

ORTELL SYNDICATE

GEOCHEMICAL SURVEY AND
PRELIMINARY GEOLOGY FOR
PARTS OF THE EIRA CLAIM GROUP

John D. Curry, B.Sc., P.Geol.
Precambrian Shield Resources Limited

October, 1977

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Office of The Supervising Mining Records
DEC - 5 1977
WHITEHORSE
Yukon Territory

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INSPEC
WHITEHORSE, Y.T.

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MAPS (IN POCKET)

- 0-02 EIRA CLAIM GROUP
- 0-04 RECONNAISSANCE GEOCHEMICAL SURVEY
- 0-06 SILVER, SOIL GEOCHEMICAL SURVEY
- 0-07 LEAD, SOIL GEOCHEMICAL SURVEY
- 0-08 ZINC, SOIL GEOCHEMICAL SURVEY
- 0-09 RECONNAISSANCE GEOLOGY

GEOCHEMICAL SURVEY AND
PRELIMINARY GEOLOGY FOR
PARTS OF THE EIRA CLAIM GROUP

INTRODUCTION

The EIRA claim group consists of 150 claims in the Nadaleen River-Stewart River Areas of the Mayo Mining District (see Property Plan 0-02), approximately 110 miles east northeast of Mayo, Yukon Territory.

EIRA claims 1 to 140 inclusive were staked in November of 1976 by the Ortell Syndicate as a result of silver-lead-zinc discoveries made in the area by McIntyre Mines Ltd. Another ten claims were added in August of 1977.

Silt sampling of creeks and some prospecting were done between June 30th and July 10th of 1977 (see Reconnaissance Geochemical Survey, Plan 0-04) by the writer and D.G. Thomas, P.Eng. Anomalous silver and zinc results in the northeastern sector of the claims caused Phase II to be carried out between August 1st and 18th, 1977 by the writer and M. Statnyk.

For Phase II a baseline, 11,000 feet in length with flagged cross-lines at intervals of 500 feet along the baseline, was established. Soil samples, at intervals of 100 feet along the crosslines and up to 1500 feet north and 2,000 feet south of the baseline, were gathered and analysed for silver, lead and zinc. Geological mapping was carried out on the grid along drainages where most of the vary sparse outcrop occurs.

The representation work submitted in this report is essentially the results of the soil sampling program. Geological work is of secondary importance in this area due to limited outcrop.

Plans 0-06, 0-07 and 0-08 show geochemical soil analysis for silver, lead and zinc in the grid area. Plan 0-09 shows the geology of the same area and indicates that geochemical anomalies are related to black shales (Road River Formation) and its contact with slate and carbonate rocks (Hadrynian rocks). This contact, although not seen in outcrop, is probably the locus of

a major thrust fault, which apparently has some control on the known silver-lead-zinc occurrences in the area.

A main southerly flowing creek in the western part of the group is somewhat anomalous but no attempt was made to investigate this area in 1977. (see Plan 0-04)

D.G. Thomas resides at 10531 Shillington Cres. S.W., Calgary, Alberta; M. Statnyk at Beaver Creek, Y.T. and the writer's postal address in c/o General Delivery, Christina Lake, B.C.

CLAIM GROUP

The 140 claims staked in November of 1977 are as follows:

<u>Claim Name</u>	<u>Claim Numbers</u>	<u>Owner of Record</u>
EIRA No. 1 - 8	14643 - 14650	D. Jurovich
EIRA No. 9 - 16	14651 - 14658	E. Jurovich
EIRA No. 17 - 32	14659 - 14674	G. Gamache
EIRA No. 33 - 40	14675 - 14682	N. Schultz
EIRA No. 41 - 48	14683 - 14690	A. Schultz
EIRA No. 49 - 56	14691 - 14698	D. McPherson
EIRA No. 57 - 64	14699 - 14706	M. Grant
EIRA No. 65 - 72	14707 - 14714	R. Grant
EIRA No. 73 - 80	14715 - 14722	G. Thomas
EIRA No. 81 - 88	14723 - 14730	J. Peters
EIRA No. 89 - 96	14731 - 14738	L. Johnnie
EIRA No. 97 - 104	14739 - 14746	C. Hutton
EIRA No. 105 - 112	14747 - 14754	D. Klippert
EIRA No. 113 - 120	14755 - 14762	C. Klippert
EIRA No. 121 - 126	14763 - 14768	S. Telep
EIRA No. 127 - 134	14769 - 14776	J. Lucas
EIRA No. 135 - 140	14777 - 14782	K. Olen

The 10 claims (EIRA 141 to 150 inclusive) staked in August of 1977 are as follows:

<u>Claim Names</u>	<u>Claim Number</u>	<u>Owner of Record</u>
EIRA 141 to 148 inclusive	YA15946 to YA15953 inclusive	J. Curry
EIRA 149 and 150	YA15954 and YA15955	M. Statnyk

Both Phase I and Phase II were carried out under the direction of the writer on behalf of the Ortell Syndicate (Giant Yellowknife Mines Ltd. - 25%, Highwood Resources Ltd. - 25%, Nemco Exploration Ltd. - 25% and Precambrian Shield Resources Limited - 25%).

GEOLOGY

The Lansing Map 7853 G shows the geology quite accurately for the area covered by the EIRA group. A major thrust fault is indicated as traversing the property in a S80°E direction. Hadrynian slate (Hs) and carbonate rocks (Hls) underly the area south of the fault; Road River shale (OSDr) with massive limestone and limestone breccia (ODc) are north of the thrust.

On Plan 0-09, unit 1 is equivalent to Hs being mainly slate with some carbonate rock. Further south, off the grid, a prominent carbonate bank is equivalent to Hls.

The black shale with minor carbonate bands of unit 2 are equivalent to the Road River Formation.

Massive light grey weathering limestone and limestone breccia (unit 3) underly the peaks northeast of the grid and are equivalent to G.S.C. unit ODc.

TABLE OF GEOLOGICAL UNITS

<u>G.S.C. Unit</u>	<u>Description</u>
Devonian ODc (Northwest of grid)	Light grey weathering massive limestone, limestone breccia
Ordovician OSDr	Road River Formation Black shale; chert?; siliceous mudstone?; minor thin-bedded dark limestone and dolomite
Hadrynian Hs(Hv?)	Brown, grey, green and maroon slate; grey dolomite and limestone; minor tuff?
Hls (South of grid)	Grey, orange and brown weathering limestone and dolomite

The thrust fault which is projected along the contact of units 1 and 2 was not observed in outcrop but there is no reason to not accept the assumed contact at the locus of the fault.

Some prospecting was done south of the fault and off the grid in carbonate rocks (Hls). No sulphide mineralization, other than minor pyrite bands, was located.

All units have a general trend of S80⁰E with some drag folded structures in evidence.

GEOCHEMICAL RESULTS

A total of 82 silt and rock samples were collected in Phase I while 650 soil samples and three rock samples were obtained in Phase II from the grid. One spectrographic analysis of a soft black submetallic mineral indicated the mineral to be a manganese oxide.

Geochemical samples were analysed for silver, lead and zinc by the Bondar-Clegg and Company Limited lab at 136B Industrial Road, Whitehorse, Y.T.

Soil and silt samples were dried and screened. Rock samples were crushed and pulverized. The minus 80 mesh fraction for soil and silt, the minus 100 mesh fraction for rock were retained for analysis. Sample digestion

was in hot perchloric acid and analysis was by atomic absorption procedures.

Phase I (see Plan 0-04) returned anomalous results in silver and zinc with highs to 2.4 and 680 parts per million in the northeastern sector of the property compared to silver not generally being detected and zinc less than 100 parts per million elsewhere on the claims.

Phase II (see SILVER, Plan 0-06; LEAD, Plan 0-07; ZINC, Plan 0-08) disclosed a number of anomalous conditions which deserve follow-up investigations. The anomalies are related to either Road River shales or the assumed locus of the regional thrust fault.

Four silver peaks, in excess of 4 parts per million (> 9 ppm on line 5W at 14S and 15S) occur on the grid. Zinc and lead peaks also occur but generally do not coincide with each other or with the silver highs. The best coincidence occurs south of the baseline on line 30E.

RECOMMENDATIONS

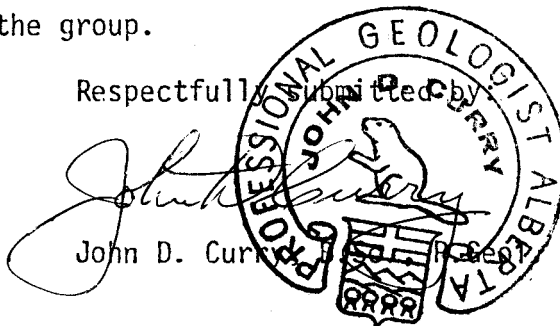
Future work on the property should expand the geochemical coverage further south and give detailed coverage to those area where anomalies are now broadly defined. Detailed examination in the vicinity of the anomalies is unlikely to reveal any rock outcrops previously overlooked but sulphide bearing float might be located. While results are of interest, more encouragement would have to be obtained before costly forms of exploration such as diamond drilling be considered.

Additional work should be carried out along the weakly anomalous drainage in the western part of the group.

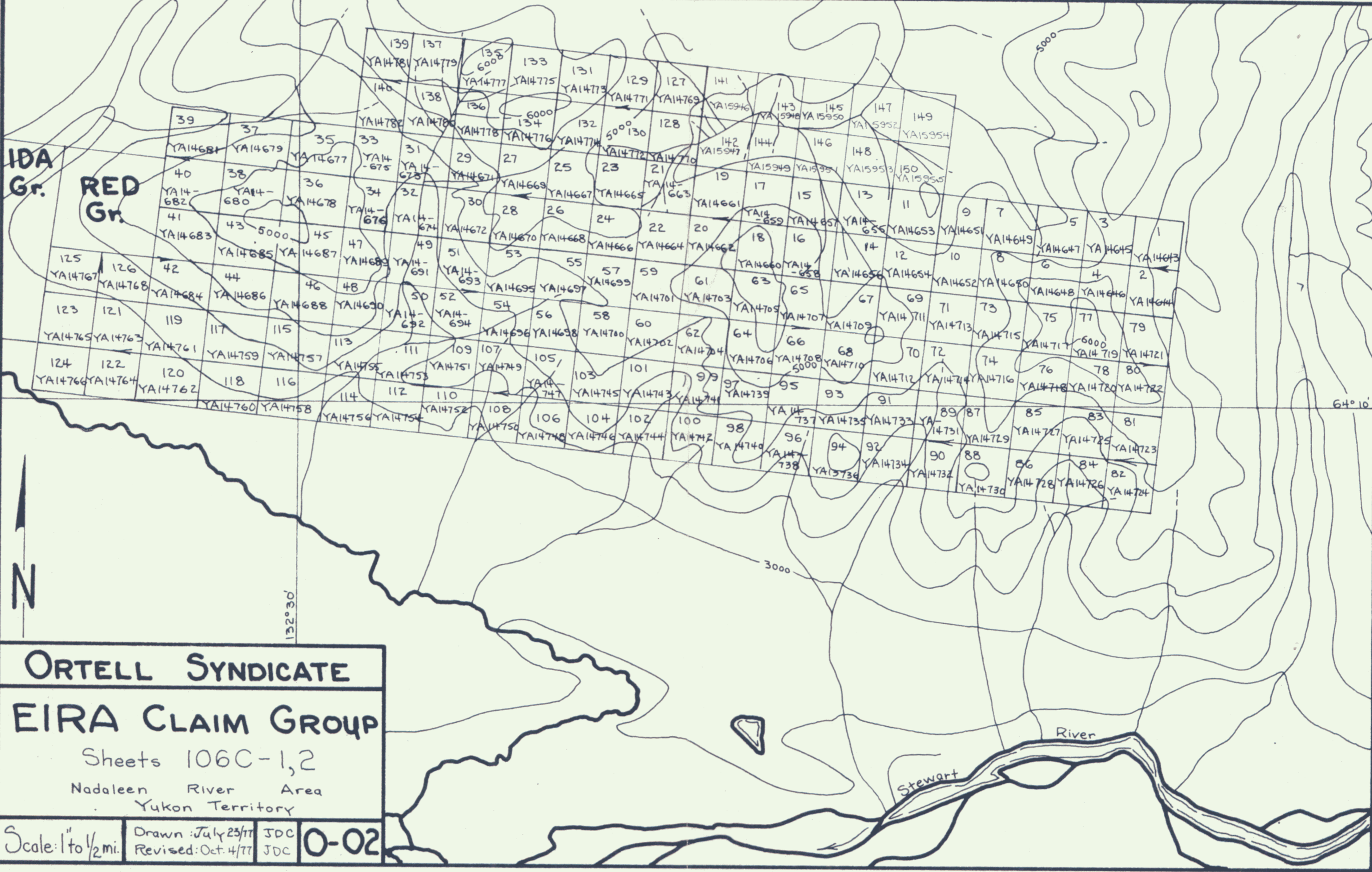
Respectfully submitted by

October 18th, 1977
Edmonton, Alberta

John D. Curry



IDA
Gr. RED
Gr.



ORTELL SYNDICATE

EIRA CLAIM GROUP

Sheets 106C-1,2

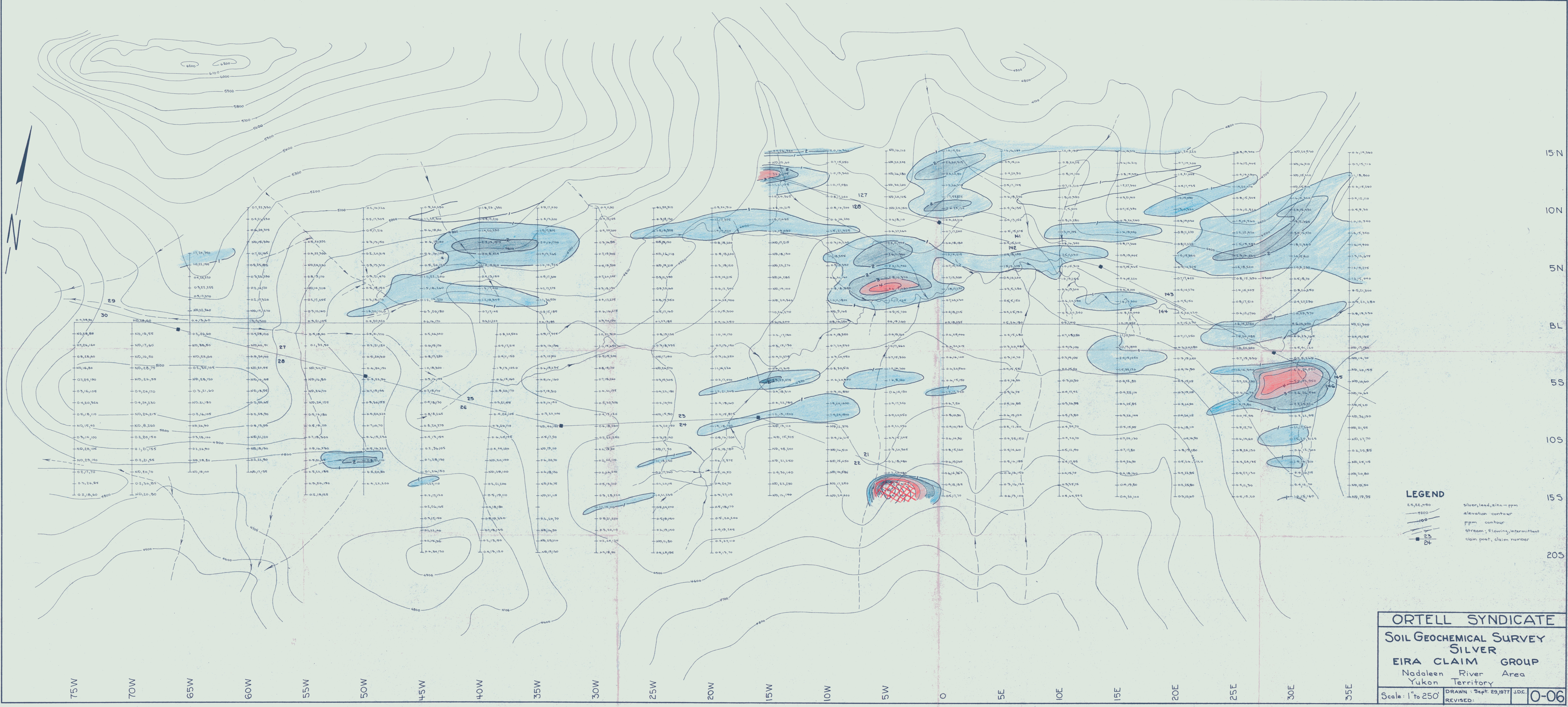
Nadaleen River Area
Yukon Territory

Scale: 1" to 1/2 mi.

Drawn: July 23/11
Revised: Oct. 4/11

JDC
JDC

0-02

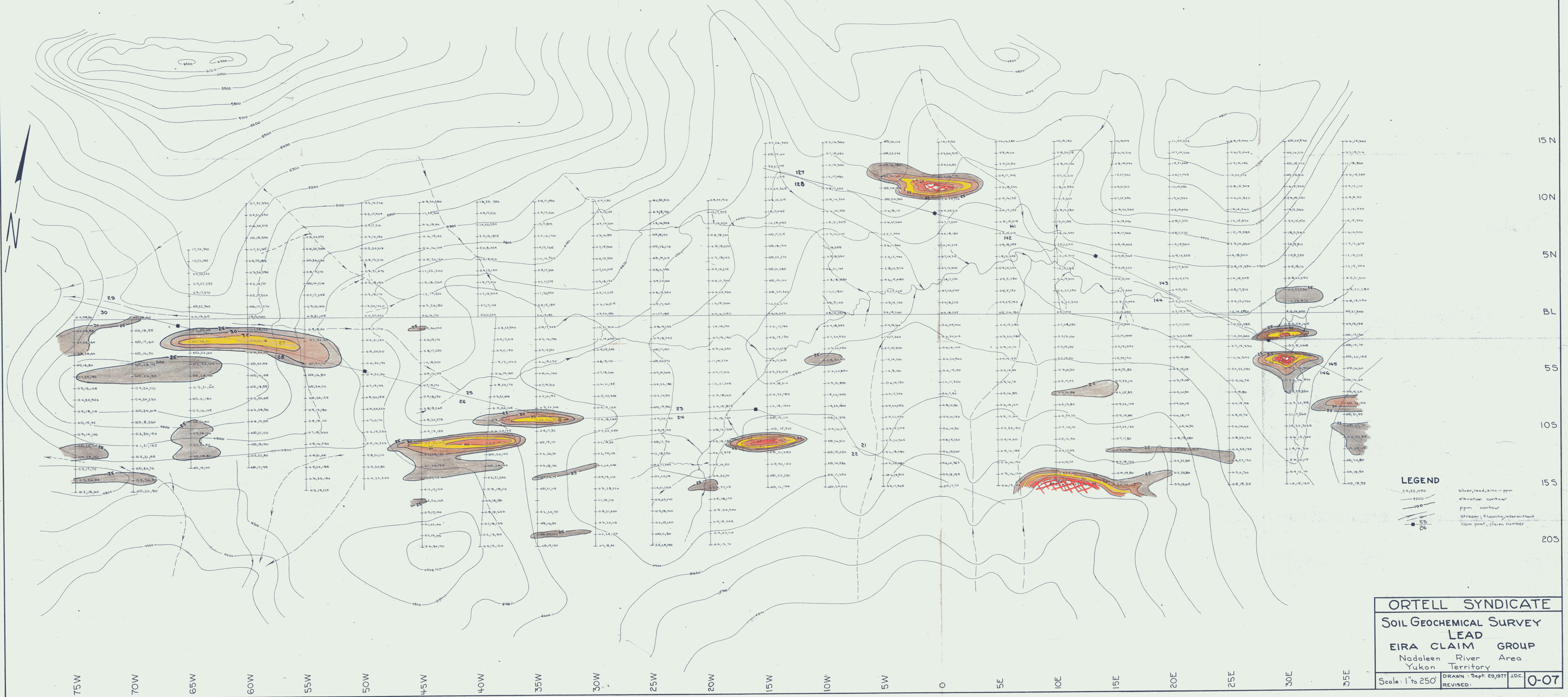


LEGEND

- 23, 24, 25 ppm silver, lead, zinc - ppm
- 1200 elevation contour
- 100 ppm contour
- stream; flowing, intermittent
- 23 claim post; claim number
- 24

ORTELL SYNDICATE
SOIL GEOCHEMICAL SURVEY
SILVER
EIRA CLAIM GROUP
 Nadaleen River Area
 Yukon Territory

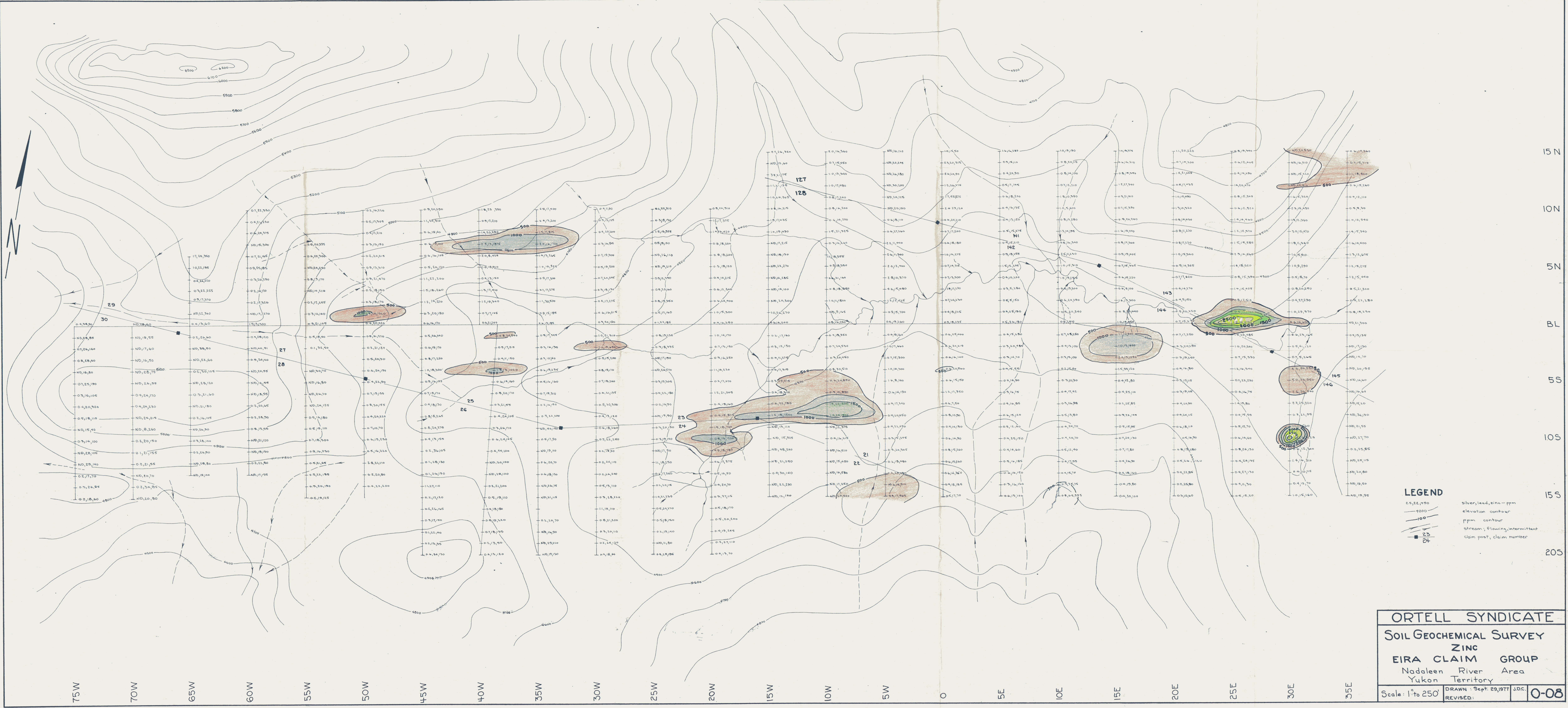
Scale: 1" to 250' DRAWN: Sept. 29, 1977 J.D.C. REVISED: 0-06



LEGEND

- silver, lead, zinc - ppm
- elevation contour
- ppm contour
- stream flowing, intermittent
- claim post, claim number

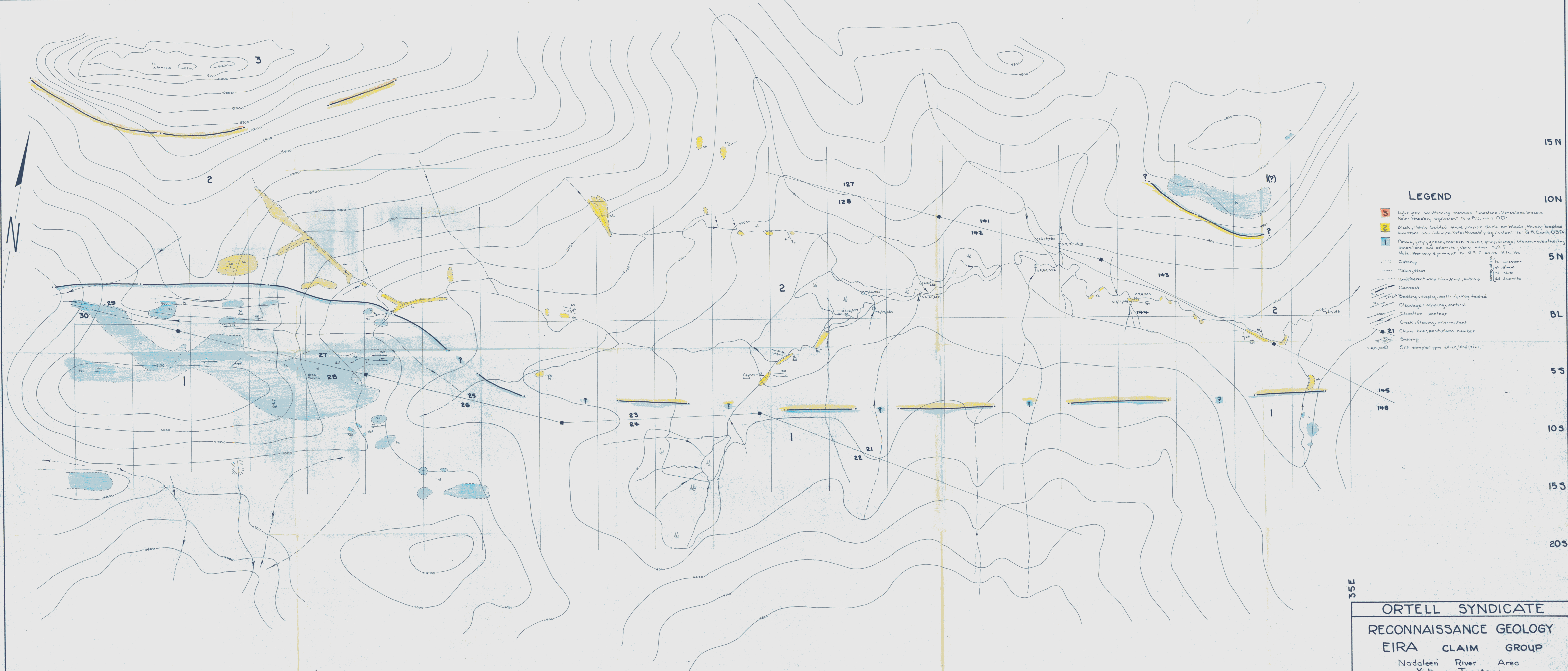
ORTELL SYNDICATE		
SOIL GEOCHEMICAL SURVEY		
LEAD		
EIRA CLAIM GROUP		
Nadaleen River Area		
Yukon Territory		
Scale: 1" to 250'	DRAWN: Sept. 29, 1977 J.O.C.	0-07
REVISED:		



LEGEND

- 4200 — elevation contour
- 100 — ppm contour
- — stream; flowing, intermittent
- 23 claim post, claim number
- 24 claim post, claim number
- — silver, lead, zinc — ppm

ORTELL SYNDICATE		
SOIL GEOCHEMICAL SURVEY		
ZINC		
EIRA CLAIM GROUP		
Nadaleen River Area		
Yukon Territory		
Scale: 1" to 250'	DRAWN: Sept. 29, 1977 J.O.C.	0-08
REVISED:		



LEGEND

- 3 Light grey-weathering massive limestone, limestone breccia
Note: Probably equivalent to G.S.C. unit ODC.
- 2 Black, thinly bedded shale, minor dark or black, thinly bedded limestone and dolomite. Note: Probably equivalent to G.S.C. unit O3D.
- 1 Brown, grey, green, maroon slate; grey, orange, brown-weathering limestone and dolomite; very minor tuff.
Note: Probably equivalent to G.S.C. units H1s, Hs.
- O Outcrop
- Talus, float
- Undifferentiated talus, float, outcrop
- Contact
- Bedding: dipping, vertical, drag folded
- Cleavage: dipping, vertical
- Elevation contour
- Creek: flowing, intermittent
- Claim line, post-claim number
- Swamp
- Silt sample: ppm silver, lead, zinc

35E

ORTELL SYNDICATE		
RECONNAISSANCE GEOLOGY		
EIRA CLAIM GROUP		
Nadaleen River Area Yukon Territory		
Scale 1" to 250'	DRAWN: Oct. 4, 1977	D.O.C. 0-09
	REVISED:	

75W 70W 65W 60W 55W 50W 45W 40W 35W 30W 25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E

15N

10N

5N

BL

5S

10S

15S

20S