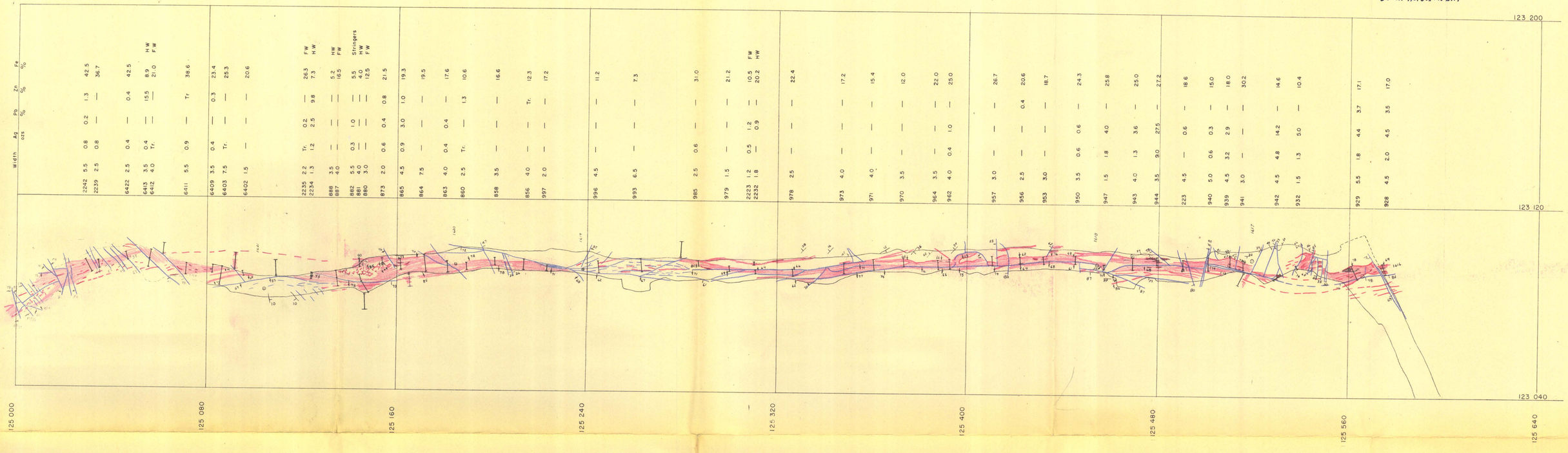
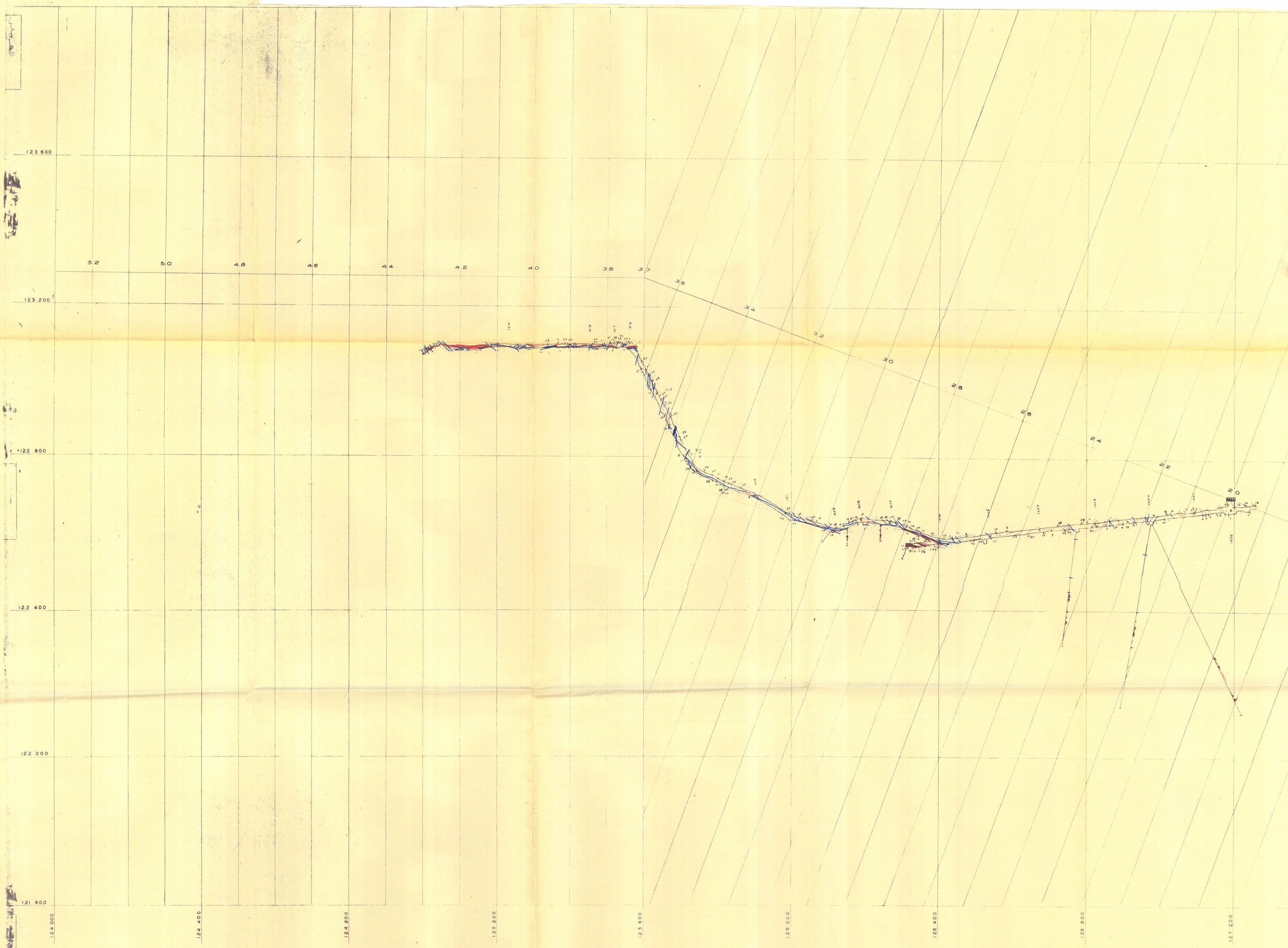
Docket No. DMEA 2719



GEOLOGIC & ASSAY PLAN HERCULES 1600 LEVEL WEST

0 20 40 60 80 100 feet



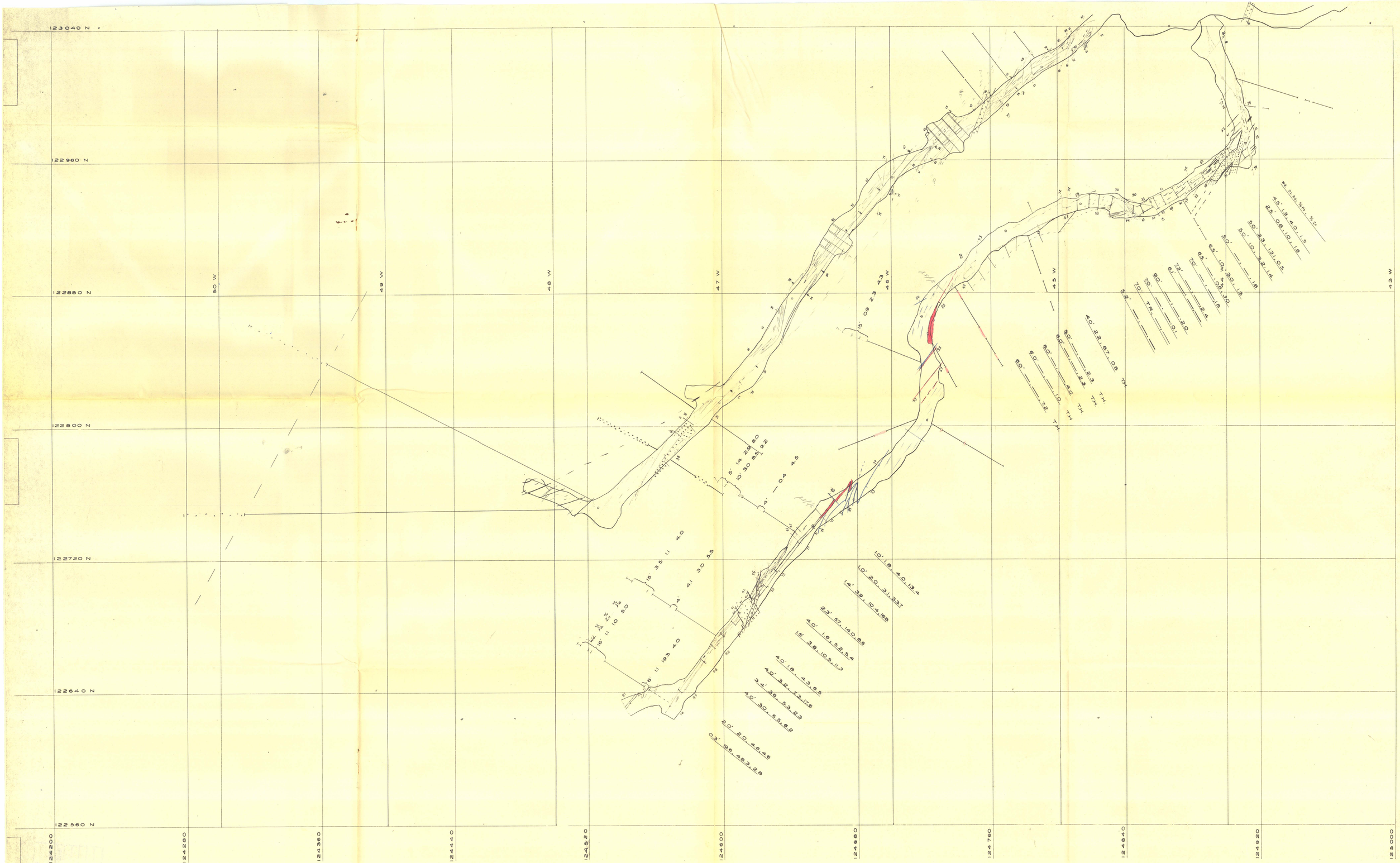
FIELD BOOK Nº

FILE Nº

MINE HERCULES

LEVEL 1600 (2261')

SCALE 1 INCH = 100 FEET



FIELD BOOK Nº

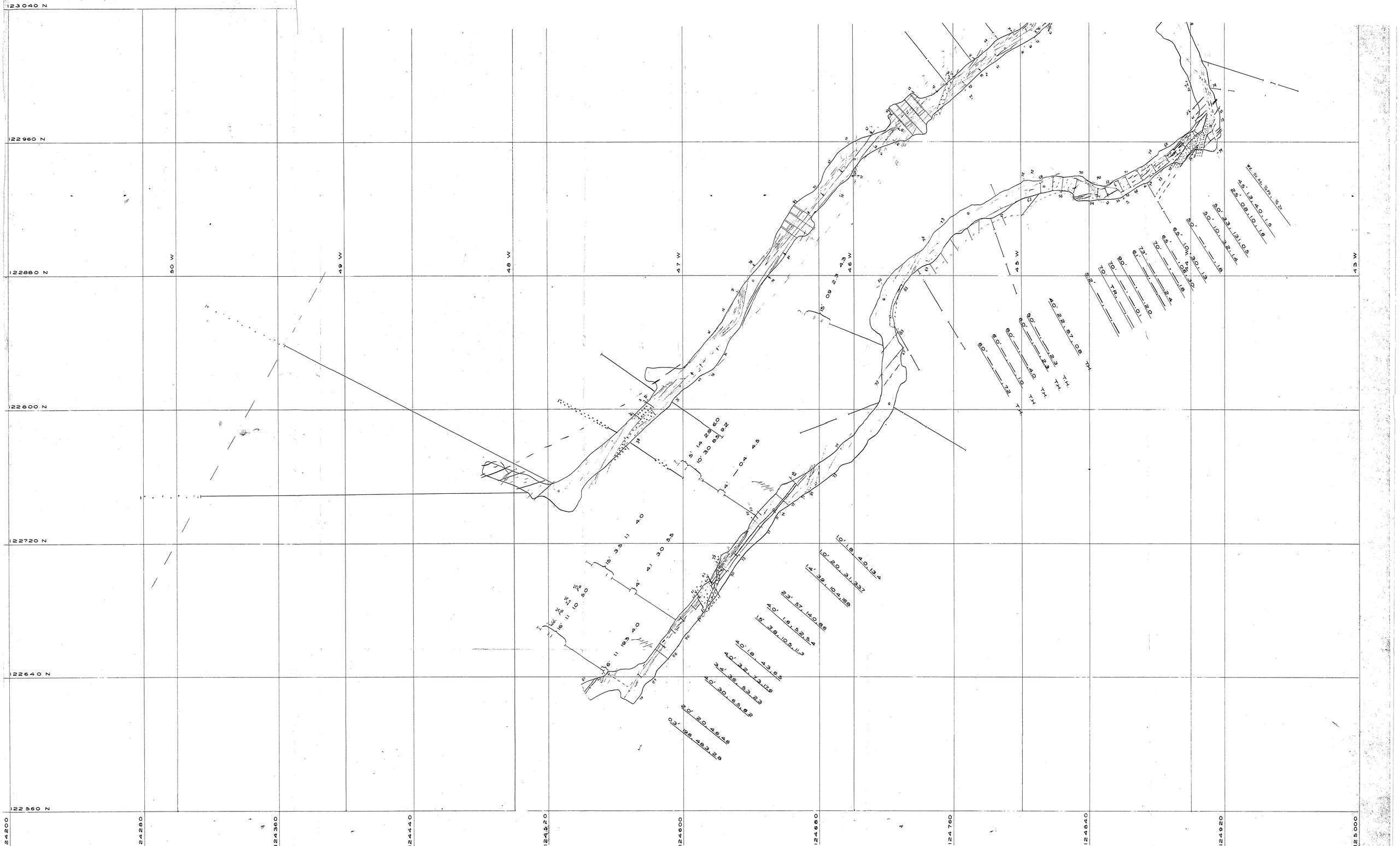
DAY MINES INC.

FILE Nº

MINE HERCULES

LEVEL COMPOSITE

SCALE 1 INCH = 20 FEET



FIELD BOOK Nº

DAY MINES INC.

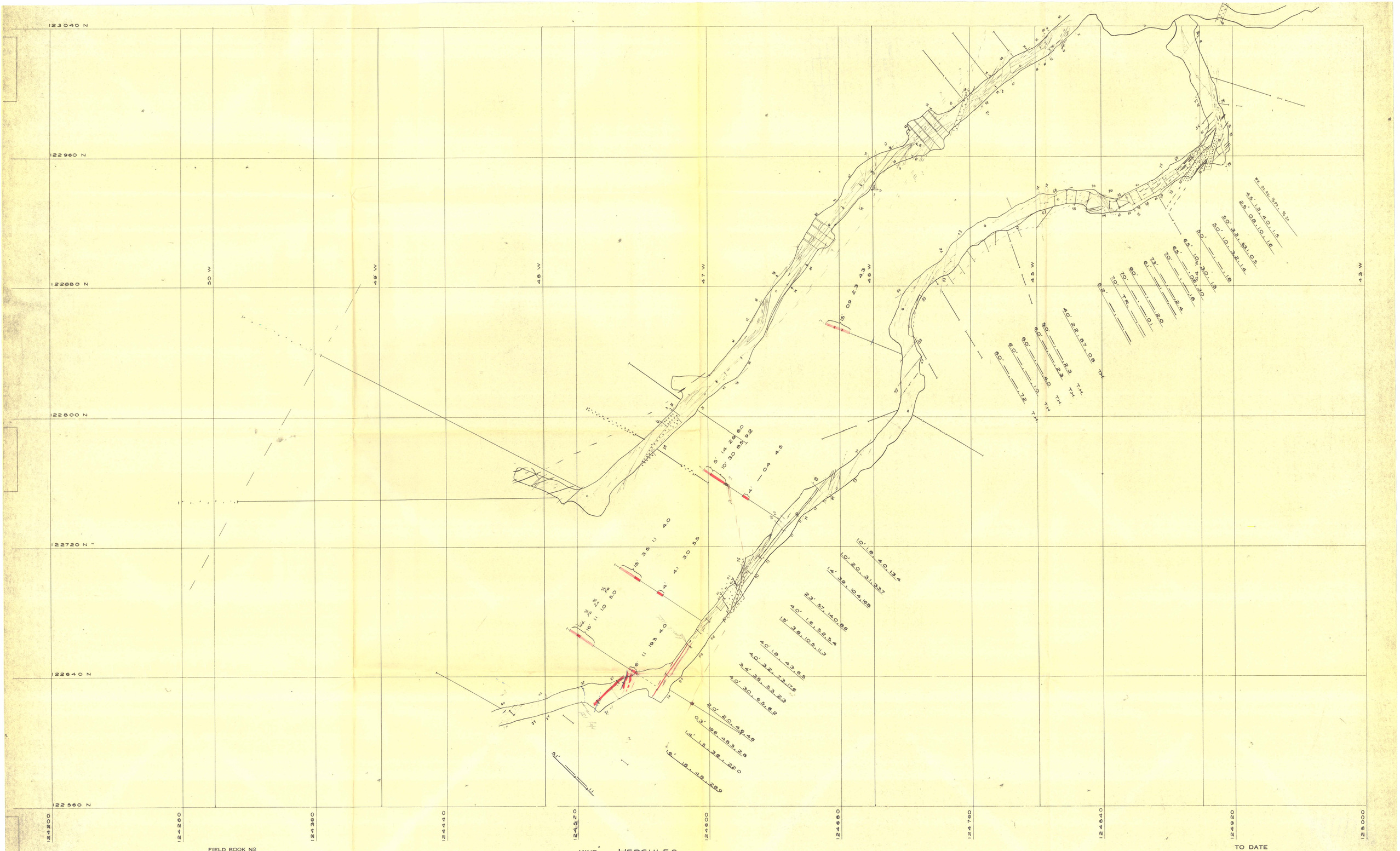
FILE Nº

MINE HERCULES

LEVEL COMPOSITE

SCALE 1 INCH = 20 FEET

TO DATE



FIELD BOOK Nº

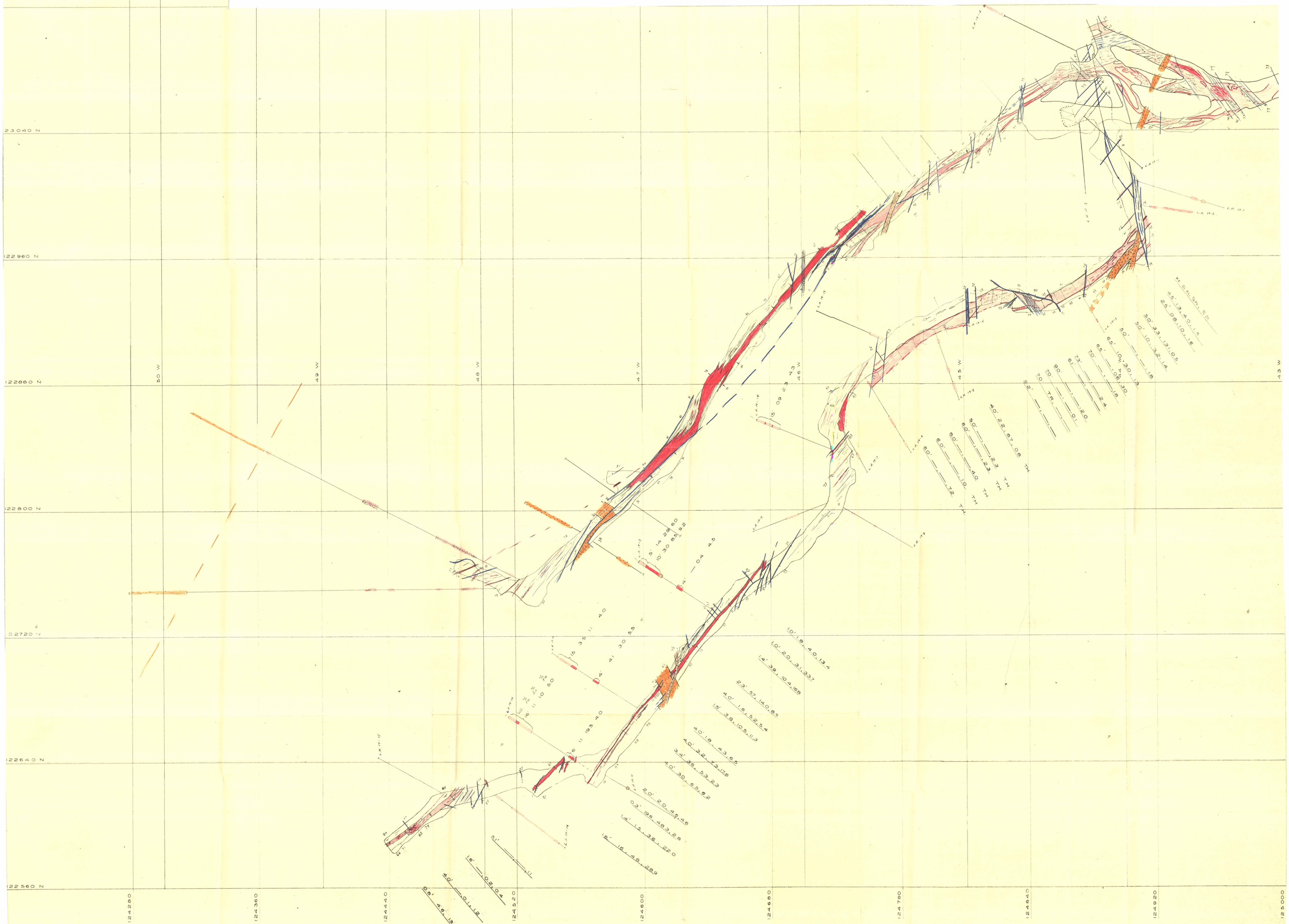
DAY MINES INC.

FILE Nº

MINE HERCULES

LEVEL COMPOSITE

SCALE 1 INCH = 20 FEET



FIELD BOOK Nº

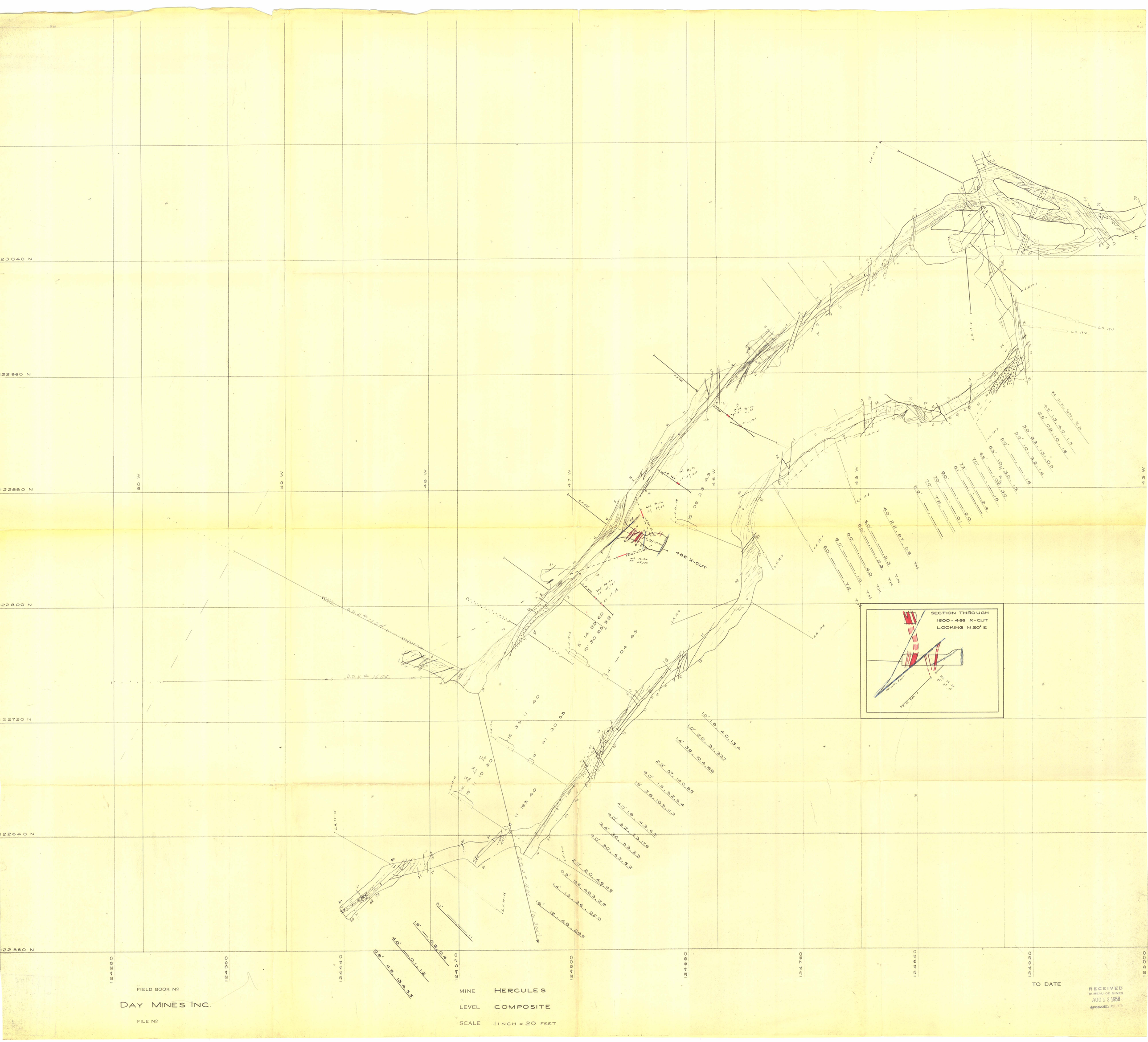
DAY MINES INC.

FILE Nº

MINE HERCULES

LEVEL COMPOSITE

SCALE 1 INCH = 20 FEET



FIELD BOOK Nº

DAY MINES INC.

FILE Nº

MINE HERCULES

LEVEL COMPOSITE

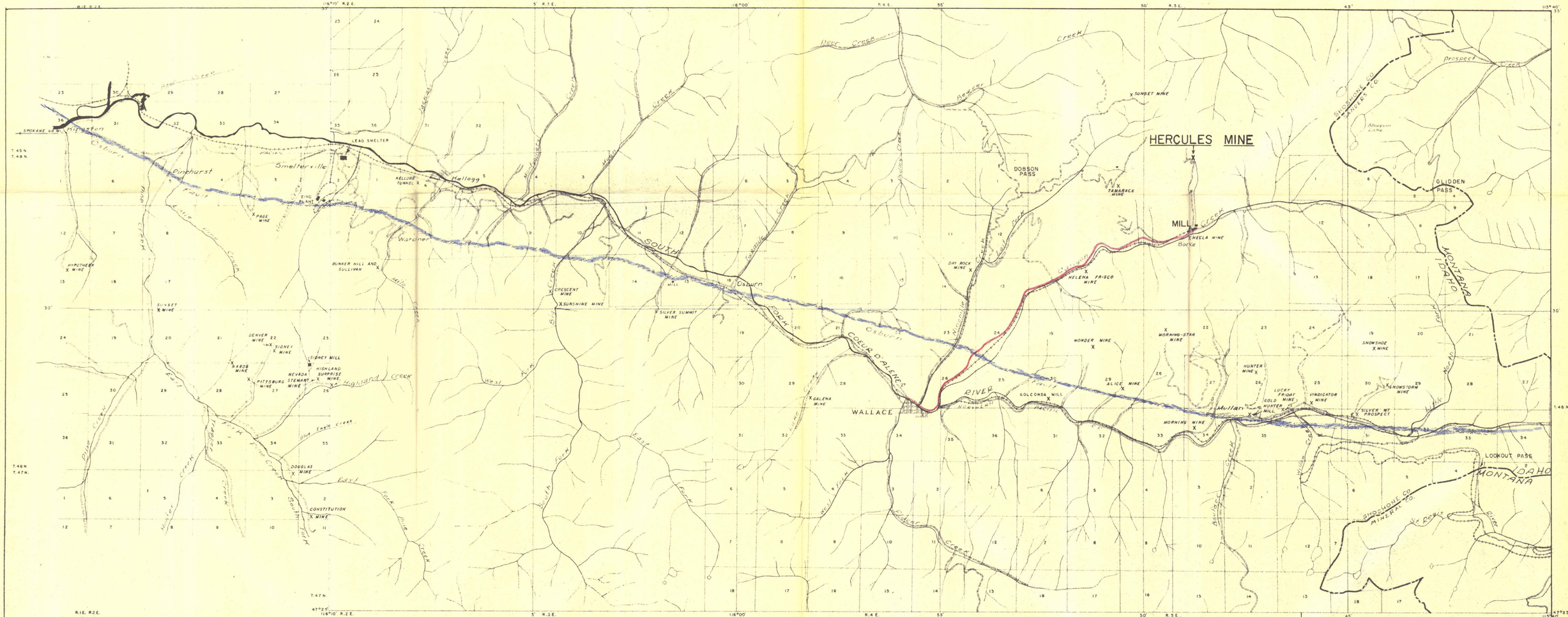
SCALE 1 INCH = 20 FEET

RECEIVED
BUREAU OF MINES
AUG 13 1958
SPOKANE

UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FINAL REPORT

DOCKET NO. DMEA 2719



LOCATION MAP
HERCULES MINE
DAY MINES, INC.
SHOSHONE COUNTY, IDAHO

1 ½ 0 1 2 MILES
R.D.SAMPLE

Mar. 1959

PLATE I

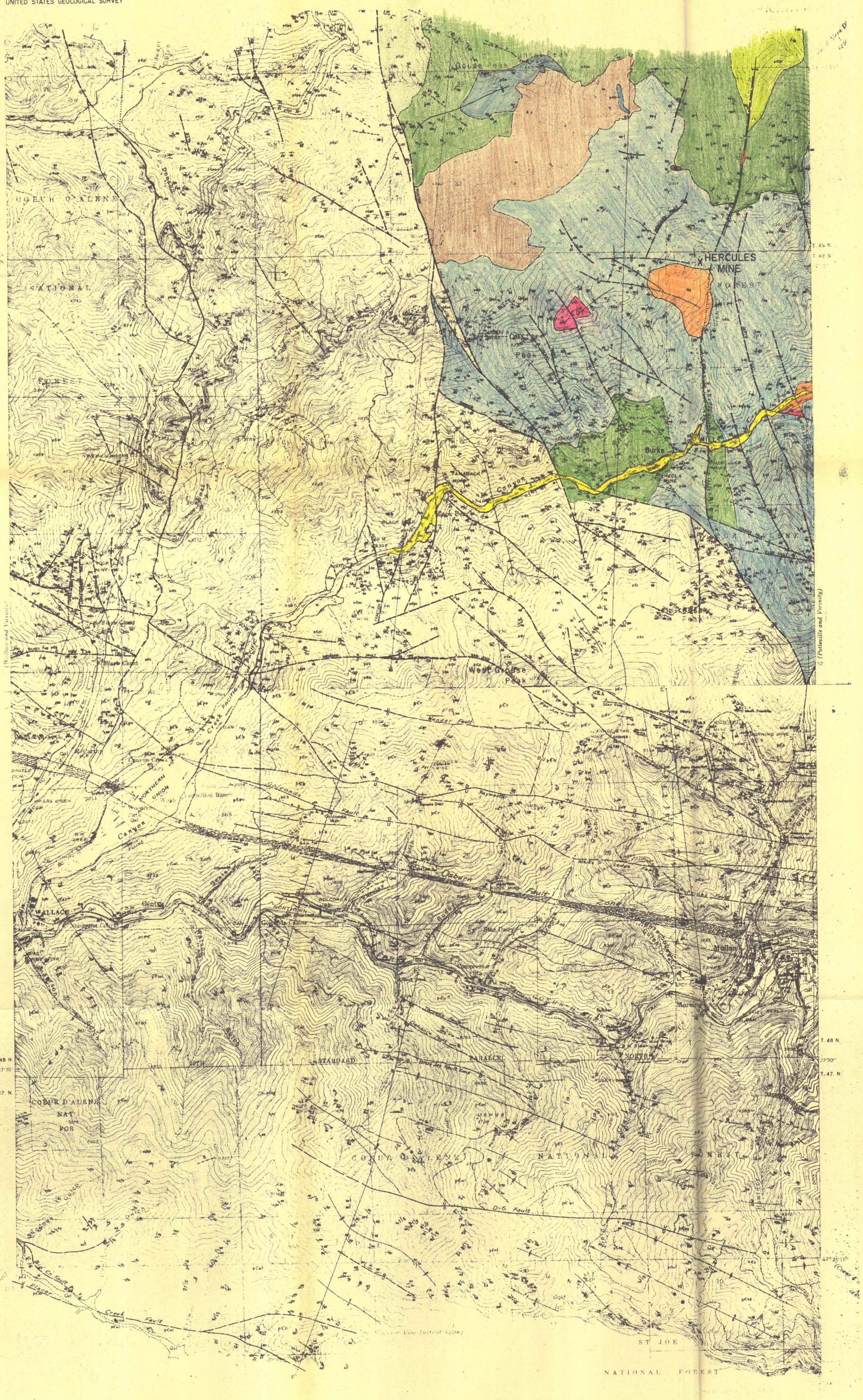
UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
OFFICE OF MINERALS EXPLORATION

DOCKET No. DMEA 2719

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

AREAL GEOLOGY
MULLAN AND VICINITY QUADRANGLE
IDAHO



EXPLANATION

Qal
Alluvial Deposits

Qg
Glacial and Glacial Fluviatile Deposits

Qg
Older Gravels
Undifferentiated gravels older than Qal, commonly forming terraces

Lamprophyre Dikes
Solid lines where exposed, dashed where approximately located.

Other Dikes
Solid lines where exposed, dashed where approximately located. Includes varieties of diabase, diorite, and monzonite.

Monzonite and Associated Rocks Vary From Syenite to Diorite

pCsp
Striped Peak Formation
Interbedded impure quartzite and argillite, usually thin-bedded. Colors vary from purple and pink to gray and green, many beds limy. Shallow water features are characteristic.

pCwu
Upper Wallace Formation
Predominantly thinly laminated, dark gray argillite, some interbedded light gray quartzite and impure to fairly pure limestone, more or less limy material throughout.

pCwl
Lower Wallace Formation
Interbedded, fine-grained, light-gray, more or less limy quartzite and dark gray argillite. Beds range from 1 to 12 inches thick. Some impure dolomite beds near top. Shallow water features are characteristic.

pCsg
pCs
St. Regis Formation
Typified by purplish color of rocks. Grades from light purple quartzite at base to thin-bedded dark purple and gray argillite. Uppermost part is usually a thinly laminated, light greenish argillite(pCsg).

pCr
Revett Formation
Thick-bedded, vitreous, white quartzite. Cross-bedded and laminated in part. Grades into less pure quartzite at bottom and top.

pCb
Burke Formation
Thin-bedded, light to greenish-gray, fine-grained argillaceous quartzite with more or less white or light purple, thick-bedded quartzite. Shallow water features are common.

pCu
Upper Prichard Formation
Thin- to thick-bedded, light gray to white, pure to argillaceous quartzite interbedded with thinly-laminated, dark gray argillite. Shallow water features are common.

pCpg
pCpl
Lower Prichard Formation
Banded dark gray argillite, laminated in part; partings usually contain numerous pyrite crystals. Weathers rusty red. The is a zone of interbedded white to light gray quartzite.

Veins at the Surface
Solid line where exposed, broken where approximately located.

Veins Projected From Underground Workings
Approximate position shown as if veins were continuous to surface, though not necessarily known to crop out.

Types of Veins
A = veins known to contain base metals
B = veins not known to contain base metals

Contact
Dashed where approximately located

Indefinite Contact
Includes gradational and obscured contacts, and boundaries of surficial deposits.

Fault Showing Dip
Dashed where approximately located, dotted where concealed.
U = upthrown side, D = downthrown side

Doubtful or Probable Fault; dotted where concealed

Faults Showing Dip, Projected on Dip to Surface From Underground Observation
U = Upthrown side, D = downthrown side

Zone of Shearing

Anticline
Showing trace of axial plane, dashed where approximately located, dotted where concealed.

Syncline
Showing trace of axial plane, dashed where approximately located, dotted where concealed

Strike and Dip of Beds

Strike and Dip of Beds Projected Vertically From Underground Observation

Strike and Dip of Overturned Beds

Strike of Vertical Beds

Horizontal Beds

Strike and Dip of Cleavage

Strike of Vertical Cleavage

Prospect Pit or Obscure Working

Portal of Adit

Shaft

This map is preliminary and has not been reviewed or edited for conformity with U.S. Geological Survey standards and nomenclature.

Topography by C. P. McKinley, C. N. Mortenson, and F. H. Purdy
Culture and drainage in part compiled from aerial photographs.
Surveyed in 1938-39

Geology mapped in 1948-51

GEOLOGIC MAP
OF THE
MULLAN AND VICINITY QUADRANGLE, IDAHO

AREAL GEOLOGY

By A. B. Griggs, R. E. Wallace and S. W. Hobbs

Scale 1:24,000

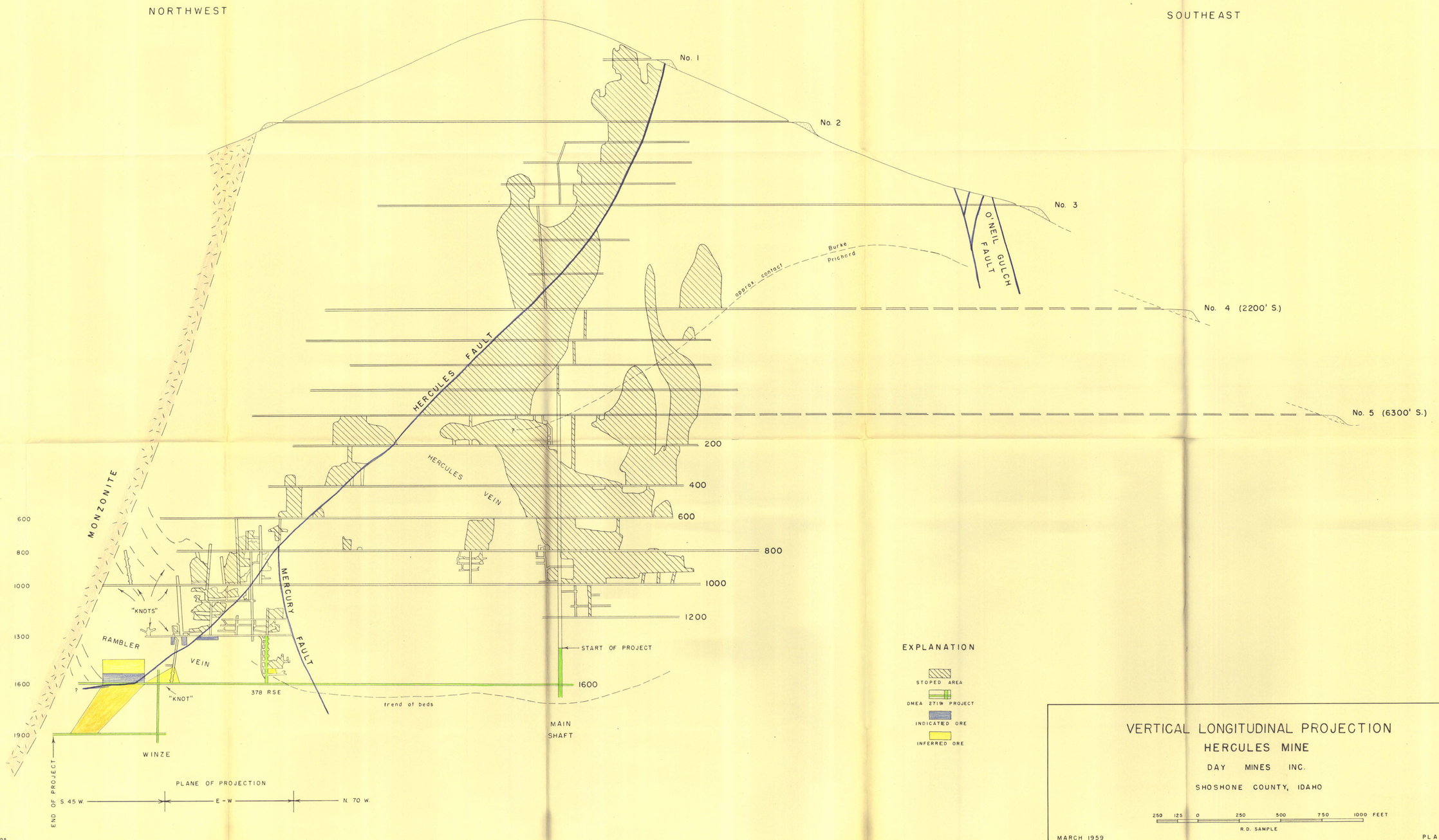
1000 500 0 1000 2000 3000 4000 5000 Feet
0 .4 1 1/2 Miles

Contour interval 25 feet
Datum is mean sea level

1952

APPROXIMATE MEAN DECLINATION 1952

PLATE 2



NOTE: Compiled from company maps.

VERTICAL LONGITUDINAL PROJECTION
HERCULES MINE

DAY MINES INC.

SHOSHONE COUNTY, IDAHO

250 125 0 250 500 750 1000 FEET
R.D. SAMPLE

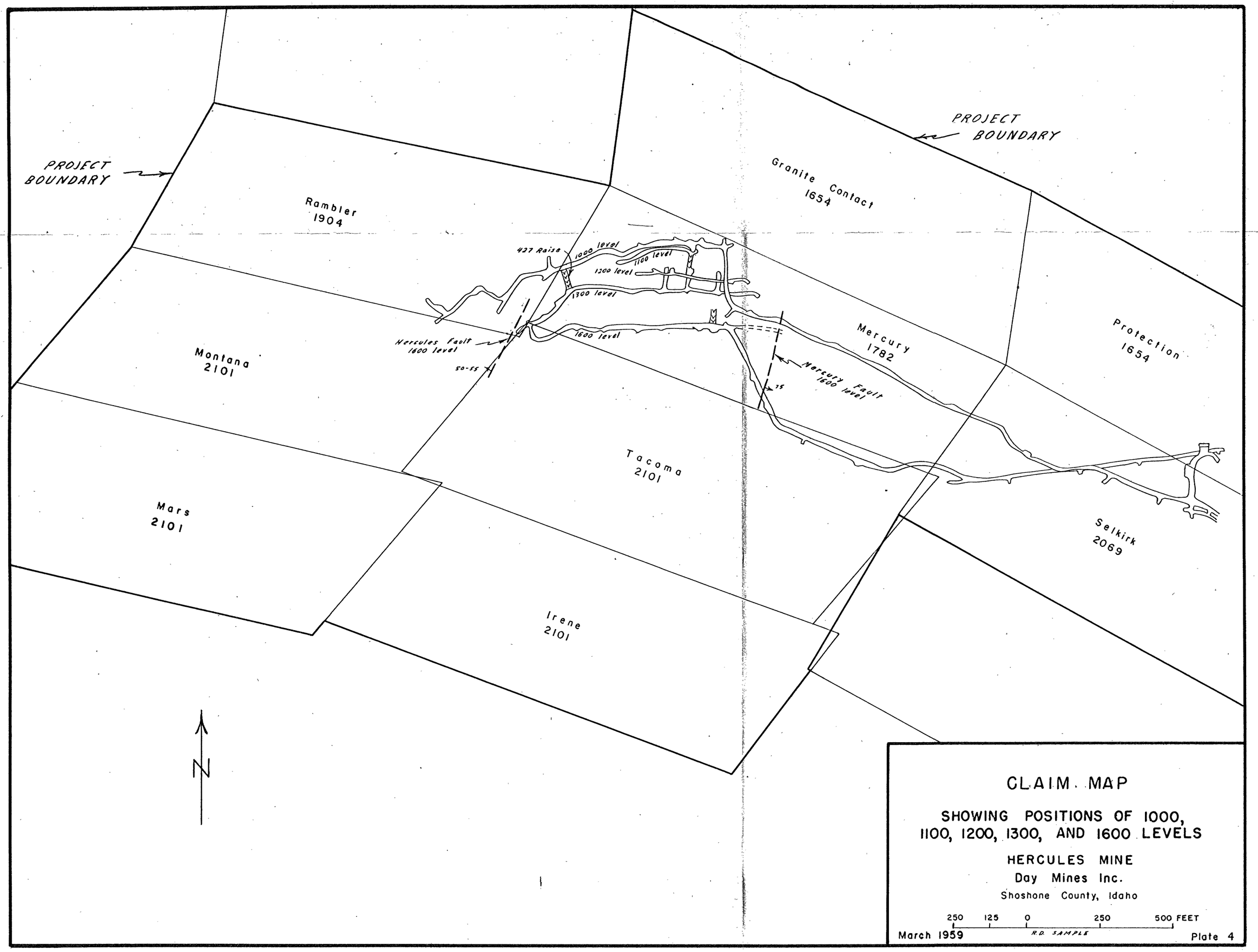
MARCH 1959

PLATE 3

UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
OFFICE OF MINERALS EXPLORATION
FINAL REPORT

DOCKET NO. DMEA 2719



UNITED STATES
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FINAL REPORT

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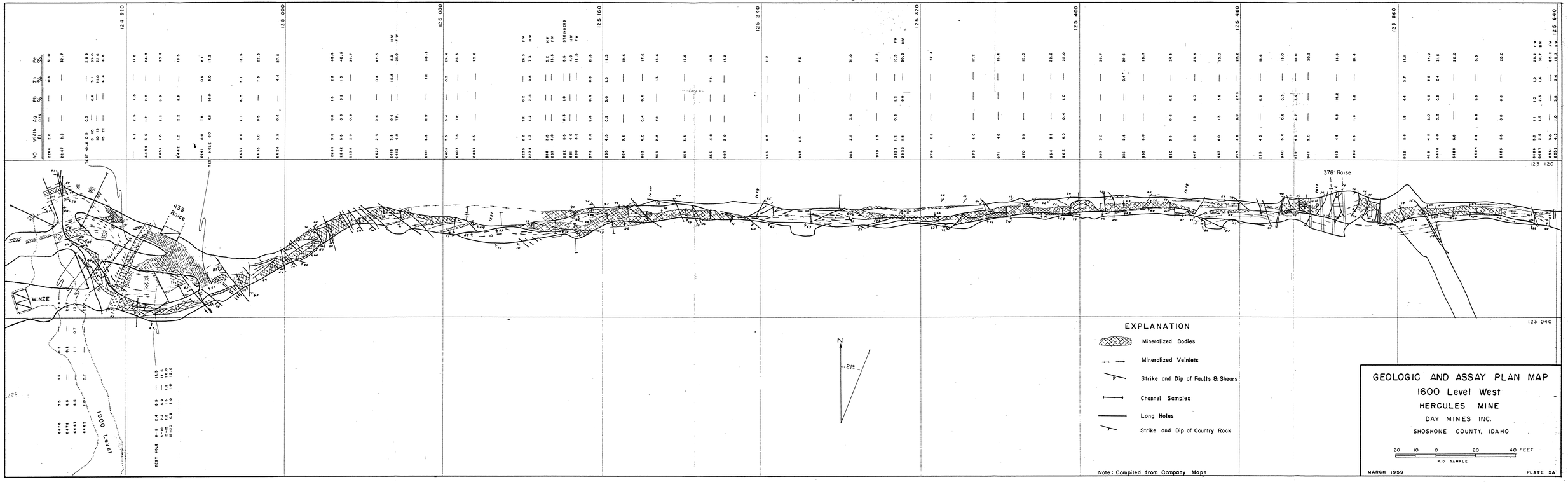
UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
OFFICE OF MINERALS EXPLORATION
FINAL REPORT

DOCKET NO. DMEA 2719



GEOLOGIC AND ASSAY PLAN MAP
1600 Level West
HERCULES MINE
DAY MINES INC.
SHOSHONE COUNTY, IDAHO

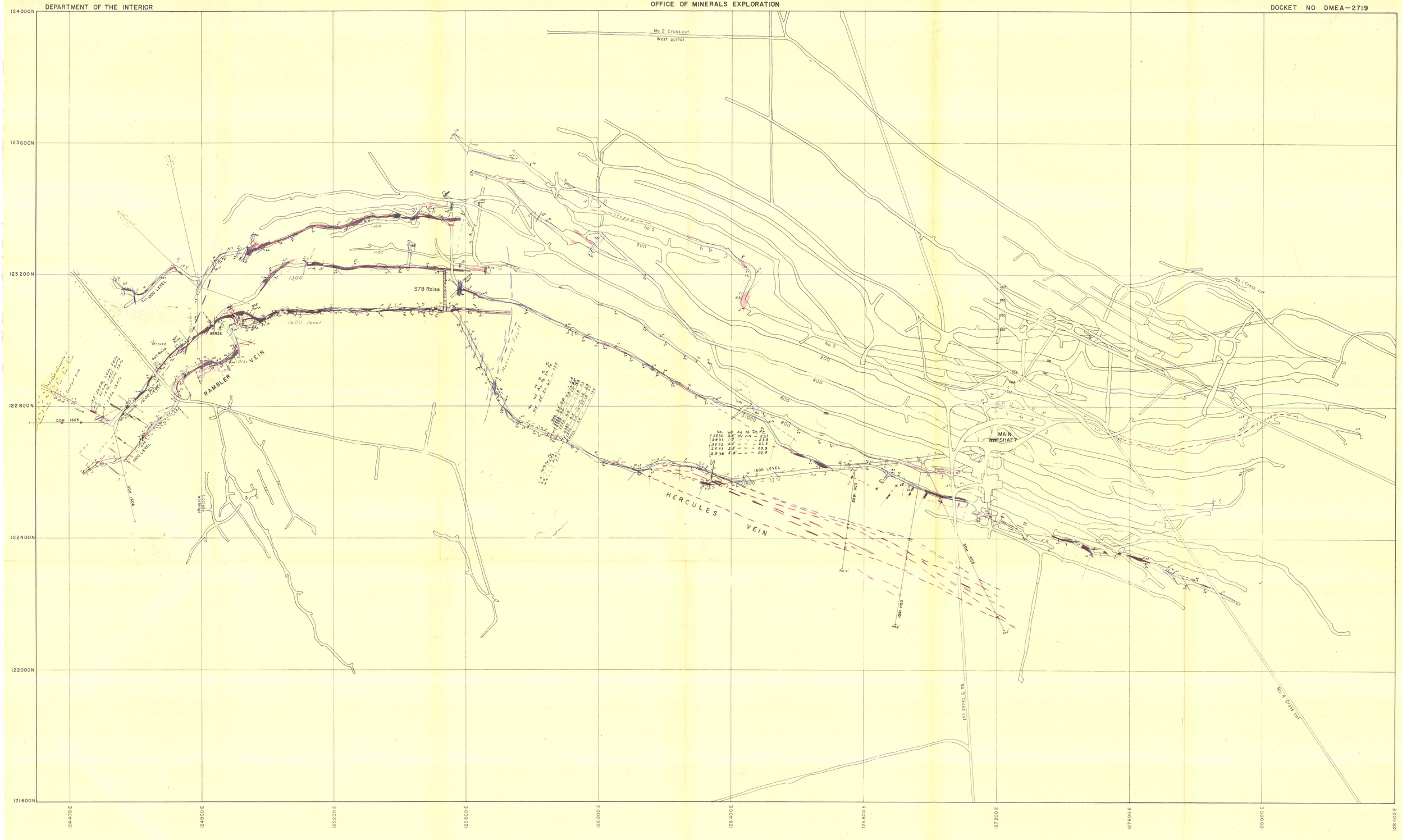
MARCH 1959

PLATE 5A

UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
OFFICE OF MINERALS EXPLORATION

DOCKET NO DMEA-2719



COMPOSITE MAP OF HERCULES MINE

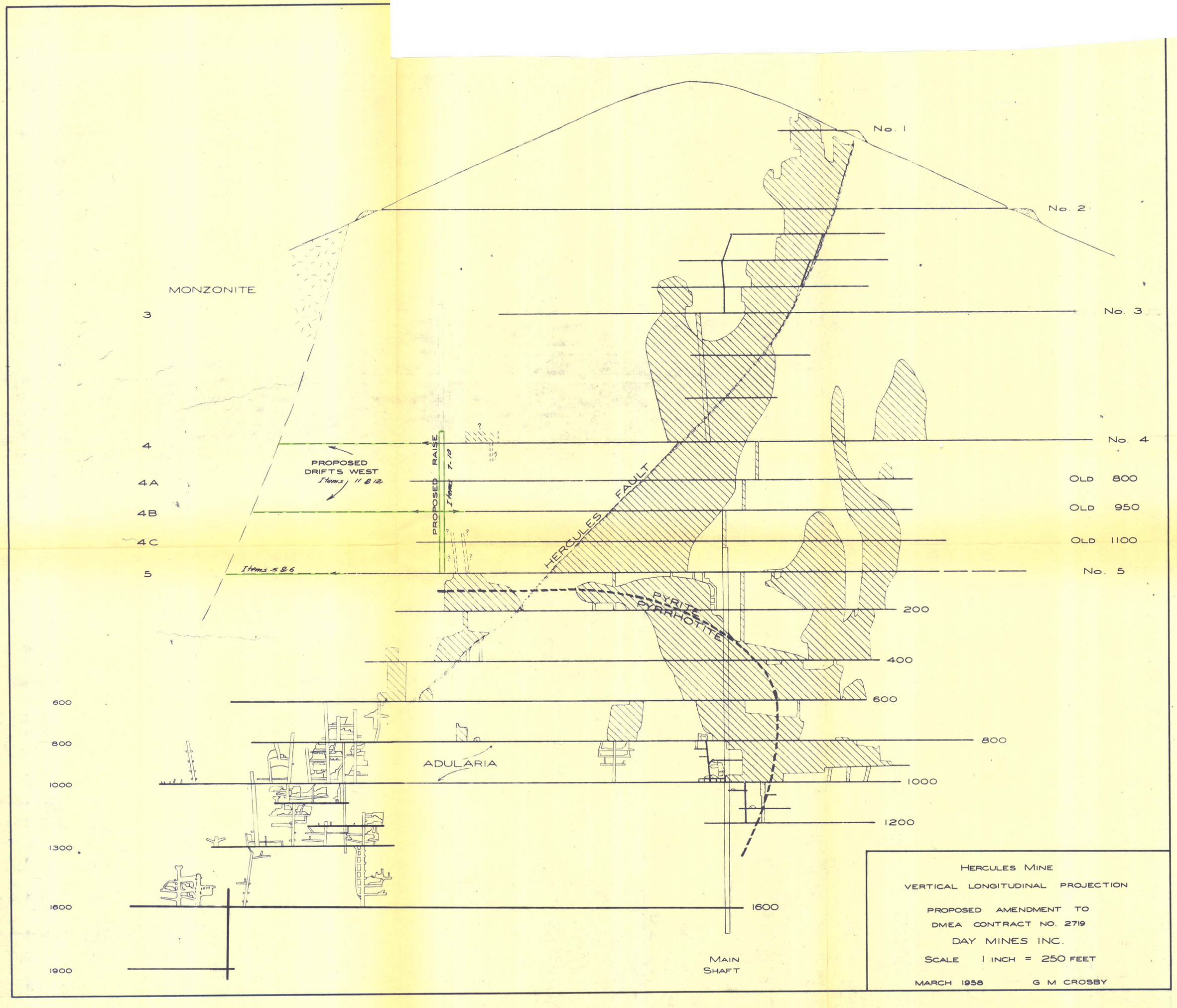
SHOSHONE COUNTY, IDAHO

100 0 100 200 300 400 Feet

R.D.S.

Compiled from Company and DMEA maps
Mar. 1959

PLATE 6



HERCULES MINE

VERTICAL LONGITUDINAL PROJECTION

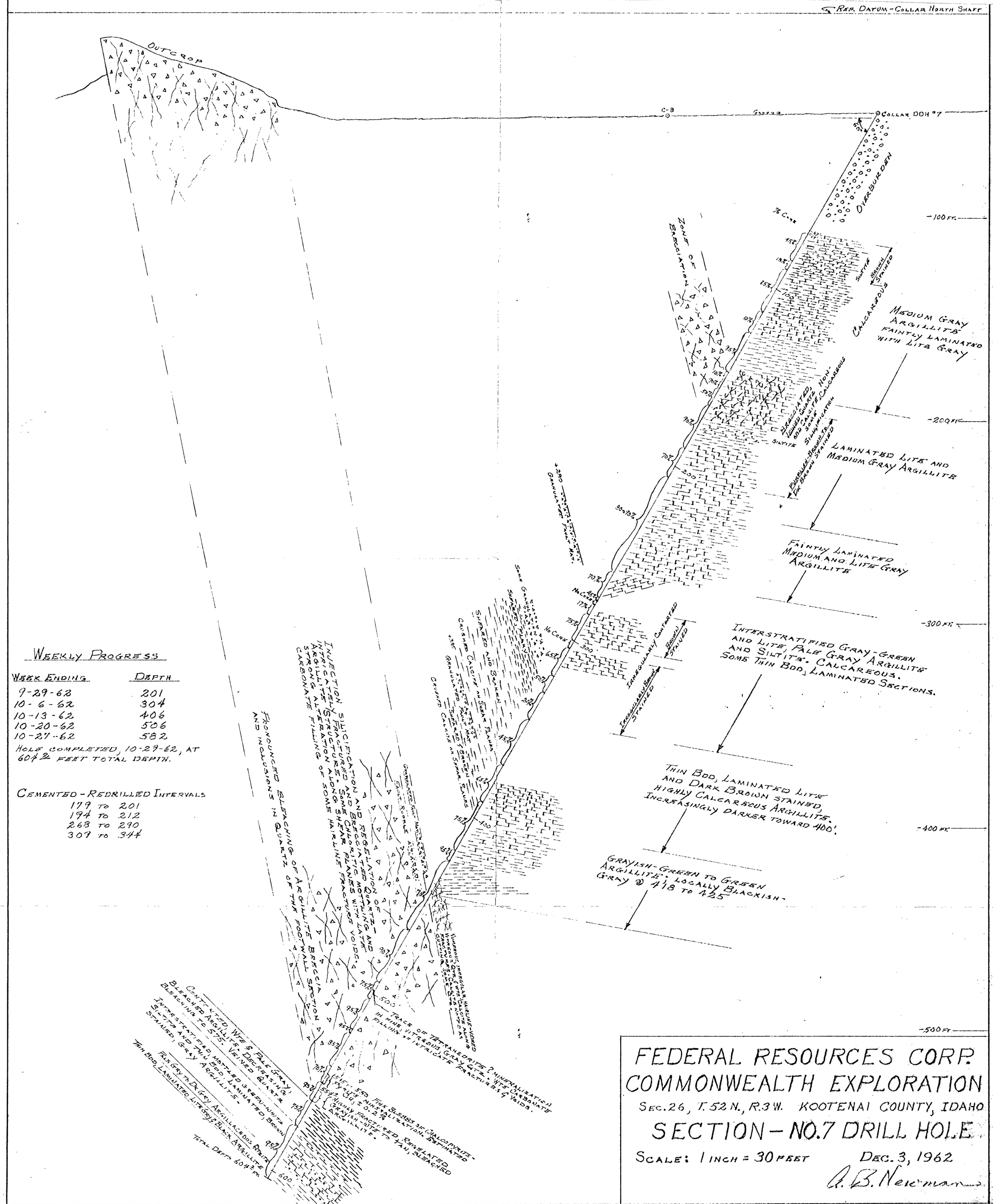
PROPOSED AMENDMENT TO
DMEA CONTRACT NO. 2719

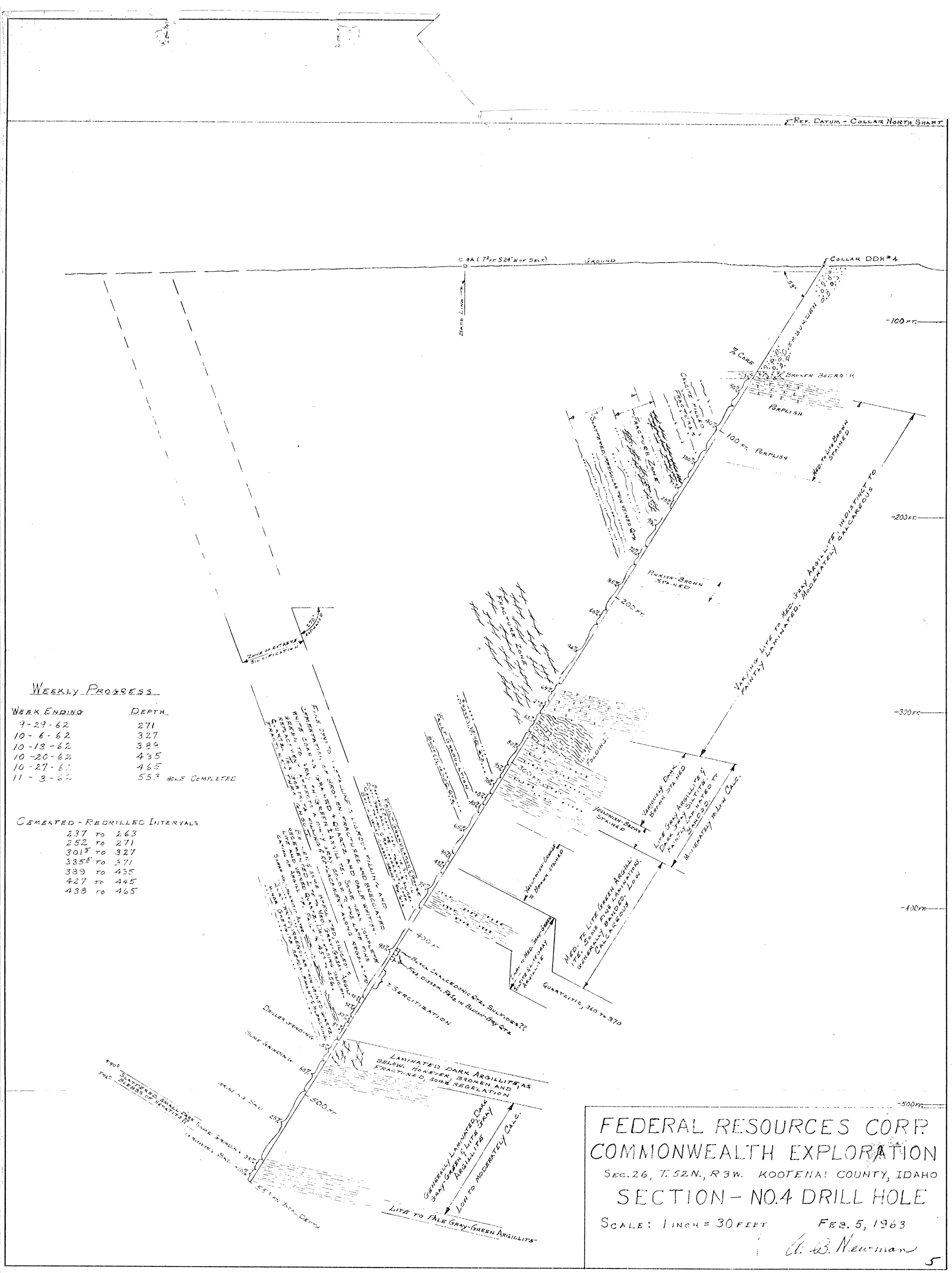
DAY MINES INC.

SCALE 1 INCH = 250 FEET

MARCH 1958 G M CROSBY

AMBERGRIS CROSSCUT
NORTH
?
BY-PASS ? Item 4
STOPED
Item 3
FAULT
PROPOSED LATERAL Item 2
HERCULES
STOPED
Item 1
SHAFT
PORTAL
8000'
HERCULES MINE
NO. 5 ADIT LEVEL
PROPOSED AMENDMENT TO
DMEA CONTRACT NO. 2719
DAY MINES INC.
SCALE 1 INCH = 100 FEET
MARCH 1958
G M CROSBY


REF. DATUM - COLLAR NORTH SHAFT
OUTCROP
C-8
GROUND
COLLAR DDH #7
OVERBURDEN
-100 FT.
ZONE OF BRECCIATION
% CORE
SILTITE
BROWN STAINED
CALCAREOUS
MEDIUM GRAY ARGILLITE FAINTLY LAMINATED WITH LITE GRAY
BRECCIATED, VEINED QUARTZ AND CALCITE, CALCAREOUS
NON-SOME SILICIFICATION
BURNISH-BROWN TO DK BROWN STAINED
-200 FT.
LAMINATED LITE AND MEDIUM GRAY ARGILLITE
FAINTLY LAMINATED MEDIUM AND LITE GRAY ARGILLITE
-300 FT.
INTERSTRATIFIED GRAY-GREEN AND LITE, PALE GRAY ARGILLITE AND SILTITE. CALCAREOUS. SOME THIN BDD, LAMINATED SECTIONS.
IRREGULARLY CONTORTED
BROWN STAINED
IRREGULARLY BROWN STAINED
THIN BDD, LAMINATED LITE AND DARK BROWN STAINED, HIGHLY CALCAREOUS ARGILLITE. INCREASINGLY DARKER TOWARD 400'.
-400 FT.
GRAYISH-GREEN TO GREEN ARGILLITE, LOCALLY BLACKISH-GRAY @ 418 TO 425
-500 FT.
SOME GRANULATED FAULT MAT.
SHEARED AND BROKEN
CRUSHED CALCITE ON SHEAR PLANES
GRANULATED FAULT MAT.
CRUSHED CALCITE ON SHEAR PLANES
INJECTION SILICIFICATION AND REGELATION OF QUARTZ INTRICATELY FRACTURED AND BRECCIATED ARGILLITE. SOME CHLORITIC MOTTLING AND STRONG ALTERATION ALONG SHEAR PLANES WITH LATE CARBONATE FILLING OF SOME HAIRLINE FRACTURES VOIDS.
PRONOUNCED BLEACHING OF ARGILLITE BRECCIA AND INCLUSIONS IN QUARTZ OF THE FOOTWALL SECTION.
VARIEGOUS IRREGULAR HAIRLINE-VEINED QUARTZ WITH CALCITE ALONG CONTACTS SOME SILICIFICATION
TRACE OF TETRAHEDRITE? MINERALIZATION IN FINE VITREOUS GRAY QTZ. WITH CARBONATE FILLING OF INTRICATE FRACTURES & VOIDS.
FAIR BLEBBS OF CHALCOPYRITE-PYRITE MINERALIZATION. ESTIMATED 0.2%
HIGHLY FRACTURED REGELATED (GRAYISH-LITE TO TAN) BLEACHED ARGILLITE.
CONTORTED WHE & PALE GRAY BLEACHED ARGILLITE. DECREASING BLEACHING TO 575. VEINED QUARTZ
INTERSTRATIFIED MOTTLED GREEN-WHITE SILTITE AND THIN BDD. LAMINATED STAINED, GRAY ARGILLITE.
PALE GRAY TO DK GRAY ARGILLACEOUS BRITTLE
THIN BDD. LAMINATED LITE GRAY BLACK ARGILLITE
TOTAL DEPTH 604½ FT.
0
50
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1800
1850
1900
1950



FEDERAL RESOURCES CORP.
COMMONWEALTH EXPLORATION

Sec. 26, T. 52 N., R 3 W. Kootenai County, Idaho

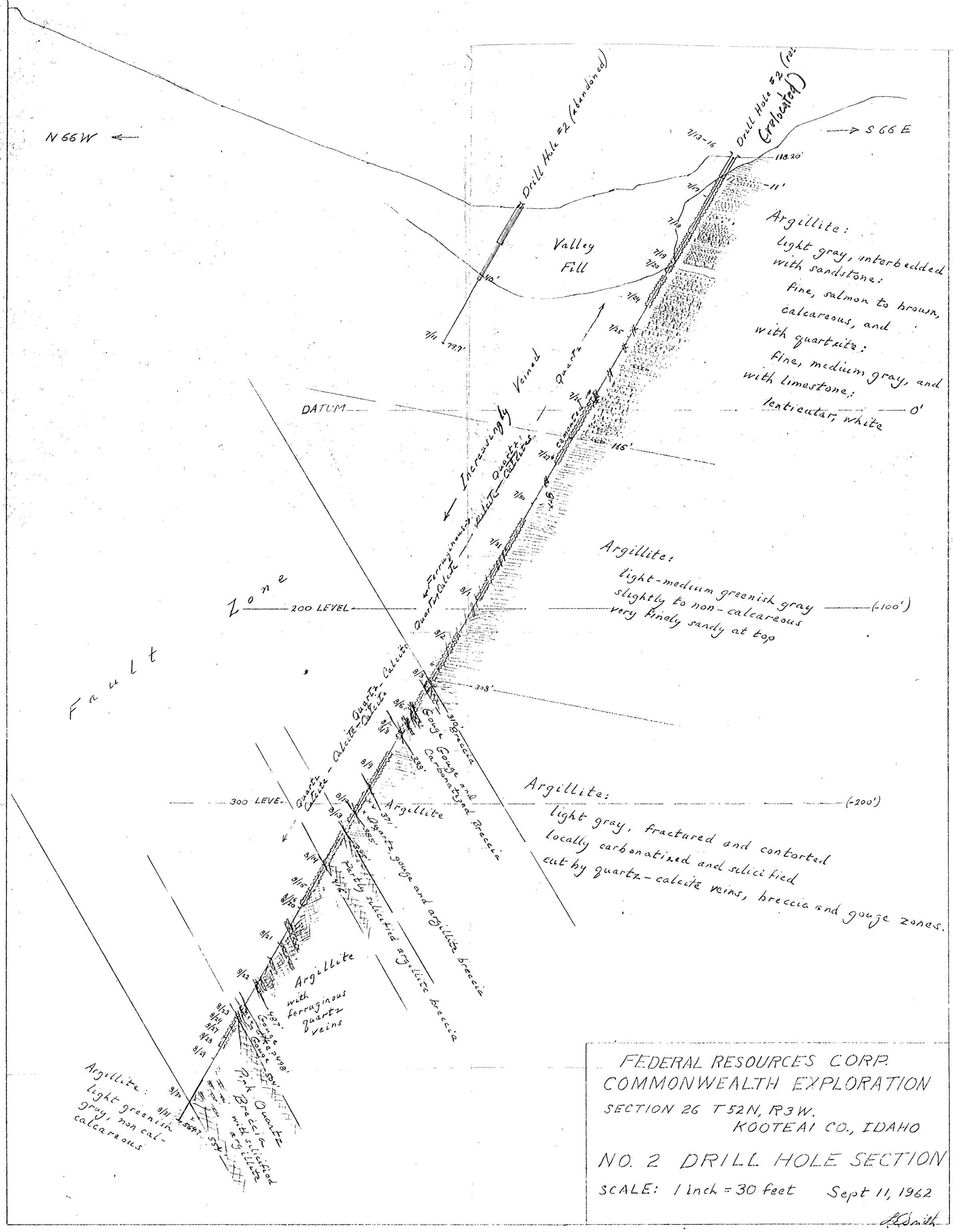
SECTION - NO. 4 DRILL HOLE

Scale: 1 inch = 30 feet

Feb. 5, 1963

C. B. Newman

5



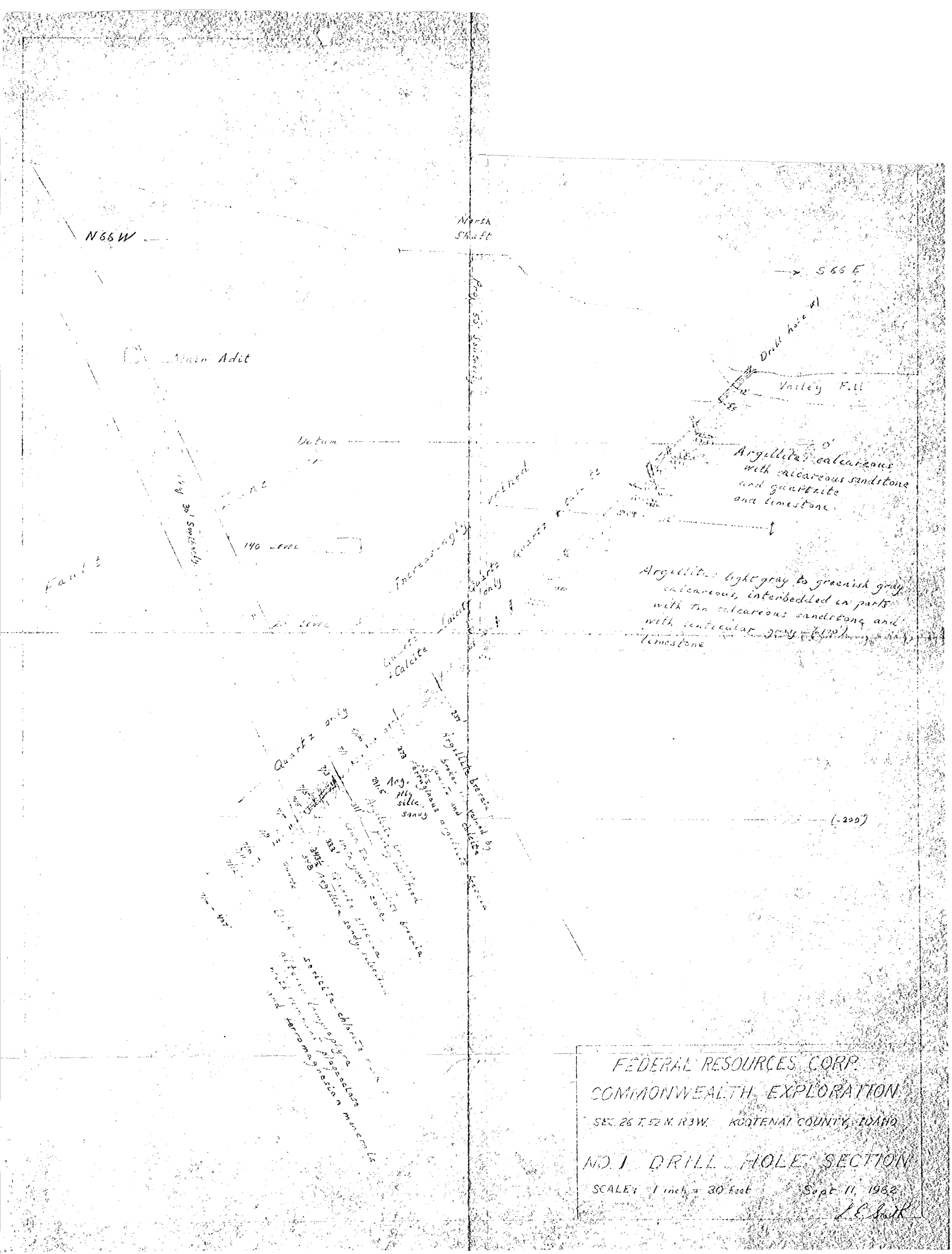
FEDERAL RESOURCES CORP.
COMMONWEALTH EXPLORATION
SECTION 26 T52N, R3W.
KOOTEAI CO., IDAHO

NO. 2 DRILL HOLE SECTION

SCALE: 1 Inch = 30 feet Sept 11, 1962

L.E. Smith

5

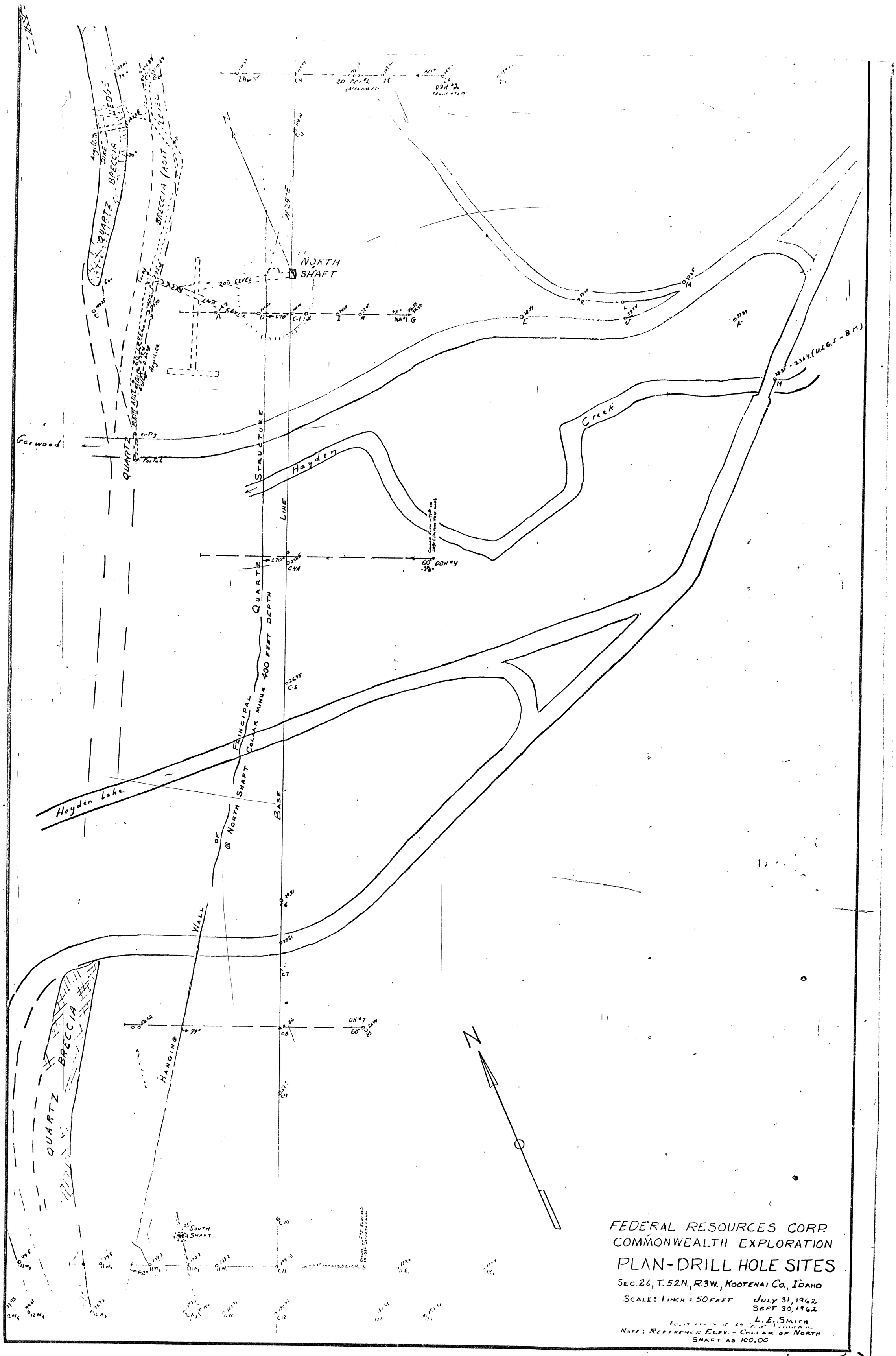


FEDERAL RESOURCES CORP.
COMMONWEALTH EXPLORATION
SEC. 26 T. 52 N. R3W. KOOTENAI COUNTY, IDAHO

NO. 1 DRILL HOLE SECTION

SCALE: 1 inch = 30 feet Sept 11, 1962

L.E. Smith


FEDERAL RESOURCES CORP.
COMMONWEALTH EXPLORATION
PLAN-DRILL HOLE SITES
SEC. 26, T. 52N., R. 3W., KOOTENAI CO., IDAHO
SCALE: 1 INCH = 50 FEET
JULY 31, 1962
SEPT 30, 1962
L. E. SMITH
NOTE: REFERENCE ELEV. - COLLAR OF NORTH SHAFT AS 100.00
NORTH SHAFT
200 LEVEL
QUARTZ BRECCIA
BRECCIA ADIT
QUARTZ
STRUCTURE
LINE
BASE
PRINCIPAL
COLLAR MINUS 400 FEET DEPTH
SHAFT
@ NORTH
OF
WALL
HANGING
BRECCIA #
SOUTH SHAFT
Garwood
Hayden
Creek
Hayden Lake
STUMP CREEK
N 28° E
N