

TRIGG, WOOLLETT & ASSOCIATES LTD.

CONSULTING GEOLOGICAL ENGINEERS

013096

1404 CAMBRIDGE BLDG.
10020 JASPER AVENUE
EDMONTON, ALBERTA
(403) 439-8277

July 8, 1971

IMPERIAL OIL ENTERPRISES LTD.

MAX GROUP, YUKON TERRITORY

EXPLORATION PROGRESS JUNE 1 TO JUNE 30, 1971

SUMMARY

About seventy-two thousand feet of lines have been cut, chained and picketed on Atlas Exploration Limited's grid 1 and grid 3.

H11 mineral occurrence consists of rosettes of molybdenite in quartz veins which may reach five feet wide. Many quartz veins in the same area are barren. The occurrence at this stage of knowledge does not warrant intensive exploration.

H13 mineral occurrence consists of molybdenite in quartz veins, along fractures and as disseminations in kaolinized quartz monzonite. The quartz monzonite is probably intrusive into Yukon group quartzite. Intensive exploration will be conducted on an area of 2000 feet by 2500 feet which includes the occurrence.

Copper mineralization is sparse. Pyrrhotite is often disseminated within Yukon group quartzite; local concentrations may reach 4 per cent. Induced polarization anomalies may be expected from the pyrrhotite.

PERSONNEL

A four-man crew established camp at Rhyolite Creek, Max Group, Y.T. on June 6, 1971.

SURVEYING

Portions of two surveyed areas, established by Atlas Exploration Limited personnel in 1971, have been cut, chained and picketed. (Dwg. IIM-1)

About twenty thousand feet of line on the Atlas grid 1, centered on the western copper and molybdenum geochemical anomaly, has

been prepared for geochemical survey, induced polarization survey, geological mapping and diamond drilling. Lines are oriented northerly, spaced at 400 feet and pickets have been spaced at intervals of 100 feet. The grid extends from 8+00W to 12+00E and from 15+00S to 10+00N.

About fifty-two thousand feet of line on the Atlas grid 3, centered on the eastern copper and molybdenum geochemical anomaly, has been prepared for geochemical survey, induced polarization survey and geological mapping. Lines are oriented northerly, spaced at 400 feet and pickets have been placed at intervals of 100 feet. The grid extends from 36+00E to 60+00E and from 0+00 to 52+00N.

A few claim posts have been located in the course of surveying. Discrepancies exist between the locations of the posts and their plotted position on Atlas plans. The staked area may extend farther north and east than assumed.

PROSPECTING

Prospecting within the limits of the resurveyed portions of grid 1 and grid 3 is incomplete. Certain of the mineral occurrences indicated on Atlas plans have been located. No new discoveries have been made. The occurrences are plotted on drawing IIM-1 and summarized in Table I.

The most interesting mineral occurrence is HI3. Molybdenite exists in a fractured, locally quartz veined, locally kaolinized quartz monzonite which is cut by a dark, basic dike. The best mineralization is concentrated in the more fractured portion of the quartz monzonite; a few specks of chalcopyrite and pyrrhotite also exist. The zone is about thirty feet wide. Quartz monzonite at this locale is probably intrusive into quartzite; however, only one contact has been observed and this is a fault contact.

Molybdenite at HI1 exists as rosettes reaching one inch diameter in quartz veins that may reach five feet wide. Although locally spectacular the occurrence, at this stage of exploration, is of less interest than HI3 because other barren quartz veins exist nearby.

Pyrrhotite may exist with molybdenite but more commonly it exists within Yukon group quartzite as fine disseminations. Concentrations of up to 4 per cent have been observed; rusty to dark colored limonitic stain usually coats the quartzite at these locales.

Only a few specks of chalcopyrite and pyrite have been observed. Chalcopyrite exists as tiny specks or occasionally tiny veinlets in narrow, limonitic horizons in quartzite.

GEOLOGICAL MAPPING

No geological mapping has been performed. Geological observations indicate that the distribution of rocks as portrayed on Atlas plans is essentially correct. Certain areas that Atlas indicate as being underlain by felsite porphyry (4a) are extensively overburden covered and the mapping is consequently suspect.

DIAMOND DRILLING

Representatives of E. Caron Diamond Drilling Limited and Arctic Diamond Drilling Ltd. have or will visit the proposed drill sites in order that they may resubmit drill tenders.

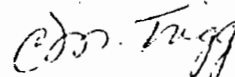
OBSERVATIONS

Sufficient molybdenite mineralization has been observed to account for soil molybdenum anomalies. However, insufficient copper mineralization has been observed to account for the soil copper anomalies. It is suspected that copper may be concentrated as an unknown or unrecognized copper mineral in soil or that samples were collected from an organic layer rather than the underlying, frozen soil horizon. The problem may be resolved following more intensive prospecting and this year's geochemical soil sampling.

The molybdenite occurrence at HI3 is, at this stage of exploration, most interesting, and consequently it will receive most attention. Unless the results of prospecting, geological mapping, geochemical sampling and induced polarization surveying indicate that HI1 occurrence warrants further work, it is not intended to diamond drill the occurrence.

Induced polarization anomalies may be produced by disseminated pyrrhotite in Yukon group quartzite and thereby mask anomalies from other sources or produce anomalies that may appear to be caused by other sulfides.

Trigg, Woollett & Associates Ltd.

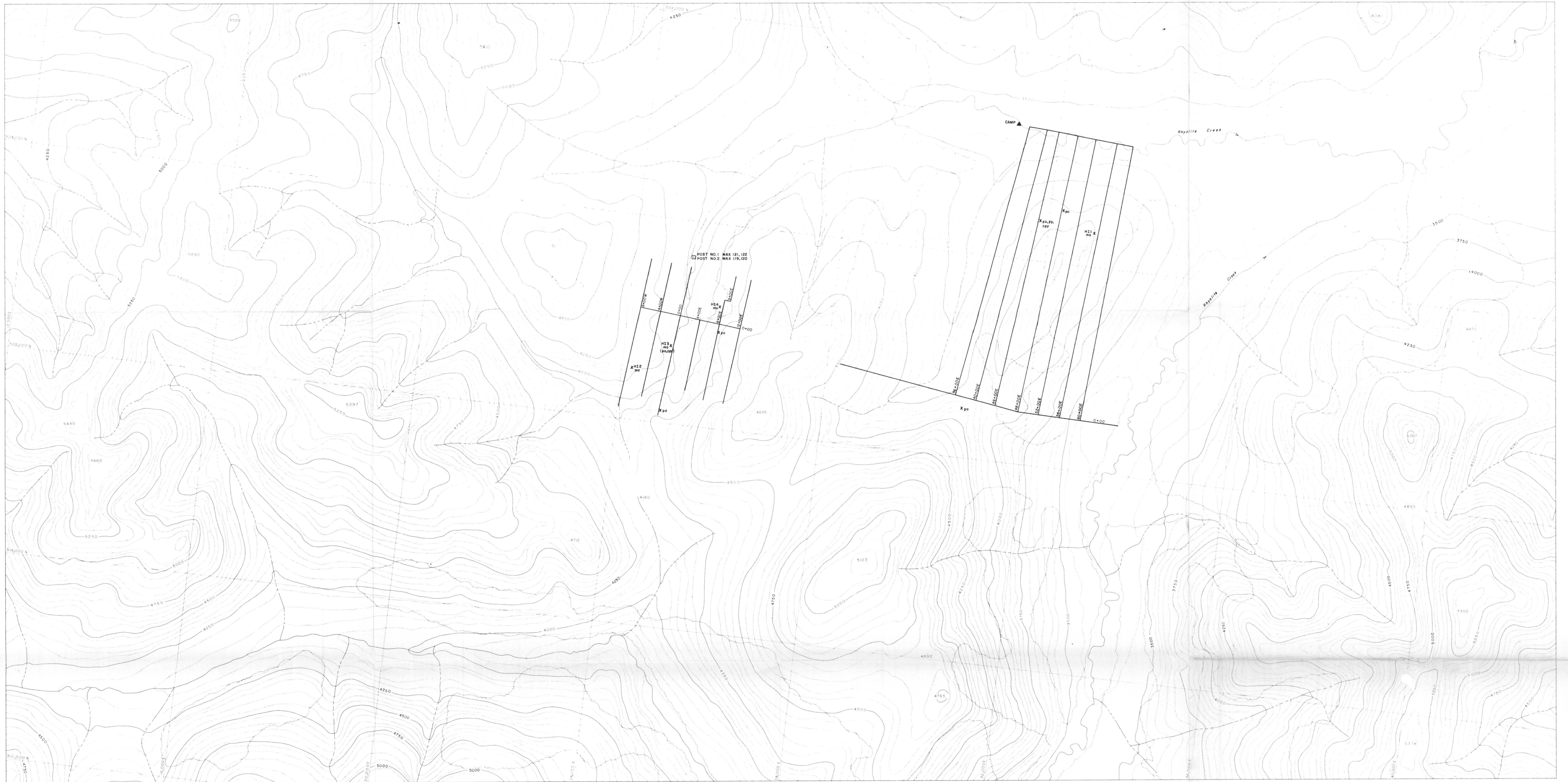


C. M. Trigg, Ph.D., P.Eng.

July 8, 1971
Edmonton, Alberta

TABLE I
MINERAL OCCURRENCES - MAX GROUP

<u>NUMBER</u>	<u>LOCATION</u>	<u>MINERALIZATION</u>	<u>ROCK TYPE</u>	<u>COMMENTS</u>
HI1	Grid 3 55+00E; 36+50N	Molybdenite	Quartz veins	MoS ₂ as rosettes in discontinuous veins ranging from three to five feet. Three trenches. Best grab estimated at 1.5% Mo. Most quartz barren. Bedrock not exposed.
HI2	Grid 1 7+00W; 12+00S	Molybdenite	Quartz veins in micaceous quartzite	In talus. Vein only 0.5 inch. Grade estimated at 0.2% Mo.
HI3	Grid 1 00+00; 5+50S	Molybdenite (Minor chalcopyrite, pyrrhotite)	Fractured and quartz veined quartz monzonite	About eighty feet of quartz monzonite exposed in creek. MoS ₂ along fractures, narrow veins and sometimes disseminated in quartz monzonite near fractures and veins. Quartz monzonite locally kaolinized. Cut by basic dike. Best grab samples estimated at 1.5% Mo.
HI4	Grid 1 7+50E; 3+50N	Molybdenite	Fractured and quartz veined quartz monzonite	Quartz monzonite, well exposed on hillside. Specks of MoS ₂ in more fractured and kaolinized quartz monzonite; minor MoS ₂ along narrow quartz veins. Cut by basic dike. Best grab sample estimated at 0.3% Mo.

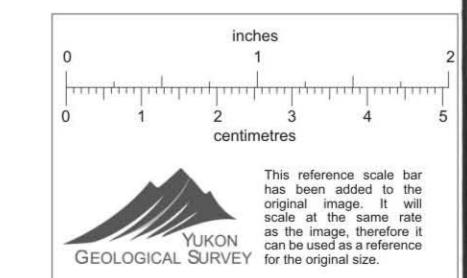


NOTE: ARBITRARY GRID BASED ON U.T.M. ZONE 8



Topography compiled by
Northwest Survey Corp. Ltd.
 Edmonton, Grande Prairie, Yellowknife, Whitehorse

LEGEND		MINERAL OCCURRENCE AND NUMBER	
	TREE AREA	H1x	MOLYBDENITE
	INTERMITTENT STREAM	mo	PYRRHOTITE
	CONTOURS (Interval 50 feet)	pp	PYRITE
	SPOT ELEVATION	py	CHALCOPYRITE
	CLAIM POST	cpy	
	1971 GRID LINE		



EXPLORATION PROGRESS TO JUNE 30, 1971

IMPERIAL OIL ENTERPRISES LTD.

MAX GROUP

RHYOLITE CREEK, Y.T.

SCALE 0 400 800 1600 2400 FEET

TRIGG, WOOLLETT & ASSOCIATES LTD.

EDMONTON, ALBERTA

JULY, 1971

DWG. IIM-1