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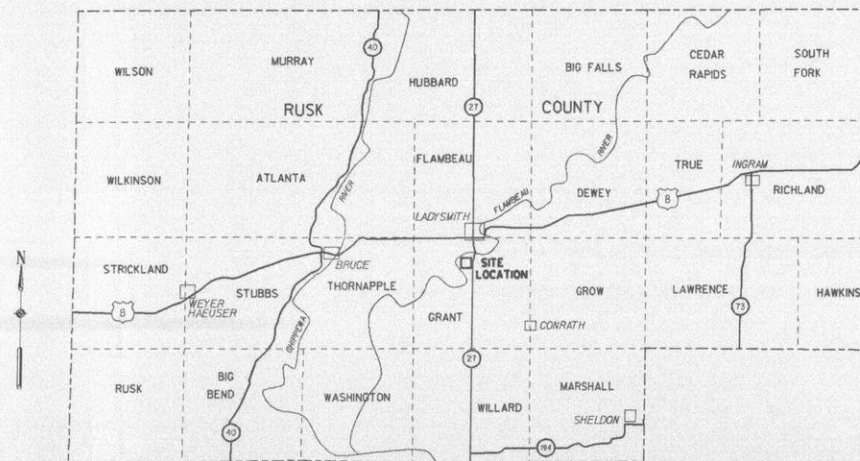
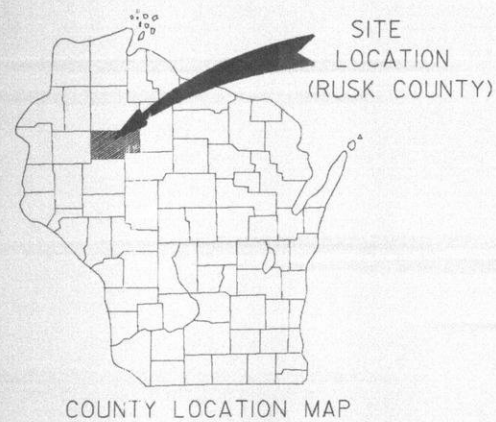
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FLAMBEAU MINING COMPANY FLAMBEAU PROJECT ENVIRONMENTAL IMPACT REPORT

LADYSMITH, WISCONSIN



SITE LOCATION MAP
APPROX. SCALE: 1"=5 MILES

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NOTE: ONLY THE FULL SIZE DRAWINGS (22"X34") THAT WERE REDUCED TO 8"X11" IN THE ENVIRONMENTAL IMPACT REPORT ARE PART OF THIS DRAWING SET.

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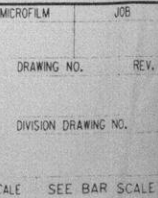
FOTH & VAN DYKE
GEOSCIENCES & ENVIRONMENTAL
MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

PREPARED FOR:

FLAMBEAU MINING COMPANY
10 EAST SOUTH TEMPLE
P.O. BOX 11248
SALT LAKE CITY, UTAH 84147



45000 E

[illegible]

SECTION A-A'

Left Elevation Scale (A): 1180, 1140, 1100, 1060

Right Elevation Scale (A'): 1180, 1140, 1100, 1060

Stratigraphic Units: TILL, CAMBRIAN, SANDSTONE, PRECAMBRIAN

Well Logs:

- PZ-1007S:** ML, SM, SP, SM, SS, "ML". Data: 113.27, $K_f = 4.3 \times 10^{-4}$. Correlation: 04/87/-9-.
- PZ-1006:** SP, SM/ML, GP, SM, SP (SS), "SM/ML". Data: 1006 DRY, 1133.59 (1006G), 1132.13 (1006S), 1006G $K_f = 8.4 \times 10^{-5}$, 1006S $K_f = 9.5 \times 10^{-4}$.
- MW-1005:** ML, SM, SP, SS, RK. Data: 1137.99 (1005, 1005P), 1137.58 (1005S), $K_f = 3.3 \times 10^{-4}$, 1005, 1005S $K_f = 1.6 \times 10^{-3}$, 1005P $K_f = 1.7 \times 10^{-5}$.
- PZ-1008:** ML, SM, CH, SP. Data: 1134.89 (1008, 1008G), $K_f = 3.4 \times 10^{-5}$, 1008, 08/62/20/10, 1008G $K_f = 3.9 \times 10^{-3}$, 18/78/-4-.

Other Features: PALEOSOL, SAND AND GRAVEL, "CL-ML".

LEGEND:

- SP: SP
- SM/ML: SM/ML
- GP: GP
- SM: SM
- SP (SS): SP (SS)
- "SM/ML": "SM/ML"
- ML: ML
- CH: CH
- SC/GC: SC/GC
- ML: ML
- RK: RK

QT	TILL, AND SAND AND GRAVEL (MAY CONTAIN SOME CAMBRIAN SANDSTONE)
SM	SILTY SAND
SW-SM	WELL GRADED SAND WITH SILT
SP	POORLY GRADED SAND
SP-SM	POORLY GRADED SAND WITH SILT
SW	WELL GRADED SAND
SP-SM, SW	POORLY GRADED SAND WITH SILT INTERBEDDED WITH WELL-GRADED SAND
SM, SP	SILTY SAND INTERBEDDED WITH POORLY GRADED SAND
SW, SM	WELL GRADED SAND INTERBEDDED WITH SILTY SAND
SM/ML	SILTY SAND/SILT
SC/SM	CLAYEY SAND/SILTY SAND
SC	CLAYEY SAND
SC-SM	SILTY-CLAYEY SAND
GW	WELL GRADED GRAVEL
GW-GM	WELL GRADED GRAVEL WITH SILT
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
SP, GP	POORLY GRADED SAND INTERBEDDED WITH POORLY GRADED GRAVEL
SM/GM	SILTY SAND/SILTY GRAVEL
SM, GW-GM	SILTY SAND INTERBEDDED WITH POORLY GRADED GRAVEL WITH SILT
GM/SM	SILTY GRAVEL/SILTY SAND

ML	SILT
CL-ML	SILTY CLAY
CL	LEAN CLAY
CL/ML	LEAN CLAY/SILT
<u>CAMBRIAN</u>	
SS	SANDSTONE
<u>PRECAMBRIAN</u>	
RK	ROCK
Q+z	QUARTZ
(1a)	SERICITE-QUARTZ SCHIST
(2)	BIOTITE SCHIST
(3)	AUGEN SCHIST
(5)	METADACITE (VOLCANIC FLOW ROCK)
"ML"	ROCK THAT DISAGGREGATES TO SILT
"SM"	ROCK THAT DISAGGREGATES TO SILTY SAND
"GM"	ROCK THAT DISAGGREGATES TO SILTY GRAVEL
"CL/ML"	ROCK THAT DISAGGREGATES TO LEAN CLAY/SILT
"SM/ML"	ROCK THAT DISAGGREGATES TO SILTY SAND/SILT
"SM,ML"	ROCK THAT DISAGGREGATES TO INTERBEDS OF SILTY SAND AND SILT

SAMPLING POINT
ATTERBERG LIMITS
IN-FIELD PERMEABILITY VALUE (CM/SEC)
LABORATORY PERMEABILITY VALUE (CM/SEC)
GRAVEL/SAND/SILT/CLAY PERCENTAGES
GRAVEL/SAND/P200 PERCENTAGES
AVERAGE WATER LEVEL
(SEPT. 1987 TO NOV. 1988)
CONTACTS-REASONABLY CERTAIN
UNCERTAIN
VERY UNCERTAIN

PZ-1005 ← WELL OR NEST DESIGNATION

TOP OF MEASURING POINT

GROUND SURFACE

TOP OF SAND PACK

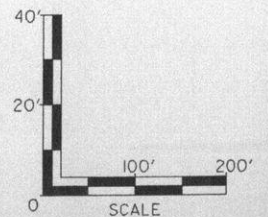
1006 WATER TABLE WELL

WELL SCREEN

1001G PIEZOMETER SCREENED IN GLACIAL OR GLACIAL FLUVIAL SEDIMENT

1006S PIEZOMETER SCREENED IN SANDSTONE

1005P PIEZOMETER SCREENED IN PRECAMBRIAN ROCK

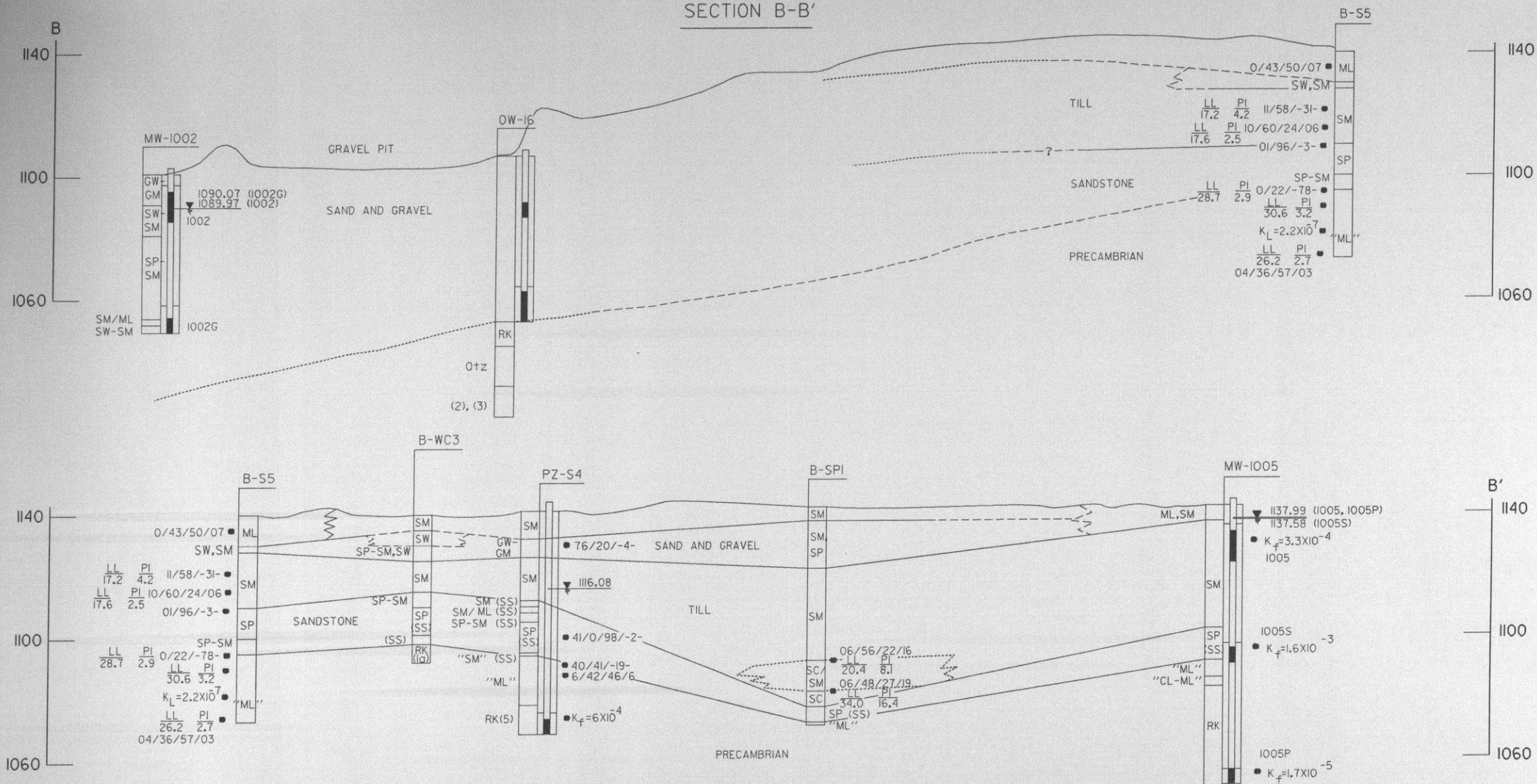


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GREEN BAY, WISCONSIN

**KENNECOTT
MINERALS
COMPANY**
1515 MINERAL SQUARE
SALT LAKE CITY, UTAH
84112

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

SECTION B-B'



LEGEND

QUATERNARY

Q+	TILL, AND SAND AND GRAVEL (MAY CONTAIN SOME CAMBRIAN SANDSTONE)
SM	SILTY SAND
SW-SM	WELL GRADED SAND WITH SILT
SP	POORLY GRADED SAND
SP-SM	POORLY GRADED SAND WITH SILT
SW	WELL GRADED SAND
SP-SM, SW	POORLY GRADED SAND WITH SILT INTERBEDDED WITH WELL-GRADED SAND
SM, SP	SILTY SAND INTERBEDDED WITH POORLY GRADED SAND
SW, SM	WELL GRADED SAND INTERBEDDED WITH SILTY SAND
SM/ML	SILTY SAND/SILT
SC/SM	CLAYEY SAND/SILTY SAND
SC	CLAYEY SAND
SC-SM	SILTY-CLAYEY SAND
GW	WELL GRADED GRAVEL
GW-GM	WELL GRADED GRAVEL WITH SILT
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
SP, GP	POORLY GRADED SAND INTERBEDDED WITH POORLY GRADED GRAVEL
SM/GM	SILTY SAND/SILTY GRAVEL
SM, GW-GM	SILTY SAND INTERBEDDED WITH POORLY GRADED GRAVEL WITH SILT
GM/SM	SILTY GRAVEL/SILTY SAND

ML	SILT
CL-ML	SILTY CLAY
CL	LEAN CLAY
CL/ML	LEAN CLAY/SILT

CAMBRIAN

SS	SANDSTONE
RK	ROCK
Q+z	QUARTZ
(1a)	SERICITE-QUARTZ SCHIST
(2)	BIOTITE SCHIST
(3)	AUGEN SCHIST
(5)	METADACITE (VOLCANIC FLOW ROCK)

"ML"	ROCK THAT DISAGGREGATES TO SILT
"SM"	ROCK THAT DISAGGREGATES TO SILTY SAND
"GM"	ROCK THAT DISAGGREGATES TO SILTY GRAVEL
"CL/ML"	ROCK THAT DISAGGREGATES TO LEAN CLAY/SILT
"SM/ML"	ROCK THAT DISAGGREGATES TO SILTY SAND/SILT
"SM, ML"	ROCK THAT DISAGGREGATES TO INTERBEDS OF SILTY SAND AND SILT

LL	PI
26	13
$K_f = 7.9 \times 10^{-5}$	
$K_f = 4.0 \times 10^{-9}$	
01/50/41/08	
0/93/-7-	
113.27	

SAMPLING POINT
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 AVERAGE WATER LEVEL
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 UNCERTAIN
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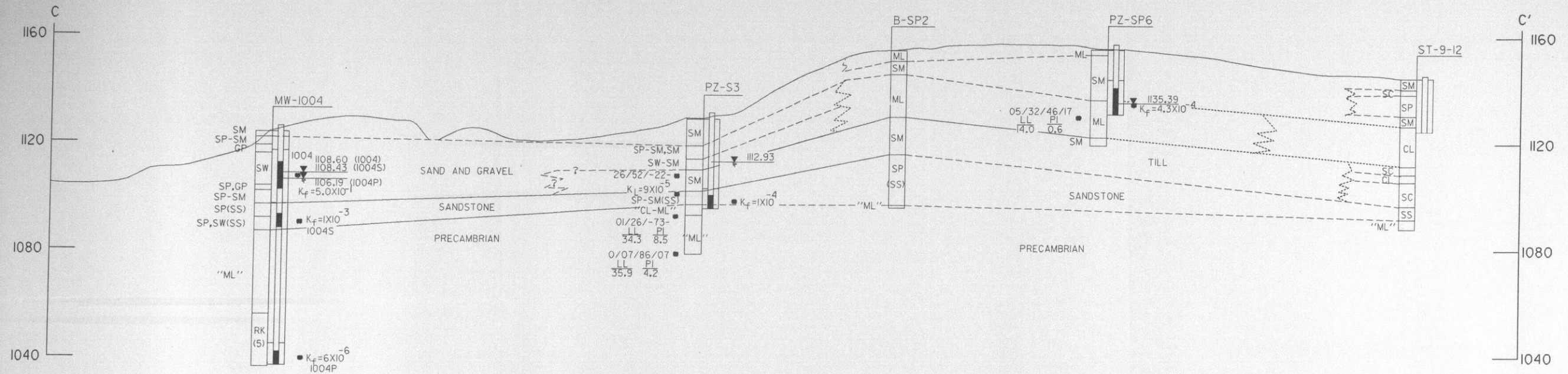
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LADYSMITH, WISCONSIN

KENNECOTT
 MINERALS
 COMPANY
 855 MINERAL SQUARE
 SALT LAKE CITY, UTAH
 8412

FIGURE NO. 3.5-4
 GEOLOGIC CROSS SECTION
 B-B'

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

SECTION C-C'

QUATERNARY

QT	TILL, AND SAND AND GRAVEL (MAY CONTAIN SOME CAMBRIAN SANDSTONE)
SM	SILTY SAND
SW-SM	WELL GRADED SAND WITH SILT
SP	POORLY GRADED SAND
SP-SM	POORLY GRADED SAND WITH SILT
SW	WELL GRADED SAND
SP-SM, SW	POORLY GRADED SAND WITH SILT INTERBEDDED WITH WELL-GRADED SAND
SM, SP	SILTY SAND INTERBEDDED WITH POORLY GRADED SAND
SW, SM	WELL GRADED SAND INTERBEDDED WITH SILTY SAND
SM/ML	SILTY SAND/SILT
SC/SM	CLAYEY SAND/SILTY SAND
SC	CLAYEY SAND
SC-SM	SILTY-CLAYEY SAND
GW	WELL GRADED GRAVEL
GW-GM	WELL GRADED GRAVEL WITH SILT
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
SP, GP	POORLY GRADED SAND INTERBEDDED WITH POORLY GRADED GRAVEL
SM/GM	SILTY SAND/SILTY GRAVEL
SM, GW-GM	SILTY SAND INTERBEDDED WITH POORLY GRADED GRAVEL WITH SILT
GM/SM	SILTY GRAVEL/SILTY SAND

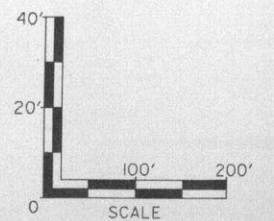
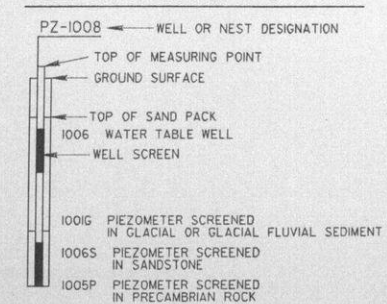
LEGEND

CL	SILT
CL-ML	SILTY CLAY
CL	LEAN CLAY
CL/ML	LEAN CLAY/SILT
<u>CAMBRIAN</u>	
SS	SANDSTONE
<u>PRECAMBRIAN</u>	
RK	ROCK
Q+z	QUARTZ
(1a)	SERICITE-QUARTZ SCHIST
(2)	BIOTITE SCHIST
(3)	AUGEN SCHIST
(5)	METADACITE (VOLCANIC FLOW ROCK)
"ML"	ROCK THAT DISAGGREGATES TO SILT
"SM"	ROCK THAT DISAGGREGATES TO SILTY SAND
"GM"	ROCK THAT DISAGGREGATES TO SILTY GRAVEL
"CL/ML"	ROCK THAT DISAGGREGATES TO LEAN CLAY/SILT
"SM/ML"	ROCK THAT DISAGGREGATES TO SILTY SAND/SILT
"SM,ML"	ROCK THAT DISAGGREGATES TO INTERBEDS OF SILTY SAND AND SILT

$\frac{L_L}{26} \quad \frac{P_I}{13}$
 $K_f = 7.9 \times 10^{-5}$
 $K_L = 4.0 \times 10^{-9}$
 01/50/41/08
 0/93/-7-
 III 3.27

SAMPLING POINT
ATTERBERG LIMITS
IN-FIELD PERMEABILITY VALUE (CM/SEC)
LABORATORY PERMEABILITY VALUE (CM/SEC)
GRAVEL/SAND/SILT/CLAY PERCENTAGES
GRAVEL/SAND/P200 PERCENTAGES
AVERAGE WATER LEVEL
(SEPT. 1987 TO NOV. 1988)
CONTACTS-REASONABLY CERTAIN
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VERY UNCERTAIN

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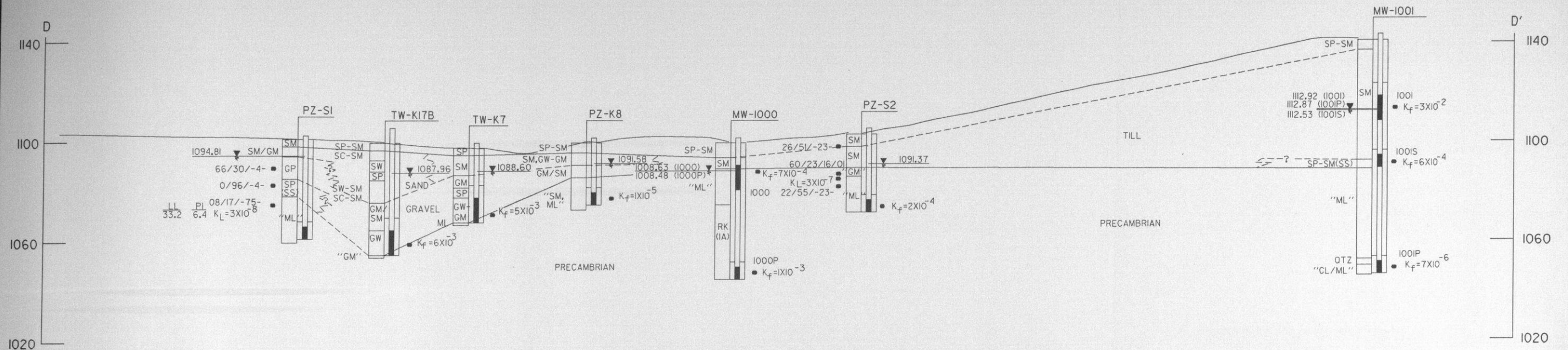
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COMPANY**
1515 MINERAL SQUARE
SALT LAKE CITY, UTAH
84112

FIGURE NO. 3.5-5
GEOLOGIC CROSS SECTION
C-C'

MICROFILM		JOB	
DRAWING NO.		REV.	
DIVISION DRAWING NO.			
SCALE	SEE BAR SCALE		

[illegible]

SECTION D-D'



QUATERNARY

QT	TILL, AND SAND AND GRAVEL (MAY CONTAIN SOME CAMBRIAN SANDSTONE)
SM	SILTY SAND
SW-SM	WELL GRADED SAND WITH SILT
SP	POORLY GRADED SAND
SP-SM	POORLY GRADED SAND WITH SILT
SW	WELL GRADED SAND
SP-SM, SW	POORLY GRADED SAND WITH SILT INTERBEDDED WITH WELL-GRADED SAND
SM, SP	SILTY SAND INTERBEDDED WITH POORLY GRADED SAND
SW, SM	WELL GRADED SAND INTERBEDDED WITH SILTY SAND
SM/ML	SILTY SAND/SILT
SC/SM	CLAYEY SAND/SILTY SAND
SC	CLAYEY SAND
SC-SM	SILTY-CLAYEY SAND
GW	WELL GRADED GRAVEL
GW-GM	WELL GRADED GRAVEL WITH SILT
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
SP, GP	POORLY GRADED SAND INTERBEDDED WITH POORLY GRADED GRAVEL
SM/GM	SILTY SAND/SILTY GRAVEL
SM, GW-GM	SILTY SAND INTERBEDDED WITH POORLY GRADED GRAVEL WITH SILT
GM/SM	SILTY GRAVEL/SILTY SAND

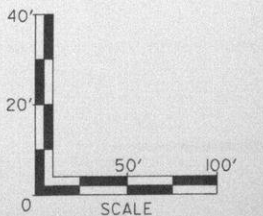
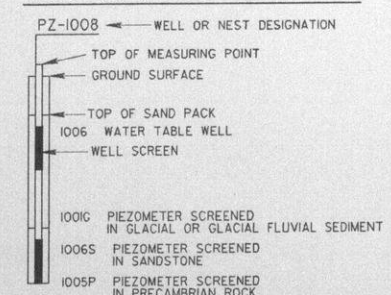
LEGEND

CL	SILT
CL-ML	SILTY CLAY
CL	LEAN CLAY
CL/ML	LEAN CLAY/SILT
<u>CAMBRIAN</u>	
SS	SANDSTONE
<u>PRECAMBRIAN</u>	
RK	ROCK
Qtz	QUARTZ
(1a)	SERICITE-QUARTZ SCHIST
(2)	BIOTITE SCHIST
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(5)	METADACITE (VOLCANIC FLOW ROCK)
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"SM,ML"	ROCK THAT DISAGGREGATES TO INTERBEDS OF SILTY SAND AND SILT

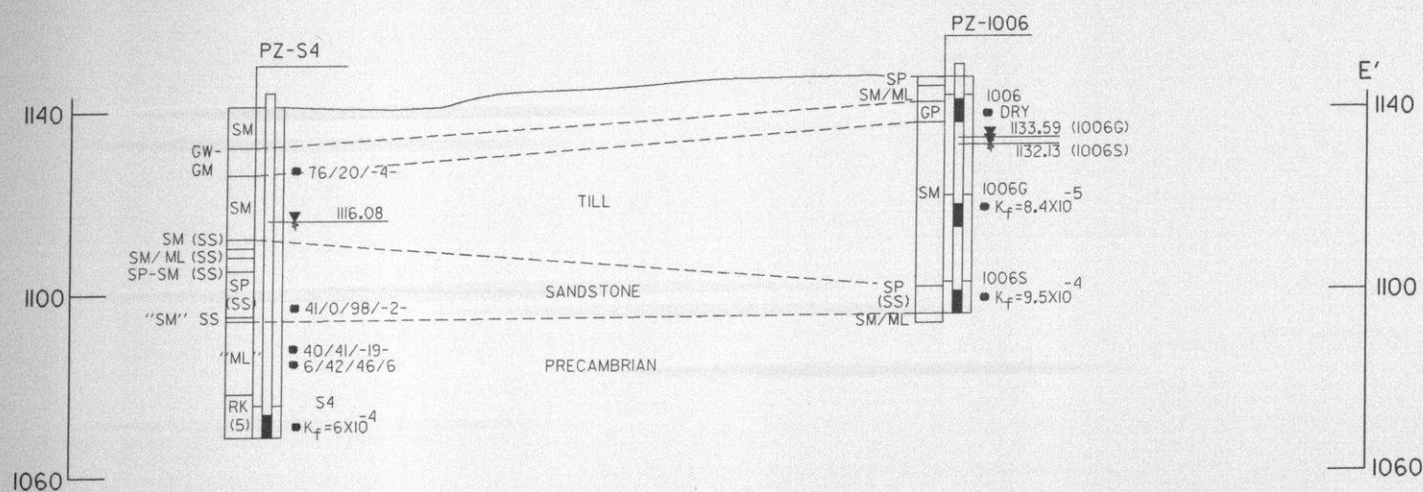
$\frac{L_L}{26} \quad \frac{P_I}{13}$
 $K_f = 7.9 \times 10^{-5}$
 $K_L = 4.0 \times 10^{-9}$
 01/50/41/08
 0/93/-7-
 III3.27

SAMPLING POINT
ATTERBERG LIMITS
IN-FIELD PERMEABILITY VALUE (CM/SEC)
LABORATORY PERMEABILITY VALUE (CM/SEC)
GRAVEL/SAND/SILT/CLAY PERCENTAGES
GRAVEL/SAND/P200 PERCENTAGES
AVERAGE WATER LEVEL
(SEPT. 1987 TO NOV. 1988)
CONTACTS-REASONABLY CERTAIN
UNCERTAIN
VERY UNCERTAIN

WELL CONSTRUCTION INFORMATION

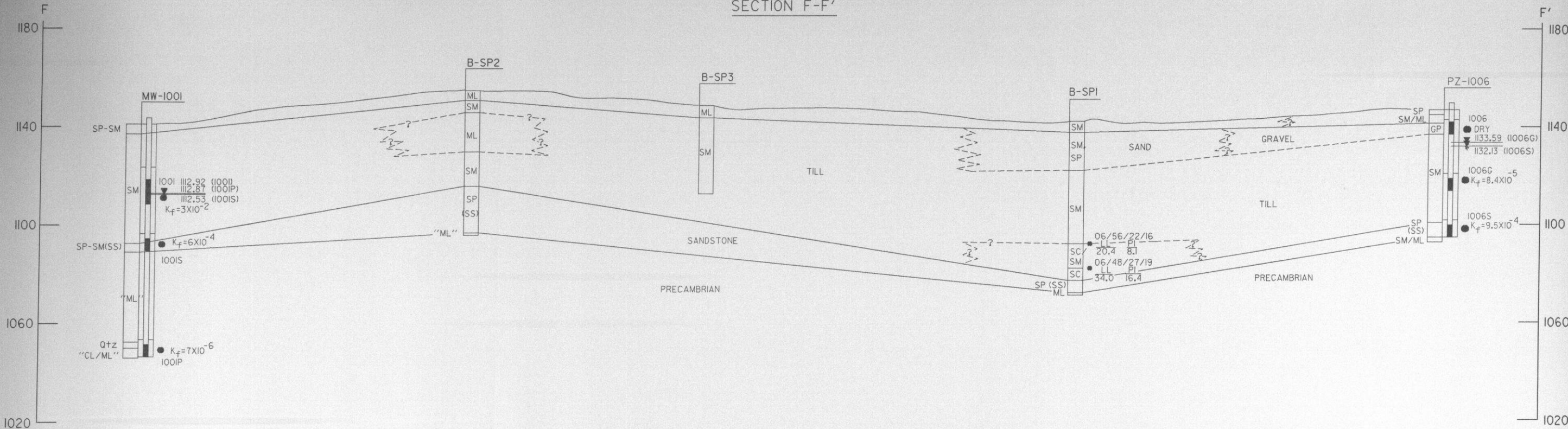


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BY CHK'D ENCR' ENCR' MGR. BY DATE PROL. ENCR. MGR. PROCESS ENCR. ENCR. MGR.										KENNECOTT MINERALS COMPANY 1515 MINERAL SQUARE SALT LAKE CITY, UTAH 8412									
BY DATE DES. ENCR. SECT. ENCR.										FIGURE NO. 3.5-6 GEOLOGIC CROSS SECTION D-D'									
BY DATE DES. ENCR. SECT. ENCR.										DIVISION DRAWING NO.									
BY DATE DES. ENCR. SECT. ENCR.										SCALE SEE BAR SCALE									



MICROFILM		JOB	
DRAWING NO.		REV.	
DIVISION DRAWING NO.			
SCALE	SEE BAR SCALE		

SECTION F-F'



QUATERNARY

OT	TILL, AN SAND AND GRAVEL (MAY CONTAIN SOME CAMBRIAN SANDSTONE)
SM	SILTY SAND
SW-SM	WELL GRADED SAND WITH SILT
SP	POORLY GRADED SAND
SP-SM	POORLY GRADED SAND WITH SILT
SW	WELL GRADED SAND
SP-SM, SW	POORLY GRADED SAND WITH SILT INTERBEDDED WITH WELL-GRADED SAND
SM,SP	SILTY SAND INTERBEDDED WITH POORLY GRADED SAND
SW,SM	WELL GRADED SAND INTERBEDDED WITH SILTY SAND
SM/ML	SILTY SAND/SILT
SC/SM	CLAYEY SAND/SILTY SAND
SC	CLAYEY SAND
SC-SM	SILTY-CLAYEY SAND
GW	WELL GRADED GRAVEL
GW-GM	WELL GRADED GRAVEL WITH SILT
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
SP,GP	POORLY GRADED SAND INTERBEDDED WITH POORLY GRADED GRAVEL
SM/GM	SILTY SAND/SILTY GRAVEL
SM,GW-GM	SILTY SAND INTERBEDDED WITH POORLY GRADED GRAVEL WITH SILT
GM/SM	SILTY GRAVEL/SILTY SAND

LEGEND

ML	SILT
CL-ML	SILTY CLAY
CL	LEAN CLAY
CL/ML	LEAN CLAY/SILT

CAMBRIAN

SS SANDSTONE

PRECAMBRIAN

RK	ROCK
Q+z	QUARTZ
(1g)	SERICITE-QUARTZ SCHIST
(2)	BIOTITE SCHIST
(3)	AUGEN SCHIST
(5)	METADACITE (VOLCANIC FLOW ROCK)
"ML"	ROCK THAT DISAGGREGATES TO SILT
"SM"	ROCK THAT DISAGGREGATES TO SILTY SAND
"GM"	ROCK THAT DISAGGREGATES TO SILTY GRAVEL
"CL/ML"	ROCK THAT DISAGGREGATES TO LEAN CLAY/SILT
"SM/ML"	ROCK THAT DISAGGREGATES TO SILTY SAND/SILT
"SM,ML"	ROCK THAT DISAGGREGATES TO INTERBEDS OF SILTY SAND AND SILT

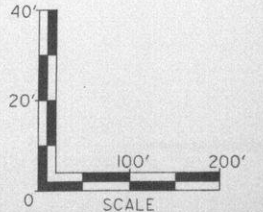
$\frac{LL}{26} \quad \frac{PI}{13}$
 $K_f = 7.9 \times 10^{-5}$
 $K_L = 4.0 \times 10^{-9}$
 01/50/41/08
 0/93/-7-
 ▼ III3.27

SAMPLING POINT
ATTERBERG LIMITS
IN-FIELD PERMEABILITY VALUE (CM/SEC)
LABORATORY PERMEABILITY VALUE (CM/SEC)
GRAVEL/SAND/SILT/CLAY PERCENTAGES
GRAVEL/SAND/P200 PERCENTAGES
AVERAGE WATER LEVEL
(SEPT. 1987 TO NOV. 1988)
CONTACTS-REASONABLY CERTAIN
UNCERTAIN
VERY UNCERTAIN

WELL CONSTRUCTION INFORMATION

The diagram illustrates the vertical profile of well PZ-1008. Key features and depths are labeled as follows:

- PZ-1008**: Well or nest designation.
- TOP OF MEASURING POINT**: Indicated by an arrow pointing to the top of the well casing.
- GROUND SURFACE**: Indicated by an arrow pointing to the ground level.
- TOP OF SAND PACK**: Indicated by an arrow pointing to the top of the sand pack.
- 1006 WATER TABLE WELL**: A well screened in the water table, located below the sand pack.
- WELL SCREEN**: Indicated by an arrow pointing to the screen of the 1006 well.
- 1001G**: Piezometer screened in glacial or glacial fluvial sediment.
- 1006S**: Piezometer screened in sandstone.
- 1005P**: Piezometer screened in Precambrian rock.



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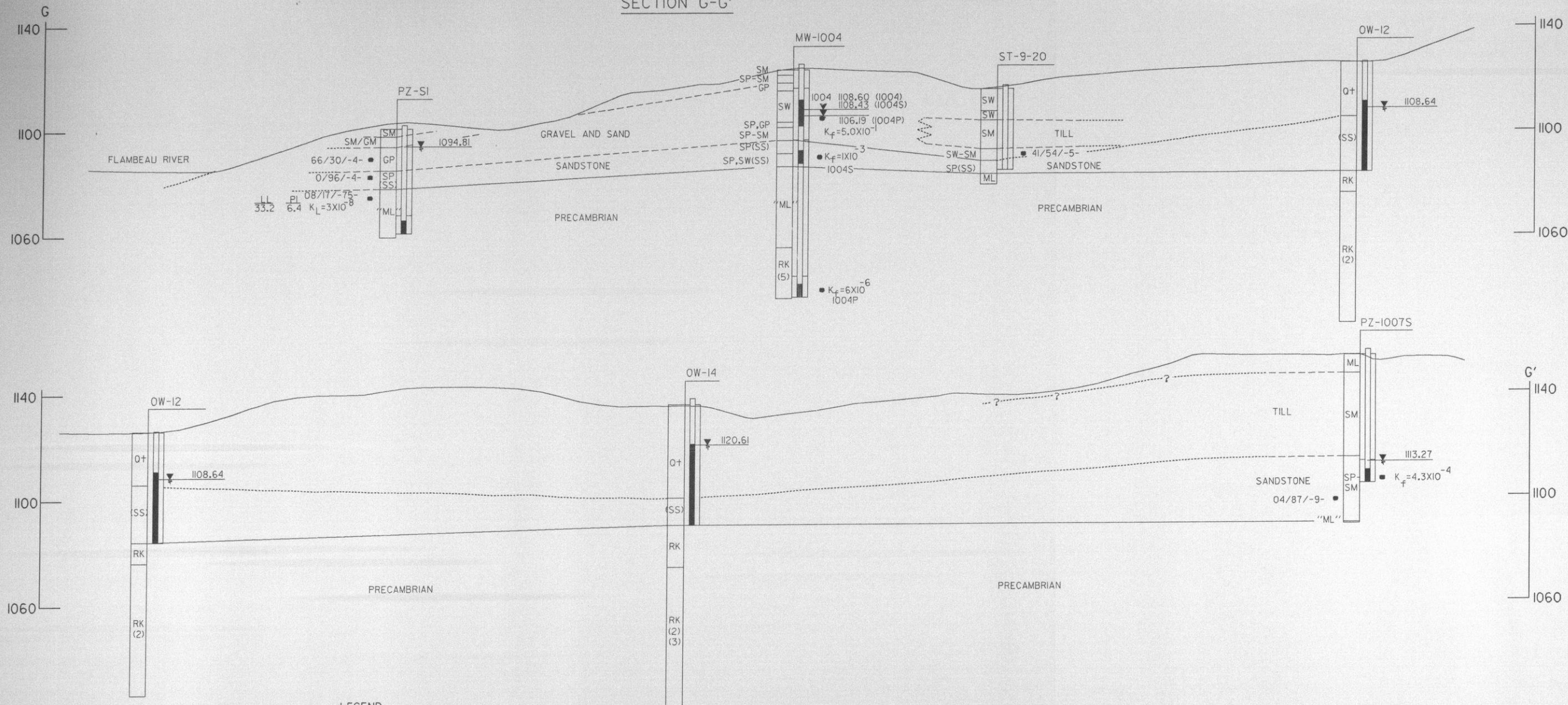
**KENNECOTT
MINERALS
COMPANY**
1515 MINERAL SQUARE
SALT LAKE CITY, UTAH
84112

FIGURE NO. 3.5-8
GEOLOGIC CROSS SECTION
F-F'

MICROFILM		JOB	
DRAWING NO.		REV.	
DIVISION DRAWING NO.			
SCALE	SEE BAR SCALE		

[illegible]

SECTION G-G'



LEGEND

QUATERNARY

Q+	TILL, AND SAND AND GRAVEL (MAY CONTAIN SOME CAMBRIAN SANDSTONE)
SM	SILTY SAND
SW-SM	WELL GRADED SAND WITH SILT
SP	POORLY GRADED SAND
SP-SM	POORLY GRADED SAND WITH SILT
SW	WELL GRADED SAND
SP-SM, SW	POORLY GRADED SAND WITH SILT INTERBEDDED WITH WELL-GRADED SAND
SM, SP	SILTY SAND INTERBEDDED WITH POORLY GRADED SAND
SW, SM	WELL GRADED SAND INTERBEDDED WITH SILTY SAND
SM/ML	SILTY SAND/SILT
SC/SM	CLAYEY SAND/SILTY SAND
SC	CLAYEY SAND
SC-SM	SILTY-CLAYEY SAND
GW	WELL GRADED GRAVEL
GW-GM	WELL GRADED GRAVEL WITH SILT
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
SP, GP	POORLY GRADED SAND INTERBEDDED WITH POORLY GRADED GRAVEL
SM/GM	SILTY SAND/SILTY GRAVEL
SM, GW-GM	SILTY SAND INTERBEDDED WITH POORLY GRADED GRAVEL WITH SILT
GM/SM	SILTY GRAVEL/SILTY SAND

ML	SILT
CL-ML	SILTY CLAY
CL	LEAN CLAY
CL/ML	LEAN CLAY/SILT

CAMBRIAN

SS	SANDSTONE
----	-----------

PRECAMBRIAN

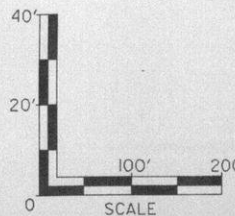
RK	ROCK
Q+z	QUARTZ
(1a)	SERICITE-QUARTZ SCHIST
(2)	BIOTITE SCHIST
(3)	AUGEN SCHIST
(5)	METADACITE (VOLCANIC FLOW ROCK)
"ML"	ROCK THAT DISAGGREGATES TO SILT
"SM"	ROCK THAT DISAGGREGATES TO SILTY SAND
"GM"	ROCK THAT DISAGGREGATES TO SILTY GRAVEL
"CL/ML"	ROCK THAT DISAGGREGATES TO LEAN CLAY/SILT
"SM/ML"	ROCK THAT DISAGGREGATES TO SILTY SAND/SILT
"SM, ML"	ROCK THAT DISAGGREGATES TO INTERBEDS OF SILTY SAND AND SILT

•	PI
LL	26
13	
K _f	= 7.9X10 ⁻⁵
K _L	= 4.0X10 ⁻⁹
01/50/41/08	
0/93/-7-	
1113.27	

SAMPLING POINT
 ATTERBERG LIMITS
 IN-FIELD PERMEABILITY VALUE (CM/SEC)
 LABORATORY PERMEABILITY VALUE (CM/SEC)
 GRAVEL/SAND/SILT/CLAY PERCENTAGES
 GRAVEL/SAND/P200 PERCENTAGES
 AVERAGE WATER LEVEL
 (SEPT. 1987 TO NOV. 1988)
 CONTACTS-REASONABLY CERTAIN
 UNCERTAIN
 VERY UNCERTAIN

WELL CONSTRUCTION INFORMATION

PZ-1008	WELL OR NEST DESIGNATION
TOP OF MEASURING POINT	
GROUND SURFACE	
TOP OF SAND PACK	
1006	WATER TABLE WELL
WELL SCREEN	
1001G	PIEZOMETER SCREENED IN GLACIAL OR GLACIAL FLUVIAL SEDIMENT
1006S	PIEZOMETER SCREENED IN SANDSTONE
1005P	PIEZOMETER SCREENED IN PRECAMBRIAN ROCK



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KENNECOTT
 MINERALS
 COMPANY

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 84112

FIGURE NO. 3.5-9
 GEOLOGIC CROSS SECTION
 G-G'

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

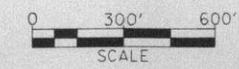
43000 N

42000 N

41000 N

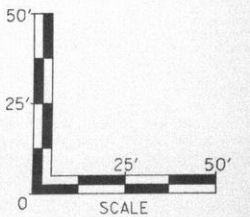
40000 N

39000 N



SCALE SEE BAR SC

[illegible]



MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

REFERENCES	DWG. NO.	DESCRIPTION	REFERENCES	DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR MGR	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR MGR	PRGJ. ENGR MGR. FORESS ENGR MGR.	BY	DATE		BY	DATE	
																						DESIGN				
																						DRAWN	SAG	2/87		
																						CHK'D	BJS	3/87		
																						DES. ENGR				
																				SECT ENGR						

KENNEDY
MINERALS
COMPANY

155 MINERAL SQUARE
SALT LAKE CITY, UTAH
84102

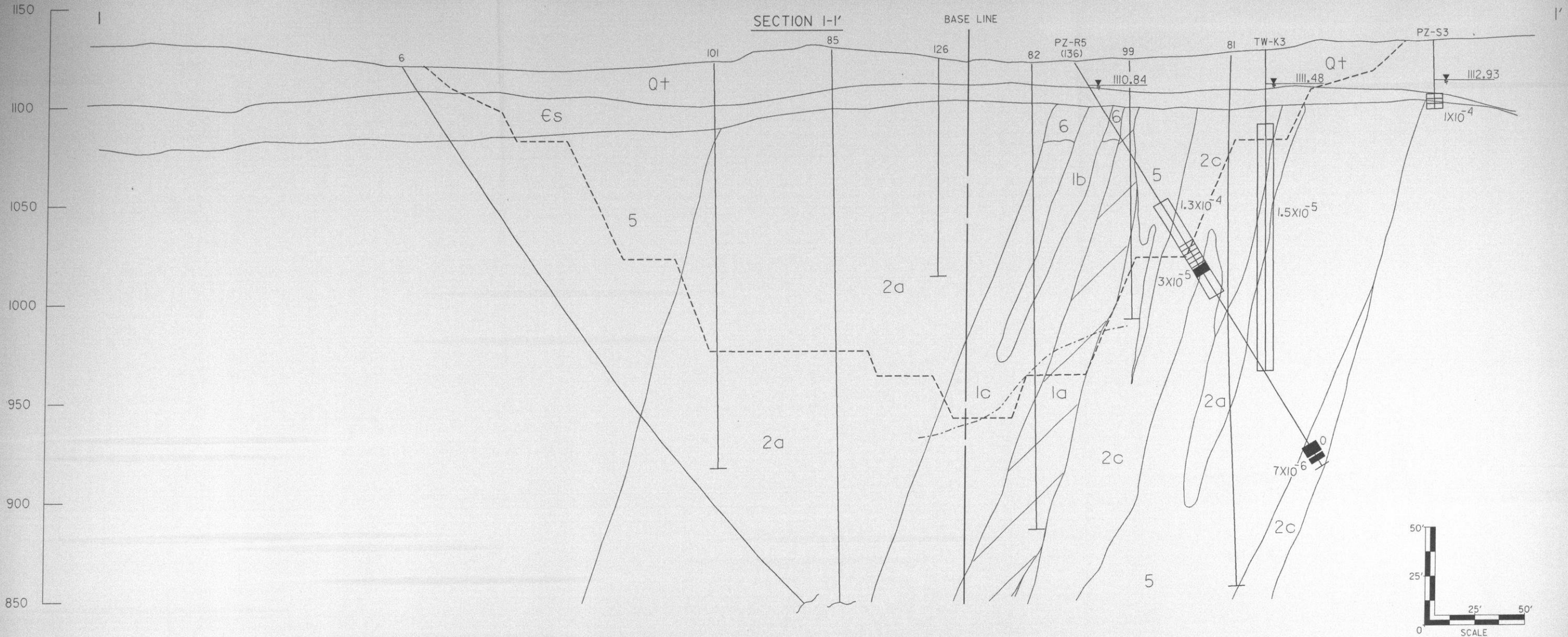
FIGURE NO. 3.5-14

GEOLOGIC CROSS-SECTION H-H'

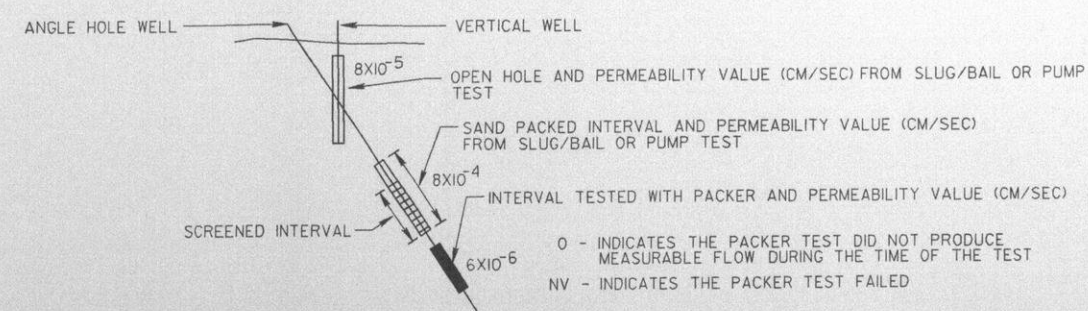
SECTION 401

DIVISION DRAWING NO.

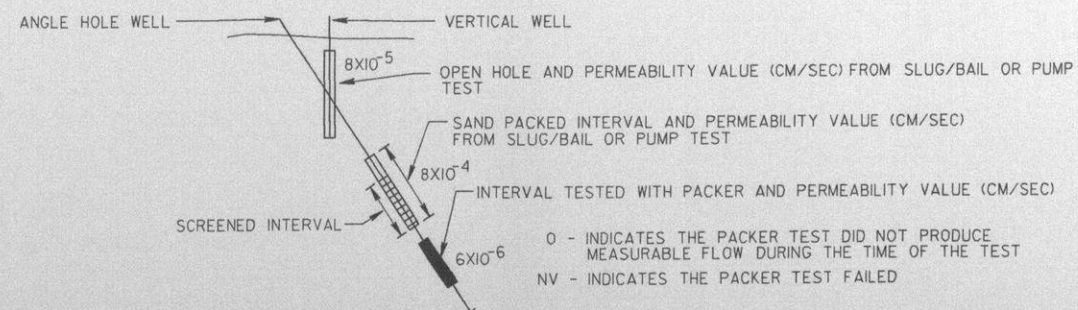
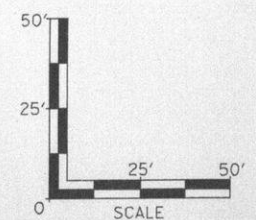
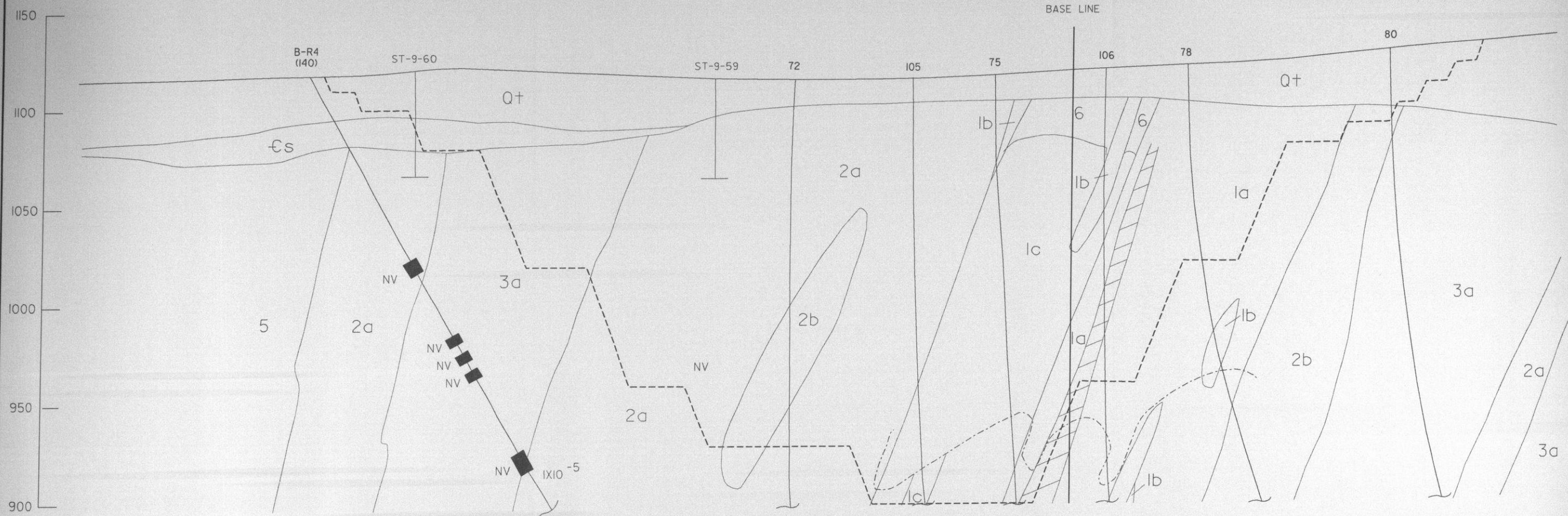
SCALE SEE BAR SCALE



- LEGEND**
- PLEISTOCENE**
Q+ GLACIAL TILL
- CAMBRIAN**
Es CAMBRIAN SANDSTONE
-ANGULAR UNCONFORMITY-
MIDDLE PRECAMBRIAN
- 4** CHLORITE SCHIST
4a QUARTZ-CHLORITE SCHIST
4b SPESSARTITE-CHLORITE SCHIST
4c CHLORITE SCHIST
- 1** MINERALIZED HORIZON
1a SERICITE-QUARTZ SCHIST
1b METACHERT
1c MASSIVE SULFIDE (>50 WT.%)
1d SEMI-MASSIVE SULFIDE (20-50 WT.%)
- 2** BIOTITE SCHIST
2a ANDALUSITE-BIOTITE SCHIST
2b ANDALUSITE-BIOTITE-SERICITE SCHIST
2c BIOTITE SCHIST
- 3** AUGEN SCHIST
3a QUARTZ-AUGEN SCHIST
3b METADACITE (VOLCANIC FLOW ROCK)
- 6** GOSSAN
--- BASE OF SUPERGENE ENRICHMENT
--- PROPOSED OPEN PIT PERIMETER



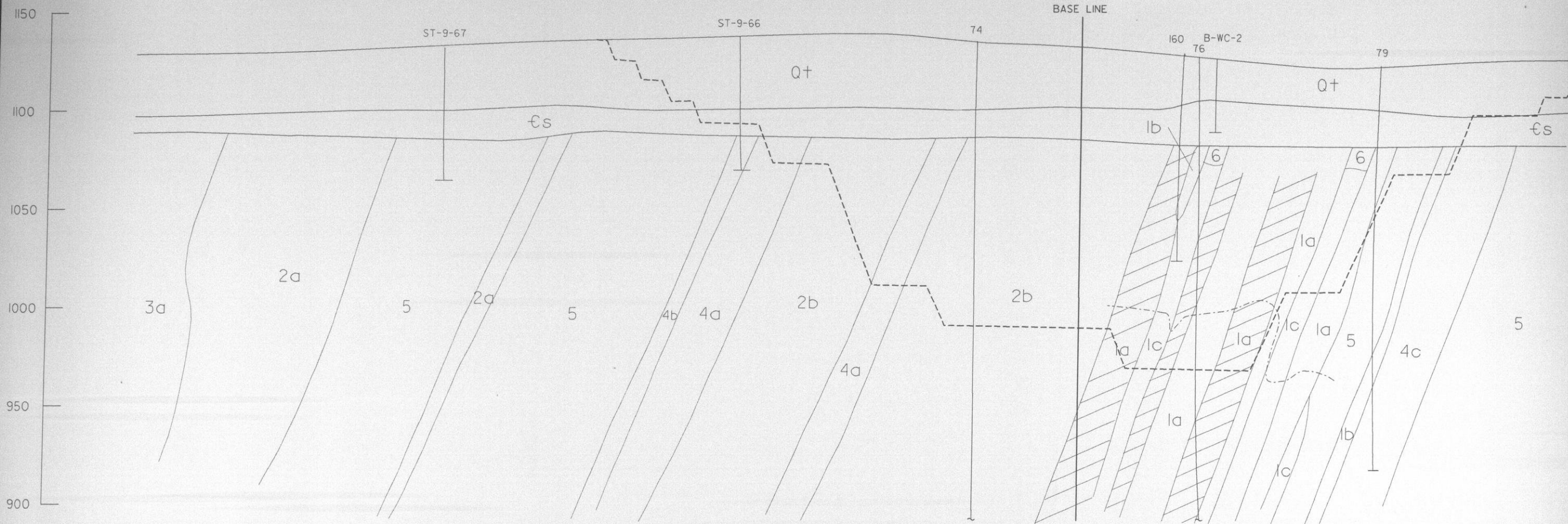
FOTH & VAN DYKE										FLAMBEAU PROJECT				MICROFILM		JOB	
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION GREEN BAY, WISCONSIN										LADYSMITH, WISCONSIN							
										KENNECOTT MINERALS COMPANY							
										1515 MINERAL SQUARE SALT LAKE CITY, UTAH 8412							
										FIGURE NO. 3.5-15 GEOLOGIC CROSS-SECTION I-I'							
										SECTION 410							
														SCALE		SEE BAR SCALE	



- | | |
|---|--|
| PLEISTOCENE | [2] BIOTITE SCHIST |
| [Q] GLACIAL TILL | [2a] ANDALUSITE-BIOTITE SCHIST |
| CAMBRIAN | [2b] ANDALUSITE-BIOTITE-SERICITE SCHIST |
| [Cs] CAMBRIAN SANDSTONE | [2c] BIOTITE SCHIST |
| -ANGULAR UNCOMFORMITY- | [3] AUGEN SCHIST |
| MIDDLE PRECAMBRIAN | [3a] QUARTZ-AUGEN SCHIST |
| [4] CHLORITE SCHIST | [5] METADACITE (VOLCANIC FLOW ROCK) |
| [4a] QUARTZ-CHLORITE SCHIST | [6] GOSSAN |
| [4b] SPESSARTITE-CHLORITE SCHIST | --- BASE OF SUPERGENE ENRICHMENT |
| [4c] CHLORITE SCHIST | --- PROPOSED OPEN PIT PERIMETER |
| [1] MINERALIZED HORIZON | |
| [1a] SERICITE-QUARTZ SCHIST | |
| [1b] METACHERT | |
| [1c] MASSIVE SULFIDE (>50 WT.%) | |
| [1d] SEMI-MASSIVE SULFIDE (20-50 WT.%) | |

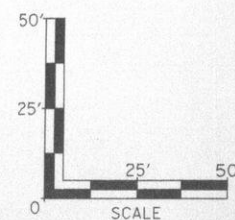
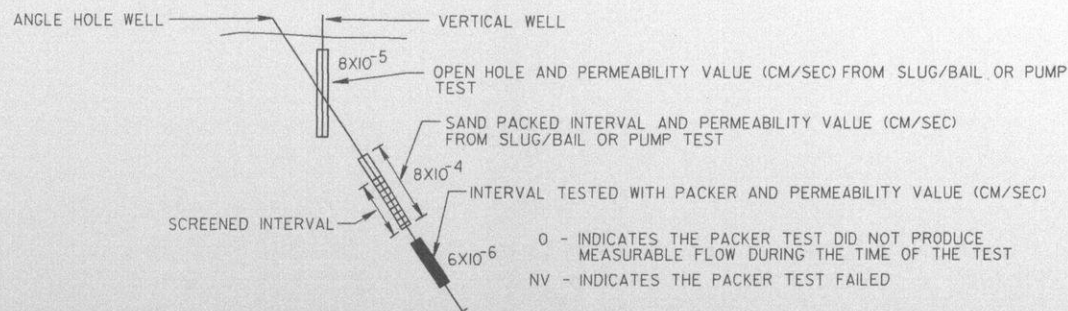
FOTH & VAN DYKE GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION GREEN BAY, WISCONSIN										FLAMBEAU PROJECT LADYSMITH, WISCONSIN										MICROFILM		JOB									
BY CHK'D ENGR ENGR MOD										BY DATE										DRAWING NO.										REV.	
PROJ. ENGR										DESIGN										FIGURE NO. 3.5-16A											
MGR. PROCESS ENGR										DRAWN DHS 4/89										GEOLOGIC CROSS-SECTION											
ENGR MOD.										CHK'D BJS 4/89										SECTION 406											
										DES. ENGR																					
										SECT ENGR																					
																														SCALE SEE BAR SCALE	

SECTION 414



LEGEND

- PLEISTOCENE**
 Q+ GLACIAL TILL
CAMBRIAN
 Cs CAMBRIAN SANDSTONE
-ANGULAR UNCONFORMITY-
MIDDLE PRECAMBRIAN
 4 CHLORITE SCHIST
 4a QUARTZ-CHLORITE SCHIST
 4b SPESSARTITE-CHLORITE SCHIST
 4c CHLORITE SCHIST
 1 MINERALIZED HORIZON
 1a SERICITE-QUARTZ SCHIST
 1b METACHERT
 1c MASSIVE SULFIDE (>50 WT.%)
 1d SEMI-MASSIVE SULFIDE (20-50 WT.%)
- 2 BIOTITE SCHIST**
 2a ANDALUSITE-BIOTITE SCHIST
 2b ANDALUSITE-BIOTITE-SERICITE SCHIST
 2c BIOTITE SCHIST
3 AUGEN SCHIST
 3a QUARTZ-AUGEN SCHIST
5 METADACITE (VOLCANIC FLOW ROCK)
6 GOSSAN
 --- BASE OF SUPERGENE ENRICHMENT
 --- PROPOSED OPEN PIT PERIMETER



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 GREEN BAY, WISCONSIN

FLAMBEAU PROJECT
 LADYSMITH, WISCONSIN

KENNECOTT MINERALS COMPANY

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 SALT LAKE CITY, UTAH
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FIGURE NO. 3.5-16B
 GEOLOGIC CROSS-SECTION
 SECTION 414

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

REFERENCES

REFERENCES

DWG. NO.	DESCRIPTION

DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR NO.	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR NO.

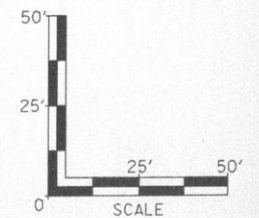
BY	CHK'D	ENGR	ENGR NO.	BY	DATE	DESIGN	BY	DATE

PROL. ENGR
 MGR. PROCESS
 ENGR. MGR.

DESIGN
 DRAWN
 CHK'D
 DES. ENGR
 SECT. ENGR

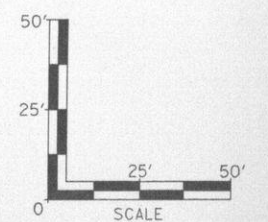
4/89
 DHS
 BJS
 4/89

BASE LINE



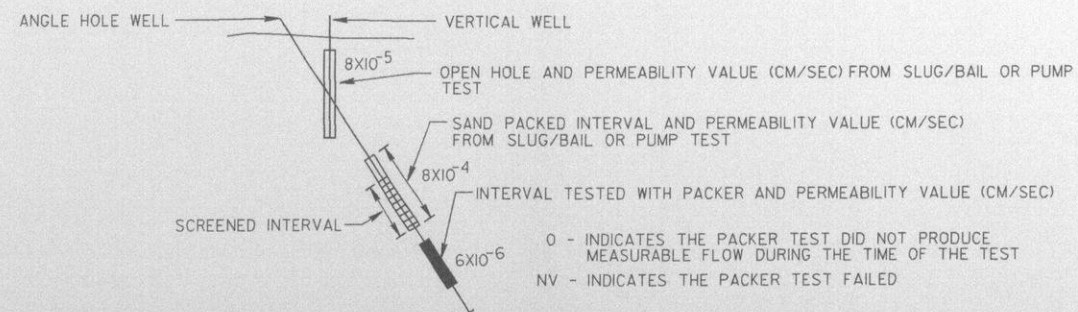
MICROFILM		JOB	
DRAWING NO.		REV.	
DIVISION DRAWING NO.			
SCALE		SEE BAR SCALE	

[illegible]



PLEISTOCENE

- [2] BIOTITE SCHIST
 2a) ANDALUSITE-BIOTITE SCHIST
 2b) ANDALUSITE-BIOTITE-SERICITE SCHIST
 2c) BIOTITE SCHIST
 [3] AUGEN SCHIST
 3a) QUARTZ-AUGEN SCHIST
 [5] METADACITE (VOLCANIC FLOW ROCK)
 [6] GOSSAN
 --- BASE OF SUPERGENE ENRICHMENT
 --- PROPOSED OPEN PIT PERIMETER



0 - INDICATES THE PACKER TEST DID NOT PRODUCE MEASURABLE FLOW DURING THE TIME OF THE TEST
NV - INDICATES THE PACKER TEST FAILED

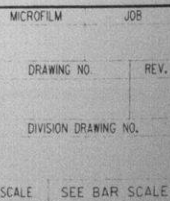
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

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MINERALS
COMPANY**
1515 MINERAL SQUARE
SALT LAKE CITY, UTAH
84112

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

REFERENCES	DWG. NO.	DESCRIPTION	REFERENCES	DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR REG.	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR REG.		BY	DATE		BY	DATE

45000 E

[illegible]

37000 E

38000 E

39000 E

40000 E

41000 E

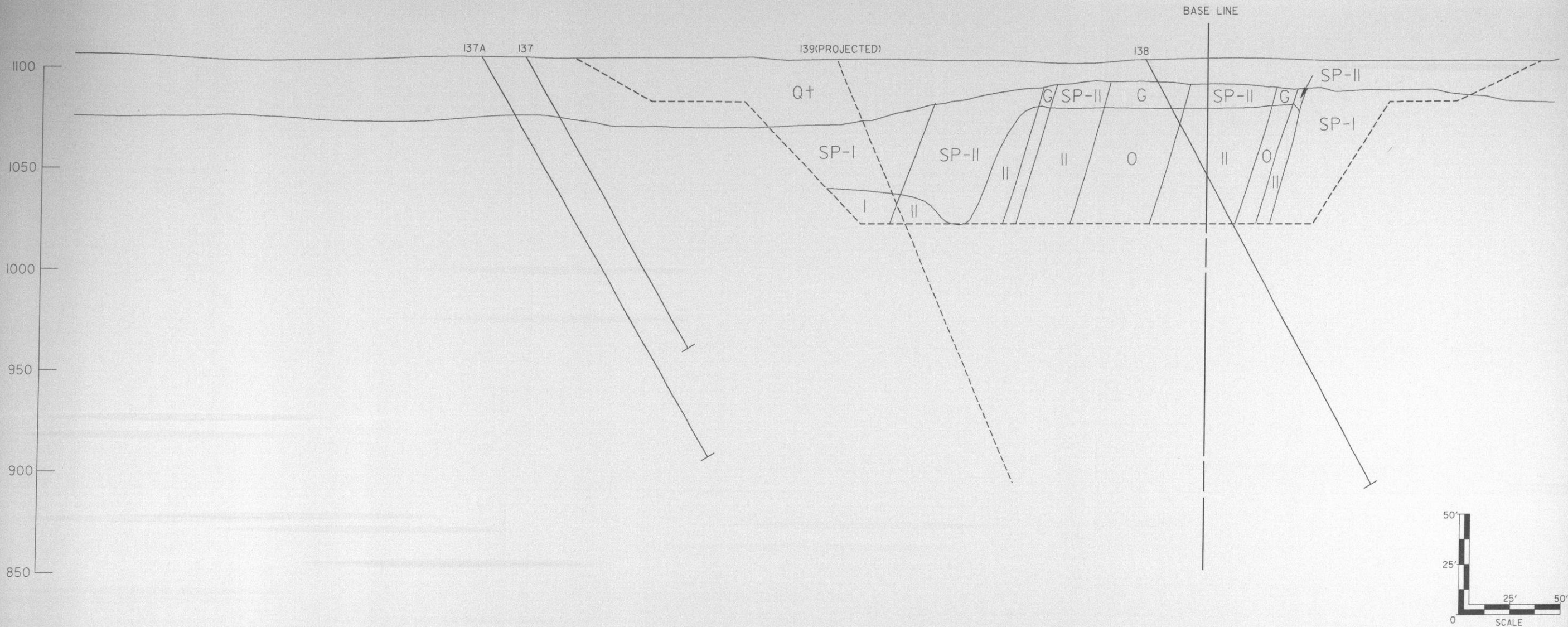
42000 E

43000 E

44000 E

45000 E





- LEGEND
- Q+ QUATERNARY PLEISTOCENE
UNCONSOLIDATED MATERIAL
- CS PALEOZOIC CAMBRIAN SANDSTONE
- PRECAMBRIAN
- G GOSSAN
- SP SAPROLITE
- O MASSIVE, SEMI-MASSIVE SULFIDE ORE
- I TYPE I WASTE ROCK,
CONTAINING < 1% SULFUR
- II TYPE II WASTE ROCK,
CONTAINING > 1% SULFUR
- PROPOSED PIT PERIMETER

FOTH & VAN DYKE
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

MICROFILM		JOB	
DRAWING NO.		REV.	
DIVISION DRAWING NO.			
SCALE		SEE BAR SCALE	

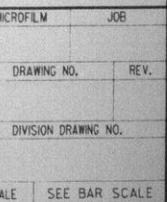
FLAMBEAU PROJECT LADYSMITH, WISCONSIN			
FIGURE NO. 3.5-23 GEOLOGIC CROSS-SECTION SECTION 40'			
WASTE ROCK AND MATERIAL WASTE DELINEATIONS			

KENNECOTT MINERALS COMPANY			
1515 MINERAL SQUARE SALT LAKE CITY, UTAH 8412			

BY	DATE	BY	DATE
DESIGN		BY	
DRAWN	2/85		
CHK'D	3/85		
DES. ENGR			
SECT. ENGR			

REFERENCES	DWG. NO.		DESCRIPTION		REFERENCES	DWG. NO.		DESCRIPTION		NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR MGR	NO.	DATE	REVISIONS	

45000 E

[illegible]

37000 E 38000 E 39000 E 40000 E 41000 E 42000 E 43000 E 44000 E 45000 E



NOTES:

1. SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
2. TOPOGRAPHIC BASE MAP PREPARED FROM AERIAL SURVEY BY SURDEX CORPORATION, CHESTERFIELD, MISSOURI, DATE OF PHOTOGRAPHY - APRIL 24, 1970. ROADS, TREES AND BUILDINGS WERE UPDATED AS PER AERIAL PHOTOGRAPH TAKEN BY MARKHURD CORPORATION, MINNEAPOLIS, MINNESOTA, DATE OF PHOTOGRAPHY - SEPTEMBER 14, 1987.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS TWO FEET.
4. HORIZONTAL DATUM BASED ON PROJECT SITE GRID SYSTEM. SITE GRID COORDINATES CORRELATION TO STATE PLANE COORDINATES DERIVED AS FOLLOWS:
SITE GRID COORDINATES CONTROL MONUMENT F-1
STATE PLANE COORDINATES
40000 E = 587,357.8087 N
40000 E = 1,713,516.1229 E
THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°13'23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.
5. SEE FIGURE NO.'S 3.6-8 AND 3.6-9 FOR HYDRO GEOLOGIC CROSS SECTIONS.

- LEGEND
- 1100— EXISTING CONTOUR
 - EXISTING PAVED ROADWAY
 - EXISTING TRAIL/GRAVEL SURFACE
 - TREES AND/OR BRUSH
 - FENCE
 - F-1 CONTROL MONUMENT

- MW-1005 MONITORING WELL
- PZ-54, PZ-56 PIEZOMETER
- ST-9-2 SOIL BORING
- 1120— HIGH GROUNDWATER CONTOUR
- INFERRED GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION

WELL	GROUNDWATER ELEVATION	WELL	GROUNDWATER ELEVATION	WELL	GROUNDWATER ELEVATION
MW-1000	1091.06	ST-9-23	1115.45	OW-36	1096.57
MW-1001	1112.83	ST-9-26	1108.92	OW-37	DRY
MW-1002	1090.72	ST-9-27A	DRY	OW-39	1099.26
MW-1003	1110.37	ST-9-28A	1099.75	OW-40	1096.85
MW-1004	1109.69	ST-9-29A	1094.99	OW-41	1097.50
MW-1005	1139.10	OW-7	1105.97	OW-42	1096.10
ST-9-2	1114.87	OW-10	1094.81	OW-43	1098.65
ST-9-19A	1109.77	OW-12	1103.14	OW-45	1093.63
ST-9-22A	DRY	OW-14	1124.84	SAND POINT (SP)	1086.84

FOTH & VAN DYKE
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

FLAMBEAU PROJECT
LADYSMITH, WISCONSIN

KENNECOTT
MINERALS
COMPANY

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SALT LAKE CITY, UTAH
8412

FIGURE NO. 3.6-4
HIGH WATER TABLE
CONTOUR MAP
APRIL 6, 1988

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHKD	ENGR	ENGR NO.	NO.	DATE	REVISIONS	BY	CHKD	ENGR	ENGR NO.

BY	DATE	DESIGN	BY	DATE

45000 E



MICROFILM		JOB	
DRAWING NO.		REV.	
DIVISION DRAWING NO.			
SCALE	SEE BAR SCALE		

[illegible]

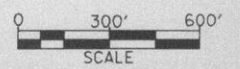
37000 E 38000 E 39000 E 40000 E 41000 E 42000 E 43000 E 44000 E 45000 E



- NOTES:
1. SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
 2. TOPOGRAPHIC BASE MAP PREPARED FROM AERIAL SURVEY BY SURDEX CORPORATION, CHESTERFIELD, MISSOURI, DATE OF PHOTOGRAPHY - APRIL 24, 1970. ROADS, TREES AND BUILDINGS WERE UPDATED AS PER AERIAL PHOTOGRAPH TAKEN BY MARKHURD CORPORATION, MINNEAPOLIS, MINNESOTA. DATE OF PHOTOGRAPHY - SEPTEMBER 14, 1987.
 3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS TWO FEET.
 4. HORIZONTAL DATUM BASED ON PROJECT SITE GRID SYSTEM. SITE GRID COORDINATES CORRELATION TO STATE PLANE COORDINATES DERIVED AS FOLLOWS:
SITE GRID COORDINATES CONTROL MONUMENT F-1 STATE PLANE COORDINATES
40000 N = 587,357.8087 N
40000 E = 1,713,516.1229 E
THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°13'23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.
 5. AVERAGE POTENTIOMETRIC SURFACE DEVELOPED BY KRIGING AVERAGE GROUNDWATER ELEVATIONS (DECEMBER TO NOVEMBER 1988) FOR THE FOLLOWING WELLS:

WELL	AVERAGE GROUNDWATER ELEVATION
MW-1003	1110.28
MW-1004S	1108.41
MW-1005	1137.51
MW-1005G	1131.72
MW-1007S	1114.72
ST-9-24	1112.94
PZ-S3	1112.84

- LEGEND
- 1100— EXISTING CONTOUR
 - EXISTING PAVED ROADWAY
 - - - EXISTING TRAIL/GRAVEL SURFACE
 - TREES AND/OR BRUSH
 - - - FENCE
 - F-1 CONTROL MONUMENT
 - MW-1005 MONITORING WELL
 - PZ-S4 PIEZOMETER
 - 1090— POTENTIOMETRIC SURFACE CONTOUR
 - - - INFERRED POTENTIOMETRIC SURFACE CONTOUR
 - - - LIMIT OF SANDSTONE
 - GROUNDWATER FLOW DIRECTION



FOTH & VAN DYKE
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

FLAMBEAU PROJECT LADYSMITH, WISCONSIN				MICROFILM		JOB	
				DRAWING NO.	REV.	DIVISION DRAWING NO.	
KENNECOTT MINERALS COMPANY 155 MINERAL SQUARE SALT LAKE CITY, UTAH 8412				FIGURE NO. 3.6-6 AVERAGE POTENTIOMETRIC SURFACE CAMBRIAN SANDSTONE			
				SCALE	SEE BAR SCALE		

REFERENCES	DWG. NO.	DESCRIPTION	REFERENCES	DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR	PROJ. ENGR MGR. PROCESS ENGR ENGR MGR.	BY	DATE	DESIGN	BY	DATE		
																						</					

37000 E

38000 E

39000 E

40000 E

41000 E

42000 E

43000 E

44000 E

45000 E



NOTES:

1. SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
2. TOPOGRAPHIC BASE MAP PREPARED FROM AERIAL SURVEY BY SURDEX CORPORATION, CHESTERFIELD, MISSOURI. DATE OF PHOTOGRAPHY - APRIL 24, 1970. ROADS, TREES AND BUILDINGS WERE UPDATED AS PER AERIAL PHOTOGRAPH TAKEN BY MARKHURD CORPORATION, MINNEAPOLIS, MINNESOTA. DATE OF PHOTOGRAPHY - SEPTEMBER 14, 1987.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS TWO FEET.
4. HORIZONTAL DATUM BASED ON PROJECT SITE GRID SYSTEM. SITE GRID COORDINATES CORRELATION TO STATE PLANE COORDINATES DERIVED AS FOLLOWS:

SITE GRID COORDINATES	STATE PLANE COORDINATES
CONTROL MONUMENT F-1	
40000 N =	587,357.8087 N
40000 E =	1,713,516.1229 E

THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°13'23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.

5. AVERAGE POTENTIOMETRIC SURFACE DEVELOPED BY KRIGING AVERAGE GROUNDWATER ELEVATIONS (DECEMBER TO NOVEMBER 1988) FOR THE FOLLOWING WELLS:

WELL	AVERAGE GROUNDWATER ELEVATION	WELL	AVERAGE GROUNDWATER ELEVATION
MW-1000	1088.91	PZ-S4	1116.17
MW-1001P	1112.53	PZ-R3	1093.30
MW-1003P	1110.34	PZ-R7	1115.41
MW-1004P	1106.17	TW-K3	1111.67
MW-1005P	1137.91	TW-K4	1116.34
PZ-S1	1094.95	TW-K5	1107.69
PZ-S2	1091.41	TW-K8	1052.89

LEGEND

- 1100— EXISTING CONTOUR
- EXISTING PAVED ROADWAY
- - - EXISTING TRAIL/GRAVEL SURFACE
- TREES AND/OR BRUSH
- * F-1 FENCE
- F-1 CONTROL MONUMENT
- MW-1005 MONITORING WELL
- PZ-S4 PIEZOMETER
- 1090— POTENTIOMETRIC SURFACE CONTOUR
- - - INFERRED POTENTIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION



0 300' 600'
SCALE

FOTH & VAN DYKE

GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

FLAMBEAU PROJECT
LADYSMITH, WISCONSIN

KENNECOTT
MINERALS
COMPANY

156 MINERAL SQUARE
SALT LAKE CITY, UTAH
8412

FIGURE NO. 3.6-7
AVERAGE POTENTIOMETRIC SURFACE
TOP OF PRECAMBRIAN ROCK

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

REFERENCES

REFERENCES

DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR

PROL. ENGR
MGR. PROCESS
ENGR
ENGR MGR.

DESIGN
DRAWN
CHK'D
DES. ENGR
SECT. ENGR

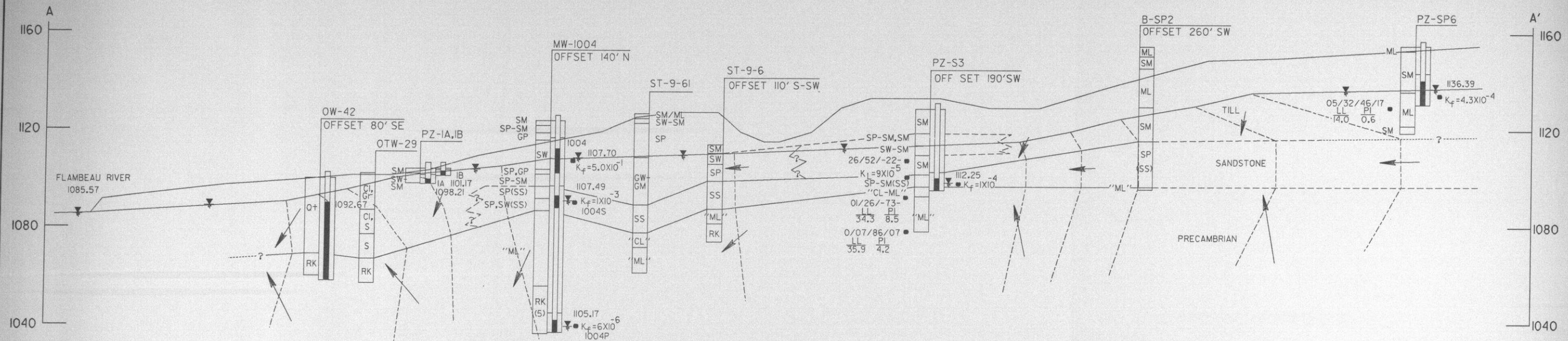
BY
DATE

BY
DATE

BY
DATE

SECTION A-A'

(LINE OF SECTION SHOWN ON FIGURE NO. 3.6-4)



QUATERNARY

Q+	TILL, AND SAND AND GRAVEL (MAY CONTAIN SOME CAMBRIAN SANDSTONE)
SM	SILTY SAND
SW-SM	WELL GRADED SAND WITH SILT
SP	POORLY GRADED SAND
SP-SM	POORLY GRADED SAND WITH SILT
SW	WELL GRADED SAND
SP-SM, SW	POORLY GRADED SAND WITH SILT INTERBEDDED WITH WELL-GRADED SAND
SM, SP	SILTY SAND INTERBEDDED WITH POORLY GRADED SAND
SW, SM	WELL GRADED SAND INTERBEDDED WITH SILTY SAND
SM/ML	SILTY SAND/SILT
SC/SM	CLAYEY SAND/SILTY SAND
SC	CLAYEY SAND
SC-SM	SILTY-CLAYEY SAND
GW	WELL GRADED GRAVEL
GW-GM	WELL GRADED GRAVEL WITH SILT
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
SP, GP	POORLY GRADED SAND INTERBEDDED WITH POORLY GRADED GRAVEL
SM/GM	SILTY SAND/SILTY GRAVEL
SM, GW-GM	SILTY SAND INTERBEDDED WITH POORLY GRADED GRAVEL WITH SILT
GM/SM	SILTY GRAVEL/SILTY SAND

LEGEND

ML	SILT
CL, S	CLAY AND SAND
CL, Gr	CLAY AND GRAVEL
S	SAND

CAMBRIAN

SS	SANDSTONE
----	-----------

PRECAMBRIAN

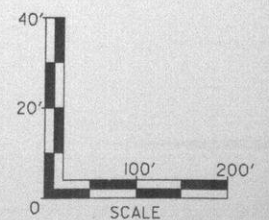
RK	ROCK
Q+z	QUARTZ
(1a)	SERICITE-QUARTZ SCHIST
(2)	BIOTITE SCHIST
(3)	AUGEN SCHIST
(5)	METADACITE (VOLCANIC FLOW ROCK)
"ML"	ROCK THAT DISAGGREGATES TO SILT
"SM"	ROCK THAT DISAGGREGATES TO SILTY SAND
"GM"	ROCK THAT DISAGGREGATES TO SILTY GRAVEL
"CL/ML"	ROCK THAT DISAGGREGATES TO LEAN CLAY/SILT
"SM/ML"	ROCK THAT DISAGGREGATES TO SILTY SAND/SILT
"SM, ML"	ROCK THAT DISAGGREGATES TO INTERBEDS OF SILTY SAND AND SILT

LL	PI
26	13
$K_f = 7.9 \times 10^{-5}$	
$K_L = 4.0 \times 10^{-9}$	
01/50/41/08	
0/93/-7-	
III 3.27	

SAMPLING POINT
 ATTERBERG LIMITS
 IN-FIELD PERMEABILITY VALUE (CM/SEC)
 LABORATORY PERMEABILITY VALUE (CM/SEC)
 GRAVEL/SAND/SILT/CLAY PERCENTAGES
 GRAVEL/SAND/P200 PERCENTAGES
 LOW WATER LEVEL
 SEPTEMBER 6, 1988
 CONTACTS-REASONABLY CERTAIN
 UNCERTAIN
 VERY UNCERTAIN
 ESTIMATED GROUNDWATER CONTOUR
 GROUNDWATER FLOW DIRECTION

WELL CONSTRUCTION INFORMATION

PZ-1008	WELL OR NEST DESIGNATION
TOP OF MEASURING POINT	
GROUND SURFACE	
TOP OF SAND PACK	
1006 WATER TABLE WELL	
WELL SCREEN	
100IG	PIEZOMETER SCREENED IN GLACIAL OR GLACIAL FLUVIAL SEDIMENT
1006S	PIEZOMETER SCREENED IN SANDSTONE
100SP	PIEZOMETER SCREENED IN PRECAMBRIAN ROCK



FOTH & VAN DYKE

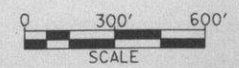
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
 GREEN BAY, WISCONSIN

FLAMBEAU PROJECT
LADYSMITH, WISCONSIN

KENNECOTT
 MINERALS
 COMPANY
 155 MINERAL SQUARE
 SALT LAKE CITY, UTAH
 8412

FIGURE NO. 3.6-8
 HYDRO GEOLOGIC CROSS SECTION
 A-A'

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE



MICROFILM		JOB	
DRAWING NO.		REV.	
DIVISION DRAWING NO.			
SCALE	SEE BAR SCALE		

- THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°-13'-23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.

- | | |
|---|-------------------------------|
|  | EXISTING CONTOUR |
|  | EXISTING PAVED ROADWAY |
|  | EXISTING TRAIL/GRAVEL SURFACE |
|  | TREES AND/OR BRUSH |
|  | FENCE |
|  | CONTROL MONUMENT |

- | | | |
|---|------------------|--|
|  | TP-10
(10.3') | TEST PIT LOCATION AND
DEPTH TO GROUNDWATER |
|  | PZ-R3
(12.3') | PIEZOMETER LOCATION AND
DEPTH TO GROUNDWATER |
|  | B-R53
(18.7') | SOIL BORING LOCATION AND
DEPTH TO GROUNDWATER |
| --- | | HYDRIC SOILS |
| --- | | HYDROPHYTIC VEGETATION |
| 7 | | WETLAND AREA DESIGNATION |

[illegible]

37000 E	38000 E	39000 E	40000 E	41000 E	42000 E	-	43000 E	44000 E	45000 E
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NOTES:

1. SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
2. TOPOGRAPHIC BASE MAP PREPARED FROM AERIAL SURVEY BY SURDEX CORPORATION, CHESTERFIELD, MISSOURI. DATE OF PHOTOGRAPHY - APRIL 24, 1970. ROADS, TREES AND BUILDINGS WERE UPDATED AS PER AERIAL PHOTOGRAPH TAKEN BY MARKHURD CORPORATION, MINNEAPOLIS, MINNESOTA. DATE OF PHOTOGRAPHY - SEPTEMBER 14, 1987.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS TWO FEET.
4. HORIZONTAL DATUM BASED ON PROJECT SITE GRID SYSTEM. SITE GRID COORDINATES CORRELATION TO STATE PLANE COORDINATES DERIVED AS FOLLOWS:

SITE GRID COORDINATES
CONTROL MONUMENT F-1
40000 N =
40000 E =

STATE PLANE
COORDINATES
587,357.8087 N
1,713,516.1229 E

THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS $359^{\circ}13'23''$ RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.

LEGEND

- | | | | | |
|---|-------------------------------|---|---------|--------------------------------|
|  | EXISTING CONTOUR |  | MW-1005 | MONITORING WELL |
|  | EXISTING PAVED ROADWAY |  | PZ-S4 | PIEZOMETER |
|  | EXISTING TRAIL/GRAVEL SURFACE |  | ST-9-2 | SOIL BORING |
|  | TREES AND/OR BRUSH |  | — 20 — | DEPTH TO WATER ISOPACH CONTOUR |
|  | FENCE | | | |
|  | CONTROL MONUMENT | | | |

 MW-1005 MONITORING WELL PZ-S4 PIEZOMETER

ST-9-2 SOIL BORING

— 20 — DEPTH TO WATER ISOPACH CONTOUR

FOTH & VAN DYKE

GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

FLAMBEAU PROJECT
LADYSMITH, WISCONSIN

**KENNECOTT
MINERALS
COMPANY**
1515 MINERAL SQUARE
SALT LAKE CITY, UTAH
84102

FIGURE NO. 3.6-21
DEPTH TO WATER
ISOPACH MAP

MICROFILM	JOB
-----------	-----

DRAWING NO.	REV
-------------	-----

VISION DRAWING NO.

SCALE	SEE BAR SCAL
-------	--------------

[illegible]

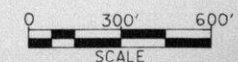
37000 E 38000 E 39000 E 40000 E 41000 E 42000 E 43000 E 44000 E 45000 E



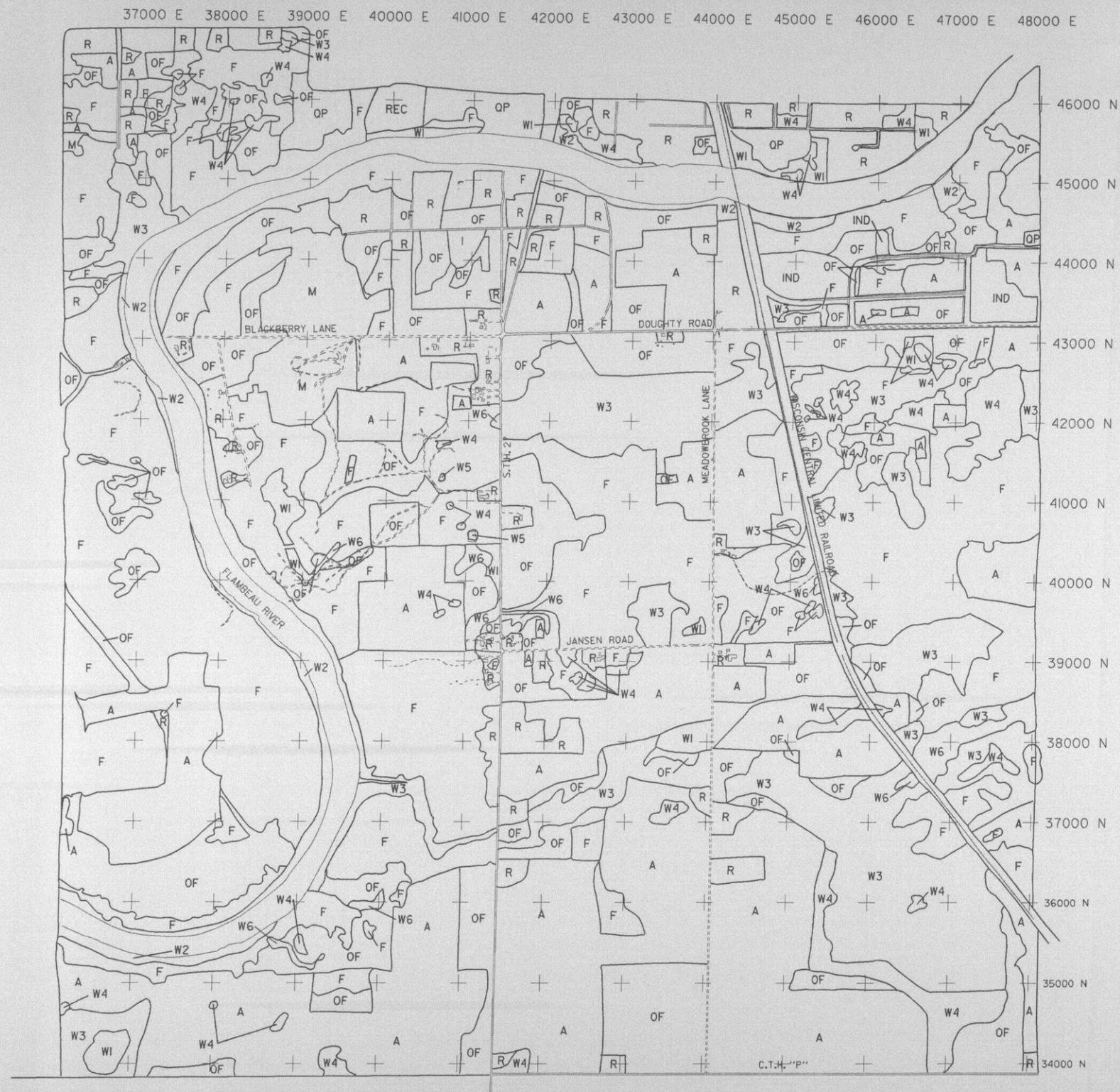
NOTES:

1. SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
2. TOPOGRAPHIC BASE MAP PREPARED FROM AERIAL SURVEY BY SURDEX CORPORATION, CHESTERFIELD, MISSOURI, DATE OF PHOTOGRAPHY - APRIL 24, 1970. ROADS, TREES AND BUILDINGS WERE UPDATED AS PER AERIAL PHOTOGRAPH TAKEN BY MARKHURD CORPORATION, MINNEAPOLIS, MINNESOTA, DATE OF PHOTOGRAPHY - SEPTEMBER 14, 1987.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS TWO FEET.
4. HORIZONTAL DATUM BASED ON PROJECT SITE GRID SYSTEM. SITE GRID COORDINATES CORRELATION TO STATE PLANE COORDINATES DERIVED AS FOLLOWS:
SITE GRID COORDINATES CONTROL MONUMENT F-1
STATE PLANE COORDINATES
40000 N = 587,357.8087 N
40000 E = 1,713,516.1229 E
THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°13'-23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.

- LEGEND
- 1100 EXISTING CONTOUR
 - EXISTING PAVED ROADWAY
 - EXISTING TRAIL/GRAVEL SURFACE
 - TREES AND/OR BRUSH
 - F-1 FENCE
 - CONTROL MONUMENT
 - SOIL SAMPLE LOCATIONS
 - VEGETATION SAMPLE LOCATIONS
 - SOIL INVERTEBRATE LOCATIONS
 - ANURAN VOICE SURVEY POINTS
 - SMALL MAMMAL TRAPPING AREAS
 - BIRD OBSERVATION ROUTES



FOTH & VAN DYKE										FLAMBEAU PROJECT										MICROFILM		JOB	
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION										LADYSMITH, WISCONSIN													
GREEN BAY, WISCONSIN																				DRAWING NO.		REV.	
BY	CHKD	ENGR	ENGR MGR			BY	DATE				BY	DATE											
				PROJ. ENGR					DESIGN														
				MGR. ENGINEER			MJO 3/89		DRAWN			T.W. 3-89											
				ENGR					CHKD														
				ENGR MGR.					DES. ENGR														
									SECT. ENGR														
										KENNECOTT MINERALS COMPANY													
										1515 MINERAL SQUARE													
										SALT LAKE CITY, UTAH													
										8412													
										FIGURE NO. 3.9-2													
										TERRESTRIAL SAMPLE LOCATIONS													
																				DIVISION DRAWING NO.			
																				SCALE		SEE BAR SCALE	



LAND USE STUDY AREA
ACREAGE TOTALS

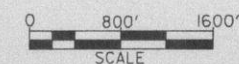
LAND USE CLASSIFICATION		ACRES
A	AGRICULTURE	754.3
F	UPLAND MIXED FOREST	924.8
OF	PASTURE / OLD FIELD / MEADOW	585.3
R	RESIDENTIAL / DISTURBED	183.1
W	WETLANDS	545.5
W1	NORTHERN WET MESIC FOREST	34.1
W2	RIVERINE FLOODPLAIN MEADOW	59.4
W3	ALDER THICKET; BOG	336.7
W4	NORTHERN SEDGE MEADOW, ALDER THICKETT	93.1
W5	DUG PONDS	0.4
W6	NORTHERN SEDGE MEADOW	21.8
REC	RECREATION	8.3
OP	QUASI PUBLIC	37.4
IND	INDUSTRIAL	25.7
M	GRAVEL PIT	59.5
	TRANSPORTATION (HWY'S,ROADS,RR)	60.0
	FLAMBEAU RIVER	169.8
TOTAL		3353.7

NOTES:

- SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
- HORIZONTAL DATUM BASED ON WISCONSIN STATE PLANE COORDINATE SYSTEM, NORTH ZONE. SITE GRID COORDINATES DERIVED AS FOLLOWS:

SITE GRID-	STATE
CONTROL MONUMENT F-1	PLANE
40000 N =	587,357.0087 N
40000 E =	1,713,516.1229 E

THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°-13'-23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.



FOTH & VAN DYKE
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

FLAMBEAU PROJECT
LADYSMITH, WISCONSIN

KENNECOTT
MINERALS
COMPANY

155 MINERAL SQUARE
SALT LAKE CITY, UTAH
84012

FIGURE NO. 3, II-3
STUDY AREA LAND USE

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR

BY	DATE	DESIGN	BY	DATE
		DRAWN	MJD	3/89
		CHK'D	KAT	3/89
		DES. ENGR		
		SECT. ENGR		

Topographic map of a coastal area with a grid overlay. The map shows contour lines, roads, and geographical features. A grid of latitude and longitude coordinates is overlaid on the map. The map includes labels for 'GRABEL PIT', 'BLACKBERRY LANE', 'MEADOWBROOK LANE', 'JANSEN ROAD', and 'FLAMBEAU RIVER'. The grid shows latitude from 34000 N to 46000 N and longitude from 13700 W to 13900 W. The map is titled 'C.T.H. 11P' at the bottom right.

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

[illegible]

37000 E

38000 E

39000 E

40000 E

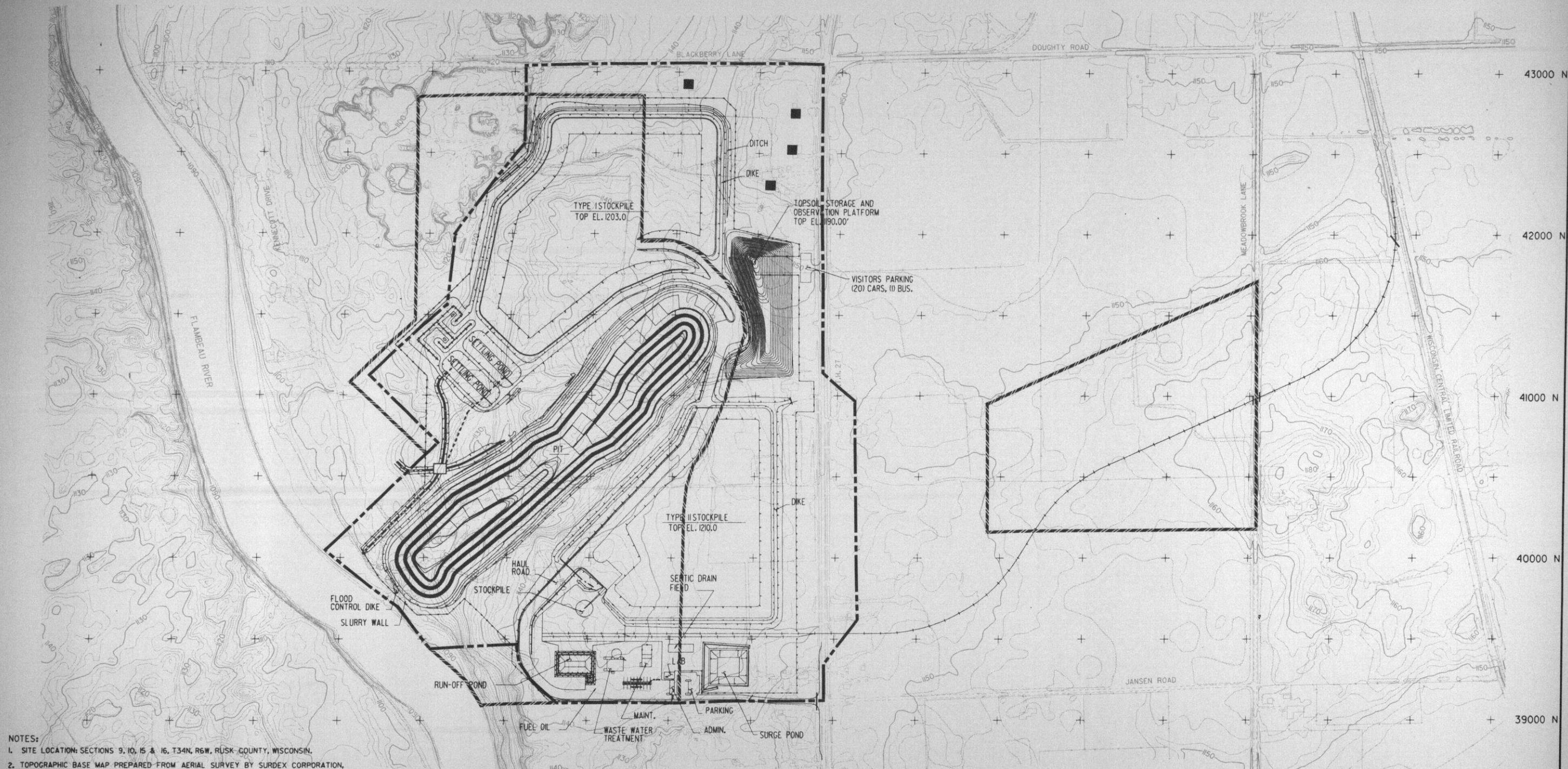
41000 E

42000 E

43000 E

44000 E

45000 E



NOTES:

1. SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
2. TOPOGRAPHIC BASE MAP PREPARED FROM AERIAL SURVEY BY SURDEX CORPORATION, CHESTERFIELD, MISSOURI, DATE OF PHOTOGRAPHY - APRIL 24, 1970. ROADS, TREES AND BUILDINGS WERE UPDATED AS PER AERIAL PHOTOGRAPH TAKEN BY MARKHURD CORPORATION, MINNEAPOLIS, MINNESOTA, DATE OF PHOTOGRAPHY - SEPTEMBER 14, 1987.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS TWO FEET.
4. HORIZONTAL DATUM BASED ON PROJECT SITE GRID SYSTEM. SITE GRID COORDINATES CORRELATION TO STATE PLANE COORDINATES DERIVED AS FOLLOWS:

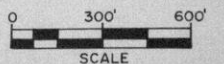
SITE GRID COORDINATES	STATE PLANE COORDINATES
CONTROL MONUMENT F-1	
40000 N =	587,357.8087 N
40000 E =	1,713,516.1229 E

THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°-13'-23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.

5. MINE FACILITIES DESIGN BY FORD, BACON & DAVIS, INCORPORATED, SALT LAKE CITY, UTAH AND PINCOCK, ALLEN & HOLT, INCORPORATED, LAKEWOOD, COLORADO.

LEGEND

- 100' EXISTING CONTOUR
- EXISTING PAVED ROADWAY
- EXISTING TRAIL/GRAVEL SURFACE
- TREES AND/OR BRUSH
- EXISTING FENCE
- NOISE IMPACT AREA PREFERRED ALTERNATIVE
- NOISE IMPACT AREA ALTERNATIVE
- KENNECOTT OWNED RESIDENCE SUBJECT TO SOME NOISE IMPACT, PREFERRED ALTERNATIVE ONLY



FOTH & VAN DYKE

GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

FLAMBEAU PROJECT
LADYSMITH, WISCONSIN

KENNECOTT
MINERALS
COMPANY

155 MINERAL SQUARE
SALT LAKE CITY, UTAH
84102

FIGURE NO. 43-2
VEHICULAR NOISE IMPACT AREAS

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

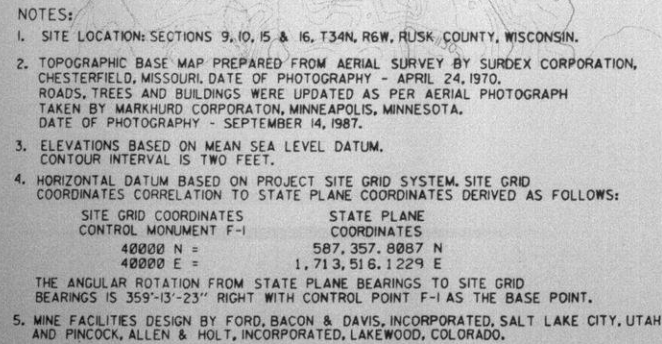
REFERENCES

REFERENCES

DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR

BY	CHK'D	ENGR	ENGR	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR

DESIGN	BY	DATE	DESIGN	BY	DATE
CHK'D	S.J.L.	MAR. 89	CHK'D	T.J.W.	3/89
DES. ENGR			DES. ENGR		
SECT ENGR			SECT ENGR		



T-3 AFFECTED UTILITY

T	- OVERHEAD TELEPHONE LINE
UT	- UNDERGROUND TELEPHONE LINE
E	- OVERHEAD ELECTRIC LINE
G	- NATURAL GAS PIPELINE



FIGURE NO. 43-13
PROJECT UTILITIES
AND IMPACTS
PREFERRED ALTERNATIVE

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

37000 E

38000 E

39000 E

40000 E

41000 E

42000 E

43000 E

44000 E

45000 E



NOTES:

- SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
- TOPOGRAPHIC BASE MAP PREPARED FROM AERIAL SURVEY BY SURDEX CORPORATION, CHESTERFIELD, MISSOURI. DATE OF PHOTOGRAPHY - APRIL 24, 1970. ROADS, TREES AND BUILDINGS WERE UPDATED AS PER AERIAL PHOTOGRAPH TAKEN BY MARKHURD CORPORATION, MINNEAPOLIS, MINNESOTA. DATE OF PHOTOGRAPHY - SEPTEMBER 14, 1987.
- ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS TWO FEET.
- HORIZONTAL DATUM BASED ON PROJECT SITE GRID SYSTEM. SITE GRID COORDINATES CORRELATION TO STATE PLANE COORDINATES DERIVED AS FOLLOWS:
SITE GRID COORDINATES
CONTROL MONUMENT F-1
40000 N = 587,357.8087 N
40000 E = 1,713,516.1229 E
THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°13'-23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.
- MINE FACILITIES DESIGN BY FORD, BACON & DAVIS, INCORPORATED, SALT LAKE CITY, UTAH AND PINCOCK, ALLEN & HOLT, INCORPORATED, LAKEWOOD, COLORADO.

LEGEND

- 1100 EXISTING CONTOUR
- EXISTING PAVED ROADWAY
- EXISTING TRAIL/GRAVEL SURFACE
- TREES AND/OR BRUSH
- FENCE
- F-1 CONTROL MONUMENT
- WETLANDS



0 300' 600'
SCALE

FOTH & VAN DYKE

GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

FLAMBEAU PROJECT
LADYSMITH, WISCONSIN

KENNECOTT
MINERALS
COMPANY

1515 MINERAL SQUARE
SALT LAKE CITY, UTAH
84102

FIGURE NO. 1
SITE PLOT PLAN

MICROFILM	JOB
DRAWING NO.	REV.
DIVISION DRAWING NO.	
SCALE	SEE BAR SCALE

DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR	NO.	DATE	REVISIONS	BY	CHK'D	ENGR	ENGR

BY	DATE	DESIGN	BY	DATE
		DRWN	SJD	FEB 89
		CHK'D	TOW	FEB 89
		DES. ENGR		
		SECT ENGR		

37000 E 38000 E 39000 E 40000 E 41000 E 42000 E 43000 E 44000 E 45000 E

43000 N

42000 N

41000 N

40000 N

39000 N

NOTES:

1. SITE LOCATION: SECTIONS 9, 10, 15 & 16, T34N, R6W, RUSK COUNTY, WISCONSIN.
2. TOPOGRAPHIC BASE MAP PREPARED FROM AERIAL SURVEY BY SURDEX CORPORATION, CHESTERFIELD, MISSOURI, DATE OF PHOTOGRAPHY - APRIL 24, 1970. ROADS, TREES AND BUILDINGS WERE UPDATED AS PER AERIAL PHOTOGRAPH TAKEN BY MARKHURD CORPORATION, MINNEAPOLIS, MINNESOTA, DATE OF PHOTOGRAPHY - SEPTEMBER 14, 1987.
3. ELEVATIONS BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS TWO FEET.
4. HORIZONTAL DATUM BASED ON PROJECT SITE GRID SYSTEM. SITE GRID COORDINATES CORRELATION TO STATE PLANE COORDINATES DERIVED AS FOLLOWS:

SITE GRID COORDINATES		STATE PLANE COORDINATES	
CONTROL MONUMENT F-1			
40000 N =	587,357.8087 N		
40000 E =	1,713,516.1229 E		

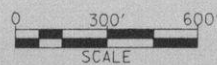
THE ANGULAR ROTATION FROM STATE PLANE BEARINGS TO SITE GRID BEARINGS IS 359°13'23" RIGHT WITH CONTROL POINT F-1 AS THE BASE POINT.
5. ALL SOILS INFORMATION OBTAINED FROM RUSK COUNTY SOIL CONSERVATION SERVICE AND LAND CONSERVATION DEPARTMENT, LADYSMITH, WISCONSIN.
 - SOIL MAP BOUNDARIES OBTAINED FROM STATE SOILS MAPS DEVELOPED 1964 - 1966
 - UPDATED MAPPING CONDUCTED JUNE 1988 BY USDA, SOIL CONSERVATION SERVICE.
 - SOIL UNIT NAMES CURRENT AS OF JUNE 20, 1988.
 - HYDRIC SOIL DATA PREPARED BY K. LUBICH OF SOIL CONSERVATION SERVICE - NOVEMBER 1986.

6. SLOPE GROUPS ARE DESIGNATED BY THE FOLLOWING LETTERS:

A = 0-2%
B = 2-6%
C = 6-12%
D = 12-20%
E = 20-30%
F = 30% AND OVER

LEGEND

- 1100 EXISTING CONTOUR
- EXISTING PAVED ROADWAY
- EXISTING TRAIL/GRAVEL SURFACE
- TREES AND/OR BRUSH
- FENCE
- CONTROL MONUMENT
- 77A SOIL UNIT BOUNDARY
- 156B SOIL UNIT SYMBOL - % SLOPE
- ISOLATED WET SOIL AREA



SOIL LEGEND

- | | | | |
|----|---|-----|--|
| 6 | STURGEON FINE SANDY LOAM, SOMEWHAT POORLY DRAINED | 156 | MAGNOR SILT LOAM, SOMEWHAT POORLY DRAINED |
| 33 | CHETEK SANDY LOAM, SOMEWHAT EXCESSIVELY DRAINED | 157 | FREON SILT LOAM, MODERATELY WELL DRAINED |
| 38 | ROSHOLT SANDY LOAM, WELL DRAINED | 324 | POSKIN VARIANT SILT LOAM, SOMEWHAT POORLY DRAINED |
| 43 | ANTIGO SILT LOAM, WELL DRAINED | 326 | CABLE SILT LOAM, VERY POORLY DRAINED |
| 44 | TERRACE ESCARPMENT, WELL DRAINED | 334 | POLOVER SANDY LOAM, SOMEWHAT POORLY DRAINED |
| 48 | BRILL SILT LOAM, MODERATELY WELL DRAINED | 339 | BEVENT LOAMY FINE SAND, WELL DRAINED |
| 77 | AUBURNDAL SILT LOAM, POORLY DRAINED | 400 | SEELYVILLE, MARKEY AND CATHRO-MUCKS, VERY POORLY DRAINED |
| | | | •HYDRIC SOIL |

FOTH & VAN DYKE

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KENNECOTT
MINERALS
COMPANY

155 MINERAL SQUARE
SALT LAKE CITY, UTAH
84102

FIGURE NO. 2
SOILS OF THE STUDY AREA

MICROFILM JOB

DRAWING NO. REV.

DIVISION DRAWING NO.

SCALE SEE BAR SCALE

5. REFER TO TEXT FOR DETAIL DESCRIPTION OF PLANT COMMUNITIES.

	EXISTING CONTOUR
	EXISTING PAVED ROADWAY
	EXISTING TRAIL/GRAVEL SURFACE
	TREES AND/OR BRUSH
	FENCE
	CONTROL MONUMENT

```

A  AGRICULTURE
F  UPLAND MIXED FOREST
OF PASTURE/OLD FIELD/EARLY SUCCESSIONAL
R  RESIDENTIAL/DISTURBED
T  TRANSPORTATION
W  WETLANDS
    - W1  NORTHERN WET MESIC FOREST
    - W2  RIVERINE FLOODPLAIN MEADOW
    - W3  ADLER THICKET; BOG
    - W4  NORTHERN SEDGE MEADOW, ADLER THICKET
    - W5  DUG PONDS
    - W6  NORTHERN SEDGE MEADOW
    - W7  RIVERINE
    - W8  NORTHERN MESIC FOREST

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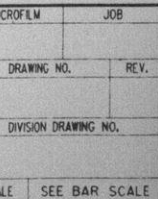
GEOSCIENCES & ENVIRONMENTAL MANAGEMENT DIVISION
GREEN BAY, WISCONSIN

FIGURE NO. 3
PLANT COMMUNITIES
OF THE STUDY AREA

MICROFILM		JOB	
DRAWING NO.		REV.	
DIVISION DRAWING NO.			
SCALE	SEE BAR SCALE		

[illegible]

45000 E

[illegible]

