



Telephone: 261-0688

Joe Sullivan, P. Eng.

Consulting Geologist

2766 West 30th Ave.,
Vancouver 8, B.C.

537

A REPORT ON
THE BETHSAIDA GROUP
OF MINERAL CLAIMS
KAMLOOPS MINING DISTRICT
BRITISH COLUMBIA

By
J. Sullivan

Xerox pp 1, 2, 3, 4, 5, 6.
key map on last page
Copy Map 1, 2, 3, 4.

Vancouver, B. C.

September 30, 1963

TABLE OF CONTENTS

	Page
Introduction	1
Property	1
Location & Accessibility	2
Geology:	
(i) Rock Types	3
(ii) Alteration	3
(iii) Structure	3
(iv) Mineralization	4
(v) Sampling	4
Discussion	5
Recommendations	5
Statement of Expenditures	6

Geological Maps - sheets 1 to 4 *In Pocket*

<p>Department of Mines and Petroleum Resources ASSESSMENT REPORT NO. 537 MAP.....</p>
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THE BETHSAIDA GROUP OF MINERAL CLAIMS

KAMLOOPS MINING DIVISION

HIGHLAND VALLEY AREA

INTRODUCTION:

This report is to supplement geological map sheets 1 - 4, Bethesda Group of mineral claims, compiled by the writer during July and August 1963.

It will be noted that the mapping goes beyond the area defined by the property boundaries. This was done to present a clearer picture of the geology since much of the claim group is covered with overburden.

Both the new claim names and the old names appear on the maps. This is because most people associated with this property in the past, still refer to the old names.

PROPERTY:

The property includes the following mineral claims:

Located Claims

<u>Name</u>	<u>Record No.</u>	<u>Name</u>	<u>Record No.</u>
D.F. 1	40125	D.F. 13 ✓	39487
D.F. 2	40126	D.F. 14	39488
D.F. 3	40127	D.F. 15	39489
D.F. 4	40128	D.F. 16	39490
D.F. 5	40129	D.F. 17	39491
D.F. 6	40130	P.R. 27	14311
D.F. 7	40131	P.R. 28	14312
D.F. 8	40132	M.D. 2	16783
D.F. 9 ✓	40133	M.D. 3	16784
D.F. 10	40134	M.D. 4	16785
D.F. 11 ✓	40135	M.D. 5	16786
D.F. 12	40136		

Crown Grants

<u>Name</u>	<u>Lot No.</u>	<u>Name</u>	<u>Lot No.</u>
Shamrock	1245 "A"	Duke	3641
Tamerec	1244 "A"	Major Fr.	3642
Star	1246 "A"	I.X.L. Fr.	3646

The above lists are held by Bethesda Copper Mines Limited, 1161 Melville Street, Vancouver, B. C.

LOCATION AND ACCESSIBILITY:

The 29 claims lie in the Highland Valley district of the Kamloops Mining Division. The best approach is by a good gravel road from the town of Ashcroft for 27 miles southeast to the northern boundary of the group. This brings one to the road to Highland Valley Lodge and within the boundaries of the area mapped.

The elevations on the property range from 4,200 feet

to 5,500 feet A.S.L. The surface is not rugged. Much of the area has rounded, gravel covered slopes. Rock bluffs are rare and do not reach more than 10 feet in height.

GEOLOGY:

(1) Rock Types:

The Bethesda Group lies in the igneous rocks of the Guichon Creek batholith. With the exception of a few square feet of quartzite on the M.D. No. 5, all the rock underlying the claim group is a quartz-biotite porphyry, known locally as Bethesda Porphyry. The quartz and biotite crystals vary up to $\frac{1}{2}$ inch in diameter and occasionally tend to segregate into zones as narrow as one foot. The ground mass is white plagioclase.

(2) Alteration:

In the areas of known mineralization the porphyry has a rusty appearance, probably from the oxidation of the sulphides and/or biotite. The rock takes on a greenish cast, quartz increases, biotite becomes rare, and sericite is present in large amounts.

(3) Structure:

The mineralization and the alteration on the property are associated with faults and shears of small displacement. These structures have four distinct trends, 115 - 120

degrees, 55 - 60 degrees, 95 - 100 degrees, and 135-140 degrees, in that order of strength. The dips are usually moderate to steep southerly.

(4) Mineralization:

The mineral occurrences are associated with the faults and shears, generally as vein matter. These veins vary up to four feet wide and contain quartz, chalcopyrite, molybdenite, and pyrite. If there is bornite in these deposits it is in small amounts.

Where the wall rock is highly sericitized and the shearing closely spaced there is usually small amounts of disseminated chalcopyrite.

(5) Sampling:

The writer did not sample any of the showings. Judging from the number of sample trenches and drill holes, this property was well sampled by Bethesda Mines and others from 1956 to 1958.

The most attractive results read by the writer were reported for the Star claim. Here, a 19 foot width of the surface assayed 1.10 percent copper and 0.03 percent molybdenite. Diamond drill hole No. 3 in the same area assayed 0.63 percent copper for 63 feet. Most values reported were much lower than the above sections.

DISCUSSION:

The weathered surface often does not disclose the presence of sulphide even though sulphide is within one or two inches of the surface. For this reason the writer feels that the mineralized zone continues for lengths greater than 1,000 feet. Mineralization is widespread but of low grade.

From the Shamrock claim south and west less than 30 percent of the outcrops examined are the altered variety. From the Shamrock claim north and east 90 percent of the outcrops examined are the altered variety. This may not seem a fair comparison, since the south and west has much more outcrop. But still, one can trace an altered zone westerly and find that it disappears for no apparent reason having given way to the unaltered porphyry.

In the areas where the 115 - 120 degree structures meet the 55-60 degree structures there are increases in the amount of mineralization. Such an area, yet unexplored appears to lie on the south boundary of the F.C. No. 1 Fr. at north south line "R".

RECOMMENDATIONS:

Since there appears to be an increase in alteration and mineralization to the north and east, the writer feels that the possible mineral zone on the south boundary

of the F.C. No. 1 Fr. should be explored. For this reason a blazed line, marked "3", was cut along the contour of the hillside at the completion of the field work. This line is plotted on map sheet 4. Six hundred feet of trenching with a heavy bulldozer would open this area for inspection.

Respectfully submitted,

Jos. Sullivan

Jos. Sullivan, P. Eng.

Vancouver, B. C.,
September 30, 1963.



Telephone: 261-0688

Joe Sullivan, P. Eng.

Consulting Geologist

2766 West 30th Ave.,
Vancouver 8, B.C.

Sept. 12, 1963.

To: Buttle Lake Mines Ltd.,
C/o Jack McPherson,
R 1818 -355 Burrard St.,
Vancouver, B.C.

From: J. Sullivan,
2766 W 30th Ave.,
Vancouver 8, B.C.

Re: Mapping contract on the Betsaida Group of mineral
claims.

One half the contract price is\$2,750.00

Would you please deposit this amount in my name under
"B" account at the Canadian Imperial Bank of Commerce, Dunbar
Branch, Vancouver, B.C.

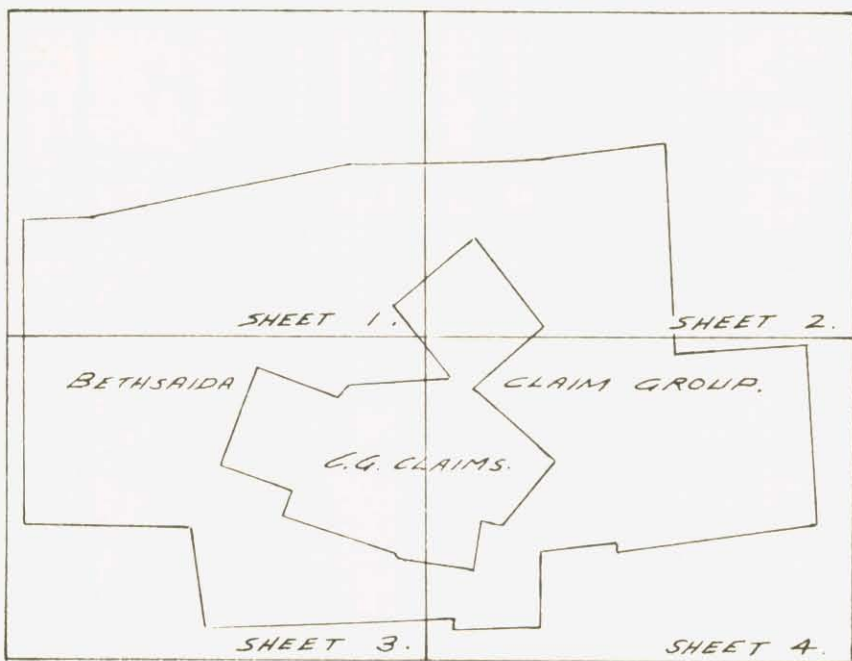
Thank you,

Joe Sullivan
Jos. Sullivan,
P. Eng.

Highland Valley

BETHSAIDA GROUP.
AUG. 1963.

KEY MAP.



LEGEND.



ROADS.

STRIPPING



GROUP CLAIM BOUNDARIES.

OUTCROP AREAS.



BETHSAIDA (QTZ-FEL.) PORPHYRY.



SERICITE ZONE IN BETHSAIDA PORPHYRY.



Molybdenite
Malachite



Chalcopyrite
Quartz

MINERALIZATION, SPECIFIC.



FAULTS & SHEARS.

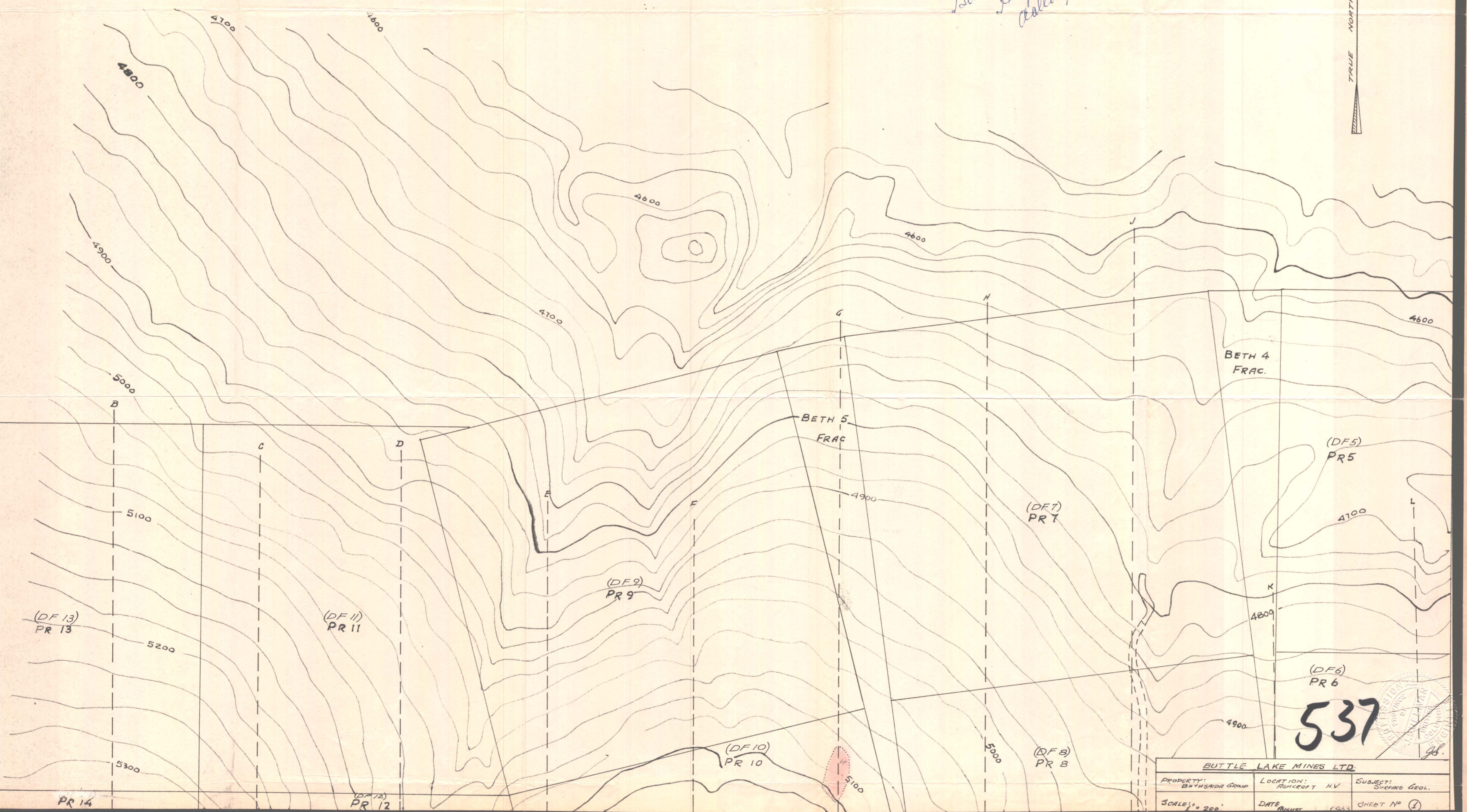
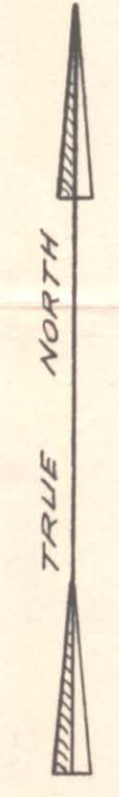


QUARTZ & SULPHIDE MINERALIZATION.

(11)

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 537 MAP 1

To accompany report by
Sgt. Sullivan
Bethsaida Group
Highland Valley
data Sept 30, 1962



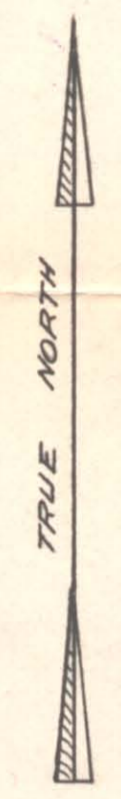
537

BUTTE LAKE MINES LTD.		
PROPERTY: BETHSAIDA GROUP	LOCATION: ASHCROFT HV	SUBJECT: SURFACE GEOL.
SCALE: 1" = 200'	DATE: MAY 1963	SHEET NO. 1

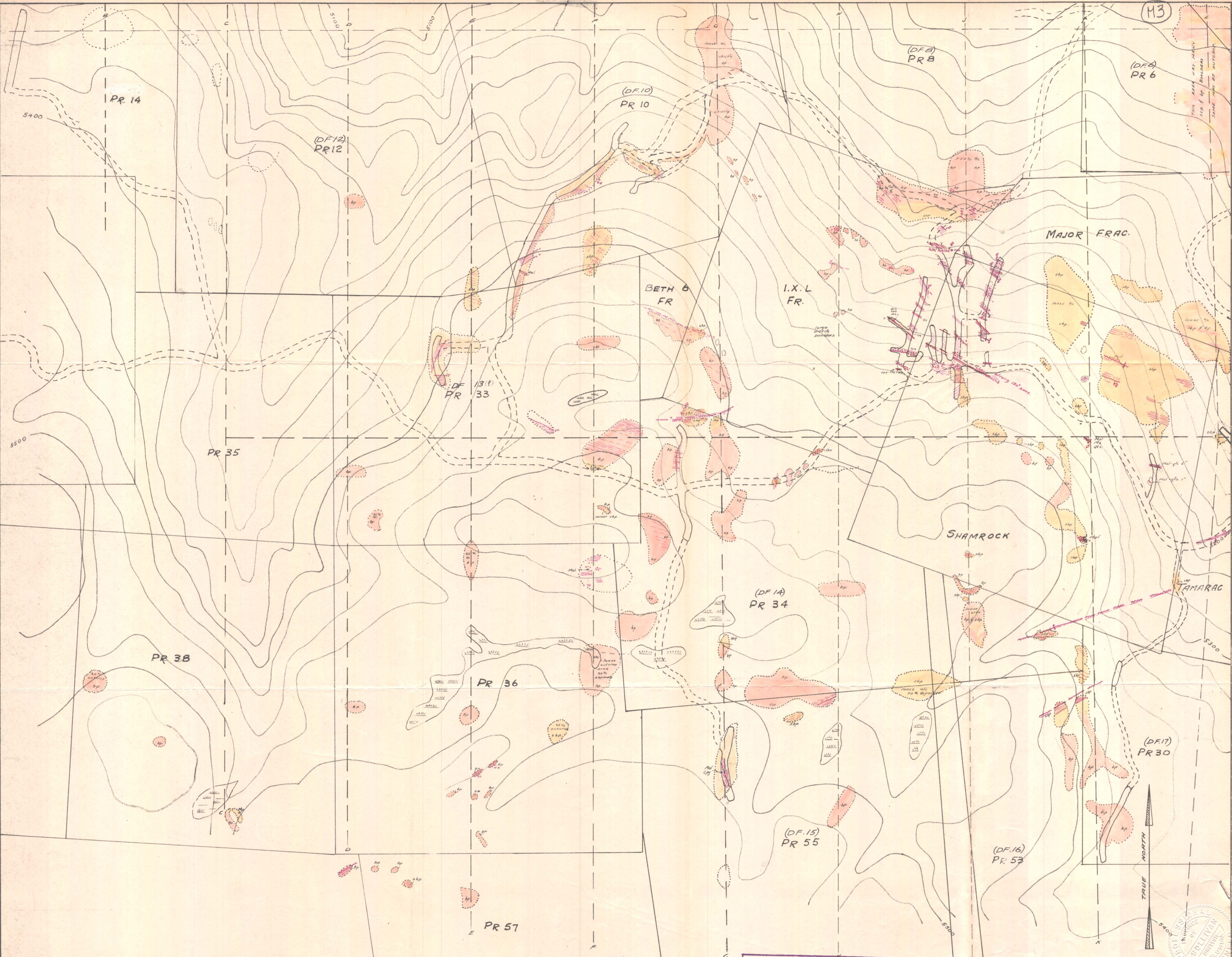
M2

To accompany report by Jos. Sullivan,
Bethsada Group, Highland Valley
dated Sept. 30, 1965

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 537 MAP 2



BUTTE LAKE MINES LTD.		
PROPERTY: BETHSADA GROUP	LOCATION: FAIRCROFT, H.V.	SUBJECT: SURFACE GEOL.
SCALE 1" = 200'	DATE: AUGUST 1963	SHEET NO. 2



(M3)

(DF 8)
PR 8

(DF 6)
PR 6

PR 14

(DF 12)
PR 12

(DF 10)
PR 10

MAJOR FRAC.

BETH 6
FR

I.X.L
FR.

(DF 13)
PR 33

PR 35

SHAMROCK

(DF 14)
PR 34

TAMARAC

PR 38

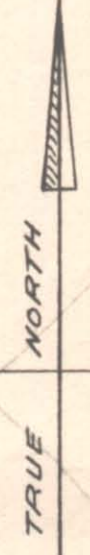
PR 36

(DF 15)
PR 55

(DF 16)
PR 53

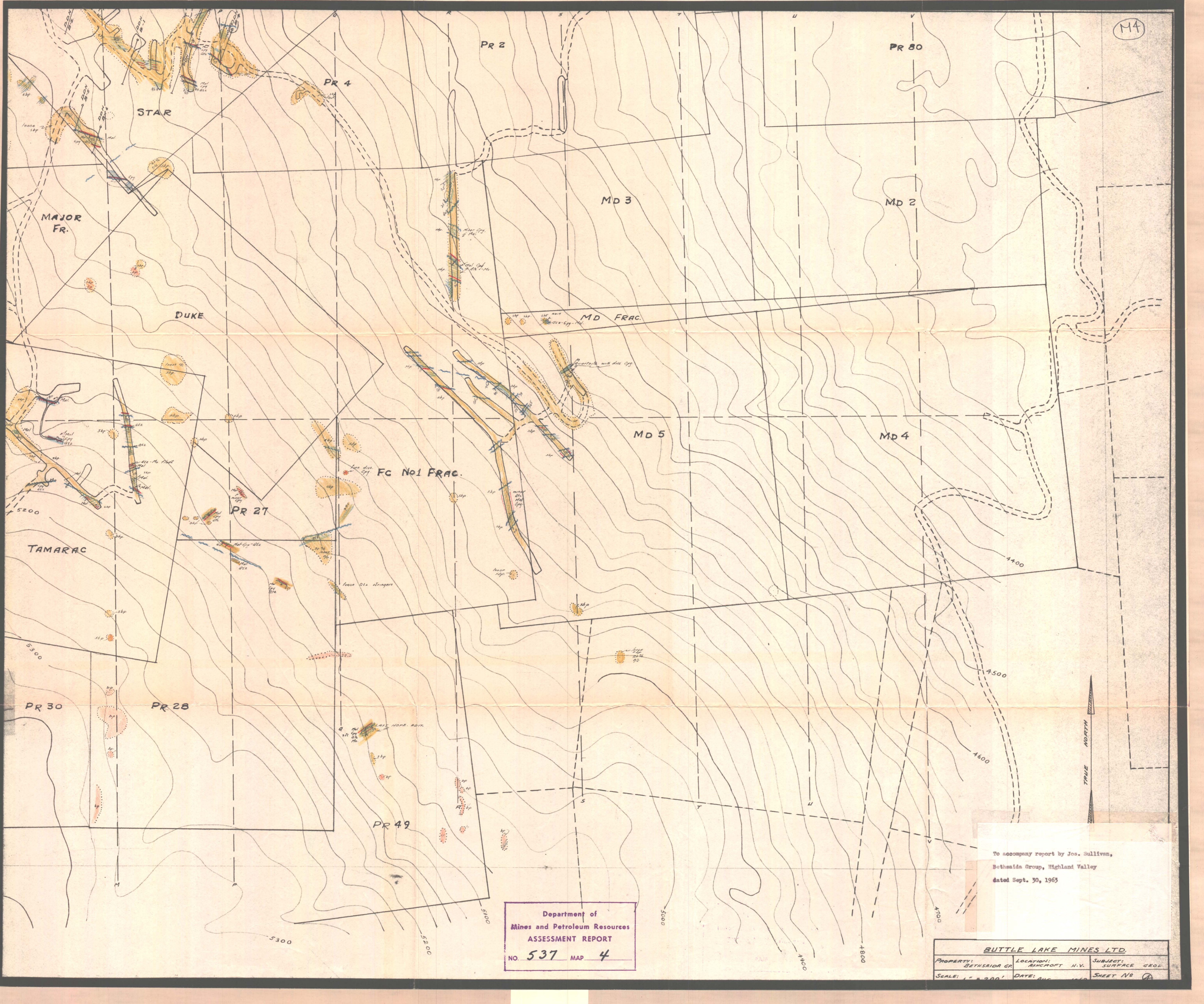
(DF 17)
PR 30

PR 57



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
No. 537 MAP 3

BUTLE LAKE MINES LTD.		
PROPERTY: BETHSUDA GROUP	LOCATION: ASHCROFT N.V.	SUBJECT: SURFACE GEOL.
SCALE: 1" = 200'	DATE: AUGUST 1963	SHEET No. (3)



M4

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 537 MAP 4

To accompany report by Jos. Sullivan,
 Bethesda Group, Highland Valley
 dated Sept. 30, 1963

BUTLE LAKE MINES LTD.		
PROPERTY: BETHSAIDA GR.	LOCATION: BANCROFT H.V.	SUBJECT: SURFACE GEOL.
SCALE: 1" = 200'	DATE: AUG 1963	SHEET NO. 4