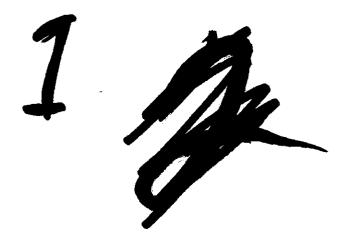
L49-115 SW. Moyie Claims. St. Eugene Mining Corp. Ltd. Smith, Alexander: Engineer. 82G/5W 0001





#### REPORT

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# MOYIE GROUPS 1-6 and the ML55 M.C.

FORT STEELE M. D.

BRITISH COLUMBIA

bу

ALEXANDER SMITH

## REPORT AND GEOLOGICAL MAPS

#### SUBMITTED AS ASSESSMENT WORK

#### ON THE MOYIE GROUPS 1-6 AND THE ML #55 M. C.

MOYIE LAKE, B. C.

NOVEMBER, 1947

The five geological maps submitted:

HE Barkshanty Creek

HE Glencairn Creek

HE Tradedollar

HU Larsen Creek

HE Etna Creek

HE Etna Creek

show the principal outcrop areas on and adjacent to the Moyie Groups. The relative positions of these maps is shown on the accompanying claim map (scale 1"= 1500') Only a few small isolated outcrops, not yet surveyed in, are not shown. The stratigraphy has been mapped in detail in an attempt to work out the structure of the area.

The area covered by these maps is underlain by the upper third of the Aldridge formation and by the overlying Creston. These sediments are mainly quartzites and argillites. They are folded into a broad open anticline plunging at about 10° to the north. Its axis (Strike N 19° E) underlies Lower Moyie Lake. On the east side of the Lake the beds in general strike northwesterly and on the west side northeasterly.

Superimposed on this relatively simple major structure are a series of rolls and crumples in the strata. In addition there has been considerable block faulting. Stratigraphic displacements of as much as 900 feet were found. The orientations of many of the faults causing these displacements are not known.

The zones of crumpling and rolling of the strata are accompanied by parallel faults. These range from N 30° W to N 20° E in strike. Occasionally fracture cleavage is developed in thin beds involved in second order folds. The cleavage usually strikes between due north and N 10° W.

Another prominent set of frectures strikes

N 70° W and dips steeply southwest, i.e. nearly normal to the
anticlinal axis. The main and south veins at the old St.

Eugene Mine occupy such fractures. The Aurora and Guindon
veins have the same orientation and lenses of ore similar to
that at the St. Eugene. Elsewhere in the area there are
narrow (1"-10") quartz veins with this trend. These have a
gangue and wall rock alteration similar to the St. Eugene
veins but are either devoid of sulphides or carry only pyrite.

There are no large Purcell sills in this Moyie Group Area. About a mile to the south are the 2 sills shown on the map submitted for the ML 60-71 assessment. A 20 ft. dyke of similar quartz gabbro strikes N 40° E and splits into two N 10° E branches which cross the St. Eugene vein struc-

tures. One or two narrow sills (4'-8') occur on both sides of the Lake in about the same stratigraphic horizon.

There are no known distinctive and persistent horizon markers. Also a large portion of the area is drift covered. To get a more comprehensive picture, it is planned to map a much larger area on a scale l"= 1000' and submit this as additional assessment work.

Real Smith

November 13th, 1947

#### COST STATEMENT

#### TO GEOLOGICAL MAPPING 48 CLAIMS

MOYIE GROUPS 1-6 INCLUSIVE AND ML #55 M. C.

done between January! 1947 and hov. 13, 1947

FIELD WORK:

Alexander Smith and J. A. Robertson -

40 days each - \$4,000.00

OFFICE WORK:

Alexander Smith and J. A. Robertson -

40 days each

- 2,000.00

**\$6,000.00** 

DISTRIBUTION:

To Moyie Groups 1-5 inclusive -

\$800.00 per group - \$4,000.00

To Moyie Group #6

700.00

To ML #55 Claim

100.00

\$4,800.00

CERTIFIED CORRECT

November 13th, 1947

## CRESTON FORMATION:

Quartzites - 735 Argillites - 736

## ALDRIDGE FORMATION:

Thick Bedded Quartzites (- 4" Av. beds Light Blue - 7401 9 banded Dark Blue - 741 Thin " & Arg. Quartzites Light Brown - 6239 " banded Dark Brown - 746 6 Argillaceous Siltstone Terra Cotta - 745 Argillites Violet - 742 Rhymmetically Banded Marker Horizons (MAR) Lavender - 7422 Purcell Sills & Dykes Green - 7381 Veins Scarlet - 744

## ABBREVIATIONS

#### ROCK TYPES:

#### BANDING: - Qyartzites B - Banding - Argillaceous Quartzites aB - occasional Banding fB - faint Banding - Siltstone AS - Argillaceous Siltstone hB - hairlike Banding as in Argillites

- Argillites dB - distinct Banding MAR - Chubbs banded marker bed pB - pronounced Banding gB - gradational Banding MAR - Chubbs banded member

## ROCK COLOR:

DG - Dark Grey MG - Medium Grey SG - Silver Grey LG - Light Grey Bl.- Black T. - Tan RN .- Rusty Weathering Gn.- Greenish Pu .- Purple

Y - Yellowish

# SEDIMENTATION FEATURES:

bp .- bedding plane ib .- interbeds Rm.- Ripple marked Rd .- Rain drop casts Mc .- Mud cracks C. - Concretions Gl.- Glistening Crystals XC - Crystel Casts on bedding plane Alt. - Alteration Fre.Clv. - Fracture Cleavage

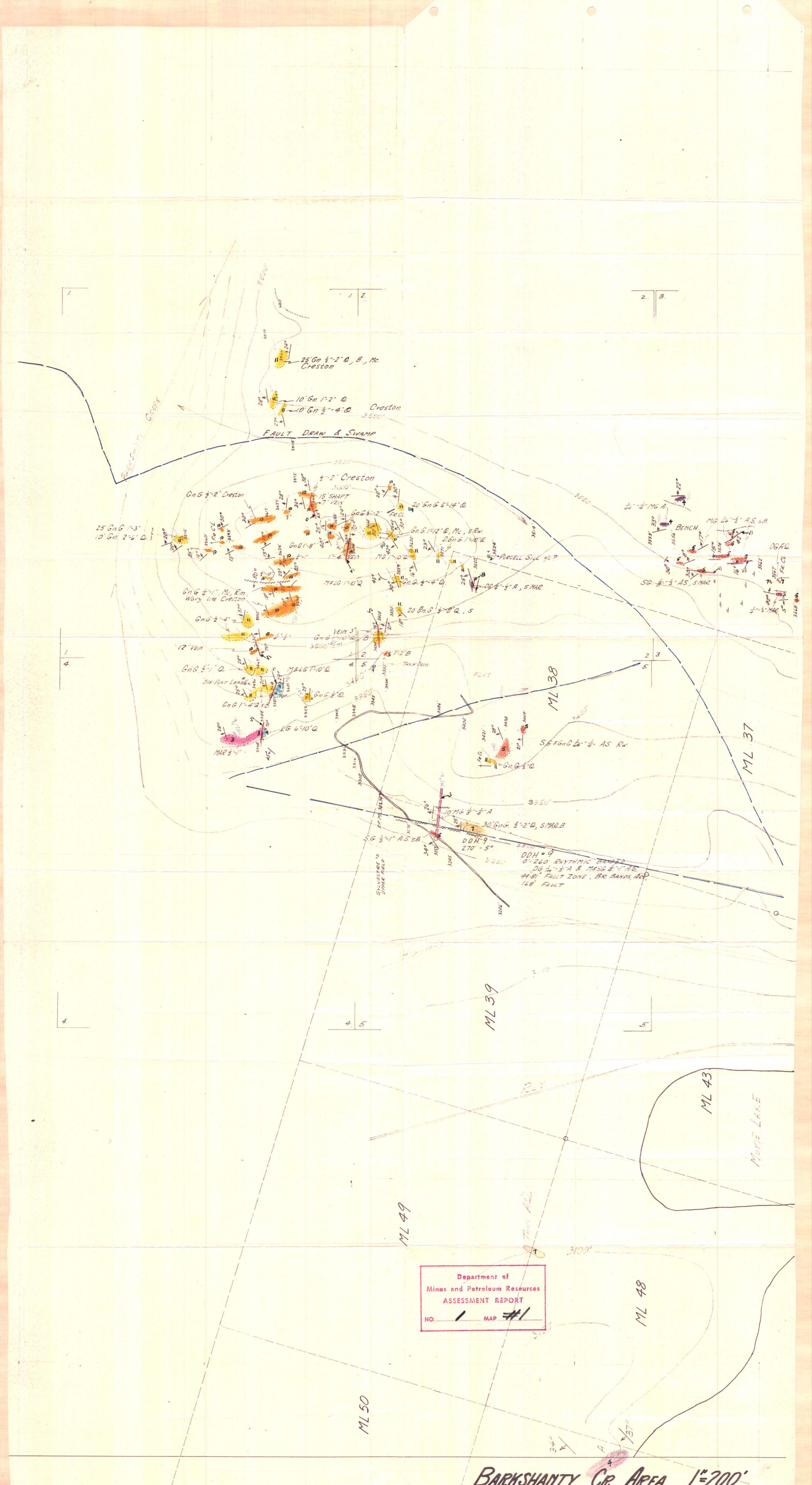
## GENISRAL: gr. - grading

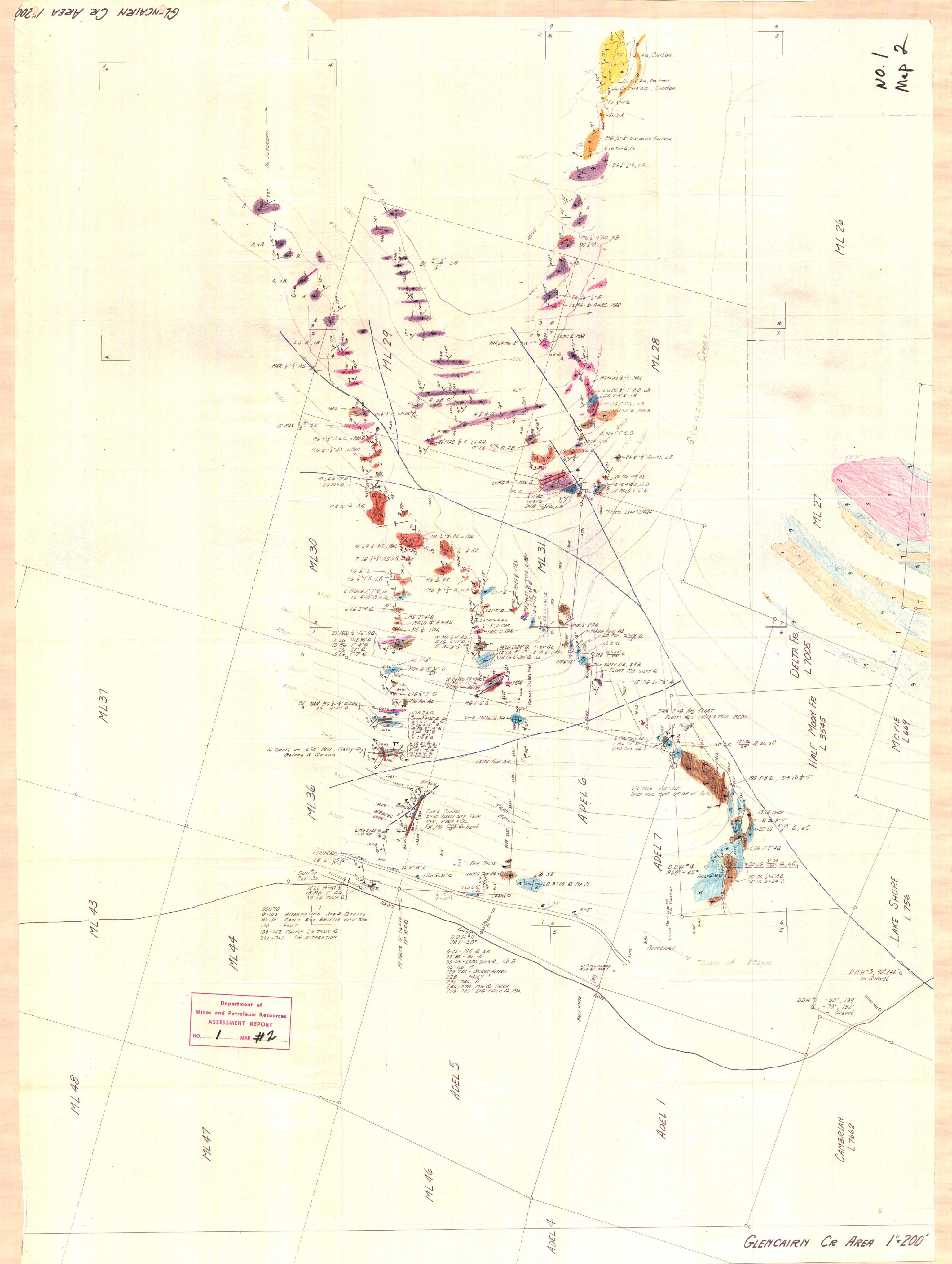
cl. - clean

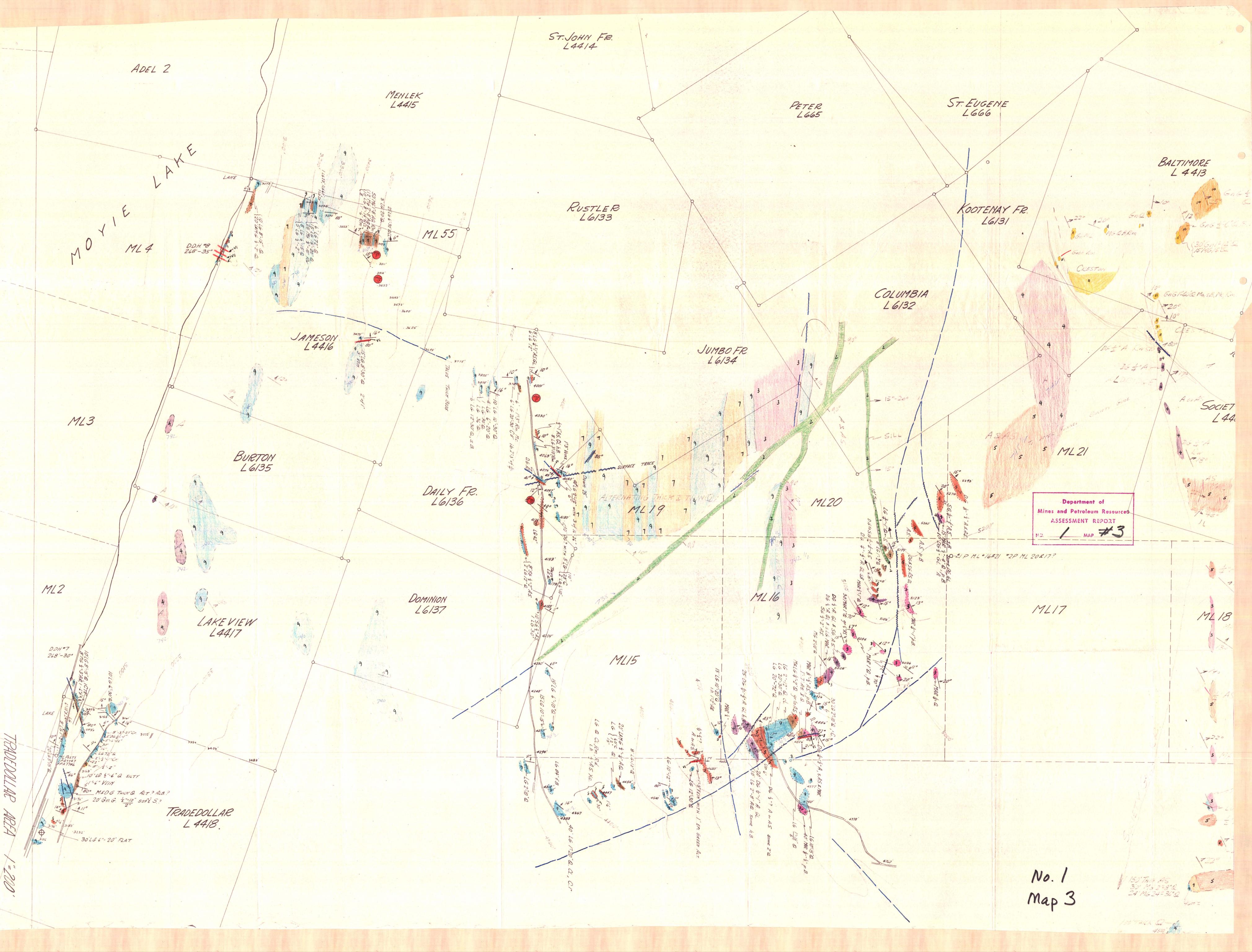
Ma. - Massive

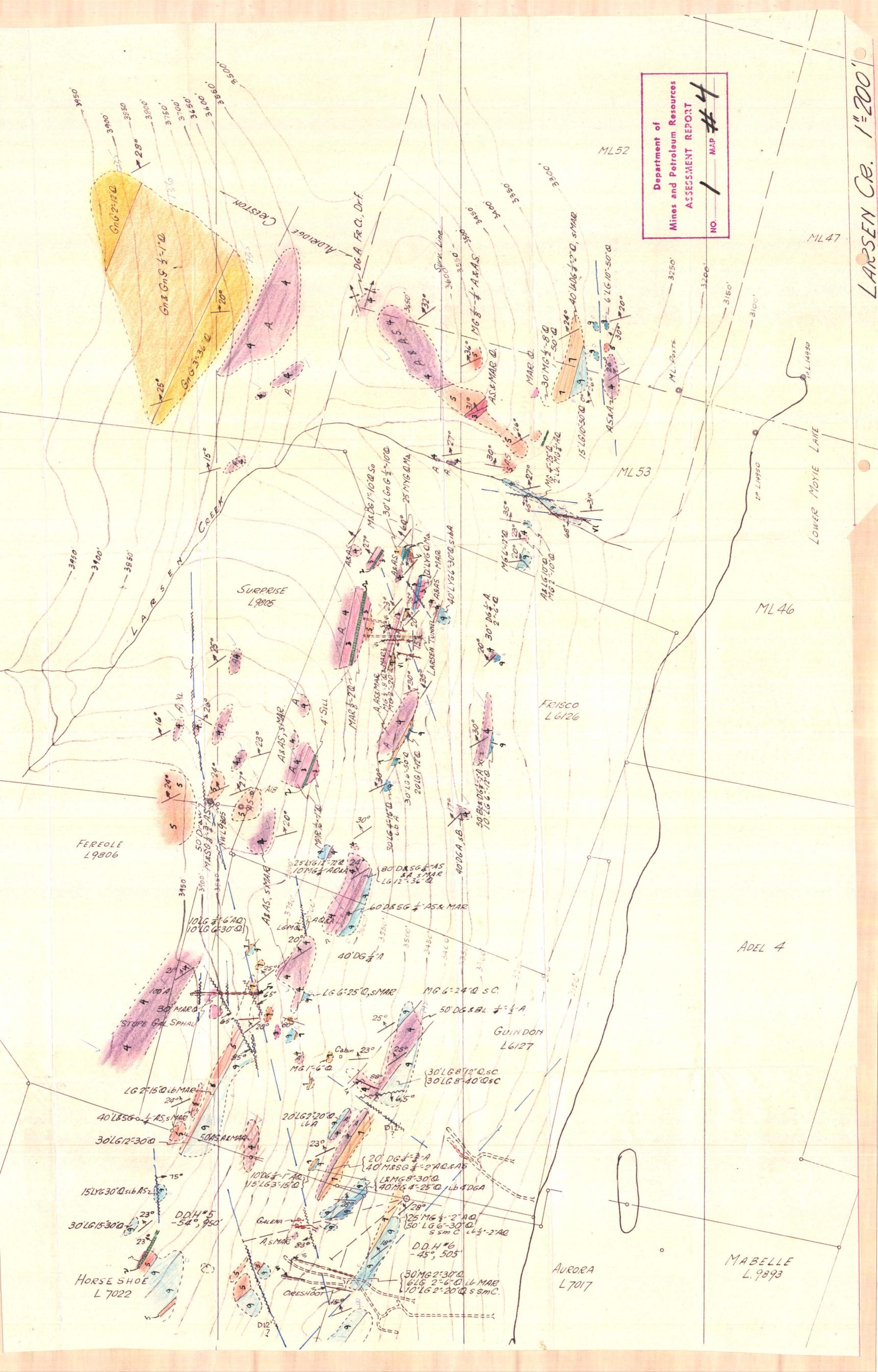
er. - Crudy (messy) Thick Thin Simi. - Similar Sa. - Sandy Sh. - Shaly Sl. - Slaty Bio .- Biotite

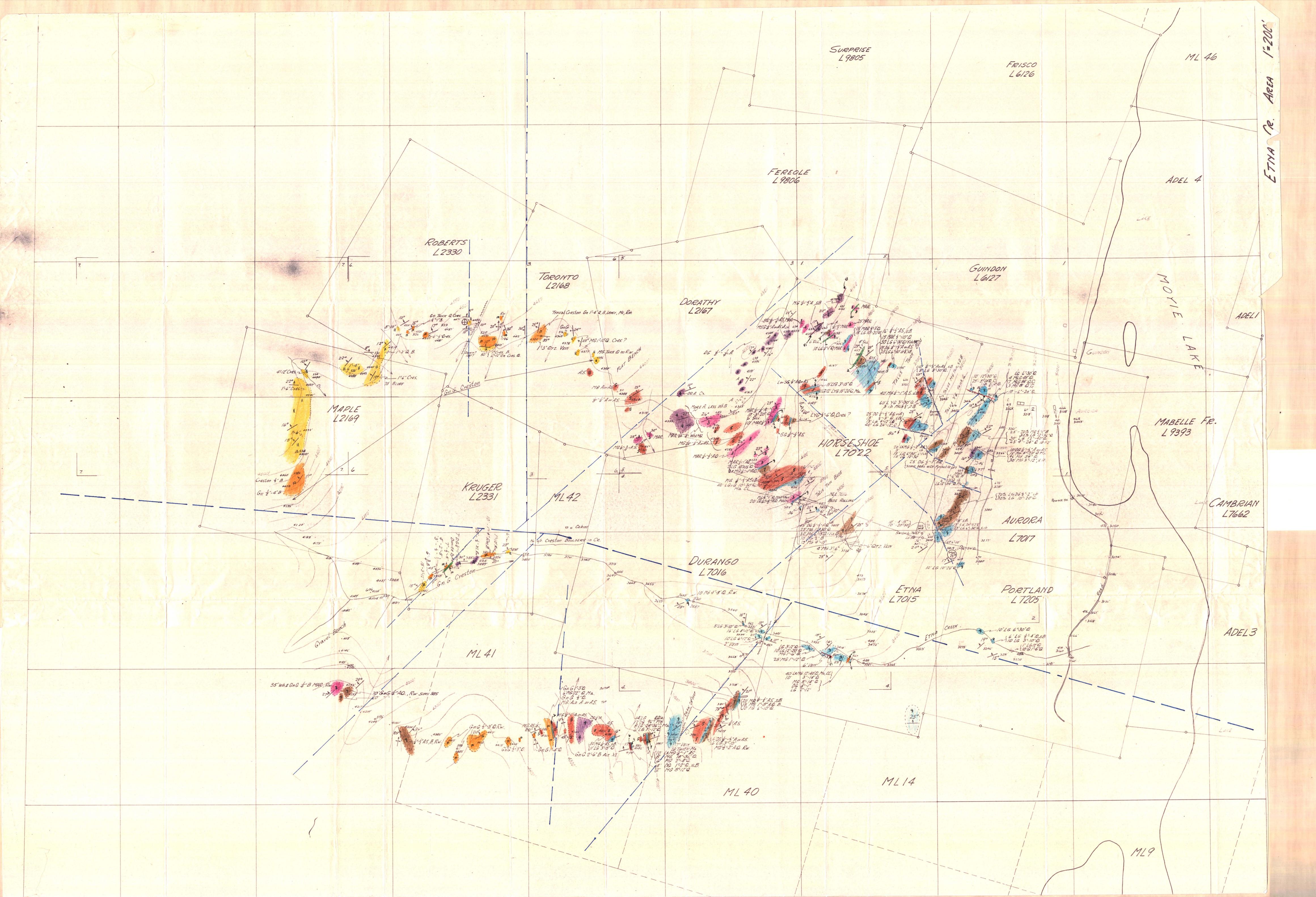
V - VEIN

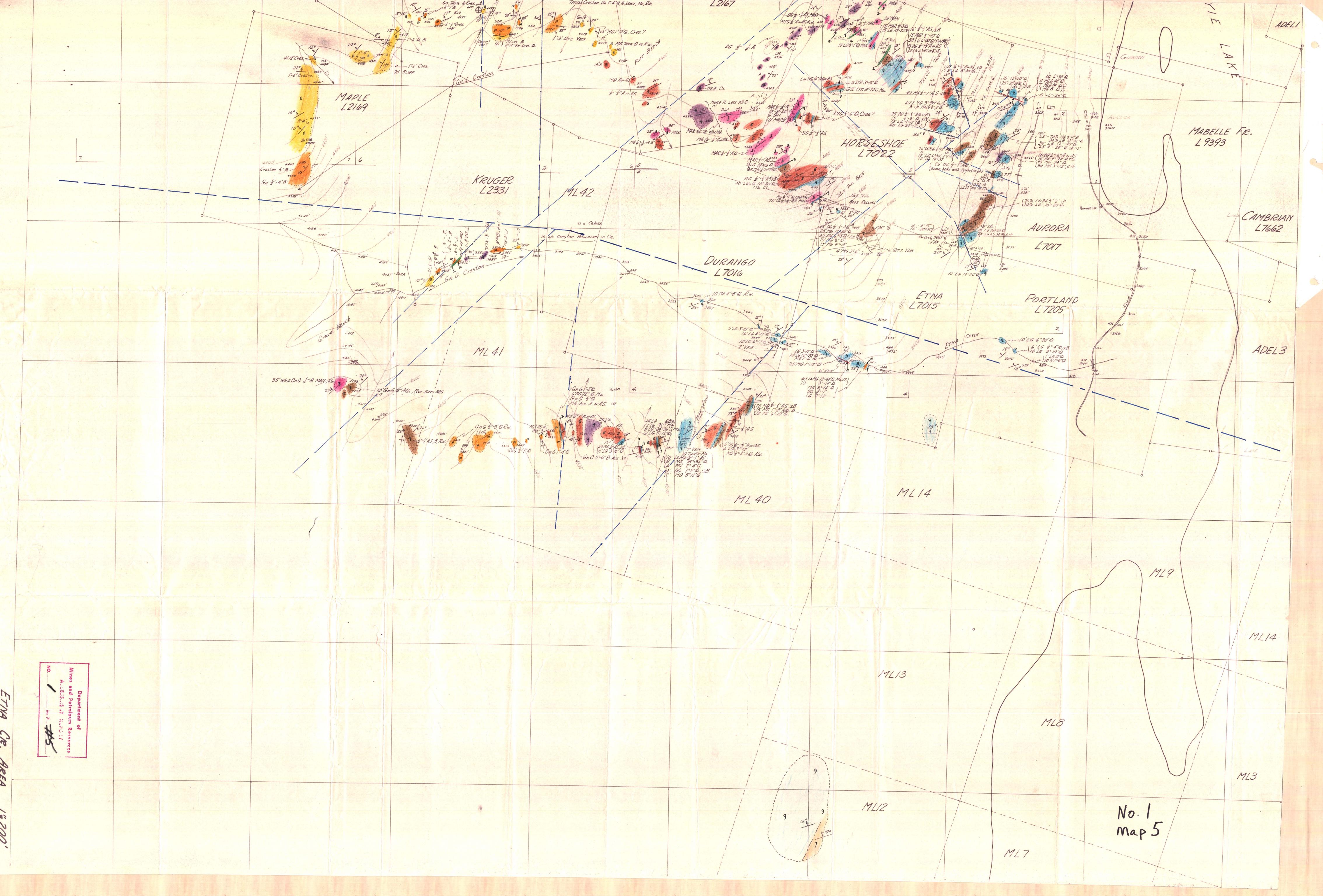


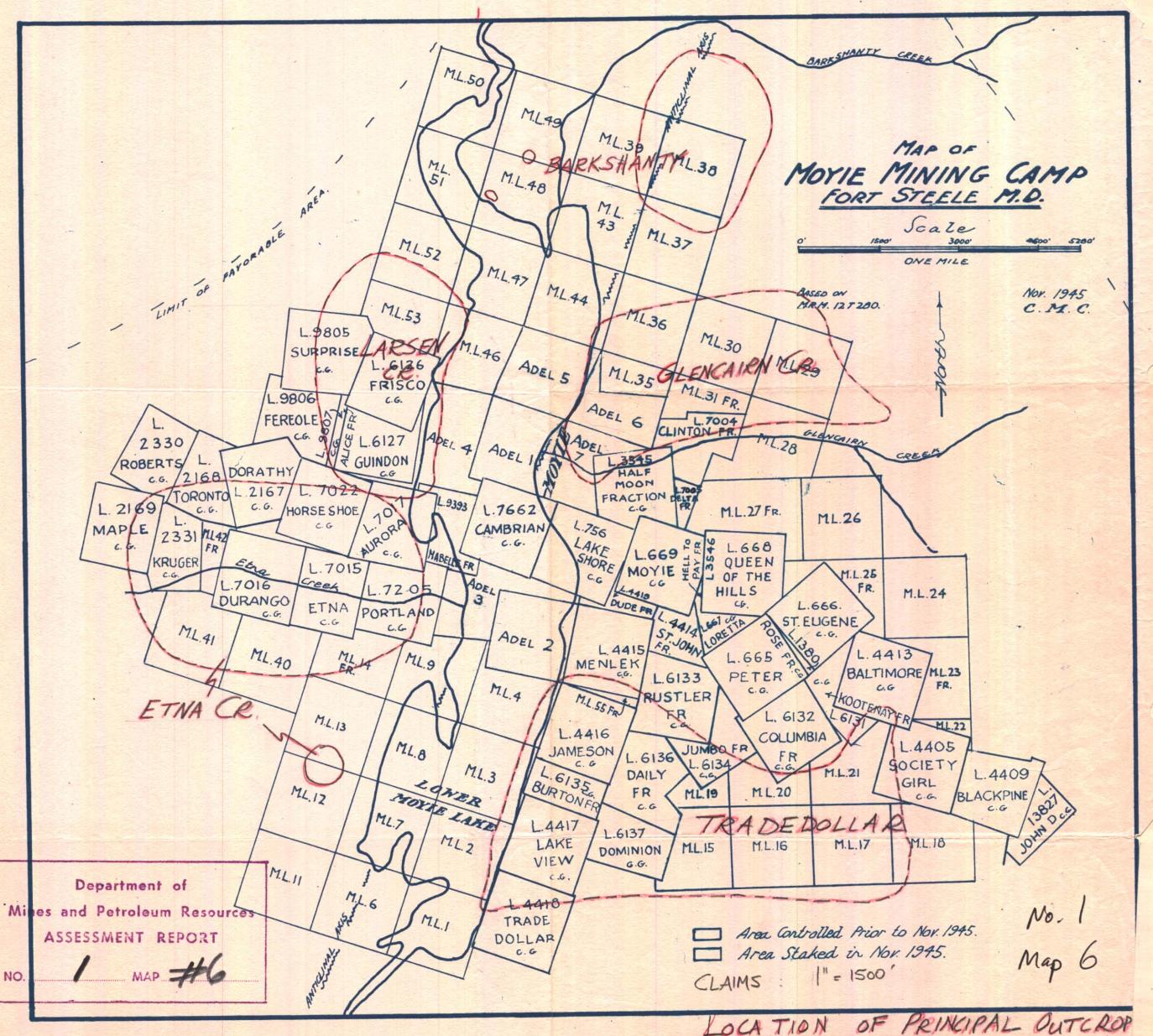












LOCATION OF PRINCIPAL OUTCROP AREAS ON 1"-200" GEOL. MAD