FIGURES



SITE LOCATION MAP

- EAGLE PROJECT
- AIRPORT
- HIGHWAY
- MAJOR ROAD
- ROAD
- COUNTY BOUNDARY
- URBAN AREA
- HYDROGRAPHY
- RAILROAD



Reference

Data provided by: ESRI, Kennecott Eagle Minerals, North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 10 20 Miles

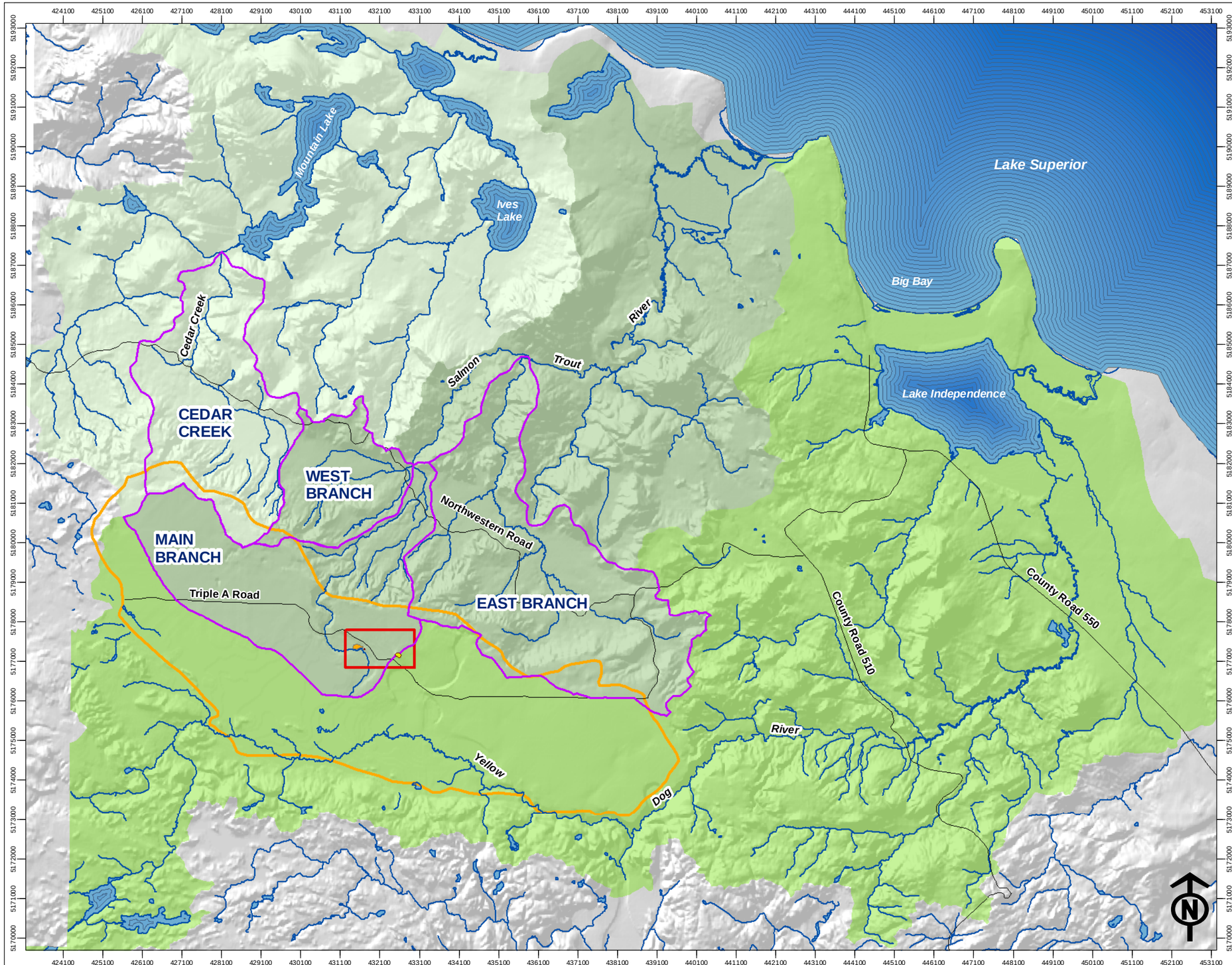
Scale: 1: 500,000

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 1



REGIONAL OVERVIEW

- ORE BODY
- OUTCROP
- EAGLE PROJECT
- PINE RIVER WATERSHED
- SALMON TROUT RIVER WATERSHED
- YELLOW DOG RIVER WATERSHED
- SUBWATERSHED
- YELLOW DOG PLAINS
- HYDROGRAPHY
- ROAD

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 1 2 Miles

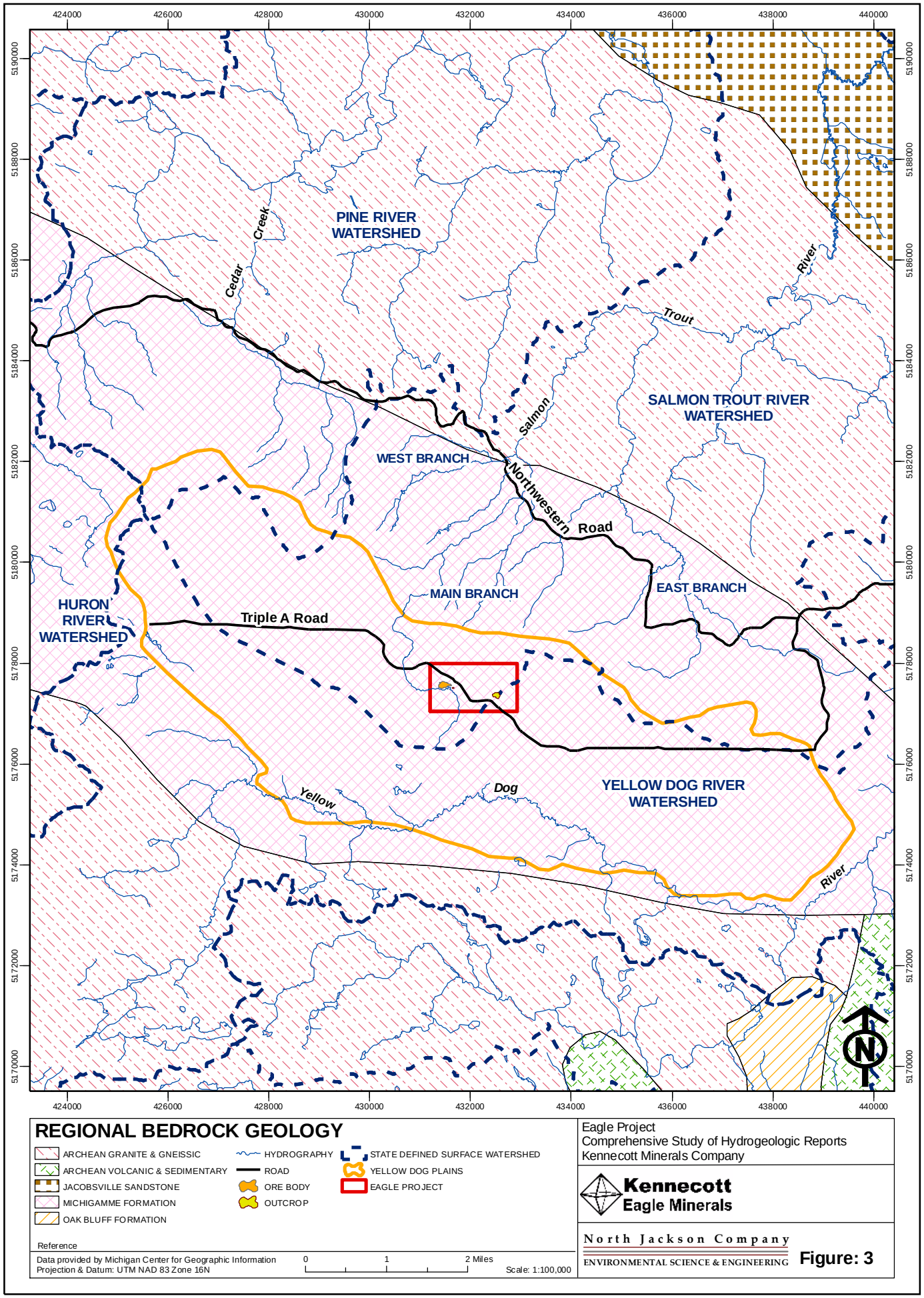
Scale: 1:100,000

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 2



REGIONAL BEDROCK GEOLOGY

- ARCHEAN GRANITE & GNEISSIC
- ARCHEAN VOLCANIC & SEDIMENTARY
- JACOBSVILLE SANDSTONE
- MICHIGAMME FORMATION
- OAK BLUFF FORMATION
- HYDROGRAPHY
- ROAD
- ORE BODY
- OUTCROP
- STATE DEFINED SURFACE WATERSHED
- YELLOW DOG PLAINS
- EAGLE PROJECT

Reference

Data provided by Michigan Center for Geographic Information
Projection & Datum: UTM NAD 83 Zone 16N

0 1 2 Miles

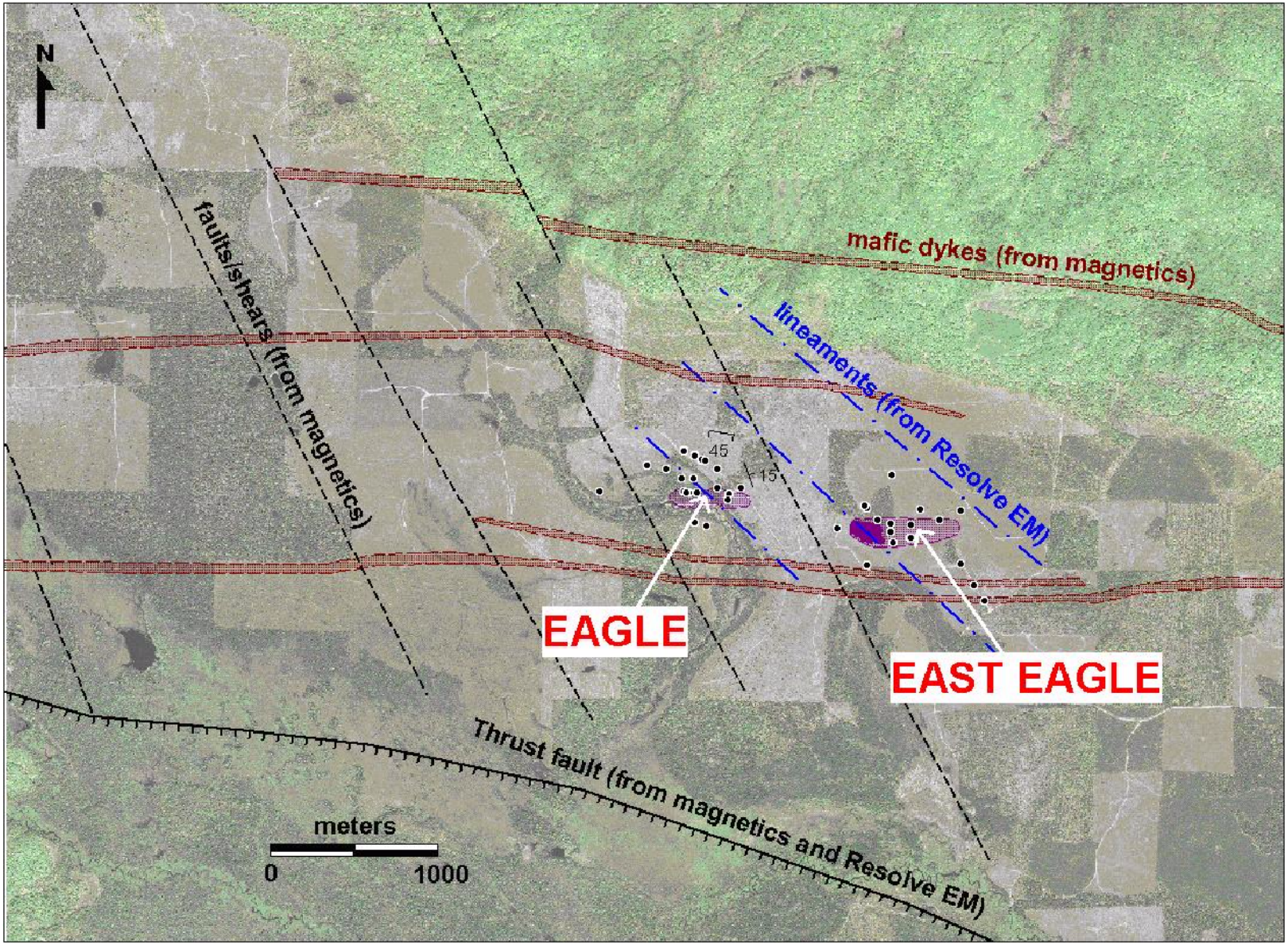
Scale: 1:100,000

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 3



EAGLE DEPOSIT GEOLOGY

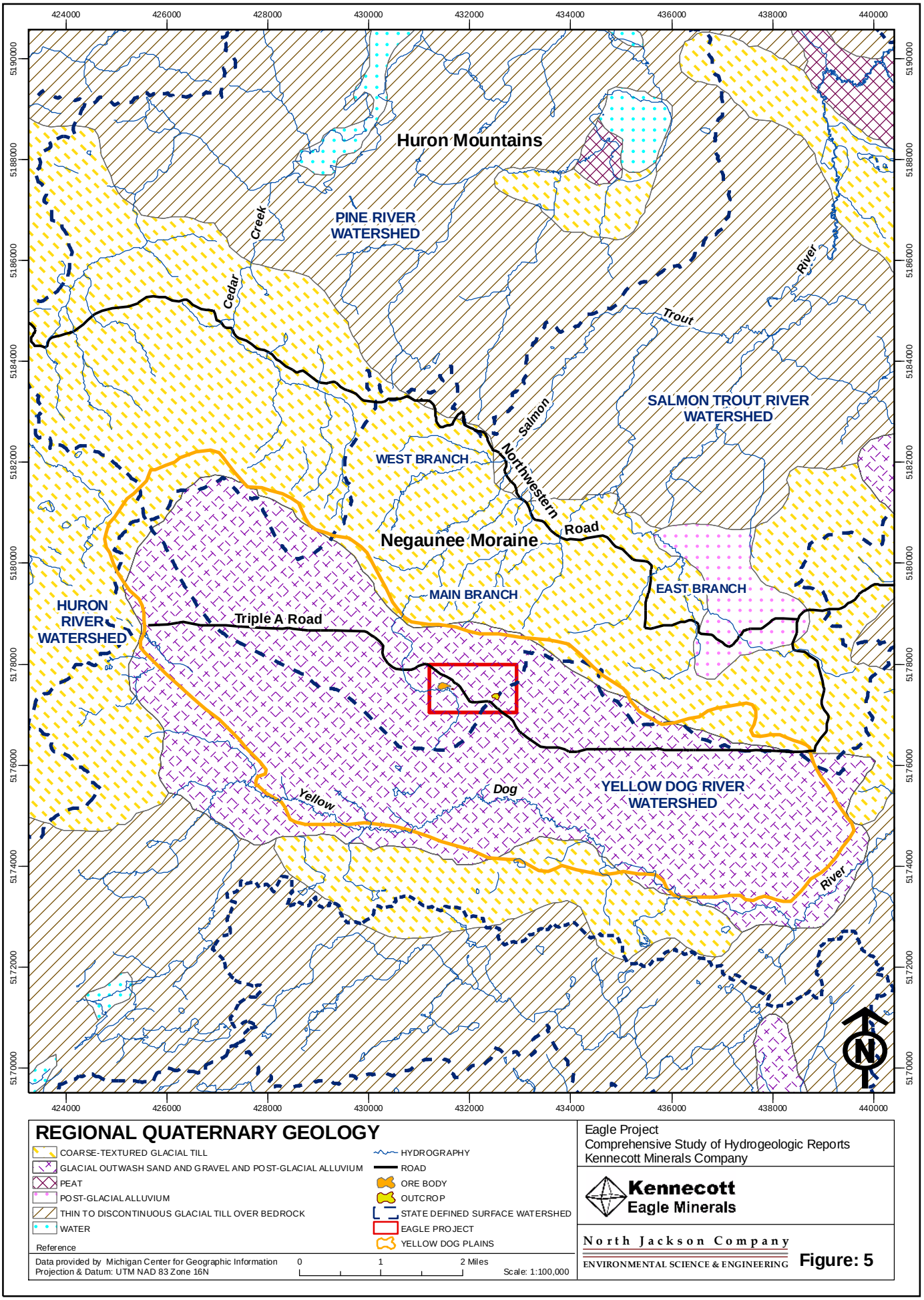
Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 4

Reference: Figure source modified from KEX 2005



REGIONAL QUATERNARY GEOLOGY

- COARSE-TEXTURED GLACIAL TILL
- GLACIAL OUTWASH SAND AND GRAVEL AND POST-GLACIAL ALLUVIUM
- PEAT
- POST-GLACIAL ALLUVIUM
- THIN TO DISCONTINUOUS GLACIAL TILL OVER BEDROCK
- WATER
- HYDROGRAPHY
- ROAD
- ORE BODY
- OUTCROP
- STATE DEFINED SURFACE WATERSHED
- EAGLE PROJECT
- YELLOW DOG PLAINS

Reference

Data provided by Michigan Center for Geographic Information
Projection & Datum: UTM NAD 83 Zone 16N

0 1 2 Miles

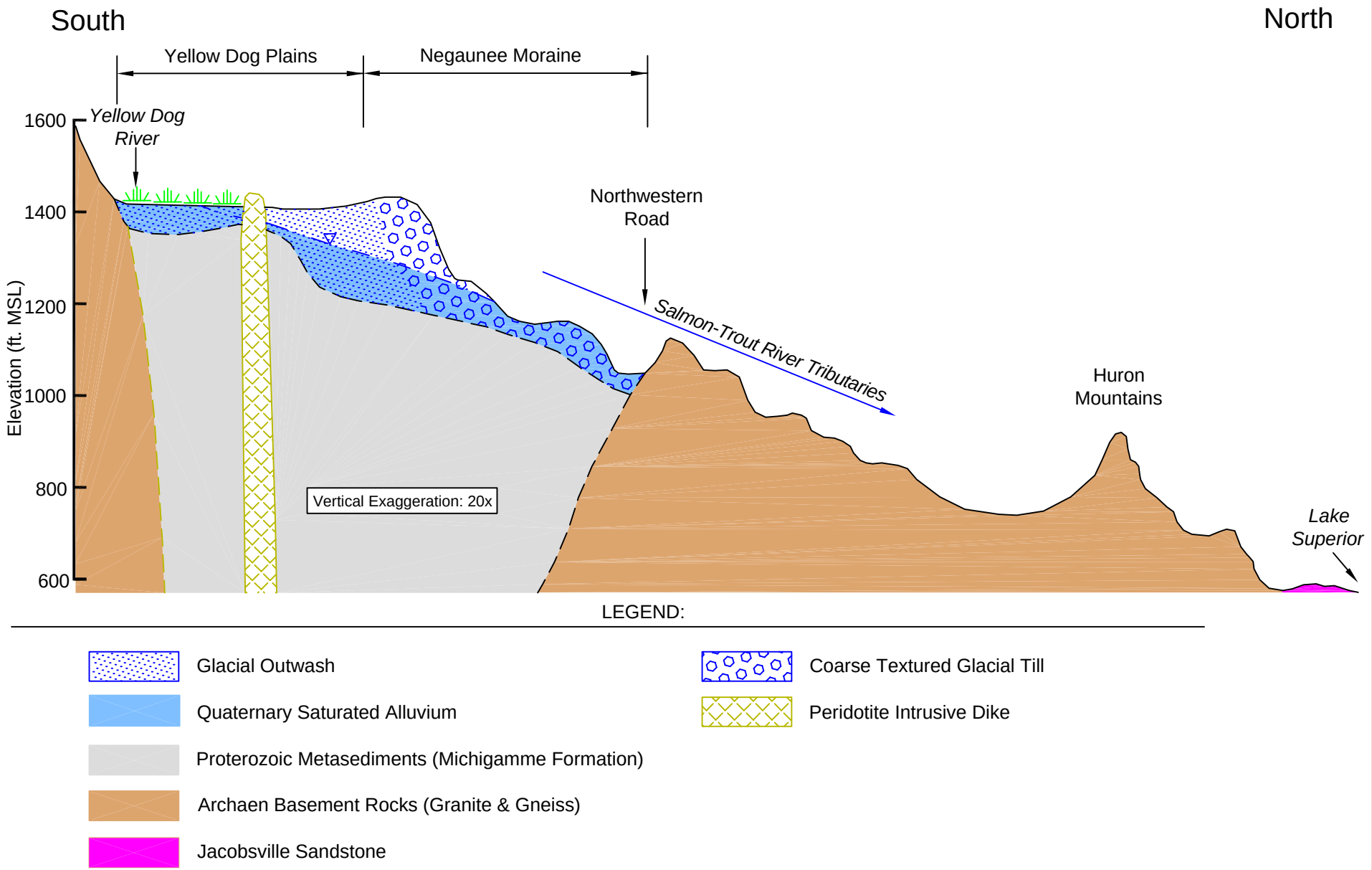
Scale: 1:100,000

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 5



NORTH JACKSON COMPANY
1004 Harbor Hills Drive, Suite 102
Marquette, MI 49855

0 6,000
Feet
Vertical Exaggeration: 20x

FIGURE 6
GENERALIZED GEOLOGIC CROSS SECTION
Eagle Project

C:\GIS - Business\Projects\North Jackson\Eagle\2005 Work\Figure 5 - 05.dwg 09/19/2005 05:45:46 AM

WELLHEAD PROTECTION / WATER WELL SURVEY

- ORE BODY
- OUTCROP
- EAGLE PROJECT
- WELL SEARCH AREA
- TOWNSHIP
- TOWN/RANGE LINE
- SECTION LINE
- QUARTER/QUARTER SECTION
- WATER WELL
- POWELL TOWNSHIP WELLHEAD PROTECTION
- 1/2 MILE WELL SEARCH RADIUS for GROUNDWATER DISCHARGE AREA

Reference

Data provided by: Kennecott Eagle Minerals, North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 1 2 Miles

Scale: 1:100,000

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 7

GROUNDWATER MONITORING LOCATIONS

- ORE BODY
- OUTCROP
- EAGLE PROJECT
- CROSS-SECTION
- ROAD
- HYDROGRAPHY
- MONITORING WELL
- SEEP PIEZOMETER
- SURFACE WATER MONITORING
- WETLAND PIEZOMETER
- MONITORING WELL/PIEZOMETER

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 3,000 6,000 Feet

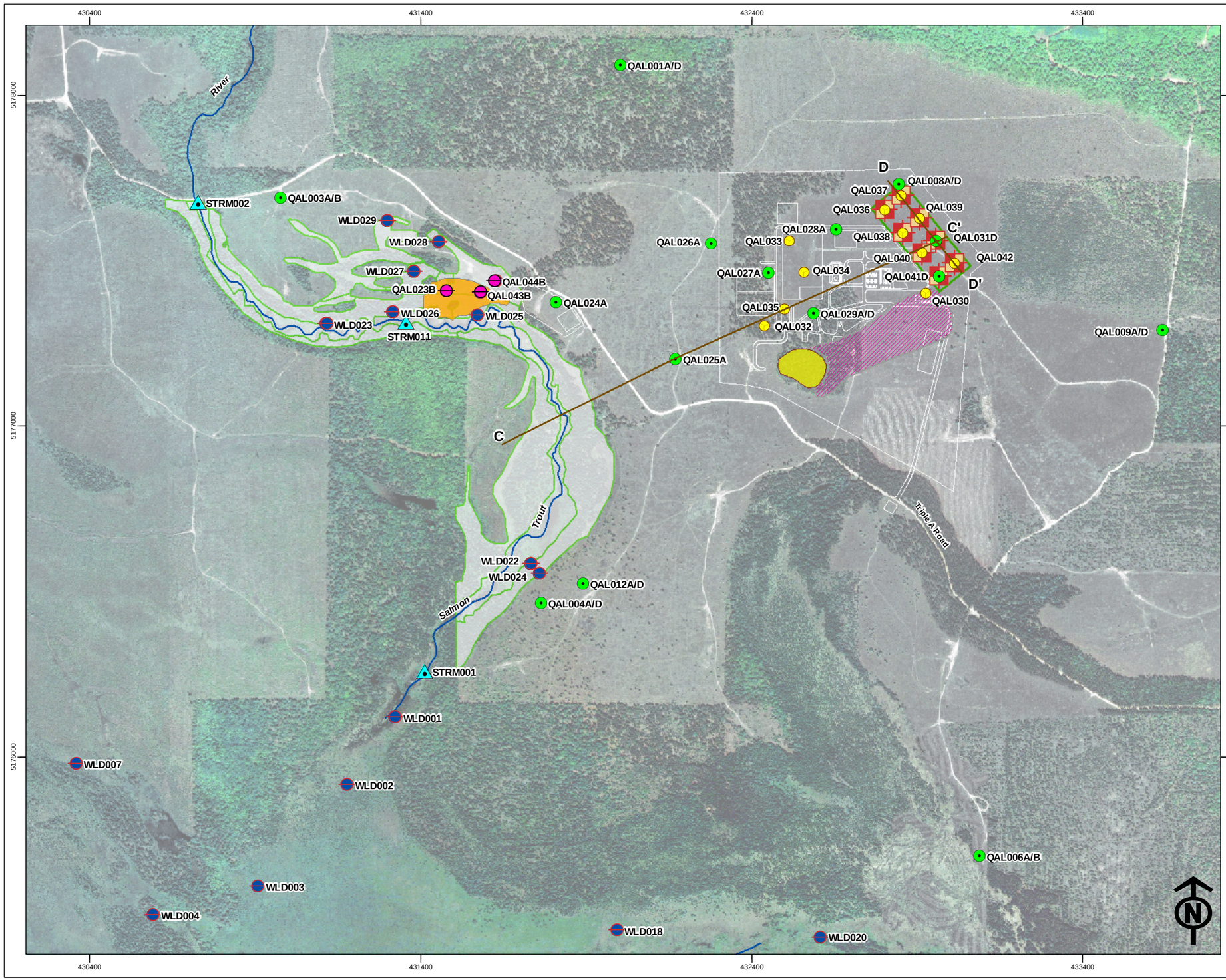
Scale: 1:36,000

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 8



GROUNDWATER and SOIL INVESTIGATION LOCATIONS PROJECT VIEW

- ORE BODY
- OUTCROP
- A ZONE UNSATURATED
- PROJECT WETLAND
- PROPOSED SITE PLAN
- PROPOSED DISCHARGE AREA
- CROSS SECTION
- SOIL BORING
- SOIL TEST PIT & INFILTRATION TEST
- MONITORING WELL
- WETLAND PIEZOMETER
- MONITORING WELL / PIEZOMETER
- SURFACE WATER MONITORING

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 1,000 2,000 Feet

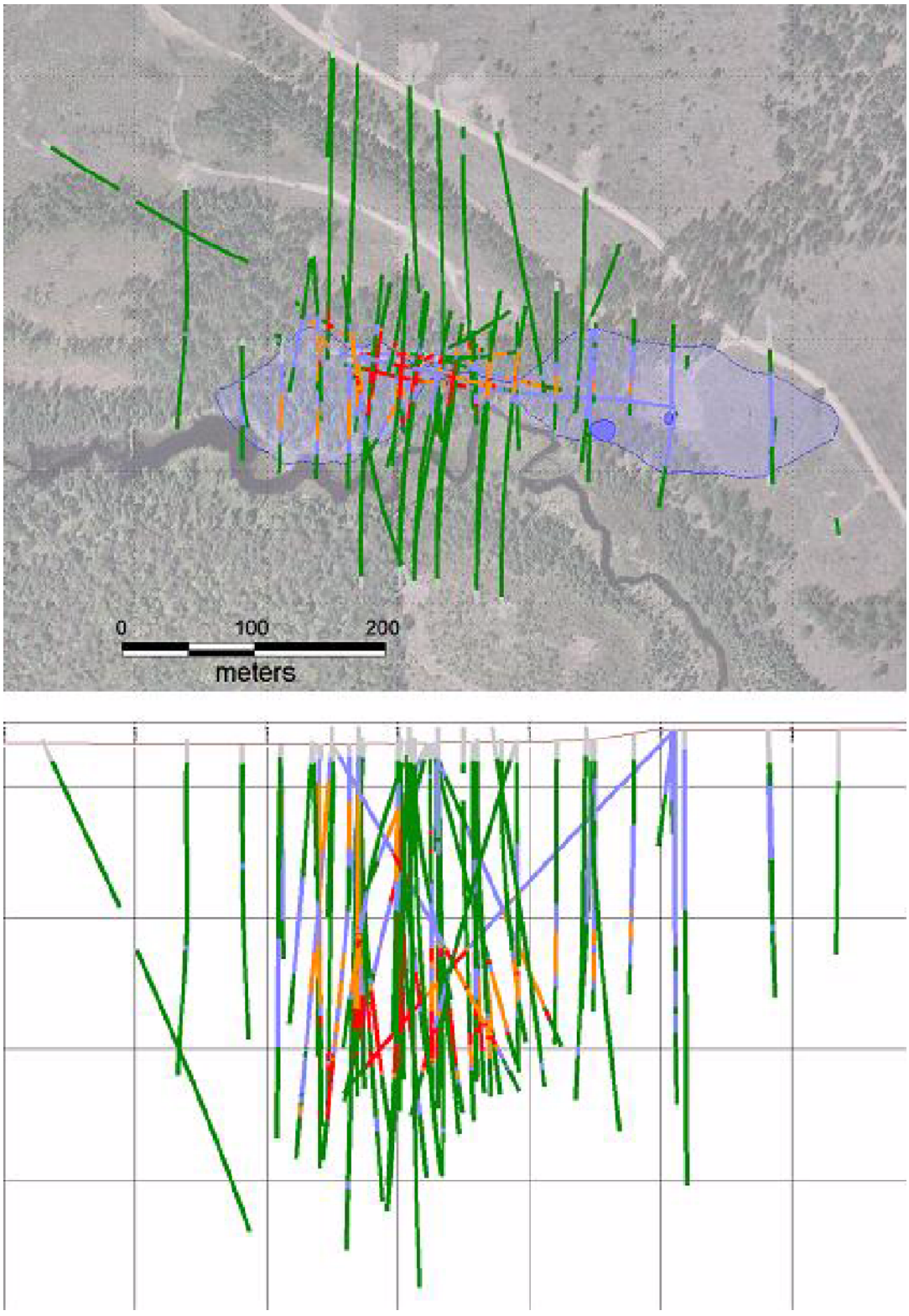
Scale: 1:12,000

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 9



EAGLE EXPLORATION DRILLING LOCATIONS

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

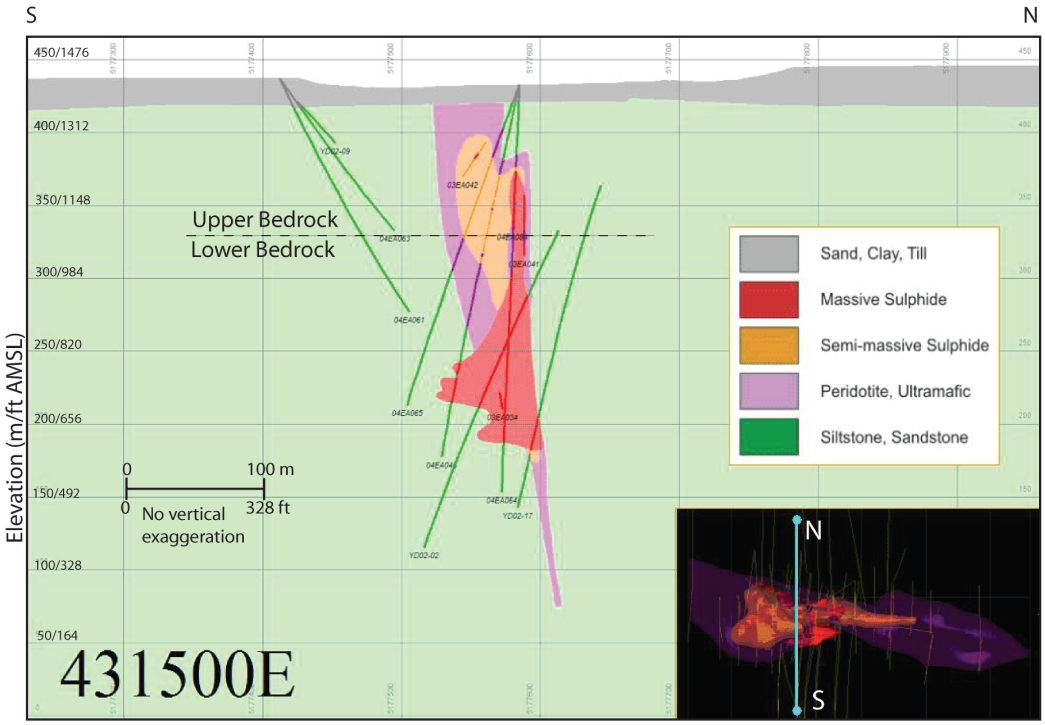
Reference

Figure Source: KEX 2005

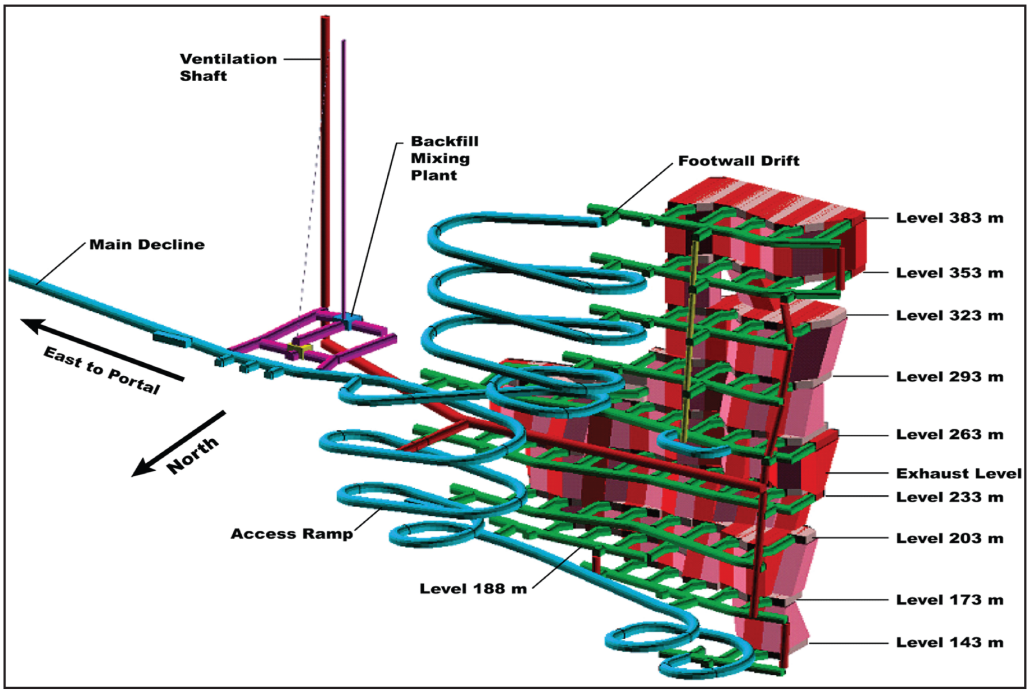
Kennecott
Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 10



North-South Geological Cross section of Eagle Deposit along 431,500 E UTM coordinates



3D Diagram of Proposed Mining Levels

BEDROCK CROSS SECTION and MINING LEVELS

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Reference

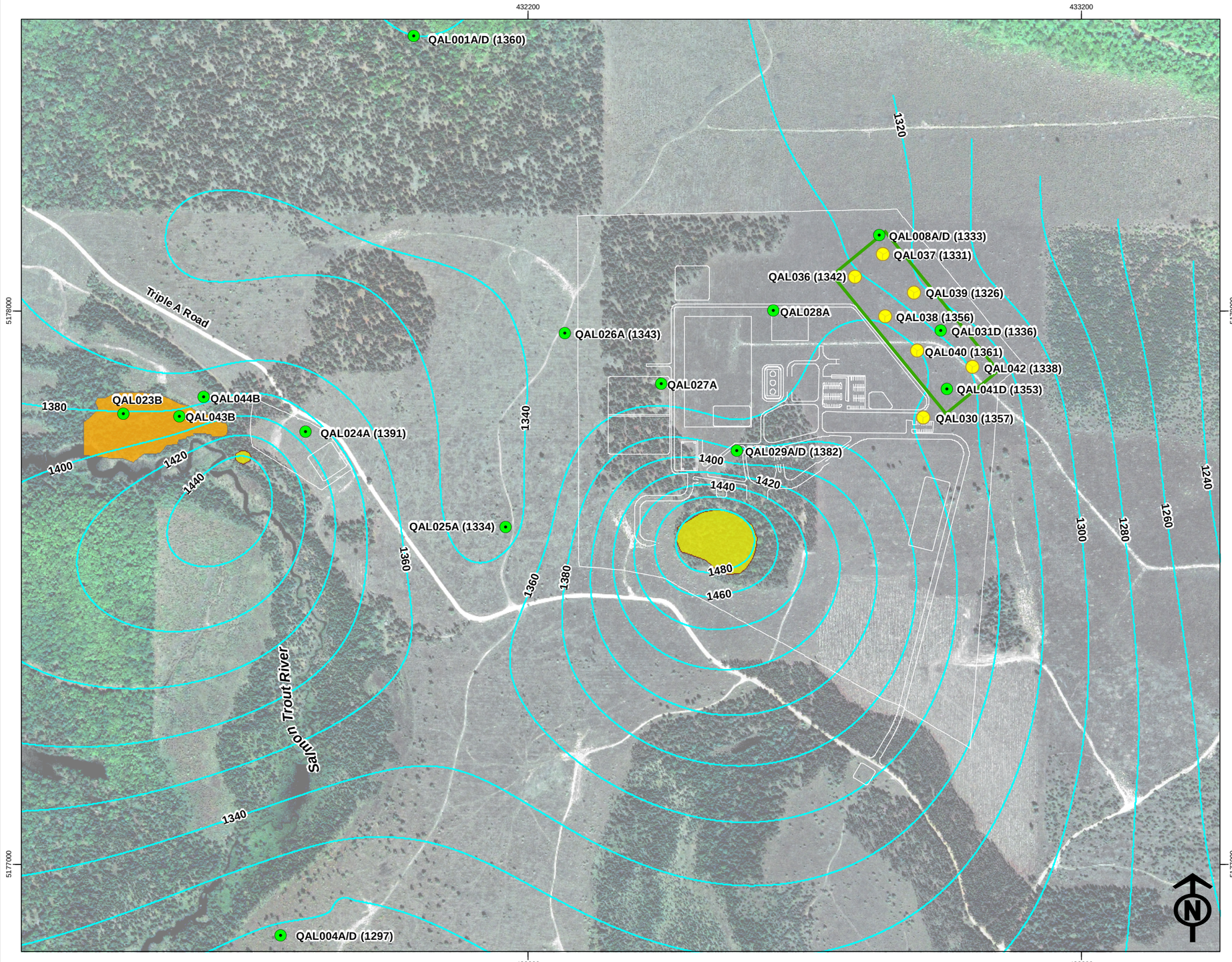
Figure Sources modified from: KEX 2005, Kennecott Eagle Minerals

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 11

BEDROCK ELEVATION MAP
PROJECT VIEW



- ORE BODY
- OUTCROP
- PROPOSED SITE PLAN
- PROPOSED DISCHARGE AREA
- BEDROCK ELEVATION CONTOUR
  (20' CONTOUR INTERVAL)
- MONITORING WELL
- SOIL BORING

(1338) BEDROCK ELEVATION (ft MSL)

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 600 1,200 Feet

Scale: 1:600

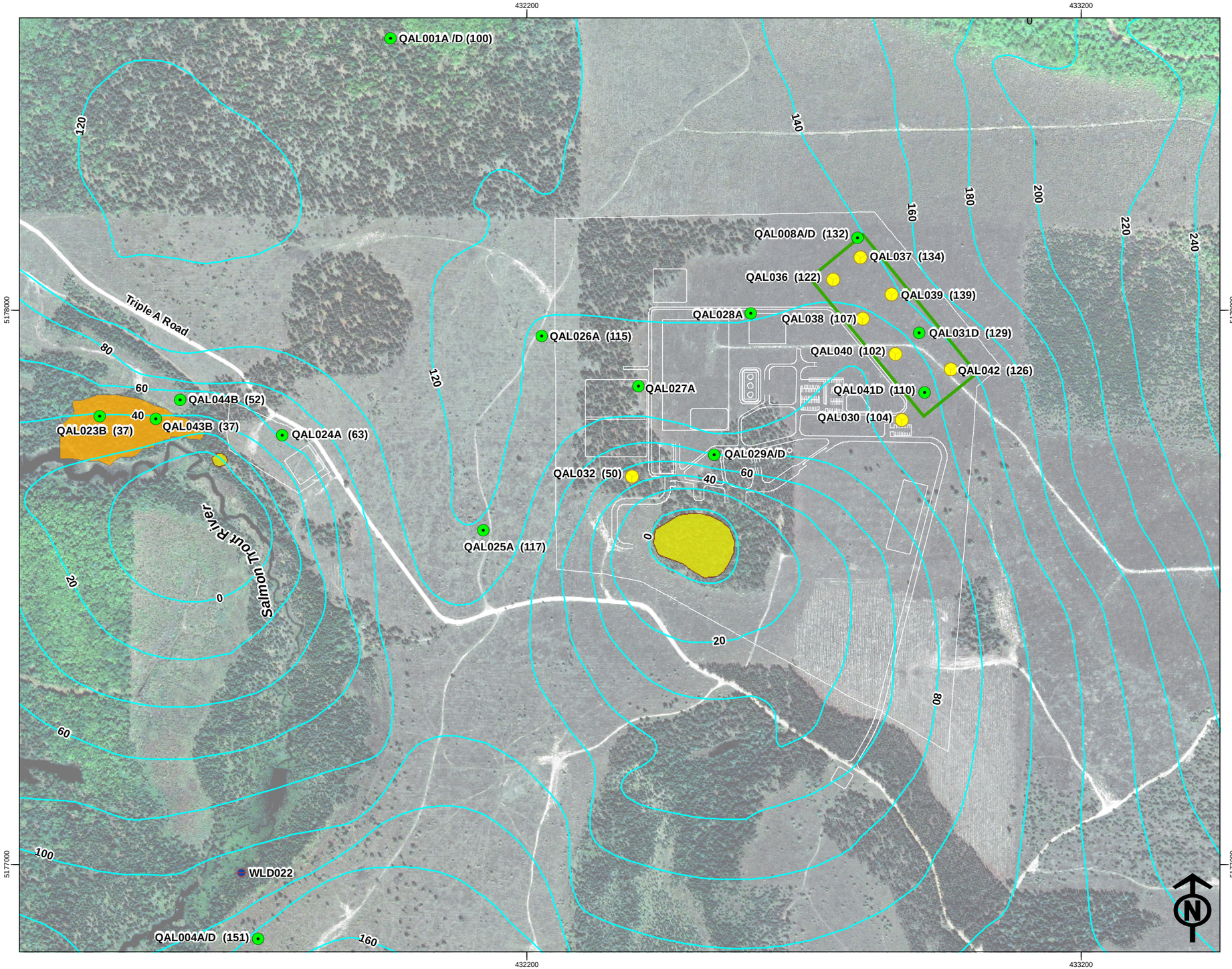
Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 12

QUATERNARY DEPOSIT ISOPACH PROJECT VIEW



- ORE BODY
- OUTCROP
- PROPOSED SITE PLAN
- PROPOSED DISCHARGE AREA
- ELEVATION CONTOUR
  (20' CONTOUR INTERVAL)
- MONITORING WELL
- SOIL BORING

(126) QUATERNARY THICKNESS (ft)

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 600 1,200 Feet

Scale: 1:7,200

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

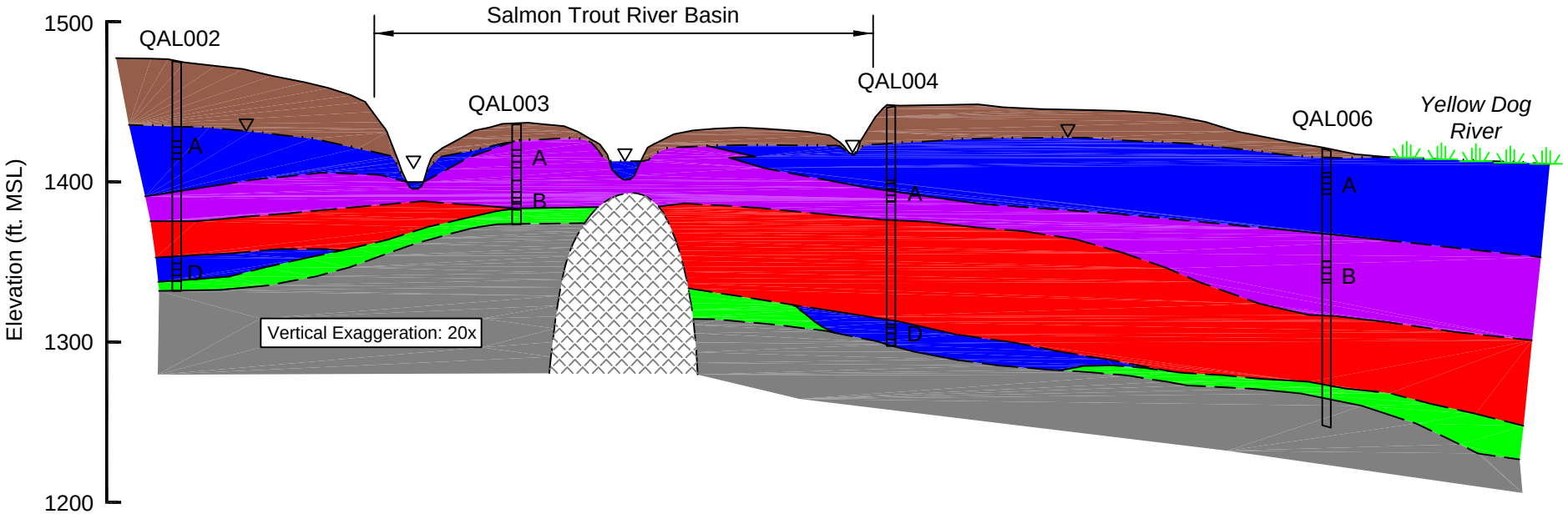
Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 13

Northwest
A

Southeast
A'



LEGEND:

- Water Table
- A — Monitoring Well with Screened Zones
- Unsaturated Sand
- Saturated Sand (upper and lower zones)
- Saturated Fine Sand Silt and Clay
- Lean Clay
- Clayey Glacial Till
- Bedrock: Metasedimentary
- Bedrock: Igneous Intrusives

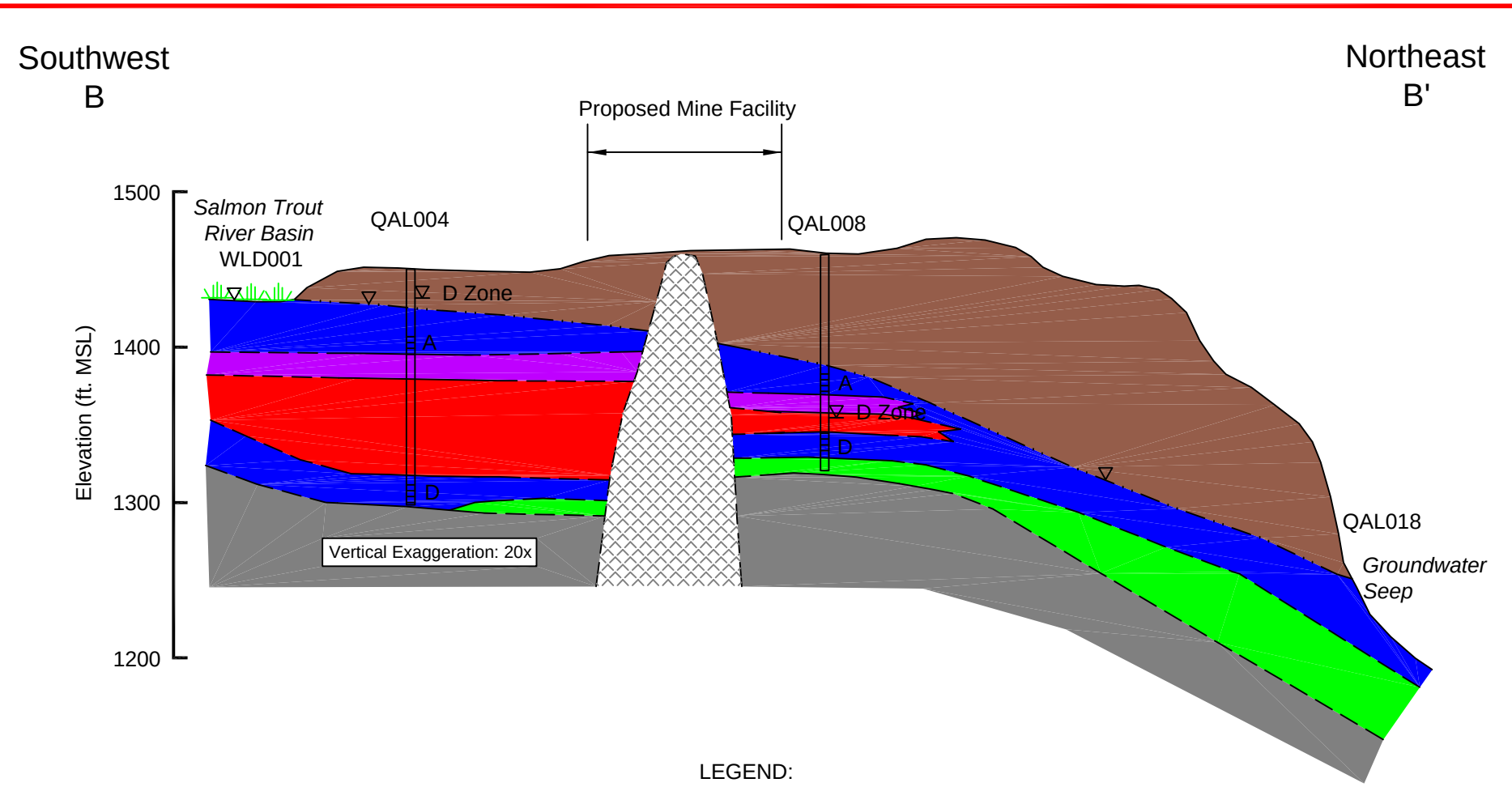
NORTH JACKSON COMPANY
1004 Harbor Hills Drive, Suite 102
Marquette, MI 49855

0 2,000
Feet
Vertical Exaggeration: 20x

FIGURE 14

CONCEPTUAL HYDROGEOLOGIC CROSS SECTION A-A'

Eagle Project



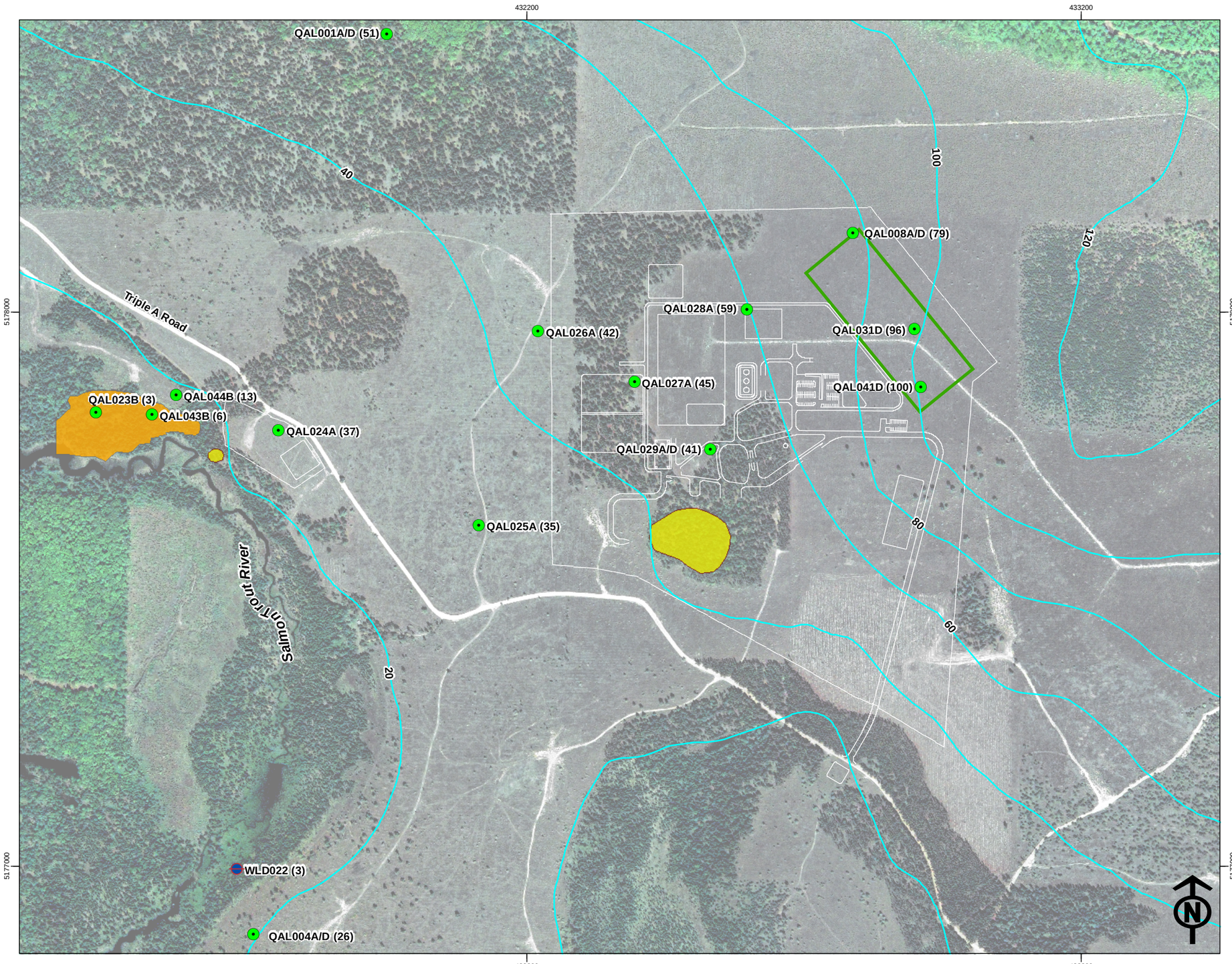
NORTH JACKSON COMPANY
1004 Harbor Hills Drive, Suite 102
Marquette, MI 49855

0 2,000
Feet
Vertical Exaggeration: 20x

FIGURE 15

CONCEPTUAL HYDROGEOLOGIC CROSS SECTION B-B'

Eagle Project



UNSATURATED ISOPACH PROJECT VIEW

- ORE BODY
- OUTCROP
- PROPOSED SITE PLAN
- PROPOSED DISCHARGE AREA
- ELEVATION CONTOUR
  (20' CONTOUR INTERVAL)
- MONITORING WELL

(79) UNSATURATED THICKNESS (ft)

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 600 1,200 Feet

Scale: 1:7,200

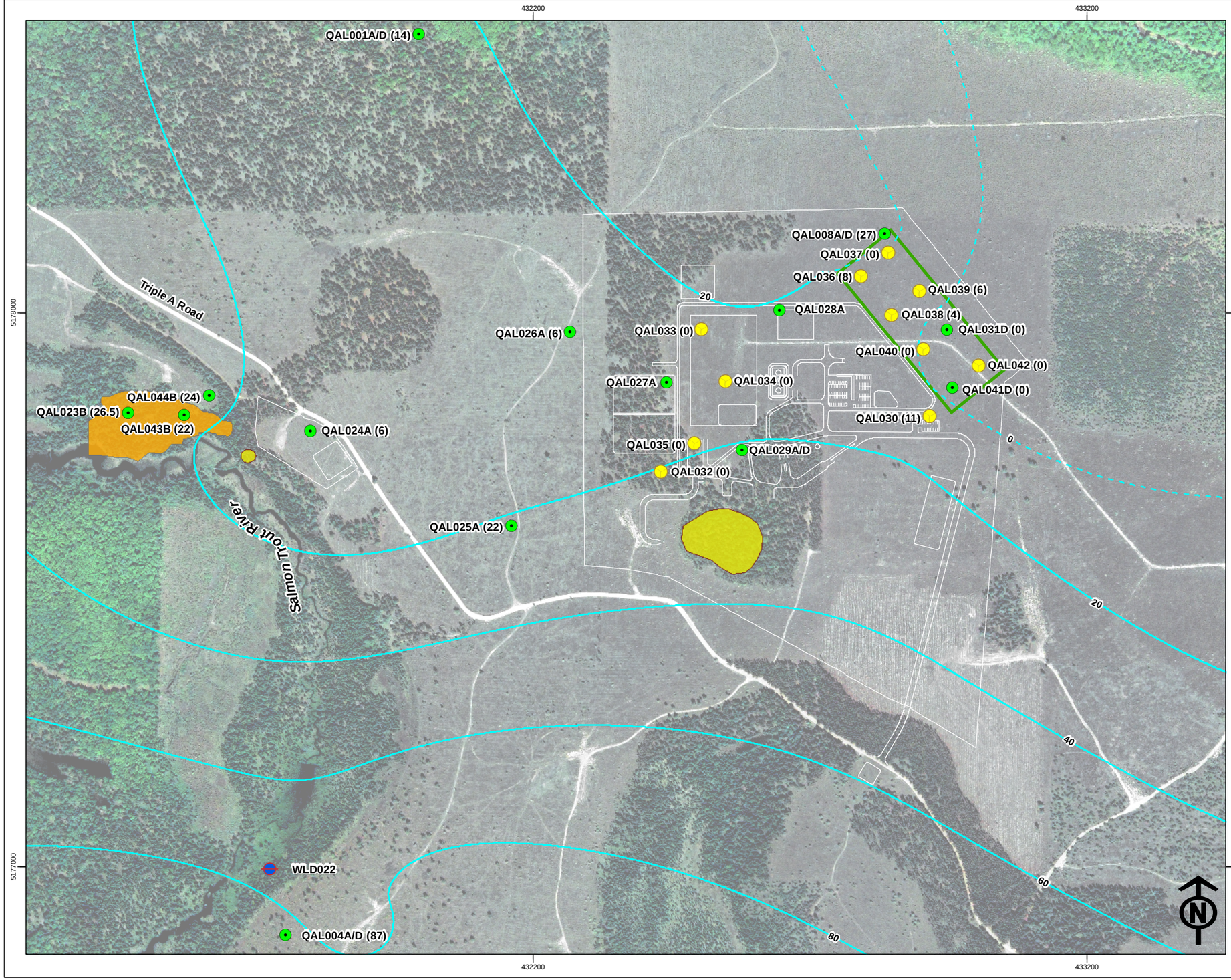
Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 16

CONFINING UNIT (B&C ZONE) ISOPACH PROJECT VIEW



- ORE BODY
- OUTCROP
- PROPOSED SITE PLAN
- PROPOSED DISCHARGE AREA
- BEDROCK ELEVATION CONTOUR
  (20' CONTOUR INTERVAL, DASHED WHERE INFERRED)
- MONITORING WELL
- SOIL BORING

(8) CONFINING UNIT THICKNESS (ft)

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 600 1,200 Feet

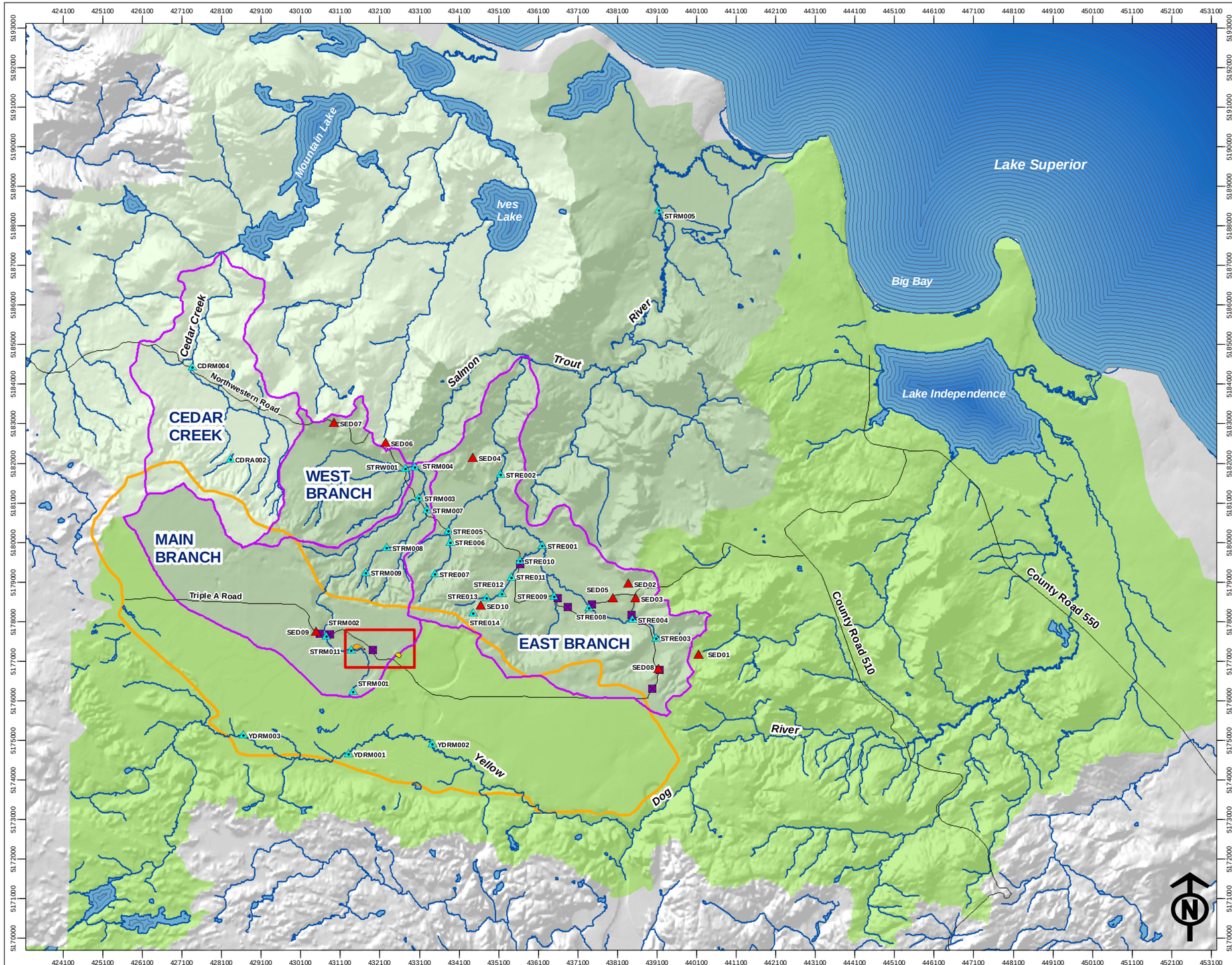
Scale: 1:7,200

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 17



SURFACE WATER MONITORING LOCATIONS

- ORE BODY
- OUTCROP
- EAGLE PROJECT
- PINE RIVER WATERSHED
- SALMON TROUT RIVER WATERSHED
- YELLOW DOG RIVER WATERSHED
- SUBWATERSHED
- YELLOW DOG PLAINS
- HYDROGRAPHY
- ROAD
- SURFACE WATER MONITORING
- SEDIMENT TRAP LOCATION
- ROAD CROSS SECTION

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 1 2 Miles

Scale: 1:100,000

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 18

Figure 19
Hydrographs of Mean Daily Flow
Eagle Project

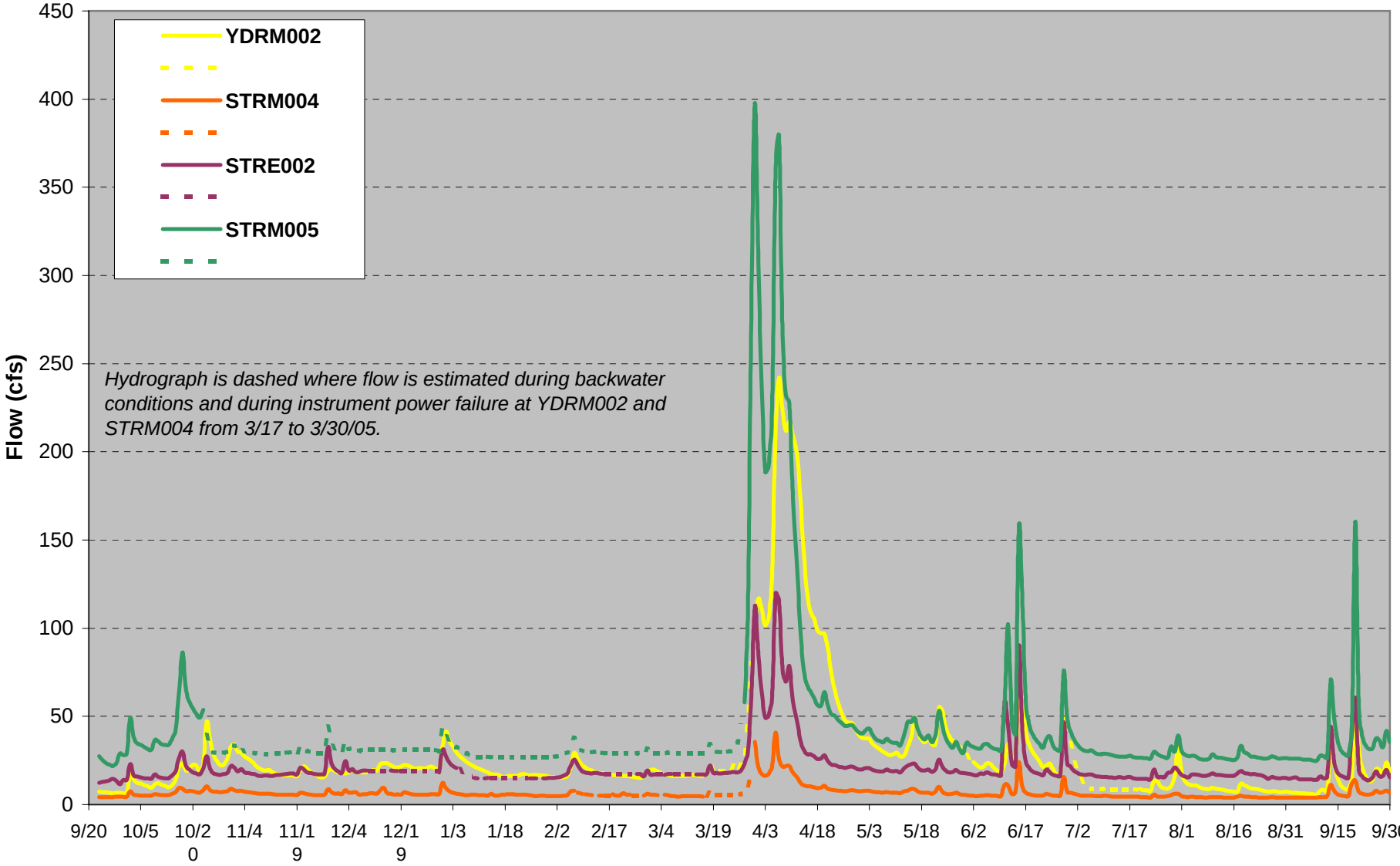
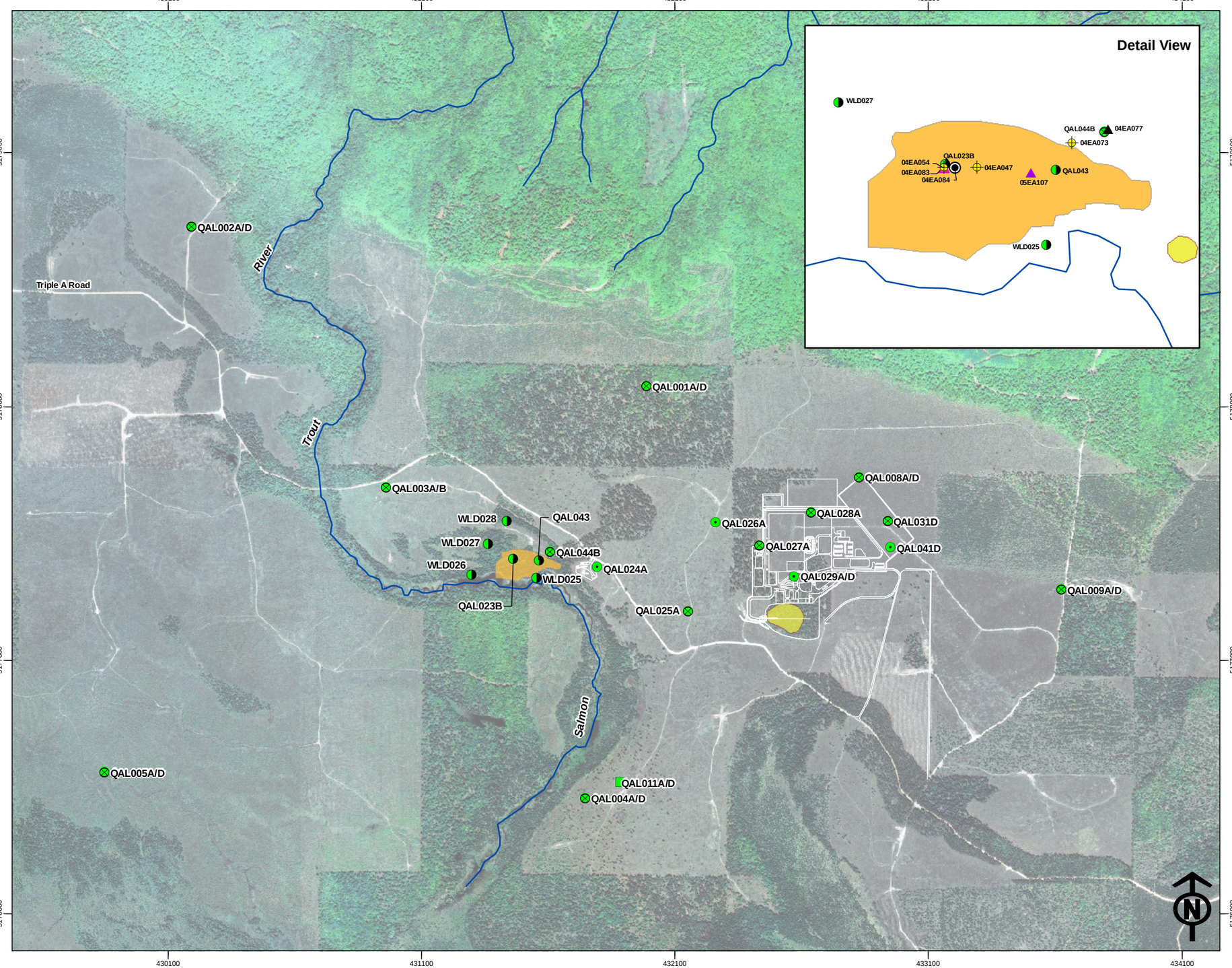


Figure 19: Hydrographs

HYDRAULIC PARAMETER TESTING LOCATIONS



- ORE BODY
- OUTCROP
- PROPOSED SITE PLAN
- HYDROGRAPHY
- MONITORING WELL
- MULTIPLE WELL PUMPING TEST
- SINGLE WELL PUMPING TEST
- SLUG TEST
- FLOW LOGGING
- FLOW LOGGING AND PUMPING TEST
- FLOW LOGGING AND SLUG TEST
- FLOW LOGGING / SLUG / PUMP TEST
- SLUG TEST

Reference

Data provided by: Kennecott Eagle Minerals,
North Jackson Company
Projection & Datum: UTM NAD 83 Zone 16N

0 0.25 0.5 Miles

Scale: 1:15,840

Eagle Project
Comprehensive Study of Hydrogeologic Reports
Kennecott Minerals Company

Kennecott Eagle Minerals

North Jackson Company
ENVIRONMENTAL SCIENCE & ENGINEERING

Figure: 20

Figure 21
Hydraulic Conductivity Values of Hydrostratigraphic Units
Eagle Project

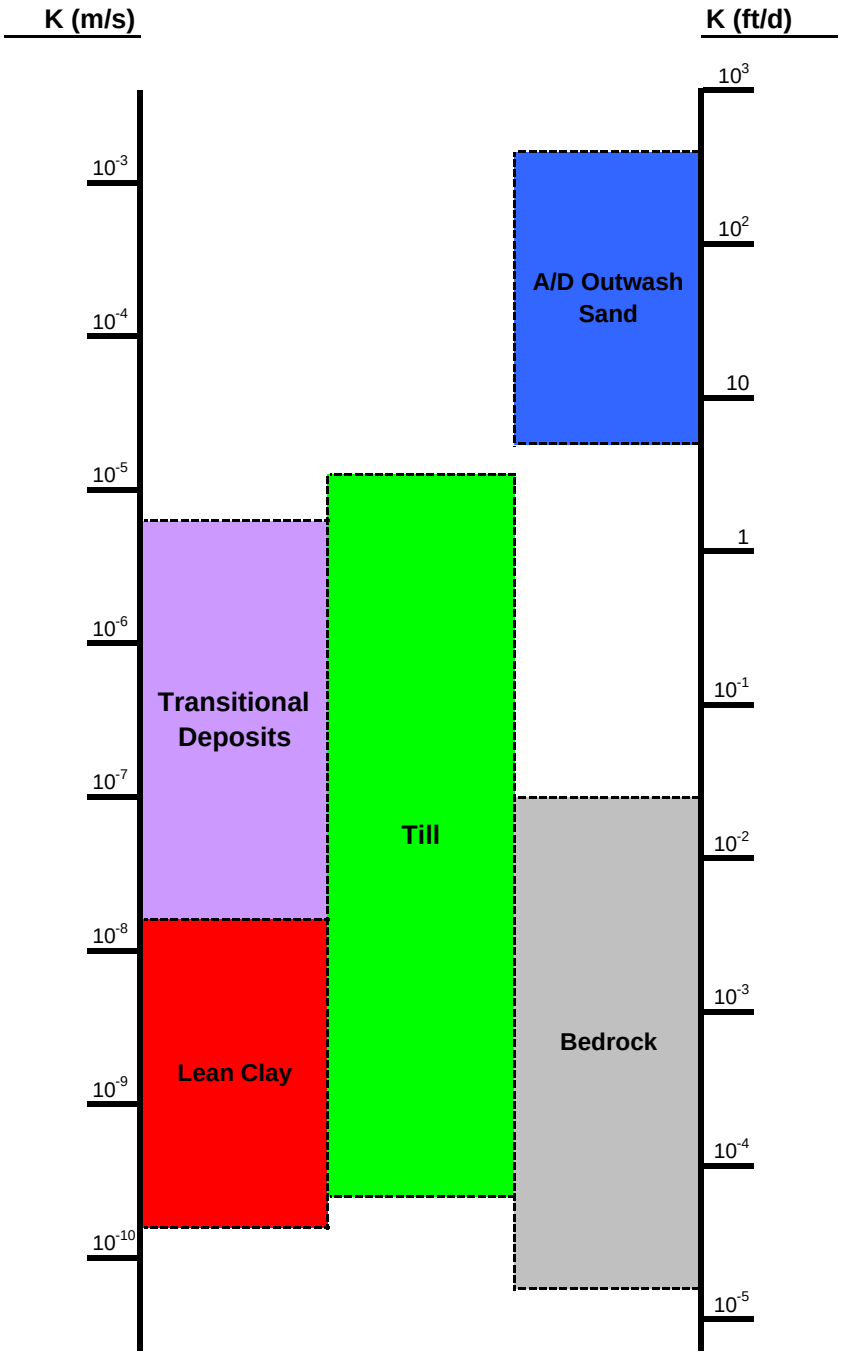


Figure 21: K Values

Figure 22
Infiltration Rates for Surficial Coarse-Grained Soils
Eagle Project

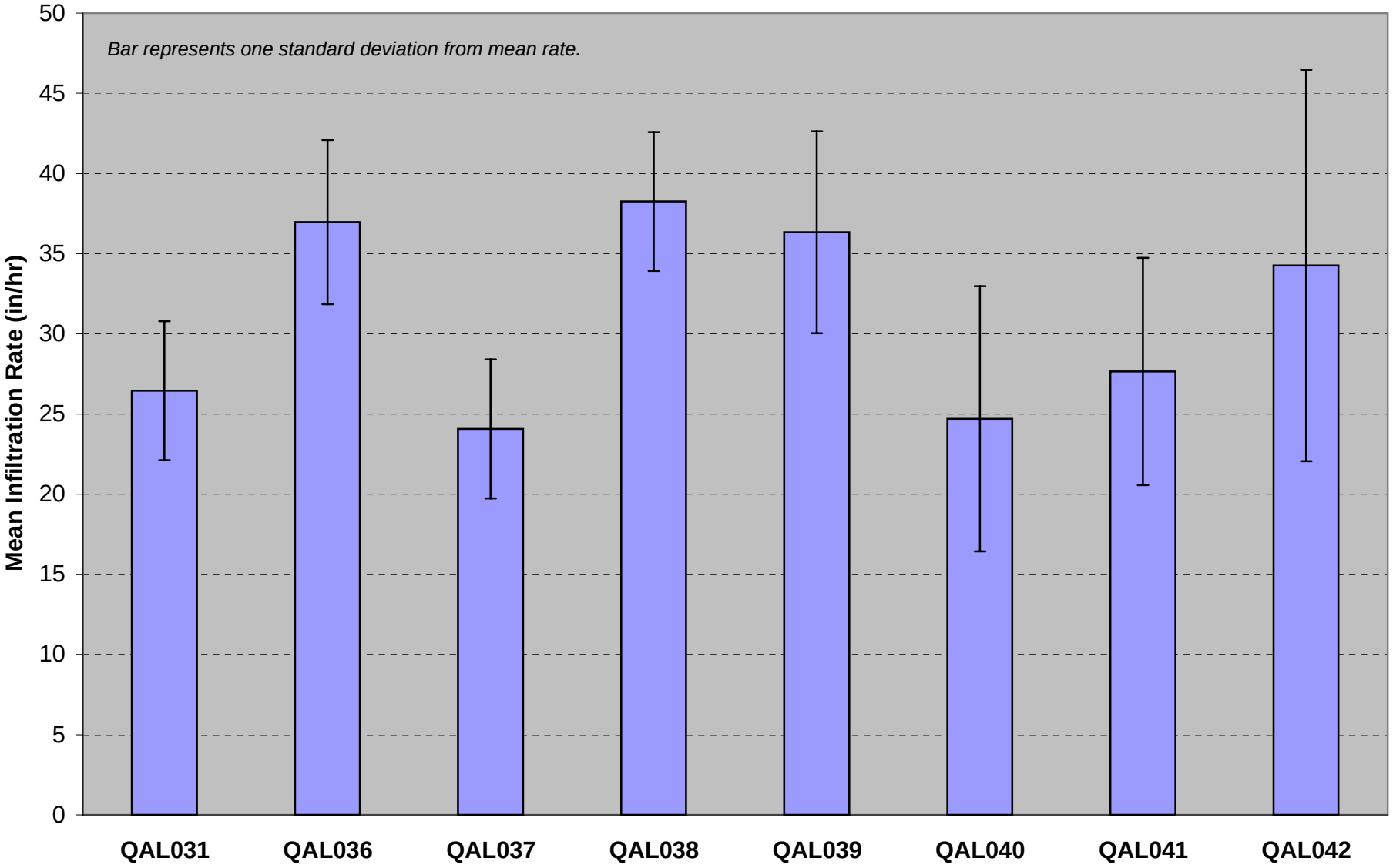


Figure 22: Infiltration Rate Plot