

PRELIMINARY REPORT ON GRAVITY SURVEY

HULSE LAKE YUKON PROJECT

YUKON TERRITORY

by

WALTER SHARPE

&

ROGER H. PEMBERTON

AUGUST 5, 1976



1/2 Physical Work ⁸³ 51 ~~88~~.35
+
Gravity 8800.22
13 968.57
83

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 14,000.00

W.D. Sinclair
Acting Resident Geologist or
Resident Mining Engineer

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

[Signature]
B.R. BAXTER
Supervising Mining Recorder
cc Commissioner of Yukon Territory



061600

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GRAVITY SURVEY:

During the month of June and July, 1976, a gravity survey was carried out over those claims listed on the attached sheet. Approximately twenty-six line miles were covered by the survey. The gravity survey was conducted by W. Sharpe with assistant supplied by Noranda Exploration. Ross Munro conducted the survey for topographic control with Paul Reid as assistant. This survey was carried out in conjunction with V.L.F. and Electro-Magnetic surveys. The separation between individual survey lines was mainly 800 feet except in the south where lines 44S, 48S, 52S, and 56S were surveyed at four hundred foot intervals.

A Sodin No. 104 gravity meter with a meter constant of 0.09996 mgls. per division was employed on the survey. A number of Base Stations were established on the property and the instrument was returned to the Base Station approximately every two hours in order that the drift of the gravity meter in all cases was less than 0.10 mgls. All elevations were tied into known survey points and were closed to ± 1 foot.

The results of this survey are presented on Plan I with the profiles superimposed on the grid line, Plan II residual gravity.

The application of gravimetric surveying as an exploration method, depends on the existence of differences in density between geologic bodies and their surroundings. Any sub-surface structure of higher density than its surroundings, will cause a greater gravitational pull than the normal earth's force of gravity in its vicinity.

A positive gravity anomaly or an area of greater gravitational force, indicates the presence of a higher-density material beneath the anomaly than material surrounding it. A negative anomaly indicates lower-density material beneath the anomaly.

PRESENTATION OF DATA:

All observed gravity data was reduced to Bouguer gravity values.

A density factor of 2.4 gms/cc was used in the mass correction.

A residual gravity anomaly map was produced from Bouguer gravity profiles.

Gravity anomalies coinciding with E.M. and geochemical anomalies, are given preference in further investigation. The gravity anomalies produced by this survey (with a brief description), are as follows: The anomalies follow the same numerical sequence as was used on the 1975 survey. Twenty-two anomalies were produced from last year's survey (A-1 to A-22). The 1976 gravity survey produced a total of thirteen anomalies (numbers A-23 to A-35).

DISCUSSION OF RESULTS:

Of the thirteen gravity anomalies produced by this year's survey, four are negative anomalies (numbers A-29, A-30, A-31, A-32), and six (numbers A-24, A-27, A-28, A-33, A-34 and A-35) are weakly positive and of such limited size as to be of no practical interest.

A-23

This anomaly has a peak value of 0.9 mgls., has a length of 3200 feet and a width of approximately 1200 feet.

It does however, lack the sharpness that is usually associated with a near surface sulphide zone. Further investigation of this anomaly should depend on the results of E.M. and geochemical surveys.

A-25

This anomaly has an intensity of 0.40 mgls, is fairly broad and lacks sharpness. It could however, be caused by disseminated sulphides and further investigation would depend on the results of E.M. and geochemical results.

A-26

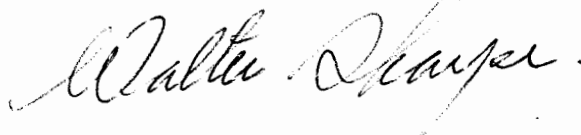
This anomaly is in the vicinity of the ore zone, has intensity of 0.50 mgls. and is within an area of shallow overburden. It is possible this anomaly is associated with a mineralized zone. As it is of limited, size, further investigation would depend again on E.M. and geochemical results.

All other anomalies found in this survey are either too small in amplitude or areal size to be recommended for further follow-up.

Respectfully submitted



Roger H. Pemberton



Walter Sharpe

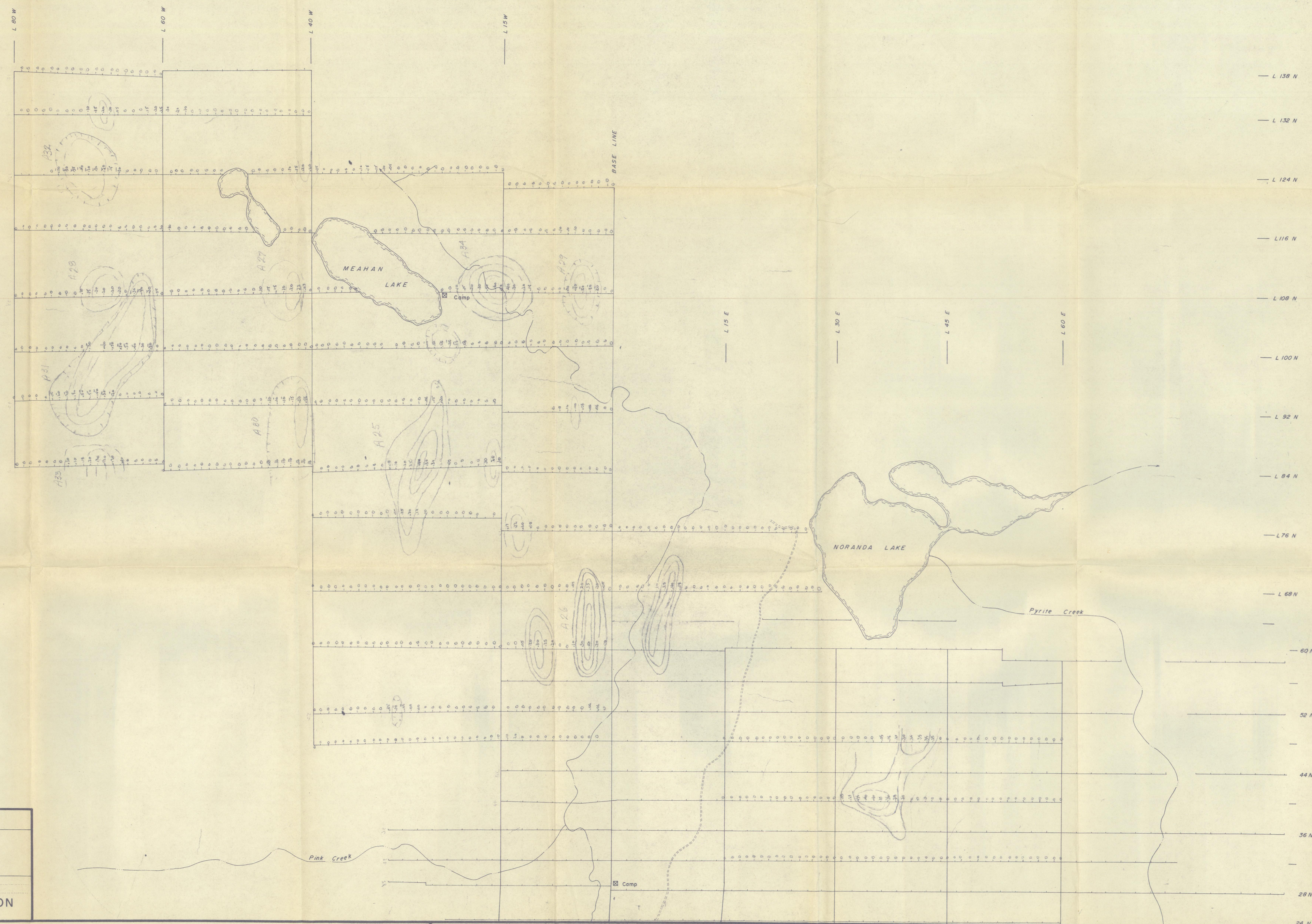
August 5, 1976

CLAIM STATUS

The claims referred to in this report are registered in the name of Noranda Exploration Company, Limited (No Personal Liability). The claim group consists of 95 STRAT claims and eight QTZ claims as follows:

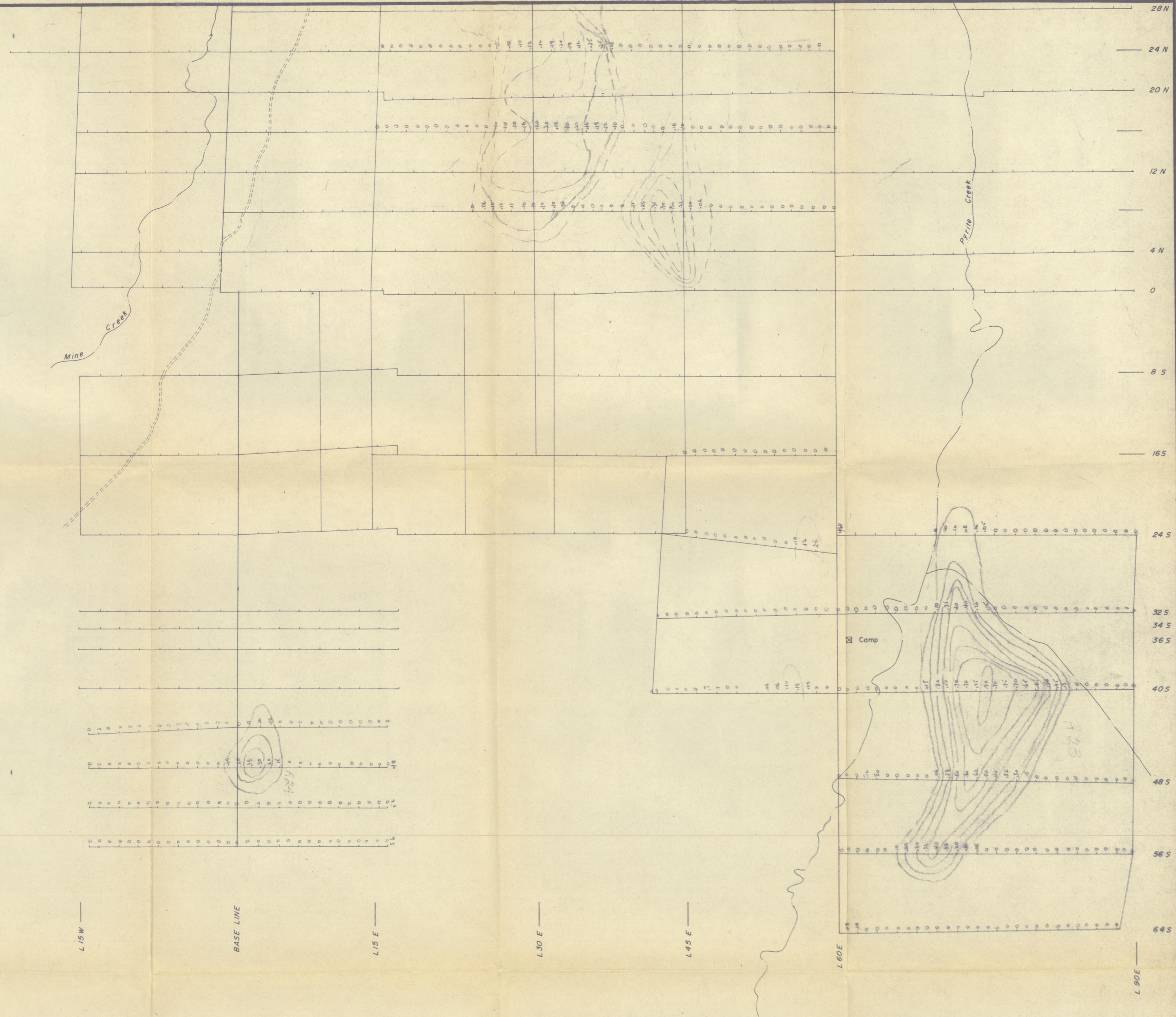
<u>Claim Name</u>	<u>Grant No.</u>	<u>Claim Name</u>	<u>Grant No.</u>
Strat 1	84583	Strat 48	93430
Strat 2	84584	Strat 49	93431
Strat 3	84585	Strat 50	93432
Strat 4	84586	Strat 51	93493
Strat 5	84587	Strat 52	93494
Strat 6	84588	Strat 53	93495
Strat 7	84589	Strat 54	93496
Strat 8	84590	Strat 55	93433
Strat 9	84591	Strat 56	93434
Strat 10	84592	Strat 57	93435
Strat 11	84593	Strat 58	93436
Strat 12	84594	Strat 59	93437
Strat 13	84595	Strat 60	93438
Strat 14	84596	Strat 61	93439
Strat 15	84597	Strat 62	93440
Strat 16	84598	Strat 63	93441
Strat 17	84599	Strat 64	93442
Strat 18	84600	Strat 65	93497
Strat 19	93401	Strat 66	93498
Strat 20	93402	Strat 67	93499
Strat 21	93403	Strat 68	93500
Strat 22	93404	Strat 69	93443
Strat 23	93405	Strat 70	93444
Strat 24	93406	Strat 71	93445
Strat 25	93407	Strat 72	93446
Strat 26	93408	Strat 73	93447
Strat 27	93409	Strat 74	93448
Strat 28	93410	Strat 75	93449
Strat 29	93411	Strat 76	93450
Strat 30	93412	Strat 77	93451
Strat 31	93413	Strat 78	93452
Strat 32	93414	Strat 79	93453
Strat 33	93415	Strat 81	93454
Strat 34	93416	Strat 82	93455
Strat 35	93417	Strat 83	93456
Strat 36	93418	Strat 84	93457
Strat 37	93419	Strat 85	93458
Strat 38	93420	Strat 86	93459
Strat 39	93421	Strat 87	93460
Strat 40	93422	Strat 88	93461
Strat 41	93423	Strat 89	93462
Strat 42	93424	Strat 90	93463
Strat 43	93425	Strat 91	93464
Strat 44	93426	Strat 92	93465
Strat 45	93427	Strat 93	93466
Strat 46	93428	Strat 94	93467
Strat 47	93429	Strat 95	93468

<u>Claim Name</u>	<u>Grant No.</u>
Strat 96	93469
QTZ 1	84112
QTZ 2	84113
QTZ 3	84114
QTZ 4	84115
QTZ 5	84116
QTZ 6	84117
QTZ 7	84118
QTZ 8	84119



MAP # 95-D-12
 Doc # 061600
 48

REVISED	QUARTZ LAKE PROJECT	
	CUT GRID	
	NORTH SHEET	
PROJ. No. 912, 914	SURVEY BY:	DATE:
N.T.S. 95D/12	DRAWN BY:	SCALE: 1" = 500'
DWG. No.	NORANDA EXPLORATION	
	OFFICE:	

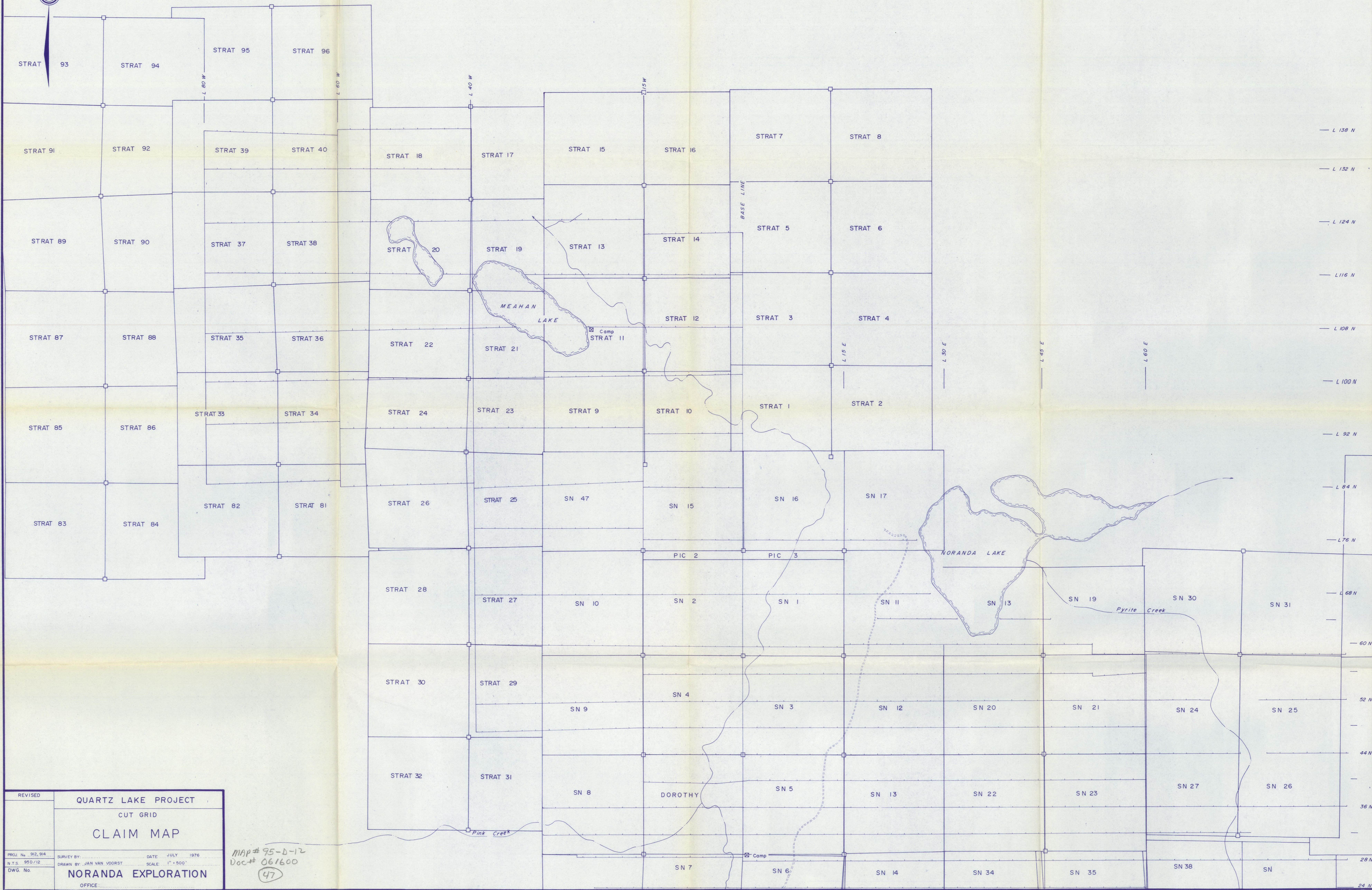


MAP # 95-D-12
Doc # 061600
(49)

REVISED	QUARTZ LAKE PROJECT
	CUT GRID
	SOUTH SHEET
PROJ. No. 912,914	SURVEY BY: _____ DATE: _____
N.T.S. 95D/12	DRAWN BY: _____ SCALE: 1" = 500'
DWG. No.	NORANDA EXPLORATION
	OFFICE _____



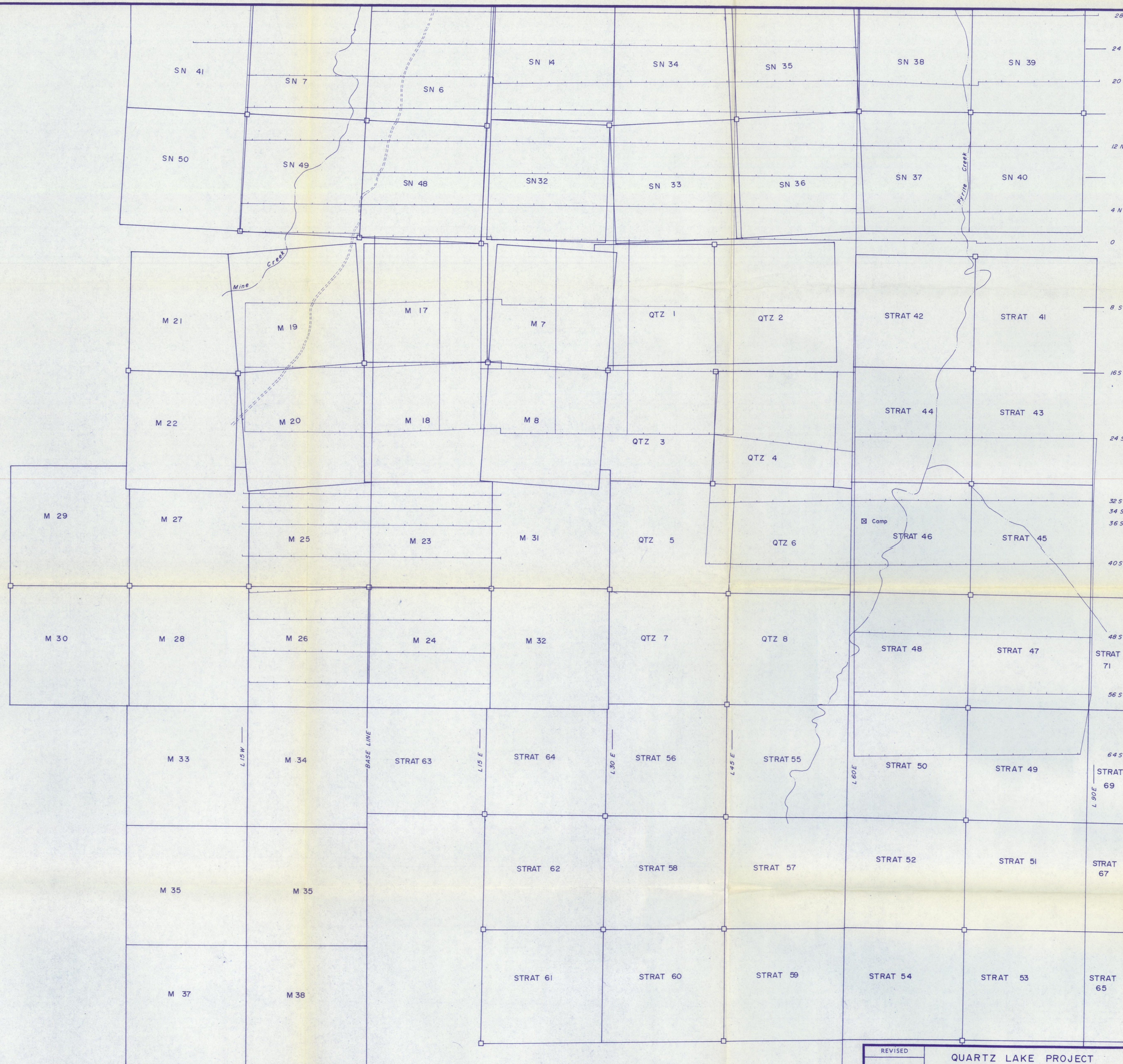
AMC/C



REVISED	QUARTZ LAKE PROJECT	
	CUT GRID	
	CLAIM MAP	
PROJ. No. 95-12	SURVEY BY: JAN VAN VOORST	DATE: JULY 1976
N.T.S. 95/12	DRAWN BY: JAN VAN VOORST	SCALE: 1" = 500'
DWG. No.	NORANDA EXPLORATION	
	OFFICE:	

MAP# 95-D-12
 Doc# 061600
 (47)

L 138 N
 L 132 N
 L 124 N
 L 116 N
 L 108 N
 L 100 N
 L 92 N
 L 84 N
 L 76 N
 L 68 N
 60 N
 52 N
 44 N
 36 N
 28 N
 24 N



REVISED	QUARTZ LAKE PROJECT	
	CUT GRID	
	CLAIM MAP	
PROJ. No. 912,914	SURVEY BY: JAN VAN VOORST	DATE: JULY 1976
N.T.S. 950/12	DRAWN BY: JAN VAN VOORST	SCALE: 1" = 500'
DWG. No.	NORANDA EXPLORATION	
	OFFICE:	

MAP# 95-D-12
Doc # 061600
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