6162

GEOLOGICAL AND GEOCHEMICAL REPORT
ON THE
MAY GROUPS 1, 2 and 3
in the Liard Mining Division
68 kilometers south of Telegraph Creek

104-G-74W

OWNED AND OPERATED BY
UTAH MINES LTD.

BY

G. A. CLOUTHIER
UTAH MINES LTD.
JANUARY, 1977

Feb 7/77

Work Performed Between June 6th and September 20th, 1976

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22	" " " "	3	"
23	" " " "	4	"
24	" " " "	5	"
25	" " " "	6	"
26	" " " "	7	"
27	" " " "	8	"
28	Geochemistry Soils Silver Sheet 1		"
29	" " " " 3		"
30	" " " " 4		"
31	" " " " 5		"
32	" " " " 6		"
33	" " " " 7		"
34	" " " " 8		"
35	Rock Geochemistry Sheet	3	"
36	" " "	4	"
37	" " "	5	"

INTRODUCTION

The May Group, consisting of six (6) claims, each of twenty (20) units, was staked for Utah Mines Ltd. on May 25, 1976. A claim map and location map follow this page. A limited program of geologic mapping and geochemistry was conducted during the 1976 field season to confirm the work done by previous workers and to expand the coverage of earlier surveys. Many existing grid lines had to be improved to provide better control for the mapping and soil sampling. In September an Orthophoto Mosaic at a scale of 1:2500 was prepared for the property by Pacific Surveys Ltd. and this was used for preparing base maps for this report and will provide a good quality large scale map for all future work.

LOCATION

The May Group is located in northwestern British Columbia, 975 kilometers north-northwest of Vancouver and 68 kilometers south of Telegraph Creek on the Stikine River. Locally the claims are staked along the eastern flank of Mess Creek Valley sixteen (16) kilometers south of Mess Lake. The NTS Grid reference is 104-G-7 and the coordinates are 57°17'N and 131°53'E.

ACCESS

At the present time access to the property is by helicopter. Small float planes have landed on Loon Lake at the base camp but payloads are very restricted so that it could probably only be used in cases of emergency. The closest airstrip is at Schaft Creek ten (10) kilometers to the north. It is a good gravel strip 2,750 meters long capable of handling fairly

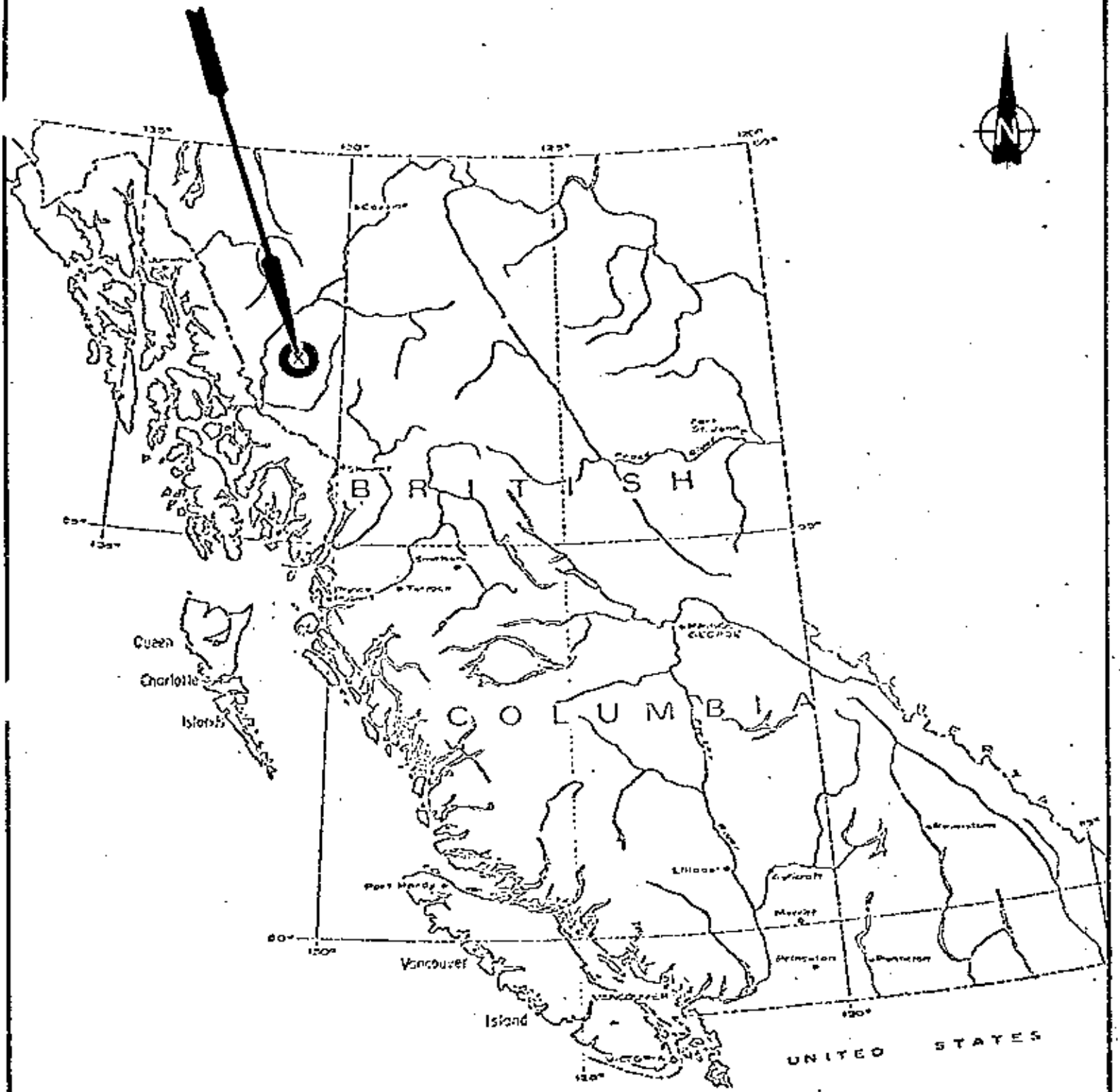


Figure 1

LOCATION MAP MAY GROUP

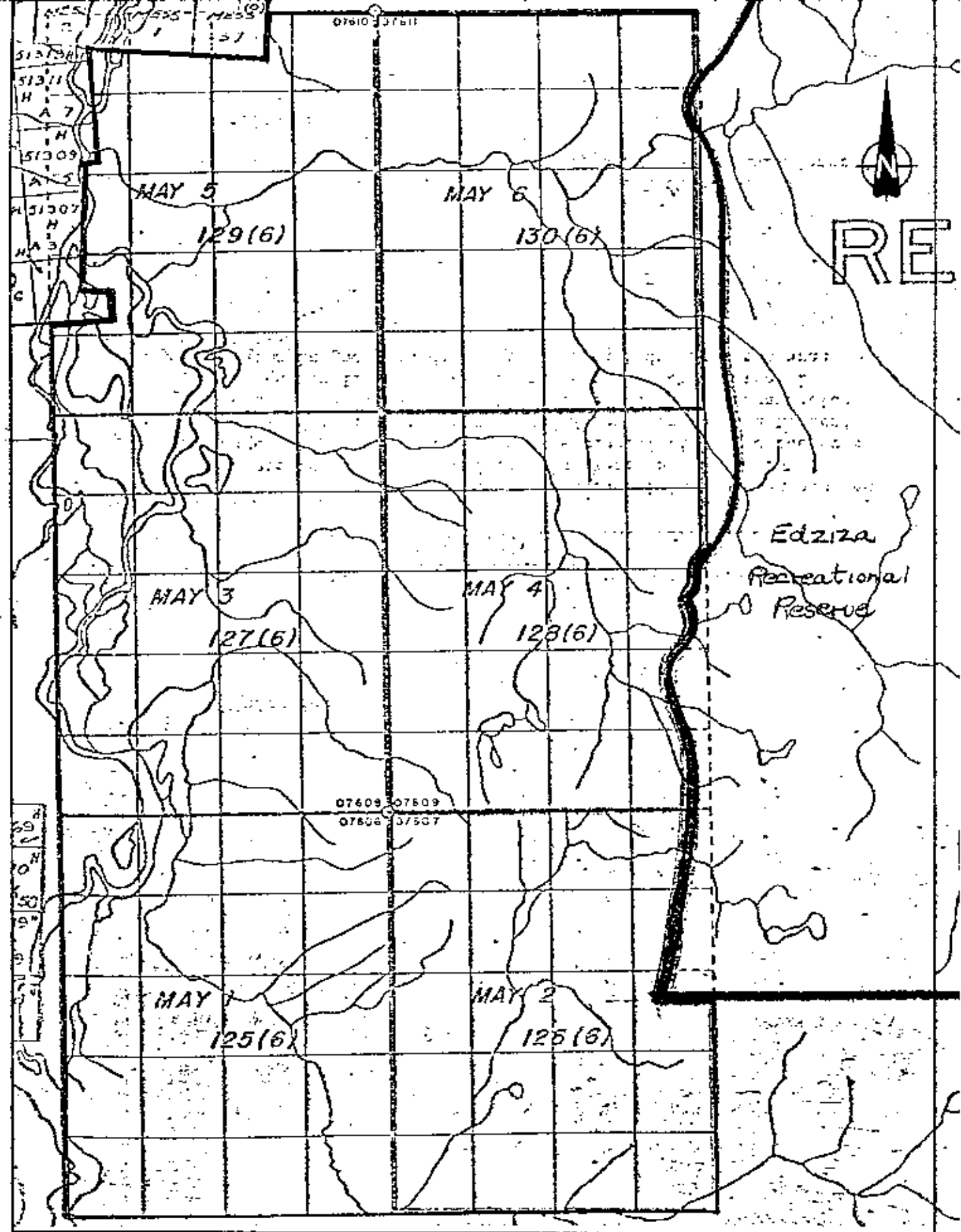


Figure 2

CLAIM MAP MAY GROUP

Scale 1"=½ mile

ACCESS - Continued

large cargo planes. The nearest road access is along the Stewart-Cassiar Highway 56 kilometers south of Iskut, which is 38 kilometers due east of the property. The proposed road to Schaft Creek, should production be realized there, would pass within a few kilometers of the property. The B.C. Rail extension from Fort St. James to Dease Lake is currently under construction and should be completed late in 1978. Using the proposed Raspberry Pass route to Schaft Creek and existing roads the distance to the railway would be 145 kilometers.

PHYSIOGRAPHY AND CLIMATE

The May Group is bounded by two (2) major physiographic features; the Spectrum Range Plateau on the east, and the Coast Range Mountains on the west. The property falls steeply from elevations of greater than 1500 meters along its eastern boundary to 730 meters in Mess Creek Valley. The southern half of the claim group is characterized by deeply dissected cliffs and talus slopes which grade into hummocky alpine terrain to the east. The entire western edge of the property is covered by the flat swampy flood plane of Mess Creek. The north part of the property is thickly forested from the Mess Creek Valley east to the 1,050 meter elevation. Above 1,050 meters, all along the eastern part of the property, scrub timber and alpine meadows predominate.

In June, July and August, the mean temperature is 13°C. Winter temperatures do not usually drop below -29°C. Total precipitation averages about 50 centimeters per year of which

about half falls as snow. These figures are approximate and based on records kept at Schaft Creek over several years.

REGIONAL GEOLOGY

Tectonic Setting

The tectonic setting of the Telegraph Creek Area is described in some detail by J.G. Souther in GSC Paper 71-44. Figure #1 illustrates the spacial relationships of the major tectonic elements of northwestern British Columbia. The May Property lies within the Stikine Arch which is described as a north-easterly trending lobe of crystalline and metamorphic rocks which remained positive during much of Mesozoic time. The Stikine Arch is bounded on the west by Coast Crystalline Belt. To the northeast it is truncated by the fault bounded Atlin Horst, a series of Late Paleozoic volcanic and sedimentary rocks. The Bowser Successor Basin in which marine sedimentation continued through late Jurassic time after the remainder of the area had become emergent, forms the southeastern boundary of the Stikine Arch. Superimposed on these major tectonic elements is a system of north-south normal faults, best developed along the Iskut River and Mess Creek Valleys where they parallel the north-south linear distribution of Tertiary and Quaternary volcanoes.

Lithology

Extensive block faulting related to the Mess Creek system has exposed a variety of rocks covering the period from Late

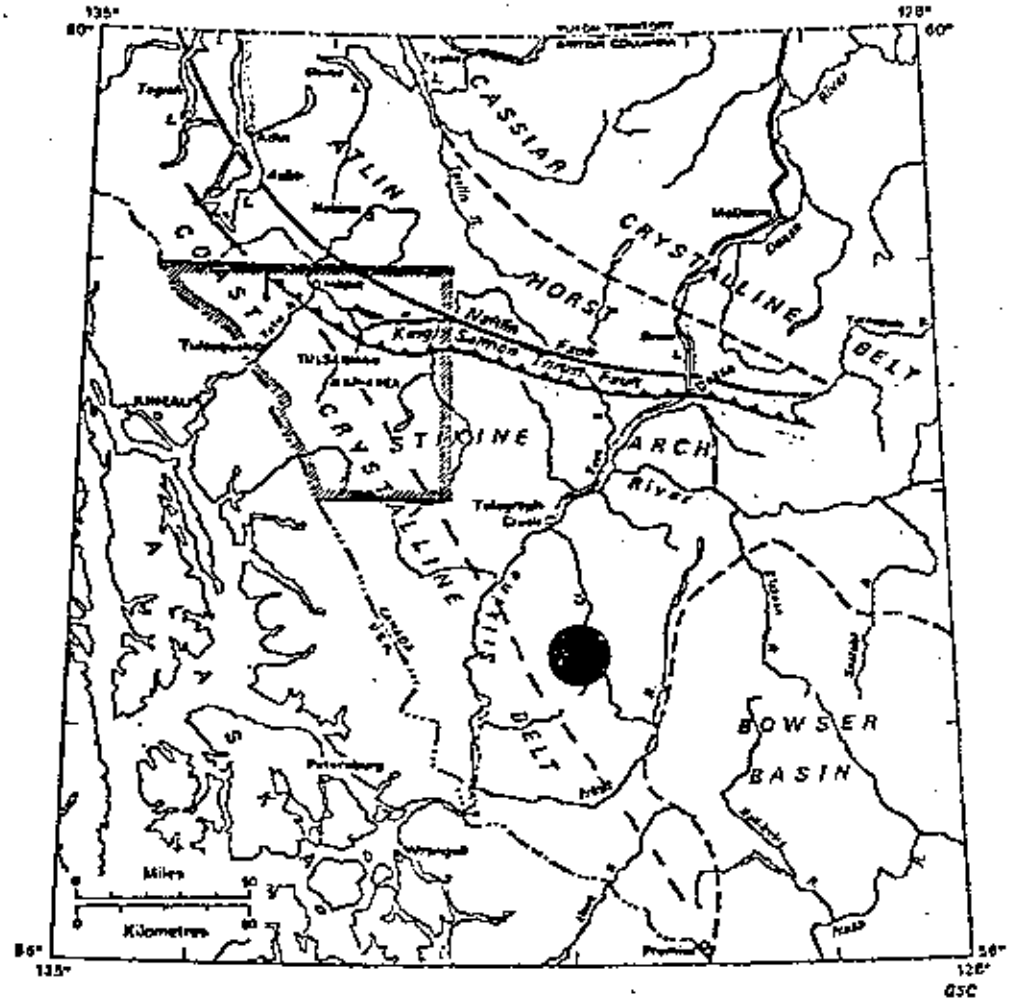


Figure 3

Tectonic Elements of Northwestern B.C.

Souther 1971

Lithology - Continued

Paleozoic to Middle Jurassic which have been intruded by large Mesozoic batholiths to the west of Mess Creek and are largely covered by Tertiary to recent volcanic rocks to the east. In effect, a north-south belt of these older rocks are exposed along the axis of Mess Creek Valley with an average width of some twelve (12) kilometers .

Along the eastern edge of this belt a narrow series of fault bounded Late Paleozoic rocks is exposed ranging from Mississippian to Upper Permian. These consist of metamorphosed pelite sediments and carbonates. The remainder of this belt consists of Upper Triassic volcanic rocks including pyroclastics and some derived volcanic sediments generally of intermediate composition. This unit forms most of the country rock underlying the May Group. Along the southeastern edges of the property all these rocks are unconformably overlain by a Lower Jurassic polymictic conglomerate.

Intrusives

The sediments and volcanic rocks below the Upper Jurassic unconformity have been intruded by intermediate acid igneous rocks of Post Upper Triassic to Pre-Tertiary age. On the May Group these intrusives consist of a swarm of light pink monzonite-syenite dikes. Minor ultramafic and mafic intrusives also occur in the area generally related to major fault structures. They are thought to be pre-Lower Jurassic in age.

PROPERTY GEOLOGY

The central portion of the property was mapped on a scale of 1:2500. This area is underlain predominantly by a series of gray-green andesitic pyroclastics and derived sediments. Flow rocks are present but rare. Porphyritic andesite dikes and sills are widespread but make up a relatively small part of the section. Bedding attitudes are generally obscure except in the fine bedded tuffs and volcanic sediments. Orientation measurements obtained suggest a northerly trend and fairly steep westerly dip. These rocks are intruded by two (2) parallel north trending dike swarms. The dikes themselves are light pink feldspar porphyries of monzonitic to syenitic composition. The dikes, where recognized, are quite narrow (1-10 meters), however, they are surrounded by large pinkish feldspathization halos in which the country rocks are partly to completely altered. Often this altered volcanic rock is very difficult to distinguish from the dike rock though it is generally not porphyritic and occasionally contains relic volcanic textures. The two dike swarms form erosionally positive ridges paralleling Mess Creek with the softer green volcanics underlying a swampy trough between them. A small partly serpentinized ultramafic body is exposed along a large northwesterly trending fault approximately one kilometer north of Loon Lake.

Structural Geology

Faulting and fracturing is quite intense over most of the area mapped. Major fault directions are: N60E, N20W and north-south. Most faults are near vertical, reflecting regional block faulting patterns. No evidence of folding was observed.

Alteration and Mineralization

The most widespread alteration type is a pink feldspathization which almost completely alters large volumes of the volcanic rock adjacent to the monzo-syenitic dikes. This alteration type is usually accompanied by a quartz veining and locally stockworks are developed. Sericite alteration is also present in areas of strong quartz veining. Generally peripheral to quartz-sericite alteration carbonate zeolite fracture fillings are present as well as strong chloritization and/or structurally controlled argillic alteration.

Pyrite is the most common sulphide in the area mapped, averaging about 1-3% overall with local concentrations up to 10%. Chalcopyrite and molybdenite occur as minor showings over most of the area mapped. They most often occur as fracture fillings and with quartz veins in the volcanic rocks and as disseminations in the intrusive rocks. Spacially, the best showings occur on or near the contacts between the dike swarms and the green volcanic rocks. Minor bornite, galena and sphalerite were also observed during the mapping. Hematite is widespread and often in specularite form in fractures. Magnetite is also locally present.

GEOCHEMISTRY

Approximately 618 soil samples were gathered to check the values obtained by previous surveys and to expand the coverage. Samples were collected with a mattock and stored in Kraft paper bags. Samples were obtained from the "B" Horizon where possible. This horizon was generally encountered between ten (10) and fifty (50) centimeters below the surface. Samples

GEOCHEMISTRY - Continued

were shipped to Chemex Labs and the -80 mesh fraction was analyzed by routine atomic absorption methods for copper, molybdenum and in most cases silver. By incorporating data from this survey and an earlier survey (A.R. 4100) threshold and anomalous levels were statistically determined for copper and molybdenum. These levels were determined by inspection for silver.

	Threshold	Anomalous	Number of Samples
Copper	90 ppm	160 ppm	1364
Molybdenum	5 ppm	10 ppm	978
Silver	.8 ppm	1 ppm	533

Comments

Copper and molybdenum values show a strong positive correlation. Changes from background to highly anomalous along lines are generally very abrupt. Data is far from complete but north-south copper molybdenum anomalies trend parallel to the contacts of the major north-south monzo-syenitic dike swarms.

A total of thirty-six (36) rock geochem samples were collected. These consisted of approximately five (5) pounds of chips collected randomly over a nine (9) square meter area. The samples were analyzed by Chemex Labs for copper, molybdenum and gold. Both areas sampled had some samples anomalously high in these metals.

WORK SUMMARY

On June 6, 1976, equipment and men were flown into Mess Creek from Tatogga Lake 67.5 kilometers to the northeast. A small base camp was established at Loon Lake using some materials left behind by previous workers. Initially, considerable time was spent finding, and where necessary, remarking lines and baselines used in earlier surveys. With this control re-established, the line cutting geochemistry and geologic mapping program discussed in this report was done over the course of the 1976 field season. Logistical support and helicopter support for this work was done out of Utah's main base camp at Tatogga Lake. Equipment and men were mobilized out of Vancouver. Work on the May claims was carried out at various times throughout the season though not continuously and was finished September 20, 1976. The Table below summarizes work done.

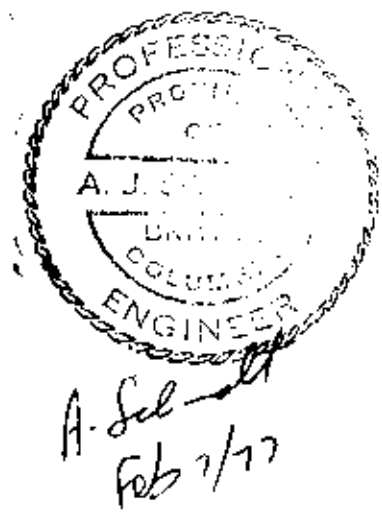
24.2 line kilometers	Geologic Mapping Scale 1:2500
17.2 line kilometers	New line cutting
19.4 line kilometers	Soil sampling (618 samples)

36 rock geochem samples collected
Orthophoto Mosaic at 1:2500 scale covering 120 units

CONCLUSIONS

Geologic mapping and the soil geochemistry surveys indicate a large area of copper-molybdenum mineralization. The work discussed in this report further refines the extent of this area of interest. Mineralization and alteration, though not typical in their spacial distribution, do suggest a possible

porphyry copper type target which warrants further study. More geologic mapping, geochemistry and geophysics (Induced Polarization and Magnetics) are recommended at this time.



A. Sel
Feb 7/17

REFERENCES

Fountain, D.K. and Misener, D.J.: Assessment Report 4755; Report on the Induced Polarization and Resistivity Survey on the Mix Group, 1973.

Gutrath, G.C.: Assessment Report 3093; Geological, Geochemical Report, Run Claims, 1971.

Gutrath, G.C.: Assessment Report 3577; Geophysical Report on Run, Hot Punch and Tia Maria Claims (Magnetics) 1972.

Gutrath, G.C.: Assessment Report 4100; Geological, Geochemical Report on the Run, Hot Punch and Tia Maria Claims, 1972.

Mullan, A.W. and Smith, P.K.: Assessment Report 3989; Report on Induced Polarization and Resistivity Survey, Run Calims, 1972.

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Souther, J.S.: GSC Paper 71-44; Telegraph Creek Map Area, British Columbia, 1972.

APPENDIX I

STATEMENT OF COSTS

STATEMENT OF COSTS

Salaries

G.A. Clouthier	Geologist	20	days @ $56.00/day =		$1,120.00
J.R. Deighton	Geologist	20	" $71.00 "		1,420.00
H.M. Visagie	Geologist	78	" $52.00 "		4,056.00
E.E. Bohn	Geologist	13	" $56.00 "		728.00
L.A. Frantz	Assistant	22	" $29.00 "		638.00
G.B. Lovell	Assistant	48	" $26.00 "		1,248.00
R.F. McIntyre	Assistant	29	" $31.00 "		899.00
J. Gonzales	Assistant	25	" $31.00 "		775.00
F. Crha	Prospector	10	" $38.00 "		380.00
					$11,264.00

Helicopter

Bell 47 54 hrs. @ $160.00/hr.	$8,640.00	
Fuel 810 gal. @ $1.50/gal.	1,215.00	
	9,855.00	$ 9,855.00
Bell 206 9 hrs. @ $330/hr.	2,970.00	2,970.00
		$12,825.00

Trucks

120 vehicle days @ $10.00/day	$1,200.00	
Gas and maintenance	600.00	
	1,800.00	$ 1,800.00

Camp Costs

265 days @ $15.00/day	$5,300.00	$ 5,300.00

Radio		
2 SBX-11s @ $3.50/day each for 100 days	$ 700.00	$ 700.00
Assays		
Rock Geochem 26 @ $6.10	$ 158.60	
11 @ $6.95	76.45	
Soil Geochem 85 @ $2.20	(187.00)	
533 @ $2.95	(1,572.35)	
	$1,994.40	$ 1,994.40
Mobilization & Demobilization		
From Vancouver		$ 1,500.00
Map Preparation		
Orthophoto Mosaic		$ 6,244.22
Drafting and Report Preparation		$ 1,000.00
	TOTAL	$42,768.02

PROFESSIONAL ENGINEER

Feb 7/77

INVOICE

PACIFIC SURVEY CORPORATION

1409 WEST PENDER STREET VANCOUVER, B.C., CANADA V6G 2S4 TELEPHONE: 683-6501

Utah Mines Ltd.,
#1600 - 1050 West Pender St.,
Vancouver, B.C.

INVOICE No. 9545
DATE 28 October 1976
YOUR ORDER No.
JOB No. 76-168
PACKING SLIP No.
SHIPPED VIA

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
	TO:		
	Completion, Kemess Creek, B.C. Area:		
	1. Topographic mapping in pencil manuscript form at a scale of 1:2500 with 20 metre contours as per packing slip 9079:		
	Lump sum		$2,875.00
	2. Ortho photo mosaic of the mapping area at a scale of 1:2500 feet with contours superimposed and one set of composite prints supplied:		
	Lump sum	$2,880.00	
	7% Provincial Sales Tax	201.60	3,081.60
	3. One set of 8 sheets of composite ortho photo with contours superimposed:		
	Lump sum	$240.00	
	12% Federal Sales Tax	28.80	
		$268.80	
	7% Provincial Sales Tax	18.82	287.62
			$6,244.22

RECEIVED OCT 29 1976

TERMS: NET CASH, INTEREST CHARGED ON OVERDUE ACCOUNTS

APPENDIX II

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

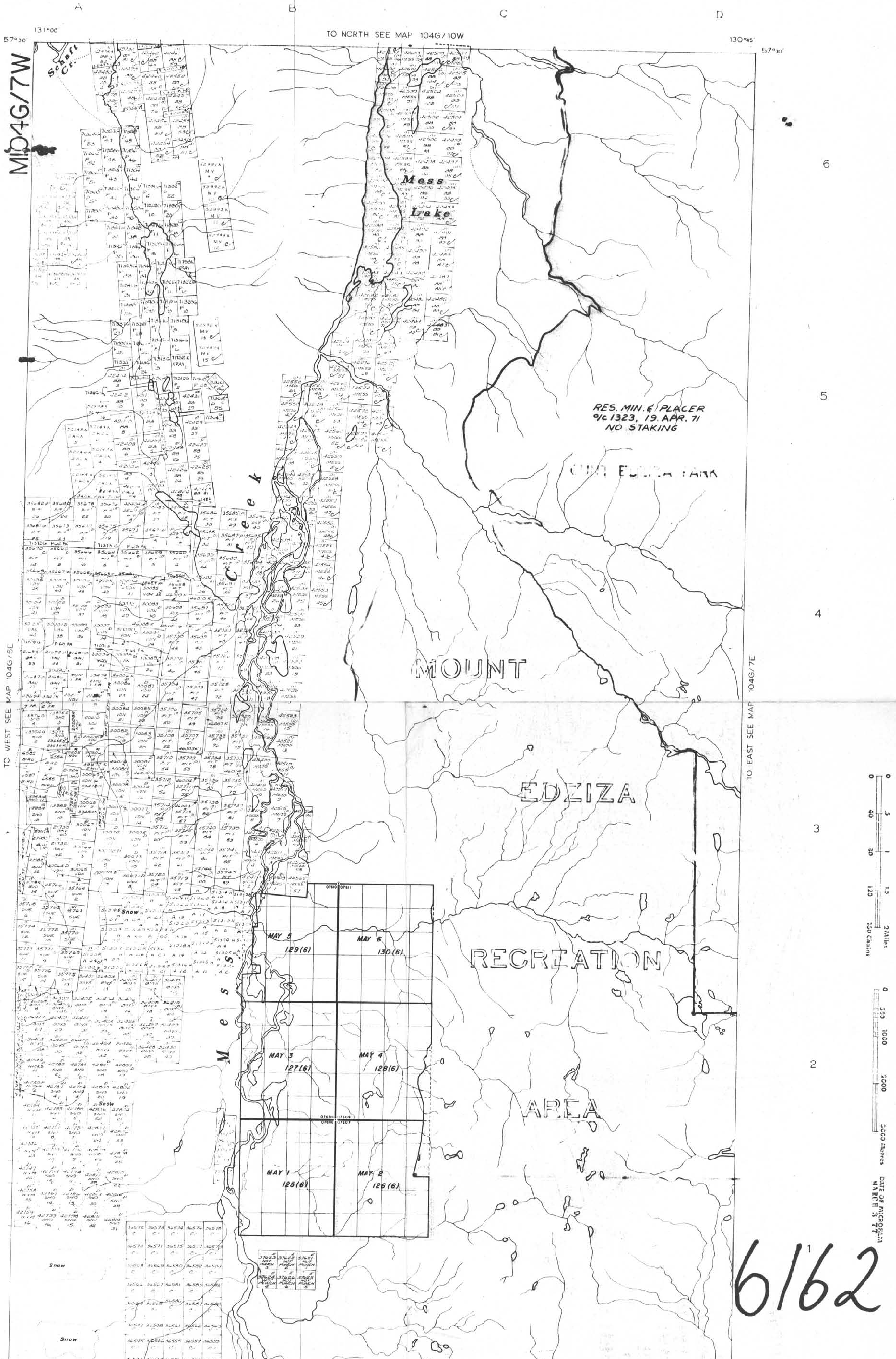
1) G.A. Clouthier, Geologist for Utah Mines Ltd., Vancouver British Columbia
Completed BSc (Honors Geology) at the University of British Columbia 1970; employed since graduation by Utah Mines Ltd. under supervision of M.J. Young. The main emphasis of work has been base metal exploration principally with porphyry copper deposits and volcanogenic deposits. Field work has involved regional evaluation and property development work in British Columbia, Alaska, Yukon Territories and the western U.S.A. Supervision responsibilities have included management of camps and exploration crews on both ground and air supported programs invloving most phases and types of exploration.

2) E.E. Bohn, Jr., Geologist for Utah Mines Ltd. Vancouver, British Columbia
Completed A.A. (geology) at the College of San Mateo, San Mateo, California in 1966; completed B.S. (geology) at Oregon State University, Corvallis, Oregon in 1968; employed as an exploration geologist during the summer field seasons of 1968 and 1969 with Humble Oil & Refining Co. in Alaska and Idaho; employed as a teaching assistant from 1968 to 1970 at the MacKay School of Mines, University of Nevada; employed part time as a consultant in 1970 for Cortez Gold Mines, Battle Mountain, Nevada; employed part time as a geologist from November 1970 to June 1971 with Utah Construction and Mining Co., Reno, Nevada; employed as a uranium geologist in western and southwestern U.S. from June 1971 to March 1974 with Lucius Pitkin, Inc. (contract work for U.S. Atomic Energy Commission), Grand

Junction, Colorado; employed as a geologist in western U.S. by Utah International Inc. from March 1974 to June 1976 in Tucson, Arizona under the supervision of S.A. Taylor; transferred to Utah Mines Ltd. as a geologist in June 1976 to date under the supervision of A.J. Schmidt, P.Eng.

3) J.R. Deighton, (Temporary Geologist)
Completed BSc (geology) at the University of British Columbia in 1965. Eleven years experience in economic geology involving base metal exploration in British Columbia, the Yukon and the American southwest. Exploration experience oriented to porphyry coppers, massive sulphides and stratiform deposits. Supervision responsibilities include management of camps and geological crews in both ground and air supported exploration programs.

4) H.M. Visagie, (Temporary Geologist)
Completed BSc (geology) at the University of British Columbia in 1972; currently enrolled in MBA program (International Finance) at UBC graduating in 1977; involved in exploration geology work in British Columbia for four (4) years; two (2) seasons as party chief for Great Plains Development Co. on helicopter supported drilling and reconnaissance program. The main emphasis of exploration experience is toward porphyry copper deposits.


M104G/7W
A
B
C
D
TO NORTH SEE MAP 104G/10W
57°30'
131°00'
130°45'
Schaft Cr.
Mess Lake
Mess Creek
RES. MIN. & PLACER O/C 1323, 19. APR. 71 NO STAKING
MOUNT EDZIZA RECREATION AREA
MAY 5 129(6)
MAY 6 130(6)
MAY 3 127(6)
MAY 4 128(6)
MAY 1 125(6)
MAY 2 126(6)
Snow
TO WEST SEE MAP 104G/6E
TO EAST SEE MAP 104G/7E
TO SOUTH SEE MAP 104G/2W
LIARD MINING DIVISION
57°15'
1
2
3
4
5
6

6162

GROUP #3

GROUP #2

GROUP #1

LP

112 N
108 N
104 N
96 N
92 N
88 N
84 N
80 N
76 N
72 N
68 N
64 N
60 N
56 N
52 N
48 N
44 N
40 N
36 N
32 N
28 N
24 N
20 N
16 N
12 N
8 N
4 N
0
4 S
8 S
12 S
16 S
20 S
24 S
28 S
32 S
36 S
40 S
44 S
46 S

LAVA CREEK

SNAKE CREEK

MOOSE LAKE

RAT LAKE

LOON LAKE

CAMP

7 8 5 6 5 6 3 3 4 4 1 1 2 2

57°20'

57°15'

130°55'

130°50'

CREEK

A.J. Sibbald
Feb 7/77

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. J. SIBBALD

6162
M-1

Plate 1

LEGEND:

LP — CLAIMS showing legal post and claim number

.....4 — MAP SHEETS (with number)

32 N — COMPASS LINES

Geological Mapping

Soil Geochemistry

Line Cutting

N

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

INDEX MAP

NTS : 104-G-7

500 0 500 1000
scale in meters

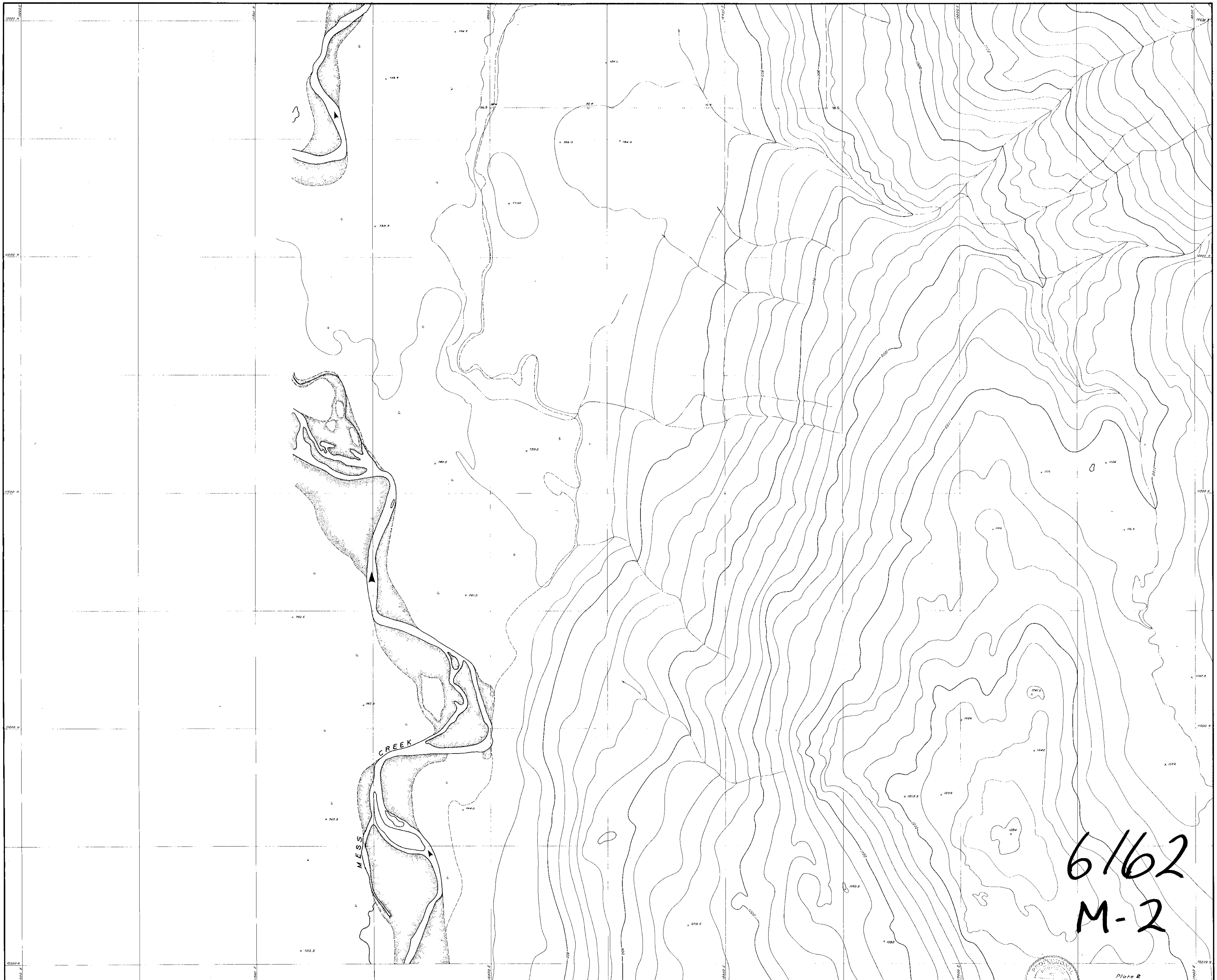


Plate 2

SYMBOLS

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination

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5	6
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1	2

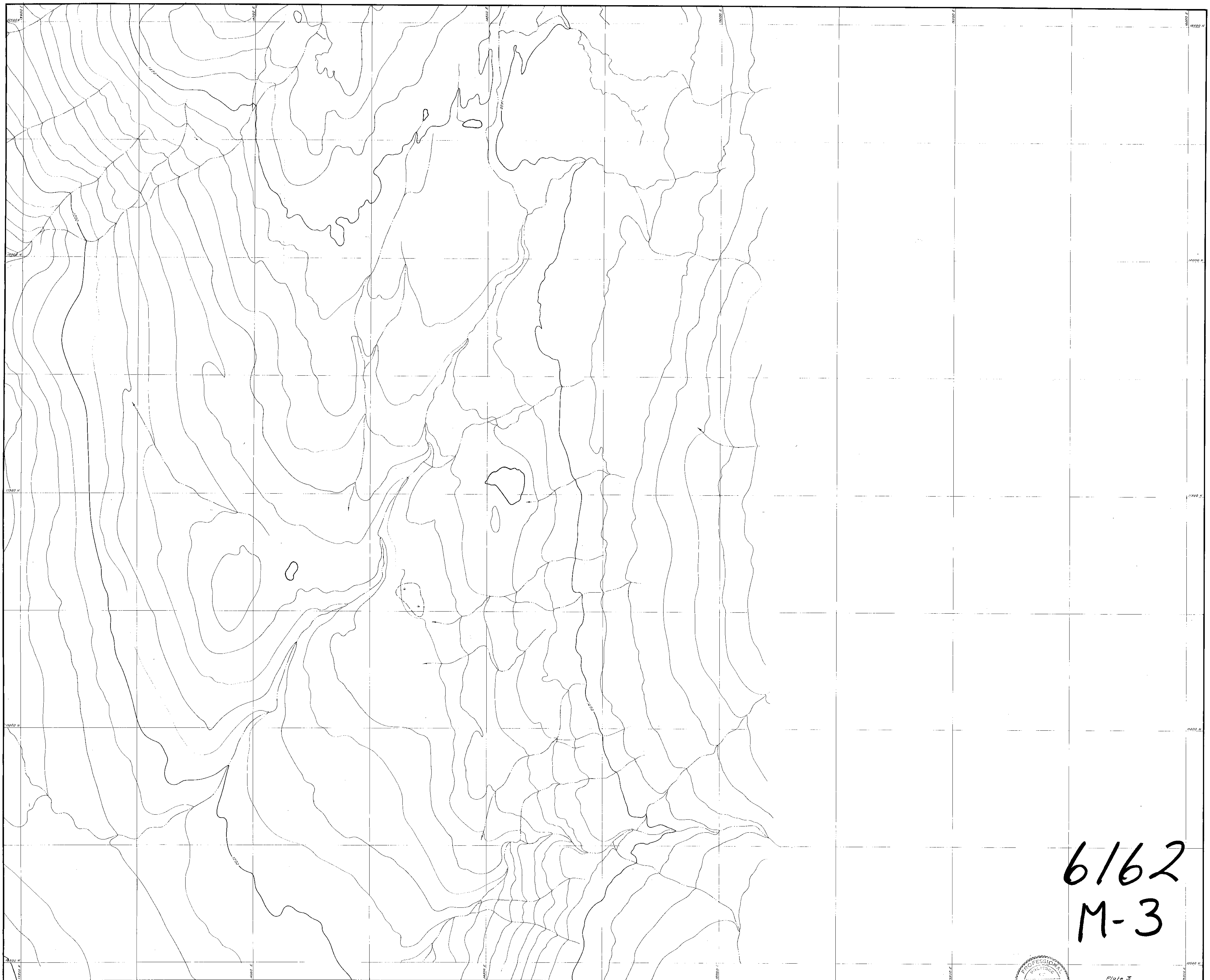
UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

TOPOGRAPHY

Work by.	Date:	NTS Ref 104-G-7
Drawn by: C Danders	Revised	

50 0 50 100 150
SCALE IN METERS



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- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination

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Plate 3

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
TOPOGRAPHY

Work by :	Date :	NTS Ref. 104-G-7
Drawn by : C. Donders	Revised:	

50 0 50 100 150
SCALE IN METERS

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

ASG
Feb. 7/77

RAT LAKE

LOON LAKE

GOOSE LAKE

MESS CREEK

CAMP

SYMBOLS:

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
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ASB Feb 7/77

6162
M-4

Plate 4

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
TOPOGRAPHY

Work by	Date:	NTS Ref. 104-G-7
Drawn by C Saunders	Revised	

50 0 50 100 150
SCALE IN METERS

SHEEP LAKE

RAM LAKE

EWE L.

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
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1	2

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Plate 5

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA

Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
TOPOGRAPHY

Work by	Date:	NTS Ref. 104-G-7
Drawn by: C. Donohoe	Revised:	

50 0 50 100 150
SCALE IN METERS

MOOSE LAKE

MESS CREEK

SHAKE CREEK

MOUSE LAKE

Shrew Lake

DDH-RG-3 -45° TO 108.2 m

DDH-RG-2 -45° TO 149.7 m

DDH-RG-1 -45° TO 130.1 m

DDH-RG-4 -45° TO 113.8 m

6162

M-6

Plate 6

SYMBOLS :

- CREEKS WIDTHS DEFINED
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N

NTS Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
TOPOGRAPHY

Work by	Date:	NTS Ref. 104-G-7
Drawn by C. Dahrouge	Revised:	

50 0 50 100 150
SCALE IN METERS

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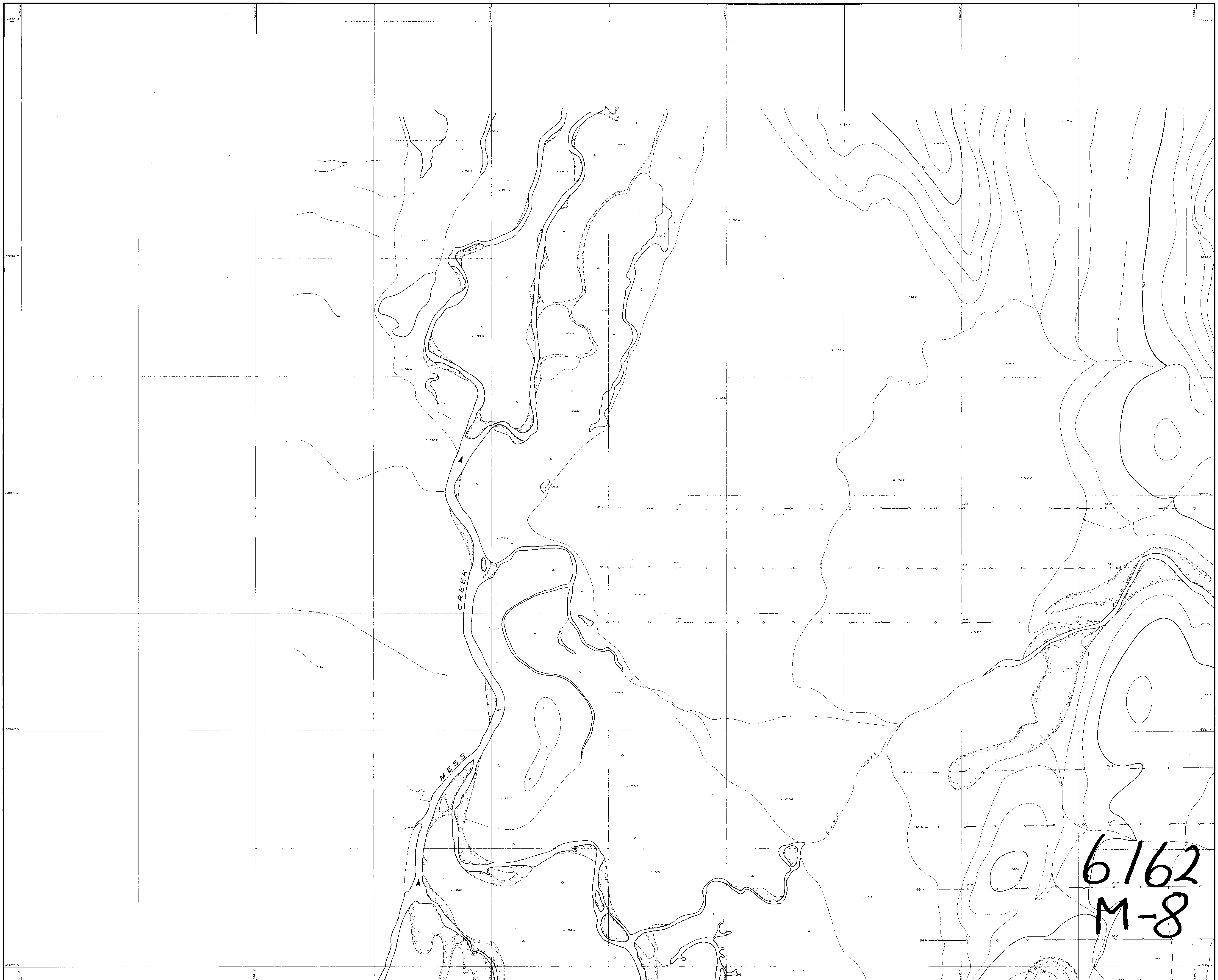
Plate 7

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
TOPOGRAPHY

Work by	Date:	NTS Ref. 104-G-7
Drawn by C. Dondera	Revised:	

SCALE IN METERS
50 0 50 100 150



SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and Inclination

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Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

TOPOGRAPHY

Work by:	Date:	NTS Ref. 104-G-7
Drawn by: C. Donders	Revised:	

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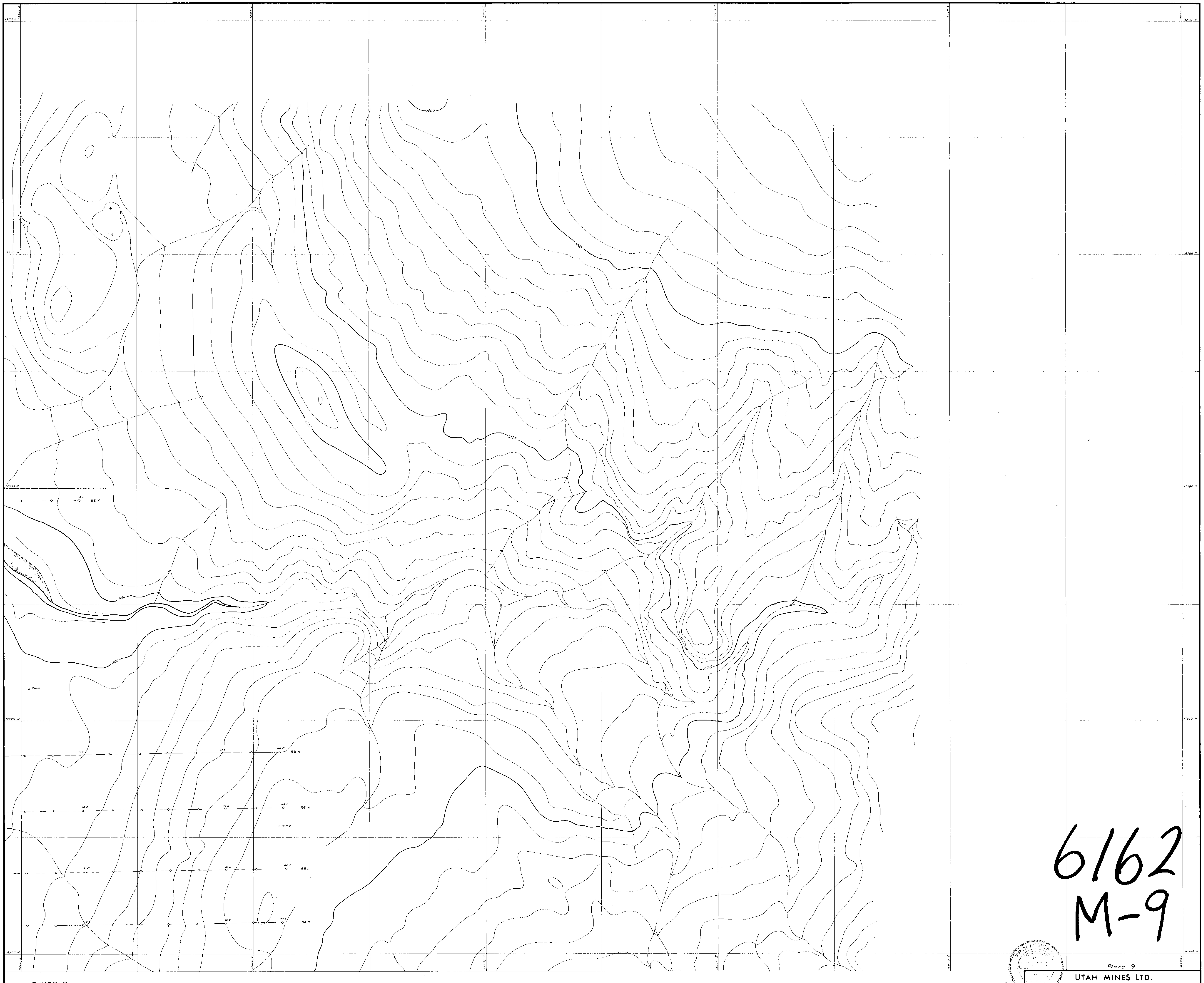
SCALE IN METERS



SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination

Plate 9

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

TOPOGRAPHY

Work by:	Date:	NTS Ref. 104-G-7
Drawn by: C. Donders	Revised:	

50 0 50 100 150
SCALE IN METERS

SYMBOLS:

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP 04679 CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5, -45°, TD 150 m. DIAMOND DRILL HOLE with total depth Azimuth and Inclination
- FAULTS with direction of movement dip (40°) plunge of slickensides (30°)
- BEDDING (with dip 30°)
- JOINTS and FRACTURES with dip
- CONTACTS (defined, inferred, possible)
- OUTCROPS
- BRECCIA
- FOLIATION (with dip 30°)

LEGEND:

- TERTIARY-RECENT: Rhyolite-Basalt Flow Rocks, Pyroclastics and related Subvolcanic intrusions
- UPPER CRETACEOUS: Sustut Group: Chert Pebble Conglomerate, Granite Boulder Conglomerate, Sandstones, Arkose, Siltstone, Carbonaceous Shale.
- LOWER JURASSIC: Conglomerate, Polymictic Conglomerate Granite Boulder Conglomerate, Grit Greywacke, Siltstone, Minor volcanics.
- UPPER TRIASSIC: Augite Andesite Flows, Pyroclastic Rocks, Derived Volcaniclastic, Rocks and related Subvolcanic Intrusions
- PERMIAN: Limestone, thick-bedded mainly Bioclastic Limestone, Minor Siltstone and Chert.

INTRUSIVE ROCKS:

- JURASSIC and/or CRETACEOUS: Granodiorite, Quart Diorite, Minor Diorite, and Leucogranite
- TRIASSIC and JURASSIC: Syenite, Orthoclase Porphyry Monzonite, Hornblende, Granodiorite and Quartz Diorite
- PRE-LOWER JURASSIC: Amphibolite, Amphibolite Gneiss, Ultramafic Rocks, Peridotite Dunites, Serpentinite

ALTERATION and MINERALIZATION:

- SILICA: Pervasive, Disseminated, Fracture Filling.
- FELDSPATHIC: Pervasive, Disseminated, Fracture Filling. K-Potassic., Na-Sodic.
- SERICITE: Pervasive, Disseminated, Fracture Filling.
- CARBONATE: Pervasive, Disseminated, Fracture Filling. Calcite-Cal., Dolomite-Do, Ankerite-An, Siderite-Si,
- ARGILLIC: Pervasive, Disseminated, Fracture Filling. Kaolinite-Kaol., Talc, Chlorite-Chl.
- MINERALIZATION: Pervasive, Disseminated, Fracture Filling. Pyrite-Py, Chalcopyrite-Cpy, Bornite-Bo, Molybdenite-Mo, Malachite-Mal, Hematite-Hem, Magnetite-Mag.

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PROFESSIONAL ENGINEER A. J. ... BRITISH COLUMBIA

ASS Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

GEOLOGY

Work by:	Date:	NTS Ref. 104-G-7
Drawn by: C. Donders	Revised:	

50 0 50 100 150
SCALE IN METERS

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination
- FAULTS with direction of movement dip (40°) plunge of slickensides (30°)
- BEDDING (with dip 30°)
- JOINTS and FRACTURES with dip
- CONTACTS (defined, inferred, possible)
- OUTCROPS
- BRECCIA
- FOLIATION (with dip 30°)

LEGEND :

- TERTIARY-RECENT : Rhyolite-Basalt Flow Rocks, Pyroclastics and related Subvolcanic intrusions
- UPPER CRETACEOUS : Suutut Group : Chert Pebble Conglomerate, Granite Boulder Conglomerate, Sandstones, Arkose, Siltstone, Carbonaceous Shale
- LOWER JURASSIC : Conglomerate, Polymictic Conglomerate Granite Boulder Conglomerate, Grit Greywacke, Siltstone, Minor volcanics.
- UPPER TRIASSIC : Augite Andesite Flows, Pyroclastic Rocks, Derived Volcaniclastic, Rocks and related Subvolcanic Intrusions
- PERMIAN : Limestone, thick-bedded mainly Bioclastic Limestone, Minor Siltstone and Chert.

INTRUSIVE ROCKS :

- JURASSIC and/or CRETACEOUS : Granodiorite, Quart Diorite, Minor Diorite, and Leucogranite
- TRIASSIC and JURASSIC : Syenite, Orthoclase Porphyry Monzonite, Hornblende, Granodiorite and Quartz Diorite
- PRE-LOWER JURASSIC : Amphibolite, Amphibolite Gneiss, Ultramafic Rocks, Peridotite Dunites, Serpentinite

ALTERATION and MINERALIZATION :

- SILICA : Pervasive, Disseminated, Fracture Filling.
- FELDSPATHIC : Pervasive, Disseminated, Fracture Filling. K-Potassic., Na-Sodic.
- SERICITE : Pervasive, Disseminated, Fracture Filling.
- CARBONATE : Pervasive, Disseminated, Fracture Filling. Calcite-Cal., Dolomite-Do, Ankerite-An, Siderite-Si,
- ARGILLIC : Pervasive, Disseminated, Fracture Filling. Kaolinite-Kaol., Talc, Chlorite-Chl.
- MINERALIZATION : Pervasive, Disseminated, Fracture Filling. Pyrite-Py, Chalcopyrite-Cpy, Bornite-Bo, Molybdenite-Mo, Malachite-Mal, Hematite-Hem, Magnetite-Mag.

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. [illegible]

Plate 11

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
GEOLOGY

Work by :	Date :	NTS Ref. 104-G-7
Drawn by : C. Doncaster	Revised :	

50 0 50 100 150
SCALE IN METERS

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP 04679 CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 45° TD 150 m DIAMOND DRILL HOLE with total depth Azimuth and inclination
- FAULTS with direction of movement dip (40°) plunge of slickensides (30°)
- BEDDING (with dip 30°)
- JOINTS and FRACTURES with dip
- CONTACTS (defined, inferred, possible)
- OUTCROPS
- BRECCIA
- FOLIATION (with dip 30°)

LEGEND:

- TERTIARY-RECENT: Rhyolite-Basalt Flow Rocks, Pyroclastics and related Subvolcanic intrusions
- UPPER CRETACEOUS: Sustut Group: Chert Pebble Conglomerate, Granite Boulder Conglomerate, Sandstones, Arkose, Siltstone, Carbonaceous Shale.
- LOWER JURASSIC: Conglomerate, Polymictic Conglomerate Granite Boulder Conglomerate, Grit Greywacke, Siltstone, Minor volcanics.
- UPPER TRIASSIC: Augite Andesite Flows, Pyroclastic Rocks, Derived Volcaniclastic, Rocks and related Subvolcanic Intrusions
- PERMIAN: Limestone, thick-bedded mainly Bioclastic Limestone, Minor Siltstone and Chert.

INTRUSIVE ROCKS:

- JURASSIC and/or CRETACEOUS: Granodiorite, Quart Diorite, Minor Diorite, and Leucogranite
- TRIASSIC and JURASSIC: Syenite, Orthoclase Porphyry Monzonite, Hornblende, Granodiorite and Quartz Diorite
- PRE-LOWER JURASSIC: Amphibolite, Amphibolite Gneiss, Ultramafic Rocks, Peridotite Dunites, Serpentinite

ALTERATION and MINERALIZATION:

- SILICA: Pervasive, Disseminated, Fracture Filling.
- FELDSPATHIC: Pervasive, Disseminated, Fracture Filling. K-Potassic., Na-Sodic.
- SERICITE: Pervasive, Disseminated, Fracture Filling.
- CARBONATE: Pervasive, Disseminated, Fracture Filling. Calcite-Cal., Dolomite-Do, Ankerite-An, Siderite-Si,
- ARGILLIC: Pervasive, Disseminated, Fracture Filling. Kaolinite-Kaol., Talc, Chlorite-Chl.
- MINERALIZATION: Pervasive, Disseminated, Fracture Filling. Pyrite-Py, Chalcopyrite-Cpy, Bornite-Bo, Molybdenite-Mo, Malachite-Mal, Hematite-Hem, Magnetite-Mag.

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMIDT

A.G.S. Feb 7/77

UTAH MINES LTD.

EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
GEOLOGY

Work by:	Date:	NTS Ref. 104-G-7
Drawn by: C. Donders	Revised:	

50 0 50 100 150
SCALE IN METERS

6162
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Plate 13

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP#679 — CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 — DIAMOND DRILL HOLE with total depth Azimuth and inclination
- FAULTS with direction of movement dip (40°) plunge of slickensides (30°)
- BEDDING (with dip 30°)
- JOINTS and FRACTURES with dip
- CONTACTS (defined, inferred, possible)
- OUTCROPS
- BRECCIA
- FOLIATION (with dip 30°)

LEGEND :

- TERTIARY-RECENT : Rhyolite-Basalt Flow Rocks, Pyroclastics and related Subvolcanic intrusions
- UPPER CRETACEOUS : Sustut Group: Chert Pebble Conglomerate, Granite Boulder Conglomerate, Sandstones, Arkose, Siltstone, Carbonaceous Shale.
- LOWER JURASSIC : Conglomerate, Polymictic Conglomerate Granite Boulder Conglomerate, Grit Greywacke, Siltstone, Minor volcanics
- UPPER TRIASSIC : Augite Andesite Flows, Pyroclastic Rocks, Derived Volcaniclastic, Rocks and related Subvolcanic Intrusions
- PERMIAN : Limestone, thick-bedded mainly Bioclastic Limestone, Minor Siltstone and Chert.

INTRUSIVE ROCKS :

- JURASSIC and/or CRETACEOUS : Granodiorite, Quart Diorite, Minor Diorite, and Leucogranite
- TRIASSIC and JURASSIC : Syenite, Orthoclase Porphyry Monzonite, Hornblende, Granodiorite and Quartz Diorite
- PRE-LOWER JURASSIC : Amphibolite, Amphibolite Gneiss, Ultramafic Rocks, Peridotite Dunites, Serpentinite

ALTERATION and MINERALIZATION :

- SILICA : Pervasive, Disseminated, Fracture Filling.
- FELDSPATHIC : Pervasive, Disseminated, Fracture Filling. K-Potassic., Na-Sodic.
- SERICITE : Pervasive, Disseminated, Fracture Filling.
- CARBONATE : Pervasive, Disseminated, Fracture Filling. Calcite-Cal., Dolomite-Do, Ankerite-An, Siderite-Si,
- ARGILLIC : Pervasive, Disseminated, Fracture Filling. Kaolinite-Kaol., Talc, Chlorite-Chl.
- MINERALIZATION : Pervasive, Disseminated, Fracture Filling. Pyrite-Py, Chalcopyrite-Cpy, Bornite-Bo, Molybdenite-Mo, Malachite-Mal, Hematite-Hem, Magnetite-Mag.

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMIDT

Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
GEOLOGY

Work by :	Date :	NTS Ref. 104-G-7
Drawn by : C. Domolenp.	Revised :	

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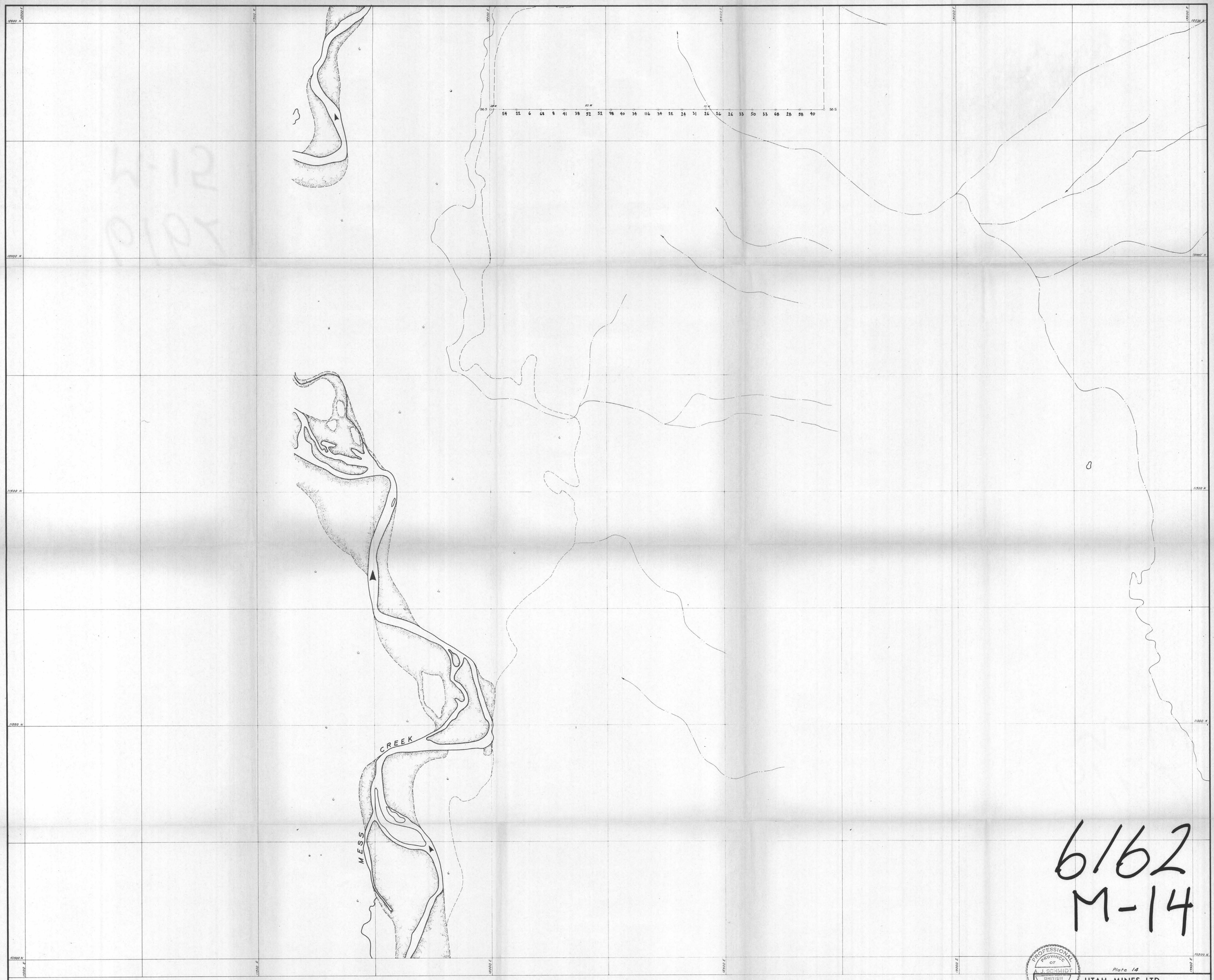
SCALE IN METERS



SYMBOLS

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP(claim) — CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 — DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< 90 ppm
POSSIBLY ANOMALOUS	≥ 90 < 150 ppm
PROBABLY ANOMALOUS	≥ 150 ppm

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PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — A. J. SCHMIDT

Plate 14

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

SOIL GEOCHEMISTRY

COPPER

Work by:	Date:	NTS Ref. 104-G-7
Drawn by: C. Donatens	Revised:	

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SCALE IN METERS

6162
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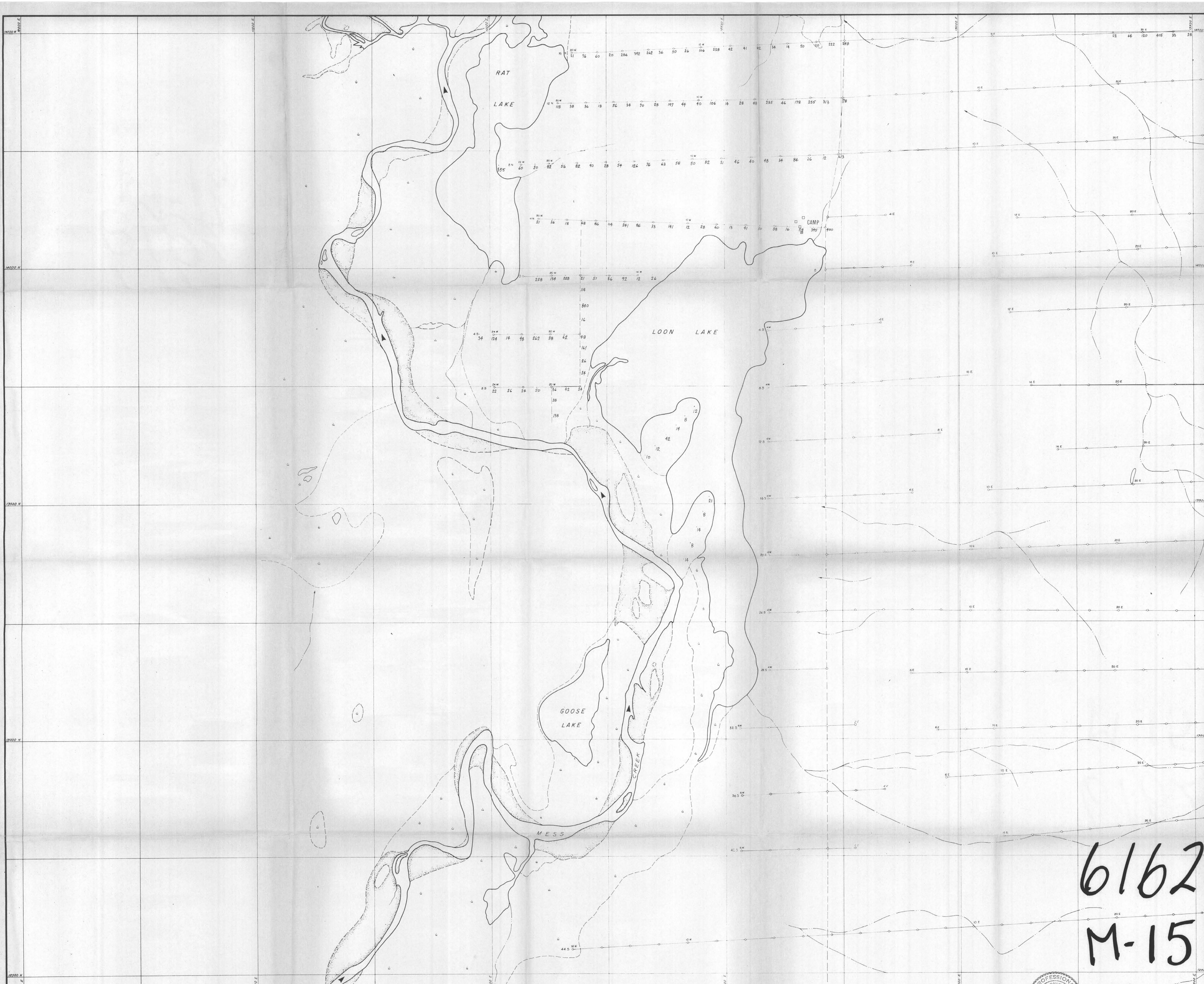

Plate 15

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

SOIL GEOCHEMISTRY

COPPER

Work by:	Date:	NTS Ref. 104-G-7
Drawn by: C. Donders	Revised	

SCALE IN METERS (50 0 50 100 150)

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMIDT

A.J.S. Feb. 7/77

SYMBOLS:

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP 04679 CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 TD 150 m. DIAMOND DRILL HOLE with total depth Azimuth and Inclination

LEGEND:

BACKGROUND	< 90 ppm
POSSIBLY ANOMALOUS	≥ 90 < 160 ppm
PROBABLY ANOMALOUS	≥ 160 ppm

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14500 E 14600 E 14700 E 15000 E 15100 E 15200 E

14500 N 33 28 90 11 34 38 36 30 E 10 N

30 E 34 E 12 N

28 E 8 N

38 E 4 N

30 E 0

14000 N

30 E 4 S

SHEEP LAKE

RAM LAKE

EWE L

30 E 38 E 8 S

30 E 12 S

30 E 38 E 16 S

13500 N

30 E 38 E 20 S

30 E 36 E 24 S

30 E 34 E 28 S

30 E 34 E 32 S

13000 N

30 E 34 E 36 S

30 E 40 S

30 E 40 E 46 E 44 S

12500 N

14500 E 14600 E 14700 E 15000 E 15100 E 15200 E

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 28 E — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP 46 TP — CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 — DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< 90 ppm
POSSIBLY ANOMALOUS	≥ 90 < 160 ppm
PROBABLY ANOMALOUS	≥ 160 ppm

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMIDT

Plate 16

Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
COPPER

Work by	Date :	NTS Ref. 104-G-7
Drawn by C. Pioncerre	Revised	

50 0 50 100 150
SCALE IN METERS

MOOSE LAKE

MESS CREEK

Snake Creek

MOUSE LAKE

Shrew Lake

DDH-RG-3 -45° TD 108.2 m

DDH-RG-2 -45° TD 149.7 m

DDH-RG-1 -45° TD 198.1 m

DDH-RG-4 -45° TD 173.9 m

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Plate 17

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 -45° 70.100 m — DIAMOND DRILL HOLE with total depth Azimuth and inclination
- SAMPLE LOCATION and value in ppm.

LEGEND :

BACKGROUND	< 90 ppm
POSSIBLY ANOMALOUS	≥ 90 < 160 ppm
PROBABLY ANOMALOUS	≥ 160 ppm

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMIDT

Feb 1/72

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
COPPER

Work by :	Date :	NTS Ref. 104-G-7
Drawn by : C. Doroniuk	Revised :	

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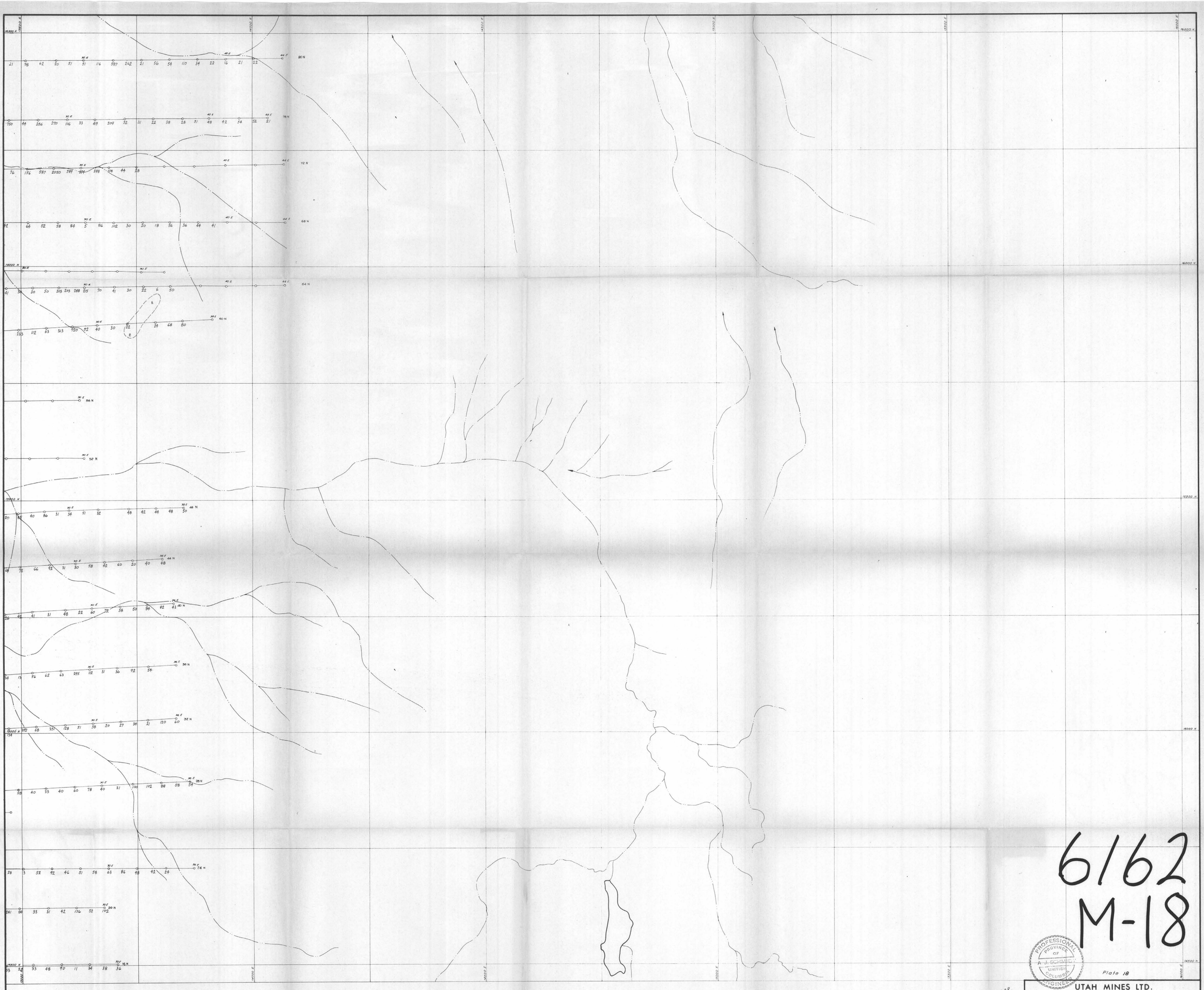
SCALE IN METERS



SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP#6 (7) — CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 — DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< 90 ppm
POSSIBLY ANOMALOUS	≥ 90 < 160 ppm
PROBABLY ANOMALOUS	≥ 160 ppm

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PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — A. J. SCHMIDT

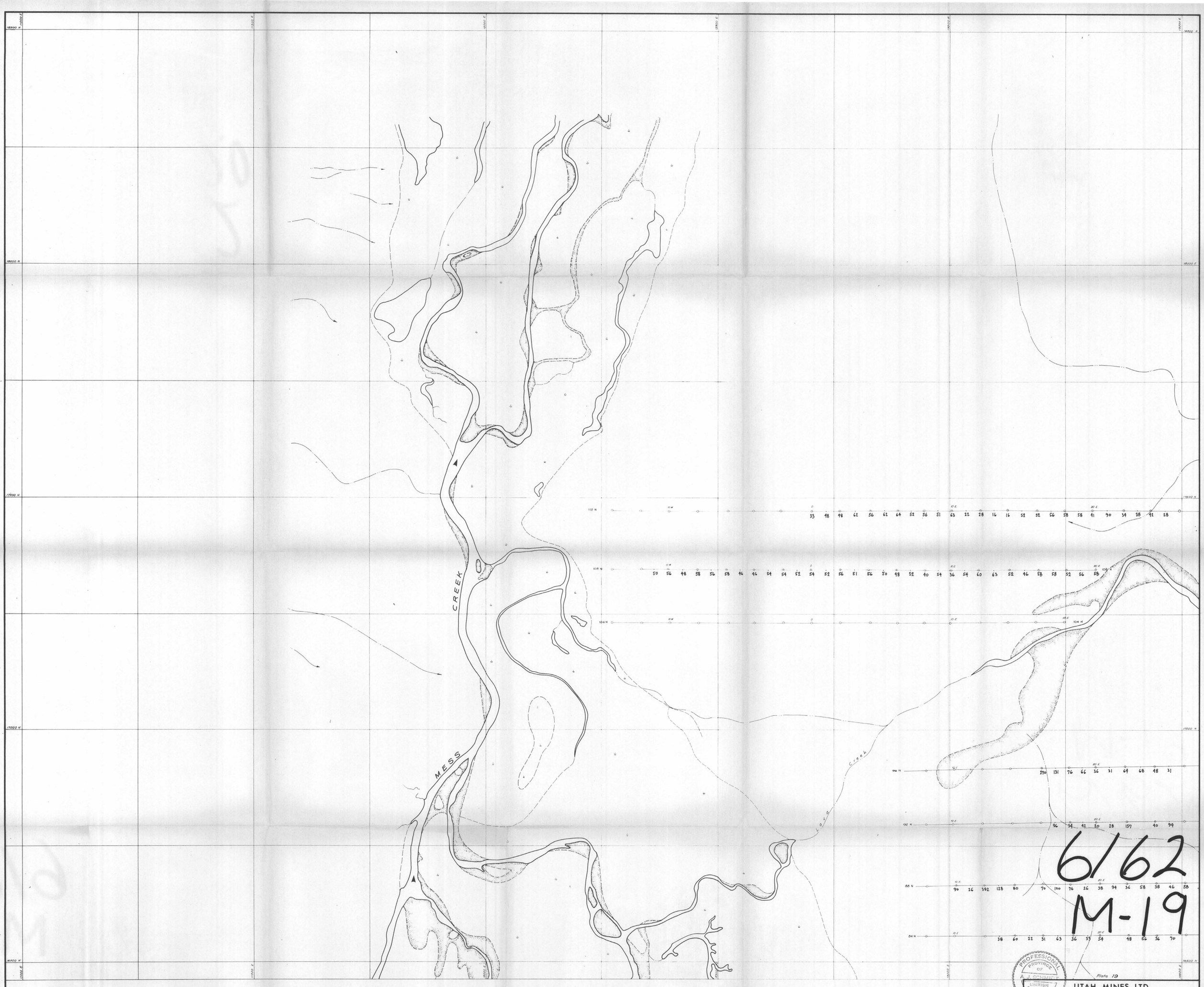
Plate 18

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
COPPER

Work by	Date:	NTS Ref 104-G-7
Drawn by C. Dondera	Revised	

50 0 50 100 150
SCALE IN METERS



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M-19

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description) — LP#4479
- DIAMOND DRILL HOLE with total depth Azimuth and inclination — DDH-MC-5, 45°, 78.00 m

LEGEND :

BACKGROUND	< 90 ppm
POSSIBLY ANOMALOUS	≥ 90 < 160 ppm
PROBABLY ANOMALOUS	≥ 160 ppm

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Plate 19

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMITT

Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

SOIL GEOCHEMISTRY

COPPER

Work by :	Date :	NTS Ref. 104-G-7
Drawn by C. Dandara	Revised :	

50 0 50 100 150
SCALE IN METERS

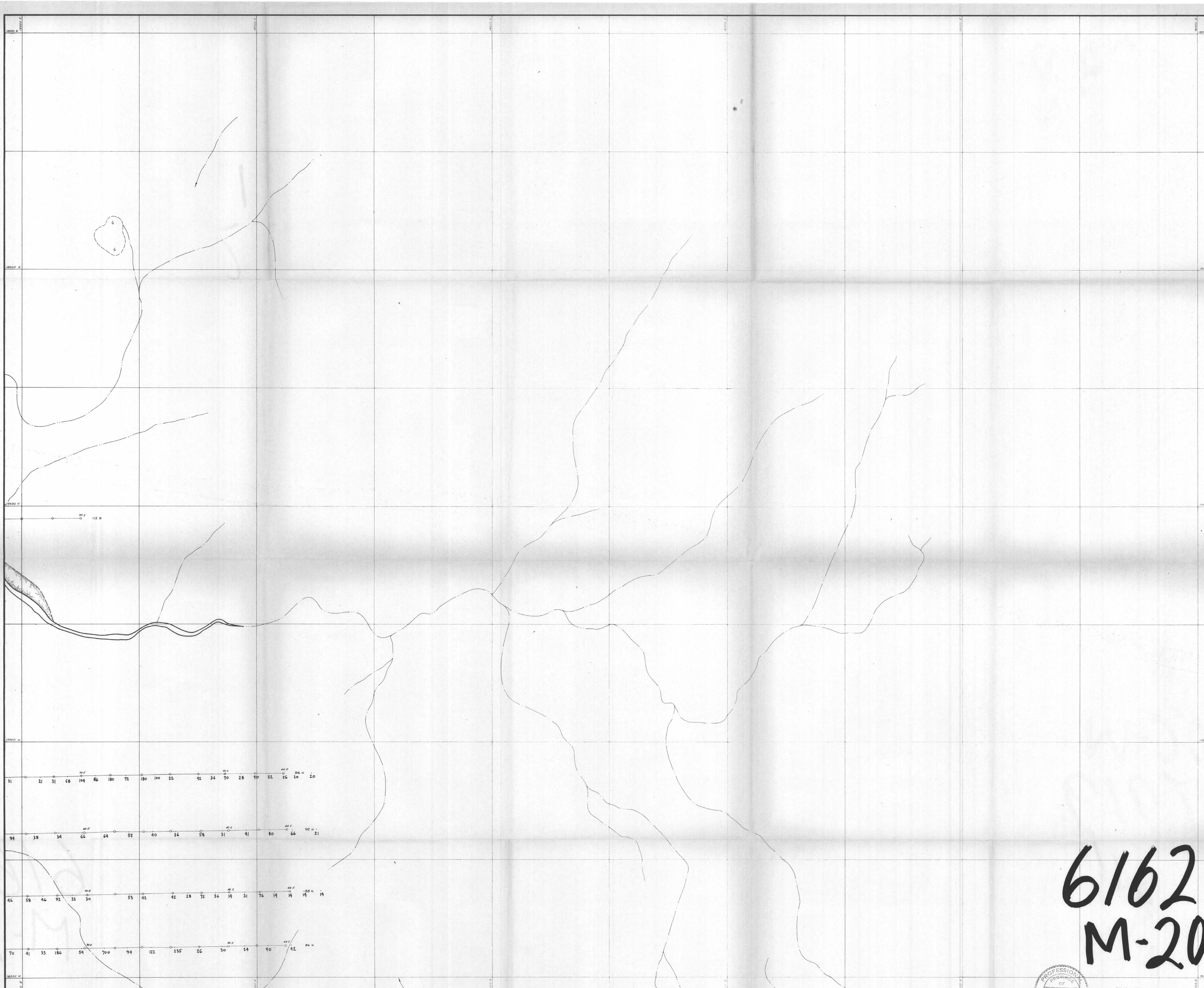

Plate 20

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP04679 CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 45° TD 150m DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< 90 ppm	
POSSIBLY ANOMALOUS	≥ 90	< 160 ppm
PROBABLY ANOMALOUS	≥ 160 ppm	

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PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — A. J. SCHMIDT

AJS Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

SOIL GEOCHEMISTRY

COPPER

Work by :	Date :	NTS Ref. 104-G-7
Drawn by C. Donders	Revised	

50 0 50 100 150
SCALE IN METERS

6162
M-21

Plate 21

SYMBOLS

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

▭	BACKGROUND	< 10 ppm
▭	POSSIBLY ANOMALOUS	≥ 10 < 15 ppm
▭	PROBABLY ANOMALOUS	≥ 15 ppm

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N

AJS
Feb. 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

SOIL GEOCHEMISTRY

MOLYBDENUM

Work by :	Date :	NTS Ref. 104-G-7
Drawn by · C. Donders	Revised ·	

50 0 50 100 150
SCALE IN METERS

RAT LAKE

LOON LAKE

GOOSE LAKE

MESS CREEK

CAMP

14500 N
14000 N
13500 N
13000 N
12500 N
12000 E
12500 E
13000 E
13500 E
14000 E
14500 E

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and Inclination

LEGEND :

BACKGROUND	< 10 ppm
POSSIBLY ANOMALOUS	≥ 10 < 15 ppm
PROBABLY ANOMALOUS	≥ 15 ppm

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

SOIL GEOCHEMISTRY

MOLYBDENUM

Work by	Date	NTS Ref 104-G-7
Drawn by C Dondera	Revised	

SCALE IN METERS 50 0 50 100 150

Plate 22

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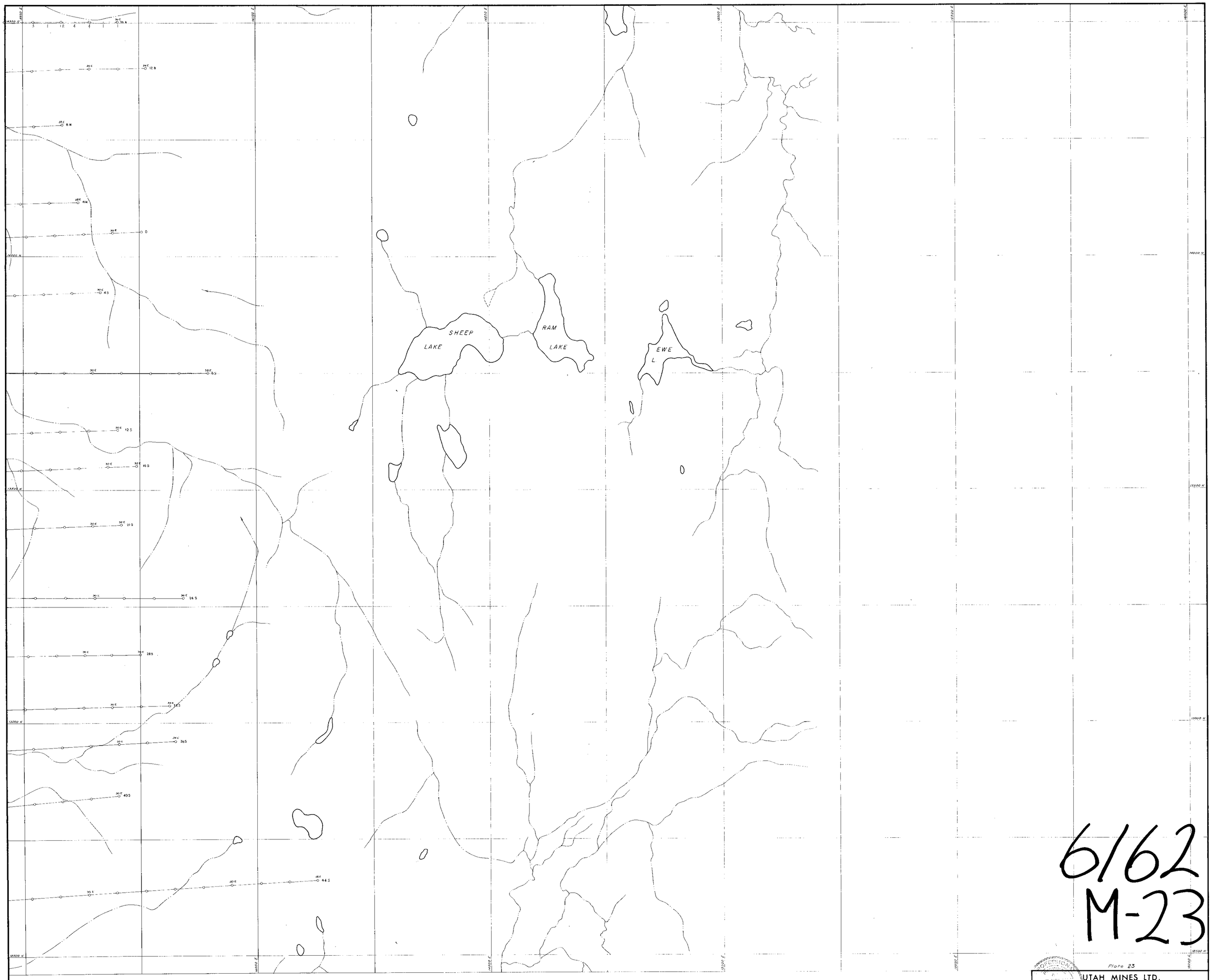

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 0 — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP#4572 — CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 — DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< 10 ppm	
POSSIBLY ANOMALOUS	≥ 10	< 15 ppm
PROBABLY ANOMALOUS	≥ 15 ppm	

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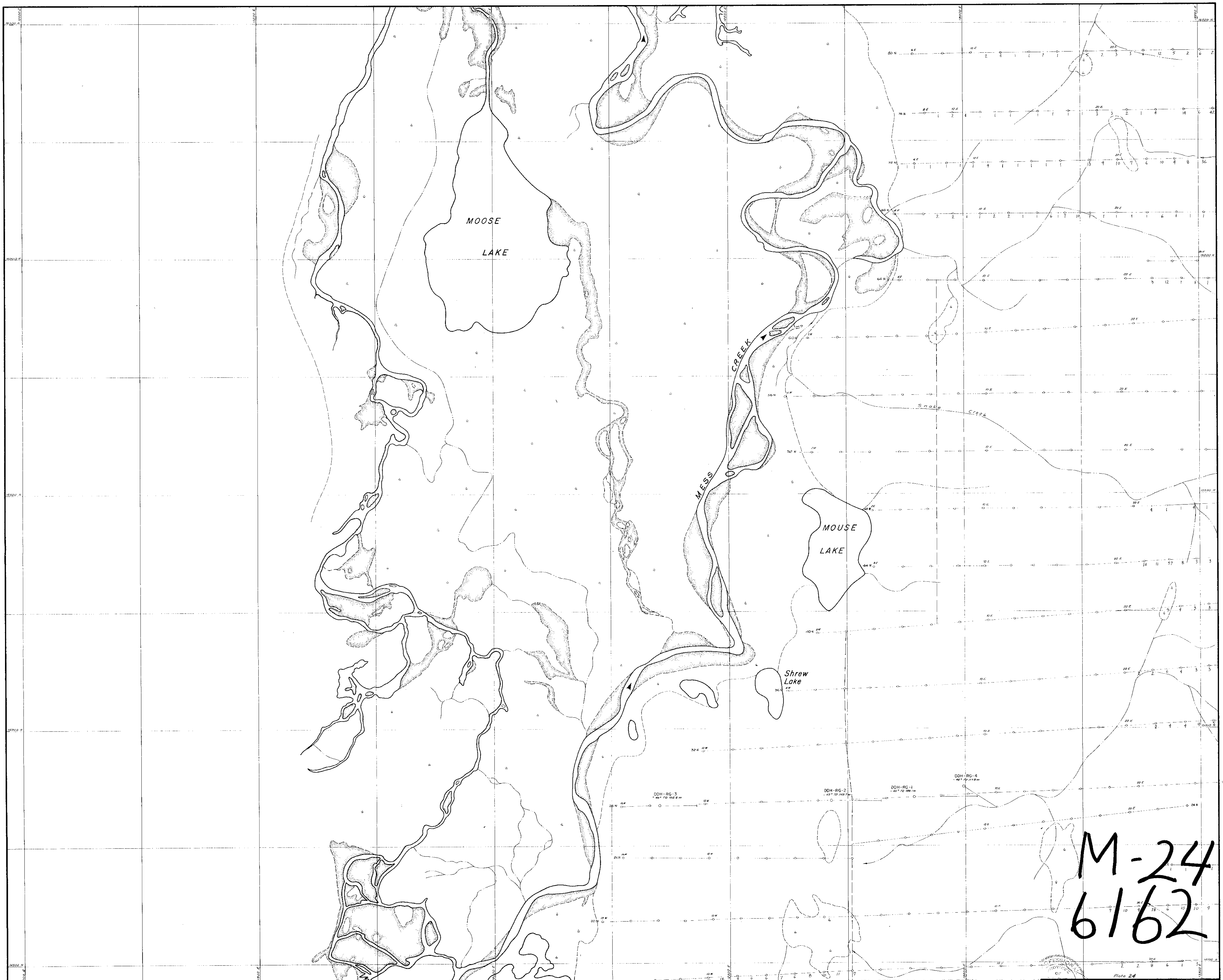
Plate 23

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
MOLYBDENUM

Work by	Date:	NTS Ref. 104-G-7
Drawn by C. Romero	Revised	

50 0 50 100 150
SCALE IN METERS



SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DIAMOND DRILL HOLE with total depth Azimuth and inclination
- SAMPLE LOCATION and value in ppm.

LEGEND :

BACKGROUND	< 10 ppm
POSSIBLY ANOMALOUS	≥ 10 < 15 ppm
PROBABLY ANOMALOUS	≥ 15 ppm

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A.S.S.
Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
MOLYBDENUM

Work by :	Date :	NTS Ref. 104-G-7
Drawn by : C. Donders	Revised :	

50 0 50 100 150
SCALE IN METERS

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post Description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< 10 ppm
POSSIBLY ANOMALOUS	≥ 10 < 15 ppm
PROBABLY ANOMALOUS	≥ 15 ppm

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Plate 25

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

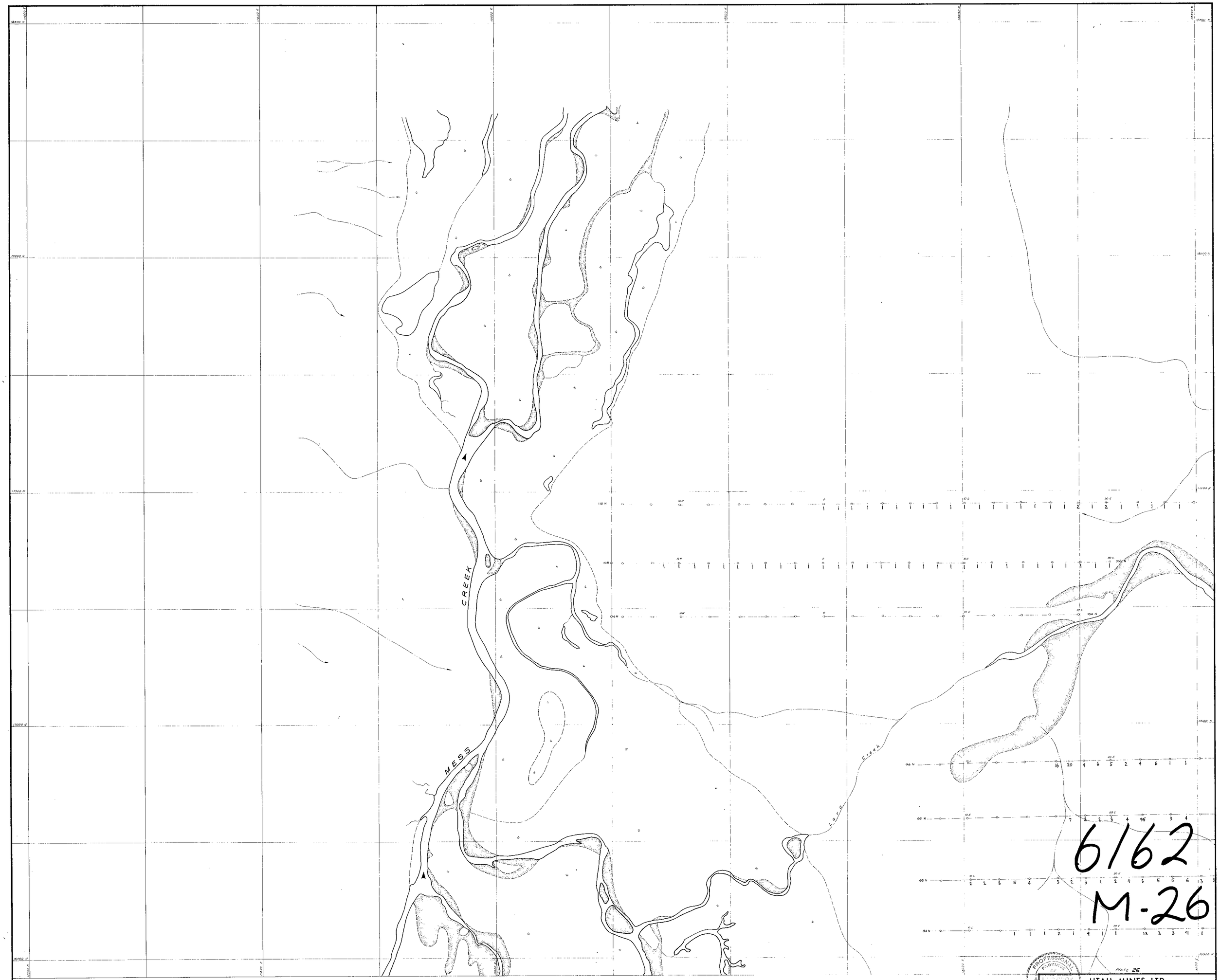
MAY PROPERTY

SOIL GEOCHEMISTRY

MOLYBDENUM

Work by :	Date :	NTS Ref 104-G-7
Drawn by : C. Downes	Revised	

SCALE IN METERS
50 0 50 100 150



SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP.14679 — CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 — DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< 10 ppm
POSSIBLY ANOMALOUS	≥ 10 < 15 ppm
PROBABLY ANOMALOUS	≥ 15 ppm

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Plate 26

PROFESSIONAL ENGINEER — A.J. [illegible] — PROVINCE OF BRITISH COLUMBIA

AJS Feb 1/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

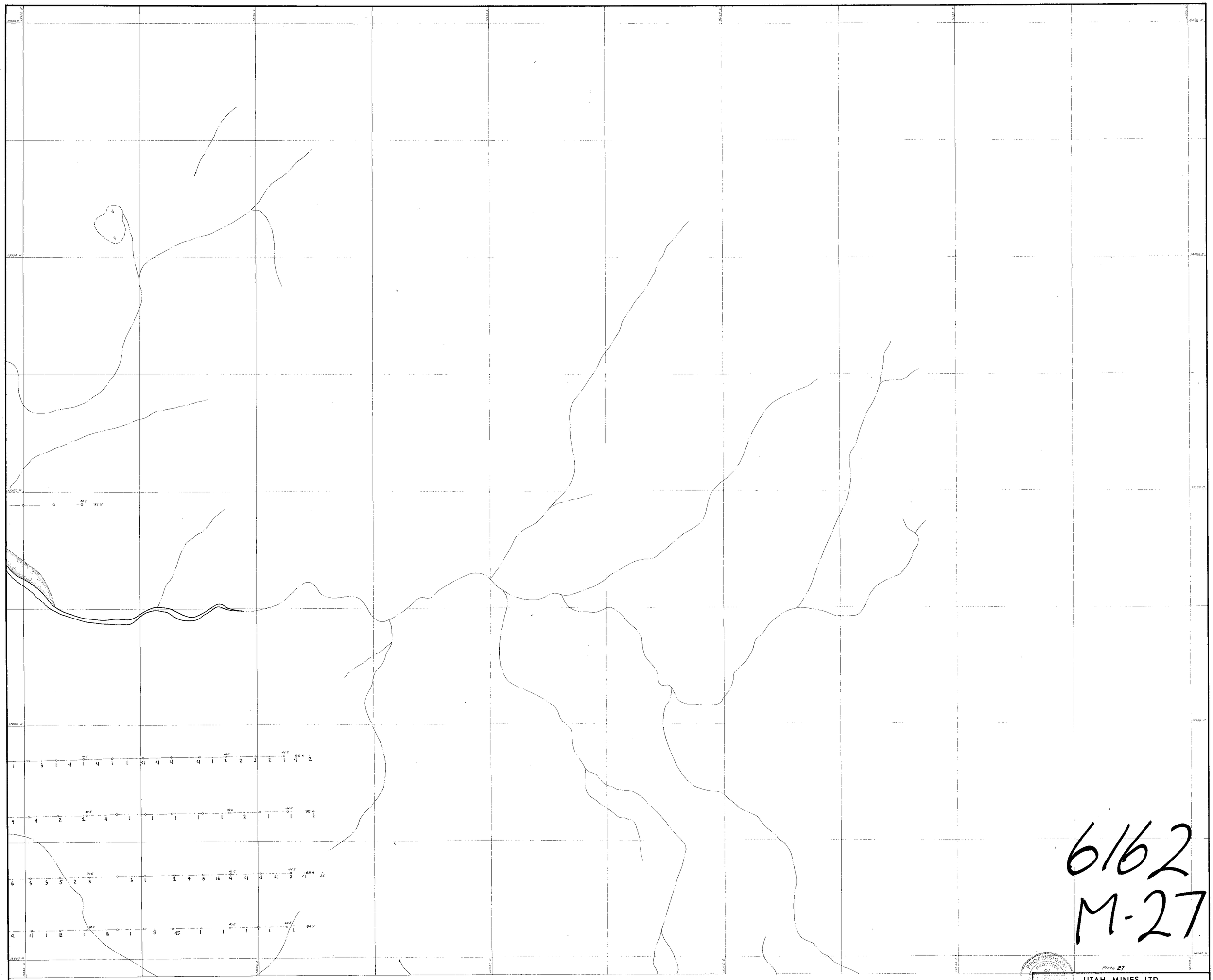
MAY PROPERTY

SOIL GEOCHEMISTRY

MOLYBDENUM

Work by	Date:	NTS Ref 104-G-7
Drawn by C. Clements	Revised	

50 0 50 100 150
SCALE IN METERS



SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< 10 ppm
POSSIBLY ANOMALOUS	≥ 10 < 15 ppm
PROBABLY ANOMALOUS	≥ 15 ppm

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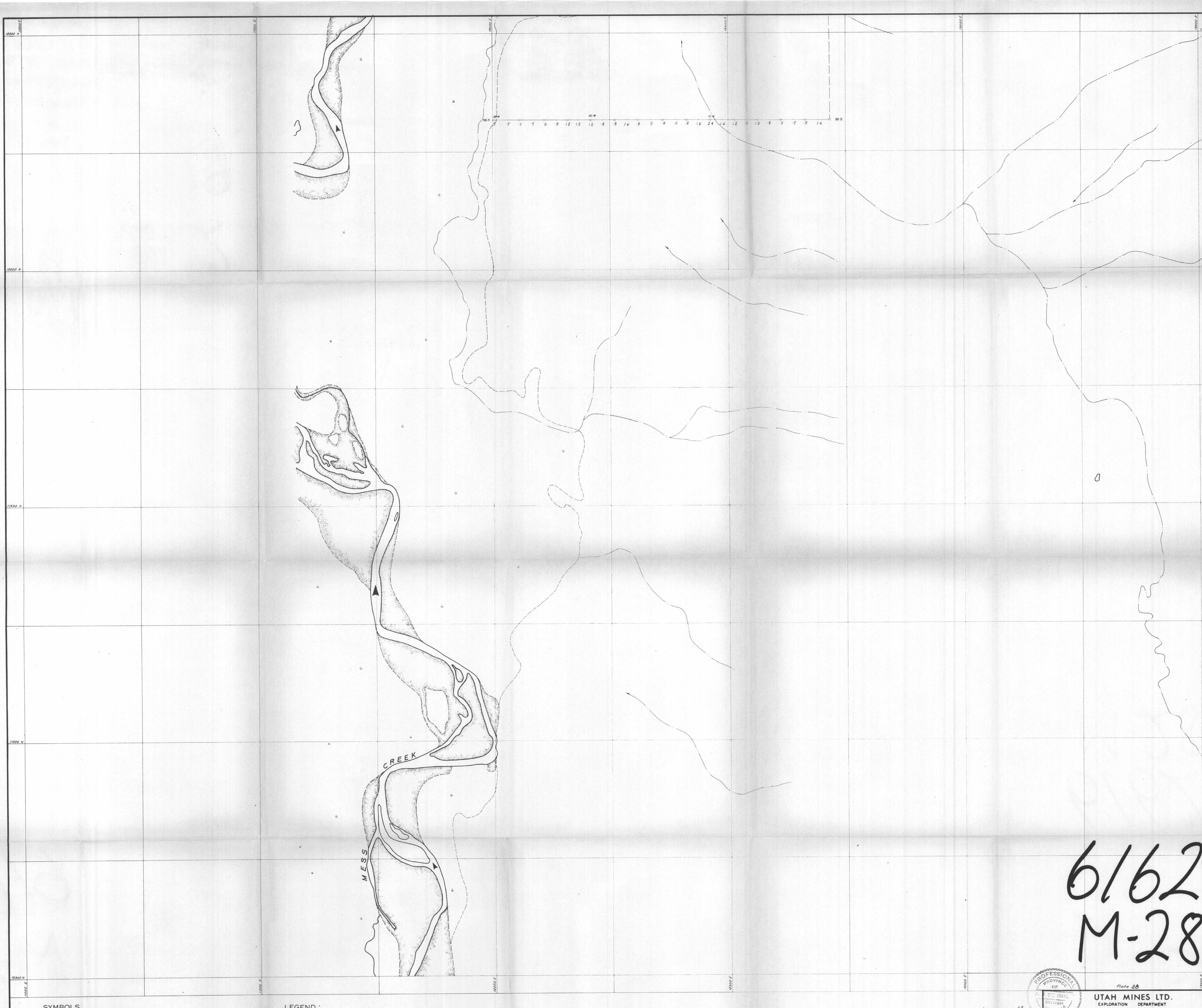
Plate 27

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
MOLYBDENUM

Work by	Date :	NTS Ref 104-G-7
Drawn by C. Donovan	Revised	

50 0 50 100 150
SCALE IN METERS



SYMBOLS

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP04679 CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 45° TD 150m DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< .8 ppm
POSSIBLY ANOMALOUS	≥ .8 < 1.0 ppm
PROBABLY ANOMALOUS	≥ 1.0 ppm

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PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, A. J. SCHMIE[illegible]

ASS. Feb. 7/77

Plate 28

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

SOIL GEOCHEMISTRY

SILVER

Work by:	Date:	NTS Ref. 104-G-7
Drawn by: C. Donaers	Revised	

50 0 50 100 150
SCALE IN METERS

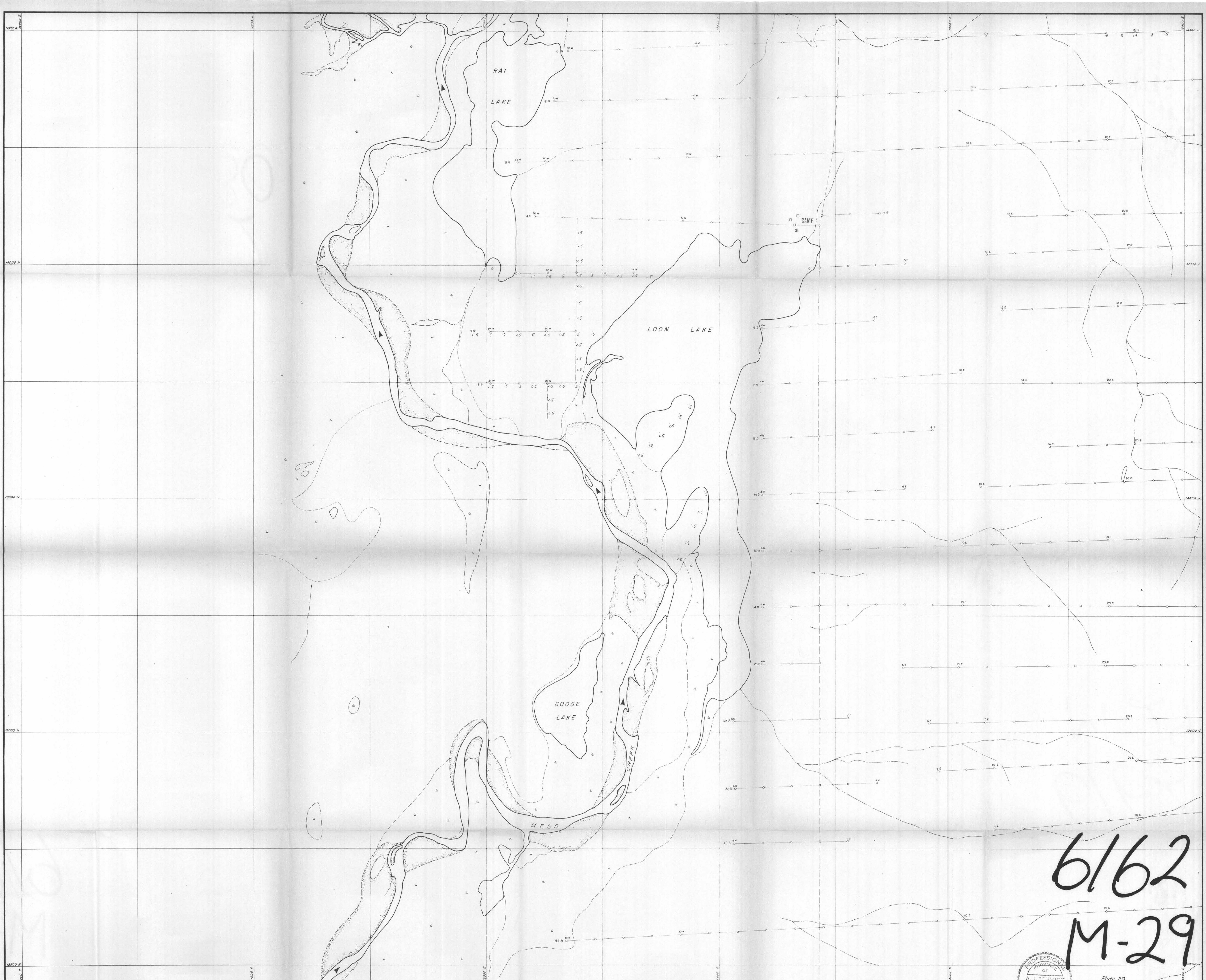

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Plate 29

SYMBOLS:

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP 04679 CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 −45° TD 150 m. DIAMOND DRILL HOLE with total depth Azimuth and Inclination

LEGEND:

BACKGROUND	< .8 ppm	
POSSIBLY ANOMALOUS	≥ .8	< 1.0 ppm
PROBABLY ANOMALOUS	≥ 1.0 ppm	

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMIDT

A.J.S. Feb. 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

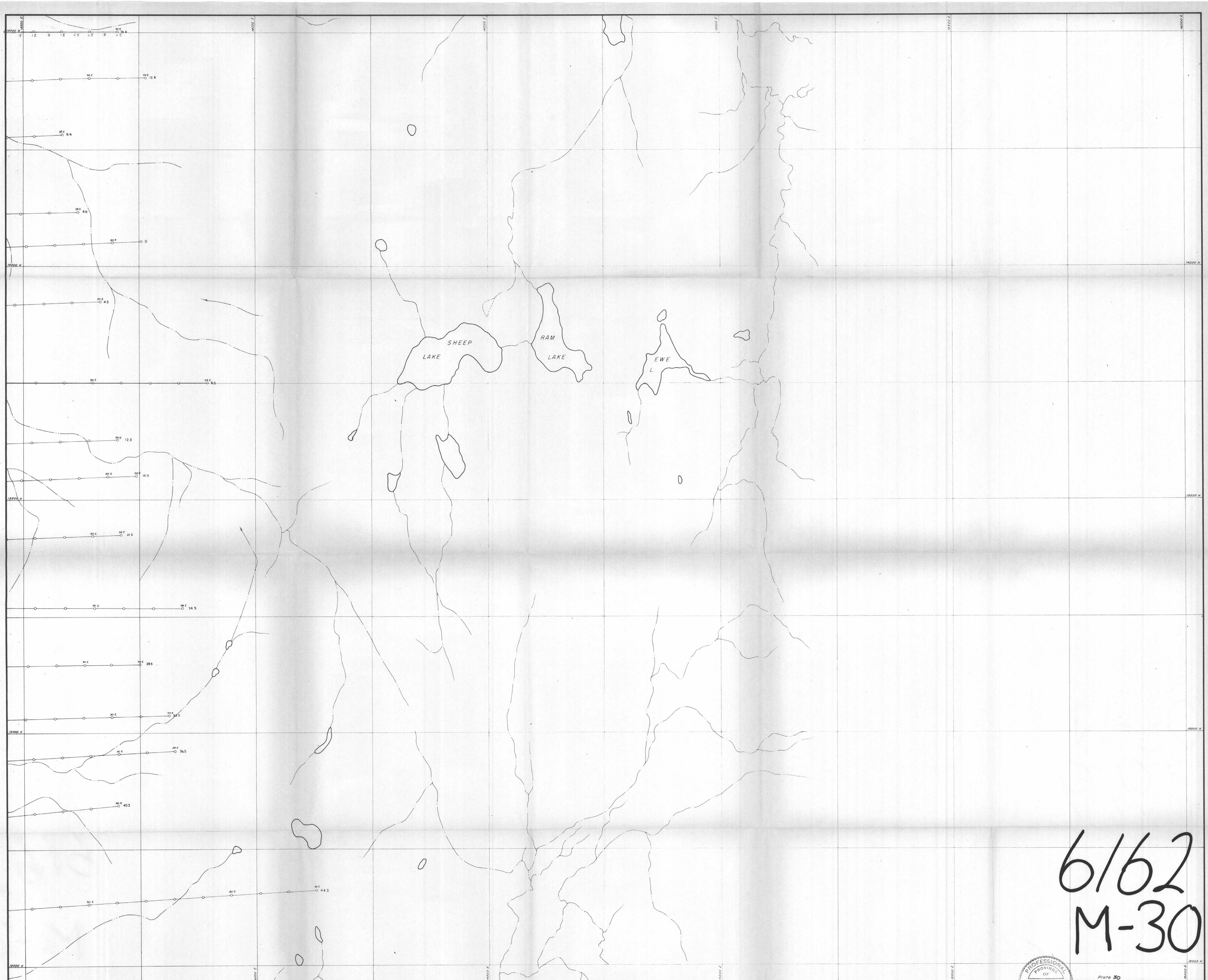
MAY PROPERTY

SOIL GEOCHEMISTRY

SILVER

Work by:	Date:	NTS Ref. 104-G-7
Drawn by: C. Donders	Revised:	

50 0 50 100 150
SCALE IN METERS



SYMBOLS :

CREEKS WIDTHS DEFINED
CREEKS WIDTHS UNDEFINED, INTERMITTENT
SWAMPS
GRAVEL BARS
LAKES
BASE CAMP
HELIPORT
4N CUT LINES WITH LINE AND STATION DESIGNATED
BASE LINE
LP04679 CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< .8 ppm	
POSSIBLY ANOMALOUS	≥ .8	< 1.0 ppm
PROBABLY ANOMALOUS	≥ 1.0 ppm	

Plate 30

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMITT

AJS Feb. 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
SILVER

Work by	Date :	NTS Ref 104-G-7
Drawn by C. Donders	Revised	

50 0 50 100 150
SCALE IN METERS

MOOSE LAKE

MESS CREEK

Snake Creek

MOUSE LAKE

Shrew Lake

DDH-RG-3 -45° TD 108.8 m

DDH-RG-2 -45° TD 149.7 m

DDH-RG-1 -45° TD 106.1 m

DDH-RG-4 -45° TD 173 m

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Plate 31

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination
- SAMPLE LOCATION and value in ppm.

LEGEND :

BACKGROUND	< .8 ppm
POSSIBLY ANOMALOUS	≥ .8 < 1.0 ppm
PROBABLY ANOMALOUS	≥ 1.0 ppm

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N

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. SCHMIDT

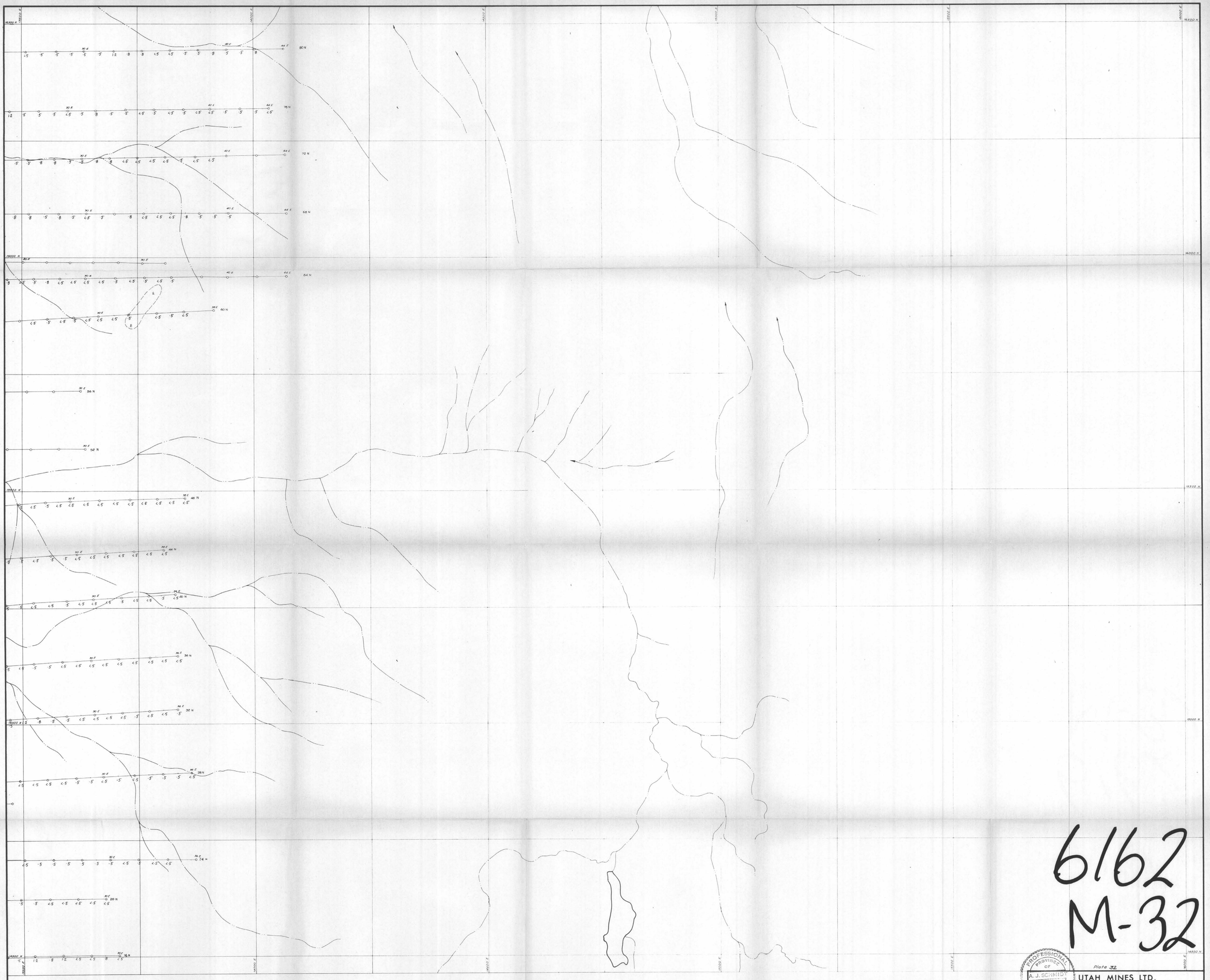
ABS Feb. 3/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
SILVER

Work by :	Date :	NTS Ref. 104-G-7
Drawn by : C. Dorrans	Revised :	

50 0 50 100 150
SCALE IN METERS



SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< .8 ppm
POSSIBLY ANOMALOUS	≥ .8 < 1.0 ppm
PROBABLY ANOMALOUS	≥ 1.0 ppm

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMIDT 1133 Feb. 7/77

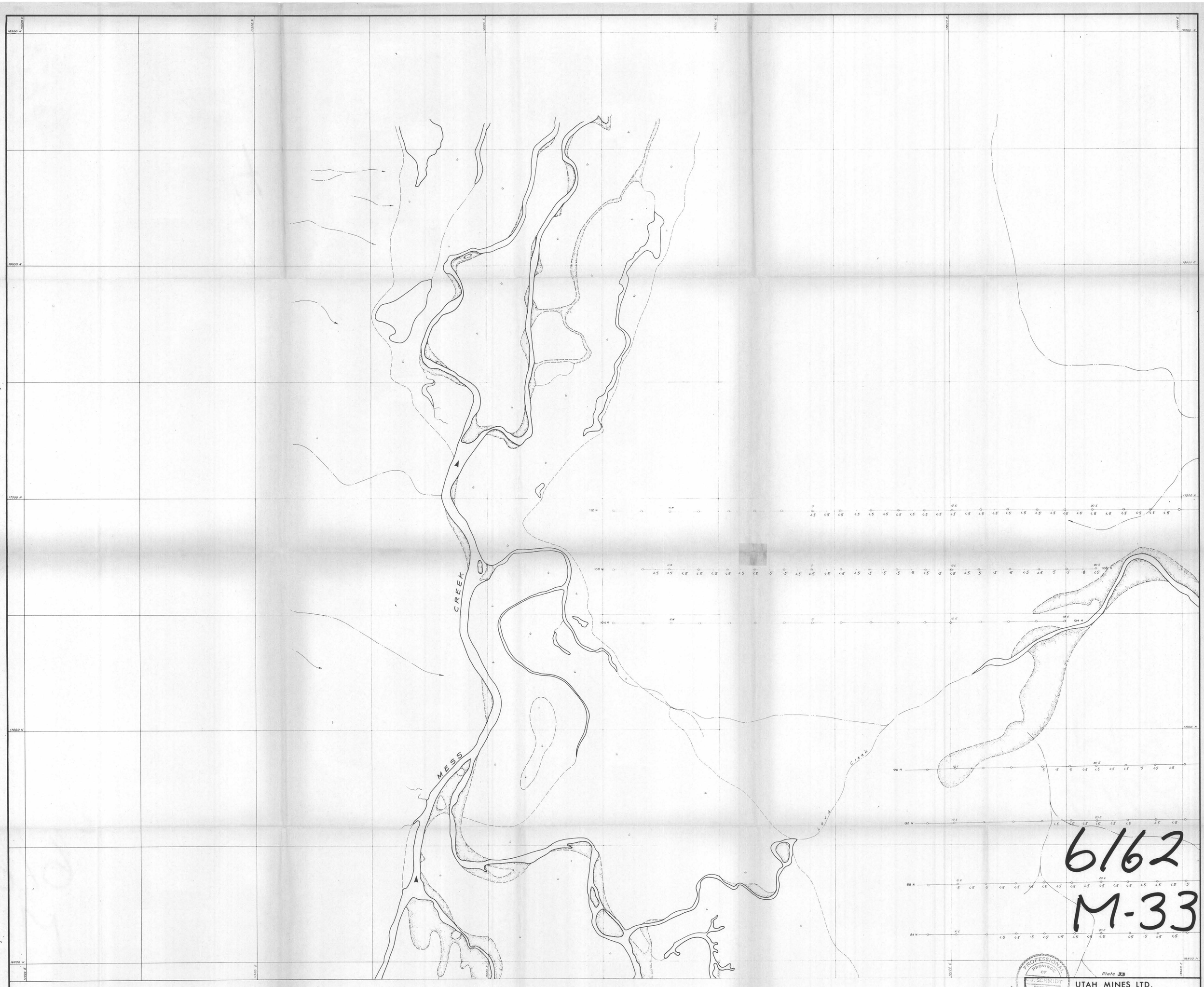
Plate 32

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
SILVER

Work by	Date:	NTS Ref 104-G-7
Drawn by C. Dondorp	Revised	

50 0 50 100 150
SCALE IN METERS



6162
M-33

Plate 33

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4W / 4N — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP.24679 — CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 — DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< .8 ppm
POSSIBLY ANOMALOUS	≥ .8 < 1.0 ppm
PROBABLY ANOMALOUS	≥ 1.0 ppm

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PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — J. SCHMIDT

Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

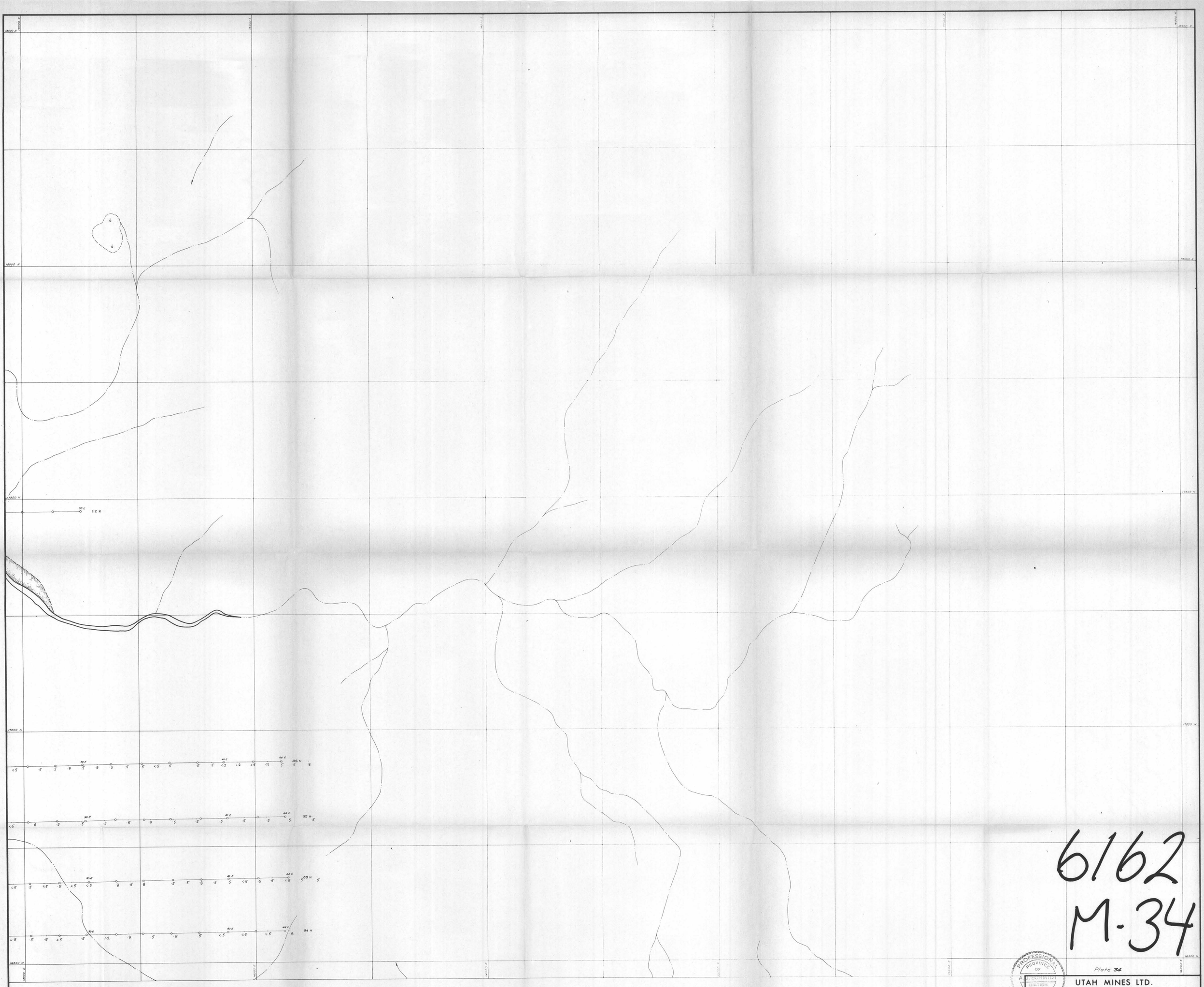
MAY PROPERTY

SOIL GEOCHEMISTRY

SILVER

Work by	Date :	NTS Ref. 104-G-7
Drawn by C. Dunsters	Revised	

50 0 50 100 150
SCALE IN METERS



SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP (claim) — CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5, 45°, 70.80m — DIAMOND DRILL HOLE with total depth Azimuth and inclination

LEGEND :

BACKGROUND	< .8 ppm
POSSIBLY ANOMALOUS	≥ .8 < 1.0 ppm
PROBABLY ANOMALOUS	≥ 1.0 ppm

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Plate 34

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — A.D. SCHMIDT — 1888 — Feb 7/77

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
SOIL GEOCHEMISTRY
SILVER

Work by	Date :	NTS Ref 104-G-7
Drawn by C.Dondenis	Revised	

50 0 50 100 150
SCALE IN METERS

RAT LAKE

LOON LAKE

GOOSE LAKE

MESS CREEK

CAMP

14500 N

14000 N

13500 N

13000 N

12500 N

15000 E

15500 E

16000 E

16500 E

17000 E

17500 E

18000 E

18500 E

19000 E

19500 E

SYMBOLS:

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W — CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH- MC-S — DIAMOND DRILL HOLE with total depth Azimuth and Inclination
- SAMPLE LOCATION (Cu: Copper in ppm; Mo: Molybdenum in ppm; Ag: Silver in ppm; Au: Gold in ppb)

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SC. MIDT 7/77

Plate 35

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

ROCK GEOCHEM

Work by: G.C.	Date: Jan. 1977	NTS Ref. 104-G-7
Drawn by: C. Dondero	Revised:	

50 0 50 100 150
SCALE IN METERS

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- 4N 4W CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- LP04679 CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 45° TD 150 m DIAMOND DRILL HOLE with total depth Azimuth and inclination
- Cu- Copper in ppm / Mo- Molybdenum in ppm / Ag- Silver in ppm / Au Gold in ppb SAMPLE LOCATION

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA A. J. SCHMIDT

A.J.S. Feb. 7/77

Plate 36

UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY

ROCK GEOCHEM

Work by: G.C.	Date: Jan. 1977	NTS Ref. 104-G-7
Drawn by: C. Donders	Revised	

50 0 50 100 150
SCALE IN METERS

MOOSE LAKE

MESS CREEK

Snake Creek

MOUSE LAKE

Shrew Lake

DDH-RG-1 -45° 70 198.1m

DDH-RG-2 -45° 70 149.7m

DDH-RG-3 -45° 70 108.8m

DDH-RG-4 -45° 70 117.9m

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M-37

Plate 37

SYMBOLS :

- CREEKS WIDTHS DEFINED
- CREEKS WIDTHS UNDEFINED, INTERMITTENT
- SWAMPS
- GRAVEL BARS
- LAKES
- BASE CAMP
- HELIPORT
- CUT LINES WITH LINE AND STATION DESIGNATED
- BASE LINE
- CLAIM BOUNDARY (Surveyed and Unsurveyed with post description)
- DDH-MC-5 DIAMOND DRILL HOLE with total depth Azimuth and inclination
- SAMPLE LOCATION

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UTAH MINES LTD.
EXPLORATION DEPARTMENT
VANCOUVER BRITISH COLUMBIA

MAY PROPERTY
ROCK GEOCHEM

Work by G.C.	Date: Jan 1977	NTS Ref. 104-G-7
Drawn by C. Doreen	Revised	

SCALE IN METERS
50 0 50 100 150

1153
Feb 3/77