

MAP NO.: PLACER ASSESSMENT REPORT X  
105 N 03 PROSPECTUS X  
CONFIDENTIAL X  
OPEN FILE

DOCUMENT NO: 120006  
MINING DISTRICT: Mayo  
TYPE OF WORK: Drilling

REPORT FILED UNDER: Noranda Exploration Company Limited

DATE PERFORMED: June 5 - July 9, 1982

DATE FILED: March 19, 1986

LOCATION: LAT.: 63° 07'N

AREA: Russell Creek

LONG.: 133° 25'W

VALUE \$: n/a

CLAIM NAME & NO.: PL4924  
PL5099 (inclusive)

WORK DONE BY: M. Milner

WORK DONE FOR: Noranda Exploration Company Limited

DATE TO GOOD STANDING:

REMARKS: RUSSELL CREEK

Placer drill logs and maps only.

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

001106

|                      |                                |                                    |                  |                            |                            |
|----------------------|--------------------------------|------------------------------------|------------------|----------------------------|----------------------------|
| LAT. _____           | START <u>June 5, 1982</u>      | PROPERTY NAME <u>RUSSELL CREEK</u> |                  | PROJ. No. <u>1096</u>      | N.T.S.* _____              |
| DEP. _____           | FINISH <u>June 5, 1982</u>     | CREEK <u>A - B PIT ZONE</u>        |                  | DRILL <u>MIDWEST SONIC</u> | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2516.24</u> | BIT _____ ROD _____ CASE _____ | DEPTH Overburden _____ Ft.         | MOVE _____ Hrs;  | DELAY _____ Hrs.           | HOLE* <u>TEST #3</u>       |
| DEPTH _____          | I.D. _____                     | DEPTH Gravel _____ Ft.             | DRILL _____ Hrs; | TOTAL _____ Hrs.           | LINE* <u>R6</u>            |
|                      | O.D. _____                     | DEPTH Bedrock <u>4</u> Ft.         | PULL _____ Hrs;  |                            |                            |

| FROM | TO   | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>3/2 3/2 1/2 1/2 | FORMATION                                                                     | VOLUME                  | ACTUAL     | CORREC-TION | CORRECT    |
|------|------|-------|-----------------------------|--------------------------|-------------|-------------------------|-------------------------------------------------------------------------------|-------------------------|------------|-------------|------------|
|      |      |       |                             |                          |             |                         |                                                                               | Theoretical<br>Measured | Mgs.<br>Au | Mgs.        | Mgs.<br>Au |
| 0    | 5    | 5     | 0                           | 0                        | no core     |                         | Disturbed, hard boulder in bit. Discarded                                     |                         |            |             |            |
| 5    | 8    | 3     | 5                           | 0                        |             |                         | Medium & fine gravel, some clay.                                              |                         |            |             |            |
| 8    | 13   | 5     | 8                           | .5                       |             |                         | Frozen, clay and gravel; considerable slate pebbles                           |                         | tr         | -           | tr         |
|      |      |       | 7.5                         | 5.5                      |             |                         | Bearing broke down. Shutdown for repairs                                      |                         |            |             |            |
| 13   | 18   | 5     | 13                          | 1                        |             |                         | Blue clay; frozen.                                                            |                         | Nil        | -           | nil        |
| 18   | 22.5 | 4.5   | 18                          | 1.5                      |             |                         | Blue clay to gravel.                                                          |                         |            |             |            |
|      |      |       | 16.5                        | 6                        |             |                         | Bit jam @22.5, Boulder in bit.                                                |                         | .50        |             | .50        |
| 22.5 | 28   | 5.5   | 22.5                        | 0.5                      |             |                         | Clay, sand, gravel; Rock in bit.                                              |                         |            |             |            |
| 28   | 33   | 5     | 28                          | 1                        |             |                         | Gritty clay - few boulders, small granite boulder stuck in bit at end of run. |                         | tr         | -           | tr         |
| 33   | 38   | 5.0   | 33                          | 1                        |             |                         | Gritty clay, gravel 34-35, then clay to 38                                    |                         | 1.5        | -.25        | 1.25       |
| 38   | 42   | 4     | 38                          | 1.25                     |             |                         | Gritty clay to bottom, grey-green, with quartz vein.                          |                         | 3.0        | -.72        | 2.28       |
| 42   | 44   | 2     | 42                          | 0                        |             |                         | Grey green shale, quartz with carbonate, 4" quartz vein, some fines. Bedrock  |                         | tr         | -           | tr         |
|      |      |       | 42                          | 2                        |             |                         |                                                                               |                         |            |             |            |

REMARKS

No values calculated.

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D.E.P. & R.S.W.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_



120006

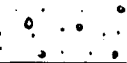
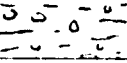
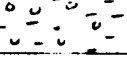
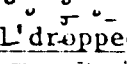
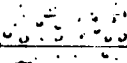
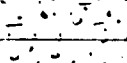
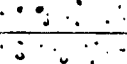
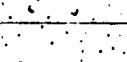
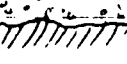
## 4.

PJA/198

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                                   |                                    |                                     |                       |                      |
|----------------------|-----------------------------------|------------------------------------|-------------------------------------|-----------------------|----------------------|
| LAT. _____           | START <u>June 6, 1982</u>         | PROPERTY NAME <u>RUSSELL CREEK</u> |                                     | PROJ. No. <u>1096</u> | N.T.S. ** _____      |
| DEP. _____           | FINISH <u>June 6, 1982</u>        | CREEK <u>RUSSELL</u>               | DRILL <u>MIDWEST SONIC</u>          |                       | SHEET _____ of _____ |
| ELEV. <u>2503.22</u> | <u>BIT</u> <u>ROD</u> <u>CASE</u> | DEPTH Overburden _____ Ft.         | MOVE <u>1</u> Hrs; DELAY _____ Hrs. | HOLE ** <u>1W</u>     |                      |
| DEPTH <u>48</u>      | I.D. _____                        | DEPTH Gravel _____ Ft.             | DRILL _____ Hrs; TOTAL _____ Hrs.   | LINE ** <u>R5</u>     |                      |
|                      | O.D. _____                        | DEPTH Bedrock <u>43</u> Ft.        | PULL _____ Hrs;                     |                       |                      |

| FROM | TO   | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG                                                                         | Ømm<br>5/16 3/8 1/2 | FORMATION                                                                                    | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|------|-------|--------------|-------------|-------------------------------------------------------------------------------------|---------------------|----------------------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |      |       | After Drive  | Core Length |                                                                                     |                     |                                                                                              | Theoretical<br>Measured |                      |                         |                       |
| 0    | 6    | 6     | 0<br>1       | -1<br>5     |    |                     | Small boulders, sand, clay, minor slough. Boulders are granite, green sil. dyke, etc.        |                         | 2.5                  |                         |                       |
| 6    | 8    | 2     | 6<br>6       | 0<br>2      |    |                     | Boulders & sandy clay                                                                        |                         |                      |                         |                       |
| 8    | 13   | 5     | 8<br>10      | -2<br>3     |    |                     | Misc. boulders 2" to 10" diam. Some totally white quartz. Some granite, minor clay & slough. |                         | 2.0                  |                         |                       |
| 13   | 16.5 | 3.5   | 13<br>12     | +1<br>2.5   |    |                     | Boulders and sand                                                                            |                         | 2.0                  |                         |                       |
| 16.5 | 23   | 6.5   | 16.5<br>16.5 | 0<br>6.5    |    |                     | Sandy top to gravel bottom. Few large rocks. Picked up 1.5' dropped previous run.            |                         | 5                    |                         |                       |
| 23   | 28   | 5     | 23<br>23     | 0<br>5      |    |                     | Sandy, chocolate brown, plus fine to very coarse gravel. Granite boulders.                   | .03669<br>.03669        | 6                    | -1.2                    | 4.80                  |
| 28   | 33   | 5     | 28<br>27     | +1<br>6     |    |                     | "                                                                                            | .03669<br>.04403        | 7                    | Minus<br>1.4 +.94       | 4.66                  |
| 33   | 38   | 5     | 33<br>38     | -1.5<br>3.5 |   |                     | "                                                                                            | .03669<br>.02568        | 5                    | +2.15                   | 7.15                  |
| 38   | 42   | 4     | 38<br>40     | +2<br>6     |  |                     | Chocolate brown sand, gravel down to purple shale (one foot). Bedrock?                       | .02935<br>.04402        | 20                   | -6.4                    | 13.40                 |
| 42   | 48   | 6     | 42<br>41     | +1<br>7     |  |                     | Red shale. Bedrock                                                                           |                         | 19                   | -2.71                   | 16.29                 |
|      | 48   |       |              |             |                                                                                     |                     | END OF HOLE                                                                                  |                         |                      |                         |                       |

## REMARKS

Edge creek on shallow fill

FROM 38 TO 48 ; 405.05 Mgs; 3.87 \$ per Cu. Yard @ \$350 U.S. /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                            |                                    |            |                             |                                   |
|----------------------|----------------------------|------------------------------------|------------|-----------------------------|-----------------------------------|
| LAT. _____           | START <u>June 7, 1982</u>  | PROPERTY NAME <u>RUSSELL CREEK</u> |            | PROJ. No. <u>1096</u>       | N.T.S. **                         |
| DEP. _____           | FINISH <u>June 7, 1982</u> | CREEK <u>RUSSELL</u>               |            | DRILL <u>MIDWEST SONIC</u>  | SHEET <u>1</u> of <u>2</u>        |
| ELEV. <u>2504.09</u> | BIT _____                  | ROD _____                          | CASE _____ | DEPTH Overburden _____ Ft.  | MOVE _____ Hrs; DELAY _____ Hrs.  |
| DEPTH <u>61</u>      | I.D. <u>5.5</u>            | _____                              | _____      | DEPTH Gravel _____ Ft.      | DRILL _____ Hrs; TOTAL _____ Hrs. |
|                      | O.D. <u>6.5</u>            | _____                              | _____      | DEPTH Bedrock <u>55</u> Ft. | PULL _____ Hrs;                   |
|                      |                            |                                    |            | HOLE ** <u>3W</u>           |                                   |
|                      |                            |                                    |            | LINE ** <u>R5</u>           |                                   |

| FROM | TO | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG                   | Ømm<br>5/8 3/4 1 1/2 | FORMATION                                                                               | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|----|-------|-----------------------------|--------------------------|-------------------------------|----------------------|-----------------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |    |       |                             |                          |                               |                      |                                                                                         | Theoretical<br>Measured |                      |                         |                       |
|      |    |       |                             |                          |                               |                      | Set up on disturbed fill. Pit Area<br>Had to move first set up - loose boulder          |                         |                      |                         |                       |
| 0    | 8  | 8     | 0<br>-1                     | 1<br>9                   |                               |                      | First 3 feet is fill.<br>Gravel with clay sand, boulders                                |                         |                      |                         |                       |
| 8    | 13 | 5     | 8<br>9                      | -1<br>4                  |                               |                      | Gravel                                                                                  |                         | <.10                 |                         |                       |
| 13   | 18 | 5     | 13<br>12                    | 1<br>6                   |                               |                      | Gravel - much green shale, granite, etc.                                                | .03669<br>.04403        | 34                   | -8                      | 26                    |
| 18   | 21 | 3     | 18<br>18                    | 0<br>3                   |                               |                      | Delay. Aligning vertically 1 1/2 hours;<br>Mainly gray green shale and boulders in clay |                         | 22                   | nil                     | 22                    |
| 21   | 23 | 2     | 21<br>21                    | 0<br>2                   |                               |                      | Many boulders in quartz. Hard drilling                                                  |                         |                      |                         |                       |
| 23   | 26 | net 3 | 23<br>22                    | 1<br>4                   | dropped 2' core               |                      | Boulders. Many limy-quartz veins to 3" wide. Rusty water.                               | .022014<br>.029352      | 27                   | -6.75                   | 20.25                 |
| 26   | 31 | 5     | 26<br>25                    | 1<br>6                   | incl. 2" dropped              |                      | Broken rock pieces - sand and gravel.<br>Yellow rusty sludge                            |                         | est. 1-              |                         |                       |
| 31   | 33 | 2     | 31<br>30.5                  | 0.5<br>2.5               |                               |                      | Clay cemented quartz, shale - limy fragments                                            |                         | <.05                 | -                       | <.05                  |
| 33   | 38 | 5     | 33<br>30.5                  | 2.5<br>7.5               | extra slough or clay expanded |                      | Boulders: coarse gravel, quartz, dolomite quartzite. Yellow water / to gritty clay      |                         | <.10                 | -                       | <.10                  |
| 38   | 43 | 5     | 38<br>39                    | 1<br>6                   |                               |                      | 2/3 boulders & coarse gravel/ 1/3 pale yellow to white clay with qtz. fragments         |                         | <.10                 | -                       | <.10                  |
| 43   | 48 | 5     | 43<br>41.5                  | 1.5<br>6.5               |                               |                      | Pebbles, boulders, blue gray dolomite to granite. Bottom to yellow clay                 |                         | 6.0                  |                         |                       |

## REMARKS

Broke stem @ 24'. Fished.  
Several delays - engine, alignment, etc. Much grinding 23

FROM 13 TO 26 ; 715.45 Mgs; 6.84 US \$ per Cu. Yard @ 350 US /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

## 62

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# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                            |                                    |                                   |                            |                            |
|----------------------|----------------------------|------------------------------------|-----------------------------------|----------------------------|----------------------------|
| LAT. _____           | START <u>June 7, 1982</u>  | PROPERTY NAME <u>RUSSELL CREEK</u> |                                   | PROJ. No. <u>1096</u>      | N.T.S. " _____             |
| DEP. _____           | FINISH <u>June 8, 1982</u> | CREEK <u>RUSSELL</u>               |                                   | DRILL <u>MIDWEST SONIC</u> | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2506.98</u> | BIT <u>ROD CASE</u>        | DEPTH Overburden _____ Ft.         | MOVE _____ Hrs; DELAY _____ Hrs.  | HOLE " <u>2W</u>           |                            |
| DEPTH <u>43</u>      | I.D. <u>5.5</u>            | DEPTH Gravel _____ Ft.             | DRILL _____ Hrs; TOTAL _____ Hrs. | LINE " <u>R5</u>           |                            |
|                      | O.D. <u>6.5</u>            | DEPTH Bedrock <u>37</u> Ft.        | PULL _____ Hrs;                   |                            |                            |

| FROM | TO   | DRIVE | Before | Core   | GRAPHIC | Ømm  | FORMATION                                             | VOLUME      | ACTUAL | CORREC- | CORRECT |
|------|------|-------|--------|--------|---------|------|-------------------------------------------------------|-------------|--------|---------|---------|
|      |      |       | Drive  | Rise   |         |      |                                                       | Theoretical | Mgs.   | TION    | Mgs.    |
|      |      |       | After  | Core   | LOG     |      |                                                       | Measured    | Au     | Mgs.    | Au      |
|      |      |       | Drive  | Length |         |      |                                                       |             |        |         |         |
| 0    | 8    | 8     | 0      | 0      |         | 1/8" | Blue grey clay, minor gravel                          |             |        |         |         |
| 8    | 13   | 5     | 8      | -0.5   |         | 1/8" | Misc. gravel, boulders (fill)                         |             |        |         |         |
| 13   | 21   | 8     | 13     | 6.5    |         | 1/8" | Fine sand? Could not core                             |             | nil    | -       | nil     |
| 21   | 26   | 5     | 21     | -1.5   |         | 1/8" | Sandy clay, sand, coarse gravel, minor small boulders |             | 0.10   | -       | 0.10    |
| 26   | 31.5 | 5.5   | 26     | 0.5    |         | 1/8" | "                                                     |             | 1.0    | -       | 1.0     |
| 31.5 | 38   | 6.5   | 31.5   | 1      |         | 1/8" | 31.5-33 sand & boulders shale                         | .0477       | 7.0    | -.93    | 6.07    |
| 38   | 43   | 5     | 38     | 0.5    |         | 1/8" | 33-38 Purple clay, decomp. bedrock of red             | .05503      | 5.0    | .454    | 4.54    |
|      | 43   |       | 37.5   | 5.5    |         | 1/8" | Red shale, red clay. Bed rock                         | .03669      |        |         |         |
|      |      |       |        |        |         |      | END OF HOLE                                           | .04036      |        |         |         |
|      |      |       |        |        |         |      |                                                       |             |        |         |         |
|      |      |       |        |        |         |      |                                                       |             |        |         |         |
|      |      |       |        |        |         |      |                                                       |             |        |         |         |
|      |      |       |        |        |         |      |                                                       |             |        |         |         |
|      |      |       |        |        |         |      |                                                       |             |        |         |         |
|      |      |       |        |        |         |      |                                                       |             |        |         |         |

|                                                                                                |                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br>31.5'-43'<br>11.5 ft. @ \$1.19/yd <sup>3</sup><br>on bedrock (\$350 US gold) | FROM <u>31.5</u> TO <u>38</u> ; <u>127.25</u> Mgs; <u>1.21</u> US \$ per Cu. Yard @ <u>350</u> US\$ /Ounce<br>FROM <u>38</u> TO <u>43</u> ; <u>123.8</u> Mgs; <u>1.17</u> US \$ per Cu. Yard @ <u>"</u> /Ounce<br>FINENESS <u>.85</u> DATE _____ LOGGED BY: _____<br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                            |                                    |  |                                   |                            |
|----------------------|----------------------------|------------------------------------|--|-----------------------------------|----------------------------|
| LAT. _____           | START <u>June 8, 1982</u>  | PROPERTY NAME <u>RUSSELL CREEK</u> |  | PROJ. No. <u>1096</u>             | N.T.S. ** _____            |
| DEP. _____           | FINISH <u>June 8, 1982</u> | CREEK <u>RUSSELL</u>               |  | DRILL <u>MIDWEST SONIC</u>        | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2491.25</u> | BIT <u>ROD CASE</u>        | DEPTH Overburden _____ Ft.         |  | MOVE _____ Hrs; DELAY _____ Hrs.  | HOLE ** <u>4W</u>          |
| DEPTH <u>43</u>      | I.D. <u>5.5</u>            | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL _____ Hrs. | LINE ** <u>R5</u>          |
|                      | O.D. <u>6.5</u>            | DEPTH Bedrock <u>41</u> Ft.        |  | PULL _____ Hrs;                   |                            |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>2 3/4 1 1/2 | FORMATION                                                                              | VOLUME      | ACTUAL  | CORREC-   | CORREC  |
|------|-----|-------|--------------|-------------|-------------|--------------------|----------------------------------------------------------------------------------------|-------------|---------|-----------|---------|
|      |     |       | After Drive  | Core Length |             |                    |                                                                                        | Theoretical | Mgs. Au | TION Mgs. | Mgs. Au |
|      |     |       |              |             |             |                    | Pit Area, disturbed material                                                           |             |         |           |         |
| 0    | 4   | 4     | 0            | 0           |             |                    | Misc. boulders, sand, clay gravel                                                      |             |         |           |         |
| 4    | 8.5 | 4.5   | 4            | 0           |             |                    | "                                                                                      |             |         |           |         |
| 8.5  | 13  | 5     | 8.5          | 1           |             |                    | " blue clay                                                                            |             |         |           |         |
| 13   | 18  | 5     | 13           | 0.5         |             |                    | "                                                                                      |             | 4.0     |           |         |
| 18   | 23  | 5     | 18           | 1.5         |             |                    | "                                                                                      |             | .10     |           |         |
| 23   | 28  | 5     | 23           | 1.5         |             |                    | Clay, sand, minor gravel, boulders                                                     |             | .50     |           |         |
| 28   | 31  | 3     | 26           | 1.5         |             |                    | Mainly gritty yellow clay. Small to med. rock fragments                                |             | 3.0     |           |         |
| 31   | 33  | 2     | 31           | 1.5         |             |                    | "                                                                                      |             | 8.0     |           |         |
| 33   | 38  | 5     | 33           | 2           |             |                    | Creamy clay to lt. green clay to quartz boulders                                       |             | 1.0     |           |         |
| 38   | 43  | 6     | 38           | 0           |             |                    | Quartz and quartz carbonate boulders/pale green sl. limy rock with qtz. carb stringers |             | 2       |           |         |
|      | 43  |       | 38           | 6           |             |                    | END OF HOLE                                                                            |             |         |           |         |

## REMARKS

Diesel overflow at 4'-8.5'

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                           |                                    |                                                |                                    |
|----------------------|---------------------------|------------------------------------|------------------------------------------------|------------------------------------|
| LAT. _____           | START <u>June 8, 1982</u> | PROPERTY NAME <u>RUSSELL CREEK</u> | PROJ. No. <u>1096</u>                          | N.T.S. * _____                     |
| DEP. _____           | FINISH _____              | CREEK <u>RUSSELL</u>               | DRILL <u>MIDWEST SONIC</u>                     | SHEET <u>1</u> of <u>1</u>         |
| ELEV. <u>2508.42</u> | BIT _____                 | DEPTH Overburden _____ Ft.         | MOVE <u>1</u> Hrs; DELAY <u>1/2</u> Hrs.       | HOLE * _____ 6W<br>LINE * _____ R5 |
| DEPTH <u>37</u>      | I.D. _____                | DEPTH Gravel _____ Ft.             | DRILL <u>13/4</u> Hrs; TOTAL <u>3 1/4</u> Hrs. |                                    |
|                      | O.D. _____                | DEPTH Bedrock <u>35</u> Ft.        | PULL _____ Hrs;                                |                                    |

| FROM | TO | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>3/4 1/2 1/4 1/8 | FORMATION                                                                          | VOLUME      | ACTUAL  | CORREC-   | CORRECT |
|------|----|-------|--------------|-------------|-------------|-------------------------|------------------------------------------------------------------------------------|-------------|---------|-----------|---------|
|      |    |       | After Drive  | Core Length |             |                         |                                                                                    | Theoretical | Mgs. Au | TION Mgs. | Mgs. Au |
|      |    |       |              |             |             |                         | Set up on 5' disturbed - (fill) over Russell Creek Channel of 1981                 |             |         |           |         |
| 0    | 8  | 8     | 0<br>50      | 50<br>7.5   |             |                         | Clay, gravel, boulders                                                             |             |         |           |         |
| 8    | 13 | 5     | 8<br>8       | 0<br>5      |             |                         | Clay, coarse gravel, misc. rock types                                              |             |         |           |         |
| 13   | 23 | 10    | 13<br>16     | -3<br>7     |             |                         | Drilled to 18 - drill dropped instantly in muck(?). Permission given to drill more |             |         |           |         |
|      |    |       |              |             |             |                         | Unconsolidated mud seen @ 18', rest 19-25 blue green clay with fragments           |             |         |           |         |
| 23   | 28 | 5     | 23<br>24     | -1<br>4     |             |                         | 4 ft. core reported - less in barrel Blue green clay and gravel                    |             | 1.5     |           |         |
| 28   | 33 | 5     | 28<br>28     | 0<br>5      |             |                         | Dark sand to sandy clay to clay and gravel                                         |             | 4       | -         | 4       |
| 33   | 37 | 4     | 33<br>31     | 2<br>6      |             |                         | Green, purple shale fragments in clay to 35/ Purple shale 36-37                    |             | 2.5(D)  |           |         |
|      | 37 |       |              |             |             |                         | END OF HOLE                                                                        |             |         |           |         |
|      |    |       |              |             |             |                         |                                                                                    |             |         |           |         |
|      |    |       |              |             |             |                         |                                                                                    |             |         |           |         |
|      |    |       |              |             |             |                         |                                                                                    |             |         |           |         |

## REMARKS

FROM 28 TO 33 ; ~~2.11~~ Mgs; 1.03 \$ per Cu. Yard @ \$350 U.S. /Ounce  
 FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FINENESS 850 DATE \_\_\_\_\_ LOGGED BY: D.E.P.  
 FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                                            |  |                                    |  |                                             |  |                            |  |                            |  |
|----------------------|--|--------------------------------------------|--|------------------------------------|--|---------------------------------------------|--|----------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 8, 1982</u>                  |  | PROPERTY NAME <u>RUSSELL CREEK</u> |  |                                             |  | PROJ. No. <u>1096</u>      |  | N.T.S. ** _____            |  |
| DEP. _____           |  | FINISH <u>June 9, 1982</u>                 |  | CREEK <u>RUSSELL</u>               |  |                                             |  | DRILL <u>MIDWEST SONIC</u> |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2510.62</u> |  | BIT <u>  </u> ROD <u>  </u> CASE <u>  </u> |  | DEPTH Overburden _____ Ft.         |  | MOVE <u>3/4</u> Hrs; DELAY _____ Hrs.       |  | HOLE ** <u>7W</u>          |  |                            |  |
| DEPTH <u>38</u>      |  | I.D. _____                                 |  | DEPTH Gravel _____ Ft.             |  | DRILL <u>2</u> Hrs; TOTAL <u>2 3/4</u> Hrs. |  | LINE ** <u>R5</u>          |  |                            |  |
|                      |  | O.D. _____                                 |  | DEPTH Bedrock <u>34</u> Ft.        |  | PULL _____ Hrs;                             |  |                            |  |                            |  |

| FROM | TO | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>5/32 3/8 1/2 | FORMATION                                                               | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|----|-------|--------------|-------------|-------------|---------------------|-------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |    |       | After Drive  | Core Length |             |                     |                                                                         | Theoretical<br>Measured |                      |                         |                       |
|      |    |       | 0            | -2          |             |                     | Set up on 5' disturbed material                                         |                         |                      |                         |                       |
| 0    | 8  | 8     | -2           | 6           |             |                     | Clay, misc. boulders & coarse chips (fill)                              |                         |                      |                         |                       |
| 8    | 13 | 5     | 8            | -2          |             |                     | Blue clay, more sand, gravel                                            |                         |                      |                         |                       |
| 13   | 18 | 5     | 10           | 3           |             |                     | Blue clay, small misc. boulders incl. red shale chips/minor sand gravel |                         |                      |                         |                       |
| 18   | 23 | 5     | 13           | 1           |             |                     | Mainly clay - sandy clay, minor slough? few small pebbles               |                         |                      |                         |                       |
| 23   | 28 | 5     | 12           | 6           |             |                     | Bit jammed in sand with granite boulders. Sand. Gravel                  |                         | 3                    |                         |                       |
| 28   | 32 | 4     | 18           | 50          |             |                     | Sand, gravel, minor clay. Boulders                                      |                         | 3                    |                         |                       |
| 32   | 38 | 6     | 17.5         | 5.5         |             |                     | 32-34 Green clay with chips<br>34-36 Red, shale 36-38 Red shale & clay  |                         | 2 (d)                |                         |                       |
|      | 38 |       | 26           | 2           |             |                     | END OF HOLE                                                             |                         |                      |                         |                       |
|      |    |       | 28           | -1          |             |                     |                                                                         |                         |                      |                         |                       |
|      |    |       | 29           | 3           |             |                     |                                                                         |                         |                      |                         |                       |
|      |    |       | 32           | 1           |             |                     |                                                                         |                         |                      |                         |                       |
|      |    |       | 31           | 7           |             |                     |                                                                         |                         |                      |                         |                       |
|      |    |       |              |             |             |                     |                                                                         |                         |                      |                         |                       |
|      |    |       |              |             |             |                     |                                                                         |                         |                      |                         |                       |
|      |    |       |              |             |             |                     |                                                                         |                         |                      |                         |                       |
|      |    |       |              |             |             |                     |                                                                         |                         |                      |                         |                       |
|      |    |       |              |             |             |                     |                                                                         |                         |                      |                         |                       |

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| REMARKS | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                     |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                             |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                                            |                                    |                                      |                            |                            |
|----------------------|--------------------------------------------|------------------------------------|--------------------------------------|----------------------------|----------------------------|
| LAT. _____           | START <u>June 9, 1982</u>                  | PROPERTY NAME <u>RUSSELL CREEK</u> |                                      | PROJ. No. <u>1096</u>      | N.T.S.** _____             |
| DEP. _____           | FINISH <u>June 9, 1982</u>                 | CREEK <u>RUSSELL</u>               |                                      | DRILL <u>MIDWEST SONIC</u> | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2525.24</u> | BIT <u>  </u> ROD <u>  </u> CASE <u>  </u> | DEPTH Overburden _____ Ft.         | MOVE _____ Hrs; DELAY _____ Hrs.     | HOLE** <u>8W</u>           |                            |
| DEPTH <u>27</u>      | I.D. _____                                 | DEPTH Gravel _____ Ft.             | DRILL _____ Hrs; TOTAL <u>2</u> Hrs. | LINE** <u>R5</u>           |                            |
|                      | O.D. _____                                 | DEPTH Bedrock <u>24</u> Ft.        | PULL _____ Hrs;                      |                            |                            |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>5/8 3/4 1 1 1/8 | FORMATION                                                            | VOLUME                  | ACTUAL                                                                          | CORREC-<br>TION | CORRECT |
|------|-----|-------|--------------|-------------|-------------|------------------------|----------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------|-----------------|---------|
|      |     |       | After Drive  | Core Length |             |                        |                                                                      | Theoretical<br>Measured |                                                                                 |                 |         |
| 0    | 8   | 8     | 0            | -1          |             |                        | Small boulders, gravel, sand - blue green clay                       |                         |                                                                                 |                 |         |
|      |     |       | 1            | 7           |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       | 8            | -1          |             |                        |                                                                      |                         |                                                                                 |                 |         |
| 9    | 13  | 5     | 9            | 4           |             |                        | "                                                                    |                         |                                                                                 |                 |         |
|      |     |       | 13           | -2.5        |             |                        |                                                                      |                         |                                                                                 |                 |         |
| 13   | 18  | 5     | 15.5         | 2.5         |             |                        | Sand, gravel, sandy clay, soft sand                                  |                         | 2.9                                                                             |                 |         |
|      |     |       | 18           | -2          |             |                        |                                                                      |                         |                                                                                 |                 |         |
| 18   | 23  | 5     | 20           | 3           |             |                        | Blue green black sand, sandy clay; few small boulders. Poor recovery |                         | 4.5                                                                             |                 |         |
|      |     |       | 23           | 1.5         |             |                        |                                                                      |                         | Drill Hard 23-24 green, blue clay w. chips of gravel. 24-27 Red shale. Bedrock. |                 | 5       |
| 21.5 | 5.5 |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      | 27  |       |              |             |             |                        | END OF HOLE                                                          |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |
|      |     |       |              |             |             |                        |                                                                      |                         |                                                                                 |                 |         |

|                                                                |                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br>Rod broke at 27'<br>Drilling hard at bottom. | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.<br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

SAMPLE #

|                      |                                     |                                    |                                           |                            |
|----------------------|-------------------------------------|------------------------------------|-------------------------------------------|----------------------------|
| LAT. _____           | START <u>June 9, 1982</u>           | PROPERTY NAME <u>RUSSELL CREEK</u> | PROJ.No. <u>1096</u>                      | N.T.S.** _____             |
| DEP. _____           | FINISH <u>June 9, 1982</u>          | CREEK <u>RUSSELL</u>               | DRILL <u>MIDWEST SONIC</u>                | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2522.83</u> | BIT <u>5.5</u> ROD _____ CASE _____ | DEPTH Overburden <u>0</u> Ft.      | MOVE <u>2</u> Hrs; DELAY _____ Hrs.       | HOLE** <u>7W</u>           |
| DEPTH <u>41</u>      | I.D. <u>5.5</u> O.D. <u>6.5</u>     | DEPTH Gravel _____ Ft.             | DRILL _____ Hrs; TOTAL <u>21 1/2</u> Hrs. | LINE** <u>R4</u>           |
|                      |                                     | DEPTH Bedrock <u>38</u> Ft.        | PULL _____ Hrs;                           |                            |

| FROM  | TO | DRIVE | Before Drive | Core Rise    | GRAPHIC LOG | Ømm<br>5/16 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 1/2 1 3/4 2 | FORMATION                                                                   | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORREC<br>Mgs.<br>Au |
|-------|----|-------|--------------|--------------|-------------|-------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|----------------------|
|       |    |       | After Drive  | Core Length  |             |                                                             |                                                                             | Theoretical<br>Measured |                      |                         |                      |
| 0     | 5  | 5     | 0<br>- .50   | 50<br>5.5    |             |                                                             | Abundant blue green clay. Misc. boulders, gravel                            |                         |                      |                         |                      |
| 5     | 8  | 3     | 5<br>4       | 1<br>4       |             |                                                             | "                                                                           |                         |                      |                         |                      |
| 8     | 13 | 5     | 8<br>6       | 2<br>7       |             |                                                             | " Mod. am't red shale chips                                                 |                         |                      |                         |                      |
| 13    | 18 | 5     | 13<br>12     | 1<br>6       |             |                                                             | " Few larger boulders                                                       |                         |                      |                         |                      |
| 18    | 23 | 5     | 18<br>17     | 1<br>6       |             |                                                             | Green blue frozen clay (half)<br>Misc. boulders                             |                         |                      |                         |                      |
| 60 23 | 28 | 5     | 23<br>21.5   | 1.5<br>6.5   |             |                                                             | 50% Frozen clay. 30% boulders, minor gravel<br>1 foot Red shale chips       |                         | 0.75                 |                         |                      |
| 61 28 | 33 | 5     | 28<br>26.5   | 1.5<br>6.5   |             |                                                             | " except red shale<br>@32-33'                                               |                         | 2                    |                         |                      |
| 62 33 | 38 | 5     | 33<br>31.5   | 1.5<br>6.5   |             |                                                             | Boulders, gravel, clay<br>36-38=1.5' yellow powdered rock (decomp. bedrock) |                         | 2                    |                         |                      |
| 53 38 | 41 | 3     | 38<br>39.5   | - .50<br>2.5 |             |                                                             | Mainly red shale rock/clay with red shale particles                         |                         | .4                   |                         |                      |
|       | 41 |       |              |              |             |                                                             | END OF HOLE                                                                 |                         |                      |                         |                      |
|       |    |       |              |              |             |                                                             |                                                                             |                         |                      |                         |                      |
|       |    |       |              |              |             |                                                             |                                                                             |                         |                      |                         |                      |
|       |    |       |              |              |             |                                                             |                                                                             |                         |                      |                         |                      |

## REMARKS

Set up on disturbed ground, west side of valley  
Bit change @38'  
Move 500'

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.  
FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                             |                                    |                                   |                            |
|----------------------|-----------------------------|------------------------------------|-----------------------------------|----------------------------|
| LAT. _____           | START <u>June 9, 1982</u>   | PROPERTY NAME <u>RUSSELL CREEK</u> | PROJ. No. <u>1096</u>             | N.T.S. " _____             |
| DEP. _____           | FINISH <u>June 10, 1982</u> | CREEK <u>RUSSELL</u>               | DRILL <u>MIDWEST SONIC</u>        | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2505.80</u> | BIT <u>ROD CASE</u>         | DEPTH Overburden _____ Ft.         | MOVE _____ Hrs; DELAY _____ Hrs.  | HOLE " <u>6W</u>           |
| DEPTH <u>40'</u>     | I.D. <u>5.5</u>             | DEPTH Gravel _____ Ft.             | DRILL _____ Hrs; TOTAL _____ Hrs. | LINE " <u>R4</u>           |
|                      | O.D. <u>5.5</u>             | DEPTH Bedrock <u>38</u> Ft.        | PULL _____ Hrs;                   |                            |

| FROM | TO | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/8 3/4 1 1 1/2 | FORMATION                                                                                 | VOLUME               | ACTUAL  | CORREC-   | CORRECT |
|------|----|-------|--------------|-------------|-------------|-------------------------|-------------------------------------------------------------------------------------------|----------------------|---------|-----------|---------|
|      |    |       | After Drive  | Core Length |             |                         |                                                                                           | Theoretical Measured | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 5  | 5     | 0            | 0           |             |                         | Disturbed fill, soil & vegetation                                                         |                      |         |           |         |
| 5    | 8  | 3     | 5            | 0           |             |                         | "                                                                                         |                      |         |           |         |
| 8    | 13 | 5     | 8.5          | 50          |             |                         | Misc. sand, gravel, clay, small rocks<br>30% frozen                                       |                      |         |           |         |
| 13   | 18 | 5     | 13           | 1           |             |                         | Mainly frozen clay with sand, misc.<br>small pebbles                                      |                      |         |           |         |
| 18   | 23 | 5     | 18           | 1           |             |                         | "                                                                                         |                      |         |           |         |
| 23   | 28 | 5     | 23           | 2           |             |                         | Dark colored, clay, sand, fine gravel,<br>mainly unfrozen, some loose                     |                      | 0.70    |           |         |
| 28   | 33 | 5     | 28           | 1.5         |             |                         | Gritty clay, sand. Small boulders on top<br>Bottom decomp. Yellow to green clay not froz. |                      | 1       |           |         |
| 33   | 38 | 5     | 33           | 0           |             |                         | Green clay, sand to red clay to red shale<br>pieces                                       |                      | 9       | -         | 9       |
| 38   | 40 | 2     | 38           | 0           |             |                         | Red shale pieces. Bedrock                                                                 |                      | 1       |           |         |
|      | 40 |       |              |             |             |                         | END OF HOLE                                                                               |                      |         |           |         |

## REMARKS

FROM 33 TO 38 ; 245.3 Mgs; 2.34 US \$ per Cu. Yard @ \$350 US /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

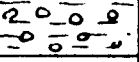
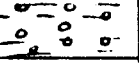
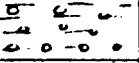
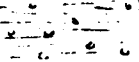
120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

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#

|                      |  |                            |  |                                    |  |                                              |  |                            |  |
|----------------------|--|----------------------------|--|------------------------------------|--|----------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 10, 1982</u> |  | PROPERTY NAME <u>RUSSELL CREEK</u> |  | PROJ. No. <u>1096</u>                        |  | N.T.S. ** _____            |  |
| DEP. _____           |  | FINISH <u>June 10 '82</u>  |  | CREEK <u>RUSSELL</u>               |  | DRILL <u>MIDWEST SONIC</u>                   |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2492.05</u> |  | BIT <u>ROD CASE</u>        |  | DEPTH Overburden _____ Ft.         |  | MOVE <u>3/4</u> Hrs; DELAY <u>1 3/4</u> Hrs. |  | HOLE ** <u>5W</u>          |  |
| DEPTH <u>28</u>      |  | I.D. <u>6"</u>             |  | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL <u>3 1/2</u> Hrs.     |  | LINE ** <u>R4</u>          |  |
|                      |  | O.D. _____                 |  | DEPTH Bedrock <u>28</u> Ft.        |  | PULL _____ Hrs;                              |  |                            |  |

99  
54  
55

| FROM | TO   | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG                                                                       | Ø mm<br>5/2 3/2 1/2                                                               | FORMATION                                                                      | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORREC<br>Mgs.<br>Au |
|------|------|-------|--------------|-------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|----------------------|
|      |      |       | After Drive  | Core Length |                                                                                   |                                                                                   |                                                                                | Theoretical<br>Measured |                      |                         |                      |
| 0    | 8    | 8     | 0<br>2       | -2<br>6     |  |  | Misc. boulders, sandy dark clay, clay w. pebbles                               |                         |                      |                         |                      |
| 8    | 11.5 | 4.5   | 8<br>8.5     | -5<br>4     |  |  | "                                                                              |                         |                      |                         |                      |
| 11.5 | 18   | 6.5   | 11.5<br>10.5 | 1<br>7.5    |  |  | "                                                                              |                         | 4.0                  |                         |                      |
| 18   | 23   | 5     | 18<br>17     | 1<br>6      |  |  | Gray green sandy clay, clay with gravel & boulders. Red shale decomposed @ 22' | .03669<br>.044028       | 29                   | 4.83                    | 24.16                |
| 23   | 28   | 5     | 23<br>22     | 1<br>6      |  |  | Green clay to red clay to red shale rock 25-28. Bedrock                        | .03669<br>.044028       | 0.75                 | -                       |                      |
|      | 28   |       |              |             |                                                                                   |                                                                                   | END OF HOLE                                                                    |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |
|      |      |       |              |             |                                                                                   |                                                                                   |                                                                                |                         |                      |                         |                      |

|         |                                                                                                     |
|---------|-----------------------------------------------------------------------------------------------------|
| REMARKS | FROM <u>18</u> TO <u>23</u> ; <u>658</u> Mgs; <u>6.29</u> US \$ per Cu. Yard @ _____ \$350US /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                               |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                                                   |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                                                           |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                             |                                    |            |                                       |                                                 |
|----------------------|-----------------------------|------------------------------------|------------|---------------------------------------|-------------------------------------------------|
| LAT. _____           | START <u>June 10, 1982</u>  | PROPERTY NAME <u>RUSSELL CREEK</u> |            | PROJ. No. <u>1096</u>                 | N.T.S. ** _____                                 |
| DEP. _____           | FINISH <u>June 12, 1982</u> | CREEK <u>RUSSELL</u>               |            | DRILL <u>MIDWEST SONIC</u>            | SHEET <u>1</u> of <u>1</u>                      |
| ELEV. <u>2502.72</u> | BIT _____                   | ROD _____                          | CASE _____ | DEPTH Overburden _____ Ft.            | MOVE <u>0</u> Hrs; DELAY <u>1 1/3</u> days Hrs. |
| DEPTH <u>44.5'</u>   | I.D. <u>5.5</u>             | _____                              | _____      | DEPTH Gravel <u>41.5</u> Ft.          | DRILL <u>3</u> Hrs; TOTAL _____ Hrs.            |
|                      | O.D. <u>6.5</u>             | _____                              | _____      | DEPTH Bedrock <u>4</u> <u>3.0</u> Ft. | PULL _____ Hrs;                                 |
|                      |                             |                                    |            | HOLE ** <u>4W</u>                     |                                                 |
|                      |                             |                                    |            | LINE ** <u>R4</u>                     |                                                 |

| FROM | TO   | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>5/8" 1 1/8" | FORMATION                                                                    | VOLUME                  | ACTUAL     | CORREC-      | CORRECT    |
|------|------|-------|-----------------------------|--------------------------|-------------|---------------------|------------------------------------------------------------------------------|-------------------------|------------|--------------|------------|
|      |      |       |                             |                          |             |                     |                                                                              | Theoretical<br>Measured | Mgs.<br>Au | TION<br>Mgs. | Mgs.<br>Au |
| 0    | 8    | 8     | 0<br>6                      | -6<br>2                  |             |                     | Sand, gravel, boulders - set up on loose fill old Pit area. Unconsolidated   |                         |            |              |            |
| 8    | 13   | 5     | 8<br>9.5                    | -1.5<br>3.5              |             |                     | "                                                                            |                         |            |              |            |
| 13   | 18   | 5     | 13<br>12                    | 1<br>6                   |             |                     | Sandy clay, coarse gravel, clay, some boulders                               |                         |            |              |            |
| 18   | 21.5 | 3.5   | 18<br>15.5                  | 2.5<br>6                 |             |                     | Clay, sandy clay, boulders, gravel                                           |                         |            |              |            |
| 21.5 | 23   | 1.5   | 21.5<br>21                  | 0.5<br>2                 |             |                     | Dark green sand with clay, fine sand, gravel. One large boulder stuck in bit |                         |            |              |            |
|      |      |       |                             |                          |             |                     | Delay 2.45a.m. Surging                                                       |                         |            |              |            |
| 23.5 | 25   | 1.5   | 23.5<br>23                  | .50<br>2                 |             |                     | Dark green sand with clay, fine sand gravel ; few boulders                   | .0329<br>.03669         | 7.0        | -.73         | 6.27       |
| 25   | 28   | 3     | 25<br>25                    | 0<br>3                   |             |                     | Clay, sandy clay, gravel, chips (misc.)                                      |                         |            |              |            |
| 28   | 33   | 3     | 25<br>25                    | 0<br>3                   |             |                     | Sand to fine gravel with clay. Small red pebbles. 2' core lost in casing     |                         | 7.5        | -            | 7.50       |
| 33   | 38   | 5     | 33<br>3                     | 2<br>7                   |             |                     | " Few boulders                                                               | .03669<br>.0511         | 36         | -9.16        | 25.84      |
| 38   | 41.5 | 3.5   | 38<br>3.75                  | .50<br>4                 |             |                     | " Red shale at 41.5 Bedrock                                                  |                         | 1.5        |              |            |
| 41.5 | 44.5 | 3     | 41.5<br>40.5                | 1<br>4                   |             |                     | Red shale - decomposed to competent rock. Bedrock                            |                         | 9          |              |            |

## REMARKS

Delay 2.45 a.m. June 10 to 7 a.m. June 12/82. Repair to Sonic Tub. Boulders stuck in bit several times when releasing core

FROM 23.5 TO 28 ; 190.5 Mgs; 1.82 \$ per Cu. Yard @ \$350 US /Ounce  
 FROM 28 TO 38 ; 453.3 Mgs; 4.35 \$ per Cu. Yard @ \$350 US /Ounce  
 FINENESS 850 DATE \_\_\_\_\_ LOGGED BY: D.E.P.  
 FACTOR 8 DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_  
 NOTE: From 23.5 - 44.5 = \$2.95 U.S. per yard<sup>3</sup> @ \$350 U.S./ounce

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

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|                      |                             |                                    |                                                 |                            |
|----------------------|-----------------------------|------------------------------------|-------------------------------------------------|----------------------------|
| LAT. _____           | START <u>June 12, 1982</u>  | PROPERTY NAME <u>RUSSELL CREEK</u> | PROJ. No. <u>1096</u>                           | N.T.S. ** _____            |
| DEP. _____           | FINISH <u>June 12, 1982</u> | CREEK <u>RUSSELL</u>               | DRILL <u>MIDWEST SONIC</u>                      | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2506.64</u> | BIT <u>5.5</u>              | DEPTH Overburden _____ Ft.         | MOVE <u>1 1/4</u> Hrs; DELAY <u>4 1/2</u> Hrs.  | HOLE ** <u>3W</u>          |
| DEPTH <u>39.5</u>    | I.D. <u>6.5</u>             | DEPTH Gravel _____ Ft.             | DRILL <u>2 1/2</u> Hrs; TOTAL <u>7 1/4</u> Hrs. | LINE ** <u>R4</u>          |
|                      | O.D. <u>6.5</u>             | DEPTH Bedrock <u>37</u> Ft.        | PULL _____ Hrs;                                 |                            |

| FROM | TO   | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>3/2 2 1/2 1 1/2 | FORMATION                                                                           | VOLUME      | ACTUAL  | CORREC-   | CORREC- |
|------|------|-------|--------------|-------------|-------------|------------------------|-------------------------------------------------------------------------------------|-------------|---------|-----------|---------|
|      |      |       | After Drive  | Core Length |             |                        |                                                                                     | Theoretical | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 5    | 5     | 0            | 0           |             |                        | Boulders, sand, gravel                                                              |             |         |           |         |
| 5    | 8    | 3     | 5            | 0           |             |                        | Few boulders/gray clay/fine to coarse gravel. Frozen parts                          |             |         |           |         |
| 8    | 18   | 10    | 8            | -4          |             |                        | Gritty frozen clay, Slipping. Difficult to hold in barrel.                          |             |         |           |         |
| 18   | 23   | 5     | 18           | 1           |             |                        | Coarse gravel/minor clay/few small boulders                                         |             |         |           |         |
| 23   | 28   | 5     | 23           | 1           |             |                        | "                                                                                   |             |         |           |         |
| 28   | 33   | 5     | 28           | -2.5        |             |                        | Fine to coarse gravel/30% small boulders. Loose                                     |             | 0.75    |           |         |
| 33   | 38   | 5     | 33           | -1          |             |                        | Mostly 3" to 5" diam. boulders. Green to brown intr. with quartz veins. Drills hard |             | 1.0     |           |         |
| 38   | 39.5 | 1.5   | 38           | 3.5         |             |                        | Quartz vein with quartz crystals. One foot core - 4' slough                         |             | .25     |           |         |
|      |      |       | 34.5         | 5           |             |                        | END OF HOLE                                                                         |             |         |           |         |
|      |      |       |              |             |             |                        |                                                                                     |             |         |           |         |
|      |      |       |              |             |             |                        |                                                                                     |             |         |           |         |
|      |      |       |              |             |             |                        |                                                                                     |             |         |           |         |
|      |      |       |              |             |             |                        |                                                                                     |             |         |           |         |
|      |      |       |              |             |             |                        |                                                                                     |             |         |           |         |

## REMARKS

Drilled to 13' - slipped out.  
 Drilled past to 18'-- 7' core in tube but 2' dropped. Picked up 18-23.  
 33-38 drills hard.  
 New bit at 38'  
 Mechanical delay @9a.m.-1p.m.

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D.E.P.  
 FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

17

|                      |                             |                                    |            |                             |                                          |
|----------------------|-----------------------------|------------------------------------|------------|-----------------------------|------------------------------------------|
| LAT. _____           | START <u>June 12, 1982</u>  | PROPERTY NAME <u>RUSSELL CREEK</u> |            | PROJ. No. <u>1096</u>       | N.T.S.** _____                           |
| DEP. _____           | FINISH <u>June 13, 1982</u> | CREEK <u>RUSSELL</u>               |            | DRILL <u>MIDWEST SONIC</u>  | SHEET <u>1</u> of <u>1</u>               |
| ELEV. <u>2506.75</u> | BIT _____                   | ROD _____                          | CASE _____ | DEPTH Overburden _____ Ft.  | MOVE _____ Hrs; DELAY _____ Hrs.         |
| DEPTH <u>38</u>      | I.D. _____                  | O.D. _____                         |            | DEPTH Gravel _____ Ft.      | DRILL _____ Hrs; TOTAL <u>3 1/2</u> Hrs. |
|                      |                             |                                    |            | DEPTH Bedrock <u>33</u> Ft. | PULL _____ Hrs;                          |
|                      |                             |                                    |            | HOLE** <u>2W</u>            |                                          |
|                      |                             |                                    |            | LINE** <u>R4</u>            |                                          |

| FROM | TO   | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>1/2 3/4 1 1 1/2 2 | FORMATION                                                                                                              | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|------|-------|--------------|-------------|-------------|--------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |      |       | After Drive  | Core Length |             |                          |                                                                                                                        | Theoretical<br>Measured |                      |                         |                       |
| 0    | 6    | 6     | 0<br>0       | 0<br>6      |             |                          | Boulders, gravel, clay, sand                                                                                           |                         |                      |                         |                       |
| 6    | 8    | 2     | 6<br>4.5     | 1.5<br>3.5  |             |                          | Brown green clay and coarse gravel - 50%<br>Small boulders                                                             |                         |                      |                         |                       |
| 8    | 13   | 5     | 8<br>7       | 1<br>6      |             |                          | Mainly green blue clay                                                                                                 |                         |                      |                         |                       |
| 13   | 18   | 5     | 13<br>14.5   | -1.5<br>3.5 |             |                          | Coarse gravel, small boulders, minor<br>clay sand. Short section lost or washed                                        |                         |                      |                         |                       |
| 18   | 21   | 3     | 18<br>17     | 1<br>4      |             |                          | "<br>with much quartz in some boulders                                                                                 |                         |                      |                         |                       |
| 21   | 23   | 2     | 21<br>19.5   | 1.5<br>3.5  |             |                          | Green clay & coarse gravel. Red shale<br>chips in clay.                                                                |                         |                      |                         |                       |
| 23   | 28   | 5     | 23<br>22.5   | 0.5<br>5.5  |             |                          | Gravel                                                                                                                 |                         | 1.0                  |                         |                       |
| 28   | 33   | 5     | 28<br>28.5   | 0.5<br>4.5  |             |                          | Green brown clay with gravel - few 4"<br>boulders                                                                      |                         | 0.75                 |                         |                       |
| 33   | 34.5 | 1.5   | 33<br>31.5   | 1.5<br>3    |             |                          | Much white quartz boulders/some yellow<br>clay                                                                         |                         | 2.00                 |                         |                       |
| 34.5 | 35.5 | 1     | 34.5<br>32.5 | 2<br>3      | 1.5' drop   |                          | Broken up quartz boulders - angular<br>minimum fines                                                                   |                         | nil                  |                         |                       |
| 35.5 | 38   | 2.5   | 35.5<br>33   | -1.5<br>1   |             |                          | Quartz boulders and pieces, Minimum fines<br>except ground material. Gedrock? Similar<br>to quartz carbonate shear (?) |                         | .2                   |                         |                       |
|      | 38   |       |              |             |             |                          | END OF HOLE                                                                                                            |                         |                      |                         |                       |

## REMARKS

Set up on shallow disturbed fill.

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.  
 FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

[illegible]

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                                          |  |                                    |  |                                   |  |                            |  |                            |  |
|----------------------|--|------------------------------------------|--|------------------------------------|--|-----------------------------------|--|----------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 14, 1982</u>               |  | PROPERTY NAME <u>Russell Creek</u> |  |                                   |  | PROJ. No. <u>1096</u>      |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH <u>x</u>                          |  | CREEK <u>Russell</u>               |  |                                   |  | DRILL <u>Midwest Sonic</u> |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2496.80</u> |  | BIT <u>5.5</u> ROD <u>6.5</u> CASE _____ |  | DEPTH Overburden _____ Ft.         |  | MOVE _____ Hrs; DELAY _____ Hrs.  |  | HOLE** <u>1W</u>           |  |                            |  |
| DEPTH <u>30</u>      |  | I.D. <u>5.5</u> _____                    |  | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL _____ Hrs. |  | LINE** <u>R3</u>           |  |                            |  |
|                      |  | O.D. <u>6.5</u> _____                    |  | DEPTH Bedrock <u>28</u> Ft.        |  | PULL _____ Hrs;                   |  |                            |  |                            |  |

| FROM   | TO     | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/8 3/4 1/2 1/8 | FORMATION                                                                            | VOLUME      | ACTUAL  | CORREC-   | CORRECT |
|--------|--------|-------|--------------|-------------|-------------|-------------------------|--------------------------------------------------------------------------------------|-------------|---------|-----------|---------|
|        |        |       | After Drive  | Core Length |             |                         |                                                                                      | Theoretical | Mgs. Au | TION Mgs. | Mgs. Au |
| 0      | 4      | 4     | 0            | -1/2        |             |                         | Boulders, sand, gravel clay                                                          |             |         |           |         |
| 4      | 8      | 4     | 4            | +1/2        |             |                         |                                                                                      |             |         |           |         |
| 8      | 13     | 5     | 8            | -2 1/2      |             |                         |                                                                                      |             |         |           |         |
| 13     | 18     | 5     | 10 1/2       | 2 1/2       |             |                         |                                                                                      |             |         |           |         |
| 18     | 21 1/2 | 3 1/2 | 13           | -1          |             |                         | Mostly coarse gravel & boulders                                                      |             |         |           |         |
| 21 1/2 | 28     | 6 1/2 | 14           | 4           |             |                         | 40% sand / 30% boulders / 20% gravel<br>10% clay                                     |             | 0.40    |           |         |
| 28     | 30     | 2     | 16.5         | 5           |             |                         | Top, sand, gravel, clay, few boulders<br>Bottom → to red shale                       |             | < 1     |           |         |
|        | END    |       | 21 1/2       | 1           |             |                         | Red shale to green shale - no<br>dry core. No strange rock so at or near<br>bedrock. |             | < 1     |           |         |
|        |        |       | 20 1/2       | 7 1/2       |             |                         |                                                                                      |             |         |           |         |
|        |        |       | 28           | 0           |             |                         |                                                                                      |             |         |           |         |
|        |        |       | 28           | 2           |             |                         |                                                                                      |             |         |           |         |
|        |        |       |              |             |             |                         |                                                                                      |             |         |           |         |
|        |        |       |              |             |             |                         |                                                                                      |             |         |           |         |
|        |        |       |              |             |             |                         |                                                                                      |             |         |           |         |
|        |        |       |              |             |             |                         |                                                                                      |             |         |           |         |

|                                                                                                   |                                                                       |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>REMARKS</b> Set up on 5' new<br>disturbed fill.<br>18-23- dropped 1 1/2 → 5' core in<br>barrel | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|                                                                                                   | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|                                                                                                   | FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u>                    |
|                                                                                                   | FACTOR _____ DATE _____ CHECKED BY: _____                             |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                             |  |                                     |  |                                    |  |                                       |  |                         |  |
|-----------------------------|--|-------------------------------------|--|------------------------------------|--|---------------------------------------|--|-------------------------|--|
| LAT. _____                  |  | START <u>June 13, 1982</u>          |  | PROPERTY NAME <u>Russell Creek</u> |  | PROJ. No. <u>1096</u>                 |  | N.T.S.* _____           |  |
| DEP. _____                  |  | FINISH <u>June 14, 1982</u>         |  | CREEK <u>Russell</u>               |  | DRILL <u>Midwest Sonic</u>            |  | SHEET <u>1</u> of _____ |  |
| ELEV. <u>2496.54</u>        |  | BIT <u>5.5</u> ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.         |  | MOVE _____ Hrs; DELAY _____ Hrs.      |  | HOLE** <u>2W</u>        |  |
| DEPTH <u>32</u>             |  | I.D. <u>6.5</u> O.D. _____          |  | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL <u>2½</u> Hrs. |  | LINE** <u>R3</u>        |  |
| DEPTH Bedrock <u>27</u> Ft. |  | PULL _____ Hrs;                     |  |                                    |  |                                       |  |                         |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/8" 1/2" | FORMATION                                                             | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|--------------|-------------|-------------|-------------------|-----------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       | After Drive  | Core Length |             |                   |                                                                       | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8   | 8     | 0<br>4       | -4<br>4'    |             |                   | Unconsolidated fresh fill.<br>Gravel. few boulders. clay & sand       |                         |                      |                         |                       |
| 8    | 13  | 5     | 8<br>7.5     | +½<br>5½    |             |                   | Gravel Sand Clay Boulders<br>60% 15% 15% 10%                          |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>13.5   | -½<br>4½    |             |                   | Gravel Sand Clay Boulders<br>45% 40% 10% 5%                           |                         |                      |                         |                       |
| 18   | 23  | 5     | 18<br>18.5   | -½<br>4½    |             |                   | Gravel Sand Clay Boulders<br>35% 15% 10% 40%                          |                         | < 1                  |                         |                       |
| 23   | 28  | 5     | 23<br>23.5   | -½<br>4½    |             |                   | 22-26 gravel, sand, boulders<br>26-27 Red clay. chips 27-28 Red shale | .03669<br>.03290        | 18                   | +2.07                   | 20.07                 |
| 28   | 32  | 4     | 28<br>26     | 2<br>6'     |             |                   | Red shale - Bedrock                                                   | .0292<br>.0438          | 19.5                 | -6.5                    | 13.00                 |
|      | END |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |
|      |     |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |
|      |     |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |
|      |     |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |
|      |     |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |
|      |     |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |
|      |     |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |
|      |     |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |
|      |     |       |              |             |             |                   |                                                                       |                         |                      |                         |                       |

|                                                                                                            |  |                                                                                                               |  |
|------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|--|
| <b>REMARKS</b><br>Set up on Bern (Fill) 10' High on Pit "Cut"<br>Rock stuck in bit 3 times displacing core |  | FROM <u>23</u> TO <u>32</u> ; <u>503.3</u> Mgs; <u>\$4.81 (US)</u> \$ per Cu. Yard @ <u>\$350 (US)</u> /Ounce |  |
|                                                                                                            |  | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                                         |  |
|                                                                                                            |  | FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u>                                                            |  |
|                                                                                                            |  | FACTOR _____ DATE _____ CHECKED BY: _____                                                                     |  |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                 |  |                             |  |                                    |  |                                          |  |                            |  |
|-----------------|--|-----------------------------|--|------------------------------------|--|------------------------------------------|--|----------------------------|--|
| LAT. _____      |  | START <u>June 13, 1982</u>  |  | PROPERTY NAME <u>Russell Creek</u> |  | PROJ. No. <u>1096</u>                    |  | N.T.S. # _____             |  |
| DEP. _____      |  | FINISH <u>June 13, 1982</u> |  | CREEK <u>Russell</u>               |  | DRILL <u>Midwest Sonic</u>               |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. _____     |  | BIT ROD CASE                |  | DEPTH Overburden _____ Ft.         |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.    |  | HOLE # <u>3W1</u>          |  |
| DEPTH <u>28</u> |  | I.D. _____                  |  | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL <u>2 1/2</u> Hrs. |  | LINE # <u>R3</u>           |  |
| O.D. _____      |  |                             |  | DEPTH Bedrock <u>25</u> Ft.        |  | PULL <u>1 3/4</u> Hrs;                   |  |                            |  |

| FROM | TO | DRIVE | Before Drive | Core Rise       | GRAPHIC LOG | Ø mm<br>5/16 3/8 1/2 5/8 | FORMATION                                                                                 | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|----|-------|--------------|-----------------|-------------|--------------------------|-------------------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |    |       | After Drive  | Core Length     |             |                          |                                                                                           | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8  | 8     | 0<br>1/2     | -1/2<br>7 1/2   |             |                          | Small boulders, gravel, sand, clay.                                                       |                         |                      |                         |                       |
| 8    | 18 | 10    | 8<br>10 1/2  | -2 1/2<br>7 1/2 |             |                          | Gravel, boulders, sand, clay. (drilled 8-10.5- lost 2' - went down fast - drilled to 18') |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          | 8" boulder core & grinding)                                                               |                         |                      |                         |                       |
| 18   | 23 | 5     | 18<br>19     | -1<br>4         |             |                          | small boulders ±20%, gravel ±40% sand ±30%, clay 10%                                      |                         | 1.5.                 |                         |                       |
| 23   | 28 | 5     | 23<br>21 1/2 | 1 1/2<br>6 1/2  |             |                          | 23-25 gravel, sand, gritty clay, small boulders. 25-28 Red shale, pts. decomposed         |                         | 3                    |                         |                       |
|      |    |       |              |                 |             |                          | Bedrock                                                                                   |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |
|      |    |       |              |                 |             |                          |                                                                                           |                         |                      |                         |                       |

|                                                                  |  |                                                                       |  |
|------------------------------------------------------------------|--|-----------------------------------------------------------------------|--|
| <b>REMARKS</b><br>Set up on disturbed ground (5' - 6'). New Bit. |  | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |  |
|                                                                  |  | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |  |
|                                                                  |  | FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u>                    |  |
|                                                                  |  | FACTOR _____ DATE _____ CHECKED BY: _____                             |  |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                                          |                                    |                         |                            |                            |
|----------------------|------------------------------------------|------------------------------------|-------------------------|----------------------------|----------------------------|
| LAT. _____           | START <u>June 13, 1982</u>               | PROPERTY NAME <u>RUSSELL CREEK</u> |                         | PROJ. No. <u>1096</u>      | N.T.S. ** _____            |
| DEP. _____           | FINISH <u>June 13, 1982</u>              | CREEK <u>RUSSELL</u>               |                         | DRILL <u>MIDWEST SONIC</u> | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2497.27</u> | BIT <u>5.5</u> ROD <u>6.5</u> CASE _____ | DEPTH Overburden _____ Ft.         | MOVE <u>1</u> Hrs;      | DELAY <u>1 - rods</u> Hrs. | HOLE ** <u>4W</u>          |
| DEPTH <u>25</u>      | I.D. <u>5.5</u> O.D. <u>6.5</u>          | DEPTH Gravel _____ Ft.             | DRILL <u>1 1/2</u> Hrs; | TOTAL <u>3 1/2</u> Hrs.    | LINE ** <u>R3</u>          |
|                      |                                          | DEPTH Bedrock <u>23</u> Ft.        | PULL _____ Hrs;         |                            |                            |

| FROM | TO   | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm | FORMATION                                                                                                   | VOLUME               | ACTUAL  | CORREC-   | CORRECT |
|------|------|-------|--------------|-------------|-------------|-----|-------------------------------------------------------------------------------------------------------------|----------------------|---------|-----------|---------|
|      |      |       | After Drive  | Core Length |             |     |                                                                                                             | Theoretical Measured | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 8    | 8     | 0<br>3       | -3<br>5     |             |     | Sand, gravel, coarse gravel, few small boulders                                                             |                      |         |           |         |
| 8    | 13   | 5     | 8<br>10      | -2<br>3     |             |     | Sand, gravel, minor clay. Many boulders                                                                     |                      |         |           |         |
| 13   | 16   | 3     | 13<br>14     | -1<br>2     |             |     | "                                                                                                           |                      |         |           |         |
| 16   | 18   | 2     | 16<br>15     | 1<br>3      |             |     | "                                                                                                           |                      |         |           |         |
| 18   | 21.5 | 3.5   | 18<br>15.5   | 2.5<br>6    |             |     | 18-20 gray blue clay with gravel, -20.5 red clay with red shale parts, -21.5 decomposed red shale & pieces. |                      | 0.50    |           |         |
| 21.5 | 23   | 1.5   | 21.5<br>20   | -1.5<br>3   |             |     | Gray green clay with gravel. Bottom decomposed shale, red clay                                              |                      | .75     |           |         |
| 23   | 25   | 2     | 23<br>22.5   | 0.5<br>2.5  |             |     | Mostly red shale. Bedrock                                                                                   |                      | .1      |           |         |
|      | 25   |       |              |             |             |     | END OF HOLE                                                                                                 |                      |         |           |         |
|      |      |       |              |             |             |     |                                                                                                             |                      |         |           |         |
|      |      |       |              |             |             |     |                                                                                                             |                      |         |           |         |
|      |      |       |              |             |             |     |                                                                                                             |                      |         |           |         |
|      |      |       |              |             |             |     |                                                                                                             |                      |         |           |         |
|      |      |       |              |             |             |     |                                                                                                             |                      |         |           |         |
|      |      |       |              |             |             |     |                                                                                                             |                      |         |           |         |
|      |      |       |              |             |             |     |                                                                                                             |                      |         |           |         |

## REMARKS

Set up on trenched ground. No new fill.

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

1998

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                                     |  |                                    |  |                                       |  |                            |  |                         |  |
|----------------------|--|-------------------------------------|--|------------------------------------|--|---------------------------------------|--|----------------------------|--|-------------------------|--|
| LAT. _____           |  | START <u>June 14, 1982</u>          |  | PROPERTY NAME <u>Russell Creek</u> |  |                                       |  | PROJ. No. <u>1096</u>      |  | N.T.S.* _____           |  |
| DEP. _____           |  | FINISH <u>June 14, 1982</u>         |  | CREEK <u>Russell</u>               |  |                                       |  | DRILL <u>Midwest Sonic</u> |  | SHEET <u>1</u> of _____ |  |
| ELEV. <u>2499.17</u> |  | BIT <u>5.5</u> ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.         |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs. |  | HOLE** <u>4E</u>           |  | LINE** <u>R2</u>        |  |
| DEPTH _____          |  | I.D. <u>6.5</u> _____               |  | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL <u>2</u> Hrs.  |  |                            |  |                         |  |
|                      |  | O.D. <u>6.5</u> _____               |  | DEPTH Bedrock <u>17</u> Ft.        |  | PULL <u>1 1/2</u> Hrs;                |  |                            |  |                         |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/8 3/4 1 1/8 | FORMATION                                                            | VOLUME               | ACTUAL  | CORREC-   | CORRECT |
|------|-----|-------|--------------|-------------|-------------|-----------------------|----------------------------------------------------------------------|----------------------|---------|-----------|---------|
|      |     |       | After Drive  | Core Length |             |                       |                                                                      | Theoretical Measured | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 4   | 4     | 0            | 0           |             |                       | organic 0-2', clay, sand, gravel, minor boulders - (frozen) 2-8'     |                      |         |           |         |
| 4    | 8   | 4     | 4            | 1 1/2       |             |                       |                                                                      |                      |         |           |         |
|      |     |       | 2 1/2        | 5 1/2       |             |                       |                                                                      |                      |         |           |         |
| 8    | 10  | 2     | 8            | 1/2         |             |                       | (Drills hard) Fine to coarse gravel, small boulders, - mostly frozen |                      | 4.5     |           |         |
|      |     |       | 7 1/2        | 2 1/2       |             |                       |                                                                      |                      |         |           |         |
| 10   | 12  | 2     | 10           | 1/2         |             |                       | Boulders - minor gravel, drills hard                                 |                      |         |           |         |
|      |     |       | 10 1/2       | 2 1/2       |             |                       |                                                                      |                      |         |           |         |
| 12   | 17  | 5     | 12           | 1           |             |                       | Gravel, boulders to parts Red shale                                  | .03669               | 19      | -3.1      | 15.9    |
|      |     |       | 11           | 6'          |             |                       |                                                                      | .04380               |         |           |         |
| 17   | 19  | 2     | 17           | 0           |             |                       | Red shale rock                                                       |                      | 4.5     |           |         |
|      |     |       | 17           | 2'          |             |                       |                                                                      |                      |         |           |         |
|      | END |       |              |             |             |                       | Bed rock                                                             |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |
|      |     |       |              |             |             |                       |                                                                      |                      |         |           |         |

|         |                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------|
| REMARKS | FROM <u>12</u> TO <u>17</u> ; _____ Mgs; <u>4.13</u> \$ per Cu. Yard @ <u>\$350 (US)</u> /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                           |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                                               |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                                                       |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                 |  |                          |  |                                      |  |                             |  |                                           |  |                                            |  |
|-----------------|--|--------------------------|--|--------------------------------------|--|-----------------------------|--|-------------------------------------------|--|--------------------------------------------|--|
| LAT. _____      |  | START <u>June 14/82</u>  |  | PROPERTY NAME - <u>Russell Creek</u> |  |                             |  | PROJ. No. <u>1096</u>                     |  | N.T.S.* _____                              |  |
| DEP. _____      |  | FINISH <u>June 15/82</u> |  | CREEK <u>Russell</u>                 |  |                             |  | DRILL <u>Midwest Sonic</u>                |  | SHEET <u>1</u> of _____                    |  |
| ELEV. _____     |  | BIT _____                |  | ROD _____                            |  | CASE _____                  |  | DEPTH Overburden _____ Ft.                |  | MOVE <u>1</u> Hrs; DELAY <u>1 day</u> Hrs. |  |
| DEPTH <u>53</u> |  | I.D. _____               |  | O.D. _____                           |  | DEPTH Gravel _____ Ft.      |  | DRILL <u>3½</u> Hrs; TOTAL <u>16</u> Hrs. |  | HOLE** <u>2E</u>                           |  |
|                 |  |                          |  |                                      |  | DEPTH Bedrock <u>50</u> Ft. |  | PULL <u>3½</u> Hrs;                       |  | LINE** <u>R2</u>                           |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/16 3/8 1/2 | FORMATION                                                                                       | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|--------------|-------------|-------------|----------------------|-------------------------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       | After Drive  | Core Length |             |                      |                                                                                                 | Theoretical<br>Measured |                      |                         |                       |
| 0    | 6   | 6     | 0<br>½       | -½<br>5½    |             |                      | Sod, clay, gravel, few small boulders                                                           |                         |                      |                         |                       |
| 6    | 9   | 3     | 6<br>6½      | -½<br>2½    |             |                      | Boulders 70%, clay & gravel 30%<br>Hard drilling                                                |                         |                      |                         |                       |
| 9    | 13  | 4     | 9<br>7       | 2<br>6'     |             |                      | Fine to coarse gravel - few boulders<br>minor gray green clay                                   |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>11½    | 1½<br>6½    |             |                      | mainly fine to coarse gravel                                                                    |                         |                      |                         |                       |
| 18   | 23  | 5     | 18<br>18½    | -½<br>4½    |             |                      | gravel, sand, boulders                                                                          |                         |                      |                         |                       |
| 23   | 28  | 5     | 23<br>-25½   | -2½<br>2½   |             |                      | 2' clay, 1½' misc. boulders (3½ ft. drop)                                                       |                         |                      |                         |                       |
| 28   | 33  | 5     | 28<br>26 3/4 | 1½<br>6½    |             |                      | gravel & sand in green clay<br>Few boulders                                                     |                         | 0.25                 | -                       |                       |
| 33   | 38  | 5     | 33<br>33½    | -½<br>4½    |             |                      | Fine to coarse gravel, sand<br>few boulders                                                     |                         | 0.60                 | -                       |                       |
| 38   | 43  | 5     | 38<br>38     | 0<br>5      |             |                      |                                                                                                 |                         | 38.75                | none                    | 38.75                 |
| 43   | 48  | 5     | 43<br>41½    | 1½<br>6½    |             |                      | much shale chunks to green clay with<br>angular chunks                                          |                         | < 1                  | -                       |                       |
| 48   | 53  | 5     | 48<br>44     | 4<br>9'     |             |                      | 2 samples<br>48-50 - much clay & shale pcs. - slough<br>50-53 green shale & clay to green shale |                         | 4.25                 |                         |                       |
|      | END |       |              |             |             |                      |                                                                                                 |                         | < 1                  |                         |                       |

|                                                                                             |                                                                                                   |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>Delay 1 day. Bolts in Oscillator<br>- shipped from Vancouver in 1 day | FROM <u>38</u> TO <u>43</u> ; <u>1056.1</u> Mgs; <u>10.11</u> \$ per Cu. Yard @ <u>350</u> /Ounce |
|                                                                                             | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                             |
|                                                                                             | FINENESS <u>850</u> DATE _____ LOGGED BY: <u>D.E.P.</u>                                           |
|                                                                                             | FACTOR _____ DATE _____ CHECKED BY: _____                                                         |

120006

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                         |  |                                                         |  |                                                    |  |                            |  |
|----------------------|--|-------------------------|--|---------------------------------------------------------|--|----------------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 16/82</u> |  | PROPERTY NAME <u>Russell Creek</u> PROJ.No. <u>1096</u> |  |                                                    |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____            |  | CREEK <u>Russell</u> DRILL <u>Midwest Sonic</u>         |  |                                                    |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2496.92</u> |  | BIT <u>ROD CASE</u>     |  | DEPTH Overburden _____ Ft.                              |  | MOVE <u>1/3</u> Hrs; DELAY <u>mech. 1 1/2</u> Hrs. |  | HOLE** <u>3E</u>           |  |
| DEPTH <u>33</u>      |  | I.D. <u>5.5</u>         |  | DEPTH Gravel _____ Ft.                                  |  | DRILL _____ Hrs; TOTAL <u>3</u> Hrs.               |  | LINE** <u>R2</u>           |  |
|                      |  | O.D. <u>6.5</u>         |  | DEPTH Bedrock <u>29</u> Ft.                             |  | PULL _____ Hrs;                                    |  |                            |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/16 3/8 1/2 3/4 1 1 1/8 1 1/4 1 1/2 1 3/4 2 | FORMATION                                                                                 | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|--------------|-------------|-------------|------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       | After Drive  | Core Length |             |                                                      |                                                                                           | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8   | 8     | 8<br>7       | 1<br>9      |             |                                                      | 2 Barrels ≈ 0-4 } frozen 1' moss-sod organic<br>4-8 } 2' bldrs, 6' gravel in clay         |                         |                      |                         |                       |
| 8    | 9   | 1     | 8<br>7 1/2   | 1<br>1 1/2  |             |                                                      | many boulders                                                                             |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>12     | 1<br>6      |             |                                                      | 60% fine gravel & clay with clay fraction<br>30-40%, 40% coarse gravel, bldrs, clay green |                         |                      |                         |                       |
| 18   | 23  | 5     | 18<br>17     | 1<br>6      |             |                                                      | 25% Clay, 30% small boulders, 35% gravel and sand                                         |                         | < .5                 |                         |                       |
| 23   | 28  | 5     | 23<br>22     | 1<br>6      |             |                                                      | 40% red shale, 20% clay-grey green, 40% sand, gravel, small bldrs, minor red shale        |                         | 0.25                 |                         |                       |
| 28   | 33  | 5     | 28<br>27     | 1<br>6      |             |                                                      | clay chips<br>80% red shale - mostly broken, some dry powder, Bed rock                    |                         | 0.25                 |                         |                       |
|      | END |       |              |             |             |                                                      |                                                                                           |                         |                      |                         |                       |
|      |     |       |              |             |             |                                                      |                                                                                           |                         |                      |                         |                       |
|      |     |       |              |             |             |                                                      |                                                                                           |                         |                      |                         |                       |
|      |     |       |              |             |             |                                                      |                                                                                           |                         |                      |                         |                       |
|      |     |       |              |             |             |                                                      |                                                                                           |                         |                      |                         |                       |
|      |     |       |              |             |             |                                                      |                                                                                           |                         |                      |                         |                       |
|      |     |       |              |             |             |                                                      |                                                                                           |                         |                      |                         |                       |
|      |     |       |              |             |             |                                                      |                                                                                           |                         |                      |                         |                       |

|                                             |  |                                                                       |  |
|---------------------------------------------|--|-----------------------------------------------------------------------|--|
| REMARKS<br><br>start 8:07      finish 10:30 |  | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |  |
|                                             |  | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |  |
|                                             |  | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                     |  |
|                                             |  | FACTOR _____ DATE _____ CHECKED BY: _____                             |  |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                                         |  |                                          |  |                            |  |
|----------------------|--|--------------------------|--|---------------------------------------------------------|--|------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>JUNE 16/82</u>  |  | PROPERTY NAME <u>Russell Creek</u> PROJ.No. <u>1096</u> |  |                                          |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH <u>June 16/82</u> |  | CREEK <u>Russell</u> DRILL <u>Midwest Sonic</u>         |  |                                          |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2484.61</u> |  | BIT ROD CASE             |  | DEPTH Overburden _____ Ft.                              |  | MOVE _____ Hrs; DELAY _____ Hrs.         |  | HOLE* <u>1E</u>            |  |
| DEPTH <u>32</u>      |  | I.D. <u>5.5</u> _____    |  | DEPTH Gravel _____ Ft.                                  |  | DRILL _____ Hrs; TOTAL <u>1 3/4</u> Hrs. |  | LINE* <u>R2</u>            |  |
|                      |  | O.D. <u>6.5</u> _____    |  | DEPTH Bedrock <u>29</u> Ft.                             |  | PULL _____ Hrs;                          |  |                            |  |

| FROM | TO | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>5/16 3/8 1/2 3/4 1 1 1/8 1 1/4 1 1/2 1 3/4 2 | FORMATION                                                    | VOLUME                  | ACTUAL     | CORREC-      | CORRECT    |
|------|----|-------|-----------------------------|--------------------------|-------------|------------------------------------------------------|--------------------------------------------------------------|-------------------------|------------|--------------|------------|
|      |    |       |                             |                          |             |                                                      |                                                              | Theoretical<br>Measured | Mgs.<br>Au | TION<br>Mgs. | Mgs.<br>Au |
|      |    |       |                             |                          |             |                                                      | Set up on road between tailings 1&2                          |                         |            |              |            |
| 0    | 8  | 8     | 0<br>3 1/2                  | -3 1/2<br>4 1/2          |             |                                                      | Boulders - gravel                                            |                         |            |              |            |
| 8    | 12 | 5     | 8<br>9.5                    | -1 1/2<br>3 1/2          |             |                                                      | sand, gravel with minor boulders                             |                         |            |              |            |
| 12   | 18 | 5     | 12<br>10 1/2                | +1 1/2<br>6 1/2          |             |                                                      | sand, gravel, few small boulders misc.                       |                         |            |              |            |
| 18   | 23 | 5     | 18<br>17                    | +1<br>6                  |             |                                                      | sand, gravel, boulders, clay, some red clay, chips at bottom |                         | 0.50       |              |            |
| 23   | 28 | 5     | 23<br>21                    | +2<br>7                  |             |                                                      | minor sand & gravel / mostly shale chips and clay            |                         | 0.50       |              |            |
| 28   | 32 | 4     | 28<br>27 1/2                | +2<br>4 1/2              |             |                                                      | mainly green brown shale - broken Bedrock @ 29               |                         | < 1.0      |              |            |
|      |    |       |                             |                          |             |                                                      | End of Hole                                                  |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |
|      |    |       |                             |                          |             |                                                      |                                                              |                         |            |              |            |

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| REMARKS | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                     |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                             |

120006

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                             |  |                            |  |                            |  |
|----------------------|--|--------------------------|--|---------------------------------------------|--|----------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 16/82</u>  |  | PROPERTY NAME <u>Russell Creek</u>          |  | PROJ.No. <u>1096</u>       |  | N.T.S.** _____             |  |
| DEP. _____           |  | FINISH <u>June 16/82</u> |  | CREEK <u>Russell</u>                        |  | DRILL <u>Midwest Sonic</u> |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2482.88</u> |  | BIT _____                |  | ROD _____                                   |  | CASE _____                 |  | DEPTH Overburden _____ Ft. |  |
| I.D. <u>5 1/2"</u>   |  | DEPTH Gravel _____ Ft.   |  | DRILL <u>2</u> Hrs; TOTAL <u>2 1/2</u> Hrs. |  | HOLE** <u>1W</u>           |  |                            |  |
| DEPTH <u>28</u>      |  | O.D. <u>6 1/2"</u>       |  | DEPTH Bedrock <u>25.5'?</u> Ft.             |  | PULL <u>2</u> Hrs;         |  | LINE** <u>R2</u>           |  |

[illegible]

|         |                                                                                                        |
|---------|--------------------------------------------------------------------------------------------------------|
| REMARKS | FROM <u>12</u> TO <u>18</u> ; <u>93.11</u> Mgs; <u>0.89</u> \$ per Cu. Yard @ <u>\$350 U.S.</u> /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                                  |
|         | FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u>                                                     |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                                                              |

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                               |     |                                                  |                             |                                                                      |             |                                                                                                                                                                                                                                                  |                                                           |                                   |                      |                         |                       |
|-------------------------------|-----|--------------------------------------------------|-----------------------------|----------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| LAT. _____                    |     | START <u>June 16/82</u>                          |                             | PROPERTY NAME <u>Russell Creek</u> PROJ.No. <u>1096</u>              |             |                                                                                                                                                                                                                                                  |                                                           | N.T.S.** _____                    |                      |                         |                       |
| DEP. _____                    |     | FINISH <u>June 16/82</u>                         |                             | CREEK <u>Russell</u> DRILL <u>Midwest Sonic</u>                      |             |                                                                                                                                                                                                                                                  |                                                           | SHEET <u>1</u> of _____           |                      |                         |                       |
| ELEV. <u>2486.41</u>          |     | BIT <u>ROD CASE</u>                              |                             | DEPTH Overburden _____ Ft. MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.     |             |                                                                                                                                                                                                                                                  |                                                           | HOLE** <u>2W</u>                  |                      |                         |                       |
| DEPTH <u>13</u>               |     | I.D. <u>5.5</u>                                  |                             | DEPTH Gravel _____ Ft. DRILL <u>3/4</u> Hrs; TOTAL <u>1 1/2</u> Hrs. |             |                                                                                                                                                                                                                                                  |                                                           | LINE** <u>R2</u>                  |                      |                         |                       |
| O.D. <u>6.5</u>               |     | DEPTH Bedrock <u>10</u> Ft. PULL <u>3/4</u> Hrs; |                             |                                                                      |             |                                                                                                                                                                                                                                                  |                                                           |                                   |                      |                         |                       |
| FROM                          | TO  | DRIVE                                            | Before Drive<br>After Drive | Core Rise<br>Core Length                                             | GRAPHIC LOG | Ø mm<br>5/12 3/2 1/8 1/16                                                                                                                                                                                                                        | FORMATION                                                 | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
| 0                             | 8   | 8                                                | 0<br>-1                     | 1<br>9                                                               |             |                                                                                                                                                                                                                                                  | Gravel, sand, shale clay 0-4<br>2 barrels for samples 4-8 |                                   |                      |                         |                       |
| 8                             | 13  | 5                                                | 8<br>8                      | 0<br>5                                                               |             |                                                                                                                                                                                                                                                  | Shale chips to clay to green shale                        |                                   | 2.5                  |                         |                       |
|                               | END |                                                  |                             |                                                                      |             |                                                                                                                                                                                                                                                  |                                                           |                                   |                      |                         |                       |
| REMARKS                       |     |                                                  |                             |                                                                      |             |                                                                                                                                                                                                                                                  |                                                           |                                   |                      |                         |                       |
| Core length 8-13<br>not noted |     |                                                  |                             |                                                                      |             | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.<br>FACTOR _____ DATE _____ CHECKED BY: _____ |                                                           |                                   |                      |                         |                       |



# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                    |  |                                 |  |                                             |  |
|----------------------|--|--------------------------|--|------------------------------------|--|---------------------------------|--|---------------------------------------------|--|
| LAT. _____           |  | START <u>June 17/82</u>  |  | PROPERTY NAME <u>Russell Creek</u> |  | PROJ. No. <u>1096</u>           |  | N.T.S. " _____                              |  |
| DEP. _____           |  | FINISH <u>June 17/82</u> |  | CREEK <u>Russell</u>               |  | DRILL <u>Midwest Sonic</u>      |  | SHEET <u>1</u> of _____                     |  |
| ELEV. <u>2478.66</u> |  | BIT <u>5.5"</u>          |  | ROD _____                          |  | CASE _____                      |  | DEPTH Overburden _____ Ft.                  |  |
| DEPTH <u>37</u>      |  | I.D. <u>6.5"</u>         |  | O.D. _____                         |  | DEPTH Gravel _____ Ft.          |  | MOVE <u>1 1/2</u> Hrs; DELAY _____ Hrs.     |  |
|                      |  |                          |  |                                    |  | DEPTH Bedrock <u>33 1/2</u> Ft. |  | DRILL <u>2</u> Hrs; TOTAL <u>2 1/2</u> Hrs. |  |
|                      |  |                          |  |                                    |  | PULL <u>2</u> Hrs;              |  | HOLE " <u>1W</u>                            |  |
|                      |  |                          |  |                                    |  |                                 |  | LINE " <u>R1</u>                            |  |

| FROM   | TO     | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/8 3/4 1/2 1/16 | FORMATION                                                    | VOLUME                  | ACTUAL<br>Mgs. Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs. Au |
|--------|--------|-------|--------------|-------------|-------------|--------------------------|--------------------------------------------------------------|-------------------------|-------------------|-------------------------|--------------------|
|        |        |       | After Drive  | Core Length |             |                          |                                                              | Theoretical<br>Measured |                   |                         |                    |
| 0      | 4      | 4     | 0            | 0           |             |                          | sand, clay, gravel, boulders                                 |                         |                   |                         |                    |
| 4      | 8      | 4     | 4            | 1/2         |             |                          | gravel, boulders, sand, clay                                 |                         |                   |                         |                    |
| 8      | 12 1/2 | 4 1/2 | 8            | 1/2         |             |                          | mainly gravel with boulders, sand, clay                      |                         |                   |                         |                    |
| 12 1/2 | 18     | 5 1/2 | 12 1/2       | 1/2         |             |                          | gravel, boulders, sand, minor clay                           |                         |                   |                         |                    |
| 18     | 23     | 5     | 18           | 1           |             |                          | gravel with shale chips, minor clay<br>few boulders (small)  |                         |                   |                         |                    |
| 23     | 28     | 5     | 23           | 1/2         |             |                          | gravel 40% boulders 10%<br>sand 40% clay 10%                 |                         | < .25             |                         |                    |
| 28     | 33     | 5     | 28           | -2          |             |                          | 28-29 boulders, 31 1/2 gravel, 33 Red<br>shale chips in clay |                         | 1.0               |                         |                    |
| 33     | 37     | 4     | 33           | 0           |             |                          | clay with green & red shale chips to Red<br>shale at 33 1/2  |                         | Tr                |                         |                    |
|        | END    |       | 33           | 4           |             |                          |                                                              |                         |                   |                         |                    |
|        |        |       |              |             |             |                          |                                                              |                         |                   |                         |                    |
|        |        |       |              |             |             |                          |                                                              |                         |                   |                         |                    |
|        |        |       |              |             |             |                          |                                                              |                         |                   |                         |                    |
|        |        |       |              |             |             |                          |                                                              |                         |                   |                         |                    |

|                                                               |                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>1/2' dropped (8-13) - sand hard to hold | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.<br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                                     |                                    |                                          |                            |
|----------------------|-------------------------------------|------------------------------------|------------------------------------------|----------------------------|
| LAT. _____           | START <u>June 17/82</u>             | PROPERTY NAME <u>Russell Creek</u> | PROJ. No. <u>1096</u>                    | N.T.S.™ _____              |
| DEP. _____           | FINISH <u>June 17/82</u>            | CREEK <u>Russell</u>               | DRILL <u>Midwest Sonic</u>               | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2480.24</u> | BIT <u>5.5</u> ROD _____ CASE _____ | DEPTH Overburden _____ Ft.         | MOVE _____ Hrs; DELAY _____ Hrs.         | HOLE™ <u>1E</u>            |
| DEPTH <u>33</u>      | I.D. <u>6.5</u> _____               | DEPTH Gravel _____ Ft.             | DRILL _____ Hrs; TOTAL <u>1 3/4</u> Hrs. | LINE™ <u>R1</u>            |
|                      | O.D. _____                          | DEPTH Bedrock _____ Ft.            | PULL _____ Hrs;                          |                            |

| FROM   | TO | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC<br>LOG | Ø mm<br>3/4 1/2 1 1/2 2 | FORMATION                                                                   | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|--------|----|-------|-----------------------------|--------------------------|----------------|-------------------------|-----------------------------------------------------------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| 0      | 8  | 8     | 0<br>-1 1/2                 | -1 1/2<br>6 1/2          |                |                         | gravel, sand, boulders, clay                                                |                                   |                      |                         |                       |
| 8      | 13 | 5     | 8<br>8                      | 0<br>5'                  |                |                         | gravel, small boulders, sand, minor clay                                    |                                   |                      |                         |                       |
| 13     | 18 | 5     | 13<br>12 1/2                | 1/2<br>5 1/2             |                |                         | gravel, small boulders, sand, minor clay                                    |                                   |                      |                         |                       |
| 18     | 23 | 5     | 18<br>17                    | 1<br>6                   |                |                         | gravel, small boulders, sand, minor clay                                    |                                   |                      |                         |                       |
| 24. 23 | 26 | 3     | 23<br>22                    | 1<br>4'                  |                |                         | gravel, small boulders, sand, minor clay<br>Drilled to 28 - dropped 2' core | .0219<br>.0292                    | 32.0                 | .8                      | 24                    |
| 25. 26 | 33 | 7     | 26<br>26                    | 20<br>7'                 |                |                         | sand, gravel, small to large boulders,<br>few red shale at 33'              |                                   | 7.0                  | 0                       | 7                     |
|        |    |       |                             |                          |                |                         | END                                                                         |                                   |                      |                         |                       |
|        |    |       |                             |                          |                |                         |                                                                             |                                   |                      |                         |                       |
|        |    |       |                             |                          |                |                         |                                                                             |                                   |                      |                         |                       |
|        |    |       |                             |                          |                |                         |                                                                             |                                   |                      |                         |                       |
|        |    |       |                             |                          |                |                         |                                                                             |                                   |                      |                         |                       |
|        |    |       |                             |                          |                |                         |                                                                             |                                   |                      |                         |                       |
|        |    |       |                             |                          |                |                         |                                                                             |                                   |                      |                         |                       |
|        |    |       |                             |                          |                |                         |                                                                             |                                   |                      |                         |                       |
|        |    |       |                             |                          |                |                         |                                                                             |                                   |                      |                         |                       |

## REMARKS

FROM 23 TO 33 ; 422.3 Mgs; \$4.06 \$ per Cu. Yard @ 350.00 /Ounce  
 FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FINENESS 850 DATE \_\_\_\_\_ LOGGED BY: D.E.P.  
 FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                    |  |                                               |  |                            |  |                         |  |
|----------------------|--|--------------------------|--|------------------------------------|--|-----------------------------------------------|--|----------------------------|--|-------------------------|--|
| LAT. _____           |  | START <u>June 17/82</u>  |  | PROPERTY NAME <u>Russell Creek</u> |  |                                               |  | PROJ. No. <u>1096</u>      |  | N.T.S.™ _____           |  |
| DEP. _____           |  | FINISH <u>June 20/82</u> |  | CREEK <u>Russell</u>               |  |                                               |  | DRILL <u>Midwest Sonic</u> |  | SHEET <u>1</u> of _____ |  |
| ELEV. <u>2480.49</u> |  | BIT ROD CASE             |  | DEPTH Overburden _____ Ft.         |  | MOVE <u>1/4</u> Hrs; DELAY <u>2 days</u> Hrs. |  | HOLE™ <u>2E</u>            |  |                         |  |
| DEPTH <u>30</u>      |  | I.D. <u>5.5</u>          |  | DEPTH Gravel _____ Ft.             |  | DRILL <u>2</u> Hrs; TOTAL _____ Hrs.          |  | LINE™ <u>R1</u>            |  |                         |  |
|                      |  | O.D. <u>6.5</u>          |  | DEPTH Bedrock <u>28</u> Ft.        |  | PULL <u>2</u> Hrs;                            |  |                            |  |                         |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm | FORMATION                                               | VOLUME                     | ACTUAL Mgs. Au | CORREC-TION Mgs. | CORRECT Mgs. Au |
|------|-----|-------|--------------|-------------|-------------|------|---------------------------------------------------------|----------------------------|----------------|------------------|-----------------|
|      |     |       | After Drive  | Core Length |             |      |                                                         | Theoretical Measured       |                |                  |                 |
| 0    | 8   | 8     | 0<br>2       | -2<br>6     |             |      | gravel, sand, boulders, clay                            |                            |                |                  |                 |
| 8    | 11½ | 3½    | 8<br>7       | 1<br>4½     |             |      | gravel, sand, boulders, clay                            |                            |                |                  |                 |
| 11½  | 18  | 6½    | 11½<br>12½   | -1<br>5½    |             |      | sand, gravel, clay, minor boulders                      |                            |                |                  |                 |
| 18   | 23  | 5     | 18<br>16½    | 1½<br>6½    |             |      | shale fragments, gravel, sand, clay, few small boulders | .03669                     | 27.7           | -6.3             | 21.4            |
| 23   | 28  | 5     | 23<br>21½    | 1½<br>6½    |             |      | clay with coarse gravel, mostly shale in clay           | .04750<br>.03669<br>.04750 | 11.5           | 2.6              | 8.9             |
| 28   | 30  | 2     | 28<br>26     | 2<br>4      |             |      | Red shale rock - dry Bedrock                            |                            | < .5           |                  |                 |
|      | END |       |              |             |             |      |                                                         |                            |                |                  |                 |
|      |     |       |              |             |             |      |                                                         |                            |                |                  |                 |
|      |     |       |              |             |             |      |                                                         |                            |                |                  |                 |
|      |     |       |              |             |             |      |                                                         |                            |                |                  |                 |
|      |     |       |              |             |             |      |                                                         |                            |                |                  |                 |
|      |     |       |              |             |             |      |                                                         |                            |                |                  |                 |
|      |     |       |              |             |             |      |                                                         |                            |                |                  |                 |
|      |     |       |              |             |             |      |                                                         |                            |                |                  |                 |

|                                                                                                                          |                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br>Delay June 17-19 for Oscillator Bolts. CPA from Winnipeg set up on road between #2 - #3 setting Ponds. | FROM <u>18</u> TO <u>28</u> ; <u>388.4</u> Mgs; <u>3.71</u> \$ per Cu. Yard @ <u>350</u> /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u><br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006



# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                         |  |                                                                        |  |  |  |                            |  |
|----------------------|--|-------------------------|--|------------------------------------------------------------------------|--|--|--|----------------------------|--|
| LAT. _____           |  | START <u>June 20/82</u> |  | PROPERTY NAME <u>RUSSELL CREEK, Y.T.</u> PROJ.No. <u>1096</u>          |  |  |  | N.T.S." _____              |  |
| DEP. _____           |  | FINISH _____            |  | CREEK <u>RUSSELL</u> DRILL <u>Midwest Sonic</u>                        |  |  |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2512.62</u> |  | BIT ROD CASE            |  | DEPTH Overburden _____ Ft. MOVE <u>1</u> Hrs; DELAY _____ Hrs.         |  |  |  | HOLE" <u>#6</u>            |  |
| DEPTH <u>43</u>      |  | I.D. <u>5.5"</u>        |  | DEPTH Gravel _____ Ft. DRILL <u>1 1/2</u> Hrs; TOTAL <u>2 1/2</u> Hrs. |  |  |  | LINE" <u>Pit Test</u>      |  |
|                      |  | O.D. <u>6.5"</u>        |  | DEPTH Bedrock <u>40</u> Ft. PULL <u> )</u> Hrs;                        |  |  |  |                            |  |

| FROM   | TO     | DRIVE | Before Drive     | Core Rise       | GRAPHIC LOG | Ømm<br>5/32 3/8 1/2 5/8 3/4 7/8 1 | FORMATION                                                                               | VOLUME               | ACTUAL  | CORREC-   | CORRECT |
|--------|--------|-------|------------------|-----------------|-------------|-----------------------------------|-----------------------------------------------------------------------------------------|----------------------|---------|-----------|---------|
|        |        |       | After Drive      | Core Length     |             |                                   |                                                                                         | Theoretical Measured | Mgs. Au | TION Mgs. | Mgs. Au |
| 0      | 6      | 6     | 0<br>1           | -1<br>5         |             |                                   | Blue Clay and Boulders                                                                  |                      |         |           |         |
| 6      | 8      | 2     | 6<br>4 1/2       | +1 1/2<br>3 1/2 |             |                                   |                                                                                         |                      |         |           |         |
| 8      | 13     | 5     | 8<br>7 1/2       | 1/2<br>5 1/2    |             |                                   | Gravel Blue Clay                                                                        |                      |         |           |         |
| 13     | 18     | 5     | 13<br>11 1/2     | 1 1/2<br>6 1/2  |             |                                   |                                                                                         |                      |         |           |         |
| 18     | 23     | 5     | 18<br>15 1/2     | 2 1/2<br>7 1/2  |             |                                   | Frozen Clay & fine gravel - sand                                                        |                      |         |           |         |
| 23     | 28     | 5     | 23<br>21         | 2<br>7          |             |                                   | Sandy clay, fine gravel, boulders                                                       |                      | 0.5     |           |         |
| 28     | 31     | 3     | 28<br>27 1/2     | 1/2<br>3 1/2    |             |                                   | (Drilled to 33 - dropped 3' in casing)<br>Blue clay, gravel, boulders                   |                      | >1      |           |         |
| (31)   | (38)   | 7     | 31<br>29         | 2<br>9          |             |                                   | "                                                                                       |                      |         |           |         |
| 31     | 34 1/2 | 3 1/2 | 31<br>31         | 0<br>3 1/2      |             |                                   | "                                                                                       |                      | 5       | --        | 5       |
| 34 1/2 | 38     | 3 1/2 | 34 1/2<br>34 1/2 | 0<br>3 1/2      |             |                                   | "                                                                                       |                      | 6       | --        | 6       |
| 38     | 43     | 5     | 38<br>38         | 0<br>5          |             |                                   | Grey green limy with quartz carb.<br>Stringers. 2 feet dry rock. Drills like<br>Bedrock |                      | 3       | --        | 3       |
| END    |        |       |                  |                 |             |                                   |                                                                                         |                      |         |           |         |

|                                                                                                  |                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br>18-23 → 7 1/2' core intube measured but may have spacing as looks less in drum | FROM <u>31</u> TO <u>38</u> ; <u>212.7</u> Mgs; <u>2.03</u> \$ per Cu. Yard @ <u>\$350 U.S.</u> /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u><br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                         |  |                                          |  |                                        |  |                            |  |
|----------------------|--|-------------------------|--|------------------------------------------|--|----------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 20/82</u> |  | PROPERTY NAME <u>RUSSELL CREEK, Y.T.</u> |  | PROJ.No. <u>1096</u>                   |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____            |  | CREEK <u>RUSSELL</u>                     |  | DRILL <u>Midwest Sonic</u>             |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2513.90</u> |  | BIT <u>ROD</u> CASE     |  | DEPTH Overburden _____ Ft.               |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.  |  | HOLE** <u>#7</u>           |  |
| DEPTH <u>45</u>      |  | I.D. _____              |  | DEPTH Gravel _____ Ft.                   |  | DRILL ) _____ Hrs; TOTAL <u>3</u> Hrs. |  | Pit Test                   |  |
|                      |  | O.D. _____              |  | DEPTH Bedrock <u>40</u> Ft.              |  | PULL ) <u>2 1/2</u> Hrs;               |  | LINE** _____               |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise      | GRAPHIC LOG | Ø mm<br>3/32 1/8 1/4 | FORMATION                                                                    | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|--------------|----------------|-------------|----------------------|------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       | After Drive  | Core Length    |             |                      |                                                                              | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8   | 8     | 0<br>1/2     | -1/2<br>7 1/2  |             |                      | Surface fill/sand gravel boulders clay                                       |                         |                      |                         |                       |
| 8    | 13  | 5     | 8<br>7       | 1<br>5         |             |                      | Blue clay - frozen. Some ice (?). Red Shale chunks (float) in clay           |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>11 1/2 | 1 1/2<br>6 1/2 |             |                      | Clay - frozen - some ice (?)                                                 |                         |                      |                         |                       |
| 18   | 23  | 5     | 18<br>16     | 2<br>7         |             |                      | Clay, gravel - some frozen small red shale pieces                            |                         |                      |                         |                       |
| 23   | 28  | 5     | 23<br>21     | 2<br>7         |             |                      | Much gravel fine to coarse, many small flat red shale pieces. Minor boulders |                         | 0.5                  |                         |                       |
| 28   | 33  | 5     | 28<br>26     | 2<br>7         |             |                      | Coarse gravel, small to large boulders sand in grey blue clay                |                         | 0.75                 |                         |                       |
| 33   | 38  | 5     | 33<br>30 1/2 | 2 1/2<br>7 1/2 |             |                      | Gravel - boulders some in clay                                               |                         | 1.0                  |                         |                       |
| 38   | 43  | 5     | 38<br>37 1/2 | 1/2<br>5 1/2   |             |                      | Dark limy rock - calc. veinlets                                              |                         | 1.0                  |                         |                       |
| 43   | 45  | 2     | 43<br>42 1/2 | 1/2<br>2 1/2   |             |                      | Grey green sil. to limy rock with much quartz                                |                         | 1.0                  |                         |                       |
|      | END |       |              |                |             |                      |                                                                              |                         |                      |                         |                       |
|      |     |       |              |                |             |                      |                                                                              |                         |                      |                         |                       |
|      |     |       |              |                |             |                      |                                                                              |                         |                      |                         |                       |
|      |     |       |              |                |             |                      |                                                                              |                         |                      |                         |                       |

|                                                                      |                           |                                                   |
|----------------------------------------------------------------------|---------------------------|---------------------------------------------------|
| <b>REMARKS</b><br><br>Set-up west of Pit Cut on 10' (disturbed) fill | NO CALCULATION MADE       |                                                   |
|                                                                      | FROM _____ TO _____       | ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|                                                                      | FROM _____ TO _____       | ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|                                                                      | FINENESS _____ DATE _____ | LOGGED BY: _____ D.E.P.                           |
|                                                                      | FACTOR _____ DATE _____   | CHECKED BY: _____                                 |

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|---------------|-----|-------|-----------------------------|--------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| LAT. _____    |     |       | START June 21/82            |                          | PROPERTY NAME RUSSELL CREEK PROJ.No. 1096                   |                                                                                                                                                                                                                                            |                             |                                   | N.T.S.** _____       |                         |                       |
| DEP. _____    |     |       | FINISH _____                |                          | CREEK RUSSELL DRILL Midwest Sonic                           |                                                                                                                                                                                                                                            |                             |                                   | SHEET 1 of 1         |                         |                       |
| ELEV. 2522.83 |     |       | BIT ROD CASE                |                          | DEPTH Overburden _____ Ft. MOVE _____ Hrs; DELAY _____ Hrs. |                                                                                                                                                                                                                                            |                             |                                   | HOLE** 4W            |                         |                       |
| DEPTH 18      |     |       | I.D. 5.5" O.D. 6.5"         |                          | DEPTH Gravel _____ Ft. DRILL _____ Hrs; TOTAL _____ Hrs.    |                                                                                                                                                                                                                                            |                             |                                   | LINE** R7            |                         |                       |
|               |     |       |                             |                          | DEPTH Bedrock 15 Ft. PULL _____ Hrs;                        |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
| FROM          | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG                                                 | Ømm<br><div style="text-align:center;">5/12<br/>3/2<br/>1/8<br/>1/128</div>                                                                                                                                                                | FORMATION                   | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
| 0             | 8   | 8     | 0<br>1/2                    | -1/2<br>7 1/2            |                                                             |                                                                                                                                                                                                                                            | Boulders gravel sand clay   |                                   |                      |                         |                       |
| 8             | 13  | 5     | 8<br>6                      | 2<br>7                   |                                                             |                                                                                                                                                                                                                                            |                             |                                   | 0.15                 |                         |                       |
| 13            | 18  | 5     | 13<br>11 1/2                | 1 1/2<br>6 1/2           |                                                             |                                                                                                                                                                                                                                            | Red clay to Red Shale @ 15' |                                   | 0.05                 |                         |                       |
|               | END |       |                             |                          |                                                             |                                                                                                                                                                                                                                            | Bedrock                     |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
|               |     |       |                             |                          |                                                             |                                                                                                                                                                                                                                            |                             |                                   |                      |                         |                       |
| REMARKS       |     |       |                             |                          |                                                             | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: D.E.P.<br>FACTOR _____ DATE _____ CHECKED BY: _____ |                             |                                   |                      |                         |                       |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

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|                      |  |                                      |  |                                    |  |                                      |  |                            |  |
|----------------------|--|--------------------------------------|--|------------------------------------|--|--------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START _____                          |  | PROPERTY NAME <u>RUSSELL CREEK</u> |  | PROJ. No. <u>1096</u>                |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____                         |  | CREEK <u>RUSSELL</u>               |  | DRILL <u>Midwest Sonic</u>           |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2517.62</u> |  | BIT <u>5.5"</u> ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.         |  | MOVE <u>½</u> Hrs; DELAY _____ Hrs.  |  | HOLE** <u>3W</u>           |  |
| DEPTH <u>42</u>      |  | I.D. <u>6.5"</u> O.D. _____          |  | DEPTH Gravel _____ Ft.             |  | DRILL <u>½</u> Hrs; TOTAL _____ Hrs. |  | LINE** <u>R7</u>           |  |
| DEPTH <u>42</u>      |  | O.D. _____                           |  | DEPTH Bedrock <u>40'</u> Ft.       |  | PULL <u>½</u> Hrs;                   |  |                            |  |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>5/16 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 1/2 1 3/4 2 | FORMATION                                                            | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|--------------------------------------------------------------|----------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       |                             |                          |             |                                                              |                                                                      | Theoretical<br>Measured |                      |                         |                       |
| 0    | 3   | 3     | 0<br>0                      | 0<br>3                   |             |                                                              | Blue clay shale pieces                                               |                         |                      |                         |                       |
| 3    | 8   | 5     | 3<br>3                      | 0<br>5                   |             |                                                              |                                                                      |                         |                      |                         |                       |
| 8    | 13  | 5     | 8<br>6                      | 2<br>7                   |             |                                                              | Blue clay w-boulders                                                 |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>12½                   | ½<br>5½                  |             |                                                              | Blue clay & gravel parts frozen                                      |                         |                      |                         |                       |
| 18   | 22  | 4     | 18<br>18½                   | ½<br>3½                  |             |                                                              | Sand, fine gravel (many small chips red shale) large granite boulder |                         | .50                  |                         |                       |
| 22   | 28  | 6     | 22<br>21½                   | ½<br>6½                  |             |                                                              | Blue clay - gravel - red shale chips to green clay                   |                         | <.50                 |                         |                       |
| 28   | 33  | 5     | 28<br>27                    | +1<br>6                  |             |                                                              | Green shale pieces - wet, drills easily                              |                         | .10                  |                         |                       |
| 33   | 38  | 5     | 33<br>32                    | +1<br>6                  |             |                                                              | (Small pieces)                                                       |                         | N11                  |                         |                       |
| 38   | 42  | 4     | 38<br>38                    | 0<br>4                   |             |                                                              | Green clay to green clay with shale to green shale @ 40'             |                         |                      |                         |                       |
|      | END |       |                             |                          |             |                                                              |                                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                                              |                                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                                              |                                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                                              |                                                                      |                         |                      |                         |                       |

|                                                                                               |  |                                                                       |  |
|-----------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------|--|
| <b>REMARKS</b><br><br>Pump delay - ½ hour<br>Pump delay - 1 hour<br>Water return is green 38' |  | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |  |
|                                                                                               |  | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |  |
|                                                                                               |  | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                     |  |
|                                                                                               |  | FACTOR _____ DATE _____ CHECKED BY: _____                             |  |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                         |  |                                    |  |                                      |  |                            |  |                            |  |
|----------------------|--|-------------------------|--|------------------------------------|--|--------------------------------------|--|----------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 23/82</u> |  | PROPERTY NAME <u>RUSSELL CREEK</u> |  |                                      |  | PROJ. No. <u>1096</u>      |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____            |  | CREEK <u>RUSSELL</u>               |  |                                      |  | DRILL <u>Midwest Sonic</u> |  | SHEET <u>1</u> of <u>2</u> |  |
| ELEV. <u>2517.10</u> |  | BIT ROD CASE            |  | DEPTH Overburden _____ Ft.         |  | MOVE _____ Hrs; DELAY _____ Hrs.     |  | HOLE** <u>R7</u>           |  |                            |  |
| DEPTH <u>71</u>      |  | I.D. _____              |  | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL <u>4</u> Hrs. |  | LINE** <u>2W</u>           |  |                            |  |
|                      |  | O.D. _____              |  | DEPTH Bedrock <u>71</u> Ft.        |  | PULL _____ Hrs;                      |  |                            |  |                            |  |

| FROM | TO | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/8 3/4 1/2 1/8 | FORMATION                                                          | VOLUME                  | ACTUAL<br>Mgs. Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs. Au |
|------|----|-------|--------------|-------------|-------------|-------------------------|--------------------------------------------------------------------|-------------------------|-------------------|-------------------------|--------------------|
|      |    |       | After Drive  | Core Length |             |                         |                                                                    | Theoretical<br>Measured |                   |                         |                    |
| 0    | 8  | 8     | 0            | -2          |             |                         | Blue clay - minor mixed gravel                                     |                         |                   |                         |                    |
| 8    | 13 | 5     | 8            | 0           |             |                         |                                                                    |                         |                   |                         |                    |
| 13   | 18 | 5     | 13           | 0           |             |                         |                                                                    |                         | 1.0               |                         |                    |
| 18   | 23 | 5     | 18           | -1 1/2      |             |                         | Sand, clay - few boulders                                          |                         | .10               |                         |                    |
| 23   | 28 | 5     | 23           | -1          |             |                         | Clay, sand, fine gravel                                            |                         | .50               |                         |                    |
| 28   | 33 | 5     | 28           | - 1/2       |             |                         |                                                                    | .03669<br>.03299        | 15                | +1.75                   | 16.75              |
| 33   | 38 | 5     | 33           | 1           |             |                         | Fine gravel - clay                                                 | .03669<br>.0438         | 30                | 4.73                    | 25.27              |
| 38   | 43 | 5     | 38           | 2           |             |                         | Fine to coarse gravel in blue grey clay                            | .03669<br>.0511         | 19                | 5.36                    | 13.64              |
| 43   | 48 | 5     | 43           | +3          |             |                         | Grey-green clay (sticky) with abundant pieces dark limestone shale | .03669<br>.0584         | 83.5              | 31.04                   | 52.46              |
| 48   | 53 | 5     | 48           | 3           |             |                         |                                                                    | .03669<br>.0584         | 13.0              | 4.84                    | 8.16               |
| 53   | 57 | 4     | 53           | 1 1/2       |             |                         |                                                                    |                         | 1.1               | --                      | --                 |
| 57   | 62 | 5     | 57           | 4           |             |                         | 2 Samples. 1 of 2 <.10 2 of 2 <.05                                 |                         | <.10<br><.05      | --                      | --                 |

|                                                                   |                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>Drill heats at 45' - sticky clay extra core | FROM <u>28</u> TO <u>53</u> ; <u>628</u> Mgs; <u>6.02 U.S.\$</u> per Cu. Yard @ <u>350 U.S.</u> /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.<br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                                         |              |                                           |                          |                       |             |                        |                                                         |                             |                |                  |                 |
|-----------------------------------------|--------------|-------------------------------------------|--------------------------|-----------------------|-------------|------------------------|---------------------------------------------------------|-----------------------------|----------------|------------------|-----------------|
| LAT.                                    | START        | PROPERTY NAME RUSSELL CREEK PROJ.No. 1096 |                          |                       |             |                        |                                                         | N.T.S."                     |                |                  |                 |
| DEP.                                    | FINISH       | CREEK RUSSELL DRILL                       |                          |                       |             |                        |                                                         | SHEET 2 of 2                |                |                  |                 |
| ELEV.                                   | BIT ROD CASE | DEPTH Overburden Ft. MOVE Hrs; DELAY Hrs. |                          |                       |             |                        |                                                         | HOLE" 2W                    |                |                  |                 |
| DEPTH                                   | I.D.         | DEPTH Gravel Ft. DRILL Hrs; TOTAL Hrs.    |                          |                       |             |                        |                                                         | LINE" R7                    |                |                  |                 |
|                                         | O.D.         | DEPTH Bedrock Ft. PULL Hrs;               |                          |                       |             |                        |                                                         |                             |                |                  |                 |
| FROM                                    | TO           | DRIVE                                     | Before Drive After Drive | Core Rise Core Length | GRAPHIC LOG | Ømm<br>5/8 3/4 1 1 1/2 | FORMATION                                               | VOLUME Theoretical Measured | ACTUAL Mgs. Au | CORREC-TION Mgs. | CORRECT Mgs. Au |
| 62                                      | 65           | 3                                         | 62 61 1/2                | 3 1/2                 |             |                        | Mostly limestone gravel & small boulders                |                             | <.05           |                  |                 |
| 65                                      | 68           | 3                                         | 65 63                    | +2 5                  |             |                        | in yellow brown clay (Dk Sil.- Lst.)<br>50% to 70% rock |                             | Tr.            |                  |                 |
| 68                                      | 71           | 3                                         | 68 68                    | 0 3                   |             |                        |                                                         |                             | <.05           |                  |                 |
|                                         | END          |                                           |                          |                       |             |                        |                                                         |                             |                |                  |                 |
| REMARKS                                 |              |                                           |                          |                       |             |                        |                                                         |                             |                |                  |                 |
| FROM TO ; Mgs; \$ per Cu. Yard @ /Ounce |              |                                           |                          |                       |             |                        |                                                         |                             |                |                  |                 |
| FROM TO ; Mgs; \$ per Cu. Yard @ /Ounce |              |                                           |                          |                       |             |                        |                                                         |                             |                |                  |                 |
| FINENESS DATE LOGGED BY: D.E.P.         |              |                                           |                          |                       |             |                        |                                                         |                             |                |                  |                 |
| FACTOR DATE CHECKED BY:                 |              |                                           |                          |                       |             |                        |                                                         |                             |                |                  |                 |

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|               |  |                  |  |                                   |  |                               |  |                |  |
|---------------|--|------------------|--|-----------------------------------|--|-------------------------------|--|----------------|--|
| LAT. _____    |  | START June 23/82 |  | PROPERTY NAME RUSSELL CREEK, Y.T. |  | PROJ.No. 1096                 |  | N.T.S. # _____ |  |
| DEP. _____    |  | FINISH _____     |  | CREEK RUSSELL                     |  | DRILL Midwest Sonic           |  | SHEET 1 of 1   |  |
| ELEV. 2517.63 |  | BIT ROD CASE     |  | DEPTH Overburden _____ Ft.        |  | MOVE ½ Hrs; DELAY _____ Hrs.  |  | HOLE # R7      |  |
| DEPTH 58      |  | I.D. _____       |  | DEPTH Gravel _____ Ft.            |  | DRILL ) Hrs; TOTAL _____ Hrs. |  | LINE # 1W      |  |
|               |  | O.D. _____       |  | DEPTH Bedrock ? Ft.               |  | PULL ) 4 Hrs;                 |  |                |  |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm<br>1/2 3/4 1 1 1/2 | FORMATION                                                                                       | VOLUME                  | ACTUAL     | CORREC-      | CORRECT    |
|------|-----|-------|-----------------------------|--------------------------|-------------|------------------------|-------------------------------------------------------------------------------------------------|-------------------------|------------|--------------|------------|
|      |     |       |                             |                          |             |                        |                                                                                                 | Theoretical<br>Measured | Mgs.<br>Au | TION<br>Mgs. | Mgs.<br>Au |
| 0    | 8   | 8     | 0<br>0                      | 0<br>8                   |             |                        | Clay (blue to brown), gravel<br>2 Samples 60 - 40 to 40 - 60                                    |                         |            |              |            |
| 8    | 13  | 5     | 8<br>7                      | 1<br>6                   |             |                        | Mostly clay                                                                                     |                         |            |              |            |
| 13   | 18  | 5     | 13<br>12½                   | ½<br>5½                  |             |                        | Clay & gravel, 13 - 14 ft. gravel                                                               |                         |            |              |            |
| 18   | 23  | 5     | 18<br>20                    | -2<br>3                  |             |                        | Sandy clay, sand & gravel. Stuck boulder<br>pushed out core.                                    |                         |            |              |            |
| 23   | 28  | 5     | 23<br>25½                   | 2½<br>2½                 |             |                        | Sand and gravel, minor clay, large boulders<br>- pushed.                                        |                         |            |              |            |
| 28   | 33  | 5     | 28<br>27½                   | ½<br>5½                  |             |                        | Clay with gravel, few rocks - mainly<br>green shale pieces.                                     |                         |            |              |            |
| 33   | 37½ | 4½    | 33<br>32½                   | ½<br>5                   |             |                        | Gravel & sand in orange clay, small<br>boulders, green shale, dark limestone                    |                         |            |              |            |
| 37½  | 43  | 5½    | 37½<br>39                   | 1½<br>7                  |             |                        |                                                                                                 |                         |            |              |            |
| 43   | 48  | 5     | 43<br>41                    | 2<br>7                   |             |                        | Yellow clay well mixed with rock frags.<br>limestone, shale etc. fine to med. Occ.<br>boulders. |                         | <.10       |              |            |
| 48   | 52  | 4     | 48<br>51                    | -3<br>7                  |             |                        |                                                                                                 |                         | Tr.        |              |            |
| 52   | 55  | 3     | 52<br>51                    | 1<br>4                   |             |                        | Orange carbonate-cemented, green shale<br>to limestone - quartz pebbles                         |                         | Tr.        |              |            |
| 55   | 58  | 3     | 55<br>56                    | -1<br>2                  |             |                        | Carbonate cemented limestone, conglom-<br>erate.                                                |                         | 0.15       |              |            |

|                                                                                                                                  |                     |                                                   |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------|
| <b>REMARKS</b><br>END<br>Dry rock sections @ 45 indicate large<br>grey green limy boulders.<br>Drilling hard & hanging up at 55+ | END OF HOLE         |                                                   |
|                                                                                                                                  | FROM _____ TO _____ | ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|                                                                                                                                  | FROM _____ TO _____ | ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|                                                                                                                                  | FINENESS _____      | DATE _____ LOGGED BY: _____ D.E.P.                |
|                                                                                                                                  | FACTOR _____        | DATE _____ CHECKED BY: _____                      |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                            |  |                                    |  |                       |  |                            |  |                            |  |
|----------------------|--|----------------------------|--|------------------------------------|--|-----------------------|--|----------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 24/82</u>    |  | PROPERTY NAME <u>RUSSELL CREEK</u> |  |                       |  | PROJ.No. <u>1096</u>       |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____               |  | CREEK <u>RUSSELL</u>               |  |                       |  | DRILL <u>Midwest Sonic</u> |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2512.24</u> |  | BIT <u>ROD</u> <u>CASE</u> |  | DEPTH Overburden _____ Ft.         |  | MOVE <u>1</u> Hrs;    |  | DELAY _____ Hrs.           |  | HOLE** <u>1W</u>           |  |
| DEPTH <u>43</u>      |  | I.D. <u>5.5</u>            |  | DEPTH Gravel _____ Ft.             |  | DRILL ) _____ Hrs;    |  | TOTAL <u>3½</u> Hrs.       |  | R6                         |  |
|                      |  | O.D. <u>6.5</u>            |  | DEPTH Bedrock <u>41</u> Ft.        |  | PULL ) <u>2½</u> Hrs; |  |                            |  | LINE** _____               |  |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm<br>1/8 3/16 1/4 3/8 1/2 3/4 1 | FORMATION                                                                     | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|-----------------------------------|-------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       |                             |                          |             |                                   |                                                                               | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8   | 8     | 0<br>-3½                    | -3½<br>4½                |             |                                   | 5' newly disturbed gravel, sand, boulders<br>minor clay.                      |                         |                      |                         |                       |
| 8    | 13  | 5     | 8<br>6½                     | 1½<br>6½                 |             |                                   | Blue Clay; little sand or gravel                                              |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>15½                   | -2½<br>2½                |             |                                   | Clay (above) - few boulders part one<br>boulder (pile driven lost core)       |                         |                      |                         |                       |
| 18   | 23  | 5     | 18<br>16½                   | -1½<br>3½                |             |                                   | Blue Clay (½) - to sand gravel                                                |                         |                      |                         |                       |
| 23   | 28  | 5     | 23<br>25                    | -2<br>3                  |             |                                   | Small boulders, gravel, sand & minor clay<br>1 pile driven boulder            |                         | Tr                   |                         |                       |
| 28   | 33  | 5     | 28<br>30                    | -2<br>3                  |             |                                   | Sand, minor gravel, clay & large boulders<br>(boulder 8" cored - pile driven) |                         | Tr                   |                         |                       |
| 33   | 38  | 5     | 33<br>35                    | -2<br>3                  |             |                                   | Pale green clay with sand clay & gravel,<br>one boulder pile driven           |                         | Tr                   |                         |                       |
| 38   | 43  | 5     | 38<br>35½                   | 2½<br>7½                 |             |                                   | Pale green clay to weathered shale to<br>green shale @ 41                     |                         |                      |                         |                       |
|      | END |       |                             |                          |             |                                   |                                                                               |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                   |                                                                               |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                   |                                                                               |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                   |                                                                               |                         |                      |                         |                       |

|                                                             |                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>Set up on Bern near edge of<br>Creek. | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u><br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                            |  |                                    |  |                                   |  |                            |  |
|----------------------|--|----------------------------|--|------------------------------------|--|-----------------------------------|--|----------------------------|--|
| LAT. _____           |  | START _____                |  | PROPERTY NAME <u>RUSSELL CREEK</u> |  | PROJ. No. <u>1096</u>             |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____               |  | CREEK <u>RUSSELL</u>               |  | DRILL <u>Midwest Sonic</u>        |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2512.71</u> |  | BIT <u>ROD</u> <u>CASE</u> |  | DEPTH Overburden _____ Ft.         |  | MOVE _____ Hrs; DELAY _____ Hrs.  |  | HOLE* <u>1 E</u>           |  |
| DEPTH <u>44½</u>     |  | I.D. _____                 |  | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL _____ Hrs. |  | LINE* <u>R 6</u>           |  |
|                      |  | O.D. _____                 |  | DEPTH Bedrock <u>37 (?)</u> Ft.    |  | PULL _____ Hrs;                   |  |                            |  |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm<br>1/2 3/4 1 1 1/2 2 | FORMATION                                                                | VOLUME                  | ACTUAL<br>Mgs. Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs. Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|--------------------------|--------------------------------------------------------------------------|-------------------------|-------------------|-------------------------|--------------------|
|      |     |       |                             |                          |             |                          |                                                                          | Theoretical<br>Measured |                   |                         |                    |
| 0    | 8   | 8     | 0<br>1½                     | -1½<br>6½                |             |                          | Gravel, sand, few boulders. 2' Blue Clay<br>Start sand 6'                |                         |                   |                         |                    |
| 8    | 13  | 5     | 8<br>6½                     | 1½<br>6½                 |             |                          | Blue Clay                                                                |                         |                   |                         |                    |
| 13   | 18  | 5     | 13<br>12                    | 1<br>6                   |             |                          |                                                                          |                         |                   |                         |                    |
| 18   | 23  | 5     | 18<br>19                    | -1<br>4                  |             |                          | Sand & gravel - more boulders                                            |                         |                   |                         |                    |
| 23   | 28  | 5     | 23<br>24                    | -1<br>4                  |             |                          | Sand & gravel in clay, to clay                                           |                         |                   |                         |                    |
| 28   | 32  | 4     | 28<br>28½                   | -½<br>3½                 |             |                          | Drill to 33. Drop 1 foot, gravel & sand<br>& small boulders in Blue Clay | .0292<br>.0256          | 23                | 3.6                     | 26.6               |
| 32   | 28  | 6     | 32<br>30½                   | 1½<br>7½                 |             |                          | Gravel - sand - clay. Much barite pieces<br>with blue mud & decomp. rock |                         | Tr                |                         |                    |
| 38   | 41½ | 3½    | 38<br>41                    | 3<br>6½                  |             |                          | Barite/limestone (dark) pieces and Blue<br>mud (clay) - decomp. rock     |                         | Tr                |                         |                    |
|      | END |       |                             |                          |             |                          | Probably bedrock since 37. Drills hard.                                  |                         | N11               |                         |                    |
|      |     |       |                             |                          |             |                          |                                                                          |                         |                   |                         |                    |
|      |     |       |                             |                          |             |                          |                                                                          |                         |                   |                         |                    |
|      |     |       |                             |                          |             |                          |                                                                          |                         |                   |                         |                    |
|      |     |       |                             |                          |             |                          |                                                                          |                         |                   |                         |                    |

|         |                                                                                                        |
|---------|--------------------------------------------------------------------------------------------------------|
| REMARKS | FROM <u>28</u> TO <u>32</u> ; <u>912.6</u> Mgs; <u>8.71</u> \$ per Cu. Yard @ <u>\$350 U.S.</u> /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                                  |
|         | FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u>                                                     |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                                                              |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                         |                                                                    |  |                            |
|----------------------|-------------------------|--------------------------------------------------------------------|--|----------------------------|
| LAT. _____           | START <u>June 24/82</u> | PROPERTY NAME <u>RUSSELL CREEK, Y.T.</u> PROJ.No. <u>1096</u>      |  | N.T.S.™ _____              |
| DEP. _____           | FINISH _____            | CREEK <u>RUSSELL</u> DRILL <u>Midwest Sonic</u>                    |  | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2513.12</u> | BIT <u>ROD CASE</u>     | DEPTH Overburden _____ Ft. MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.   |  | HOLE™ <u>2 E</u>           |
| DEPTH <u>35 1/2</u>  | I.D. <u>5.5</u>         | DEPTH Gravel _____ Ft. DRILL <u>)</u> Hrs; TOTAL <u>2 3/4</u> Hrs. |  | LINE™ <u>R 6</u>           |
|                      | O.D. <u>6.5</u>         | DEPTH Bedrock <u>33 (?)</u> Ft. PULL <u>) 2 1/2</u> Hrs;           |  |                            |

| FROM  | TO     | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>3/2 3/2 1/2 1/2 | FORMATION                                                                        | VOLUME                  | ACTUAL     | CORREC-TION | CORRECT    |
|-------|--------|-------|-----------------------------|--------------------------|-------------|-------------------------|----------------------------------------------------------------------------------|-------------------------|------------|-------------|------------|
|       |        |       |                             |                          |             |                         |                                                                                  | Theoretical<br>Measured | Mgs.<br>Au | Mgs.        | Mgs.<br>Au |
| 0     | 6 1/2  | 6 1/2 | 0<br>0                      | 0<br>6 1/2               |             |                         | Gravel w. clay/minor small boulders                                              |                         |            |             |            |
| 6 1/2 | 8      | 1 1/2 | 6 1/2<br>5 1/2              | 1<br>2 1/2               |             |                         | Clay and gravel with sand                                                        |                         |            |             |            |
| 8     | 13     | 5     | 8<br>6 1/2                  | 1 1/2<br>6 1/2           |             |                         | Mostly blue clay - some coarse gravel                                            |                         |            |             |            |
| 2 13  | 18     | 5     | 13<br>15                    | -2<br>3                  |             |                         | Clay down to sand - gravel last 2'                                               |                         | Tr         |             |            |
| 3 18  | 23     | 5     | 18<br>16                    | -2<br>3                  |             |                         | Sand & fine gravel. Some lost                                                    |                         | .3         |             |            |
| 4 23  | 28     | 5     | 23<br>23                    | 0<br>5                   |             |                         | Half sand & gravel/half clay. Some slough                                        |                         | 3          |             |            |
| 5 28  | 33     | 5     | 28<br>26 1/2                | 1 1/2<br>6 1/2           |             |                         | Mainly limestone barite boulders (small) and chips in heavy blue mud (suttings?) |                         | < .25      |             |            |
| 6 33  | 35 1/2 | 1 1/2 | 33<br>30 1/2                | 2 1/2<br>4               |             |                         | Blue grey decomposed rock and pieces dark limestone + barite. Bedrock            |                         | < .10      |             |            |
|       | END    |       |                             |                          |             |                         |                                                                                  |                         |            |             |            |
|       |        |       |                             |                          |             |                         |                                                                                  |                         |            |             |            |
|       |        |       |                             |                          |             |                         |                                                                                  |                         |            |             |            |
|       |        |       |                             |                          |             |                         |                                                                                  |                         |            |             |            |
|       |        |       |                             |                          |             |                         |                                                                                  |                         |            |             |            |

REMARKS

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D.E.P

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

[illegible]

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                    |  |                                   |  |                            |  |                            |  |
|----------------------|--|--------------------------|--|------------------------------------|--|-----------------------------------|--|----------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 25/82</u>  |  | PROPERTY NAME <u>Russell Creek</u> |  |                                   |  | PROJ. No. <u>1096</u>      |  | N.T.S. # _____             |  |
| DEP. _____           |  | FINISH <u>June 25/82</u> |  | CREEK <u>Russell</u>               |  |                                   |  | DRILL <u>Midwest sonic</u> |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2521.18</u> |  | BIT <u>ROD CASE</u>      |  | DEPTH Overburden _____ Ft.         |  | MOVE _____ Hrs; DELAY _____ Hrs.  |  | HOLE # <u>1E</u>           |  |                            |  |
| DEPTH <u>42</u>      |  | I.D. <u>5.5"</u>         |  | DEPTH Gravel _____ Ft.             |  | DRILL _____ Hrs; TOTAL _____ Hrs. |  | LINE # <u>R7</u>           |  |                            |  |
|                      |  | O.D. <u>6.5"</u>         |  | DEPTH Bedrock <u>38</u> Ft.        |  | PULL _____ Hrs;                   |  |                            |  |                            |  |

| FROM  | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm | FORMATION                                                       | VOLUME               | ACTUAL | CORREC-TION | CORRECT |
|-------|-----|-------|--------------|-------------|-------------|-----|-----------------------------------------------------------------|----------------------|--------|-------------|---------|
|       |     |       | After Drive  | Core Length |             |     |                                                                 | Theoretical Measured |        |             |         |
| 0     | 8   | 8     | 0<br>2½      | -2½<br>5½   |             |     | Disturbed; gravel, clay, dirt, boulders                         |                      |        |             |         |
| 8     | 18  | 10    | 8<br>11½     | -3½<br>6½   |             |     | mainly blue clay, minor gravel, occ. sm. bldgs.                 |                      |        |             |         |
| 4 18  | 22½ | 4½    | 18<br>19     | -1<br>3½    |             |     | mainly blue clay, minor gravel, occ. small boulders.            |                      | N11    |             |         |
| 2 22½ | 28  | 5½    | 22½<br>21    | -1½<br>4    |             |     | Blue clay & gravel, boulders Pile driving due to boulder in bit |                      | < .10  |             |         |
| 3 28  | 33  | 5     | 28<br>30     | -2<br>3'    |             |     | Small boulders, gravel, sand Mainly boulders.                   |                      | < 2.0  |             |         |
| 5 33  | 38  | 5     | 33<br>32½    | 1½<br>6½    |             |     | Gravel & clay to clay to red clay to red shale float            | .03669<br>.0475      | 18.5   | 4.3         | 14.2    |
| 6 38  | 42  | 4     | 38<br>38     | 0<br>4      |             |     | Red shale rock. Bedrock                                         |                      | Tr     |             |         |
|       | END |       |              |             |             |     |                                                                 |                      |        |             |         |
|       |     |       |              |             |             |     |                                                                 |                      |        |             |         |
|       |     |       |              |             |             |     |                                                                 |                      |        |             |         |
|       |     |       |              |             |             |     |                                                                 |                      |        |             |         |
|       |     |       |              |             |             |     |                                                                 |                      |        |             |         |
|       |     |       |              |             |             |     |                                                                 |                      |        |             |         |

|                                                                                                        |                                                                                                    |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br>Set up on fill. Edge of camp est.<br>8-18-10' run could not hold core drilled to 18' | FROM <u>33</u> TO <u>38</u> ; <u>387.0</u> Mgs; <u>3.69</u> \$ per Cu. Yard @ <u>350 US</u> /Ounce |
|                                                                                                        | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                              |
|                                                                                                        | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                                                  |
|                                                                                                        | FACTOR _____ DATE _____ CHECKED BY: _____                                                          |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                                                                                                                   |                      |    |                         |                             |                                                              |             |                                                                                                                   |                                                                            |                                   |                      |                         |                       |
|-------------------------------------------------------------------------------------------------------------------|----------------------|----|-------------------------|-----------------------------|--------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| S<br>A<br>M<br>P<br>L<br>E<br><br>#                                                                               | LAT. _____           |    | START <u>June 26/82</u> |                             | PROPERTY NAME <u>RUSSELL CREEK Y.T.</u> PROJ.No. <u>1096</u> |             |                                                                                                                   |                                                                            | N.T.S.™ _____                     |                      |                         |                       |
|                                                                                                                   | DEP. _____           |    | FINISH _____            |                             | CREEK <u>RUSSELL</u> DRILL <u>Midwest Sonic</u>              |             |                                                                                                                   |                                                                            | SHEET <u>1</u> of <u>1</u>        |                      |                         |                       |
|                                                                                                                   | ELEV. <u>2524.36</u> |    | BIT ROD CASE            |                             | DEPTH Overburden _____ Ft.                                   |             | MOVE _____ Hrs; DELAY _____ Hrs.                                                                                  |                                                                            | HOLE™ <u>2E</u>                   |                      |                         |                       |
|                                                                                                                   | DEPTH <u>41</u>      |    | I.D. _____ O.D. _____   |                             | DEPTH Gravel _____ Ft.                                       |             | DRILL _____ Hrs; TOTAL _____ Hrs.                                                                                 |                                                                            | LINE™ <u>R7</u>                   |                      |                         |                       |
|                                                                                                                   | FROM                 | TO | DRIVE                   | Before Drive<br>After Drive | Core Rise<br>Core Length                                     | GRAPHIC LOG | Ø mm<br>2 1/2 2 3/8 3 1/2 4 1/2 5 5/8 6 3/4 8 9 10 11 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 | FORMATION                                                                  | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|                                                                                                                   | 0                    | 8  | 8                       | 0<br>3 1/2                  | -3 1/2<br>4 1/2                                              |             |                                                                                                                   | Till, gravel, loam, etc.                                                   |                                   |                      |                         |                       |
|                                                                                                                   | 8                    | 13 | 5                       | 8<br>8                      | 0<br>5                                                       |             |                                                                                                                   | Blue Clay to brown clay, minor fine gravel                                 |                                   |                      |                         |                       |
|                                                                                                                   | 13                   | 18 | 5                       | 13<br>12                    | 1<br>6                                                       |             |                                                                                                                   | Mainly Blue Clay - minor gravel.<br>Frozen parts                           |                                   |                      |                         |                       |
|                                                                                                                   | 18                   | 23 | 5                       | 18<br>18 1/2                | - 1/2<br>4 1/2                                               |             |                                                                                                                   | As above                                                                   |                                   |                      |                         |                       |
| 34                                                                                                                | 23                   | 28 | 5                       | 23<br>26 1/2                | -3 1/2<br>1 1/2                                              |             |                                                                                                                   | Drilled 25. Couldn't hold core. Large quartz boulder cored & others. Small |                                   | Nil                  |                         |                       |
| 35                                                                                                                | 28                   | 34 | 6                       | 28<br>28                    | 0<br>6                                                       |             |                                                                                                                   | quantity sand + gravel.<br>(Very black water) sand gravel, v-fine          |                                   | 0.10                 |                         |                       |
| 36                                                                                                                | 34                   | 38 | 4                       | 34<br>34                    | 0<br>4                                                       |             |                                                                                                                   | red shale pieces.<br>Sand, gravel, clay w-red shale.                       |                                   | 18.0                 | --                      | 18                    |
| 37                                                                                                                | 38                   | 41 | 3                       | 38<br>36 1/2                | 1 1/2<br>4 1/2                                               |             |                                                                                                                   | Red shale to red clay to red shale same dry. Bedrock.                      |                                   | 134                  | 44.8                    | 89.2                  |
|                                                                                                                   | END                  |    |                         |                             |                                                              |             |                                                                                                                   |                                                                            |                                   |                      |                         |                       |
| REMARKS                                                                                                           |                      |    |                         |                             |                                                              |             |                                                                                                                   |                                                                            |                                   |                      |                         |                       |
| Noranda delay. D-8 Cat stuck 1 hour. Set up on 5 to 8 feet disturbed till. Unconsolidated. Pile driving @ 25 etc. |                      |    |                         |                             |                                                              |             | FROM <u>34</u> TO <u>41</u> ; 2097 Mgs; 20.05 \$ per Cu. Yard @ <u>350</u> /Ounce                                 |                                                                            |                                   |                      |                         |                       |
|                                                                                                                   |                      |    |                         |                             |                                                              |             | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                                             |                                                                            |                                   |                      |                         |                       |
|                                                                                                                   |                      |    |                         |                             |                                                              |             | FINENESS <u>850</u> DATE _____ LOGGED BY: <u>D.E.P.</u>                                                           |                                                                            |                                   |                      |                         |                       |
|                                                                                                                   |                      |    |                         |                             |                                                              |             | FACTOR _____ DATE _____ CHECKED BY: _____                                                                         |                                                                            |                                   |                      |                         |                       |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                            |  |                                          |  |                                          |  |                            |  |
|----------------------|--|----------------------------|--|------------------------------------------|--|------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 25/82</u>    |  | PROPERTY NAME <u>RUSSELL CREEK, Y.T.</u> |  | PROJ.No. <u>1096</u>                     |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____               |  | CREEK <u>RUSSELL</u>                     |  | DRILL <u>Midwest Sonic</u>               |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2535.48</u> |  | BIT <u>ROD</u> <u>CASE</u> |  | DEPTH Overburden _____ Ft.               |  | MOVE <u>1/2</u> Hrs; DELAY <u>6</u> Hrs. |  | HOLE** <u>#3 E</u>         |  |
| DEPTH <u>40</u>      |  | I.D. _____                 |  | DEPTH Gravel _____ Ft.                   |  | DRILL <u>)</u> Hrs; TOTAL <u>9</u> Hrs.  |  | LINE** <u>R 7</u>          |  |
|                      |  | O.D. _____                 |  | DEPTH Bedrock <u>38</u> Ft.              |  | PULL <u>) 2 3/4</u> Hrs;                 |  |                            |  |

| FROM   | TO     | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm<br>3/2 3/4 1/2 1/16 | FORMATION                                                               | VOLUME                     | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|--------|--------|-------|-----------------------------|--------------------------|-------------|-------------------------|-------------------------------------------------------------------------|----------------------------|----------------------|-------------------------|-----------------------|
|        |        |       |                             |                          |             |                         |                                                                         | Theoretical<br>Measured    |                      |                         |                       |
| 0      | 4      | 4     | 0<br>-2                     | 2<br>6                   |             |                         | Disturbed Till - edge of camp area                                      |                            |                      |                         |                       |
| 4      | 8      | 4     | 4<br>3 1/2                  | 1/2<br>4 1/2             |             |                         | Gravel, Till, Clay                                                      |                            |                      |                         |                       |
| 8      | 13     | 5     | 8<br>+7                     | 1<br>6                   |             |                         | Clay, Solid; minor gravel                                               |                            |                      |                         |                       |
| 13     | 18     | 5     | 13<br>12                    | 1<br>6                   |             |                         | Clay - frozen                                                           |                            |                      |                         |                       |
| 18     | 23     | 5     | 18<br>19                    | -1<br>4                  |             |                         | Clay - frozen with sand parts, minor gravel                             |                            |                      |                         |                       |
| 23     | 27 1/2 | 4 1/2 | 23<br>25 1/2                | -2 1/2<br>2              |             |                         | Gravel & sand                                                           |                            | Nil                  |                         |                       |
| 27 1/2 | 33     | 5 1/2 | 27 1/2<br>30                | -2 1/2<br>3              |             |                         | Sand gravel boulders (misc.) no clay<br>one 5 1/2" white quartz boulder |                            | 1.0                  |                         |                       |
| 33     | 38     | 5     | 33<br>30                    | 3<br>8                   |             |                         | Clay to gravel; clay to red clay & shale                                | .03669<br>.05864<br>.01466 | 9.5                  | -3.53                   | 5.97                  |
| 38     | 40     | 2     | 38<br>37 1/2                | 1/2<br>2 1/2             |             |                         | Red shale rock - Bedrock                                                | .01832                     | 8.1                  | -1.62                   | 6.48                  |
|        |        |       |                             |                          |             |                         |                                                                         |                            |                      |                         |                       |
|        |        |       |                             |                          |             |                         |                                                                         |                            |                      |                         |                       |
|        |        |       |                             |                          |             |                         |                                                                         |                            |                      |                         |                       |

|                                                                                       |                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br>Mechanical delay. Oscillator bolts.<br>Pile driving at 25 & 30' (?) | FROM <u>33</u> TO <u>40</u> ; <u>242.6</u> Mgs; <u>2.32</u> \$ per Cu. Yard @ <u>\$350 U.S.</u> /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u><br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                         |  |                                                                |  |                                         |  |                            |  |
|----------------------|--|-------------------------|--|----------------------------------------------------------------|--|-----------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 26/82</u> |  | PROPERTY NAME <u>RUSSELL CREEK, Y.T.</u> PROJ. No. <u>1096</u> |  |                                         |  | N.T.S. ** _____            |  |
| DEP. _____           |  | FINISH _____            |  | CREEK <u>RUSSELL</u> DRILL <u>Midwest Sonic</u>                |  |                                         |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2526.23</u> |  | BIT <u>ROD CASE</u>     |  | DEPTH Overburden _____ Ft.                                     |  | MOVE <u>3/4</u> Hrs; DELAY _____ Hrs.   |  | HOLE # <u>1 E</u>          |  |
| DEPTH <u>39 1/2</u>  |  | I.D. <u>5.5</u>         |  | DEPTH Gravel _____ Ft.                                         |  | DRILL <u>)</u> Hrs; TOTAL <u>3</u> Hrs. |  | LINE # <u>R 8</u>          |  |
|                      |  | O.D. <u>6.5"</u>        |  | DEPTH Bedrock <u>37 (?)</u> Ft.                                |  | PULL <u>)</u> <u>2 1/2</u> Hrs;         |  |                            |  |

| FROM | TO     | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>3/16 1/8 1/4 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 1/2 1 3/4 2 | FORMATION                                                                         | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|--------|-------|-----------------------------|--------------------------|-------------|----------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |        |       |                             |                          |             |                                                                      |                                                                                   | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8      |       | 0<br>6                      | -6<br>2                  |             |                                                                      | Set up on large boulders. Boulders, sand, gravel, cuttings                        |                         | 0.05                 |                         |                       |
| 8    | 13     | 5     | 8 1/2<br>8 1/2              | - 1/2<br>4 1/2           |             |                                                                      | Clay, minor sand - gravel                                                         |                         | 2.0                  |                         |                       |
| 13   | 18     | 5     | 13<br>13 1/2                | - 1/2<br>4 1/2           |             |                                                                      |                                                                                   |                         | N11                  |                         |                       |
| 18   | 23     | 5     | 18<br>18                    | 0<br>5                   |             |                                                                      | Clay, red shale "float" chips, some red clay.                                     |                         | N11                  |                         |                       |
| 23   | 28     | 5     | 23<br>23 1/2                | - 1/2<br>4 1/2           |             |                                                                      | Brown clay (slough, minor), blue clay, with red shale pieces                      |                         | < .10                |                         |                       |
| 28   | 33     | 5     | 28<br>27 1/2                | 1/2<br>5 1/2             |             |                                                                      | Brown clay, gravel, occ. red shale pieces                                         |                         | < .05                |                         |                       |
| 33   | 38     | 5     | 33<br>32 1/2                | 1/2<br>5 1/2             |             |                                                                      | Brown clay, misc. coarse gravel, small boulders - dark limestone rocks to 5' dia. |                         | 0.50                 |                         |                       |
| 38   | 39 1/2 | 1 1/2 | 38<br>38                    | 0<br>1 1/2               |             |                                                                      | Dense dark limestone - barite ? - no strangers. Bedrock ?                         |                         | Tr.                  |                         |                       |
|      | END    |       |                             |                          |             |                                                                      |                                                                                   |                         |                      |                         |                       |
|      |        |       |                             |                          |             |                                                                      |                                                                                   |                         |                      |                         |                       |
|      |        |       |                             |                          |             |                                                                      |                                                                                   |                         |                      |                         |                       |
|      |        |       |                             |                          |             |                                                                      |                                                                                   |                         |                      |                         |                       |
|      |        |       |                             |                          |             |                                                                      |                                                                                   |                         |                      |                         |                       |

|                                                                                                                                                                  |                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>Bedrock (?) - Dense dark limestone (barite) rocks and chips - no other rock types bottom 3 feet and drills V. hard.<br>Casing swinging off | FROM <u>NO CALCULATION MADE</u> ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|                                                                                                                                                                  | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce             |
|                                                                                                                                                                  | FINENESS _____ DATE _____ LOGGED BY: _____                                        |
|                                                                                                                                                                  | FACTOR _____ DATE _____ CHECKED BY: _____                                         |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|               |  |                  |  |                                                 |  |                                     |  |               |  |
|---------------|--|------------------|--|-------------------------------------------------|--|-------------------------------------|--|---------------|--|
| LAT. _____    |  | START June 27/82 |  | PROPERTY NAME RUSSELL CREEK, Y.T. PROJ.No. 1096 |  |                                     |  | N.T.S.* _____ |  |
| DEP. _____    |  | FINISH _____     |  | CREEK RUSSELL DRILL Midwest Sonic               |  |                                     |  | SHEET 1 of 1  |  |
| ELEV. 2526.35 |  | BIT ROD CASE     |  | DEPTH Overburden _____ Ft.                      |  | MOVE 1/4 Hrs; DELAY _____ Hrs.      |  | HOLE** 2 E    |  |
| DEPTH 38      |  | I.D. 5.5" _____  |  | DEPTH Gravel _____ Ft.                          |  | DRILL ) _____ Hrs; TOTAL 2 3/4 Hrs. |  | LINE** R 8    |  |
|               |  | O.D. 6.5" _____  |  | DEPTH Bedrock 33 Ft.                            |  | PULL ) 2 1/2 Hrs;                   |  |               |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG       | Ømm<br>3/8" ~ 5/8" | FORMATION                                                        | VOLUME               | ACTUAL | CORREC-<br>TION | CORRECT |
|------|-----|-------|--------------|-------------|-------------------|--------------------|------------------------------------------------------------------|----------------------|--------|-----------------|---------|
|      |     |       | After Drive  | Core Length |                   |                    |                                                                  | Theoretical Measured |        |                 |         |
| 0    | 4   | 4     |              | 4 1/2       |                   |                    | (Till) Black soil, gravel, boulders, clay                        |                      | 0.20   |                 |         |
| 4    | 8   | 4     |              | 3 1/2       |                   |                    | Sand, gravel, mostly ground up rock of boulders in 0' 6' Section |                      | <.10   |                 |         |
| 8    | 13  | 5     |              | 2           |                   |                    | Mainly blue clay - (lost some due to boulder 0 - 10)             |                      | N11    |                 |         |
| 13   | 18  | 5     |              | 3'          |                   |                    | Clay - (one large stone pile-driving gave lost core)             |                      | Tr     |                 |         |
| 18   | 21  | 3     |              | 3 1/2       | 2' lost in casing |                    | Misc. fine to coarse gravel in blue clay                         |                      | N11    |                 |         |
| 21   | 28  | 7     |              | 8           |                   |                    | (2 Samples) Mainly clay fine to coarse gravel                    |                      | 5.0    |                 |         |
| 28   | 33  | 5     |              | 6           |                   |                    | Gravel, minor clay to clay with red shale chips 2" to 4"         |                      | 1.0    |                 |         |
| 33   | 38  | 5     |              |             |                   |                    | Red clay to red shale rock. Bedrock                              |                      | 0.5    |                 |         |
|      | END |       |              |             |                   |                    |                                                                  |                      |        |                 |         |
|      |     |       |              |             |                   |                    |                                                                  |                      |        |                 |         |
|      |     |       |              |             |                   |                    |                                                                  |                      |        |                 |         |
|      |     |       |              |             |                   |                    |                                                                  |                      |        |                 |         |
|      |     |       |              |             |                   |                    |                                                                  |                      |        |                 |         |

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| REMARKS | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                     |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                             |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

SAMPLE #

|                      |  |                                            |  |                                    |  |                                              |  |                            |  |
|----------------------|--|--------------------------------------------|--|------------------------------------|--|----------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 27/82</u>                    |  | PROPERTY NAME <u>RUSSELL CREEK</u> |  | PROJ.No. <u>1096</u>                         |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____                               |  | CREEK <u>RUSSELL</u>               |  | DRILL <u>Midwest Sonic</u>                   |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2529.00</u> |  | BIT <u>  </u> ROD <u>  </u> CASE <u>  </u> |  | DEPTH Overburden _____ Ft.         |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.        |  | HOLE* <u>3 E</u>           |  |
| DEPTH <u>38</u>      |  | I.D. _____                                 |  | DEPTH Gravel _____ Ft.             |  | DRILL <u>  </u> Hrs; TOTAL <u>2 1/2</u> Hrs. |  | LINE* <u>R 8</u>           |  |
|                      |  | O.D. _____                                 |  | DEPTH Bedrock <u>35</u> Ft.        |  | PULL <u>  </u> <u>2 1/2</u> Hrs;             |  |                            |  |

| FROM | TO | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>5/8 3/4 1/2 1/4 | FORMATION                                                | VOLUME               | ACTUAL  | CORREC-   | CORRECT |
|------|----|-------|--------------|-------------|-------------|------------------------|----------------------------------------------------------|----------------------|---------|-----------|---------|
|      |    |       | After Drive  | Core Length |             |                        |                                                          | Theoretical Measured | Mgs. Au | TION Mgs. | Mgs. Au |
| 65   | 0  | 8     | 0            | 0           |             |                        | Sand, gravel boulders 0-4 Blue clay 4-8                  |                      | Tr.     | -         | Tr.     |
| 66   | 8  | 18    | 8            | -8 1/2      |             |                        | Sand. Trouble holding core                               |                      | N11     | -         | N11     |
| 67   | 18 | 23    | 18           | - 1/2       |             |                        | Dark sand, down to yellow brown clay with gravel & chips |                      | 0.75    | -         | 0.75    |
| 15   | 23 | 28    | 23           | - 1/2       |             |                        | Ditto clay with 50% rock chips and gravel                |                      | 1       | -         | 1       |
| 16   | 28 | 33    | 28           | - 1/2       |             |                        |                                                          |                      | 7       | .78       | 7.78    |
| 17   | 33 | 38    | 33           | 1           |             |                        | Decomposed red slate and red slate. Bedrock              |                      | 24      | 3.9       | 20.1    |
|      |    | END   | 32           | 6           |             |                        |                                                          |                      |         |           |         |
|      |    |       |              |             |             |                        |                                                          |                      |         |           |         |
|      |    |       |              |             |             |                        |                                                          |                      |         |           |         |
|      |    |       |              |             |             |                        |                                                          |                      |         |           |         |
|      |    |       |              |             |             |                        |                                                          |                      |         |           |         |
|      |    |       |              |             |             |                        |                                                          |                      |         |           |         |
|      |    |       |              |             |             |                        |                                                          |                      |         |           |         |
|      |    |       |              |             |             |                        |                                                          |                      |         |           |         |
|      |    |       |              |             |             |                        |                                                          |                      |         |           |         |

|                                                                        |                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>Set-up on loose fill.<br>Minor scheelite in con. | FROM <u>28</u> TO <u>38</u> ; <u>378.6</u> Mgs; <u>3.62</u> \$ per Cu. Yard @ <u>350</u> /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS <u>850</u> DATE _____ LOGGED BY: <u>D.E.P.</u><br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                         |  |                                                               |  |                                            |  |                            |  |
|----------------------|--|-------------------------|--|---------------------------------------------------------------|--|--------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 27/82</u> |  | PROPERTY NAME <u>RUSSELL CREEK, Y.T.</u> PROJ.No. <u>1096</u> |  |                                            |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____            |  | CREEK <u>RUSSELL</u> DRILL _____                              |  |                                            |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2530.69</u> |  | BIT ROD CASE            |  | DEPTH Overburden _____ Ft.                                    |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.      |  | HOLE* <u>4 E</u>           |  |
| DEPTH <u>35</u>      |  | I.D. <u>5.5</u>         |  | DEPTH Gravel _____ Ft.                                        |  | DRILL ) _____ Hrs; TOTAL <u>1 3/4</u> Hrs. |  | LINE* <u>R 8</u>           |  |
|                      |  | O.D. <u>6.5</u>         |  | DEPTH Bedrock <u>33</u> Ft.                                   |  | PULL ) <u>1 1/2</u> Hrs;                   |  |                            |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>1/2 3/4 1 1 1/2 1 3/4 2 | FORMATION                                                | VOLUME               | ACTUAL  | CORREC-   | CORRECT |
|------|-----|-------|--------------|-------------|-------------|--------------------------------|----------------------------------------------------------|----------------------|---------|-----------|---------|
|      |     |       | After Drive  | Core Length |             |                                |                                                          | Theoretical Measured | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 4   | 4     | 0            | 0           |             |                                | Sandy till                                               |                      | <.10    |           |         |
| 4    | 8   | 4     | 4            | 1/2         |             |                                | Sandy till to Blue Clay 50/50                            |                      | N11     |           |         |
| 8    | 13  | 5     | 8            | - 1/2       |             |                                | Blue Clay to Brown Clay with moderate gravel             |                      | 0.15    |           |         |
| 13   | 18  | 5     | 13           | - 1/2       |             |                                | (10 inch long core rock)<br>Brown clay with gravel, sand |                      | .15     |           |         |
| 18   | 23  | 5     | 18           | 0           |             |                                | Brown clay (Minor) - fine to coarse gravel               |                      | 5.0     | -         | 5       |
| 23   | 28  | 5     | 23           | 0           |             |                                |                                                          |                      | 3.0     | -         | 3       |
| 28   | 33  | 5     | 28           | 1           |             |                                | Red clay to parts red shale                              |                      | 0.6     |           |         |
| 33   | 35  | 2     | 33           | - 1/2       |             |                                | Red shale rock. Bedrock                                  |                      |         |           |         |
|      | END |       | 33 1/2       | 1 1/2       |             |                                |                                                          |                      |         |           |         |
|      |     |       |              |             |             |                                |                                                          |                      |         |           |         |
|      |     |       |              |             |             |                                |                                                          |                      |         |           |         |
|      |     |       |              |             |             |                                |                                                          |                      |         |           |         |
|      |     |       |              |             |             |                                |                                                          |                      |         |           |         |

|         |                                                                                   |
|---------|-----------------------------------------------------------------------------------|
| REMARKS | FROM <u>23</u> TO <u>33</u> ; 108.9 Mgs; 1.04 \$ per Cu. Yard @ <u>350</u> /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce             |
|         | FINENESS <u>850</u> DATE _____ LOGGED BY: <u>D.E.P.</u>                           |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                                         |

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|---------------|-------|-------|-----------------------------|--------------------------|-------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| LAT. _____    |       |       | START June 27/82            |                          | PROPERTY NAME RUSSELL CREEK, Y.T. PROJ.No. 1096 |                                                                       |                                             |                                   | N.T.S.™ _____        |                         |                       |
| DEP. _____    |       |       | FINISH _____                |                          | CREEK RUSSELL DRILL Midwest Sonic               |                                                                       |                                             |                                   | SHEET 1 of 1         |                         |                       |
| ELEV. 2532.49 |       |       | BIT ROD CASE                |                          | DEPTH Overburden _____ Ft.                      |                                                                       | MOVE 1/2 Hrs; DELAY _____ Hrs.              |                                   | HOLE™ 5E             |                         |                       |
| DEPTH 13      |       |       | I.D. 5.5                    |                          | DEPTH Gravel _____ Ft.                          |                                                                       | DRILL ) _____ Hrs; TOTAL 1 Hrs.             |                                   | R8                   |                         |                       |
|               |       |       | O.D. 6.5                    |                          | DEPTH Bedrock 10 Ft.                            |                                                                       | PULL ) 3/4 Hrs;                             |                                   | LINE™ _____          |                         |                       |
| FROM          | TO    | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG                                     | Ømm<br>5/8 3/4 1/2                                                    | FORMATION                                   | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
| 0             | 5 1/2 | 5 1/2 | 0<br>1/2                    | - 1/2<br>5               |                                                 |                                                                       | Brown clay with gravel, sand boulders       | .03669                            |                      |                         |                       |
| 5 1/2         | 8     | 2 1/2 | 5 1/2<br>6 1/2              | -1<br>1 1/2              |                                                 |                                                                       | Sand with large boulders. Some pile driving |                                   | 0.5                  |                         |                       |
| 8             | 13    | 5     | 8<br>7 1/2                  | 1/2<br>5 1/2             |                                                 |                                                                       | Red clay to red shale @ 10'                 | .3669<br>.04036                   | 38.25                | -3.48                   | 34.77                 |
|               | END   |       |                             |                          |                                                 |                                                                       | Bedrock                                     |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 |                                                                       |                                             |                                   |                      |                         |                       |
| REMARKS       |       |       |                             |                          |                                                 | FROM 8 TO 13 ; 947.66 Mgs; 9.06 \$ per Cu. Yard @ \$350 U.S. /Ounce   |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 | FINENESS 850 DATE _____ LOGGED BY: D.E.P.                             |                                             |                                   |                      |                         |                       |
|               |       |       |                             |                          |                                                 | FACTOR _____ DATE _____ CHECKED BY: _____                             |                                             |                                   |                      |                         |                       |



## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

SAMPLE #

|               |  |                  |  |                                   |  |                                 |  |              |  |
|---------------|--|------------------|--|-----------------------------------|--|---------------------------------|--|--------------|--|
| LAT. _____    |  | START June 28/82 |  | PROPERTY NAME RUSSELL CREEK, Y.T. |  | PROJ. No. 1096                  |  | N.T.S. **    |  |
| DEP. _____    |  | FINISH _____     |  | CREEK LIMESTONE                   |  | DRILL Midwest Sonic             |  | SHEET 1 of 1 |  |
| ELEV. 2537.03 |  | BIT ROD CASE     |  | DEPTH Overburden _____ Ft.        |  | MOVE ½ Hrs; DELAY _____ Hrs.    |  | HOLE** 1 W   |  |
| DEPTH 38      |  | I.D. _____       |  | DEPTH Gravel _____ Ft.            |  | DRILL ) _____ Hrs; TOTAL 2 Hrs. |  | LINE** L 1   |  |
|               |  | O.D. _____       |  | DEPTH Bedrock 35 Ft.              |  | PULL ) 1½ Hrs;                  |  |              |  |

| FROM | TO | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm | FORMATION                                                     | VOLUME                  | ACTUAL | CORREC-<br>TION | CORRECT |
|------|----|-------|-----------------------------|--------------------------|-------------|-----|---------------------------------------------------------------|-------------------------|--------|-----------------|---------|
|      |    |       |                             |                          |             |     |                                                               | Theoretical<br>Measured |        |                 |         |
| 0    | 8  | 8     | 0<br>4                      | -4<br>4                  |             |     | Sandy clay - organics                                         |                         |        |                 |         |
| 8    | 13 | 5     | 8<br>8                      | 0<br>5                   |             |     | Blue clay - solid. Not frozen                                 |                         |        |                 |         |
| 13   | 18 | 5     | 13<br>15½                   | 2½<br>2½                 |             |     | Blue clay to clay with gravel                                 |                         |        |                 |         |
| 18   | 23 | 5     | 18<br>17½                   | ½<br>5½                  |             |     | Blue clay to clay with gravel                                 |                         |        |                 |         |
| 23   | 28 | 5     | 23<br>23                    | 0<br>5                   |             |     | Minor clay, sand & gravel                                     |                         | .10    |                 |         |
| 28   | 33 | 5     | 28<br>26½                   | 1½<br>6½                 |             |     | Clay, abundant chips esp. red shale.<br>Red clay at bottom    | .03669<br>.0475         | 7.25   | - 1.65          | 5.60    |
| 33   | 38 | 5     | 33<br>31½                   | 1½<br>6½                 |             |     | Grey brown clay to red (shale) clay to<br>red shale (Bedrock) | .03669<br>.0475         | 4.15   | .95             | 3.20    |
|      |    |       |                             |                          |             |     | End.                                                          |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |
|      |    |       |                             |                          |             |     |                                                               |                         |        |                 |         |

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| REMARKS | FROM 28 TO 38 ; 119.8 Mgs; 1.14 \$ per Cu. Yard @ \$350 U.S. /Ounce   |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FINENESS _____ DATE _____ LOGGED BY: D.E.P.                           |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                             |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|---------------------------------|----------------------|-----|---------------------------------|-----------------------------|-----------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| S<br>A<br>M<br>P<br>L<br>E<br># | LAT. _____           |     | START <u>June 28/82</u>         |                             | PROPERTY NAME <u>RUSSELL CREEK, Y.T.</u> PROJ. No. <u>1096</u>        |             |                                                                                                                                                                                                                                                   |                                                           | N.T.S.* _____                     |                      |                         |                       |
|                                 | DEP. _____           |     | FINISH <u>June 28/82</u>        |                             | CREEK <u>Limestone</u> DRILL <u>Midwest Sonic</u>                     |             |                                                                                                                                                                                                                                                   |                                                           | SHEET <u>1</u> of <u>1</u>        |                      |                         |                       |
|                                 | ELEV. <u>2536.87</u> |     | BIT ROD CASE                    |                             | DEPTH Overburden _____ Ft. MOVE <u>1h. 25m.</u> Hrs; DELAY _____ Hrs. |             |                                                                                                                                                                                                                                                   |                                                           | HOLE** <u>1E</u>                  |                      |                         |                       |
|                                 | DEPTH <u>23</u>      |     | I.D. <u>5.5</u> O.D. <u>6.5</u> |                             | DEPTH Gravel _____ Ft. DRILL <u>25m.</u> Hrs; TOTAL <u>50m.</u> Hrs.  |             |                                                                                                                                                                                                                                                   |                                                           | LINE** <u>L1</u>                  |                      |                         |                       |
|                                 | FROM                 | TO  | DRIVE                           | Before Drive<br>After Drive | Core Rise<br>Core Length                                              | GRAPHIC LOG | Ø mm<br>5/8 3/4 1 1 1/8 1 1/2                                                                                                                                                                                                                     | FORMATION                                                 | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|                                 | 0                    | 8   | 8                               | 0<br>1                      | -1<br>7                                                               |             |                                                                                                                                                                                                                                                   | Black till to brown clay with gravel to Blue clay (at 4') |                                   |                      |                         |                       |
|                                 | 8                    | 13  | 5                               | 8<br>9                      | -1<br>4                                                               |             |                                                                                                                                                                                                                                                   | Blue Clay - minor mixed gravel                            |                                   |                      |                         |                       |
|                                 | 13                   | 18  | 5                               | 13<br>12 1/2                | 1/2<br>5 1/2                                                          |             |                                                                                                                                                                                                                                                   | Blue clay, moderate gravel & chips, red shale             |                                   | tr.                  |                         |                       |
|                                 | 18                   | 23  | 5                               | 18<br>18                    | 0<br>5                                                                |             |                                                                                                                                                                                                                                                   | Red clay (decomp. Bed rock) to red shale Bedrock          |                                   | < .05                |                         |                       |
|                                 |                      | END |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
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|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
|                                 |                      |     |                                 |                             |                                                                       |             |                                                                                                                                                                                                                                                   |                                                           |                                   |                      |                         |                       |
| REMARKS                         |                      |     |                                 |                             |                                                                       |             | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P..<br>FACTOR _____ DATE _____ CHECKED BY: _____ |                                                           |                                   |                      |                         |                       |

120006

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                                        |     |                   |                             |                                   |             |                                                                       |                                                                       |                                   |                      |                         |                       |
|----------------------------------------|-----|-------------------|-----------------------------|-----------------------------------|-------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| LAT. _____                             |     | START June 28/82  |                             | PROPERTY NAME Russell Creek, Y.T. |             | PROJ.No. 1096                                                         |                                                                       | N.T.S.* _____                     |                      |                         |                       |
| DEP. _____                             |     | FINISH June 28/82 |                             | CREEK Limestone                   |             | DRILL Midwest Sonic                                                   |                                                                       | SHEET 1 of 1                      |                      |                         |                       |
| ELEV. 2537.31                          |     | BIT ROD CASE      |                             | DEPTH Overburden _____ Ft.        |             | MOVE ½ Hrs; DELAY Noranda 1 Hrs.                                      |                                                                       | HOLE** 2E                         |                      |                         |                       |
| DEPTH 21                               |     | I.D. 5.5 _____    |                             | DEPTH Gravel _____ Ft.            |             | DRILL ) ¾ Hrs; TOTAL 2 Hrs.                                           |                                                                       | LINE** L1                         |                      |                         |                       |
|                                        |     | O.D. 6.5 _____    |                             | DEPTH Bedrock 18 Ft.              |             | PULL _____ Hrs;                                                       |                                                                       |                                   |                      |                         |                       |
| FROM                                   | TO  | DRIVE             | Before Drive<br>After Drive | Core Rise<br>Core Length          | GRAPHIC LOG | Ø mm<br>5/8 3/4 1/2 1/4                                               | FORMATION                                                             | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
| 0                                      | 5½  | 5½                | 0<br>2½                     | -2½<br>3'                         |             |                                                                       | Black till to gravel with small boulders                              |                                   |                      |                         |                       |
| 5½                                     | 8   | 2½                | 5½<br>6                     | ½<br>3                            |             |                                                                       | Brown sandy clay till with much gravel                                |                                   |                      |                         |                       |
| 8                                      | 13  | 5                 | 8<br>8                      | 0<br>5                            |             |                                                                       | Gravel - few boulders                                                 |                                   |                      |                         |                       |
| 13                                     | 18  | 5                 | 13<br>13                    | 0<br>5                            |             |                                                                       | Gravel to red clay with red shale chips;<br>some red shale rock - dry |                                   | 2.00                 |                         |                       |
| 18                                     | 21  | 3                 | 18<br>18                    | 0<br>3                            |             |                                                                       | Red shale - minor gravel at 18<br>Bedrock                             |                                   | < .05                |                         |                       |
|                                        | END |                   |                             |                                   |             |                                                                       |                                                                       |                                   |                      |                         |                       |
|                                        |     |                   |                             |                                   |             |                                                                       |                                                                       |                                   |                      |                         |                       |
|                                        |     |                   |                             |                                   |             |                                                                       |                                                                       |                                   |                      |                         |                       |
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|                                        |     |                   |                             |                                   |             |                                                                       |                                                                       |                                   |                      |                         |                       |
| REMARKS                                |     |                   |                             |                                   |             |                                                                       |                                                                       |                                   |                      |                         |                       |
| Delay to move drill - waiting for cat. |     |                   |                             |                                   |             | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |                                                                       |                                   |                      |                         |                       |
|                                        |     |                   |                             |                                   |             | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |                                                                       |                                   |                      |                         |                       |
|                                        |     |                   |                             |                                   |             | FINENESS _____ DATE _____ LOGGED BY: D.E.P.                           |                                                                       |                                   |                      |                         |                       |
|                                        |     |                   |                             |                                   |             | FACTOR _____ DATE _____ CHECKED BY: _____                             |                                                                       |                                   |                      |                         |                       |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                                          |                                                               |                                                 |                            |
|----------------------|------------------------------------------|---------------------------------------------------------------|-------------------------------------------------|----------------------------|
| LAT. _____           | START <u>June 28/82</u>                  | PROPERTY NAME <u>Russell Creek, Y.T.</u> PROJ.No. <u>1096</u> |                                                 | N.T.S.* _____              |
| DEP. _____           | FINISH <u>June 28/82</u>                 | CREEK <u>Limestone</u> DRILL <u>Midwest Sonic</u>             |                                                 | SHEET <u>1</u> of <u>1</u> |
| ELEV. <u>2539.38</u> | BIT <u>5.5</u> ROD <u>6.5</u> CASE _____ | DEPTH Overburden _____ Ft.                                    | MOVE <u>1/4</u> Hrs; DELAY _____ Hrs.           | HOLE** <u>3E</u>           |
| DEPTH <u>21</u>      | I.D. _____ O.D. _____                    | DEPTH Gravel _____ Ft.                                        | DRILL <u>1 1/4</u> Hrs; TOTAL <u>1 1/4</u> Hrs. | LINE** <u>L1</u>           |
|                      |                                          | DEPTH Bedrock <u>19</u> Ft.                                   | PULL _____ Hrs;                                 |                            |

| FROM | TO  | DRIVE | Before Drive | Core Rise       | GRAPHIC LOG | Ømm             | FORMATION                                                   | VOLUME          | ACTUAL  | CORREC- | CORRECT |
|------|-----|-------|--------------|-----------------|-------------|-----------------|-------------------------------------------------------------|-----------------|---------|---------|---------|
|      |     |       | After Drive  | Core Length     |             |                 |                                                             | Theoretical     | Mgs. Au | TION    | Mgs. Au |
|      |     |       |              |                 |             | 5/8 3/4 1/2 1/2 |                                                             | Measured        |         |         |         |
| 0    | 8   | 8     | 0<br>4 1/2   | -4 1/2<br>3 1/2 |             |                 | Till - mainly boulders                                      |                 |         |         |         |
| 8    | 13  | 5     | 8<br>6       | 2<br>7          |             |                 | Gravel, sand, boulders, minor clay, 15% slough              |                 |         |         |         |
| 9 13 | 18  | 5     | 13<br>11     | 2<br>7          |             |                 | Good gravel; few boulders                                   | .03669<br>.0511 | 7.00    | -2      | 5.02    |
| 0 18 | 22  | 4     | 18<br>17 1/2 | 1<br>4 1/2      |             |                 | Brown clay & gravel to red clay to red slate at 19. Bedrock | .0294<br>.0330  | 5.00    | -55     | 4.45    |
|      | END |       |              |                 |             |                 |                                                             |                 |         |         |         |
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|      |     |       |              |                 |             |                 |                                                             |                 |         |         |         |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                          |  |                                                     |  |                            |  |
|----------------------|--|--------------------------|--|------------------------------------------|--|-----------------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 28/82</u>  |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  | PROJ. No. <u>1096</u>                               |  | N.T.S. ** _____            |  |
| DEP. _____           |  | FINISH <u>June 28/82</u> |  | CREEK <u>Limestone</u>                   |  | DRILL <u>Midwest Sonic</u>                          |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2538.59</u> |  | BIT ROD CASE             |  | DEPTH Overburden _____ Ft.               |  | MOVE $\frac{1}{4}$ Hrs; DELAY _____ Hrs.            |  | HOLE ** <u>4E</u>          |  |
| DEPTH <u>33</u>      |  | I.D. <u>5.5</u>          |  | DEPTH Gravel _____ Ft.                   |  | DRILL ) $1\frac{1}{2}$ Hrs; TOTAL <u>1 3/4</u> Hrs. |  | LINE ** <u>L1</u>          |  |
|                      |  | O.D. <u>6.5</u>          |  | DEPTH Bedrock <u>30</u> Ft.              |  | PULL _____ Hrs;                                     |  |                            |  |

| FROM  | TO  | DRIVE | Before Drive | Core Rise    | GRAPHIC LOG | Ø mm<br>5/16 3/8 1/2 1 1 1/2 | FORMATION                                                                     | VOLUME               | ACTUAL<br>Mgs. Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs. Au |
|-------|-----|-------|--------------|--------------|-------------|------------------------------|-------------------------------------------------------------------------------|----------------------|-------------------|-------------------------|--------------------|
|       |     |       | After Drive  | Core Length  |             |                              |                                                                               | Theoretical Measured |                   |                         |                    |
| 0     | 8   | 8     | 0<br>4       | -4<br>4      |             |                              | Mostly gravel. Drilled to Boulders                                            |                      |                   |                         |                    |
| 8     | 14  | 6     | 8<br>11      | -3<br>3      |             |                              | (large boulders Pile Driving) Rock core<br>Core mostly gravel                 |                      |                   |                         |                    |
| 14    | 18  | 4     | 14<br>15     |              |             |                              | In boulders minor gravel and rock<br>core                                     |                      |                   |                         |                    |
| 6. 18 | 23  | 5     | 18<br>17 1/2 | 1/2<br>5 1/2 |             |                              | sand, gravel, small boulders, brown clay                                      |                      | 1.25              |                         |                    |
| 1. 23 | 28  | 5     | 23<br>23 1/2 | 1/2<br>4 1/2 |             |                              | sand, gravel, small boulders, brown clay                                      |                      | Nil               |                         |                    |
| 2. 28 | 33  | 5     | 28<br>25     | 3<br>8       |             |                              | (1 1/2' slough sand) clay & gravel to Red<br>shale to bedrock Red shale @ 30' |                      | 3.00              |                         |                    |
|       | END |       |              |              |             |                              |                                                                               |                      |                   |                         |                    |
|       |     |       |              |              |             |                              |                                                                               |                      |                   |                         |                    |
|       |     |       |              |              |             |                              |                                                                               |                      |                   |                         |                    |
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|       |     |       |              |              |             |                              |                                                                               |                      |                   |                         |                    |
|       |     |       |              |              |             |                              |                                                                               |                      |                   |                         |                    |

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| REMARKS | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                     |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                             |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                                               |  |  |  |                                                 |  |
|----------------------|--|--------------------------|--|---------------------------------------------------------------|--|--|--|-------------------------------------------------|--|
| LAT. _____           |  | START <u>June 29/82</u>  |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> PROJ.No. <u>1096</u> |  |  |  | N.T.S.* _____                                   |  |
| DEP. _____           |  | FINISH <u>June 29/82</u> |  | CREEK <u>Russell</u> DRILL <u>Midwest Sonic</u>               |  |  |  | SHEET <u>1</u> of <u>1</u>                      |  |
| ELEV. <u>2538.52</u> |  | BIT ROD CASE             |  | DEPTH Overburden _____ Ft.                                    |  |  |  | MOVE <u>1/4</u> Hrs; DELAY _____ Hrs.           |  |
| DEPTH <u>33</u>      |  | I.D. <u>5.5</u>          |  | DEPTH Gravel _____ Ft.                                        |  |  |  | DRILL <u>1 1/4</u> Hrs; TOTAL <u>1 1/2</u> Hrs. |  |
|                      |  | O.D. <u>6.5</u>          |  | DEPTH Bedrock <u>30</u> Ft.                                   |  |  |  | PULL _____ Hrs;                                 |  |
|                      |  |                          |  |                                                               |  |  |  | HOLE* <u>1W</u>                                 |  |
|                      |  |                          |  |                                                               |  |  |  | LINE* <u>R9</u>                                 |  |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>3/8 1/2 3/4 1 1 1/4 1 1/2 2 | FORMATION                                            | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|-------------------------------------|------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       |                             |                          |             |                                     |                                                      | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8   | 8     | 0<br>2                      | -2<br>6                  |             |                                     | Coarse gravel, brown clay, few boulders.             |                         | .75                  |                         |                       |
| 8    | 13  | 5     | 8<br>9                      | -<br>4                   |             |                                     | Coarse gravel, brown clay, few boulders, good gravel |                         | .75                  |                         |                       |
| 13   | 18  | 5     | 13<br>13 1/2                | 1<br>4 1/2               |             |                                     | Coarse gravel, brown clay, few boulders, good gravel |                         | .35                  |                         |                       |
| 18   | 23  | 5     | 18<br>17                    | 1<br>6                   |             |                                     | Coarse gravel, brown clay, few boulders, good gravel |                         | 1.00                 |                         |                       |
| 23   | 28  | 5     | 23<br>21 1/2                | 1 1/2<br>6 1/2           |             |                                     | Coarse gravel, brown clay, few boulders, good gravel |                         | .50                  |                         |                       |
| 28   | 33  | 5     | 28<br>26                    | 2<br>7                   |             |                                     | Nearly all red shale. Bedrock                        |                         | < .10                |                         |                       |
|      | END |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                                     |                                                      |                         |                      |                         |                       |

|                                         |                                                                                                                                                                                                                                                  |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REMARKS<br>(SAME LINE AS LIMESTONE #L1) | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.<br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                                               |  |                                           |  |                            |  |
|----------------------|--|--------------------------|--|---------------------------------------------------------------|--|-------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 29/82</u>  |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> PROJ.No. <u>1096</u> |  |                                           |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH <u>June 29/82</u> |  | CREEK <u>Limestone</u> DRILL <u>Midwest Sonic</u>             |  |                                           |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2555.25</u> |  | BIT ROD CASE             |  | DEPTH Overburden _____ Ft.                                    |  | MOVE <u>1½</u> Hrs; DELAY _____ Hrs.      |  | HOLE* <u>1E</u>            |  |
| DEPTH <u>42</u>      |  | I.D. _____               |  | DEPTH Gravel _____ Ft.                                        |  | DRILL <u>1½</u> Hrs; TOTAL <u>2½</u> Hrs. |  | LINE* <u>L2</u>            |  |
| O.D. _____           |  |                          |  | DEPTH Bedrock <u>39</u> Ft.                                   |  | PULL _____ Hrs;                           |  |                            |  |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm<br>5/8" 1 1/8" | FORMATION                                                                | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|--------------------|--------------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       |                             |                          |             |                    |                                                                          | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8   | 8     | 0<br>3                      | -3<br>5                  |             |                    | Fair gravel fine to coarse. Moderate brown clay, mixed                   |                         |                      |                         |                       |
| 8    | 13  | 5     | 8<br>7½                     | ½<br>5½                  |             |                    | monogravel (1') to blue clay. Frozen                                     |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>12½                   | ½<br>5½                  |             |                    | Blue clay minor fine gravel, sand occ. boulders                          |                         |                      |                         |                       |
| 18   | 23  | 5     | 18<br>17½                   | ½<br>5½                  |             |                    | Blue clay - solid                                                        |                         |                      |                         |                       |
| 23   | 28  | 5     | 23<br>22                    | 1<br>6                   |             |                    | Blue clay - solid                                                        |                         | < .25                |                         |                       |
| 28   | 33  | 5     | 28<br>27¾                   | ¼<br>5½                  |             |                    | mostly fine to coarse gravel in blue clay 90% gravel                     |                         | 1.00                 |                         |                       |
| 33   | 38  | 5     | 33<br>32                    | 1<br>6                   |             |                    | mostly fine to coarse gravel in blue clay 90% gravel few red shale chips |                         | 19.0                 | -3.1                    | 15.9                  |
| 38   | 42  | 4     | 38<br>38                    | 0<br>4                   |             |                    | Mainly Red Shale - Bedrock                                               |                         | 0.50                 |                         |                       |
|      | END |       |                             |                          |             |                    | END                                                                      |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                    |                                                                          |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                    |                                                                          |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                    |                                                                          |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                    |                                                                          |                         |                      |                         |                       |

|                                                                 |                                                                                                    |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>Difficult move.<br>Changed set up 5 Feet. | FROM <u>33</u> TO <u>38</u> ; <u>433.3</u> Mgs; <u>4.14</u> \$ per Cu. Yard @ <u>350.00</u> /Ounce |
|                                                                 | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                              |
|                                                                 | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                                                  |
|                                                                 | FACTOR _____ DATE _____ CHECKED BY: _____                                                          |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                          |  |                                          |  |                                                 |  |                            |  |
|----------------------|--|--------------------------|--|------------------------------------------|--|-------------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 29/82</u>  |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  | PROJ.No. <u>1096</u>                            |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH <u>June 29/82</u> |  | CREEK <u>Limestone</u>                   |  | DRILL <u>Midwest Sonic</u>                      |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2560.01</u> |  | BIT <u>ROD CASE</u>      |  | DEPTH Overburden _____ Ft.               |  | MOVE <u>1/4</u> Hrs; DELAY _____ Hrs.           |  | HOLE** <u>2E</u>           |  |
| DEPTH <u>32</u>      |  | I.D. <u>5.5</u>          |  | DEPTH Gravel _____ Ft.                   |  | DRILL <u>1 1/4</u> Hrs; TOTAL <u>1 1/2</u> Hrs. |  | LINE** <u>L2</u>           |  |
|                      |  | O.D. <u>6.5</u>          |  | DEPTH Bedrock <u>29</u> Ft.              |  | PULL _____ Hrs;                                 |  |                            |  |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm<br>5/32 3/16 1/8 | FORMATION                                        | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|----------------------|--------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       |                             |                          |             |                      |                                                  | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8   | 8     | 0<br>1 1/2                  | -1 1/2<br>6 1/2          |             |                      | Gravel, minor blue-brown clay                    |                         |                      |                         |                       |
| 8    | 13  | 5     | 8<br>9                      | -1<br>4                  |             |                      | Gray clay at 10' - gravel 8-10                   |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>12 1/2                | 1/2<br>5 1/2             |             |                      | Mostly gray-blue clay                            |                         |                      |                         |                       |
| 18   | 23  | 5     | 18<br>18                    | 0<br>5                   |             |                      | Mostly gray-blue clay, minor gravel              |                         | 0.60                 | --                      | 0.60                  |
| 23   | 28  | 5     | 23<br>23                    | 0<br>5                   |             |                      | Blue Clay, very coarse gravel to Red shale chips |                         | 0.50                 | --                      | 0.50                  |
| 28   | 32  | 4     | 28<br>27                    | 1<br>5                   |             |                      | Red shale Broken - to Red shale bedrock          |                         | < .10                | --                      | < .10                 |
|      | END |       |                             |                          |             |                      |                                                  |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                                  |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                                  |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                                  |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                                  |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                                  |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                                  |                         |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                                  |                         |                      |                         |                       |

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| REMARKS | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                     |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                             |

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

[illegible]

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

[illegible]

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                          |                                         |                             |                                  |                         |
|----------------------|--------------------------|-----------------------------------------|-----------------------------|----------------------------------|-------------------------|
| LAT. _____           | START <u>June 29/82</u>  | PROPERTY NAME <u>Russell Creek Y.T.</u> |                             | PROJ.No. <u>1096</u>             | N.T.S.™ _____           |
| DEP. _____           | FINISH <u>June 29/82</u> | CREEK <u>Limestone</u>                  |                             | DRILL <u>Midwest Sonic</u>       | SHEET <u>1</u> of _____ |
| ELEV. <u>2556.14</u> | BIT <u>ROD CASE</u>      | DEPTH Overburden _____ Ft.              | MOVE <u>1/2</u> _____ Hrs;  | DELAY _____ Hrs.                 | HOLE™ <u>6E</u>         |
| DEPTH <u>11</u>      | I.D. <u>5.5</u>          | DEPTH Gravel _____ Ft.                  | DRILL <u>1/2</u> _____ Hrs; | TOTAL <u>&gt; 3/4</u> _____ Hrs. | LINE™ <u>L2</u>         |
|                      | O.D. <u>6.5</u>          | DEPTH Bedrock <u>9</u> _____ Ft.        | PULL <u>1/2</u> _____ Hrs;  |                                  |                         |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>1/2 3/4 1/2 1/28 | FORMATION                             | VOLUME      | ACTUAL  | CORREC-   | CORRECT |
|------|-----|-------|--------------|-------------|-------------|-------------------------|---------------------------------------|-------------|---------|-----------|---------|
|      |     |       | After Drive  | Core Length |             |                         |                                       | Theoretical | Mgs. Au | TION Mgs. | Mgs. Au |
| 4    | 0   | 6     | 0            | 0           |             |                         | Light till, clay, gravel (at 4')      |             | .25     | --        | .25     |
|      |     |       | 0            | 6           |             |                         | some frozen                           |             |         |           |         |
| 5    | 6   | 11    | 6            | 0           |             |                         | Minor clay to decomposed yellow-brown |             | < .05   | --        | < .05   |
|      |     |       | 6            | 5           |             |                         | rocks to decomposed red shale         |             |         |           |         |
|      | END |       |              |             |             |                         | Bed Rocks                             |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |
|      |     |       |              |             |             |                         |                                       |             |         |           |         |

## REMARKS

Poor set up and narrow gorge for 5E set up. Bedrock ridge 70' north so skipped L2, 5E, and L2, 7E

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

## 65

[illegible]

Ridge of limestone approximately  
75' north

FROM 6' TO 8' ; 211.31 Mgs; \$2.02 US \$ per Cu. Yard @ \$350 US /Ounce  
FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
FINENESS .85 DATE \_\_\_\_\_ LOGGED BY: D.E.Pegg  
FACTOR 211.31 x .85 x \$350 DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_  
311.03

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

66

|                      |  |                                     |  |                                         |  |                                             |  |                            |  |
|----------------------|--|-------------------------------------|--|-----------------------------------------|--|---------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>June 29/82</u>             |  | PROPERTY NAME <u>Russell Creek Y.T.</u> |  | PROJ.No. <u>1096</u>                        |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH <u>June 29/82</u>            |  | CREEK <u>Russell</u>                    |  | DRILL <u>Midwest Sonic</u>                  |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2542.27</u> |  | BIT <u>5.5</u> ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.              |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.       |  | HOLE** <u>1E</u>           |  |
| DEPTH <u>43</u>      |  | I.D. _____ O.D. <u>6.5</u>          |  | DEPTH Gravel _____ Ft.                  |  | DRILL <u>2 1/2</u> Hrs; TOTAL <u>3</u> Hrs. |  | LINE** <u>R9</u>           |  |
| DEPTH <u>43</u>      |  | O.D. <u>6.5</u>                     |  | DEPTH Bedrock <u>40</u> Ft.             |  | PULL _____ Hrs;                             |  |                            |  |

| FROM | TO | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm<br>3/32 1/8 1/4 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 1/2 1 3/4 2 2 1/4 2 1/2 2 3/4 3 3 1/4 3 1/2 3 3/4 4 4 1/4 4 1/2 4 3/4 5 5 1/4 5 1/2 5 3/4 6 6 1/4 6 1/2 6 3/4 7 7 1/4 7 1/2 7 3/4 8 8 1/4 8 1/2 8 3/4 9 9 1/4 9 1/2 9 3/4 10 10 1/4 10 1/2 10 3/4 11 11 1/4 11 1/2 11 3/4 12 12 1/4 12 1/2 12 3/4 13 13 1/4 13 1/2 13 3/4 14 14 1/4 14 1/2 14 3/4 15 15 1/4 15 1/2 15 3/4 16 16 1/4 16 1/2 16 3/4 17 17 1/4 17 1/2 17 3/4 18 18 1/4 18 1/2 18 3/4 19 19 1/4 19 1/2 19 3/4 20 20 1/4 20 1/2 20 3/4 21 21 1/4 21 1/2 21 3/4 22 22 1/4 22 1/2 22 3/4 23 23 1/4 23 1/2 23 3/4 24 24 1/4 24 1/2 24 3/4 25 25 1/4 25 1/2 25 3/4 26 26 1/4 26 1/2 26 3/4 27 27 1/4 27 1/2 27 3/4 28 28 1/4 28 1/2 28 3/4 29 29 1/4 29 1/2 29 3/4 30 30 1/4 30 1/2 30 3/4 31 31 1/4 31 1/2 31 3/4 32 32 1/4 32 1/2 32 3/4 33 33 1/4 33 1/2 33 3/4 34 34 1/4 34 1/2 34 3/4 35 35 1/4 35 1/2 35 3/4 36 36 1/4 36 1/2 36 3/4 37 37 1/4 37 1/2 37 3/4 38 38 1/4 38 1/2 38 3/4 39 39 1/4 39 1/2 39 3/4 40 40 1/4 40 1/2 40 3/4 41 41 1/4 41 1/2 41 3/4 42 42 1/4 42 1/2 42 3/4 43 43 1/4 43 1/2 43 3/4 44 44 1/4 44 1/2 44 3/4 45 45 1/4 45 1/2 45 3/4 46 46 1/4 46 1/2 46 3/4 47 47 1/4 47 1/2 47 3/4 48 48 1/4 48 1/2 48 3/4 49 49 1/4 49 1/2 49 3/4 50 50 1/4 50 1/2 50 3/4 51 51 1/4 51 1/2 51 3/4 52 52 1/4 52 1/2 52 3/4 53 53 1/4 53 1/2 53 3/4 54 54 1/4 54 1/2 54 3/4 55 55 1/4 55 1/2 55 3/4 56 56 1/4 56 1/2 56 3/4 57 57 1/4 57 1/2 57 3/4 58 58 1/4 58 1/2 58 3/4 59 59 1/4 59 1/2 59 3/4 60 60 1/4 60 1/2 60 3/4 61 61 1/4 61 1/2 61 3/4 62 62 1/4 62 1/2 62 3/4 63 63 1/4 63 1/2 63 3/4 64 64 1/4 64 1/2 64 3/4 65 65 1/4 65 1/2 65 3/4 66 66 1/4 66 1/2 66 3/4 67 67 1/4 67 1/2 67 3/4 68 68 1/4 68 1/2 68 3/4 69 69 1/4 69 1/2 69 3/4 70 70 1/4 70 1/2 70 3/4 71 71 1/4 71 1/2 71 3/4 72 72 1/4 72 1/2 72 3/4 73 73 1/4 73 1/2 73 3/4 74 74 1/4 74 1/2 74 3/4 75 75 1/4 75 1/2 75 3/4 76 76 1/4 76 1/2 76 3/4 77 77 1/4 77 1/2 77 3/4 78 78 1/4 78 1/2 78 3/4 79 79 1/4 79 1/2 79 3/4 80 80 1/4 80 1/2 80 3/4 81 81 1/4 81 1/2 81 3/4 82 82 1/4 82 1/2 82 3/4 83 83 1/4 83 1/2 83 3/4 84 84 1/4 84 1/2 84 3/4 85 85 1/4 85 1/2 85 3/4 86 86 1/4 86 1/2 86 3/4 87 87 1/4 87 1/2 87 3/4 88 88 1/4 88 1/2 88 3/4 89 89 1/4 89 1/2 89 3/4 90 90 1/4 90 1/2 90 3/4 91 91 1/4 91 1/2 91 3/4 92 92 1/4 92 1/2 92 3/4 93 93 1/4 93 1/2 93 3/4 94 94 1/4 94 1/2 94 3/4 95 95 1/4 95 1/2 95 3/4 96 96 1/4 96 1/2 96 3/4 97 97 1/4 97 1/2 97 3/4 98 98 1/4 98 1/2 98 3/4 99 99 1/4 99 1/2 99 3/4 100 100 1/4 100 1/2 100 3/4 101 101 1/4 101 1/2 101 3/4 102 102 1/4 102 1/2 102 3/4 103 103 1/4 103 1/2 103 3/4 104 104 1/4 104 1/2 104 3/4 105 105 1/4 105 1/2 105 3/4 106 106 1/4 106 1/2 106 3/4 107 107 1/4 107 1/2 107 3/4 108 108 1/4 108 1/2 108 3/4 109 109 1/4 109 1/2 109 3/4 110 110 1/4 110 1/2 110 3/4 111 111 1/4 111 1/2 111 3/4 112 112 1/4 112 1/2 112 3/4 113 113 1/4 113 1/2 113 3/4 114 114 1/4 114 1/2 114 3/4 115 115 1/4 115 1/2 115 3/4 116 116 1/4 116 1/2 116 3/4 117 117 1/4 117 1/2 117 3/4 118 118 1/4 118 1/2 118 3/4 119 119 1/4 119 1/2 119 3/4 120 120 1/4 120 1/2 120 3/4 121 121 1/4 121 1/2 121 3/4 122 122 1/4 122 1/2 122 3/4 123 123 1/4 123 1/2 123 3/4 124 124 1/4 124 1/2 124 3/4 125 125 1/4 125 1/2 125 3/4 126 126 1/4 126 1/2 126 3/4 127 127 1/4 127 1/2 127 3/4 128 128 1/4 128 1/2 128 3/4 129 129 1/4 129 1/2 129 3/4 130 130 1/4 130 1/2 130 3/4 131 131 1/4 131 1/2 131 3/4 132 132 1/4 132 1/2 132 3/4 133 133 1/4 133 1/2 133 3/4 134 134 1/4 134 1/2 134 3/4 135 135 1/4 135 1/2 135 3/4 136 136 1/4 136 1/2 136 3/4 137 137 1/4 137 1/2 137 3/4 138 138 1/4 138 1/2 138 3/4 139 139 1/4 139 1/2 139 3/4 140 140 1/4 140 1/2 140 3/4 141 141 1/4 141 1/2 141 3/4 142 142 1/4 142 1/2 142 3/4 143 143 1/4 143 1/2 143 3/4 144 144 1/4 144 1/2 144 3/4 145 145 1/4 145 1/2 145 3/4 146 146 1/4 146 1/2 146 3/4 147 147 1/4 147 1/2 147 3/4 148 148 1/4 148 1/2 148 3/4 149 149 1/4 149 1/2 149 3/4 150 150 1/4 150 1/2 150 3/4 151 151 1/4 151 1/2 151 3/4 152 152 1/4 152 1/2 152 3/4 153 153 1/4 153 1/2 153 3/4 154 154 1/4 154 1/2 154 3/4 155 155 1/4 155 1/2 155 3/4 156 156 1/4 156 1/2 156 3/4 157 157 1/4 157 1/2 157 3/4 158 158 1/4 158 1/2 158 3/4 159 159 1/4 159 1/2 159 3/4 160 160 1/4 160 1/2 160 3/4 161 161 1/4 161 1/2 161 3/4 162 162 1/4 162 1/2 162 3/4 163 163 1/4 163 1/2 163 3/4 164 164 1/4 164 1/2 164 3/4 165 165 1/4 165 1/2 165 3/4 166 166 1/4 166 1/2 166 3/4 167 167 1/4 167 1/2 167 3/4 168 168 1/4 168 1/2 168 3/4 169 169 1/4 169 1/2 169 3/4 170 170 1/4 170 1/2 170 3/4 171 171 1/4 171 1/2 171 3/4 172 172 1/4 172 1/2 172 3/4 173 173 1/4 173 1/2 173 3/4 174 174 1/4 174 1/2 174 3/4 175 175 1/4 175 1/2 175 3/4 176 176 1/4 176 1/2 176 3/4 177 177 1/4 177 1/2 177 3/4 178 178 1/4 178 1/2 178 3/4 179 179 1/4 179 1/2 179 3/4 180 180 1/4 180 1/2 180 3/4 181 181 1/4 181 1/2 181 3/4 182 182 1/4 182 1/2 182 3/4 183 183 1/4 183 1/2 183 3/4 184 184 1/4 184 1/2 184 3/4 185 185 1/4 185 1/2 185 3/4 186 186 1/4 186 1/2 186 3/4 187 187 1/4 187 1/2 187 3/4 188 188 1/4 188 1/2 188 3/4 189 189 1/4 189 1/2 189 3/4 190 190 1/4 190 1/2 190 3/4 191 191 1/4 191 1/2 191 3/4 192 192 1/4 192 1/2 192 3/4 193 193 1/4 193 1/2 193 3/4 194 194 1/4 194 1/2 194 3/4 195 195 1/4 195 1/2 195 3/4 196 196 1/4 196 1/2 196 3/4 197 197 1/4 197 1/2 197 3/4 198 198 1/4 198 1/2 198 3/4 199 199 1/4 199 1/2 199 3/4 200 200 1/4 200 1/2 200 3/4 201 201 1/4 201 1/2 201 3/4 202 202 1/4 202 1/2 202 3/4 203 203 1/4 203 1/2 203 3/4 204 204 1/4 204 1/2 204 3/4 205 205 1/4 205 1/2 205 3/4 206 206 1/4 206 1/2 206 3/4 207 207 1/4 207 1/2 207 3/4 208 208 1/4 208 1/2 208 3/4 209 209 1/4 209 1/2 209 3/4 210 210 1/4 210 1/2 210 3/4 211 211 1/4 211 1/2 211 3/4 212 212 1/4 212 1/2 212 3/4 213 213 1/4 213 1/2 213 3/4 214 214 1/4 214 1/2 214 3/4 215 215 1/4 215 1/2 215 3/4 216 216 1/4 216 1/2 216 3/4 217 217 1/4 217 1/2 217 3/4 218 218 1/4 218 1/2 218 3/4 219 219 1/4 219 1/2 219 3/4 220 220 1/4 220 1/2 220 3/4 221 221 1/4 221 1/2 221 3/4 222 222 1/4 222 1/2 222 3/4 223 223 1/4 223 1/2 223 3/4 224 224 1/4 224 1/2 224 3/4 225 225 1/4 225 1/2 225 3/4 226 226 1/4 226 1/2 226 3/4 227 227 1/4 227 1/2 227 3/4 228 228 1/4 228 1/2 228 3/4 229 229 1/4 229 1/2 229 3/4 230 230 1/4 230 1/2 230 3/4 231 231 1/4 231 1/2 231 3/4 232 232 1/4 232 1/2 232 3/4 233 233 1/4 233 1/2 233 3/4 234 234 1/4 234 1/2 234 3/4 235 235 1/4 235 1/2 235 3/4 236 236 1/4 236 1/2 236 3/4 237 237 1/4 237 1/2 237 3/4 238 238 1/4 238 1/2 238 3/4 239 239 1/4 239 1/2 239 3/4 240 240 1/4 240 1/2 240 3/4 241 241 1/4 241 1/2 241 3/4 242 242 1/4 242 1/2 242 3/4 243 243 1/4 243 1/2 243 3/4 244 244 1/4 244 1/2 244 3/4 245 245 1/4 245 1/2 245 3/4 246 246 1/4 246 1/2 246 3/4 247 247 1/4 247 1/2 247 3/4 248 248 1/4 248 1/2 248 3/4 249 249 1/4 249 1/2 249 3/4 250 250 1/4 250 1/2 250 3/4 251 251 1/4 251 1/2 251 3/4 252 252 1/4 252 1/2 252 3/4 253 253 1/4 253 1/2 253 3/4 254 254 1/4 254 1/2 254 3/4 255 255 1/4 255 1/2 255 3/4 256 256 1/4 256 1/2 256 3/4 257 257 1/4 257 1/2 257 3/4 258 258 1/4 258 1/2 258 3/4 259 259 1/4 259 1/2 259 3/4 260 260 1/4 260 1/2 260 3/4 261 261 1/4 261 1/2 261 3/4 262 262 1/4 262 1/2 262 3/4 263 263 1/4 263 1/2 263 3/4 264 264 1/4 264 1/2 264 3/4 265 265 1/4 265 1/2 265 3/4 266 266 1/4 266 1/2 266 3/4 267 267 1/4 267 1/2 267 3/4 268 268 1/4 268 1/2 268 3/4 269 269 1/4 269 1/2 269 3/4 270 270 1/4 270 1/2 270 3/4 271 271 1/4 271 1/2 271 3/4 272 272 1/4 272 1/2 272 3/4 273 273 1/4 273 1/2 273 3/4 274 274 1/4 274 1/2 274 3/4 275 275 1/4 275 1/2 275 3/4 276 276 1/4 276 1/2 276 3/4 277 277 1/4 277 1/2 277 3/4 278 278 1/4 278 1/2 278 3/4 279 279 1/4 279 1/2 279 3/4 280 280 1/4 280 1/2 280 3/4 281 281 1/4 281 1/2 281 3/4 282 282 1/4 282 1/2 282 3/4 283 283 1/4 283 1/2 283 3/4 284 284 1/4 284 1/2 284 3/4 285 285 1/4 285 1/2 285 3/4 286 286 1/4 286 1/2 286 3/4 287 287 1/4 287 1/2 287 3/4 288 288 1/4 288 1/2 288 3/4 289 289 1/4 289 1/2 289 3/4 290 290 1/4 290 1/2 290 3/4 291 291 1/4 291 1/2 291 3/4 292 292 1/4 292 1/2 292 3/4 293 293 1/4 293 1/2 293 3/4 294 294 1/4 294 1/2 294 3/4 295 295 1/4 295 1/2 295 3/4 296 296 1/4 296 1/2 296 3/4 297 297 1/4 297 1/2 297 3/4 298 298 1/4 298 1/2 298 3/4 299 299 1/4 299 1/2 299 3/4 300 300 1/4 300 1/2 300 3/4 301 301 1/4 301 1/2 301 3/4 302 302 1/4 302 1/2 302 3/4 303 303 1/4 303 1/2 303 3/4 304 304 1/4 304 1/2 304 3/4 305 305 1/4 305 1/2 305 3/4 306 306 1/4 306 1/2 306 3/4 307 307 1/4 307 1/2 307 3/4 308 308 1/4 308 1/2 308 3/4 309 309 1/4 309 1/2 309 3/4 310 310 1/4 310 1/2 310 3/4 311 311 1/4 311 1/2 311 3/4 312 312 1/4 312 1/2 312 3/4 313 313 1/4 313 1/2 313 3/4 314 314 1/4 314 1/2 314 3/4 315 315 1/4 315 1/2 315 3/4 316 316 1/4 316 1/2 316 3/4 317 317 1/4 317 1/2 317 3/4 318 318 1/4 318 1/2 318 3/4 319 319 1/4 319 1/2 319 3/4 320 320 1/4 320 1/2 320 3/4 321 321 1/4 321 1/2 321 3/4 322 322 1/4 322 1/2 322 3/4 323 323 1/4 323 1/2 323 3/4 324 324 1/4 324 1/2 324 3/4 325 325 1/4 325 1/2 325 3/4 326 326 1/4 326 1/2 326 3/4 327 327 1/4 327 1/2 327 3/4 328 328 1/4 328 1/2 328 3/4 329 329 1/4 329 1/2 329 3/4 330 330 1/4 330 1/2 330 3/4 331 331 1/4 331 1/2 331 3/4 332 332 1/4 332 1/2 332 3/4 333 333 1/4 333 1/2 333 3/4 334 334 1/4 334 1/2 334 3/4 335 335 1/4 335 1/2 335 3/4 336 336 1/4 336 1/2 336 3/4 337 337 1/4 337 1/2 337 3/4 338 338 1/4 338 1/2 338 3/4 339 339 1/4 339 1/2 339 3/4 340 340 1/4 340 1/2 340 3/4 341 341 1/4 341 1/2 341 3/4 342 342 1/4 342 1/2 342 3/4 343 343 1/4 343 1/2 343 3/4 344 344 1/4 344 1/2 344 3/4 345 345 1/4 345 1/2 345 3/4 346 346 1/4 346 1/2 346 3/4 347 347 1/4 347 1/2 347 3/4 348 348 1/4 348 1/2 348 3/4 349 349 1/4 349 1/2 349 3/4 350 350 1/4 350 1/2 350 3/4 351 351 1/4 351 1/2 351 3/4 352 352 1/4 352 1/2 352 3/4 353 353 1/4 353 1/2 353 3/4 354 354 1/4 354 1/2 354 3/4 355 355 1/4 355 1/2 355 3/4 356 356 1/4 356 1/2 356 3/4 357 357 1/4 357 1/2 357 3/4 358 358 1/4 358 1/2 358 3/4 359 359 1/4 359 1/2 359 3/4 360 360 1/4 360 1/2 360 3/4 361 361 1/4 361 1/2 361 3/4 362 362 1/4 362 1/2 362 3/4 363 363 1/4 363 1/2 363 3/4 364 364 1/4 364 1/2 364 3/4 365 365 1/4 365 1/2 365 3/4 366 366 1/4 366 1/2 366 3/4 367 367 1/4 367 1/2 367 3/4 368 368 1/4 368 1/2 368 3/4 369 369 1/4 369 1/2 369 3/4 370 370 1/4 370 1/2 370 3/4 371 371 1/4 371 1/2 371 3/4 372 372 1/4 372 1/2 372 3/4 373 373 1/4 373 1/2 373 3/4 374 374 1/4 374 1/2 374 3/4 375 375 1/4 375 1/2 375 3/4 376 376 1/4 376 1/2 376 3/4 377 377 1/4 377 1/2 377 3/4 378 378 1/4 378 1/2 378 3/4 379 379 1/4 379 1/2 379 3/4 380 380 1/4 380 1/2 380 3/4 381 381 1/4 381 1/2 381 3/4 382 382 1/4 382 1/2 382 3/4 383 383 1/4 383 1/2 383 3/4 384 384 1/4 384 1/2 384 3/4 385 385 1/4 385 1/2 385 3/4 386 386 1/4 386 1/2 386 3/4 387 387 1/4 387 1/2 387 3/4 388 388 1/4 388 1/2 388 3/4 389 389 1/4 389 1/2 389 3/4 390 390 1/4 390 1/2 390 3/4 391 391 1/4 391 1/2 391 3/4 392 392 1/4 392 1/2 392 3/4 393 393 1/4 393 1/2 393 3/4 394 394 1/4 394 1/2 394 3/4 395 395 1/4 395 1/2 395 3/4 396 396 1/4 396 1/2 396 3/4 397 397 1/4 397 1/2 397 3/4 398 398 1/4 398 1/2 398 3/4 399 399 1/4 399 1/2 399 3/4 400 400 1/4 400 1/2 400 3/4 401 401 1/4 401 1/2 401 3/4 402 402 1/4 402 1/2 402 3/4 403 403 1/4 403 1/2 403 3/4 404 404 1/4 404 1/2 404 3/4 405 405 1/4 405 1/2 405 3/4 406 406 1/4 406 1/2 406 3/4 407 407 1/4 407 1/2 407 3/4 408 408 1/4 408 1/2 408 3/4 409 409 1/4 409 1/2 409 3/4 410 410 1/4 410 1/2 410 3/4 411 411 1/4 411 1/2 411 3/4 412 412 1/4 412 1/2 412 3/4 413 413 1/4 413 1/2 413 3/4 414 414 1/4 414 1/2 414 3/4 415 415 1/4 415 1/2 415 3/4 416 416 1/4 416 1/2 416 3/4 417 417 1/4 417 1/2 417 3/4 418 418 1/4 418 1/2 418 3/4 419 419 1/4 419 1/2 419 3/4 420 420 1/4 420 1/2 420 3/4 421 421 1/4 421 1/2 421 3/4 422 422 1/4 422 1/2 422 3/4 423 423 1/4 423 1/2 423 3/4 424 424 1/4 424 1/2 424 3/4 425 425 1/4 425 1/2 425 3/4 426 426 1/4 426 1/2 426 3/4 427 427 1/4 427 1/2 427 3/4 428 428 1/4 428 1/2 428 3/4 429 429 1/4 429 1/2 |
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## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                          |                                         |            |                             |                                             |
|----------------------|--------------------------|-----------------------------------------|------------|-----------------------------|---------------------------------------------|
| LAT. _____           | START <u>June 30/82</u>  | PROPERTY NAME <u>Russell Creek Y.T.</u> |            | PROJ.No. <u>1096</u>        | N.T.S.* _____                               |
| DEP. _____           | FINISH <u>June 30/82</u> | CREEK <u>Russell</u>                    |            | DRILL <u>Midwest Sonic</u>  | SHEET <u>1</u> of _____                     |
| ELEV. <u>2543.64</u> | BIT _____                | ROD _____                               | CASE _____ | DEPTH Overburden _____ Ft.  | MOVE <u>1/2</u> Hrs; DELAY <u>1/2</u> Hrs.  |
| DEPTH <u>47</u>      | I.D. _____               | O.D. _____                              |            | DEPTH Gravel _____ Ft.      | DRILL <u>2 1/4</u> Hrs; TOTAL <u>3</u> Hrs. |
|                      |                          |                                         |            | DEPTH Bedrock <u>45</u> Ft. | PULL _____ Hrs;                             |
|                      |                          |                                         |            |                             | HOLE** <u>2E</u>                            |
|                      |                          |                                         |            |                             | LINE** <u>R9</u>                            |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>3/2 3/2 1/2 1/2 | FORMATION                                                       | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|-------------------------|-----------------------------------------------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| 0    | 8   | 8     | 0<br>1                      | -1<br>7'                 |             |                         | gravel & Boulder minor sand and clay                            |                                   |                      |                         |                       |
| 8    | 13  | 5     | 8<br>13                     | 6 1/2<br>4 1/2           |             |                         | Gray blue clay - firm                                           |                                   |                      |                         |                       |
| 13   | 18  | 5     | 13<br>18                    | -1/2<br>4 1/2            |             |                         | Gray blue clay - frozen                                         |                                   |                      |                         |                       |
| 18   | 23  | 5     | 18<br>23                    | -1/2<br>4 1/2            |             |                         | Gray blue clay - frozen                                         |                                   |                      |                         |                       |
| 23   | 28  | 5     | 23<br>28                    | -1/2<br>4 1/2            |             |                         | Gray blue clay - frozen                                         |                                   |                      |                         |                       |
| 28   | 33  | 5     | 28<br>33                    | 1/2<br>5 1/2             |             |                         | Mostly gravel                                                   |                                   | 0.40                 |                         |                       |
| 33   | 38  | 5     | 33<br>38                    | -1/2<br>4 1/2            |             |                         | Mostly gravel                                                   |                                   | 2.5                  |                         |                       |
| 38   | 43  | 5     | 38<br>43                    | -1 1/2<br>3 1/2          |             |                         | sandy clay-abundant boulder & gravel some<br>"pushing" boulders |                                   | 2.0                  |                         |                       |
| 43   | 47  | 4     | 43<br>47                    | 1 1/2<br>5 1/2           |             |                         | Red Shale - Broken Bedrock                                      |                                   | 0.25                 |                         |                       |
|      | END |       |                             |                          |             |                         |                                                                 |                                   |                      |                         |                       |
|      |     |       |                             |                          |             |                         |                                                                 |                                   |                      |                         |                       |
|      |     |       |                             |                          |             |                         |                                                                 |                                   |                      |                         |                       |

REMARKS

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                          |                                          |            |                             |                                             |
|----------------------|--------------------------|------------------------------------------|------------|-----------------------------|---------------------------------------------|
| LAT. _____           | START <u>June 30/82</u>  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |            | PROJ.No. <u>1096</u>        | N.T.S.* _____                               |
| DEP. _____           | FINISH <u>June 30/82</u> | CREEK <u>Russell</u>                     |            | DRILL <u>Midwest Sonic</u>  | SHEET <u>1</u> of _____                     |
| ELEV. <u>2547.26</u> | BIT _____                | ROD _____                                | CASE _____ | DEPTH Overburden _____ Ft.  | MOVE <u>1</u> Hrs; DELAY <u>1</u> Hrs.      |
| DEPTH <u>48</u>      | I.D. <u>5.5</u>          | _____                                    | _____      | DEPTH Gravel _____ Ft.      | DRILL <u>2 1/2</u> Hrs; TOTAL <u>3</u> Hrs. |
|                      | O.D. <u>6.5</u>          | _____                                    | _____      | DEPTH Bedrock <u>45</u> Ft. | PULL _____ Hrs;                             |
|                      |                          |                                          |            | HOLE** <u>3E</u>            |                                             |
|                      |                          |                                          |            | LINE** <u>R9</u>            |                                             |

| FROM | TO  | DRIVE | Before Drive | Core Rise      | GRAPHIC LOG | Ømm<br>3/32 1/8 1/4 3/8 1/2 5/8 3/4 1 1 1/4 1 1/2 1 3/4 2 | FORMATION                                            | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|--------------|----------------|-------------|-----------------------------------------------------------|------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       | After Drive  | Core Length    |             |                                                           |                                                      | Theoretical<br>Measured |                      |                         |                       |
| 0    | 6   | 6     | 0<br>2       | -2<br>4        |             |                                                           | Dark Till to 50% gravel & boulders                   |                         |                      |                         |                       |
| 6    | 8   | 2     | 6<br>5 1/2   | 1<br>2 1/2     |             |                                                           | Dark Till to 50% gravel & boulders                   |                         |                      |                         |                       |
| 8    | 13  | 5     | 8<br>7       | 1<br>6         |             |                                                           | Blue Clay. 10% gravel                                |                         |                      |                         |                       |
| 13   | 18  | 5     | 13<br>13     | 0<br>5         |             |                                                           | Blue Clay. 10% gravel                                |                         |                      |                         |                       |
| 18   | 23  | 5     | 18<br>18     | 0<br>5         |             |                                                           | Blue Clay. 10% gravel (also ice crystal              |                         |                      |                         |                       |
| 23   | 28  | 5     | 23<br>23     | 0<br>5         |             |                                                           | Blue Clay. 10% gravel Parts frozen                   |                         |                      |                         |                       |
| 28   | 33  | 5     | 28<br>28     | 0<br>5         |             |                                                           | Blue Clay. minor gravel Parts frozen                 |                         | < .05                |                         |                       |
| 33   | 38  | 5     | 33<br>35 1/2 | 2 1/2<br>2 1/2 |             |                                                           | Gravel & Sand, 6" and 8" cores cut, cores pushing    |                         | Nil                  |                         |                       |
| 38   | 43  | 5     | 38<br>39     | -1<br>4        |             |                                                           | Grey clay - 60% gravel<br>1 boulder pushing          |                         | < .50                |                         |                       |
| 43   | 48  | 5     |              |                |             |                                                           | Red shale chips in clay to red shale rock<br>Bedrock |                         | 2.0                  |                         |                       |
|      | End |       |              |                |             |                                                           |                                                      |                         |                      |                         |                       |
|      |     |       |              |                |             |                                                           |                                                      |                         |                      |                         |                       |

## REMARKS

Lost core 33-38 due to "pushing" of boulders. Also 38-43

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ .D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                         |  |                                                               |  |  |  |                            |  |
|----------------------|--|-------------------------|--|---------------------------------------------------------------|--|--|--|----------------------------|--|
| LAT. _____           |  | START <u>June 30/82</u> |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> PROJ.No. <u>1096</u> |  |  |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH <u>July 1/82</u> |  | CREEK <u>Russell</u> DRILL <u>Midwest Sonic</u>               |  |  |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2551.00</u> |  | BIT ROD CASE            |  | DEPTH Overburden _____ Ft. MOVE _____ Hrs; DELAY _____ Hrs.   |  |  |  | HOLE** <u>4E</u>           |  |
| DEPTH <u>53</u>      |  | I.D. <u>5.5</u> _____   |  | DEPTH Gravel _____ Ft. DRILL _____ Hrs; TOTAL _____ Hrs.      |  |  |  | LINE** <u>R9</u>           |  |
|                      |  | O.D. <u>6.5</u> _____   |  | DEPTH Bedrock <u>50</u> Ft. PULL _____ Hrs;                   |  |  |  |                            |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise      | GRAPHIC LOG | Ø mm<br>5/8 3/4 1 1 1/8 1 1/2 | FORMATION                                                               | VOLUME      | ACTUAL  | CORREC-   | CORRECT |
|------|-----|-------|--------------|----------------|-------------|-------------------------------|-------------------------------------------------------------------------|-------------|---------|-----------|---------|
|      |     |       | After Drive  | Core Length    |             |                               |                                                                         | Theoretical | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 8   | 8     | 0<br>2       | -2<br>6        |             |                               | Clay, gravel, boulders in small cut                                     |             |         |           |         |
| 8    | 13  | 5     | 8<br>7       | 1<br>6         |             |                               | Fair gravel & small boulders                                            |             |         |           |         |
| 13   | 18  | 5     | 13<br>13     | 0<br>5         |             |                               | Mostly frozen grey blue clay - some gravel                              |             |         |           |         |
| 18   | 23  | 5     | 18<br>17 1/2 | 1/2<br>5 1/2   |             |                               | Blue clay Frozen parts                                                  |             |         |           |         |
| 23   | 28  | 5     | 23<br>22 1/2 | 1/2<br>5 1/2   |             |                               | Blue clay Frozen parts                                                  |             |         |           |         |
| 28   | 33  | 5     | 28<br>27 1/2 | 1/2<br>5 1/2   |             |                               | Blue clay Frozen parts                                                  |             |         |           |         |
| 33   | 38  | 5     | 33<br>33 1/2 | -1/2<br>4 1/2  |             |                               | Blue clay to 35 gravel 35-38                                            |             | < .05   |           |         |
| 38   | 43  | 5     | 38<br>40     | -2<br>3        |             |                               | Gravel & small boulders - many Quartz or granitic "pushing"             |             | < .05   |           |         |
| 43   | 48  | 5     | 43<br>45 1/2 | 2 1/2<br>2 1/2 |             |                               | Pushing by large boulder in tube. Some good coarse gravel in gray clay. |             | N11     |           |         |
| 48   | 53  | 5     | 48<br>48     | 0<br>5         |             |                               | Gravel to red shale to green shale                                      |             | < 1.0   |           |         |
|      | END |       |              |                |             |                               | Bedrock                                                                 |             |         |           |         |
|      |     |       |              |                |             |                               |                                                                         |             |         |           |         |

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| REMARKS | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                     |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                             |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                             |  |                                     |  |                                          |  |                                             |  |                            |  |
|-----------------------------|--|-------------------------------------|--|------------------------------------------|--|---------------------------------------------|--|----------------------------|--|
| LAT. _____                  |  | START <u>July 1/82</u>              |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  | PROJ.No. <u>1096</u>                        |  | N.T.S.* _____              |  |
| DEP. _____                  |  | FINISH <u>July 1/82</u>             |  | CREEK <u>Russell</u>                     |  | DRILL <u>Midwest Sonic</u>                  |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2638.73</u>        |  | BIT <u>5.5</u> ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.               |  | MOVE <u>1</u> Hrs; DELAY _____ Hrs.         |  | HOLE** <u>1E</u>           |  |
| DEPTH <u>51</u>             |  | I.D. <u>6.5</u> O.D. _____          |  | DEPTH Gravel _____ Ft.                   |  | DRILL <u>2 1/2</u> Hrs; TOTAL <u>3</u> Hrs. |  | LINE** <u>R15</u>          |  |
| DEPTH Bedrock <u>48</u> Ft. |  | PULL _____ Hrs;                     |  |                                          |  |                                             |  |                            |  |

| FROM   | TO     | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ø mm<br>5/8 3/4 1 1/8 | FORMATION                                                                  | VOLUME      | ACTUAL  | CORREC-   | CORRECT |
|--------|--------|-------|--------------|-------------|-------------|-----------------------|----------------------------------------------------------------------------|-------------|---------|-----------|---------|
|        |        |       | After Drive  | Core Length |             |                       |                                                                            | Theoretical | Mgs. Au | TION Mgs. | Mgs. Au |
| 0      | 8      | 8     | 0            | -2          |             |                       | 3' sand / 5' medium to coarse gravel<br>1 @ 6" boulder                     |             |         |           |         |
| 8      | 13     | 5     | 8            | 1           |             |                       | 4 Ft. gravel & sand to 1' sandy clay                                       |             |         |           |         |
| 13     | 18     | 5     | 13           | 6           |             |                       | Grey blue clay. Firm.                                                      |             |         |           |         |
| 18     | 23     | 5     | 18           | 0           |             |                       | Grey blue clay. Firm.                                                      |             |         |           |         |
| 23     | 28     | 5     | 23           | 1           |             |                       | Clay to sandy clay to gravel to fine sand                                  |             | 2.10    |           |         |
| 28     | 29 1/2 | 1 1/2 | 28           | 0           |             |                       | Fine sand (difficult to hold core)<br>1 1/2' recovered from 5' run.        |             | Nil     |           |         |
| 29 1/2 | 33     | 3 1/2 | 29 1/2       | 1 1/2       |             |                       | Fine sand to coarse sand in clay.                                          |             |         |           |         |
| 33     | 38     | 5     | 33           | 0           |             |                       | Sand with clay (minor)                                                     |             | .5      |           |         |
| 38     | 43     | 5     | 38           | -1          |             |                       | Coarse gravel with brown silt and some small boulders (well rounded)       |             | .5      |           |         |
| 43     | 48     | 5     | 43           | 4           |             |                       | 3' Blue clay with 60% rock in clusions<br>1' coarse rock chips - red shale |             | 1.5     |           |         |
| 48     | 51     | 3     | 48           | 1           |             |                       | Red shale pieces. Bedrock                                                  |             | 8.5     | —         | 8.5     |
|        | END    |       |              | 3           |             |                       |                                                                            |             |         |           |         |

|         |                                                                                                   |
|---------|---------------------------------------------------------------------------------------------------|
| REMARKS | FROM <u>48</u> TO <u>51</u> ; <u>384.6</u> Mgs; <u>3.55</u> \$ per Cu. Yard @ <u>\$350</u> /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                             |
|         | FINENESS _____ DATE _____ LOGGED BY: <u>D.E.P.</u>                                                |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                                                         |

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                                     |  |                                          |  |                                      |  |                         |  |
|----------------------|--|-------------------------------------|--|------------------------------------------|--|--------------------------------------|--|-------------------------|--|
| LAT. _____           |  | START <u>July 1/82</u>              |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  | PROJ.No. <u>1096</u>                 |  | N.T.S.™ _____           |  |
| DEP. _____           |  | FINISH <u>July 2/82</u>             |  | CREEK <u>Russell</u>                     |  | DRILL <u>Midwest Sonic</u>           |  | SHEET <u>1</u> of _____ |  |
| ELEV. <u>2639.45</u> |  | BIT <u>5.5</u> ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.               |  | MOVE _____ Hrs; DELAY _____ Hrs.     |  | HOLE™ <u>2E</u>         |  |
| DEPTH <u>47</u>      |  | I.D. <u>6.5</u> _____               |  | DEPTH Gravel _____ Ft.                   |  | DRILL _____ Hrs; TOTAL <u>3</u> Hrs. |  | LINE™ <u>R15</u>        |  |
|                      |  | O.D. <u>6.5</u> _____               |  | DEPTH Bedrock <u>45</u> Ft.              |  | PULL _____ Hrs;                      |  |                         |  |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>5/16 3/8 1/2 5/8 3/4 7/8 1 | FORMATION                          | VOLUME      |          | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|------------------------------------|------------------------------------|-------------|----------|----------------------|-------------------------|-----------------------|
|      |     |       |                             |                          |             |                                    |                                    | Theoretical | Measured |                      |                         |                       |
| 0    | 4   | 4     | 0<br>- 1/2                  | 1/2<br>4 1/2             |             |                                    | sand, gravel, clay, boulders       |             |          |                      |                         |                       |
| 4    | 8   | 4     | 4<br>4                      | 0<br>4                   |             |                                    | sand, gravel, clay, boulders       |             |          |                      |                         |                       |
| 8    | 12  | 4     | 8<br>9 1/2                  | -1 1/2<br>2 1/2          |             |                                    | sand, gravel, clay, boulders       |             |          |                      |                         |                       |
| 12   | 18  | 4     | 12<br>11                    | 1<br>5                   |             |                                    | clay                               |             |          |                      |                         |                       |
| 18   | 23  | 5     | 18<br>18                    | 0<br>5                   |             |                                    | clay, gravel                       |             |          | < .05                |                         |                       |
| 23   | 28  | 5     | 23<br>20 1/2                | 2 1/2<br>7 1/2           |             |                                    | gravel, clay                       |             |          | < .10                |                         |                       |
| 28   | 33  | 5     | 28<br>28                    | 0<br>5                   |             |                                    | clay, sand                         |             |          | < .05                |                         |                       |
| 33   | 38  | 5     | 33<br>30 1/2                | 2 1/2<br>7 1/2           |             |                                    | sand, gravel, clay                 |             |          | < .50                |                         |                       |
| 38   | 43  | 5     | 36<br>36                    | 0<br>5                   |             |                                    | sand, gravel                       |             |          | < .50                |                         |                       |
| 43   | 47  | 4     | 43<br>41                    | 2<br>6                   |             |                                    | gravel & purple shale      Bedrock |             |          | < .10                |                         |                       |
|      | END |       |                             |                          |             |                                    |                                    |             |          |                      |                         |                       |
|      |     |       |                             |                          |             |                                    |                                    |             |          |                      |                         |                       |

|         |                                                                       |
|---------|-----------------------------------------------------------------------|
| REMARKS | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |
|         | FINENESS _____ DATE _____ LOGGED BY: _____ D.P. / R.H.                |
|         | FACTOR _____ DATE _____ CHECKED BY: _____                             |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                                     |  |                                                         |  |                                   |  |                            |  |
|----------------------|--|-------------------------------------|--|---------------------------------------------------------|--|-----------------------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>July 2/82</u>              |  | PROPERTY NAME <u>Russell Creek</u> PROJ.No. <u>1096</u> |  |                                   |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH <u>July 2/82</u>             |  | CREEK <u>Russell</u> DRILL <u>Midwest Sonic</u>         |  |                                   |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2642.06</u> |  | BIT <u>5.5</u> ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.                              |  | MOVE _____ Hrs; DELAY _____ Hrs.  |  | HOLE* <u>#3E</u>           |  |
| DEPTH <u>45</u>      |  | I.D. <u>6.5</u> _____               |  | DEPTH Gravel _____ Ft.                                  |  | DRILL _____ Hrs; TOTAL _____ Hrs. |  | LINE* <u>R15</u>           |  |
|                      |  | O.D. _____                          |  | DEPTH Bedrock <u>43</u> Ft.                             |  | PULL _____ Hrs;                   |  |                            |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise      | GRAPHIC LOG | Ømm<br>3/32 1/8 1/16 | FORMATION                | VOLUME               | ACTUAL  | CORREC-   | CORRECT |
|------|-----|-------|--------------|----------------|-------------|----------------------|--------------------------|----------------------|---------|-----------|---------|
|      |     |       | After Drive  | Core Length    |             |                      |                          | Theoretical Measured | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 6   | 6     | 0<br>-1      | 1<br>7'        |             |                      | clay, gravel             |                      |         |           |         |
| 6    | 8   | 2     | 6<br>5       | 1<br>3         |             |                      | gravel, boulders         |                      |         |           |         |
| 8    | 13  | 5     | 8<br>7 1/2   | 1 1/2<br>5 1/2 |             |                      | gravel, boulders         |                      |         |           |         |
| 13   | 18  | 5     | 13<br>12 1/2 | 1 1/2<br>5 1/2 |             |                      | gravel, clay, boulders   |                      | < .05   | —         | < .05   |
| 18   | 23  | 5     | 18<br>18 1/2 | 1 1/2<br>4     |             |                      | gravel, sands (yellow)   |                      | < .05   | —         | < .05   |
| 23   | 28  | 5     | 23<br>23     | 0<br>5         |             |                      | sand, gravel (yellow)    |                      | Nil     | —         | Nil     |
| 28   | 33  | 5     | 28<br>28     | 0<br>5         |             |                      | gravel (yellow)          |                      | 2 mg    | —         | 2 mg    |
| 33   | 38  | 5     | 33<br>33     | 0<br>5         |             |                      | gravel (yellow)          |                      | 8       | —         | 8       |
| 38   | 43  | 5     | 38<br>38     | 0<br>5         |             |                      | gravel (yellow)          | .03669<br>.03669     | 14      | —         | 14      |
| 43   | 45  | 2     | 43<br>43     | 0<br>2         |             |                      | green shale      Bedrock |                      | 1.25    | —         | 1.25    |
|      | END |       |              |                |             |                      |                          |                      |         |           |         |
|      |     |       |              |                |             |                      |                          |                      |         |           |         |

|                                                            |                                                                                                      |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| REMARKS<br><br>33 - 43 = \$2.84 yard <sup>3</sup><br><br>/ | FROM <u>38</u> TO <u>43</u> ; <u>381.5</u> Mgs; <u>3.64</u> \$ per Cu. Yard @ <u>350 U.S.</u> /Ounce |
|                                                            | FROM <u>33</u> TO <u>38</u> ; <u>218</u> Mgs; <u>2.08</u> \$ per Cu. Yard @ <u>350 U.S.</u> /Ounce   |
|                                                            | FINENESS _____ DATE _____ LOGGED BY: <u>R.K.</u>                                                     |
|                                                            | FACTOR _____ DATE _____ CHECKED BY: _____                                                            |

120006

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                         |                                          |                                      |                         |
|----------------------|-------------------------|------------------------------------------|--------------------------------------|-------------------------|
| LAT. _____           | START <u>July 2/82</u>  | PROPERTY NAME <u>Russell Creek, Y.T.</u> | PROJ.No. <u>1096</u>                 | N.T.S.* _____           |
| DEP. _____           | FINISH <u>July 3/82</u> | CREEK <u>Russell</u>                     | DRILL <u>Midwest Sonic</u>           | SHEET <u>1</u> of _____ |
| ELEV. <u>2649.22</u> | BIT <u>ROD CASE</u>     | DEPTH Overburden _____ Ft.               | MOVE _____ Hrs; DELAY _____ Hrs.     | HOLE** <u>4E</u>        |
| DEPTH <u>40½</u>     | I.D. <u>5.5</u>         | DEPTH Gravel _____ Ft.                   | DRILL _____ Hrs; TOTAL <u>3</u> Hrs. | LINE** <u>R15</u>       |
|                      | O.D. <u>6.5</u>         | DEPTH Bedrock <u>39½</u> Ft.             | PULL _____ Hrs;                      |                         |

| FROM | TO  | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ømm<br>3/32 1/8 1/16 | FORMATION                         | VOLUME<br>Theoretical<br>Measured | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------------------|--------------------------|-------------|----------------------|-----------------------------------|-----------------------------------|----------------------|-------------------------|-----------------------|
| 0    | 5½  | 5½    | 0<br>-½                     | ½<br>6                   |             |                      | sand, clay, gravel                |                                   |                      |                         |                       |
| 5½   | 8   | 2½    | 5½<br>5                     | ½<br>3                   |             |                      | gravel                            |                                   |                      |                         |                       |
| 8    | 13  | 5     | 8<br>7                      | 1<br>6                   |             |                      | clay, gravel                      |                                   | < .05                | —                       | —                     |
| 13   | 18  | 5     | 13<br>12                    | 1<br>6                   |             |                      | gravel, clay                      |                                   | 1.10                 | —                       | —                     |
| 18   | 23  | 5     | 18<br>18                    | 0<br>5                   |             |                      | gravel, sand                      |                                   | 2.00                 | —                       | 2.00                  |
| 23   | 28  | 5     | 23<br>23½                   | -½<br>4½                 |             |                      | sand, gravel, clay                | .03669<br>.03302                  | 6.00                 | + .66                   | 6.66                  |
| 28   | 33  | 5     | 28<br>27½                   | ½<br>5½                  |             |                      | gravel, boulders                  | .03669<br>.0403                   | 6.00                 | - .54                   | 5.46                  |
| 33   | 38  | 5     | 33<br>33½                   | ½<br>4½                  |             |                      | gravel - silty                    |                                   | 1.00                 | —                       | —                     |
| 38   | 40½ | 1½    | 38<br>36                    | 2<br>3½                  |             |                      | (Bedrock) Green shale - quartzite |                                   | < .05                | —                       | —                     |
|      |     |       |                             |                          |             |                      |                                   |                                   |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                   |                                   |                      |                         |                       |
|      |     |       |                             |                          |             |                      |                                   |                                   |                      |                         |                       |

## REMARKS

FROM 23 TO 33 ; 165 Mgs; 1.57 \$ per Cu. Yard @ 350 /Ounce  
 FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: R.K.  
 FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                                            |                                          |                                                 |                         |
|----------------------|--------------------------------------------|------------------------------------------|-------------------------------------------------|-------------------------|
| LAT. _____           | START <u>July 3/82</u>                     | PROPERTY NAME <u>Russell Creek, Y.T.</u> | PROJ.No. <u>1096</u>                            | N.T.S.* _____           |
| DEP. _____           | FINISH <u>July 3/82</u>                    | CREEK <u>Russell</u>                     | DRILL <u>Midwest Sonic</u>                      | SHEET <u>1</u> of _____ |
| ELEV. <u>2509.53</u> | BIT <u>  </u> ROD <u>  </u> CASE <u>  </u> | DEPTH Overburden _____ Ft.               | MOVE <u>1/4</u> Hrs; DELAY _____ Hrs.           | HOLE* <u>TP 8</u>       |
| I.D. _____           |                                            | DEPTH Gravel _____ Ft.                   | DRILL <u>2 1/2</u> Hrs; TOTAL <u>2 3/4</u> Hrs. |                         |
| DEPTH <u>38</u>      | O.D. _____                                 | DEPTH Bedrock <u>36</u> Ft.              | PULL _____ Hrs;                                 | LINE* <u>≈ R6</u>       |

[illegible]

| REMARKS |       |         |      |          |            |      |            |             |             |             |                   |            |        |
|---------|-------|---------|------|----------|------------|------|------------|-------------|-------------|-------------|-------------------|------------|--------|
| #177    | 38-43 | Bedrock | 5mg. | FROM     | <u>18</u>  | TO   | <u>21½</u> | ; 486.      | Mgs;        | <u>4.65</u> | \$ per Cu. Yard @ | <u>350</u> | /Ounce |
|         |       |         |      | FROM     | <u>28</u>  | TO   | <u>38</u>  | ; 154.9     | Mgs;        | <u>1.48</u> | \$ per Cu. Yard @ | <u>350</u> | /Ounce |
|         |       |         |      | FINENESS | <u>850</u> | DATE | <u></u>    | LOGGED BY:  | <u>R.K.</u> |             |                   |            |        |
|         |       |         |      | FACTOR   | <u></u>    | DATE | <u></u>    | CHECKED BY: | <u></u>     |             |                   |            |        |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                       |  |                                     |  |                                          |  |                                             |  |                         |  |
|-----------------------|--|-------------------------------------|--|------------------------------------------|--|---------------------------------------------|--|-------------------------|--|
| LAT. _____            |  | START <u>July 3/82</u>              |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  | PROJ. No. <u>1096</u>                       |  | N.T.S.™ _____           |  |
| DEP. _____            |  | FINISH <u>July 3/82</u>             |  | CREEK <u>Russell</u>                     |  | DRILL <u>Midwest Sonic</u>                  |  | SHEET <u>1</u> of _____ |  |
| ELEV. <u>2511.77</u>  |  | BIT <u>5.5</u> ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.               |  | MOVE <u>1/3</u> Hrs; DELAY _____ Hrs.       |  | HOLE™ <u>TP9</u>        |  |
| DEPTH <u>45</u>       |  | I.D. <u>6.5</u> _____               |  | DEPTH Gravel _____ Ft.                   |  | DRILL <u>3</u> Hrs; TOTAL <u>3 1/3</u> Hrs. |  | LINE™ <u>≈ R6</u>       |  |
| O.D. <u>6.5</u> _____ |  | DEPTH Bedrock <u>42</u> Ft.         |  | PULL _____ Hrs;                          |  |                                             |  |                         |  |

| FROM | TO | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC<br>LOG | Ømm<br>1/2 3/4 1 1 1/8 1 3/8 1 1/2 1 3/4 2 | FORMATION                         | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|----|-------|-----------------------------|--------------------------|----------------|--------------------------------------------|-----------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |    |       |                             |                          |                |                                            |                                   | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8  | 8     | 0<br>-1                     | 1<br>7                   |                |                                            | gravel - clay                     |                         |                      |                         |                       |
| 8    | 13 | 5     | 8<br>7                      | 1<br>6                   |                |                                            | clay                              |                         |                      |                         |                       |
| 13   | 18 | 5     | 13<br>13                    | 0<br>5                   |                |                                            | clay, gravel                      |                         |                      |                         |                       |
| 18   | 23 | 5     | 18<br>19                    | -1<br>4                  |                |                                            | gravel                            | .03669<br>.02935        | 12.5                 | + 3.1                   | 15.6                  |
| 23   | 28 | 5     | 23<br>22 1/2                | 1 1/2<br>5 1/2           |                |                                            | gravel                            | .03669<br>.04036        | 2.0                  | - .2                    | 1.8                   |
| 28   | 32 | 4     | 28<br>29                    | -1<br>3                  |                |                                            | gravel                            | .02935<br>.02201        | 10                   | + 3.3                   | 13.3                  |
| 32   | 37 | 5     | 32<br>30                    | +2<br>7                  |                |                                            | gravel, clay                      | .03669<br>.05136        | 37.0                 | 10.57                   | 26.43                 |
| 37   | 42 | 5     | 37<br>38                    | -1<br>4                  |                |                                            | gravel, green & Purple soft shale |                         | < .05                | —                       | < .05                 |
| 42   | 45 | 3     | 42<br>40 1/2                | 1 1/2<br>4 1/2           |                |                                            | Decomposed Bedrock                |                         | 1 mg                 | —                       | 1 mg                  |
|      |    |       |                             |                          |                |                                            | END                               |                         |                      |                         |                       |
|      |    |       |                             |                          |                |                                            |                                   |                         |                      |                         |                       |
|      |    |       |                             |                          |                |                                            |                                   |                         |                      |                         |                       |

|                                                                                                                                          |                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br>gravel between bottom of clay and bedrock<br>18-37 = 57.13 mg = 19ft<br>409.76 mg per yd. <sup>3</sup> = \$3.91 cu yd. | FROM <u>18</u> TO <u>23</u> ; <u>531.48</u> Mgs; <u>\$5.08</u> US \$ per Cu. Yard @ <u>350</u> US/Ounce |
|                                                                                                                                          | FROM <u>28</u> TO <u>32</u> ; <u>453.12</u> Mgs; <u>4.33</u> \$ per Cu. Yard @ <u>350</u> US/Ounce      |
|                                                                                                                                          | FROM <u>32</u> TO <u>37</u> ; <u>720.36</u> Mgs; <u>6.89</u> \$ per Cu. Yard @ <u>350</u> US/Ounce      |
|                                                                                                                                          | FINENESS <u>850</u> DATE _____ LOGGED BY: <u>R.K.</u><br>FACTOR _____ DATE _____ CHECKED BY: _____      |

120006

## NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                                                   |                                          |                                             |                         |
|----------------------|---------------------------------------------------|------------------------------------------|---------------------------------------------|-------------------------|
| LAT. _____           | START <u>July 3/82</u>                            | PROPERTY NAME <u>Russell Creek, Y.T.</u> | PROJ.No. <u>1096</u>                        | N.T.S.* _____           |
| DEP. _____           | FINISH <u>July 4/82</u>                           | CREEK <u>Russell</u>                     | DRILL <u>Midwest Sonic</u>                  | SHEET <u>1</u> of _____ |
| ELEV. <u>2501.01</u> | BIT <u>5.5</u> ROD <u>_____</u> CASE <u>_____</u> | DEPTH Overburden _____ Ft.               | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.       | HOLE** <u>TP 10</u>     |
| DEPTH <u>38</u>      | I.D. <u>6.5</u>                                   | DEPTH Gravel _____ Ft.                   | DRILL <u>2 3/4</u> Hrs; TOTAL <u>3</u> Hrs. | LINE** <u>R6</u>        |
|                      | O.D. <u>6.5</u>                                   | DEPTH Bedrock <u>36</u> Ft.              | PULL _____ Hrs;                             |                         |

| FROM | TO | DRIVE | Before Drive | Core Rise       | GRAPHIC LOG | Ømm | FORMATION                           | VOLUME Theoretical Measured | ACTUAL Mgs. Au | CORREC-TION Mgs. | CORRECT Mgs. Au |
|------|----|-------|--------------|-----------------|-------------|-----|-------------------------------------|-----------------------------|----------------|------------------|-----------------|
| 0    | 8  | 8     | 0<br>6       | -6<br>2         |             |     | Gravel, clay (4')                   |                             |                |                  |                 |
| 8    | 13 | 5     | 8<br>7 1/2   | 1/2<br>5 1/2    |             |     | clay                                |                             |                |                  |                 |
| 13   | 18 | 5     | 13<br>13 1/2 | 1/2<br>4 1/2    |             |     | clay (1 1/2') gravel (3')           |                             |                |                  |                 |
| 18   | 23 | 5     | 5<br>5 1/2   | -1/2<br>4 1/2   |             |     | gravel                              |                             | 1.5            | —                | 1.5             |
| 23   | 28 | 5     | 23<br>20 1/2 | -2 1/2<br>2 1/2 |             |     | gravel, boulders                    |                             | < .8           | —                | < .8            |
| 28   | 33 | 5     | 28<br>28     | 0<br>5          |             |     | gravel to clay at 32'               |                             | 5.0            | —                | 5.0             |
| 33   | 38 | 5     | 33<br>33     | 0<br>5          |             |     | green gray clay to green decomposed |                             | 38.0           | —                | 38.0            |
| 38   | 43 | 5     |              |                 |             |     | Bedrock                             |                             | < .3           |                  |                 |
|      |    |       |              |                 |             |     |                                     |                             |                |                  |                 |
|      |    |       |              |                 |             |     |                                     |                             |                |                  |                 |
|      |    |       |              |                 |             |     |                                     |                             |                |                  |                 |
|      |    |       |              |                 |             |     |                                     |                             |                |                  |                 |

## REMARKS

FROM 33 TO 38 ; 1035.7 Mgs; \$9.90 US \$ per Cu. Yard @ 350 US /Ounce

FROM 28 TO 38 ; 585.9 Mgs; 5.60 \$ per Cu. Yard @ 350 /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D.E.P. & R.K.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                 |                                   |                                          |                                                 |                            |
|-----------------|-----------------------------------|------------------------------------------|-------------------------------------------------|----------------------------|
| LAT. _____      | START <u>July 4/82</u>            | PROPERTY NAME <u>Russell Creek, Y.T.</u> | PROJ.No. <u>1096</u>                            | N.T.S.** _____             |
| DEP. _____      | FINISH <u>July 4/82</u>           | CREEK <u>Russell</u>                     | DRILL <u>Midwest Sonic</u>                      | SHEET <u>1</u> of <u>1</u> |
| ELEV. _____     | <u>BIT</u> <u>ROD</u> <u>CASE</u> | DEPTH Overburden _____ Ft.               | MOVE <u>6</u> Hrs; DELAY _____ Hrs.             | HOLE** <u>1E</u>           |
| DEPTH <u>28</u> | I.D. _____                        | DEPTH Gravel _____ Ft.                   | DRILL <u>1 1/2</u> Hrs; TOTAL <u>7 1/2</u> Hrs. | LINE** <u>R40</u>          |
|                 | O.D. _____                        | DEPTH Bedrock <u>25</u> Ft.              | PULL _____ Hrs;                                 |                            |

[illegible]

## REMARKS

Includes 3<sup>2</sup> mile more from Camp  
area. 6 hours

~~091466~~

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

[illegible]

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |                         |                                          |            |                             |                                         |
|----------------------|-------------------------|------------------------------------------|------------|-----------------------------|-----------------------------------------|
| LAT. _____           | START <u>July 5/82</u>  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |            | PROJ.No. <u>1096</u>        | N.T.S.** _____                          |
| DEP. _____           | FINISH <u>July 5/82</u> | CREEK <u>Russell</u>                     |            | DRILL <u>Midwest Sonic</u>  | SHEET <u>1</u> of _____                 |
| ELEV. <u>2938.15</u> | BIT <u>5.5</u>          | ROD _____                                | CASE _____ | DEPTH Overburden _____ Ft.  | MOVE <u>1</u> Hrs; DELAY _____ Hrs.     |
| DEPTH <u>31</u>      | I.D. <u>6.5</u>         | _____                                    | _____      | DEPTH Gravel _____ Ft.      | DRILL <u>2</u> Hrs; TOTAL <u>3</u> Hrs. |
|                      | O.D. <u>6.5</u>         | _____                                    | _____      | DEPTH Bedrock <u>28</u> Ft. | PULL _____ Hrs;                         |
|                      |                         |                                          |            | HOLE** <u>T12</u>           |                                         |
|                      |                         |                                          |            | LINE** <u>RB40</u>          |                                         |

| FROM | TO  | DRIVE | Before<br>Drive | Core<br>Rise   | GRAPHIC<br>LOG | Ømm<br>5/8 3/4 1/2 | FORMATION                                                         | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|-----|-------|-----------------|----------------|----------------|--------------------|-------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |     |       | After<br>Drive  | Core<br>Length |                |                    |                                                                   | Theoretical<br>Measured |                      |                         |                       |
| 0    | 6½  | 6½    | 0<br>½          | -½<br>6        |                |                    | organics, clay, gravel, boulders                                  |                         |                      |                         |                       |
| 6½   | 8   | 1½    | 6½<br>6½        | 0<br>1½        |                |                    | gravel, boulders & pieces boulders, clay                          |                         |                      |                         |                       |
| 8    | 10  | 2     | 8<br>8          | 0<br>2         |                |                    | mixed coarse gravel, clay, small boulders<br>local large boulders |                         | 2.5                  |                         |                       |
| 10   | 13  | 3     | 10<br>10½       | -½<br>2½       |                |                    | mixed coarse gravel, clay, small boulders<br>local large boulders |                         | 1.0                  |                         |                       |
| 13   | 18  | 5     | 13<br>12        | 1<br>6         |                |                    | mixed coarse gravel, clay, small boulders<br>local large boulders |                         | <.20                 |                         |                       |
| 18   | 23  | 5     | 18<br>16        | +2<br>7        |                |                    | mostly brown broken shale                                         |                         | .05                  |                         |                       |
| 23   | 28  | 5     | 23<br>23        | 0<br>5         |                |                    | gravel & mostly brown broken shale<br>pieces Bedrock (?)          |                         | Tr                   |                         |                       |
| 28   | 31  | 3     | 28<br>28        | 0<br>3         |                |                    | gravel & mostly brown broken shale<br>pieces Bedrock at 28        |                         | N11                  |                         |                       |
|      | END |       |                 |                |                |                    |                                                                   |                         |                      |                         |                       |
|      |     |       |                 |                |                |                    |                                                                   |                         |                      |                         |                       |
|      |     |       |                 |                |                |                    |                                                                   |                         |                      |                         |                       |
|      |     |       |                 |                |                |                    |                                                                   |                         |                      |                         |                       |
|      |     |       |                 |                |                |                    |                                                                   |                         |                      |                         |                       |

## REMARKS

moved up on bench.  
Some large boulders.

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: \_\_\_\_\_ D.E.P.

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                 |  |                         |  |                                                               |  |                                             |  |                            |  |
|-----------------|--|-------------------------|--|---------------------------------------------------------------|--|---------------------------------------------|--|----------------------------|--|
| LAT. _____      |  | START <u>July 5/82</u>  |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> PROJ.No. <u>1096</u> |  |                                             |  | N.T.S.* _____              |  |
| DEP. _____      |  | FINISH <u>July 5/82</u> |  | CREEK <u>Russell</u> DRILL <u>Midwest Sonic</u>               |  |                                             |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. _____     |  | BIT ROD CASE            |  | DEPTH Overburden _____ Ft.                                    |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.       |  | HOLE** <u>T13</u>          |  |
| DEPTH <u>38</u> |  | I.D. _____              |  | DEPTH Gravel _____ Ft.                                        |  | DRILL <u>2 1/2</u> Hrs; TOTAL <u>3</u> Hrs. |  | LINE** <u>RB 40</u>        |  |
| O.D. _____      |  |                         |  | DEPTH Bedrock <u>35</u> Ft.                                   |  | PULL _____ Hrs;                             |  |                            |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>3/32 1/8 1/16 | FORMATION                                                                    | VOLUME               | ACTUAL  | CORREC-   | CORRECT |
|------|-----|-------|--------------|-------------|-------------|----------------------|------------------------------------------------------------------------------|----------------------|---------|-----------|---------|
|      |     |       | After Drive  | Core Length |             |                      |                                                                              | Theoretical Measured | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 4   | 4     | 0            | 0           |             |                      | Till - coarse boulders & clay                                                |                      |         |           |         |
| 4    | 8   | 4     | 4            | 1/2         |             |                      | coarse gravel & clay 50/50                                                   |                      |         |           |         |
| 8    | 13  | 5     | 8            | -1/2        |             |                      | coarse gravel & clay 50/50                                                   |                      | 6.0     | + 1.29    | 7.29    |
| 13   | 18  | 5     | 13           | 0           |             |                      | Shale - broken up. Sand at bottom                                            |                      | 6.0     | —         | 6.0     |
| 18   | 23  | 5     | 18           | 0           |             |                      | mostly clay & brown broken shale to red clay. Few gravel pebbles             |                      | <.05    |           |         |
| 23   | 28  | 5     | 23           | 0           |             |                      | 60% clay, 40% coarse gravel mixed few specs. pyrite                          |                      | .05     | —         | .05     |
| 28   | 33  | 5     | 28           | 0           |             |                      | clay with gravel/broken brown shale/small scattered pebbles - small boulders |                      | .05     | —         | .05     |
| 33   | 38  | 5     | 33           | 0           |             |                      | mostly broken shale, decomposed rock part water very rusty. Bedrock          |                      | .10     | —         | .10     |
|      | END |       |              |             |             |                      |                                                                              |                      |         |           |         |
|      |     |       |              |             |             |                      |                                                                              |                      |         |           |         |
|      |     |       |              |             |             |                      |                                                                              |                      |         |           |         |
|      |     |       |              |             |             |                      |                                                                              |                      |         |           |         |
|      |     |       |              |             |             |                      |                                                                              |                      |         |           |         |

|                                                                                       |                                                                                                       |
|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>Set up above old Sluice workings.<br>Approx. 100' north of T 12 | FROM <u>8</u> TO <u>18</u> ; <u>181.1</u> Mgs; <u>\$1.73</u> \$ per Cu. Yard @ <u>\$350</u> US /Ounce |
|                                                                                       | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                                 |
|                                                                                       | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                                                     |
|                                                                                       | FACTOR _____ DATE _____ CHECKED BY: _____                                                             |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG

|                      |  |                         |  |                                          |  |                                             |  |                         |  |
|----------------------|--|-------------------------|--|------------------------------------------|--|---------------------------------------------|--|-------------------------|--|
| LAT. _____           |  | START <u>July 5/82</u>  |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  | PROJ. No. <u>1096</u>                       |  | N.T.S.* _____           |  |
| DEP. _____           |  | FINISH <u>July 6/82</u> |  | CREEK <u>Russell</u>                     |  | DRILL <u>Midwest Sonic</u>                  |  | SHEET <u>1</u> of _____ |  |
| ELEV. <u>2998.44</u> |  | BIT _____               |  | DEPTH Overburden _____ Ft.               |  | MOVE <u>1 1/2</u> Hrs; DELAY <u>1</u> Hrs.  |  | HOLE* <u>T 14</u>       |  |
| DEPTH <u>68</u>      |  | I.D. _____              |  | DEPTH Gravel _____ Ft.                   |  | DRILL <u>2 1/2</u> Hrs; TOTAL <u>4</u> Hrs. |  | LINE* <u>RB 40</u>      |  |
|                      |  | O.D. _____              |  | DEPTH Bedrock <u>none</u> Ft.            |  | PULL _____ Hrs;                             |  |                         |  |

| FROM | TO | DRIVE | Before Drive | Core Rise       | GRAPHIC LOG | Ø mm<br>3/32 1/8 1/4 | FORMATION                                                                    | VOLUME                  | ACTUAL<br>Mgs. Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs. Au |
|------|----|-------|--------------|-----------------|-------------|----------------------|------------------------------------------------------------------------------|-------------------------|-------------------|-------------------------|--------------------|
|      |    |       | After Drive  | Core Length     |             |                      |                                                                              | Theoretical<br>Measured |                   |                         |                    |
| 0    | 8  | 8     | 0<br>1 1/2   | -1 1/2<br>6 1/2 |             |                      | gravel                                                                       |                         |                   |                         |                    |
| 8    | 13 | 5     | 8<br>8       | 0<br>5          |             |                      | gravel                                                                       |                         |                   |                         |                    |
| 13   | 18 | 5     | 13<br>13     | 0<br>5          |             |                      | gravel with clay                                                             |                         |                   |                         |                    |
| 18   | 23 | 5     | 18<br>19     | -1<br>4         |             |                      | gravel                                                                       |                         |                   |                         |                    |
| 23   | 28 | 5     | 23<br>24 1/2 | -1 1/2<br>3 1/2 |             |                      | coarse gravel, numerous boulders - few<br>cores of rock to 10" - pushing (?) |                         | 3.0               | +1.29                   | 4.29               |
| 28   | 33 | 5     | 28<br>28 1/2 | -1 1/2<br>4 1/2 |             |                      | gravel. medium to coarse. good                                               |                         | 8.0               | + .88                   | 8.88               |
| 33   | 38 | 5     | 33<br>33     | 0<br>5          |             |                      | gravel, medium to coarse good                                                |                         | 4.0               | —                       | 4                  |
| 38   | 43 | 5     | 38<br>38     | 0<br>5          |             |                      | gravel medium to coarse<br>(slough) more clay part                           |                         | 5.0               |                         | 5                  |
| 43   | 48 | 5     | 43<br>41 1/2 | 1 1/2<br>6 1/2  |             |                      | gravel - some clay                                                           |                         | 2 mg              |                         |                    |
| 48   | 53 | 5     | 48<br>47 1/2 | 1/2<br>5 1/2    |             |                      | gravel                                                                       |                         | < 1 mg            |                         |                    |
| 53   | 58 | 5     | 53<br>52     | 1<br>6          |             |                      | gravel                                                                       |                         | .10               |                         |                    |
| 58   | 64 | 6     | 58<br>58     | 0<br>6          |             |                      | gravel                                                                       |                         | .05               |                         |                    |

|                                                                                        |    |   |          |        |                                                                                                           |  |  |  |  |
|----------------------------------------------------------------------------------------|----|---|----------|--------|-----------------------------------------------------------------------------------------------------------|--|--|--|--|
| REMARKS                                                                                |    |   |          |        | FROM <u>gravel to 3 feet clay</u> TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce              |  |  |  |  |
| 64                                                                                     | 68 | 4 | 64<br>63 | 1<br>5 | FROM <u>23</u> TO <u>43</u> ; <u>151.06</u> Mgs; <u>\$1.23</u> \$ per Cu. Yard @ <u>\$350 U.S.</u> /Ounce |  |  |  |  |
| July 6 - Late start due to Bombardier repair<br>Did not hit bedrock. Not enough Casing |    |   |          |        | FINENESS _____ DATE _____ LOGGED BY: _____ D.E.P.                                                         |  |  |  |  |
|                                                                                        |    |   |          |        | FACTOR _____ DATE _____ CHECKED BY: _____                                                                 |  |  |  |  |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 82

|                      |                         |                                          |            |                                   |                                             |
|----------------------|-------------------------|------------------------------------------|------------|-----------------------------------|---------------------------------------------|
| LAT. _____           | START <u>July 6/82</u>  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |            | PROJ. No. <u>1096</u>             | N.T.S.* _____                               |
| DEP. _____           | FINISH <u>July 7/82</u> | CREEK <u>Russell</u>                     |            | DRILL <u>Midwest Sonic</u>        | SHEET <u>1</u> of <u>2</u>                  |
| ELEV. <u>2888.14</u> | BIT <u>5.5</u>          | ROD _____                                | CASE _____ | DEPTH Overburden _____ Ft.        | MOVE <u>1/2</u> Hrs; DELAY <u>1/4</u> Hrs.  |
| DEPTH <u>67</u>      | I.D. <u>6.5</u>         | _____                                    | _____      | DEPTH Gravel _____ Ft.            | DRILL <u>3</u> Hrs; TOTAL <u>3-3/4</u> Hrs. |
|                      | O.D. <u>6.5</u>         | _____                                    | _____      | DEPTH Bedrock? <u>near 65 Ft.</u> | PULL <u>3</u> Hrs;                          |
| HOLE** <u>2E</u>     |                         | LINE** <u>R41</u>                        |            |                                   |                                             |

| FROM | TO   | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>5/8 3/4 1 1 1/8 1 3/8 1 1/2 1 3/4 2 | FORMATION                                                      | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|------|-------|-----------------------------|--------------------------|-------------|---------------------------------------------|----------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |      |       |                             |                          |             |                                             |                                                                | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8    | 8     | 0<br>3 1/2                  | -3 1/2<br>4 1/2          |             |                                             | Clay sand gravel                                               |                         |                      |                         |                       |
| 8    | 13   | 5     | 8<br>9 1/2                  | -1 1/2<br>3 1/2          |             |                                             | Clay sand gravel "pushed" boulder                              |                         |                      |                         |                       |
| 13   | 18   | 5     | 13<br>13 1/2                | -1/2<br>4 1/2            |             |                                             | Clay minor gravel                                              |                         |                      |                         |                       |
| 18   | 23   | 5     | 18<br>20 1/2                | -2 1/2<br>2 1/2          |             |                                             | "Pushed" boulder. Gritty clay, clay and clay with fine gravel. |                         |                      |                         |                       |
| 23   | 28   | 5     | 23<br>22 1/2                | 1/2<br>5 1/2             |             |                                             | Blue clay                                                      |                         |                      |                         |                       |
| 28   | 33   | 5     | 28<br>27 1/2                | 1/2<br>5 1/2             |             |                                             | Blue clay                                                      |                         |                      |                         |                       |
| 33   | 38   | 5     | 33<br>32 1/2                | 1/2<br>5 1/2             |             |                                             | Blue clay occasional seam gravel                               |                         |                      |                         |                       |
| 38   | 43   | 5     | 38<br>36                    | 2<br>7                   |             |                                             | Blue clay                                                      |                         |                      |                         |                       |
| 43   | 48   | 5     | 43<br>42 1/2                | 1/2<br>5 1/2             |             |                                             | Clay to gravel with clay to gravel                             |                         |                      |                         |                       |
| 48   | 53   | 5     | 48<br>47 1/2                | 1/2<br>4 1/2             |             |                                             | Mostly clay; parts moderate medium gravel                      |                         |                      |                         |                       |
| 53   | 58   | 5     | 53<br>50 1/2                | 2 1/2<br>7 1/2           |             |                                             | 65% gravel, 35% clay                                           | .03669<br>.0550         | 1.25                 | -.42                    | 0.83                  |
| 58   | 62.5 | 4 1/2 | 58<br>58                    | 0<br>4 1/2               |             |                                             | Boulders - gravel sand                                         |                         | 0.05                 | -                       | .05                   |

## REMARKS

Set up on road - west of old sluice workings.  
Bedrock uncertain. No more casing.

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce  
 FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D. E. Pegg  
 FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 82

|             |  |  |                                |  |  |                                          |  |  |                                   |  |  |                            |  |  |
|-------------|--|--|--------------------------------|--|--|------------------------------------------|--|--|-----------------------------------|--|--|----------------------------|--|--|
| LAT. _____  |  |  | START _____                    |  |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  |  | PROJ.No. <u>1096</u>              |  |  | N.T.S.* _____              |  |  |
| DEP. _____  |  |  | FINISH _____                   |  |  | CREEK <u>Russell</u>                     |  |  | DRILL <u>Midwest Sonic</u>        |  |  | SHEET <u>2</u> of <u>2</u> |  |  |
| ELEV. _____ |  |  | BIT _____ ROD _____ CASE _____ |  |  | DEPTH Overburden _____ Ft.               |  |  | MOVE _____ Hrs; DELAY _____ Hrs.  |  |  | HOLE* <u>2E</u>            |  |  |
| DEPTH _____ |  |  | I.D. _____                     |  |  | DEPTH Gravel _____ Ft.                   |  |  | DRILL _____ Hrs; TOTAL _____ Hrs. |  |  | LINE* <u>R41</u>           |  |  |
|             |  |  | O.D. _____                     |  |  | DEPTH Bedrock _____ Ft.                  |  |  | PULL _____ Hrs;                   |  |  |                            |  |  |

| FROM | TO  | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>1/2 3/4 1/2 1/16 | FORMATION                                      | VOLUME      | ACTUAL  | CORREC-TION | CORRECT |
|------|-----|-------|--------------|-------------|-------------|-------------------------|------------------------------------------------|-------------|---------|-------------|---------|
|      |     |       | After Drive  | Core Length |             |                         |                                                | Theoretical | Mgs. Au | Mgs.        | Mgs. Au |
| 62½  | 67  | 4½    | 62½          | 0           |             |                         | Clay to decomposed bedrock. Broken             | .03302      | 17.5    | -           | 17.5    |
|      | End |       | 62½          | 4½          |             |                         | brown shale. No pebbles 65-67. No more casing. |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |
|      |     |       |              |             |             |                         |                                                |             |         |             |         |

**REMARKS**

FROM 62.5 TO 67 ; 529 Mgs; 5.07 \$ per Cu. Yard @ \$350 U.S. /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D. E. Pegg

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 83

|                      |  |                       |  |                                                                |  |                                            |  |                            |  |
|----------------------|--|-----------------------|--|----------------------------------------------------------------|--|--------------------------------------------|--|----------------------------|--|
| LAT. _____           |  | START _____           |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> PROJ. No. <u>1096</u> |  |                                            |  | N.T.S.* _____              |  |
| DEP. _____           |  | FINISH _____          |  | CREEK <u>Russell</u> DRILL <u>Midwest Sonic</u>                |  |                                            |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>2887.36</u> |  | BIT ROD CASE          |  | DEPTH Overburden _____ Ft.                                     |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.      |  | HOLE** <u>1E</u>           |  |
| DEPTH <u>66</u>      |  | I.D. <u>5.5</u> _____ |  | DEPTH Gravel _____ Ft.                                         |  | DRILL } _____ Hrs; TOTAL <u>2 1/2</u> Hrs. |  | LINE** <u>R41</u>          |  |
|                      |  | O.D. <u>6.5</u> _____ |  | DEPTH Bedrock (?) _____ Ft.                                    |  | PULL } <u>2 1/2</u> Hrs;                   |  |                            |  |

| FROM | TO | DRIVE | Before Drive | Core Rise       | GRAPHIC LOG | Ømm | FORMATION                                             | VOLUME               | ACTUAL Mgs. Au | CORREC-TION Mgs. | CORRECT Mgs. Au |
|------|----|-------|--------------|-----------------|-------------|-----|-------------------------------------------------------|----------------------|----------------|------------------|-----------------|
|      |    |       | After Drive  | Core Length     |             |     |                                                       | Theoretical Measured |                |                  |                 |
| 0    | 8  | 8     | 0<br>-3 1/2  | -3 1/2<br>4 1/2 |             |     | Sand-gravel. Slightly disturbed.                      |                      |                |                  |                 |
| 8    | 13 | 5     | 8<br>9 1/2   | -1 1/2<br>3 1/2 |             |     | 70% gravel with brown clay/to blue clay minor gravel. |                      |                |                  |                 |
| 13   | 18 | 5     | 13<br>12 1/2 | 1/2<br>5 1/2    |             |     | Blue clay, minor sand and fine gravel                 |                      | <.05           |                  |                 |
| 18   | 23 | 5     | 18<br>17 1/2 | 3/4<br>5-3/4    |             |     | Blue clay                                             |                      |                |                  |                 |
| 23   | 28 | 5     | 23<br>22 1/2 | 3/4<br>5-3/4    |             |     | Blue clay                                             |                      |                |                  |                 |
| 28   | 33 | 5     | 28<br>27     | 1<br>6          |             |     | Blue clay                                             |                      |                |                  |                 |
| 33   | 38 | 5     | 33<br>32     | 1<br>6          |             |     | Blue clay some with boulder                           |                      |                |                  |                 |
| 38   | 43 | 5     | 38<br>37     | 1<br>6          |             |     | Blue clay                                             |                      |                |                  |                 |
| 43   | 48 | 5     | 43<br>42 1/2 | 1/2<br>5 1/2    |             |     | Blue clay                                             |                      |                |                  |                 |
| 48   | 53 | 5     | 48<br>48     | 0<br>5          |             |     | Clay to 51'/fine sand 51-53/                          |                      | N11            |                  |                 |
| 53   | 58 | 5     | 53<br>52     | 1<br>6          |             |     | Sand to 55/gravel, clay, few boulders                 |                      | N11            |                  |                 |
| 58   | 61 | 3     | 58<br>58 1/2 | -1/2<br>2 1/2   |             |     | Sand, gravel, boulders (stuck)                        |                      | tr             |                  |                 |

|                                                                                                          |  |  |  |                                                                                                      |  |  |  |
|----------------------------------------------------------------------------------------------------------|--|--|--|------------------------------------------------------------------------------------------------------|--|--|--|
| REMARKS<br>61 66 5 60 6<br><br>Bedrock uncertain - not enough casing to finish.<br>Two hour travel time. |  |  |  | FROM <u>To heavy clay, decomposed rock</u> TO _____; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce |  |  |  |
|                                                                                                          |  |  |  | FROM _____ TO _____; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce                                 |  |  |  |
| FINENESS _____ DATE _____ LOGGED BY: <u>D. E. Pegg</u>                                                   |  |  |  | FACTOR _____ DATE _____ CHECKED BY: _____                                                            |  |  |  |

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 84

|                      |                        |                                          |            |                              |                                            |
|----------------------|------------------------|------------------------------------------|------------|------------------------------|--------------------------------------------|
| LAT. _____           | START <u>July 7/82</u> | PROPERTY NAME <u>Russell Creek, Y.T.</u> |            | PROJ. No. <u>1096</u>        | N.T.S.* _____                              |
| DEP. _____           | FINISH <u>"</u>        | CREEK <u>Russell</u>                     |            | DRILL <u>Midwest Sonic</u>   | SHEET <u>1</u> of <u>2</u>                 |
| ELEV. <u>2889.14</u> | BIT _____              | ROD _____                                | CASE _____ | DEPTH Overburden _____ Ft.   | MOVE <u>1/3</u> Hrs; DELAY <u>1/3</u> Hrs. |
| DEPTH <u>65 1/2</u>  | I.D. _____             | _____                                    | _____      | DEPTH Gravel _____ Ft.       | DRILL _____ Hrs; TOTAL <u>3-2/3</u> Hrs.   |
|                      | O.D. _____             | _____                                    | _____      | DEPTH Bedrock <u>(?)</u> Ft. | PULL _____ 3 Hrs;                          |
|                      |                        |                                          |            | HOLE** <u>1W</u>             |                                            |
|                      |                        |                                          |            | LINE** <u>R41</u>            |                                            |

| FROM | TO | DRIVE | Before Drive | Core Rise   | GRAPHIC LOG | Ømm<br>5/16 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 1/2 1 3/4 2 | FORMATION                                       | VOLUME      | ACTUAL  | CORREC-   | CORRECT |
|------|----|-------|--------------|-------------|-------------|-------------------------------------------------------------|-------------------------------------------------|-------------|---------|-----------|---------|
|      |    |       | After Drive  | Core Length |             |                                                             |                                                 | Theoretical | Mgs. Au | TION Mgs. | Mgs. Au |
| 0    | 4  | 4     | 0            | 0           |             |                                                             | Surface sand - boulders                         |             |         |           |         |
| 4    | 8  | 4     | 4            | 1/2         |             |                                                             | Sand gravel clay. Few small boulders            |             |         |           |         |
| 8    | 13 | 5     | 8            | -1          |             |                                                             | Gravel in gray clay with boulders.              |             |         |           |         |
| 13   | 18 | 5     | 9            | 4           |             |                                                             | Medium gravel in gray clay.                     |             |         |           |         |
|      |    |       | 13           | -1/2        |             |                                                             | 40% Sand, 30% Gravel                            |             | 2.00    |           |         |
| 18   | 23 | 5     | 12 1/2       | 4 1/2       |             |                                                             | Clay. Minor medium gravel.                      |             |         |           |         |
| 23   | 28 | 5     | 18 1/2       | 4 1/2       |             |                                                             | Few small Blue clay. Scattered gravel boulders. |             |         |           |         |
| 28   | 33 | 5     | 23           | 0           |             |                                                             | Blue clay                                       |             |         |           |         |
| 33   | 38 | 5     | 27 1/2       | 5 1/2       |             |                                                             | Blue clay                                       |             |         |           |         |
| 38   | 43 | 5     | 33           | 1/2         |             |                                                             | Blue clay                                       |             |         |           |         |
| 43   | 48 | 5     | 32 1/2       | 5 1/2       |             |                                                             | Blue clay                                       |             |         |           |         |
| 48   | 53 | 5     | 38           | 0           |             |                                                             | Blue clay                                       |             |         |           |         |
| 53   | 58 | 5     | 43           | -1/2        |             |                                                             | Blue clay to 46 - /gravel 46 - 8                |             | <.50    |           |         |
|      |    |       | 43 1/2       | 4 1/2       |             |                                                             | Clay/moderate gravel to clay                    |             | 5.00    |           |         |
|      |    |       | 48           | -1/2        |             |                                                             | Mostly gravel in blue clay                      |             | <.05    |           |         |
|      |    |       | 48 1/2       | 4 1/2       |             |                                                             |                                                 |             |         |           |         |
|      |    |       | 53           | -1/2        |             |                                                             |                                                 |             |         |           |         |
|      |    |       | 53 1/2       | 4 1/2       |             |                                                             |                                                 |             |         |           |         |

## REMARKS

Bedrock uncertain. Not enough casing. Hot day, minor delays head heating up. 2 hour travel time.

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D. E. Pegg

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 84

[illegible]

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 85

|                      |                         |                                          |                      |                            |                            |
|----------------------|-------------------------|------------------------------------------|----------------------|----------------------------|----------------------------|
| LAT. _____           | START <u>July 8/82</u>  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |                      | PROJ. No. <u>1096</u>      | N.T.S.™ _____              |
| DEP. _____           | FINISH <u>July 9/82</u> | CREEK <u>Russell</u>                     |                      | DRILL <u>Midwest Sonic</u> | SHEET <u>1</u> of <u>2</u> |
| ELEV. <u>3089.71</u> | BIT <u>ROD CASE</u>     | DEPTH Overburden _____ Ft.               | MOVE <u>1/2</u> Hrs; | DELAY <u>1/2</u> Hrs.      | HOLE™ <u>1W</u>            |
| DEPTH <u>66</u>      | I.D. <u>5.5</u>         | DEPTH Gravel _____ Ft.                   | DRILL <u>1</u> Hrs;  | TOTAL <u>3 1/2</u> Hrs.    | LINE™ <u>R52</u>           |
|                      | O.D. <u>6.5</u>         | DEPTH Bedrock <u>65</u> Ft.              | PULL <u>1</u> 3 Hrs; |                            |                            |

| FROM | TO | DRIVE | Before<br>Drive | Core<br>Rise   | GRAPHIC<br>LOG | Ø mm<br>3/32 1/8 1/4 | FORMATION                                          | VOLUME                  | ACTUAL     | CORREC-      | CORRECT    |
|------|----|-------|-----------------|----------------|----------------|----------------------|----------------------------------------------------|-------------------------|------------|--------------|------------|
|      |    |       | After<br>Drive  | Core<br>Length |                |                      |                                                    | Theoretical<br>Measured | Mgs.<br>Au | TION<br>Mgs. | Mgs.<br>Au |
| 0    | 8  | 8     | 0<br>4          | -4<br>4        |                |                      | Organics, clay, boulders                           |                         |            |              |            |
| 8    | 13 | 5     | 8<br>9          | -1<br>4        |                |                      | Clay, gravel, boulders                             |                         |            |              |            |
| 13   | 17 | 4     | 13<br>14        | -1<br>3        |                |                      | Clay, gravel, boulders to sand @ 16'               |                         |            |              |            |
| 17   | 23 | 6     | 17<br>18        | -1<br>7        |                |                      | Gravel, minor sand                                 |                         | 0.25       |              |            |
| 23   | 28 | 5     | 23<br>22        | 1<br>6         |                |                      | Sand and fine gravel                               |                         |            |              |            |
| 28   | 33 | 5     | 28<br>26        | -2<br>3        |                |                      | Sand, fine gravel (hard to hold)                   |                         |            |              |            |
| 33   | 38 | 5     | 33<br>33        | 0<br>5         |                |                      | Sand to 36'/gravel to 38'                          |                         |            |              |            |
| 38   | 43 | 5     | 38<br>38        | 0<br>5         |                |                      | Medium size gravel                                 |                         | 1.60       |              |            |
| 43   | 48 | 5     | 43<br>42 1/2    | -1/2<br>4 1/2  |                |                      | Fine gravel to minor gravel, minor clay            |                         | 4.00       |              |            |
| 48   | 53 | 5     | 48<br>48 1/2    | -1/2<br>4 1/2  |                |                      | Sand and gravel to clay                            |                         | 1.00       |              |            |
| 53   | 58 | 5     | 53<br>53        | 0<br>5         |                |                      | Blue clay with 40% gravel                          |                         | 0.50       |              |            |
| 58   | 62 | 4     | 58<br>58 1/2    | -1/2<br>3 1/2  |                |                      | Gravel to small boulders. Few large cored granite. |                         | <.50       |              |            |

## REMARKS

2 hours to work area.

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FROM \_\_\_\_\_ TO \_\_\_\_\_ ; \_\_\_\_\_ Mgs; \_\_\_\_\_ \$ per Cu. Yard @ \_\_\_\_\_ /Ounce

FINENESS \_\_\_\_\_ DATE \_\_\_\_\_ LOGGED BY: D.E. Pegg

FACTOR \_\_\_\_\_ DATE \_\_\_\_\_ CHECKED BY: \_\_\_\_\_

120006

NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 85

|       |         |              |                             |                                    |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |       |      |      |                     |       |              |        |     |
|-------|---------|--------------|-----------------------------|------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|------|---------------------|-------|--------------|--------|-----|
| LAT.  |         | START        | July 8/82                   | PROPERTY NAME Russell Creek,* Y.T. |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |       |      |      | PROJ.No. 1096       |       | N.I.S.**     |        |     |
| DEP.  |         | FINISH       | July 9/82                   | CREEK                              |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |       |      |      | DRILL Midwest Sonic |       | SHEET 2 of 2 |        |     |
| ELEV. | 3089.71 | BIT ROD CASE |                             | DEPTH Overburden                   |             | Ft.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MOVE  | 1/2  | Hrs; | DELAY               | 1/2   | Hrs.         | HOLE** | 1W  |
| DEPTH | 66      | I.D. 5.5     |                             | DEPTH Gravel                       |             | Ft.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DRILL | )    | Hrs; | TOTAL               | 3 1/2 | Hrs.         | LINE** | R52 |
|       |         | O.D. 6.5     |                             | DEPTH Bedrock                      |             | 65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Ft.   | PULL | )    | 3                   | Hrs;  |              |        |     |
| FROM  | TO      | DRIVE        | Before Drive<br>After Drive | Core Rise<br>Core Length           | GRAPHIC LOG | Ømm<br><div style="font-size: small;">5/16 3/8 1/2 5/8 3/4 7/8 1 1 1/8 1 1/4 1 1/2 1 3/4 2 2 1/4 2 1/2 2 3/4 3 3 1/4 3 1/2 3 3/4 4 4 1/4 4 1/2 4 3/4 5 5 1/4 5 1/2 5 3/4 6 6 1/4 6 1/2 6 3/4 7 7 1/4 7 1/2 7 3/4 8 8 1/4 8 1/2 8 3/4 9 9 1/4 9 1/2 9 3/4 10 10 1/4 10 1/2 10 3/4 11 11 1/4 11 1/2 11 3/4 12 12 1/4 12 1/2 12 3/4 13 13 1/4 13 1/2 13 3/4 14 14 1/4 14 1/2 14 3/4 15 15 1/4 15 1/2 15 3/4 16 16 1/4 16 1/2 16 3/4 17 17 1/4 17 1/2 17 3/4 18 18 1/4 18 1/2 18 3/4 19 19 1/4 19 1/2 19 3/4 20 20 1/4 20 1/2 20 3/4 21 21 1/4 21 1/2 21 3/4 22 22 1/4 22 1/2 22 3/4 23 23 1/4 23 1/2 23 3/4 24 24 1/4 24 1/2 24 3/4 25 25 1/4 25 1/2 25 3/4 26 26 1/4 26 1/2 26 3/4 27 27 1/4 27 1/2 27 3/4 28 28 1/4 28 1/2 28 3/4 29 29 1/4 29 1/2 29 3/4 30 30 1/4 30 1/2 30 3/4 31 31 1/4 31 1/2 31 3/4 32 32 1/4 32 1/2 32 3/4 33 33 1/4 33 1/2 33 3/4 34 34 1/4 34 1/2 34 3/4 35 35 1/4 35 1/2 35 3/4 36 36 1/4 36 1/2 36 3/4 37 37 1/4 37 1/2 37 3/4 38 38 1/4 38 1/2 38 3/4 39 39 1/4 39 1/2 39 3/4 40 40 1/4 40 1/2 40 3/4 41 41 1/4 41 1/2 41 3/4 42 42 1/4 42 1/2 42 3/4 43 43 1/4 43 1/2 43 3/4 44 44 1/4 44 1/2 44 3/4 45 45 1/4 45 1/2 45 3/4 46 46 1/4 46 1/2 46 3/4 47 47 1/4 47 1/2 47 3/4 48 48 1/4 48 1/2 48 3/4 49 49 1/4 49 1/2 49 3/4 50 50 1/4 50 1/2 50 3/4 51 51 1/4 51 1/2 51 3/4 52 52 1/4 52 1/2 52 3/4 53 53 1/4 53 1/2 53 3/4 54 54 1/4 54 1/2 54 3/4 55 55 1/4 55 1/2 55 3/4 56 56 1/4 56 1/2 56 3/4 57 57 1/4 57 1/2 57 3/4 58 58 1/4 58 1/2 58 3/4 59 59 1/4 59 1/2 59 3/4 60 60 1/4 60 1/2 60 3/4 61 61 1/4 61 1/2 61 3/4 62 62 1/4 62 1/2 62 3/4 63 63 1/4 63 1/2 63 3/4 64 64 1/4 64 1/2 64 3/4 65 65 1/4 65 1/2 65 3/4 66 66 1/4 66 1/2 66 3/4 67 67 1/4 67 1/2 67 3/4 68 68 1/4 68 1/2 68 3/4 69 69 1/4 69 1/2 69 3/4 70 70 1/4 70 1/2 70 3/4 71 71 1/4 71 1/2 71 3/4 72 72 1/4 72 1/2 72 3/4 73 73 1/4 73 1/2 73 3/4 74 74 1/4 74 1/2 74 3/4 75 75 1/4 75 1/2 75 3/4 76 76 1/4 76 1/2 76 3/4 77 77 1/4 77 1/2 77 3/4 78 78 1/4 78 1/2 78 3/4 79 79 1/4 79 1/2 79 3/4 80 80 1/4 80 1/2 80 3/4 81 81 1/4 81 1/2 81 3/4 82 82 1/4 82 1/2 82 3/4 83 83 1/4 83 1/2 83 3/4 84 84 1/4 84 1/2 84 3/4 85 85 1/4 85 1/2 85 3/4 86 86 1/4 86 1/2 86 3/4 87 87 1/4 87 1/2 87 3/4 88 88 1/4 88 1/2 88 3/4 89 89 1/4 89 1/2 89 3/4 90 90 1/4 90 1/2 90 3/4 91 91 1/4 91 1/2 91 3/4 92 92 1/4 92 1/2 92 3/4 93 93 1/4 93 1/2 93 3/4 94 94 1/4 94 1/2 94 3/4 95 95 1/4 95 1/2 95 3/4 96 96 1/4 96 1/2 96 3/4 97 97 1/4 97 1/2 97 3/4 98 98 1/4 98 1/2 98 3/4 99 99 1/4 99 1/2 99 3/4 100 100 1/4 100 1/2 100 3/4 101 101 1/4 101 1/2 101 3/4 102 102 1/4 102 1/2 102 3/4 103 103 1/4 103 1/2 103 3/4 104 104 1/4 104 1/2 104 3/4 105 105 1/4 105 1/2 105 3/4 106 106 1/4 106 1/2 106 3/4 107 107 1/4 107 1/2 107 3/4 108 108 1/4 108 1/2 108 3/4 109 109 1/4 109 1/2 109 3/4 110 110 1/4 110 1/2 110 3/4 111 111 1/4 111 1/2 111 3/4 112 112 1/4 112 1/2 112 3/4 113 113 1/4 113 1/2 113 3/4 114 114 1/4 114 1/2 114 3/4 115 115 1/4 115 1/2 115 3/4 116 116 1/4 116 1/2 116 3/4 117 117 1/4 117 1/2 117 3/4 118 118 1/4 118 1/2 118 3/4 119 119 1/4 119 1/2 119 3/4 120 120 1/4 120 1/2 120 3/4 121 121 1/4 121 1/2 121 3/4 122 122 1/4 122 1/2 122 3/4 123 123 1/4 123 1/2 123 3/4 124 124 1/4 124 1/2 124 3/4 125 125 1/4 125 1/2 125 3/4 126 126 1/4 126 1/2 126 3/4 127 127 1/4 127 1/2 127 3/4 128 128 1/4 128 1/2 128 3/4 129 129 1/4 129 1/2 129 3/4 130 130 1/4 130 1/2 130 3/4 131 131 1/4 131 1/2 131 3/4 132 132 1/4 132 1/2 132 3/4 133 133 1/4 133 1/2 133 3/4 134 134 1/4 134 1/2 134 3/4 135 135 1/4 135 1/2 135 3/4 136 136 1/4 136 1/2 136 3/4 137 137 1/4 137 1/2 137 3/4 138 138 1/4 138 1/2 138 3/4 139 139 1/4 139 1/2 139 3/4 140 140 1/4 140 1/2 140 3/4 141 141 1/4 141 1/2 141 3/4 142 142 1/4 142 1/2 142 3/4 143 143 1/4 143</div> |       |      |      |                     |       |              |        |     |

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 86

|                      |  |                         |  |                                          |  |            |  |                                 |  |                                          |  |
|----------------------|--|-------------------------|--|------------------------------------------|--|------------|--|---------------------------------|--|------------------------------------------|--|
| LAT. _____           |  | START <u>July 9/82</u>  |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  |            |  | PROJ.No. <u>1096</u>            |  | N.T.S.* _____                            |  |
| DEP. _____           |  | FINISH <u>July 9/82</u> |  | CREEK <u>Russell</u>                     |  |            |  | DRILL <u>Midwest Sonic</u>      |  | SHEET <u>1</u> of <u>1</u>               |  |
| ELEV. <u>3090.85</u> |  | BIT _____               |  | ROD _____                                |  | CASE _____ |  | DEPTH Overburden _____ Ft.      |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.    |  |
| DEPTH <u>65</u>      |  | I.D. <u>5.5</u>         |  | _____                                    |  | _____      |  | DEPTH Gravel _____ Ft.          |  | DRILL _____ Hrs; TOTAL <u>3 1/2</u> Hrs. |  |
|                      |  | O.D. <u>6.5</u>         |  | _____                                    |  | _____      |  | DEPTH Bedrock <u>(none)</u> Ft. |  | PULL _____ 3 Hrs;                        |  |
| HOLE** <u>2W</u>     |  | LINE** <u>R52</u>       |  |                                          |  |            |  |                                 |  |                                          |  |

| FROM | TO | DRIVE | Before Drive<br>After Drive | Core Rise<br>Core Length | GRAPHIC LOG | Ø mm<br>3/16 1/8 1/4 3/8 1/2 5/8 3/4 7/8 1 | FORMATION                                                          | VOLUME                  | ACTUAL<br>Mgs.<br>Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs.<br>Au |
|------|----|-------|-----------------------------|--------------------------|-------------|--------------------------------------------|--------------------------------------------------------------------|-------------------------|----------------------|-------------------------|-----------------------|
|      |    |       |                             |                          |             |                                            |                                                                    | Theoretical<br>Measured |                      |                         |                       |
| 0    | 8  | 8     | 0<br>-1 1/2                 | 1 1/2<br>9 1/2           |             |                                            | (2 samples)<br>Clay gravel small boulders                          |                         |                      |                         |                       |
| 8    | 13 | 5     | 8<br>1 1/2                  | -3 1/2<br>1 1/2          |             |                                            | (pushed boulder) Gravel. Sand. Boulder.                            |                         |                      |                         |                       |
| 13   | 18 | 5     | 13<br>13 1/2                | -1 1/2<br>4 1/2          |             |                                            | Clay, gravel, sand (more clay)                                     |                         |                      |                         |                       |
| 18   | 23 | 5     | 18<br>18                    | 0<br>5                   |             |                                            | Fine gravel, boulders to compact clay.<br>Some fine gravel.        | 3.00                    | -                    |                         |                       |
| 23   | 28 | 5     | 18<br>19                    | -1<br>4                  |             |                                            | Clay to sand - fine gravel                                         | 1.5                     |                      |                         |                       |
| 28   | 33 | 5     | 28<br>28                    | 0<br>5                   |             |                                            | Mainly fine gravel                                                 | 1.0                     |                      |                         |                       |
| 33   | 37 | 5     | 33<br>32 1/2                | 1/2<br>5 1/2             |             |                                            | Sand and fine gravel                                               |                         |                      |                         |                       |
| 37   | 43 | 6     | 37<br>37                    | 0<br>6                   |             |                                            | Sand and fine to medium gravel.                                    |                         |                      |                         |                       |
| 43   | 48 | 5     | 43<br>43                    | 0<br>5                   |             |                                            | Sand and fine to medium gravel to sand.                            |                         |                      |                         |                       |
| 48   | 53 | 5     | 48<br>49                    | -1<br>4                  |             |                                            | Gray silt in sand.                                                 |                         |                      |                         |                       |
| 52   | 58 | 5     | 53<br>53                    | 0<br>5                   |             |                                            | 2' sand to clay with gravel and<br>boulders.                       | 1.10                    |                      |                         |                       |
| 58   | 65 | 7     | 58<br>58 1/2                | -1 1/2<br>6 1/2          |             |                                            | 1 1/2' sand to blue clay with small<br>boulders. No bedrock. 50/50 | 4.5                     |                      |                         |                       |

|                                                                              |                                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b><br><br>No bedrock. Probably very close.<br>Not enough casing. | FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: <u>D.E. Pegg</u><br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

# NORANDA EXPLORATION COMPANY LTD. - PLACER DRILL LOG 87

|                      |  |                                |  |                                          |  |                                          |  |                    |  |                            |  |
|----------------------|--|--------------------------------|--|------------------------------------------|--|------------------------------------------|--|--------------------|--|----------------------------|--|
| LAT. _____           |  | START <u>July 9/82</u>         |  | PROPERTY NAME <u>Russell Creek, Y.T.</u> |  |                                          |  | PROJ.No. _____     |  | N.T.S. ** _____            |  |
| DEP. _____           |  | FINISH <u>July 9/82</u>        |  | CREEK <u>Russell</u>                     |  |                                          |  | DRILL _____        |  | SHEET <u>1</u> of <u>1</u> |  |
| ELEV. <u>3090.71</u> |  | BIT _____ ROD _____ CASE _____ |  | DEPTH Overburden _____ Ft.               |  | MOVE <u>1/2</u> Hrs; DELAY _____ Hrs.    |  | HOLE ** <u>1E</u>  |  |                            |  |
| DEPTH <u>66</u>      |  | I.D. _____ O.D. _____          |  | DEPTH Gravel _____ Ft.                   |  | DRILL _____ Hrs; TOTAL <u>3 1/2</u> Hrs. |  | LINE ** <u>R52</u> |  |                            |  |
|                      |  |                                |  | DEPTH Bedrock <u>64</u> Ft.              |  | PULL _____ 3 Hrs;                        |  |                    |  |                            |  |

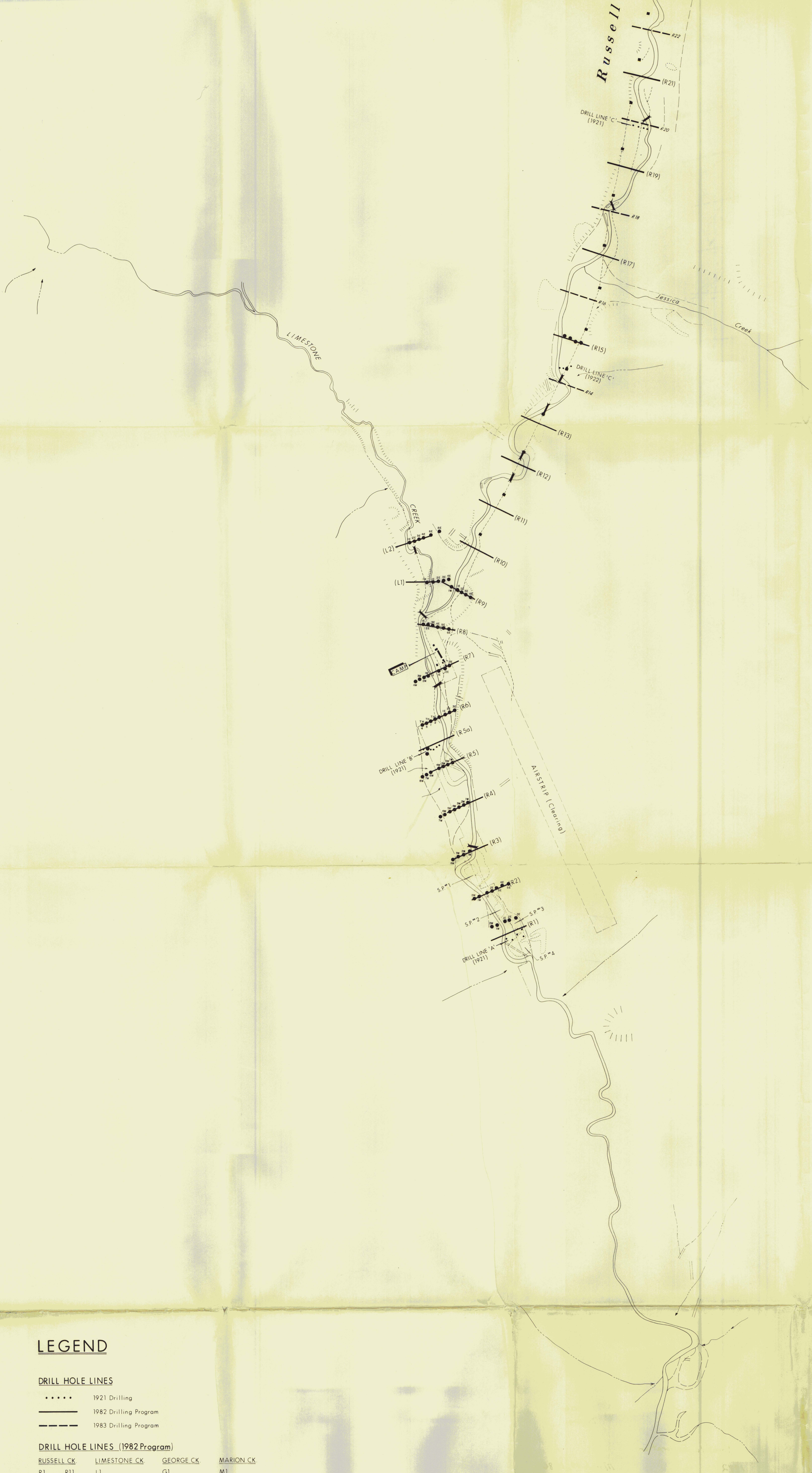
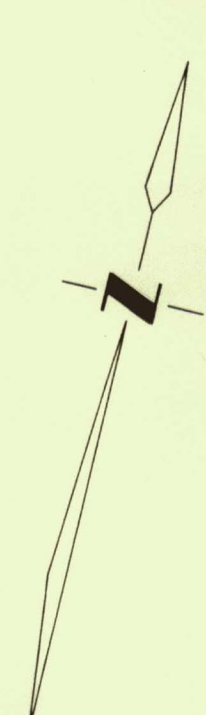
| FROM | TO  | DRIVE | Before Drive | Core Rise       | GRAPHIC LOG | Ømm<br>5/16 3/8 1/2 | FORMATION                                                                 | VOLUME               | ACTUAL<br>Mgs. Au | CORREC-<br>TION<br>Mgs. | CORRECT<br>Mgs. Au |
|------|-----|-------|--------------|-----------------|-------------|---------------------|---------------------------------------------------------------------------|----------------------|-------------------|-------------------------|--------------------|
|      |     |       | After Drive  | Core Length     |             |                     |                                                                           | Theoretical Measured |                   |                         |                    |
| 0    | 8   | 8     | 0<br>2 1/2   | -2 1/2<br>5 1/2 |             |                     | Gravel. Sand in minor clay.                                               |                      |                   |                         |                    |
| 8    | 13  | 5     | 8<br>9       | -1<br>4         |             |                     | Gravel. Sand in minor clay. Few boulders.                                 |                      |                   |                         |                    |
| 13   | 18  | 5     | 13<br>14     | -1<br>4         |             |                     | Gravel. Sand in minor clay. Few boulders.                                 |                      | <.05              | -                       |                    |
| 18   | 23  | 5     | 18<br>19     | -1<br>4         |             |                     | Sand and fine gravel.                                                     |                      | <.05              | -                       |                    |
| 23   | 28  | 5     | 23<br>23 1/2 | -1 1/2<br>4 1/2 |             |                     | Sand and fine gravel.                                                     |                      |                   |                         |                    |
| 28   | 33  | 5     | 28<br>28 1/2 | -1 1/2<br>4 1/2 |             |                     | Sand                                                                      |                      |                   |                         |                    |
| 33   | 43  | 10    | 33<br>43     | -10<br>0        |             |                     | Pushing in fine wet sand. No core.                                        |                      |                   |                         |                    |
| 43   | 53  | 10    | 43<br>48     | -5<br>5         |             |                     | Sand. Core 6" - granite boulder<br>PUSHING?                               |                      | <.25              | -                       |                    |
| 53   | 58  | 5     | 53<br>52     | -1<br>4         |             |                     | Sand and boulders. Second rock stuck in tube.                             |                      | <.05              | -                       |                    |
| 58   | 62  | 4     | 58<br>58     | 0<br>4          |             |                     | Sand and boulders. (1-15 mg nugget)                                       | .02935<br>.02935     | 15.25             | -                       | 15.25              |
| 62   | 66  | 4     | 62<br>61 1/2 | 1/2<br>4 1/2    |             |                     | Clay and boulders to decomposed rock to soft green shale at 64'. Bedrock. |                      | 5 mg.             |                         |                    |
|      | END |       |              |                 |             |                     |                                                                           |                      |                   |                         |                    |

|                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>REMARKS</b> 6" to 8" boulder pushing 33-53. Could not get core most of 33-43+. Pulled several times, then drilled ahead. Finally got boulder in tube at 53'. Casing was to 43 so 5' of sand probably came from 43-53. | FROM <u>58</u> TO <u>62</u> ; <u>519.59</u> Mgs; <u>4.96</u> \$ per Cu. Yard @ <u>350</u> /Ounce<br>FROM _____ TO _____ ; _____ Mgs; _____ \$ per Cu. Yard @ _____ /Ounce<br>FINENESS _____ DATE _____ LOGGED BY: <u>D.E. Pegg</u><br>FACTOR _____ DATE _____ CHECKED BY: _____ |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

120006

120006



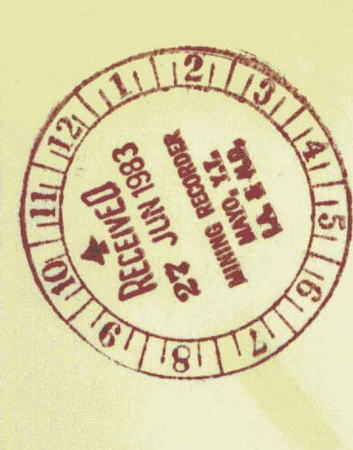
LEGEND

- DRILL HOLE LINES
- ..... 1921 Drilling
  - 1982 Drilling Program
  - 1983 Drilling Program

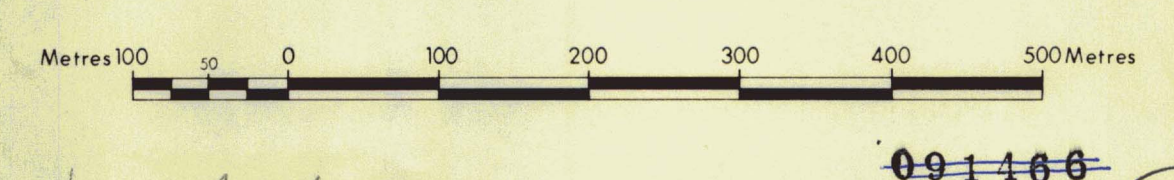
DRILL HOLE LINES (1982 Program)

| RUSSELL CK | LIMESTONE CK | GEORGE CK | MARION CK |
|------------|--------------|-----------|-----------|
| R1         | R11          | L1        | G1        |
| R2         | R12          | L2        | G2        |
| R3         | R13          |           |           |
| R4         | R14          |           |           |
| R5         | R15          |           |           |
| R6         | R16          |           |           |
| R7         | R17          |           |           |
| R8         | R18          |           |           |
| R9         | R19          |           |           |
| R10        | R20          |           |           |
| R11        | R21          |           |           |
| R12        | R22          |           |           |
| R13        | R23          |           |           |
| R14        | R24          |           |           |
| R15        | R25          |           |           |
| R16        | R26          |           |           |
| R17        | R27          |           |           |
| R18        | R28          |           |           |
| R19        | R29          |           |           |
| R20        | R30          |           |           |
| R21        | R31          |           |           |
| R22        | R32          |           |           |
| R23        | R33          |           |           |
| R24        | R34          |           |           |
| R25        | R35          |           |           |
| R26        | R36          |           |           |
| R27        | R37          |           |           |
| R28        | R38          |           |           |
| R29        | R39          |           |           |
| R30        | R40          |           |           |
| R31        | R41          |           |           |
| R32        | R42          |           |           |
| R33        | R43          |           |           |
| R34        | R44          |           |           |
| R35        | R45          |           |           |
| R36        | R46          |           |           |
| R37        | R47          |           |           |
| R38        | R48          |           |           |
| R39        | R49          |           |           |
| R40        | R50          |           |           |
| R41        | R51          |           |           |
| R42        | R52          |           |           |
| R43        | R53          |           |           |
| R44        | R54          |           |           |
| R45        |              |           |           |
| R46        |              |           |           |
| R47        |              |           |           |
| R48        |              |           |           |
| R49        |              |           |           |
| R50        |              |           |           |
| R51        |              |           |           |
| R52        |              |           |           |
| R53        |              |           |           |
| R54        |              |           |           |

- SP-1 to SP-10 Setting Ponds
- Creek Crossings
- Claim Posts



SCALE  
1:5000



09-1-108-0 Doc# 120000 (34)

40 MAPH

|                  |                                   |                          |  |
|------------------|-----------------------------------|--------------------------|--|
| REVISED          | RUSSELL CREEK                     |                          |  |
|                  | 1982/83 DRILLING PROGRAM          |                          |  |
| PROJECT No. 1093 | SURVEY BY: M. Miller & D.E. Cross | DATE: Feb. 1982          |  |
| N.T.S. 1:5000/3W | DRAWN BY: J. G. H. H.             | SCALE: 1:5000 (1"=66.7') |  |
| DWG. No.         | NORANDA EXPLORATION               |                          |  |
|                  | OFFICE: VANCOUVER                 |                          |  |