

UMEX

UNION MINIERE EXPLORATIONS
AND MINING CORPORATION LIMITED

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ASSESSMENT REPORT
GEOLOGICAL MAPPING SURVEY
ON THE
DAS 1-42 MINERAL CLAIMS
(Record Nos. YA2304-YA2321, YA2044-YA2065, YA2348-YA2349)

Dawson Mining District, Yukon
N.T.S. 116B/13
Latitude $64^{\circ}49'N$
Longitude $139^{\circ}51'W$

by
Colin V. Dyson, P.Eng.

Work Done: August 5-10, August 17-23, 1976

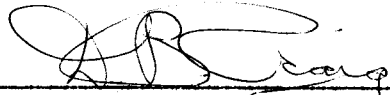
Date: May, 1977

Owner: Union Miniere Explorations and
Mining Corporation Limited

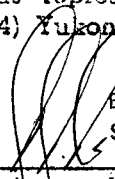
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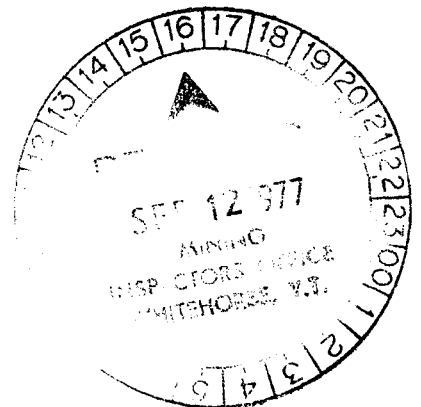
This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$4200.00


Resident Geologist or
~~Resident Mining Engineer~~

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


B. R. BAXTER
Supervising Mining Recorder


Commissioner of Yukon Territory



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ASSESSMENT REPORT

GEOLOGICAL MAPPING SURVEY ON THE DAS 1-42 MINERAL CLAIMS

INTRODUCTION

In the period August 5 to 10 and August 17 to 23, 1976 a geological mapping survey was completed over the DAS 1-42 mineral claims in the Dawson Mining District, Yukon. The claims are located approximately ten miles north of Mount Harper and forty miles west of Chapman Lake at latitude $64^{\circ}49'N$ and longitude $139^{\circ}51'W$ (Figure 1) and are accessible via helicopter.

A geological mapping survey was completed in the field by Mr. R. Tolbert, B.Sc. (geologist) and Mr. Z. House (geological assistant) under the supervision of Mr. C.V. Dyson, P.Eng., who was on the property on August 17-19, 1976 to study the local geology and review the survey.

PROPERTY

Relevant details of claim status are as follows:

| Claim Name | Grant Numbers | Expiry Date |
|------------|---------------|-----------------|
| DAS 1-8 | YA2304-YA2311 | August 19, 1977 |
| DAS 9-30 | YA2044-YA2065 | August 4, 1977 |
| DAS 31-32 | YA2348-YA2349 | August 28, 1977 |
| DAS 33-42 | YA2312-YA2321 | August 19, 1977 |

The claims are owned by Union Miniere Explorations and Mining Corporation Limited for whom the survey was completed.

REGIONAL GEOLOGY

The claim area is regionally mapped by the G.S.C. (Green, 1972)¹ as underlain by Unit 2b Precambrian buff and orange fine-grained dolomite, dark shale to slate, minor varicoloured quartzite, limestone, dolomite conglomerate and jasper-bearing conglomerate. The sediments lie on the northern flanks of an east-west trending oval-shaped area some 50 miles by 20 miles in extent which is referred to as the Coal Creek Dome.

¹G.S.C. Memoir 364, Dawson Geology Map 1284A, Green, 1972.



64°45'

139°30'

FIGURE 1

DAS CLAIMS

LOCATION MAP, 1/250,000

N.T.S. 116/B

[Handwritten signature]

CLAIM GROUP GEOLOGY

The claim area is entirely underlain by a thick unconformable sequence of Proterozoic sediments which can be subdivided into three main formations (Figure 2). The basal unit is a dark weathering folded and sheared "slate formation" consisting of highly contorted black and green slates, phyllites and siltstones. The formation is at least 2000 feet thick and appears to be the oldest formation in the area.

Unconformably overlying the slate formation is a thick (1500 feet estimated) formation consisting of a variable sequence of highly folded and faulted Helikian(?) sediments. These consist of more than 500 feet of purple-grey hematitic breccia which is overlain by interbedded purple siltstones and shales, and brown weathering grey, brown or pinkish silicified, altered sandy dolomites grading to quartzites. These are overlain by 50 to 200 feet of interbedded green and black shales with jasper bands which in turn are overlain and capped by interbedded purple shales and siltstones, purple and green mottled shales and siltstones, breccias and quartzites. Correlation of individual units within the Helikian(?) sediments is difficult due to lensing of individual beds, a high degree of folding and faulting, and the presence of pervasive intrusive diabasic textured dioritic sills and dykes which disrupt the continuity of individual beds.

Unconformably overlying the Helikian(?) sediments is a thick succession of interbedded black and maroon shales, siltstones, minor quartzites and limestones. This upper formation is interpreted to represent a basal Hadrynian unit. Several small localized areas of weak mineralization occur on the claims (Figure 2).

- Area 1: Fine disseminated and minor fracture fillings of chalcopyrite + bornite + pyrite occur within a highly fractured and silicified area of dolomitic quartzites with interbedded green shales and jasper. A chip sample assayed 0.19% Cu across 20 feet. Prospecting did not indicate continuity to the mineralization or to the host unit.
- Area 2: Chalcopyrite + bornite + malachite + minor erythrite occurs in siliceous dolomites and black shales (with jasper) over an area of 300 feet by 50 feet peripheral to a large dioritic mass.
- Area 3: Weak disseminated chalcopyrite + erythrite occurs erratically distributed within a siliceous dolomite bed some 15 feet thick down a steep hillside.

Area 4: Minor malachite and chalcopyrite mineralization occurs in siliceous dolomite in talus and sub-outcrops down a grassy slope and appears to be fairly restricted in extent.

The copper mineralization appears to be preferentially concentrated within the Helikian(?) siliceous dolomite and quartzite units and the green and black shales with jasper bands. There appears to be a spacial relationship of the dioritic intrusives to the mineralization, since most occurrences are all within approximately 500 feet of an intrusion.

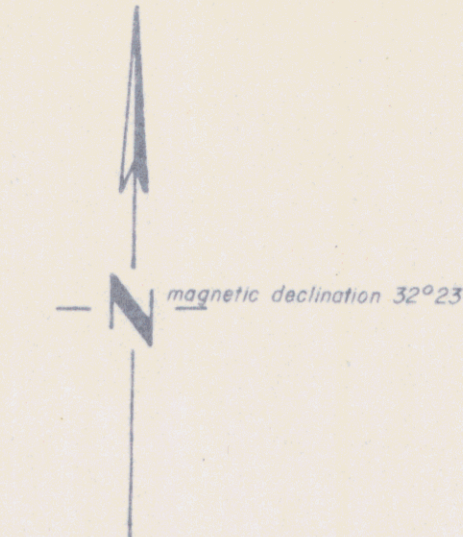
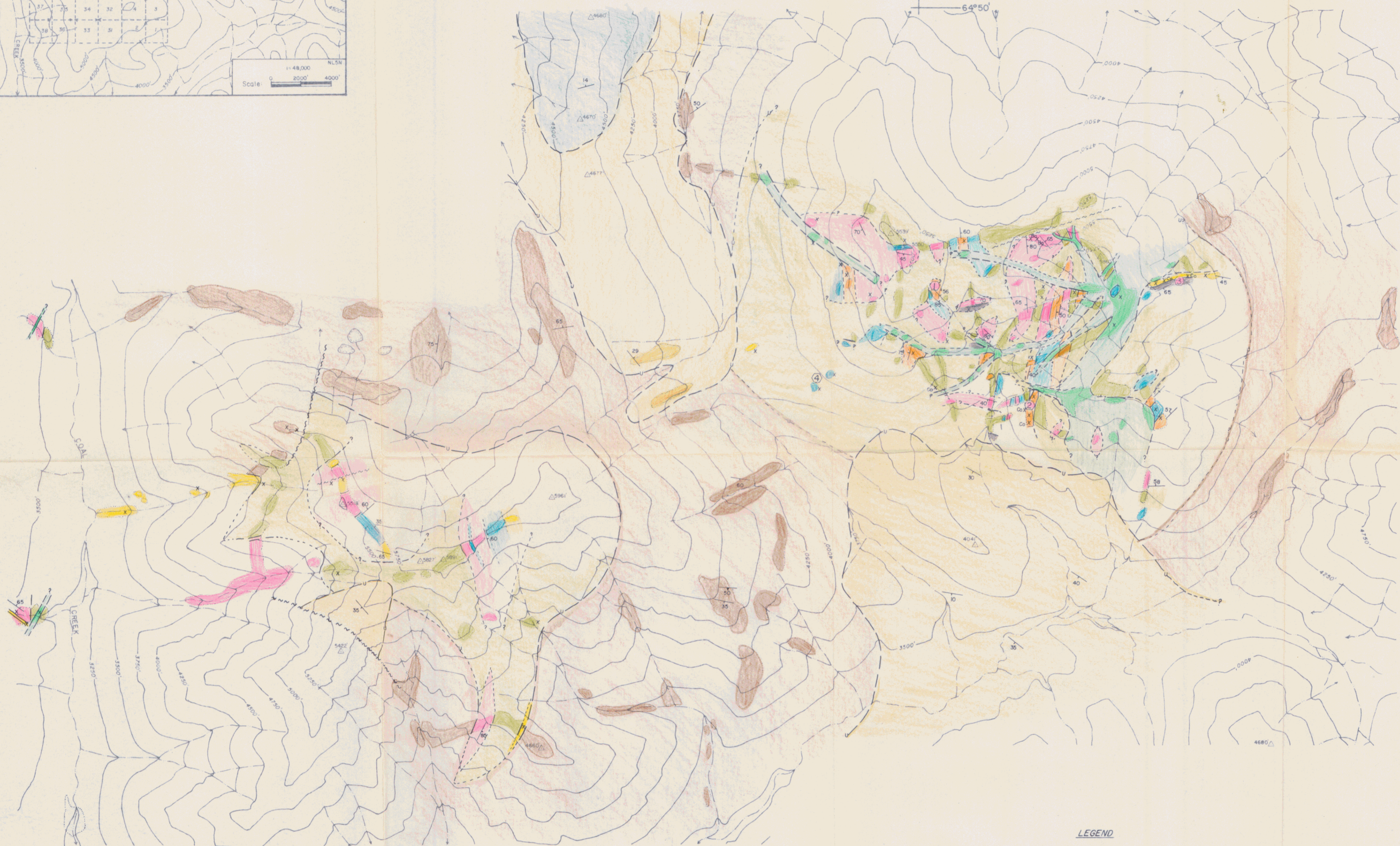
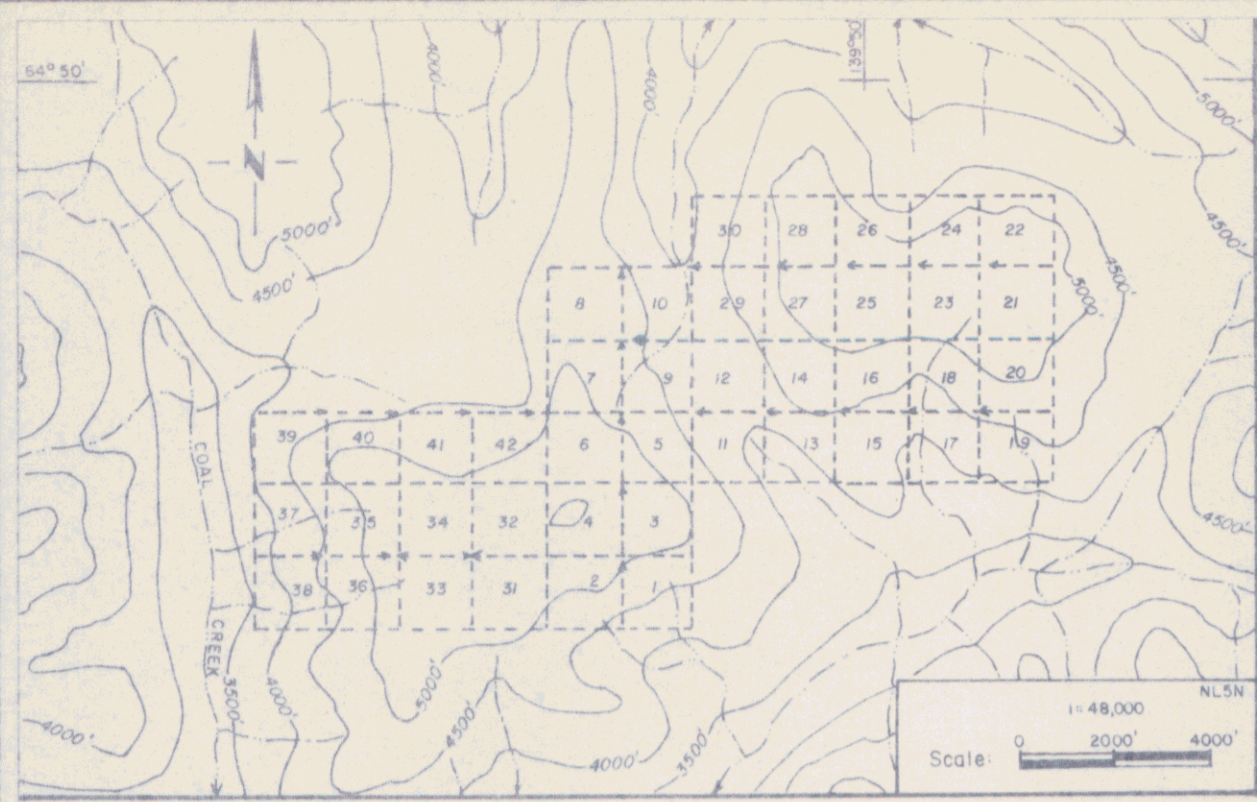
CONCLUSIONS AND RECOMMENDATIONS

- (1) Geological mapping over the DAS mineral claims shows the area to be underlain by an unconformable sequence of Proterozoic sediments which are intruded by Proterozoic and/or later dioritic sills and dykes.
- (2) Minor copper mineralization occurs within siliceous dolomites, quartzites and green/black shales proximal to dioritic intrusives.
- (3) Detailed prospecting and chip sampling is recommended in the known areas of mineralization to better define their economic potential and better define the genetic affinity of the copper.

Respectfully submitted,



C.V. Dyson, P.Eng.



LITHOLOGY

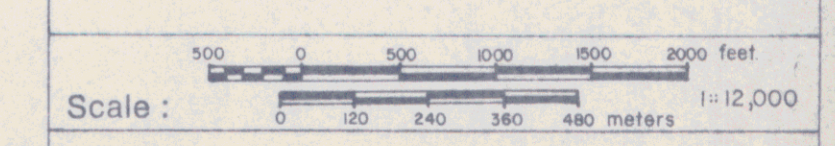
| AGE | DESCRIPTION |
|--------------------------------------|--|
| CAMBRO-ORDOVICIAN | Medium-thin bedded light grey waxy dolomites |
| | Orange weathering, laminated, grey dolomites, black, maroon & buff shales & siltstones |
| | Buff-grey medium-thick bedded dolomites & minor black shale bands |
| HADRYNIAN (WINDERMERE) | Black shale, minor limestone & maroon-buff shale-sandstone |
| | Undifferentiated basic intrusions |
| | Undifferentiated maroon-purple 'intrusive' breccia with variable mud, hematite, carbonate & silica in matrix & fragments - blocks > 10' across of variable composition |
| | Grey-green-black silicified argillites & red jasper bands |
| | Maroon - maroon & green mottled shales & siltstones |
| HELIKIAN (PURCELL) Ladasida Group | Grey-black & green shales & argillites partly silicified, & locally with holes pseudomorphing dolomite |
| | Brown weathering tan-pink, silicified, K- altered sandy dolomite |
| APHEBIAN | White, massive silicified dolomite almost completely altered to shapard |
| | Dark grey, black & green shales & siltstones |

LEGEND

| | | | |
|--|--|--|----------------------------------|
| | Stream | | Showing area described in report |
| | Lake | | |
| | Outcrop | | |
| | Geologic contact (defined, approximate, assumed) | | |
| | Unconformity | | |
| | Fault | | |
| | Bedding attitude (inclined, vertical) | | |
| | Copper mineralization (unless otherwise noted) | | |
| | Cobalt mineralization | | |
| | Baryte | | |

FIGURE 2

**BLACKSTONE PROJECT 1976
DAS CLAIMS
GEOLOGY**



UMEX CORPORATION LTD.

DRAWN BY: RS.Tolbert
DATE: February 1977
SURVEYED BY: RTolbert, Z.House

DWG. No.