

1983

SUMMARY OF 1983  
FIELD WORK  
RUFUS & MM 100 CLAIMS  
STEWART, B. C.

for

Kingdom Resources Limited



C. R. Harris, P.Eng.  
November 24, 1983

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## INTRODUCTION

During the period July 31 to September 9 the writer directed an exploration crew of 6 men in the Stewart area for Kingdom Resources Ltd. Work was performed on both the MM 100 and Rufus claim groups.

On the Rufus group very wet weather and poor flying conditions cancelled the planned program on the upper claims and work was confined to assessment requirements on the lower more accessible claims.

On the MM 100 claim work consisted of geochemical sampling over anomolous areas found in 1981 and physical work of drilling and blasting pits in the Mayflower Creek and Tye Adit areas to assist in geological mapping and sampling of known gold-silver-bearing quartz veins.

The Stewart area experienced record rainfall during this program necessitating many changes from the planned schedule and also seriously impeding progress.

This report is a summary of several more detailed reports prepared during and following the field season for internal and assessment requirements.

## CONCLUSIONS

The geochemical soil sampling on the MM 100 claim to the east of Victoria Creek confirmed the presence of several strongly anomolous copper-zinc-lead zones trending NNE and conforming generally to the expected northern projection of the "Portland Canal Shear" on which the old Dunwell, George E and Sunbeam mines were worked to the south. These anomolous zones are strongly indicative of important buried vein systems and should be further prospected by diamond drilling. Two zones, A & B figure 5, are reasonably accessible and should receive priority.

The trenching on the Tyee and Mayflower areas did not develop any new sulphide veins but allowed detailed mapping to be completed and confirmed the presence of one drill target, the extension of veins opened up in the area of #3 adit by Mayflower pits 9 & 10. This vein should be prospected by short hole packsack drilling as soil sampling to the west shows a possible northwest surface trace.

Several old prospects on the MM 100 group such as the Silver Ledge, Mayflower and Superior have not yet been adequately prospected primarily due to the necessity of opening up old workings. However, these are still considered worthwhile exploration targets.

On the Rufus claims, no major finds were made but geochemical soil sampling to the east of Rufus Creek indicates some possibly anomolous zinc areas which should be further defined.

Assessment credits of \$ 7,200 for the Rufus group and \$ 33,200 for the MM 100 group as shown on Appendix II were filed.

#### RECOMMENDATIONS

It is recommended that the "A" or "B" anomalies to the east of Victoria Creek be drilled, first by short holes directed to the east at 45 degrees to locate the veins or structure followed by deeper drilling to test mineralization. This initial work is expected to require about 1000' of B or N core drilling.

Packsack drilling of about 300' is also recommended for the Mayflower #3 vein and further prospecting is required on the MM 100 claim particularly in the Silver Ledge and Emperor areas.

A detailed program has not yet been worked out but the following budget is anticipated:

Diamond drilling 1000' @ 50.00 (incl) .....	\$ 50,000
Packsack drilling 300' @ 30.00 (incl) .....	9,000
Prospect, geochem, support etc .....	11,000
	<hr/>
	70,000
Contingency .....	10,000
	<hr/>
Total .....	\$ 80,000

Following this work a further phase of diamond drilling may be required and the necessity for additional funding should be recognized.

PROPERTY

Kingdom Resources Ltd. own two claim groups in the Stewart area, the Rufus and MM 100 Groups.

RUFUS

This group consists of 24 reverted Crown Granted claims and one claim of 16 units.

Comet #3	Rec. # 521	Long Fract.	Rec. # 532
" #4	522	Argyle #1	534
Veteran	523	" #2	535
Veteran #3	524	" #3	536
Rufus #1	525	" #4	537
" #2	526	" #5	538
" #4	527	" #6	539
" #6	528	Duke Fract.	540
Argyle Fract.	520	Rufus	2140
Baby Rufus Fr.	529	" #3	2141
Wide Fraction	530	" #5	2142
Silver Fract.	531	Slide Fract.	3317
		Buck 87 (16 units)	3171

MM 100

This group consists of 5 claims totaling 35 units and six two-post claims.

M M 100	Rec.# 1594	M.M. #1 Fr.	Rec.# 3314
Buck 709	3138	" #2	3311
Buck 710	3170	" #3	3312
Lake 16	3139	" #4 Fr.	3315
Lake 17	3140	" #5	3313
		" #6 Fr.	3316

### LOCATION & ACCESS

The Rufus Claim Group is located on the north slope of Bear Pass about 16 miles NNE of Stewart, B. C. Elevations range from 1000' in Bear Pass to 5000' on the icefield along the north side of the claims. Access is by helicopter only to the upper elevations but the lower claims can be reached from the Stewart Highway although no trails exist and heavy underbrush and rugged topography make travel difficult. The Rufus claims are shown on Figure 2.

The MM 100 Claim Group is located on the hillside east of Bear River about 5 - 6 miles north of Stewart, B. C., between Glacier and Bitter Creeks. Elevations range from 160' near the highway to 3000' along the eastern claim boundary. Access is by helicopter only to the upper areas but the lower western portion of the MM 100 claim can be reached by trail from the Stewart Highway. The MM 100 Claim Group is shown on Figure 1.

## 1983 EXPLORATION

Upon arrival in Stewart on August 2, four days, August 3 - 6, were spent prospecting on the lower Rufus claims to cover assessment requirements for the Buck 87 claim. Following this a full camp was flown and erected east of Victoria Creek for geochemical surveys and general prospecting. When geochemical surveys were well underway another small camp was erected at the mouth of Victoria Creek near the Stewart highway to service the trenching crew working on the Mayflower Creek and Tyee areas.

The geochemical sampling on Victoria Creek was completed on August 23 and the camp and equipment flown to the lower camp. Work was then concentrated on the Mayflower & Tyee areas until August 29 after which 8 days were spent on physical and geochemical work on the Lower Rufus claims. Camp was then struck and all equipment brought to Vancouver on September 9.

On the Rufus lower claims the earlier exploration discovered a zone of pyritization in fractured volcanics which was further prospected by several dug and blasted pits on the later dates. 3.2 km of soil sample lines were also laid out and sampled to determine if other similar zones could be located by this method. Figures 2 & 3 show the location of this work.

On the MM 100 claim, 5.5 km of new sampling lines were laid out to the east of Victoria Creek to tighten the 1983 grid and better trace the anomalies found in 1981. A total of 110 soil samples were collected and about 1 km of new trail located. Figures 4 & 8 show the location of this work.

On the Mayflower Creek and Tyee areas of MM 100 claim a total of 28 pits and trenches were dug, drilled and blasted to expose fresh rock faces for sampling and mapping. These are shown on figures 9 & 10. 28 soil samples were also taken in the area. Following this, P. Green P.Eng. mapped the geology of Mayflower Creek and Tyee Adit. Some reconnaissance prospecting was also undertaken.

## DISCUSSION

### RUFUS CLAIMS

The new pyritic zones discovered and opened up by pits shown on figure 3 did not return significant base or precious metal content on assay but their presence may be of geological importance and additional prospecting is warranted.

The exploratory geochemical lines showed no highly anomalous areas for copper and lead but several possibly anomalous areas of zinc were located east of Rufus Creek which should be further tested by closer spaced lines and sampling. These areas are shown on figure 3.

### VICTORIA CREEK EAST

The geochemical sampling confirmed the anomalous areas discovered in 1981. The 1981 and 1983 sampling is shown contoured on figures 5, 6 & 7. Copper and zinc show almost identical patterns with strong NNE trends. Lead showed a similar but weaker trend. The two zones "A" and "B" marked on figure 5 are definitely worthy of diamond drilling. Other zones are also highly significant but are more difficult of access and should be left until drill results of the A or B zones are available.

Additional sampling of the caved Silver Ledge portal shows that this should be opened up and sampled. This is a suspected 400' tunnel from which a small production was obtained in early years.

### MAYFLOWER CREEK

The sampling in the pits blasted in Mayflower Creek was disappointing except in the area of #3 adit. Below this, mapping shows that the creek is a fault with some quartz veining but precious metal values occur only in very narrow intersecting veinlets and no major vein was uncovered. At the #3 adit a mineralized vein system exists and was traced by pits 9 and 10. This should be explored by short hole packsack drilling.



Geochemical sampling in the area was inconclusive but indicates a possible NW surface trace for the veins at #3 adit. Figures 4 & 10 show the location of pits and samples in Mayflower Creek.

#### TYEE AREA

Although some interesting assays were obtained from pits and underground sampling no major sulphide zone was uncovered. Sulphides appear to be localized in pods or on fractures but no concentrations were found. However, prospecting should be continued in the area to the north as mineralized float was found in a creek some 500 metres north. The pits and underground are shown on figure 9.

C.R. Harris, P.Eng.,  
2709 Wembley Drive  
North Vancouver, B.C.  
V7J 3B7

November 24, 1983

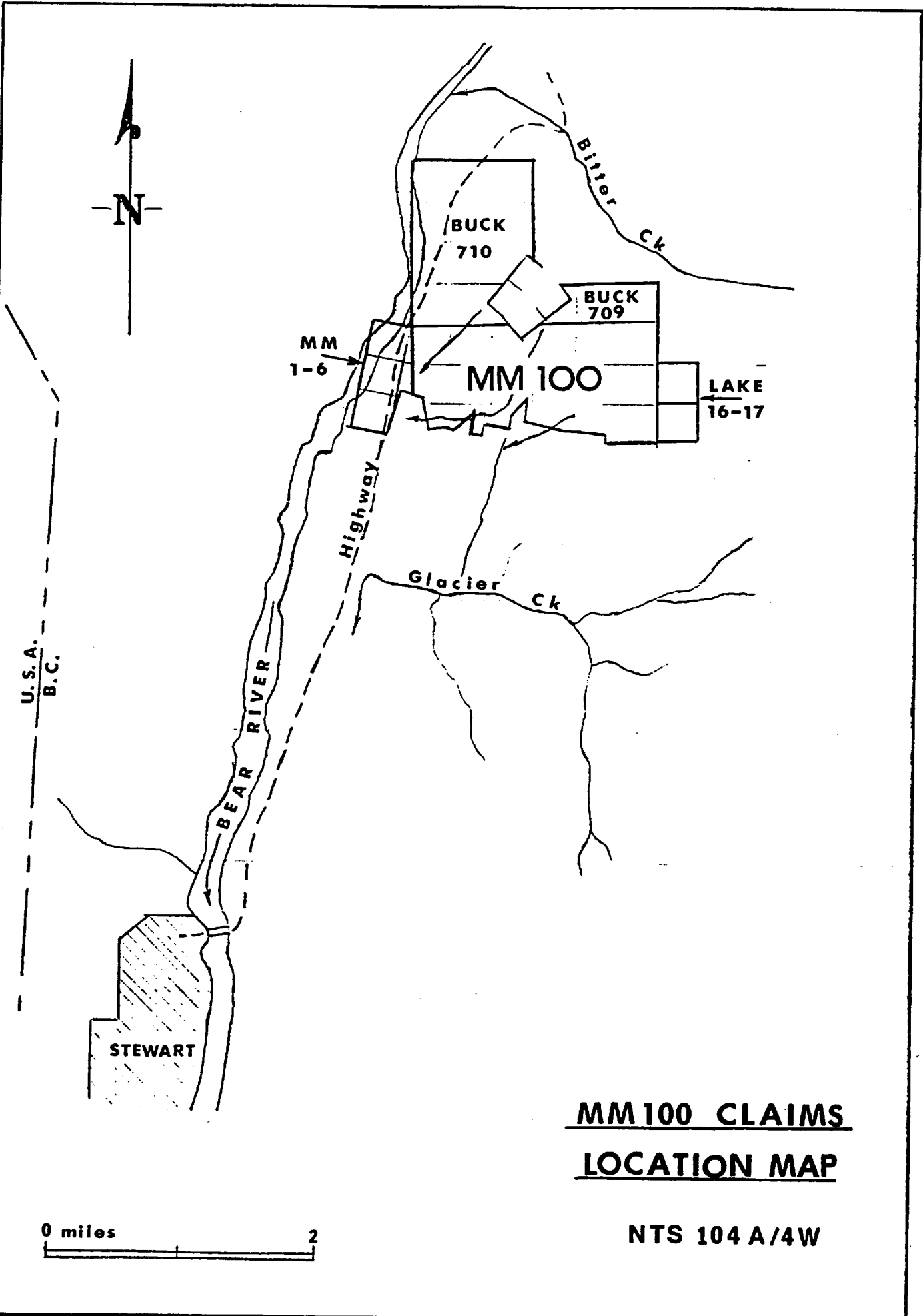
CERTIFICATE

I, Charles R. Harris, of 2709 Wembley Drive, North Vancouver, B. C., hereby certify that:

1. I am a graduate of the University of British Columbia with a degree of Bachelor of Applied Science in Mining Engineering.
2. I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia, and have been practicing my profession for the past eighteen years.
3. I do not own, nor do I expect to receive, any interest directly or indirectly in the properties or securities of Kingdom Resources Ltd.
4. Permission is granted to use or publish this report.

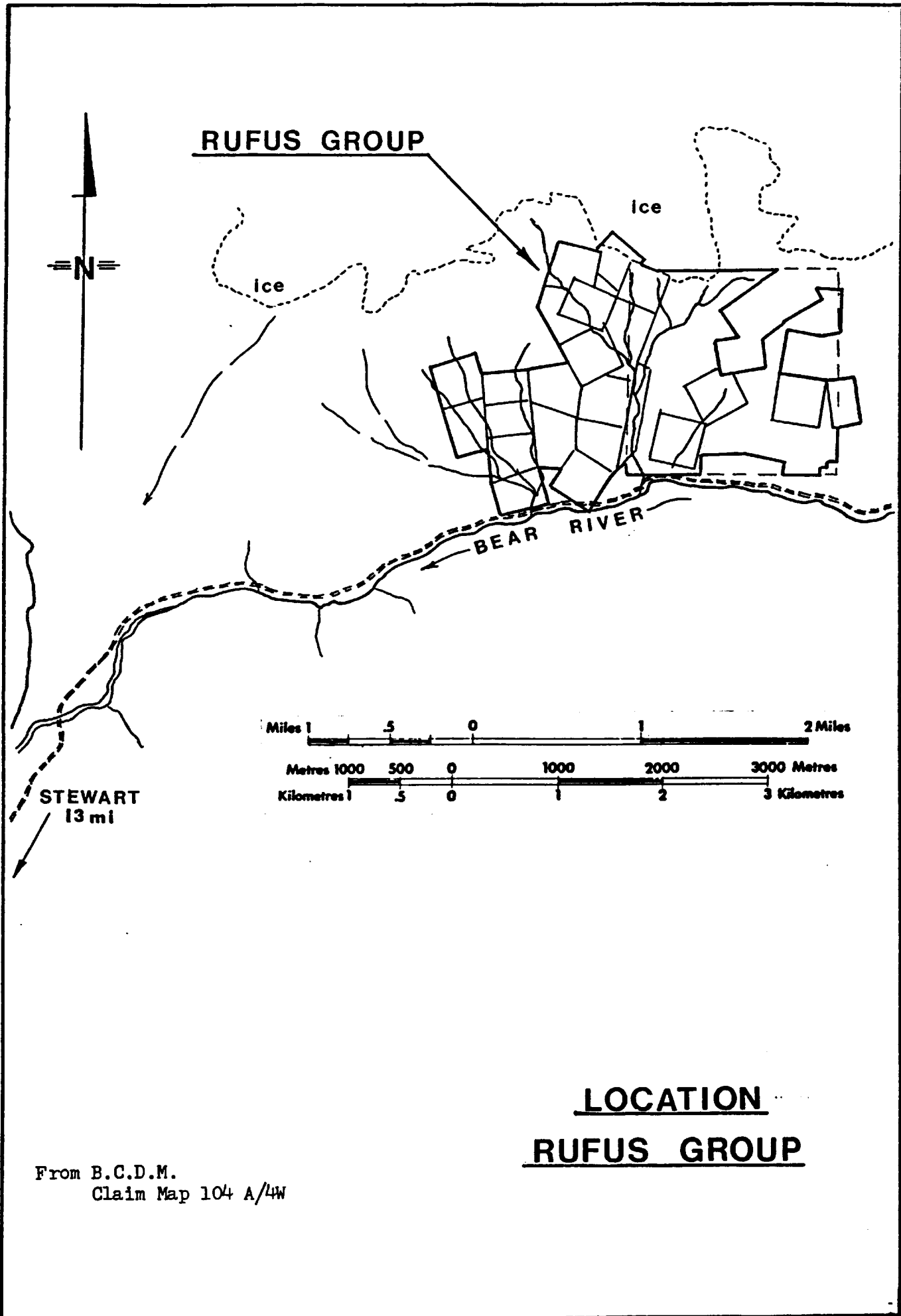


C. R. Harris, P.Eng



**MM 100 CLAIMS**  
**LOCATION MAP**

NTS 104 A/4W



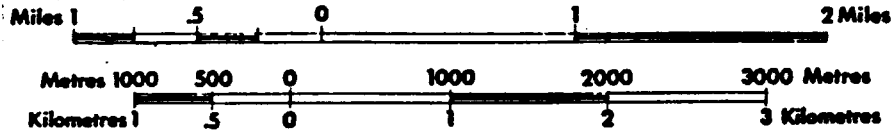
RUFUS GROUP

Ice

Ice

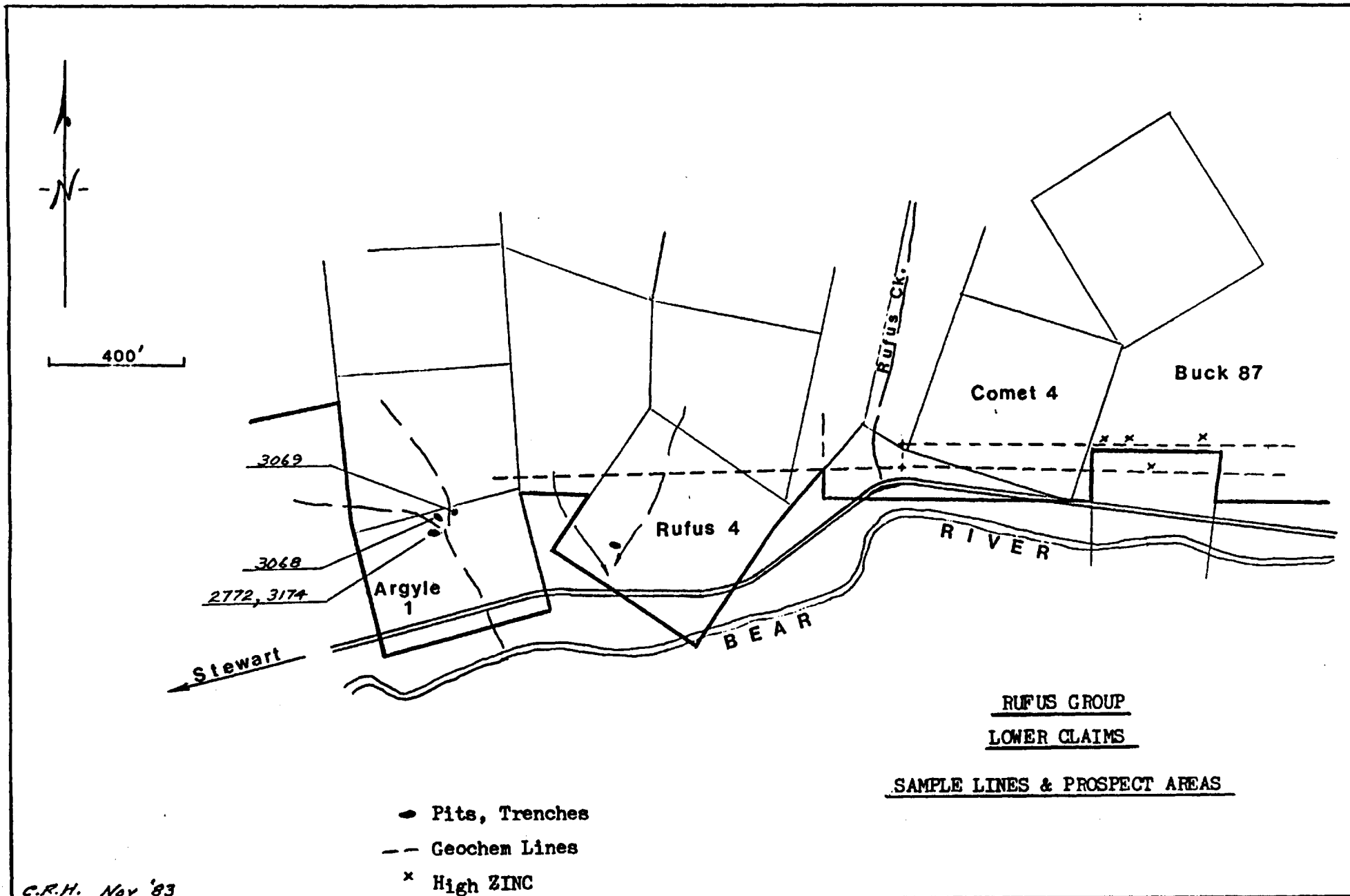
BEAR RIVER

STEWART  
13 mi



LOCATION  
RUFUS GROUP

From B.C.D.M.  
Claim Map 104 A/4W



C.R.H. Nov '83

Figure 3

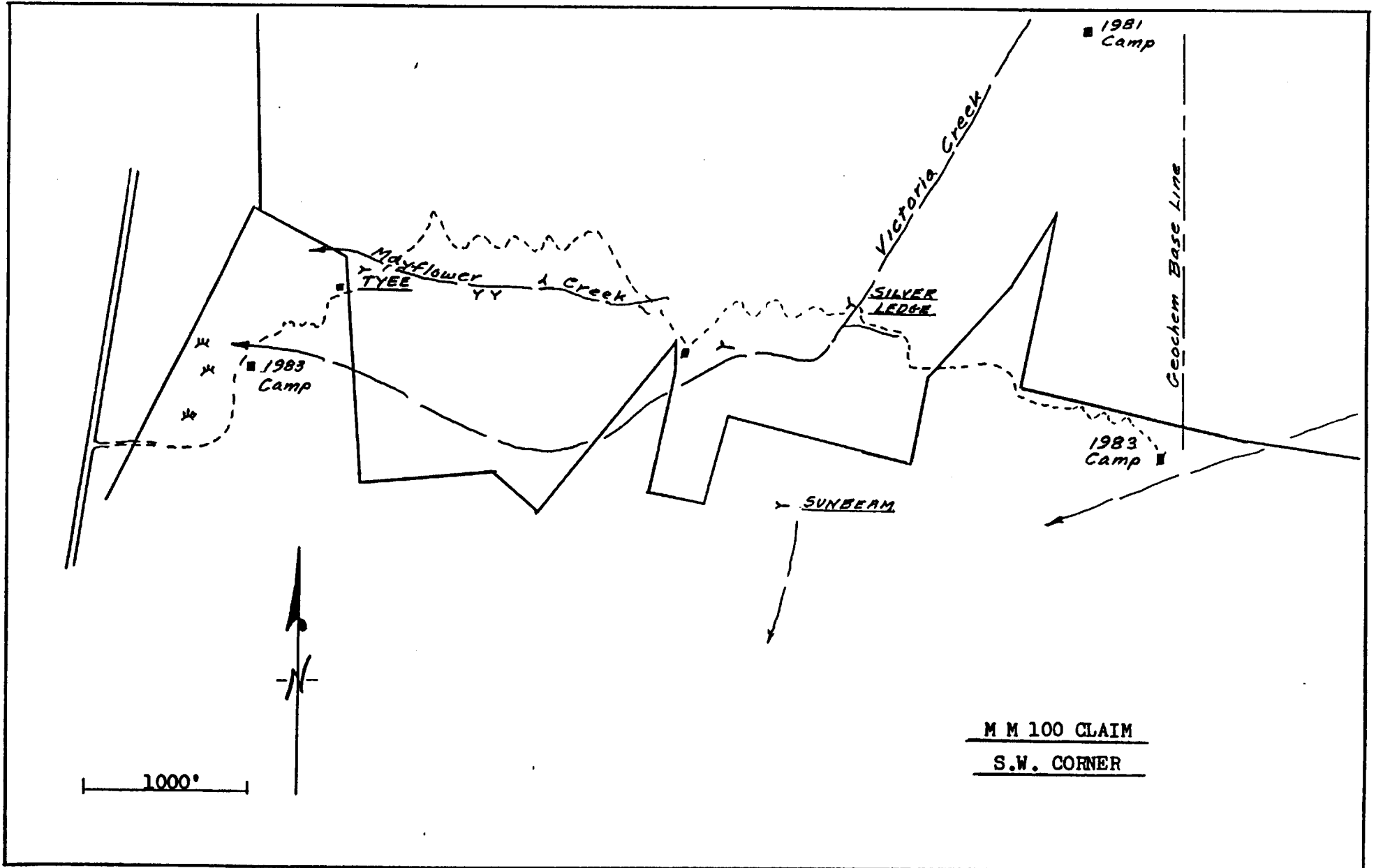
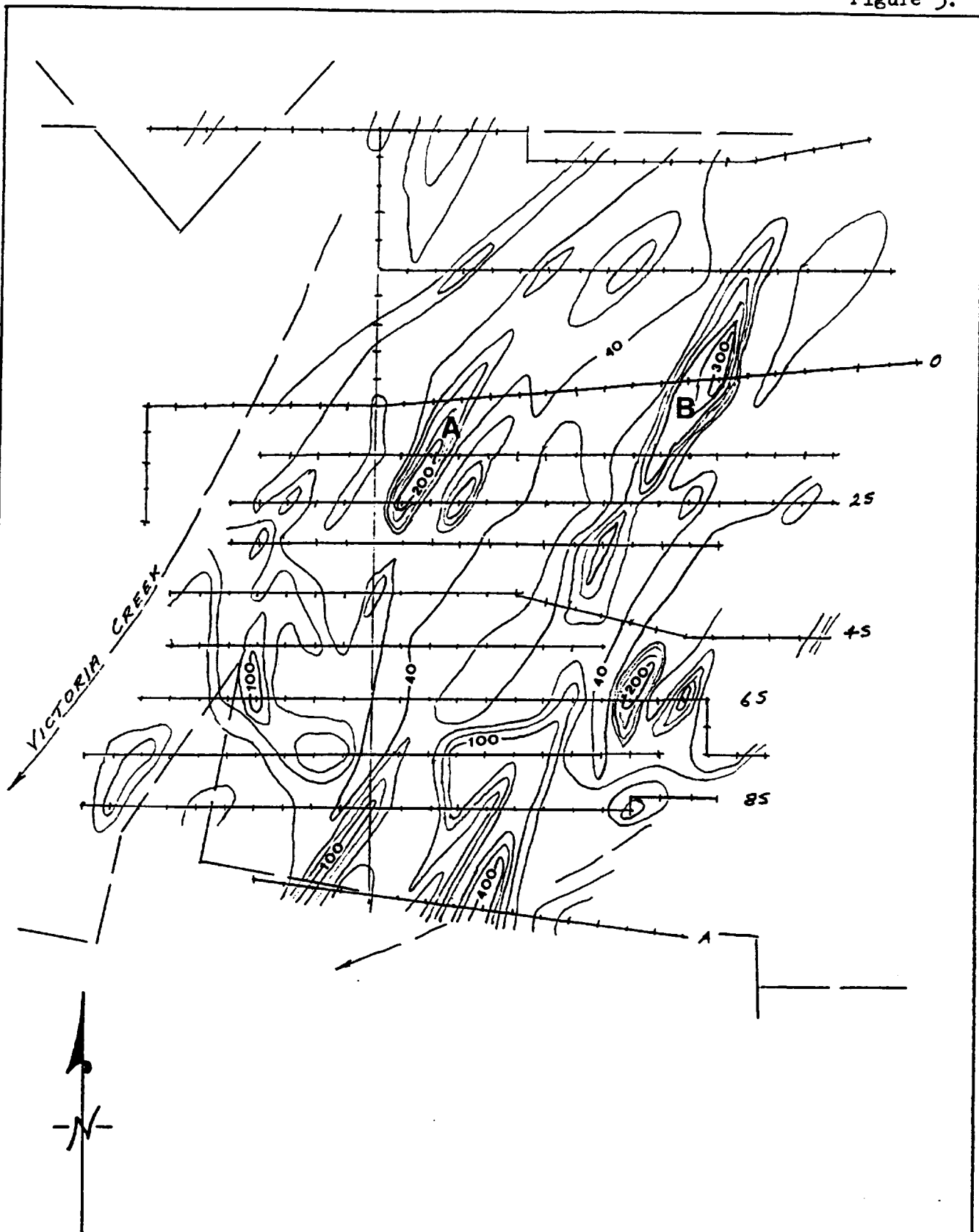
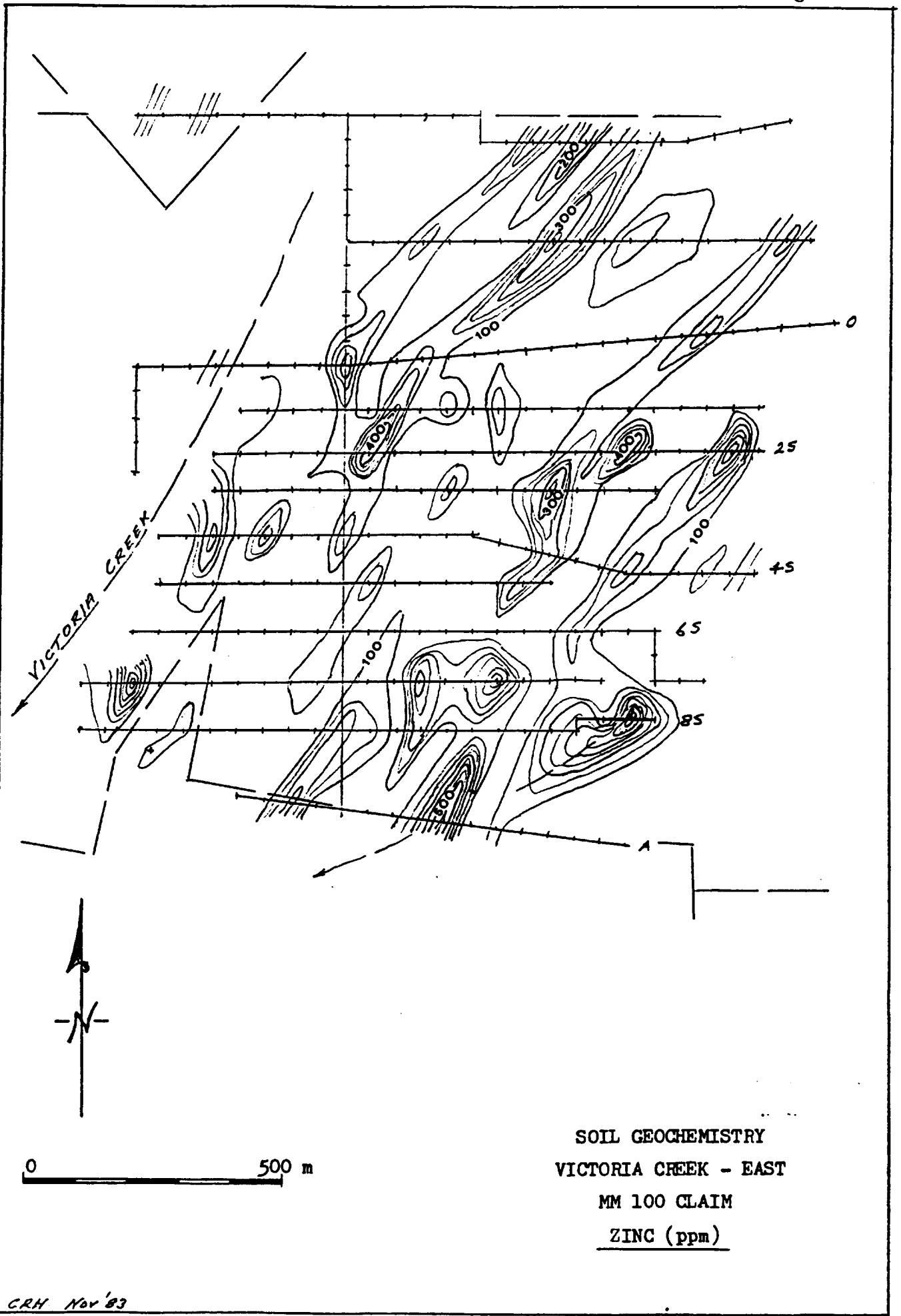


Figure 4.

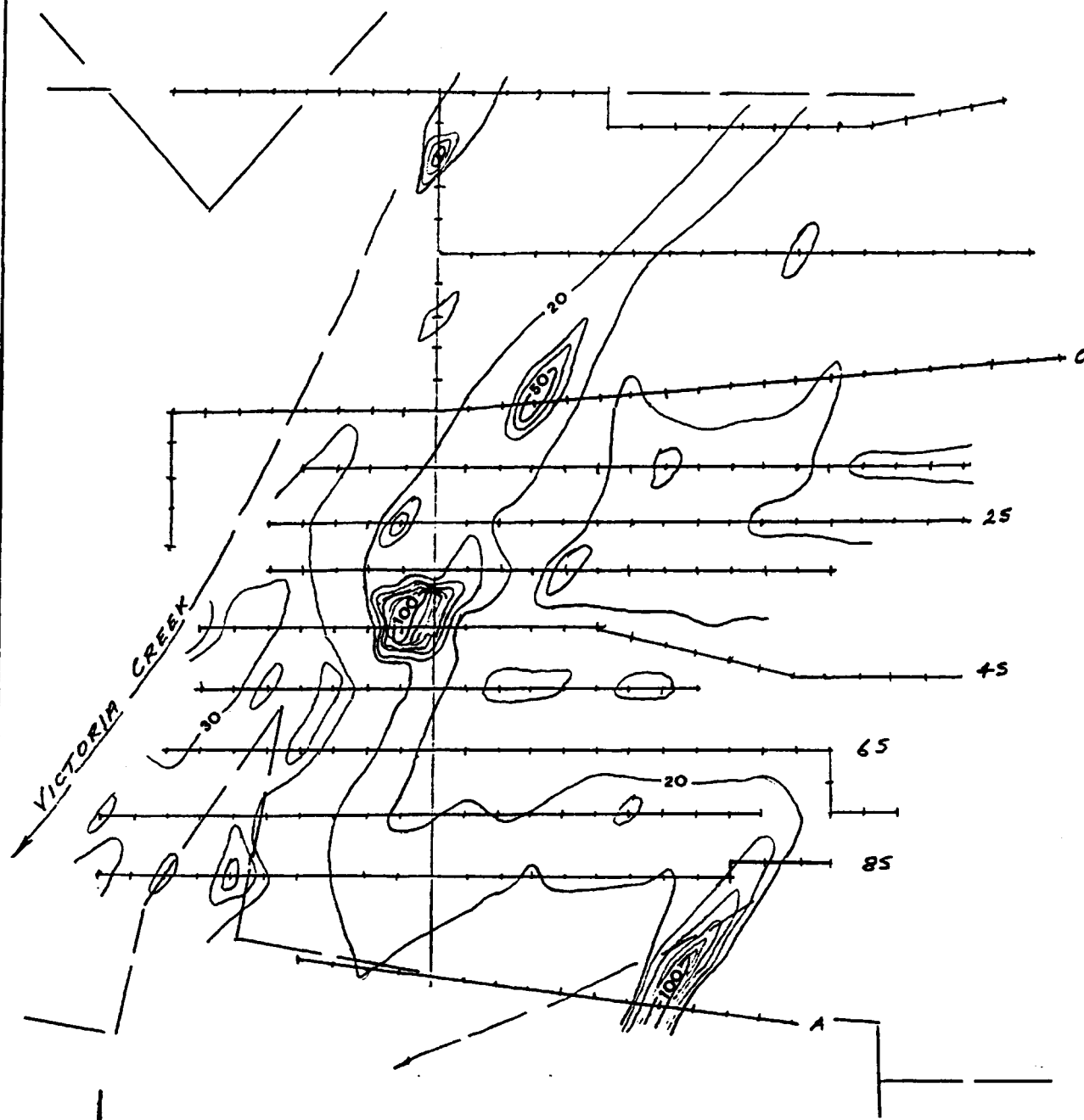


SOIL GEOCHEMISTRY  
VICTORIA CREEK - EAST  
MM 100 CLAIM  
COPPER (ppm)



CRH Nov '83

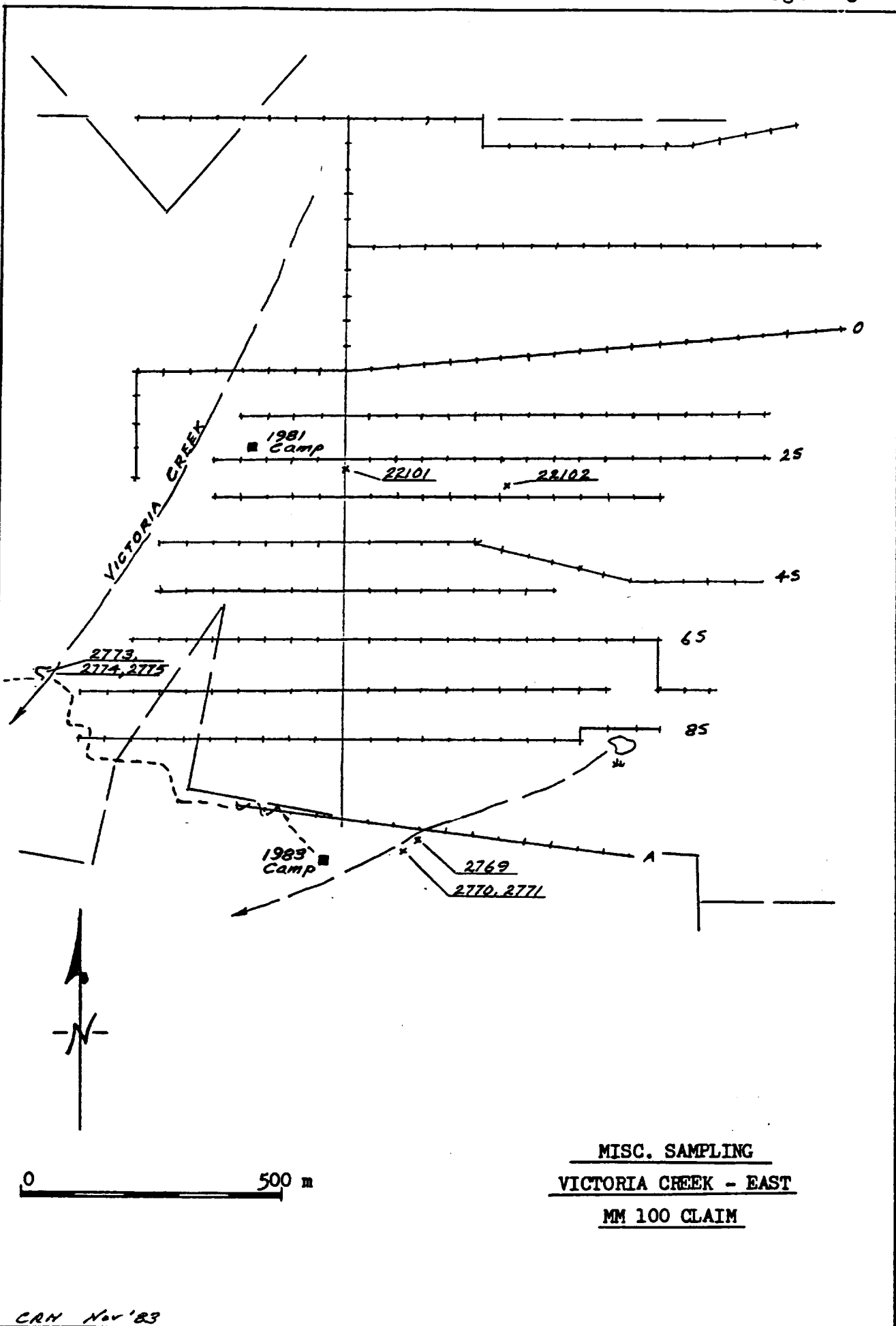




SOIL GEOCHEMISTRY  
 VICTORIA CREEK - EAST  
 MM 100 CLAIM  
LEAD (ppm)

0 500 m

CRH Nov '83

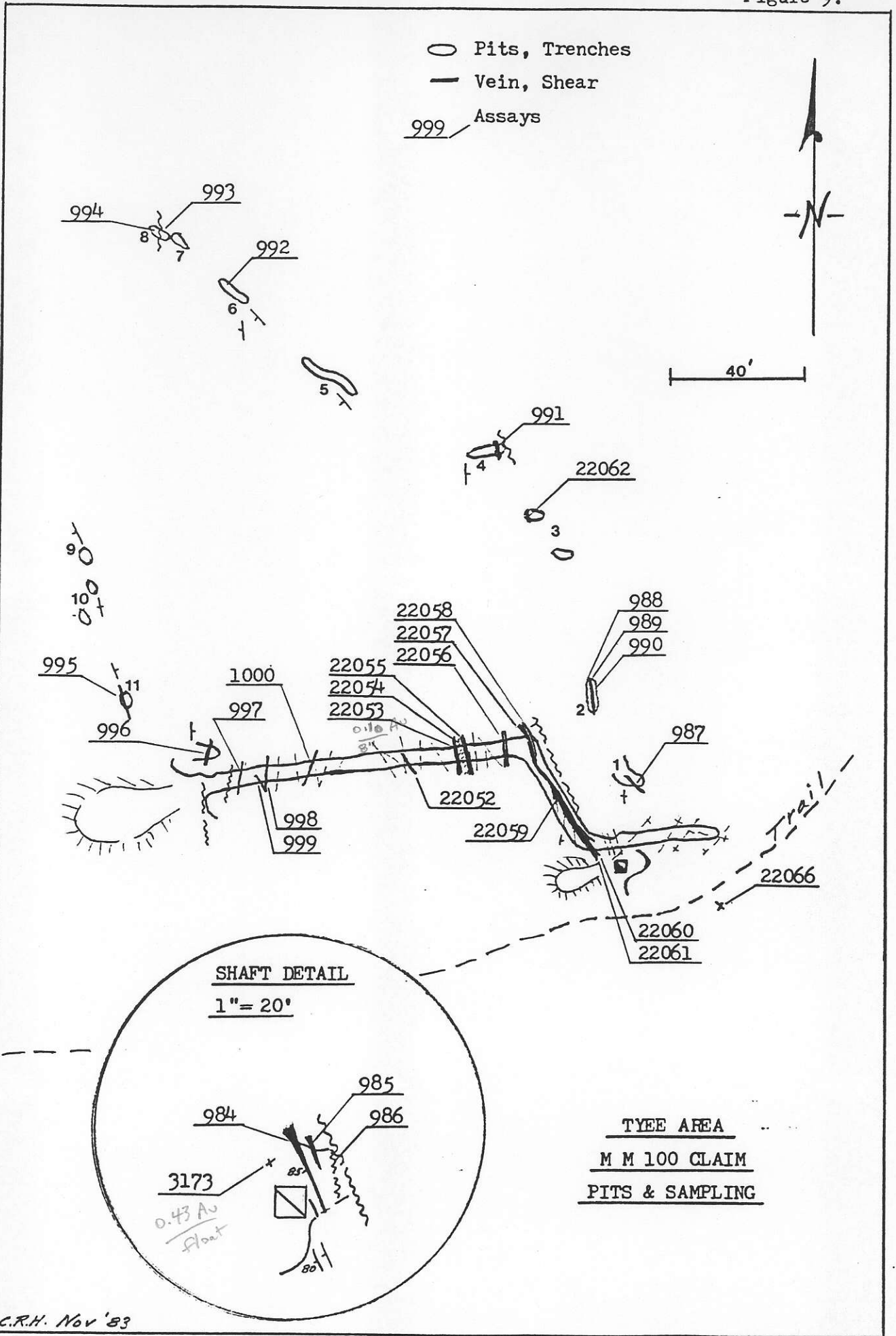


0 500 m

MISC. SAMPLING  
VICTORIA CREEK - EAST  
MM 100 CLAIM

CRH Nov '83

Figure 9.



C.R.H. Nov '83

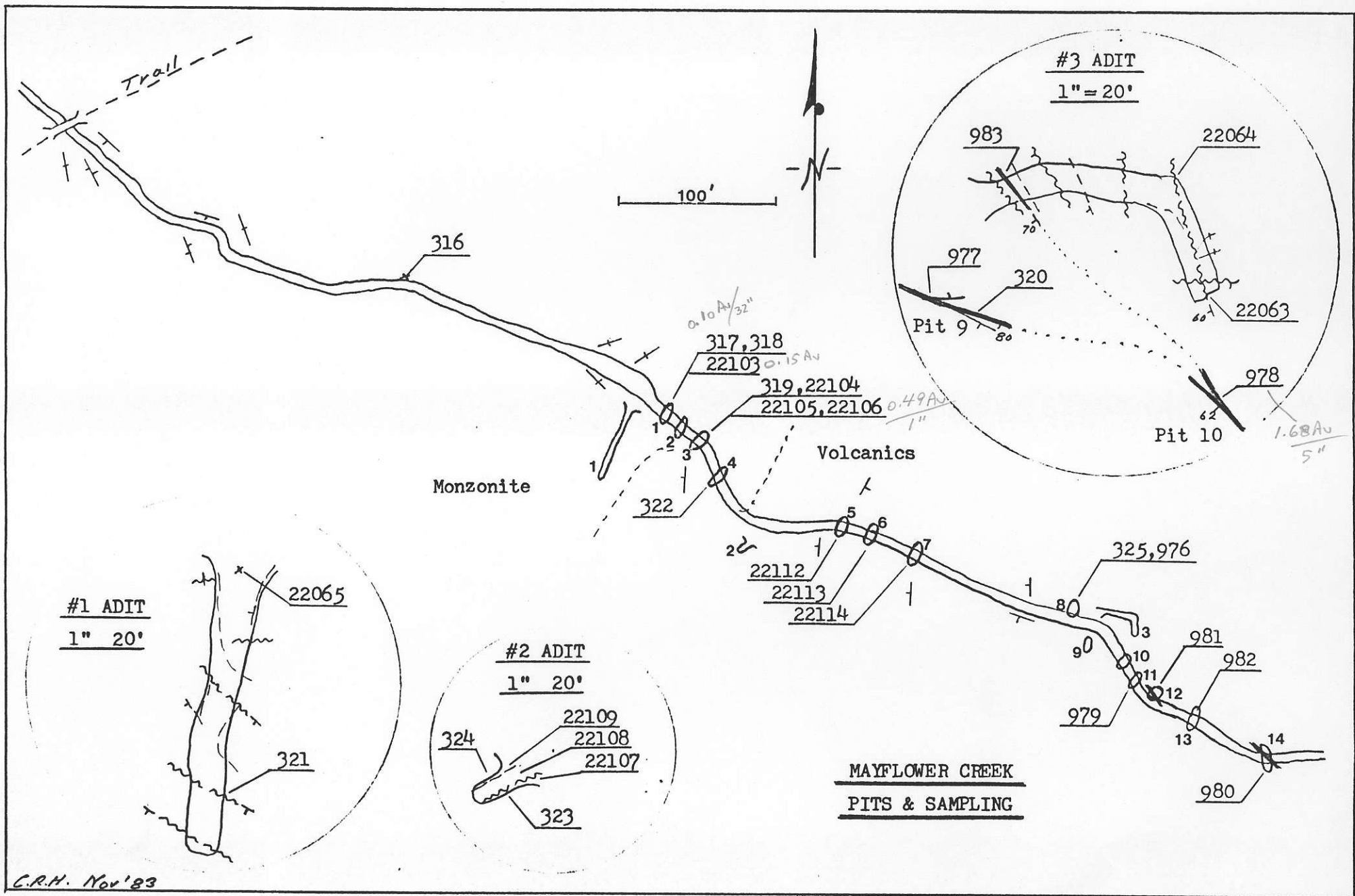


Figure 10.

C.R.H. Nov '83

<u>Sample</u>	<u>Comments</u>	<u>Au.</u> <u>oz/t.</u>	<u>Ag.</u> <u>oz/t.</u>	<u>Pb.%</u>	<u>Zn.%</u>	<u>Cu.%</u>
316	Mayflower Ck. 80.2 m E of trail crossing. Grab o'crop hornblende granite. specks py.	.002	.03			
317	Mayflower #1 pit. 2' 8" in creek. quartz stringers with py, cp, sph, ga.	.104	1.85	.08	2.50	.220
318	Mayflower #1 pit. aplite dyke 2.5 m S of creek.	.001	.04			
319	Mayflower #3 pit, 5" sheared aplite-granite' minor qtz stringers with py. strikes S of 1 & 2 pits.	.009	.20			
320	Mayflower #9 pit, 8" qtz shear with py, sphal, ga in silic sercitic volcanic	.030	.77	.11	1.82	
321	Adit #1, 0 - 30', 6" gouge with 1" qtz veinlet.	.001	.04			
322	Mayflower #4 pit, sheared granite, qtz & py	.009	.18			
323	Adit #2, 0 - 5', 12" rusty sheared volc.	.001	.06			
324	Adit #2, 0 - 5', 2" rusty shear, graphitic.	.002	.30			
325	Mayflower #8 pit, 1½" qtz-chlorite stringer in siliceous volcanic	.001	.13	.02	.06	
976	Mayflower #8 pit, irregular qtz in light volc. some py, sphal, ga.	.008	.52	.09	2.28	
977	Mayflower 9A pit, 1½" qtz shear 3' from #320	.039	9.15	.70	8.20	
978	Mayflower #10 pit, 5" qtz & breccia with py, sphal, ga intersecting qtz threads in silic volc. irregular.	1.680	19.20	.87	2.64	
979	Mayflower #11 pit, 7" qtz with irreg py, sphal, trace cp. Strike & dip to pit 10.	.020	2.61	.09	1.60	
980	Tyee Pit #14, 6" qtz vein, specks py.	.001	.12	.01	.02	
981	Tyee Pit #12, grab, silic-sercitic intrusive	.001	.06	.01	.02	
982	Tyee Pit #13, 6" qtz vein, specks py.	.002	.28			
983	Adit #3, 2" green qtz vein. N wall, 3' in	.002	.30			
984	Tyee Shaft, 7½" qtz lens, py, minor ga.	.039	3.15			

<u>SAMPLE</u>	<u>Comments</u>	<u>Au.</u> <u>oz/t.</u>	<u>Ag.</u> <u>oz/t.</u>	<u>Pb.%</u>	<u>Zn.%</u>	<u>Cu.%</u>
985	Tyee shaft, 5" sugary qtz lens, specks MoS	.008	.10			
986	Tyee shaft, 3" gouge	.009	.19			
987	Tyee pit #1, 3" massive py in qtz.	.059	14.50			
988	Tyee pit #2, 2'7" silic granite, py.	.027	.43			
989	Tyee pit #2, 1'10" qtz-cherty qtz, 3/8" py stringer	.013	2.00			
990	Tyee Pit #2, 2" silic qtz-py	.030	.32			
991	Tyee pit #4, 2'5" qtz-py shear	.010	.95			
992	Tyee pit #6, py in lightly chloritized intrusive	.009	.08			
993	Tyee pit #7, 3" silic zone, qtz-py	.007	.10			
994	Tyee pit #8, 3" silic zone	.011	.07			
995	Tyee pit #11, 5" qtz vein in granite, py	.009	.32			
996	Tyee adit, 0 + 5', 3" irreg qtz-py vein	.017	3.70			
997	Tyee adit, 0 + 12', 3" qtz-py vein, N wall.	.048	.90			
998	Tyee adit, 0 + 17'. 4" qtz stringers with py. S wall	.023	.42			
999	Tyee adit, Back & S wall, 0 + 15', 2" qtz-py with 1/16" mass py stringer.	.011	.20			
1000	Tyee adit, 0 - 30', N wall, 5" qtz-py	.020	.70			
2769	Creek, upper camp, loc'n 1. volc, minor cp & py	.001	.04			
2770	Creek, upper camp, loc'n 2, silic shear, minor sulph	.001	.05			
2771	Creek, upper camp, loc'n 2, qtz float, minor sulph	.001	.02			
2772	Rufus, Argyle #1 Cl. fract volc, minor py	.001	.02			
2773	Silver Ledge, dump grab, high sulph	.012	7.47	11.95	2.25	
2774	Silver Ledge, 4' brow of portal	.013	.19	.01	4.35	
2775	Silver Ledge, 6' volc S of adit	.006	.22	.01	.04	.064
3068	Rufus, Argyle #1 Cl. 6" rusty zone, above forks	.001	.02			
3069	Rufus, Argyle #1 Cl. 3' rusty zone, E fork	.002	.01			

<u>Sample</u>	<u>Description</u>	<u>Au.</u> <u>oz/t.</u>	<u>Ag.</u> <u>oz/t.</u>	<u>Pb.%</u>	<u>Zn.%</u>	<u>Cu.%</u>
3173	Tyee shaft, slump boulder, py	.439	* 4.92			
3174	Rufus, Argyle #1. W of forks, 6' rusty, py	.006	.13			
22052	Tyee adit, S wall 56', 5" qtz-py vein	.003	.34			
22053	" " , S wall 75', 8" silic, py & qtz vein.	.100	* 3.13			
22054	" " , S wall 75', 2'7" pyritic granite, qtz	.039	.19			
22055	" " , S wall 78', 6" qtz-py lens	.018	5.83			
22056	" " , N wall 91', 1'6" shear, qtz & py	.001	.18			
22057	" " , N wall 94', 1'2" silic.	.010	.56			
22058	" " , N wall 96', 1'9" py granite & gouge	.002	.12			
22059	" " , N wall back 21', 1'9" qtz-py lenses	.011	.24			
22060	" " , S wall 37' from N wall, 9" gouge	.019	.11			
22061	" " , 8" silic-py on HW of 22060	.008	.10			
22062	Tyee pit #3, granite with qtz-py	.047	2.18			
22063	Mayflower 3 adit, S face, 1" clay gouge, minor py	.032	1.32			
22064	" " , N face, 1" clay gouge, minor py	.021	.64			
22065	Mayflower 1 adit, portal brow, granite with py	.002	.09			
22066	Tyee shaft, 20' NE shaft on uphill side trail, grab	.002	.08			
22101	0'crop on base line 60 m S of line 2S, volc, py	.001	.04			
22102	0'crop W side small lake on 3S E. siltstone-chert	.001	.03			
22103	Mayflower #1 pit, silic shear in granite, py with minor ga, sph. 6' N of creek	.157	* 2.31	.13	.67	
22104	Mayflower #3 pit, 9" silic zone, minor py	.002	.12			
22105	Mayflower #3 pit, 11" rhyolite dyke.	.001	.04			

<u>Sample</u>	<u>Comments</u>	<u>Au.</u> <u>oz/t.</u>	<u>Ag.</u> <u>oz/t.</u>	<u>Pb.%</u>	<u>Zn.%</u>	<u>Cu.%</u>
22106	Mayflower #3 pit, 1" qtz-py stringer in blast rock.	.490*	2.83			
22107	#2 Adit, 6" rusty shear E side portal	.001	.07			
22108	#2 Adit, 3' sheared volc.	.002	.02			
22109	#2 Adit, 4" rusty shear, W side	.003	.10			
22110	Mayflower #5 pit, 2' silic zone, S side, varicolored alteration, little sulph.	.001	.03			
22111	Mayflower #5 pit, 2' silic zone N of above	.001	.01			
22112	Mayflower #5 pit, grab from blast, higher py.	.002	.01			
22113	Mayflower #6 pit, 8" qtz, some sulph	.018	.72			
22114	Mayflower #7 pit, 48" silic shear, little sulph.	.001	.01			



ASSESSMENT CREDIT APPLIED FOR

	<u>Rec. #</u>	<u>Due</u>	<u>Filed</u>	<u>Amt.\$</u>	<u>To</u>
<u>RUFUS GROUP</u>					
Buck 87 (16)	3171	Aug./83	Aug./83	1,600	Aug./84
Argyle Fr.	520	Mar./84	Nov./83	200	Mar./85
Comet 3	521	"	"	200	"
Comet 4	522	"	"	200	"
Veteran	523	"	"	200	"
Veteran 3	524	Mar./85	-	-	"
Rufus 1	525	Mar./84	Nov./83	400	Mar./86
Rufus 2	526	"	"	200	Mar./85
Rufus 4	527	"	"	200	"
Rufus 6	528	Mar./85	"	200	Mar./86
Baby Rufus	529	Mar./84	"	200	Mar./85
Wide Fract.	530	"	"	200	"
Silver Fr.	531	"	"	400	Mar./86
Long Fract.	532	"	"	200	Mar./85
Argyle 1-6	534/539	"	"	1,200	"
Duke Fr.	540	"	"	200	"
Rufus	2140	"	"	400	Mar./86
Rufus 3	2141	"	"	400	"
Rufus 5	2142	Mar./85	"	200	"
Slide Fract.	3317	Mar./84	"	400	"
				<u>\$ 7,200</u>	
<u>M M 100 GROUP</u>					
MM 1-6	3311/3316	Nov./83	Nov./83	7,800	Nov./90
Buck 709	3138	Jul./85	"	3,000	Jul./90
Buck 710	3170	Aug./85	"	9,600	Aug./89
Lake 16	3139	Jul./85	"	1,000	Jul./90
Lake 17	3140	"	"	1,000	"
MM 100	1594	Jul./88	"	10,800	Jul./91
				<u>\$ 33,200</u>	
				<u>\$ 40,400</u>	