

87-389-15901
04/88

ASSESSMENT WORK

STREAM SEDIMENT GEOCHEMICAL AND GEOLOGICAL WORK

ON THE MUTT 3 CLAIM (RECORD NO. 2605(4))

CLAIM SHEET 82G/12E, 4S X 5E = 20 UNITS

LOCATED AT WILD HORSE RIVER (EAST SIDE), B.C.

FORT STEELE MINING DIVISION
SOUTHEASTERN BRITISH COLUMBIA

FILMED

LATITUDE 49° 44' N
LONGITUDE: 115° 30' W

SUB-RECORDER
RECEIVED
JUL 8 1987
FIELD WORK MARCH 30, 1987# _____ \$ _____
VANCOUVER, B.C.

FIELD WORK MARCH 30, 1987# _____ \$ _____

VANCOUVER, B.C.

ON BEHALF OF

OPERATOR: GOVERNOR RESOURCES LTD.

200-675 WEST HASTINGS STREET
VANCOUVER, BRITISH COLUMBIA V6B 4Z1

REPORT BY: DR. W.D. GROVES, P.Eng.

200-675 WEST HASTINGS STREET
VANCOUVER, BRITISH COLUMBIA V6B 4Z1

REPORT DATE: JUNE 25, 1987
GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,901

WDG.

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ABSTRACT

The Mutt 3 claim is a 20 unit (4S x 5E) modified grid claim in the Fort Steele Mining Division near Cranbrook, B.C. on NTS 82G/12. The NW corner LCP is 700 m downstream from the convergence of Wild Horse and East Wild Horse Rivers. The LCP is just east of the river itself. Access is by main forestry roads contouring up the steep valley of Wild Horse River, 15 km up-river from Fort Steele. On March 30, 1987 when the field work was done, 2 feet of snow still lay on the shaded east bank of the river and on the east forestry road, necessitating buying four chains for the rental 4 WD in order to reach the starting point of the traverse - up Wallinger Creek, contouring 1 km north, then down the course of Z-Creek, which enters the Wild Horse 2/3 km above the Wallinger Creek junction. Road conditions on the main (W side) forestry road were quite passable at that time of year. Because of snow conditions, the geological information accessible was mainly stream sediments and float in the melted out creek beds: on the banks, snow up to 1 m deep made walking difficult and covered most of the outcrop.

Geology was further impeded by the thick till coverage of the slope up to the 1300 m elevation reached: this was exposed in a fan of forestry harvest roads up the north side of Wallinger Creek Valley, where bank cuts revealed the till. A small amount of outcrop was showing on the point of the steep slope between the two creeks, on the contour portion of the traverse, and an outcrop of green, thin-bedded Lower Creston quartzite sediments was encountered in Z-Creek in a small bluff near the creek's road crossing. This had a N20W/35SW bedding attitude and confirmed that the claim lies on the east side of the Wild Horse River syncline, notwithstanding minor block faulting in the quartzites, and that the unit underlying the claim, at least at lower elevations, is Lower Creston.

Some quartz-ankerite vein float was observed in the lower portion of Wallinger Creek: one piece of float showed some lead-zinc sulfides in this ankerite. Apart from one low anomalous (26 ppb Au) stream sediment sample, the Wallinger Creek sediments on Z-Creek stream sediment samples showed no anomalous Pb, Zn, Cu, As, low to moderate levels of ankerite-associated Sr & Ba, no intrusive associated tungsten and non-anomalous levels of Au and Ag in the two streams. This in itself does not preclude the possibility of mineralization on the claims, since in-wash of the very thick till into creeks on the lower steep slopes of the claim would tend to

drown any bedrock signal from further up the hill in these: this is exactly the same situation as encountered in Wendy's Creek on the nearby A-1 claim: stream sediment samples were non-anomalous inspite of soil geochem gold anomalies in the creek's drainage. However, the claims must be considered as inspected only in a rather cursory way under adverse weather conditions and should be re-traversed, particularly the upper levels where bluffs were visible, to do full justice to the claim. One day (two man-days) of geological and sediment sampling field work (March 30, 1987), with associated travel assay and report costs, gave a total expenditure on the claim in 1986-7 of \$2,263, or enough to hold the 20 unit claim for its first year.

INTRODUCTION

A. Property: Location, Access & Physiography

The claim lies on the steep east side of the upper Wild Horse River Valley, from the 1100 meter level near the LCP in the Wild Horse Canyon, up slopes from 30-40⁰ up to 2000 m elevations on the eastern (highest side) of the claim near ridge-crest elevation. The slope is highly till-covered except on ridge noses and on cliffy higher elevation exposures, where blocky Upper Creston quartzites are exposed. Access is via the west side contour main forestry road 15 km up to the Wild Horse-East Wild Horse forks, then back southward downstream 2/3 km along the rougher east side forestry road to the region of the LCP.

B. Status of Property

The Mutt 3 claim is a 4S x 5E, 20 unit modified grid claim staked from a northwest LCP #124401, 2/3 km downstream of the Wild Horse forks near river level. Claim was staked by Mr. Ken Gourley of Vancouver, B.C. and conveyed to Governor Resources Corp.

Record number of the claim is 2605(4). It is located on the

northeast corner of Claim Sheet NTS 82G/12E, Fort Steele Mining Division, south central British Columbia. Field work was completed before the anniversary date of the claim.

C. **History**

A group of surveyed claims: 1-unit sized Crown Grants L5453, L5452, L5454, L5451, plus a small fraction L3775, lie just north and west of the Wild Horse forks, on the steep rocky quartzite slopes of the main Wild Horse Canyon. A 20 x 20 size survey: L3059, and SL 12 L459B exist south of these: the latter overlaps about a 2/3 UX 2U area of the north portion of the Mutt 3 claim. Rice's 1937 1:63,360 GSC mapping of the Wild Horse Valley shows Unit 4 (Kitchener Formation) in the general claim area, and Unit 3 (Creston) on the west side of the river. This was a regional reconnaissance map. Although numerous adits and shafts are shown on Rice's map, aside from a switchback trail zig-zagging up through the claim (it goes off the map at the 2000 m elevation), no old workings are shown on the subject claim. Since Rice diligently visited reported workings and mapped them, it is probable that no appreciable pre-1937 adits exist on the subject property.

The general history of the Wild Horse River was that over \$6 million in placer gold had been taken out of the Wild Horse by 1900: the town of Fort Steele arose near the junction of the Wild Horse and the Kootenay during the placer era. Gold was reworked Tertiary, but intensive prospecting of the river basin took place to find hard rock sources: gold quartz veins in N30W/steep, in shallowly southerly dipping Laramide thrust faults, and in a major splayed fault up the Wild Horse itself all showed indications of lode gold, which no doubt contributed variously to the river's production. Gold is fault-vein associated: recent soil geochem studies on Creston and Aldridge units in the thick Purcell Precambrian stratigraphy show only 1-2 ppb background gold value in soil samples derived from these units.

WJG.

D. References

1. Geological Survey of Canada, Memoir 207, Cranbrook Map Area, British Columbia, by H.M.A. Rice, No. 2435, 1937. (Regional Map)
2. "Data Relating to the Tit-for-Tat, Lenz Lode and Celt A Claims, Fort Steele M.D., B.C. Albury Resources Ltd. 1/86, by R. Kregosky (Fieldwork, 1982). Figure 5.
3. Cominco Smelter Sheets(3 sheets) 1975, Dardanelles 95 ton bulk sample, for Magnum Enterprises Ltd. (Assay Sheets, Item 4).
4. a) B.C. Minister of Mines Reports: 1898, p. 1026
Tit-for-Tat, Dardanelles claims

b) IBID, 1925, p. A229, Dardanelles Group.
5. Assessment Report on Geophysical and Geochemical Surverys on the "A" Mineral Claim, Ft. Steele, Wallinger Creek, for Justice Mining Corporation, by L. Sookachoff, P.Eng. Work from July 12 to December 19, 1983. Report dated December 19, 1983.
6. Assessment Report on follow-up Geochemical Surveys, "A" claim, Ft. Steele M.D., B.C., NTS 82G/12E, for Justice Mining Corp., by Dr. W.D. Groves, P.Eng.
7. Report on Dardanelles, Motherlode and Tit-for-Tat Crown-granted Claims, and Surrounding Location Ground, A1, Ramses and C1 Claims, Fort Steele M.D., Cranbrook Area, B.C., NTS 82G/12E by Dr. W.D. Groves, P.Eng. dated April 25, 1986.

E. Summary of Work Done

Field work consisted principally of a 1-day 2-man geological and stream sediment sampling traverse up Wallinger Creek to above the forks, then contouring one km north at about the 1300 m elevation, thence down Z-Creek, flowing into the Wild Horse 2/3 km north of Wallinger. The 9 stream sediment samples taken were assayed at Acme Analytical Laboratory at the ppm level for base metals Cu, Pb, Zn, As, and for Au (ppb) and Ag (ppm), and for hot-spring-associated alkaline earths, Sr and Ba, and intrusive-associated tungsten. Apart from one stream sediment gold anomaly, (26 ppb Wall-5), no anomalous gold stream sediment values were detected. Quartz-carbonate ankerite float was also collected but not analyzed: one specimen showed Pb-Zn sulphides in the coarse brown crystalline ankerite. This type of mineralization is of some interest in that ankerite-associated base metal (plus minor Ag) replacements have been found in the area, such as at the Kootenay King property on the west side of the Wild Horse River. However, such mineralization is virtually without gold mineralization, which is locally highly quartz-vein associated. Hence, such base-metal (plus minor Ag) mineralization is of doubtful economic significance at the present time. The field work supplemented some initial prospecting done in the summer of 1986 by Mr. Ken Gourley, property owner.

TECHNICAL DATA - INTERPRETATION

A. Regional Geology and Geomorphology

The stratified rocks of the Cranbrook area have, regionally, a northerly strike and easterly dip. A very large thickness of turbidites then micaceous arenites to orthoquartzite, to dolomites were accumulated in the Purcell Trough during Proterozoic time as a sediment wedge on the west side of the Archean North American Craton. Thickness of the Purcell sediments is not less than 12,000 m. Units exposed (in ^{upward} ~~upper~~ progression) in the area are Fort Steele, Alderidge, Creston and Kitchener.

From the small amount of bedrock exposure encountered on the claim, as well as looking at stream float in the courses of Wallinger and Z-Creek, it is apparent that the bedrock is Lower Creston at lower elevation. Upper elevations are mapped as Kitchener formation: green, grey and purple buff-weathering argillite (Rice's Unit 4) rounded quartz carbonate cobbles in Wallinger Creek may derive from younger units still higher in the Proterozoic section.

No major faults are mapped crossing the property, though the whole area is extensively minor-faulted (minor thrusts and block faults).

B. **Geochemistry**

1. Field procedure and laboratory analysis: the nine stream sediment samples (Wall 1 - Wall 5, plus Z-1 to Z-4 inclusive) were obtained by selecting the finest grained sediments available in small pockets in the boulder beds of the two streams. Ice cover over most of the stream obscured much of the bed so that sample areas had to coincide with melt-holes in the ice. Samples were hand-screened of coarser material, and standard 3-400 gram samples of fines placed in a marked kraft geochemical sampling bag. Standard geochemical analyses of the 9 samples was carried out by Acme Analytical Laboratory, Vancouver. After pulverization, a 10 gram sample was digested in aqua regia and lamped by induction-coupled-plasma spectoscopy for Pb, Cu, Zn, As, Sr, Ba, W and Ag (ppm). Analysis for Au involved MIBK extraction and ICP analysis in ppb for Au. Results are presented in Geochem ICP Analysis Report 87-0868, attached to this report. Results are plotted for Au (ppb) and Ag (ppm) Fig. 5: Cu, Pb, Zn, As (base metals, ppm) on Figure 6, and for Sr, Ba, & W (ppm) on Figure 7.

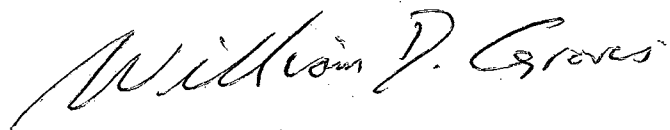
2. Sampling Results

Only one sample, Wall-5, at the top of the Wallinger Creek traverse on the more westerly flowing fork, at 26 ppb Au, showed any anomalous level of gold in the stream sediment. No corresponding associated elevation in place of the other elements in this sample were noted.

CONCLUSIONS

1. It would be interesting to follow both forks of Wallinger Creek up further with closer-spaced stream sediment sampling to see if a gold stream sediment anomaly exists upstream.
2. It is suggested to conduct 2-4 days of summer traversing of the higher elevations of the property, in weather that allows fly-camping.
3. It is recommended to follow up the old trail on Rice's map, angling NE up from the road creek intersection with Z-Creek, to see what workings it leads to, and see if these might involve traceable structures.

Yours respectfully



W.D. Groves, Ph.D., P.Eng.

APPENDIX I

WORK COST STATEMENT- MUTT 3 CLAIM

APPENDIX I

WORK COST STATEMENT- MUTT 3 CLAIM

Field Personnel

Dr. W.D.Groves, P.Eng.
 (Geological, Chemical Engineering) @ \$350/day
 Mr. Kelly Gourley, Prospector @ \$225/day

Field Activity	W.D. Groves, 1 day	
30 March/87	Geological traverse, up Wallinger Creek N-contour, then down Z Creek	\$ 350.00

	K.G. accompanied W.D.G.	
	9 stream sediment samples, 1 day	225.00
		<u>\$ 575.00</u>
		=====

Meals, 1 day @ \$30/man day, 2 men	\$ 60.00
------------------------------------	----------

1 day, 4WD @ \$50/day + \$20 fuel	\$ 70.00
-----------------------------------	----------

Purchased for snow conditions, chains, snow shovel, come-along, rope, large jack, axe (Heavy snow conditions E-side forestry road)	\$ 100.00
Total field related expenses:	<u>\$ 805.00</u>

Transportation: 1/3 of Vancouver-Cranbrook Airfare (2 x \$310.20) (3-property trip) \$620.40/3	205.00
--	--------

Travel Standby time 1/2 day, W.D.G. @ \$200, KG @ \$100	150.00
	<u>\$ 355.00</u>

Fieldwork and transport	<u>\$ 1,160.00</u>
	=====

WDG -

Sample Assay Costs

9 geochemical ICP Analyses
8 elements ppm, Au ppb @ \$12/sample \$ 108.00

Report preparation cost:

W.D.G., 2 days @ \$350 700.00
Drafting, 1:5,000 map base, F. Chong 60.00
Rough Draft typing -B. Bell, 4 hrs @ \$10 40.00
Word Processing - DBS - 4 hours @ \$25 100.00
Maps, xerox, - 4 large maps x 4 cc) 75.00
Report covers, xerox copies 20.00

Total Report Costs: \$ 995.00
=====

Total Work Cost:

\$ 1,160 + \$ 108 + \$ 995 = \$ 2,263.00
=====

(20 units, for Year I, requires \$ 2,000.00)

WDG.

APPENDIX II

CERTIFICATE, W.D. GROVES, Ph.D., P.Eng.

CERTIFICATE

I, William D. Groves, do hereby certify that:

1. I, William D. Groves, am a Consulting Engineer (geological) with an office at 200-675 West Hastings Street, Vancouver, British Columbia, V6B 4Z1.
2. I am a graduate of the University of British Columbia (B.A.Sc. in Geological Engineering, 1960). I am a graduate of the University of Alberta, B.Sc., in Chemical Engineering in 1962, and of the University of British Columbia with a Ph.D. in Chemical Engineering in 1971.
3. I am a registered Professional Engineer in the Province of British Columbia.
4. I have practised my profession since 1960.
5. I visited the Mutt 3 mineral claim property on March 30, 1987 to carry out stream sediment geochemical sampling and geological work, and supervised the work of prospector, Kelly Gourley, at that time.
6. I have not received directly or indirectly, nor do I expect to receive any interest, direct or indirect, in the Mutt 3 claim, nor do I beneficially own, directly or indirectly any securities of Governor Resources Ltd., nor do I expect to receive any such interests.

Respectfully submitted,

William D. Groves

W.D. Groves, Ph.D., P.Eng.
25 June 1987.

ACME ANALYTICAL LABORATORIES

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE CA P CR MG BA TI B AL NA K W SI ZR CE SN Y NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SILTS -20 MESH ^{PULVERIZED} AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: APRIL 1 1987

DATE REPORT MAILED: *Apr 6/87*

ASSAYER... *D. Toyer*... DEAN TOYE, CERTIFIED B.C. ASSAYER

GOVERNOR RESOURCES

File # 87-0868

SAMPLE#	CU PPM	PB PPM	ZN PPM	AG PPM	AS PPM	SR PPM	BA PPM	W PPM	AU* PPB
ZZ-1	18	7	37	.2	5	24	104	3	9
ZZ-2	14	11	36	.1	4	23	89	1	4
ZZ-3	17	8	37	.1	3	23	106	1	7
ZZ-4	18	10	35	.1	2	24	102	2	4
WALL-1	12	6	31	.2	3	28	107	2	1
WALL-2	18	7	27	.1	7	31	136	3	6
WALL-3	18	11	27	.1	12	33	152	1	5
WALL-4	13	8	26	.1	3	23	98	1	4
WALL-5	16	11	24	.1	6	43	112	1	26
STD C/AU-S	61	38	137	7.2	44	49	183	13	52

APPENDIX III
ASSAY CERTIFICATE - MUTTS
CLAIM.

WDG.



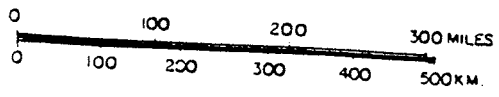
**PROPERTY
LOCATION**

GOVERNOR RESOURCES LTD.

MUTT 3 CLAIM
LOCATION MAP

N.T.S. 82G-12 PORT STEELE M.D., B.C.

K. S. G.	DATE: MAY 1987
SCALE AS SHOWN	FIGURE NO. 1



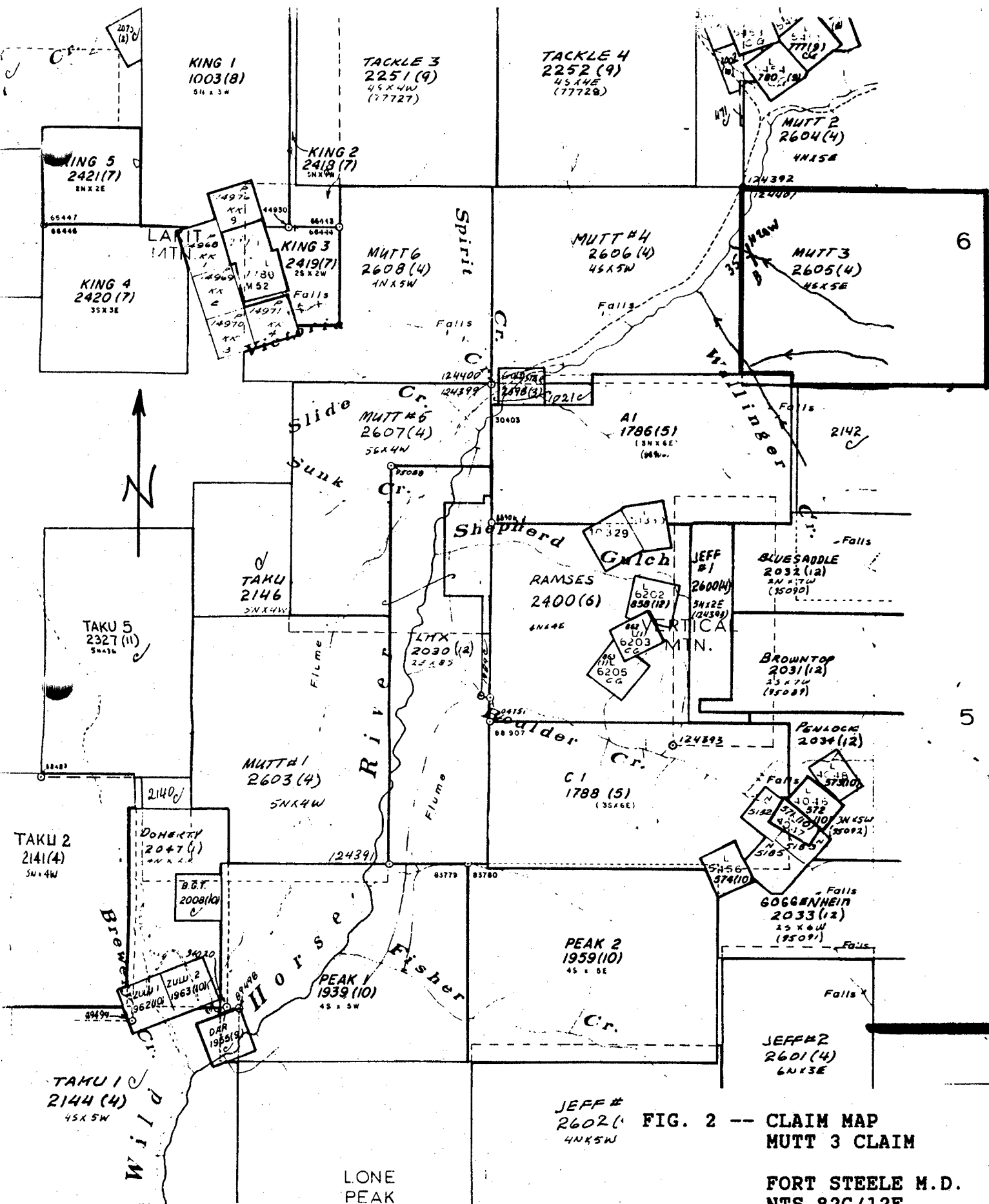
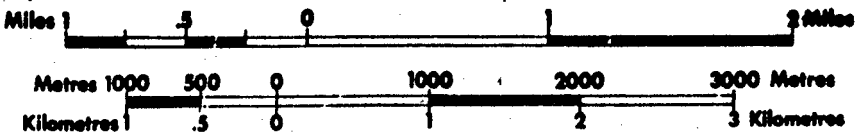


FIG. 2 -- CLAIM MAP
MUTT 3 CLAIM

FORT STEELE M.D.
NTS 82G/12E
Scale 1:50000



FORMERLY 1407
FORMERLY 458

LEGEND

- | | | | | |
|----------------------------|--|----------------------------------|--|---|
| MESOZOIC
OR
CENOZOIC | CENOZOIC | MODERN
RECENT AND PLEISTOCENE | 12 | <i>Glacial drift; silt, sand, gravel</i> |
| | | CRETACEOUS OR TERTIARY | 11 | <i>Granodiorite</i> |
| PALAEOZOIC | CENOZOIC | CAMBRIAN
LOWER CAMBRIAN | 10 | <i>EAGER FORMATION: argillite</i> |
| | | 9 | <i>CRANBROOK FORMATION: quartzite, magnesite</i> | |
| PRECAMBRIAN | CENOZOIC | UPPER PURCELL SERIES | 8 | <i>GATEWAY FORMATION: argillaceous quartzite, dolomitic argillite, concretionary and pisolitic dolomite</i> |
| | | LOWER PURCELL SERIES | 7 | <i>PURCELL EXTRUSIVES: andesitic lava</i> |
| | | [Pattern] | <i>PURCELL INTRUSIVES: diorite sills and dykes</i> | |
| | | [Pattern] | <i>SIYEH FORMATION: highly coloured argillite and dolomitic argillite</i> | |
| | | 4 | <i>KITCHENER FORMATION: green, grey and purple, buff weathering, dolomitic argillite</i> | |
| | | 3 | <i>CRESTON FORMATION: green, purple and white, argillaceous quartzite</i> | |
| | | 2 | <i>ALDRIDGE FORMATION: grey, rusty weathering argillite and argillaceous quartzite</i> | |
| 1 | <i>FORT STEELE FORMATION: white quartzite, banded grey argillite and quartzite, black, limy argillite, grey-green, dolomitic argillite</i> | | | |

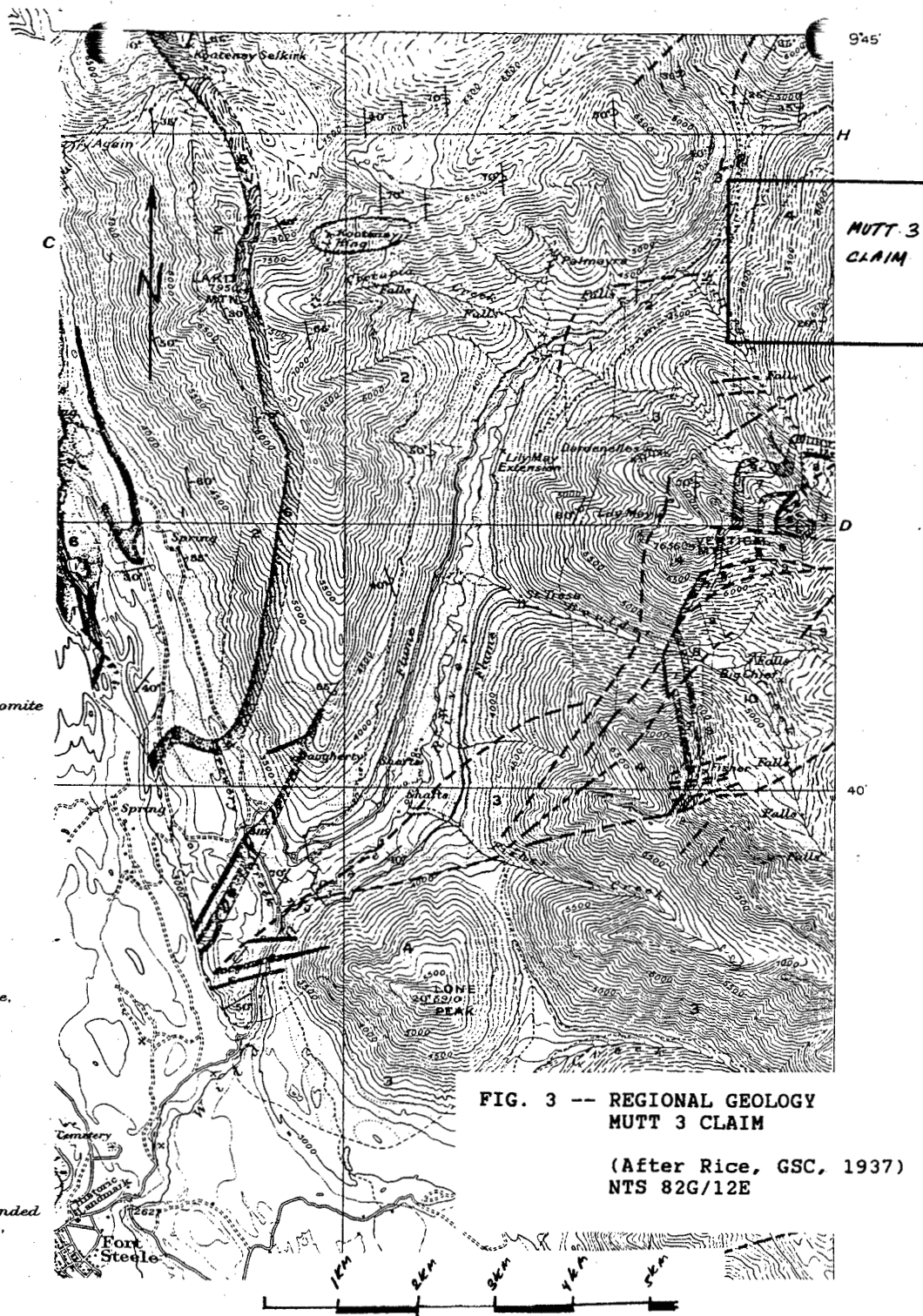
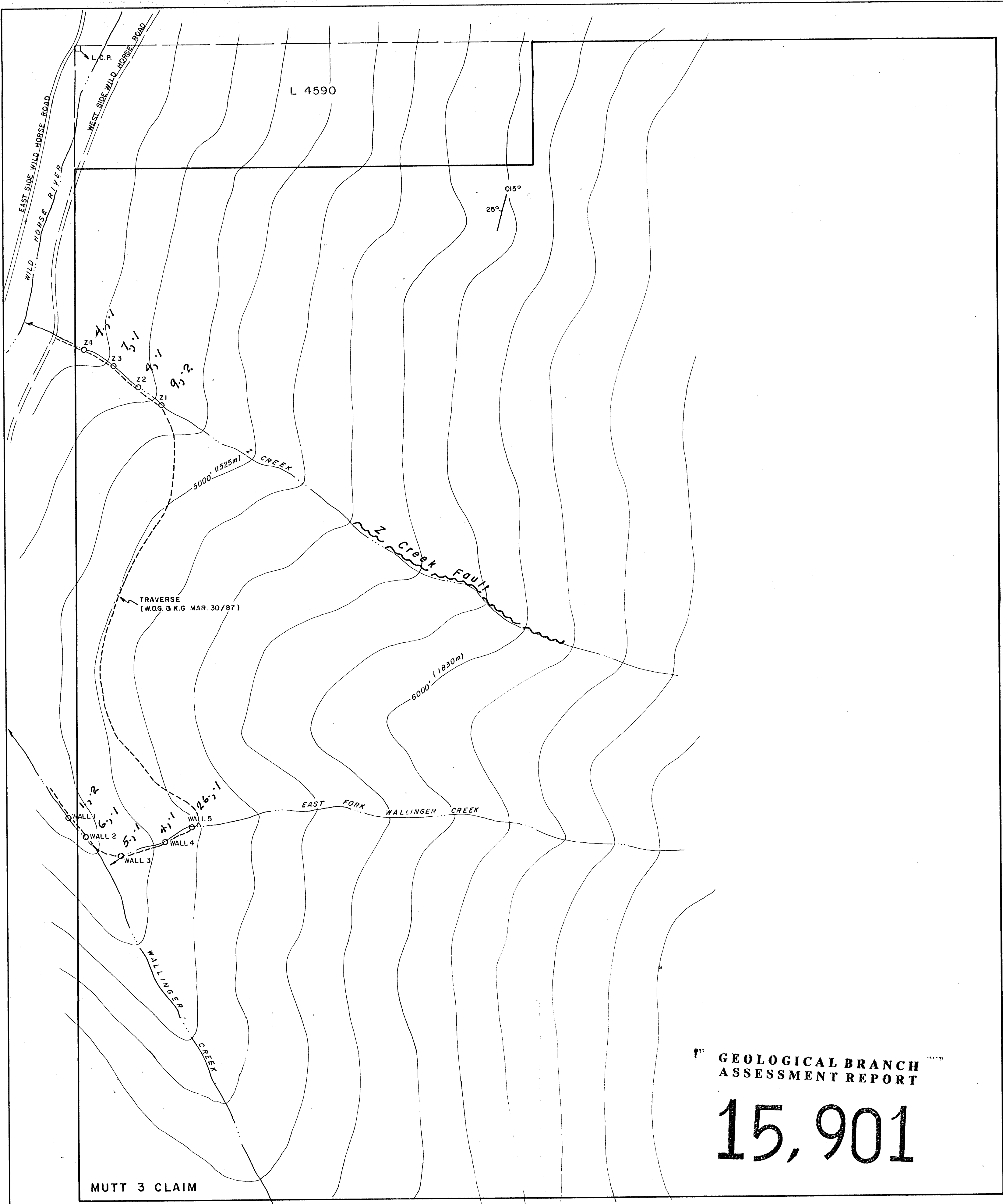


FIG. 3 -- REGIONAL GEOLOGY
MUTT 3 CLAIM

(After Rice, GSC, 1937)
NTS 82G/12E



**GEOLOGICAL BRANCH
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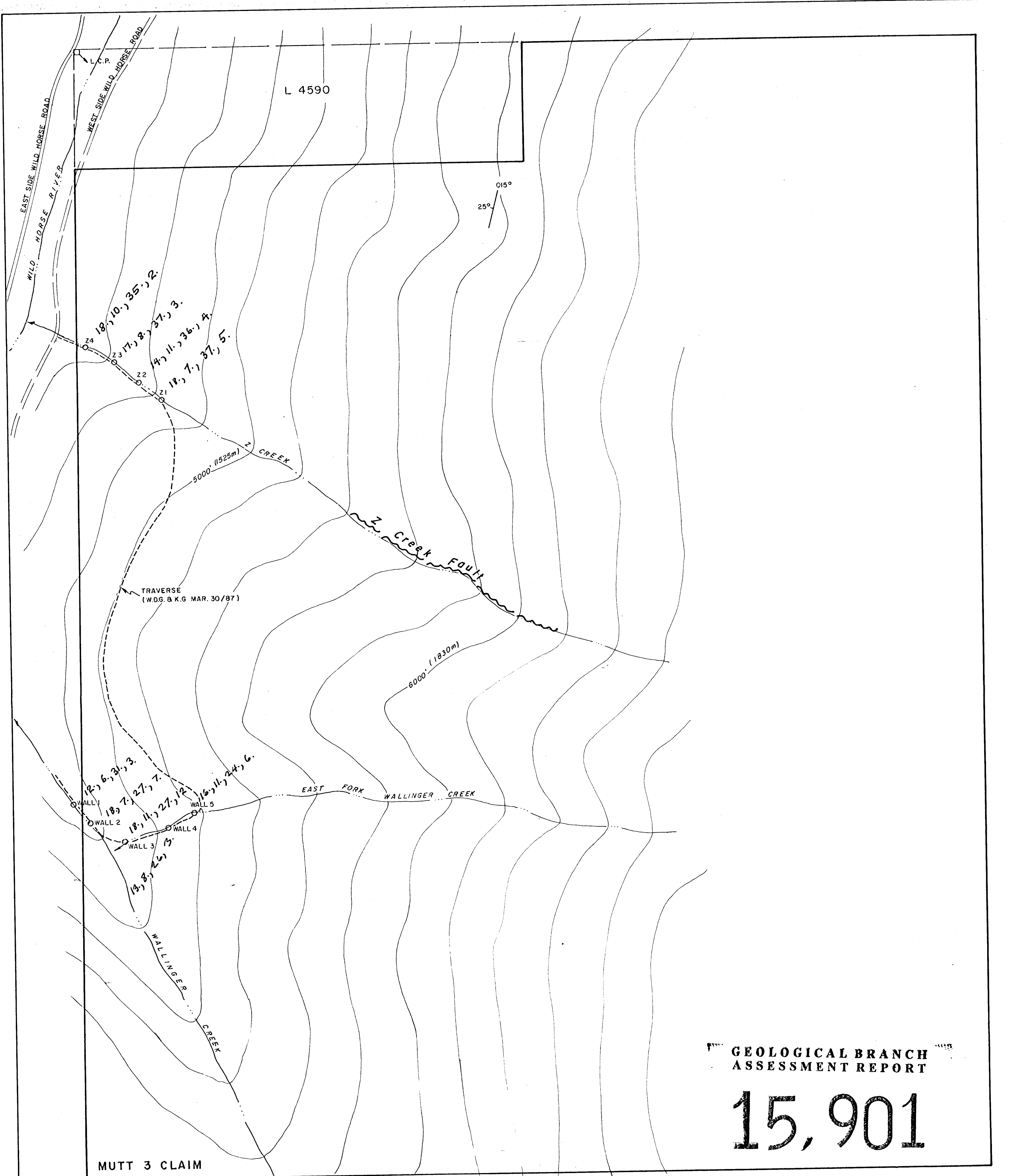
MUTT 3 CLAIM

LEGEND

- STREAM SEDIMENT SAMPLE LOCATION & N^o.
- ROAD
- CREEK
- CONTOUR AT 200' INTERVAL
- TRAVERSE
- FAULT




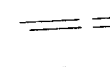
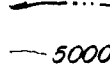
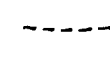


GOVERNOR RESOURCES LTD.	
MUTT 3 CLAIM <i>W.D.G.</i>	
GEOLOGICAL TRAVERSE, STREAM SEDIMENT SAMPLES	
N.T.S. 82G-11W, 12E	FORT STEELE M.D., B.C.
SCALE 1:5000	DATE: JUNE 1987
DRAWN BY: W.G.	FIGURE N ^o . <i>24.5</i>



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

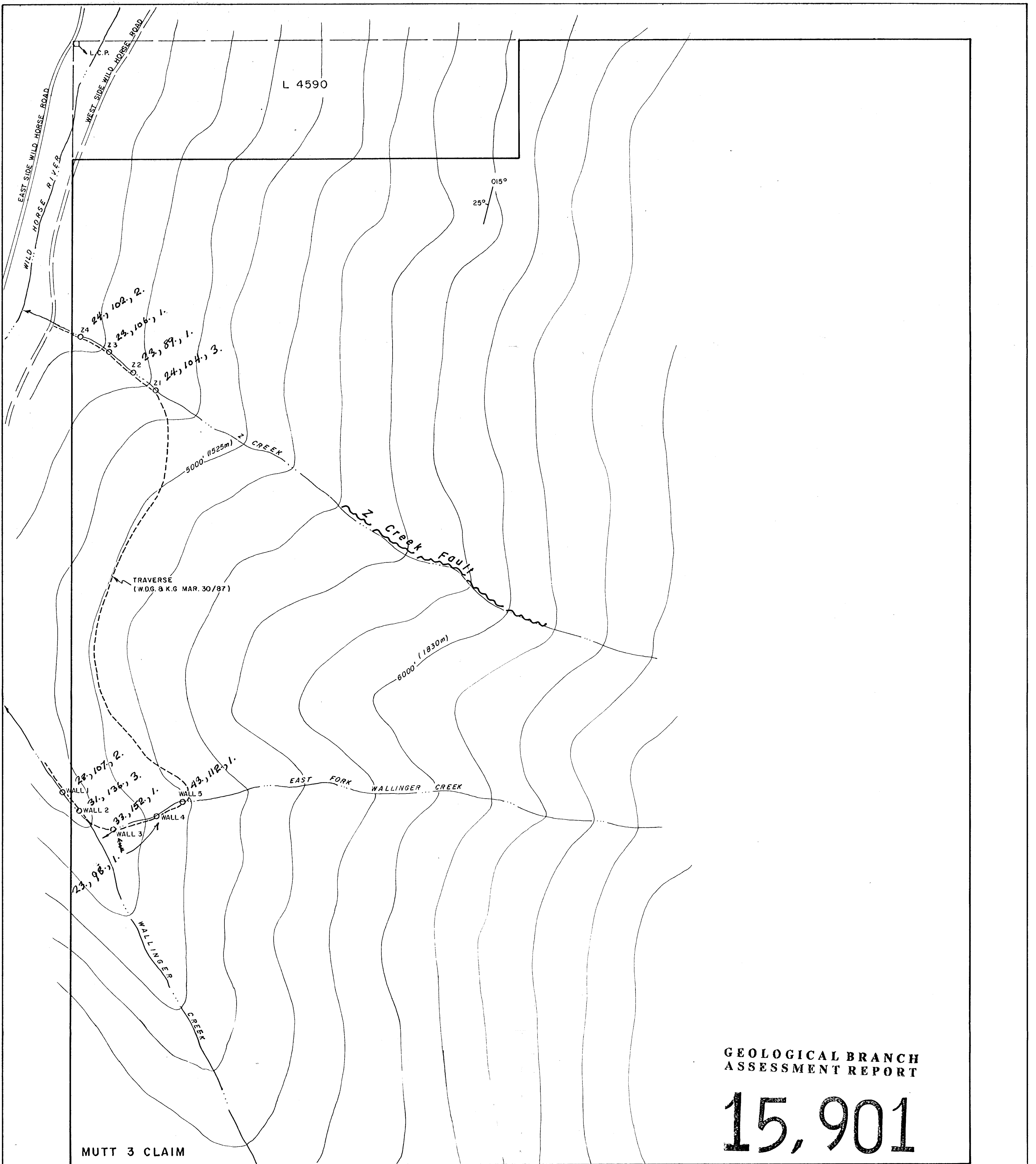
15,901

LEGEND

-  STREAM SEDIMENT SAMPLE LOCATION & NO.
-  ROAD
-  CREEK
-  CONTOUR AT 200' INTERVAL
-  TRAVERSE
-  FAULT



GOVERNOR RESOURCES LTD.	
MUTT 3 CLAIM <i>WJG</i>	
GEOLOGICAL TRAVERSE, STREAM SEDIMENT SAMPLES	
N.T.S. 82G-11W,12E	FORT STEELE MD., B.C.
STREAM SED. GEOCHEM. <i>Cu, Pb, Zn, As (ppm)</i>	
SCALE 1:5000	DATE: JUNE 1987
DRAWN BY: W.G.	FIGURE NO. 36



GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,901

MUTT 3 CLAIM

LEGEND

- Z1
○ STREAM SEDIMENT SAMPLE LOCATION & NO.
- == ROAD
- CREEK
- 5000'— CONTOUR AT 200' INTERVAL
- - - TRAVERSE
- ~~~~ FAULT



GOVERNOR RESOURCES LTD.	
MUTT 3 CLAIM W.V.G.	
GEOLOGICAL TRAVERSE, STREAM SEDIMENT SAMPLES	
N.T.S. 82G-11W, 12E FORT STEELE MD., B.C.	
STREAM SED. GEOCHEM. Sr, Ba, W (ppm)	
0 100 200 300 metres	
SCALE 1:5000	DATE JUNE 1987
DRAWN BY: W.G.	FIGURE NO. 77