

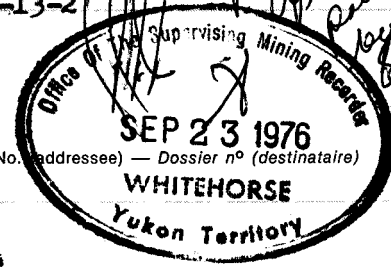


FROM DE Mining Recorder, Whitehorse, Yukon

File No. (originator) / Dossier n° (source) 340-13-2

TO A Supervising Mining Recorder Whitehorse, Yukon

File No. (addressee) / Dossier n° (destinataire)



Subject - Objet Bore Hole Drilling Program United Keno Hill Mines Ltd.

(1) DEF Mineral Claims

Pro-rated portion of report allocated to these claims valued at \$ 18,469.14

Require support of \$18,400 to renew above claims

(2) SUM Mineral Claims

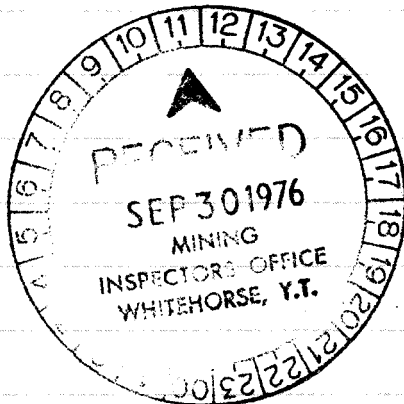
Pro-rated portion of report allocated to these claims valued at \$ 5,037.04

Require support of \$4,800 to renew above claims

Signature B.E. Sias

Date 23/09/76

Reply - Réponse



7540-21-029-0717

CGSB STANDARD FORM 59

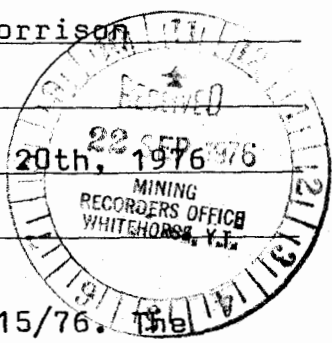
Signature

Date 10/13/47

FORMULE NORMALISÉE 59 DE L'ONGC

TO Mr. R. E. VanTassell
ADDRESS _____
IN REPLY TO YOURS OF _____
SUBJECT Assessment Work SUN Claim Group

FROM J. D. Morrison
ADDRESS _____
DATE September 20th, 1976



Work was performed on site from April 30/76 to May 15/76. The total cost of the program is outlined as follows:

| | |
|--------------------------------------|--------------------|
| Golder Associates - Drilling Program | \$24,950.73 |
| Underhill & Underhill - Surveyors | 4,680.80 |
| Trans North Turbo Air (1971) Ltd. | <u>17,380.85</u> |
| Total Cost of Work | \$47,012.38 |

Golder Associates were sub-contractors to Wright Engineers Limited. They were responsible for completing the geotechnical work for the study. Golder Associates engaged Mobile Augers and Research Limited of Edmonton to carry out the drilling with a Ranger auger drill. Mobilization for the program was provided by Trans North Turbo Air (1971) Ltd. using a Bell 206 Jet Ranger helicopter from Carmacks. Hole locations were surveyed by Underhill and Underhill of Whitehorse.

The time spent drilling on the SUN Claims was 1.5 days and the total drilling program was completed in 14.0. The costs allocated to the SUN Claims is calculated as follows:

$1.5/14 \times 47,012.38 = \$5,037.04$

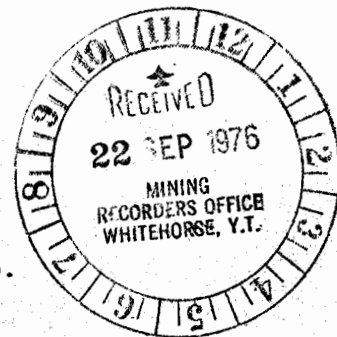
Attachments to substantiate the above claim are listed as follows:

1. Letter - Golder Associates - August 24/76
2. Summary of Invoices Trans North Turbo Air
3. Invoices - Underhill and Underhill - May 11/76
4. Geotechnical Investigation - Bore Hole Information
5. Drawing No. 854-11-0018- Minto, DEF and Adjacent Mineral Claims
6. Copy of Bore Hole Logs.

I trust the above information is satisfactory for your assessment work.



Golder Associates
CONSULTING GEOTECHNICAL ENGINEERS



P/76/808

August 24, 1976.

United Keno Hill Mines Ltd.,
Whitehorse,
Yukon Territories.

Attention: Mr. J.D. Morrison, P.Eng.

Re: Minto Feasibility Study
Field Investigation Program

Dear Sirs:

As requested during our telephone conversation on August 23, charges against the field investigation program are summarised as follows:

| | | | |
|-------------------------------------|------------|-------------|--------------|
| Time charges | - R. Quist | | \$ 3,761.57 |
| Expense accounts | - R. Quist | \$ 623.90 | |
| Air fare | - R. Quist | 226.00 | |
| Mobile Augers and Research | | 17,537.43 | |
| Instrumentation supplied to site | | 1,620.42 | |
| Sample and equipment transportation | | 172.40 | |
| | | <hr/> | |
| | | \$20,180.15 | |
| 5% on disbursements | | 1,009.01 | 21,189.16 |
| | | <hr/> | |
| | | | \$ 24,950.73 |
| | | | <hr/> |

Yours very truly,

GOLDER BRAUNER & ASSOCIATES LTD.

David B. Campbell
David B. Campbell, P.Eng.

DBC:ctr
V76055

cc. Wright Engineers Limited

Underhill & Underhill

Professional Engineers - Dominion & B.C. Land Surveyors



212 Main Street
P.O. Box 4068

Whitehorse, Yukon
Telephone (403) 667-2048
Telex 036-8-211

Our File:

Your File:

May 10, 1976

- C. D. Underhill, P.Eng., B.C.L.S.
- A. T. Holmes, P.Eng., B.C.L.S.
- W. G. Robinson, P.Eng., D.L.S.,
B.C.L.S., R.L.S. Alaska
- J. W. Sharpe, B.C.L.S.
- J. M. Parnell, D.L.S., B.C.L.S.
- D. T. Simmons, B.C.L.S.
- T. E. Koepke, P.Eng., D.L.S.,
B.C.L.S., R.L.S. Alaska

Minto Project
United Keno Hill Mines Ltd.
405 Main Street
Whitehorse, Yukon

Attention: J.D. Morrison, P.Eng.

Dear Sirs:--

Re: Engineering Survey for Soils Investigation Drilling Programme -
Minto Project, Y.T.

We are enclosing for your records our original field notes covering the work in the above-noted survey. The hole location co-ordinates are given in a table at the beginning of the book and the details of location and reference ties are given in the following pages as per the index.

We thank you for the opportunity to again participate in this project and wish you success in your feasibility study.

Our final itemized account and supporting documents are enclosed. As discussed in our telephone conversation, we are not including any helicopter charges as these will be paid directly by your company.

Yours very truly,

UNDERHILL & UNDERHILL

A handwritten signature in cursive script, appearing to read "T.E. Koepke".

T.E. Koepke, D.L.S.

TEK/bp
Encls.

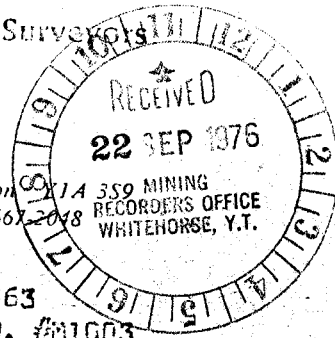
00

Underhill & Underhill

Professional Engineers - Dominion & B.C. Land Surveyors

Minto Project
 United Keno Hill Mines Ltd.
 405 Main Street
 Whitehorse, Yukon

212 Main Street
 P.O. Box 4068
 Whitehorse, Yukon
 Telephone (403) 667-2048
 Telex 036-8-211



Our File: Y-563
 Your File: P.O. #1603

May 11, 1976
 INVOICE No. 1413

RE: — Engineering Survey for Soils Investigation
 Drilling Programme - Minto Project, Y.T.

PERIOD: April 2, 1976 - May 6, 1976

TO: Consultations with Project Group; calculation
 of preliminary layout dimensions from
 preliminary co-ordinates supplied; supply of
 field sketches;

Plotting revised drill locations on legal survey
 grid; consultations with Mr. Morrison;

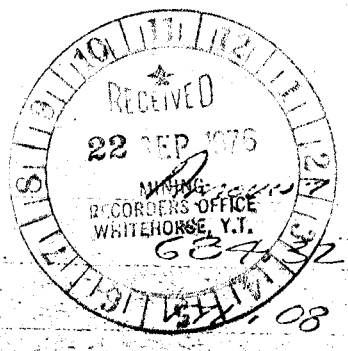
Mobilization of field personnel; layout of
 24 drill hole locations at specified locations
 and traverse to creek section; calculations,
 checking, calculation of select elevations;
 demobilization to Whitehorse;

Completion of field notes and review of work;

Presentation of final returns.

| | | |
|-----------------------|----------|----------|
| Professional Services | 256.00 | |
| Wages | 3,212.25 | |
| Board and Lodging | 221.20 | |
| Transportation | 251.40 | |
| Field Expenses | 152.25 | 4,093.10 |

TRANS NORTH TANGO AIR



| FLIGHT DATE | INVOICE NO. | Tonnes | |
|----------------|-------------|--------|-------|
| April 30, 1976 | 12081 | 2.0 | } 2.5 |
| " 30 " | 12082 | 0.5 | |
| May 1 " | 12083 | 1.7 | } 3.6 |
| " 1 " | 12084 | 1.9 | |
| " 2 " | 12085 | 3.0 | } 4.1 |
| " 2 " | 12086 | 1.1 | |
| " 3 " | 12087 | 2.2 | } 3.3 |
| " 3 " | 12088 | 1.1 | |
| " 4 " | 12089 | 1.2 | } 3.7 |
| " 4 " | 12090 | 2.5 | |
| " 5 " | 12091 | 1.0 | } 3.7 |
| " 5 " | 12092 | 2.7 | |
| " 6 " | 12093 | 1.7 | |
| " 6 " | 12094 | 3.5 | |
| " 8 " | 12095 | 3.2 | |
| " 9 " | 12096 | 2.9 | |
| " 10 " | 12097 | 2.1 | |
| " 11 " | 12098 | 3.7 | |
| " 12 " | 12099 | 4.1 | |
| " 13 " | 12100 | 2.0 | |
| " 14 " | 12101 | 3.5 | |
| " 15 " | 12102 | 2.9 | |
| | | 50.5 | |

581.36
 650.26
 1026.43
 383.18
 758.82
 383.18
 417.82
 855.40
 348.54
 923.52
 581.36
 1207.13
 1102.14
 998.86
 725.34
 1276.41
 1416.04
 684.32
 1207.13
 998.22
 17 380.85

COST / HOUR = \$ 344.18

RECORD OF BOREHOLE #24 Scheme 2b Dam site

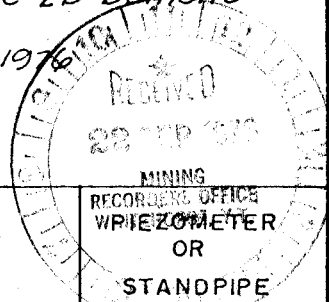
LOCATION (See Figure 2) N. 17,000
E. 22,720

BORING DATE May 13, 1976

BOREHOLE TYPE Permafrost Core Barrel

BOREHOLE DIAMETER

DATUM



Project No. 1-76055

| SOIL PROFILE | | STRATIGRAPHY PLOT | SAMPLE NUMBER | SAMPLE TYPE | BLOWS / FOOT | ELEVATION SCALE | WATER CONTENT PERCENT | | | | STANDPIPE INSTALLATION | ADDITIONAL LAB. TESTING | |
|--------------|--|-------------------|---------------|-------------|--------------|-----------------|-----------------------|---|----------------|---|------------------------|-------------------------|----|
| ELEV. DEPTH | DESCRIPTION | | | | | | W _p | W | W _L | 5 | | | -2 |
| | Ground Surface | | | | | | | | | | | | |
| 0.0' | Moss | | | | | | | | | | | | |
| 0.5' | Peat - black, fibrous | | | | | | | | | | | | |
| 1.5' | Silt and fine Sand; laminated with scattered organic; Occasional seams of gravel and coarse sand; Frozen throughout with zones containing segregated ice crystals. | | 1 | C.B. | | | | | | | | | |
| | | | 2 | RC | | | | | | | | | |
| | | | 3 | " | | | | | | | | | |
| 26.5' | End of Hole | | | | | | | | | | | | |
| | No mineral seen | | | | | | | | | | | | |

Thermistors

VERTICAL SCALE
1 inch to 5 feet

Golder Associates

DRAWN
CHECKED

RECORD OF BOREHOLE #26 Scheme 2a Dam site

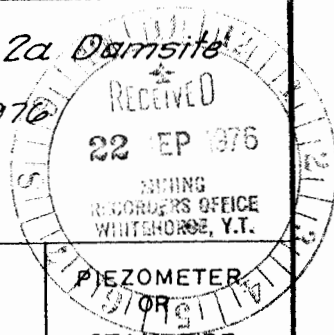
LOCATION (See Figure 2) N. 15,920
E. 21,630

BORING DATE May 14, 1976

BOREHOLE TYPE Permafrost Core Barrel

BOREHOLE DIAMETER

DATUM



Project No. 1-76055

| SOIL PROFILE | | STRATIGRAPHY PLOT | SAMPLE NUMBER | SAMPLE TYPE | BLOWS / FOOT | ELEVATION SCALE | WATER CONTENT PERCENT | | | PIEZOMETER OR STANDPIPE INSTALLATION | ADDITIONAL LAB. TESTING |
|--------------|---|-------------------|---------------|-------------|--------------|-----------------|-----------------------|---|----------------|---|----------------------------|
| ELEV. DEPTH | DESCRIPTION | | | | | | W _p | W | W _L | | |
| | Ground Surface | | | | | | | | | | |
| 0.0' | Sand and gravel-silty with peat and segregated ice. | | | | | | | | | | |
| 4.0' | Peat - black with wood and ice. | | | | | | | | | | |
| 6.5' | Silt and fine sand-laminated with scattered organic. Occasional seams of gravel and coarse sand; Frozen throughout with zones containing segregated ice crystals. | | 1 | C.O. | | | | 0 | | | |
| | | | 2 | " | | | | 0 | | | |
| 14.5' | Peat, Wood and Ice | | | | | | | | | | |
| 10.5' | | | 3 | " | | | | | | | 246.0° |
| | No mineral seen | | | | | | | | | | |
| | End of Hole | | 4 | " | | | | | | | |
| 30.0' | | | | | | | | | | | |

VERTICAL SCALE
1 inch to 5 feet

Golder Associates

DRAWN
CHECKED *[Signature]*

RECORD OF BOREHOLE #27 Scheme 2a Damsite

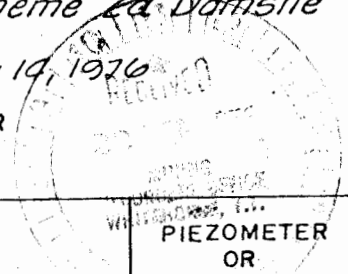
LOCATION (See Figure 2) N.16,140
E.21,490

BORING DATE May 19, 1976

BOREHOLE TYPE Permafrost Core Barrel.

BOREHOLE DIAMETER

DATUM



Project No. V-76055

| SOIL PROFILE | | STRATIGRAPHY PLOT | SAMPLE NUMBER | SAMPLE TYPE | BLOWS / FOOT | ELEVATION SCALE | WATER CONTENT PERCENT | | | PIEZOMETER OR STANDPIPE INSTALLATION | ADDITIONAL LAB. TESTING |
|--------------|---|-------------------|---------------|-------------|--------------|-----------------|-----------------------|---|----------------|--------------------------------------|-------------------------|
| ELEV. DEPTH | DESCRIPTION | | | | | | W _p | W | W _L | | |
| | Ground Surface | | | | | | | | | | |
| 0.0' | | | | | | | | | | | |
| 0.3' | Moss | | | | | | | | | | |
| 1.0' | Peat - silty with ice and wood. | | 1 | | | | | | | | |
| 5.0' | Silt and fine sand; laminated with scattered organic; Occasional seams of gravel and coarse sand; Frozen throughout with zones containing segregated ice crystals; Layers of clear ice. | | 2 | | | | | | | 135.30 | |
| | Gravel layer | | | | | | | | | | |
| 26.0' | End of Hole | | | | | | | | | | |
| | No mineral seen | | | | | | | | | | |

VERTICAL SCALE
1 inch to 5 feet

Golder Associates

DRAWN
CHECKED *[Signature]*

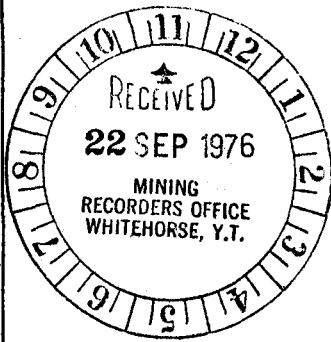


Department of Indian Affairs and Northern Development

YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)



| | | | |
|------------------|--|------------|-----------|
| I (Name) | Robert E. Van Tassell | Occupation | Geologist |
| (Postal Address) | 405 Main Street, Whitehorse, Yukon Y1A 2B6 | | |

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT :-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, work on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

Y 62699 SUN 1

situated at Big Creek Area Claim Sheet No. 115-I-11
 in the Whitehorse Mining District, to the value of at least \$ 5,037.04
 dollars, since the 30th day of April 19 76

to represent the following mineral claims under the authority of Grouping Certificate No. _____
 (Here list claims to be renewed in numerical order, by grant number and claim name, showing renewal period requested).

| | | | | | | | | | |
|---------|-----|---|-------|------|---------|-----|----|-------|------|
| Y 62699 | SUN | 1 | \$400 | 4yrs | Y 62705 | SUN | 7 | \$400 | 4yrs |
| Y 62700 | SUN | 2 | \$400 | 4yrs | Y 62706 | SUN | 8 | \$400 | 4yrs |
| Y 62701 | SUN | 3 | \$400 | 4yrs | Y 62708 | SUN | 10 | \$400 | 4yrs |
| Y 62702 | SUN | 4 | \$400 | 4yrs | Y 62710 | SUN | 12 | \$400 | 4yrs |
| Y 62703 | SUN | 5 | \$400 | 4yrs | Y 62712 | SUN | 14 | \$400 | 4yrs |
| Y 62704 | SUN | 6 | \$400 | 4yrs | Y 62714 | SUN | 16 | \$400 | 4yrs |

TOTAL 48 claim years

3. The following is a detailed statement of such work: (Set out full particulars of the work done indicating dates work commenced and ended in the twelve months in which such work is required to be done as shown by Section 53.)

Three (3) holes drilled between April 30th and May 4th, 1976, employing a Ranger Auger Drill operated by Mobile Augers and Research Limited and supported by a Jet Ranger 206B helicopter for mobilization, moving and crew transport from Carmacks. Holes laid out and surveyed by Underhill & Underhill. Helicopter chartered from Trans North Turbo Air.

Total cost of SUN drilling program \$ 5,037.04 per attached invoices etc etc..

Sworn before me at Whitehorse
 this 22 day of September 19 76

Notary Public

Applicant.

Robert E. Van Tassell
 Exploration Superintendent & Agent
 United Keno Hill Mines Ltd.

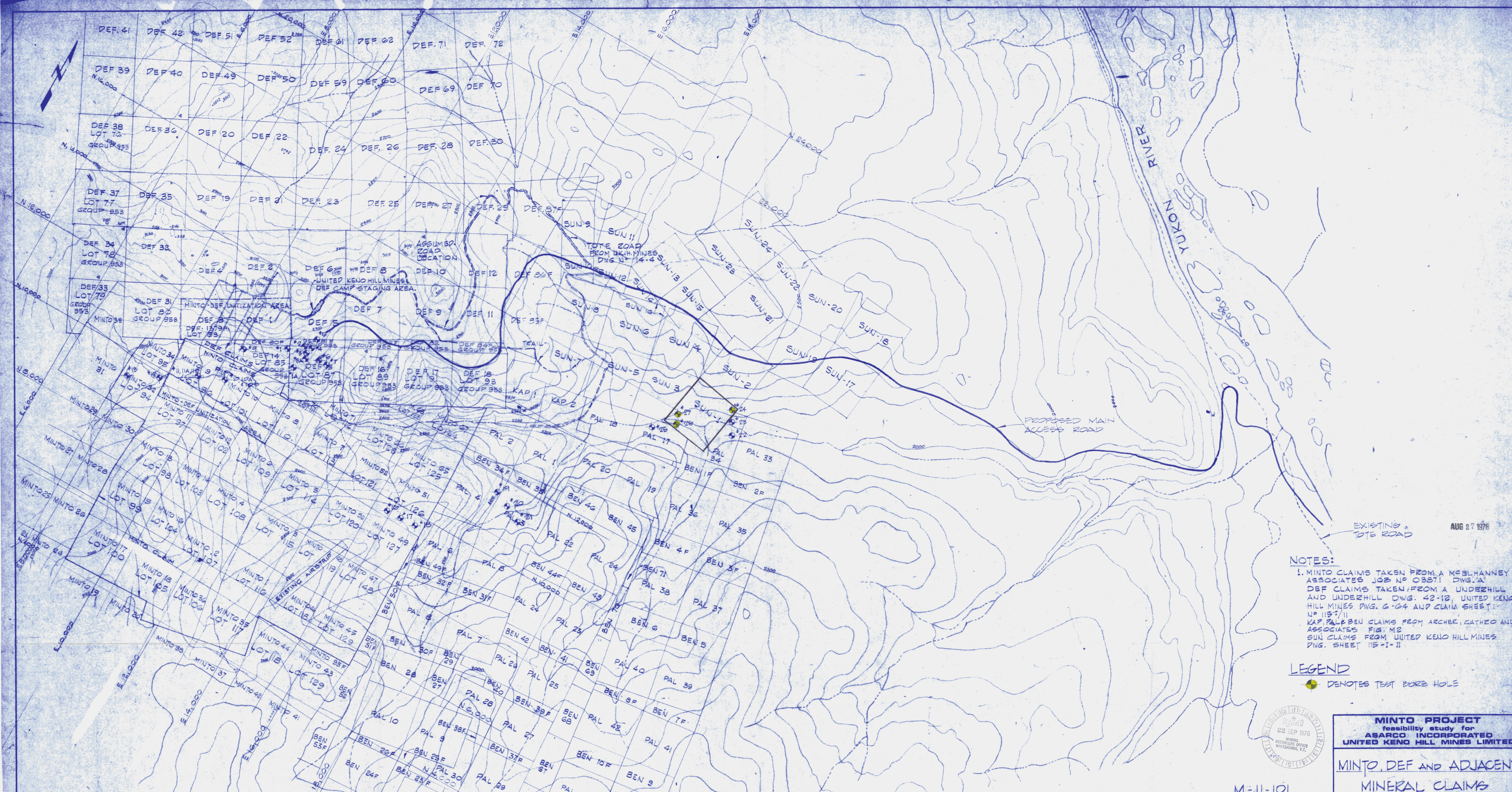
Oct 7/56

SMR

Recommend acceptance
of this work as follows

| | |
|---------|------------------------|
| DEF Exp | \$18,400 ⁰⁰ |
| SUN " | \$4,800 ⁰⁰ |

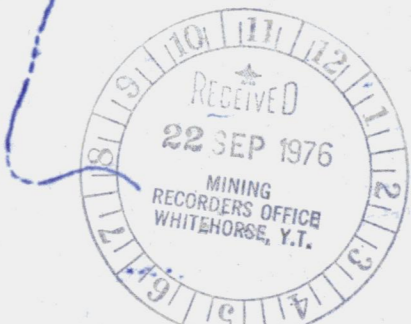
RGR



AUG 27 1976

NOTES:
 1. MINTO CLAIMS TAKEN FROM A McELHANNAY ASSOCIATES JOB NO 03871 DWG. 'A'
 DEF CLAIMS TAKEN FROM A UNDERHILL AND UNDERHILL DWG. 42-12 UNITED KENO HILL MINES PWS. G-64 AND CLAIM SHEET NO 115-1/11
 KAP, PAL, BEN CLAIMS FROM ARCHER, CATHER AND ASSOCIATES FIG. M2
 SUN CLAIMS FROM UNITED KENO HILL MINES PWS. SHEET 115-1-11

LEGEND
 ● DENOTES TEST BORE HOLE



MINTO PROJECT
 feasibility study for
ASARCO INCORPORATED
UNITED KENO HILL MINES LIMITED

MINTO, DEF AND ADJACENT MINERAL CLAIMS

M-11-101

| DESIGN | DRAWN | CHECK | APPROVAL | ISSUED FOR | DATE | REV. | DESCRIPTION OF REVISION | DESIGN | DRAWN | CHECK | APPROVAL | ISSUED FOR | DATE | REV. | DESCRIPTION OF REVISION | REFERENCE | NO. | DWG. NO. | REFERENCE | NO. | DWG. NO. | REFERENCE | NO. | DWG. NO. |
|--------|-------|-------|----------|------------|--------|------|--|--------|-------|-------|----------|------------|------|------|-------------------------|-----------|-----|----------|-----------|-----|----------|-----------|-----|----------|
| | | | | REFERENCE | 2-4-74 | | | | | | | | | | | | 11 | | | | | | | |
| | | | | REFERENCE | 3-5-74 | A | DEF, SUN, PAL, BEN CLAIMS, ROAD & STAGING AREA ADDED | | | | | | | | | | 7 | | | | | | | |
| | | | | REFERENCE | | B | MAIN ACCESS RD. & TEST BORE HOLES ADDED | | | | | | | | | | 10 | | | | | | | |
| | | | | | | | | | | | | | | | | | 6 | | | | | | | |
| | | | | | | | | | | | | | | | | | 9 | | | | | | | |
| | | | | | | | | | | | | | | | | | 8 | | | | | | | |

SCALE: SCALE 1" = 1000 FT

WRIGHT ENGINEERS LIMITED
 VANCOUVER CANADA
 DWG. No. **E 854 11 001 B**