

A GEOCHEMICAL REPORT

on the

49 CR. GROUP

APPROX. 9 KM SW OF NELSON, B.C.

49 CREEK AREA

NELSON MINING DIVISION

BRITISH COLUMBIA

MINERAL CLAIM MAP N.T.S. 82-F/6 WEST

LATITUDE: 49° 27' N
LONGITUDE: 117° 25' W

for

McMAHON RESOURCES LTD.

by

CHRIS SIDECO, P. ENG.
B.S. MINING ENGINEER

FIELD WORK: August 10, 1983 to November 21, 1984

REPORT: August 1, 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,653

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FIGURE 1	Property Map
FIGURE 2	49 Creek Group Soil Geochemistry Results

I. INTRODUCTION

The 49 Creek Group of Claims were acquired by McMahon Resources Ltd. for the purpose of locating the source of a 40 lb. boulder of gold ore brought out of the 49 Creek watershed by Jim McMahon in 1970.

Samples of this ore ran 20 oz. GOLD to the ton.

Due to heavy overburden and scarcity of outcrops, it was decided that a geochemical survey would be most beneficial.

On the basis of the encouraging results outlined on the Geochemical survey conducted in 1982 on these claims it was decided to extend the grid and instead of using the A Horizon soils for analysis as was done in 1982; the B Horizon soils were used.

2. PROPERTY AND OWNERSHIP

The 30 claim (49 Creek Group) are owned by McMahon Resources Ltd., 1423 Columbia Avenue, Trail, B.C.

The 49 Creek Group consist of:

JA #1 to 8	Record No. 2536 to 2543
PB #1 to 8	Record No. 2770 to 2777
PB #9 to 12	Record No. 2766 to 2769
PB #5 to 6	Record No. 3159 to 3160
JD #1 to 8	Record No. 2949 to 2956

3. LOCATION AND ACCESS

The 49 Creek Group of Claims are located along 49 Creek, with 24 claims on the SW side and 6 claims on the NE side.

Access to the NE Border of the claims group is 3.5 KM via the 49 Creek road from the Nelson Blewett Highway.

Access to the Geochemical Survey Area is 3.5 KM up the 49 Creek road, then approximately 420 meters (SW) downhill and across 49 creek.

4. PHYSIOGRAPHY

The 49 Creek Group straddles 49 creek with a portion of the claims on the SW side for a width of approx. 900 by 5484 meters long starting at an elevation of 760 meters.

The other portion of the claims lie on the NE side for a width of approx. 900 meters by 2700 long starting at an elevation of 800 meters.

Outcrops in the area are limited to steep ridges along some of the draws and creeks up the slope from 49 creek.

Timber covers most of the area with parts of the area, mainly the lower elevations covered with heavy underbrush.

5. GEOCHEMICAL SURVEY OF SOILS

5.1 Survey Method

The grid covers the NE area of Mineral claims JA #3; JA #5; JA #7; and PB #1 which lie on the SW side of 49 Creek.

Base line #1 runs 248 meters SW from a point 15 meters up A Creek from 49 Creek.

Cross Line 1B runs parallel with 49 Creek and follows Line 1 of the Humus soil sampling program carried out in 1982 and joins Line 2 at St. 36B.

Cross line 2B is at 28 meters and extends 575 meters NW from A Creek.

Cross line 3 is at 78 meters and extends 853 meters NW from A Creek.

Cross line 4 is at 128 meters and extends 1006 meters NW from A Creek.

Cross line 4A is at 188 meters and extends 513 meters NW from the Base line.

Cross line 5 is at 248 meters and extends 1011 meters NW from A Creek.

As there were only a few isolated encouraging values to the SE of A Creek in the 1982 Geochemical Survey. A Geochemical survey on a reconnaissance basis was implemented above and to the SE of the 1982 survey.

Base line #2 runs 192 meters SW from L-1 ST.8 of the 1982 Geochemical Survey (Humus soils).

Cross line 21 is at 92 meters and extends 681 meters NW to A Creek and 350 meters SE just 16 meters short of B Creek.

Cross line 22 is at 192 meters and extends 590 meters NW to A Creek and extends 1003 meters SE crossing B Creek at 475 meters.

Soil samples were generally taken at 25 meter intervals but as many small creeks and depressions were encountered the soil samples were taken from higher up the banks to avoid contamination from above.

Variations in distances between stations was recorded in the notebook.

In the latter part of the season extra sampling at closer spacings was done and recorded where high values were obtained in the previously sampled areas.

Stations were marked with flagging tape denoting the sample location.

5.2 Sampling Method

The soil samples were taken from the light brown weathering B Horizon just below the humus and root level of the A Horizon. The B Horizon is well developed in the area.

5.3 Assay Method

Assays were run for AU by the Kamloops Research and Assay Laboratory (assay report G880, G905, G964, G974, G1027, G1121).

Geochemical Analysis Procedure

Sample Preparation:

A. Silts and Sediments

Dry sample thoroughly and sieve through an 80 mesh stainless steel sieve. The oversize portion is discarded (unless we have been requested to save it) and the analyses are performed on the 80 mesh portion.

Fire Assay Re-agents

- 1. Litharge : C.P.
- 2. Sodium Carbonate : C.P.
- 3. Borax Glass : C.P.
- 4. Potassium Nitrate: C.P.
- 5. Flour : C.P.
- 6. Herman Inquarts : C.P.
- 7. SiO₂ : C.P.

Atomic Absorption Re-agents

For Ag, Cu, Pb, An, Co, Cd, Ni, Mn, Fe, Cr, Mo

- Nitric Acid : C.P. 70%
- Hydrochloric Acid: C.P. 37%
- Aluminum Chloride: C.P. + 99%

Fire Assay-A.A. Method for Gold

Weigh 29.17 gms of sample. Fuse with re-agents as above in proportions necessary to obtain a good melt with clean pour slag easily separated from lead button. (For silicates use flour; for sulphides use potassium nitrate.) Cupel lead bead and place in test tube. Dissolve bead in nitric acid then hydrochloric (3 times the amount of nitric). Bulk to 10 mls and read on atomic absorption spectrophotometer.

5.4 Results and Interpretation

General:

The data is from Kamloops Research and Assay Ltd. dated June 16, 1983 for the "A" horizon soil assays and Aug. 31, Sept 9, Oct 27, Nov.3, 1983 and Feb.21, 1984 for the "B" horizon assays. When the assays are "L5" (i.e. less than 5ppb) a value of 1 ppb has been assigned. Both the "A" and "B" horizons have log normally distributed values.

Histogram 1 "Gold/ppb/A" - representing the "A" horizon
A log normal distribution is indicated.

Descriptive Statistics for the "A" horizon.
The mean is 10 ppb with standard deviation of 30 ppb.
Anomalous values would be over $10 + 2(30) = 70$ ppb for the "A" horizon.

Histogram 2 "Gold/ppb/B" - representing the "B" horizon.
A log normal distribution is indicated.

Descriptive Statistics for the "B" horizon.
The mean is 42 ppb with a standard deviation of 83 ppb.
Anomalous values are considered to be greater than $42 + 2(83) = 208$ ppb for the "B" horizon.

HISTOGRAM

FREQUENCY

PERCENT

Frequency	Percent
126	70.0
105	54.0
84	36.0
63	18.0
21	2.0

1.0 10.0 20.0 30.0 40.0 50.0 60.0 70.0 80.0

G O L D P P E S

DESCRIPTIVE STATISTICS

VARIABLE: GOLD/PPE/B SAMPLE SIZE (N) = 349

SAMPLE STATISTICS:

MEAN = 42.5942 RANGE = 849

VARIANCE = 6928.7 MINIMUM = 1

STD. DEV. = 83.2388 MAXIMUM = 850

UNBIASED ESTIMATES OF POPULATION PARAMETERS:

VARIANCE = 6947.53 STD. DEV. = 83.3519

DATA DISTRIBUTION COEFFICIENTS:

SKEWNESS = 5.20676 KURTOSIS = 34.71

F R E Q U E N C Y D I S T R I B U T I O N

DISTRIBUTION OF VARIABLE: GOLD/FPE/A

INTERVAL	FREQUENCY	PERCENT	CUMULATIVE %
1.000 TO 9.999	126	72.0	72.0
10.000 TO 19.999	10	5.7	77.7
20.000 TO 29.999	22	12.6	90.3
30.000 TO 39.999	10	5.7	96.0
40.000 TO 49.999	2	1.1	97.1
50.000 TO 59.999	1	0.6	97.7
60.000 TO 69.999	1	0.6	98.3
70.000 TO 370.000	3	1.7	100.0

T O T A L	175	100.0	
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DESCRIPTIVE STATISTICS

VARIABLE: GOLD/FPE/A SAMPLE SIZE (N) = 175

SAMPLE STATISTICS:

MEAN	=	10.2914	RANGE	=	369
VARIANCE	=	928.95	MINIMUM	=	1
STD. DEV.	=	30.4787	MAXIMUM	=	370

UNBIASED ESTIMATES OF POPULATION PARAMETERS:

VARIANCE	=	934.289	STD. DEV.	=	30.5661
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DATA DISTRIBUTION COEFFICIENTS:

SKEWNESS	=	9.54655	KURTOSIS	=	108.136
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F R E Q U E N C Y D I S T R I B U T I O N

DISTRIBUTION OF VARIABLE: GOLD/PFB/E

INTERVAL	FREQUENCY	PERCENT	CUMULATIVE %
1.000 TO 107.099	338	91.6	91.6
107.100 TO 213.199	19	5.1	96.7
213.200 TO 319.299	2	0.5	97.3
319.300 TO 425.499	5	1.4	98.6
425.500 TO 531.599	3	0.8	99.5
531.600 TO 637.699	1	0.3	99.7
637.700 TO 743.799	0	0.0	99.7
743.800 TO 850.000	1	0.3	100.0
T O T A L	369	100.0	

Conclusion and Recommendations

Considering values over 208 PPb as anomalous, a few isolated areas where high concentrations of gold warrant additional evaluation are L-5 ST.17, L-4 ST.15 and L-2B ST.40.

Areas of definite ^{INTEREST} in which higher gold concentrations were found are:

1. From L-2 ST.36 in a westerly direction through L-3 ST.13 and ST.14 and upward to the area around L-4 ST.18 and ST.19.
2. The area SE and NW from L-3 at Base Line #1 and East to C-1.

The author feels that with the encouraging results obtained with the Geochemical Survey thus far, a Geophysical survey should be conducted over the area to the NW of A Creek, with the object of locating targets for trenching and assist in the geological mapping of the structure.

ANNEXE I

1. FIELD WORK August 10, 1983 to November 21, 1983

Personnel

J. Butula	160 Hrs. at \$15/per hr.	\$2400.00
B. McMahon	8 Hrs. at \$15/per hr	120.00
C. Sideco	2 days at \$200/day	400.00

TRUCK RENTAL AND GAS

16 days at \$47.75/per day	764.00
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Geochemistry:

Kamloops Research and Assay Laboratories Ltd.

Invoices 83-0622	File No. G-880	August 31-83	\$1045.20
" 83-0691	" G-905	September 16-83	609.70
" 83-0879	" G-964	October 27-83	247.90
" 83-0906	" G-974	November 3-83	134.00
" 83-0056	" G-1077	February 21-84	87.10
" 83-0362	" G-1121	July 16-84	341.70

A total of 368 soil sample were analysed at the cost of \$2465.60

FIELD SUPPLIES:

Flagging tape	\$ 46.01	
"	23.00	
Top-o-lite Thread	101.18	
Felt Pens	9.95	
	<u>\$180.14</u>	180.14

OFFICE WORK

Personnel

C. Sideco	5 days at \$200/day	\$1000.00
J. Butula	4 days at \$120/day	<u>480.00</u>
		\$7809.74

ANNEXE II

STATEMENT OF QUALIFICATIONS

I, CRIS SIDECO OF 3843 Dogwood Drive,, Trail, British Columbia, hereby certify that:

1. I am a graduate of the University of Phillipines with a degree in Mining Engineering.
2. I have been employed as a P. Engineer with Cominco from March 1964 to 1982 at the following locations (Sullivan) Kimberly; (H.B. Mine) Salmo; Pine Point and at Trail.
3. I am affiliated with:
 - A. Association of Professional Engineers of British Columbia
 - B. Canadian Institute of Mining and Metallurgical Engineers (CIMM)
4. I have personally participated in the field work and supervised all the completed work included in this report.

Respectfully submitted,


Cris Sideco

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V2C 5P5
PHONE: (604) 372-2784 — TELEX: 048-8320

GEOCHEMICAL LAB REPORT

Mr. Jack Butula
1423 Columbia Avenue
Trail, B.C.
V1R 1J7

DATE August 31, 1983

ANALYST _____

FILE NO. _____

FILE NO. G-880

KRAL NO.	IDENTIFICATION	ppb Au		KRAL No.	Identification	ppb Au	
1	L1N ST 6B	30		31	L4 ST 3 N	5	
2	6B1	20		32	4	35	
3	11B	5		33	5	5	
4	11B1	30		34	6	15	
5	20B	5		35	7	70	
6	20B1	5		36	8	100	
7	L2N ST26B	L5		37	9	50	
8	26B1	5		38	10	15	
9	27B	L5		39	11	30	
10	28B	L5		40	12	10	
11	29B	15		41	13	40	
12	L2ANST30B	10		42	14	10	
13	31B	20		43	15	5	
14	32B	10		44	16	5	
15	33B	10		45	17	70	
16	34B	10		46	18	30	
17	35B	45		47	19	455	
18	36B	585		48	20	55	
19	37B	55		49	21	10	
20	38B	15		50	22	25	
21	39B	25		51	23	50	
22	40B	210		52	24	10	
23	41B	15		53	25	20	
24	42B	20		54	26	120	
	43B	20		55	27	10	
	44B	10		56	28	20	
	45B	155		57	29	L5	
		200		58	30	55	
		10		59	31	5	
		40		60	32	20	

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FILE NO. G-880

PAGE 2

KRAL NO.	IDENTIFICATION	ppb Au			KRAL No.	Identification	ppm Au		
61	L4.5ST1	5			91	L5 ST 23	15		
62	L4.5 ST 2	25			92	25	5		
63	3	L5			93	26	20		
64	4	10			94	27	5		
65	5	105			95	28	130		
66	6	20			96	29	L5		
67	L 5 ST0	20			97	30	10		
68	1	45			98	31	L5		
69	2	5			99	32	L5		
70	3	5			100	33	30		
71	4	30			101	34	L5		
72	5	5			102	35	L5		
73	6	20			103	36	L5		
74	7	20			104	37	15		
75	8	10			105	38	20		
76	9	80			106	39	5		
77	10	10			107	40	5		
78	11	10			108	41	20		
79	12	5			109	L21NST24	50		
80	13	120			110	25	10		
81	13A	10			111	26	35		
82	14	20			112	27	40		
83	15	40			113	L22SP	20		
	16	30			114	L22ST 0	45		
	17	230			115	BL22ST1S	45		
	18	60			116	2S	35		
	19	105			117	3S	25		
	20	10			118	4S	40		
	21	5			119	5S	35		
	22	40			120	6S	40		

GEOCHEMICAL LAB REPORT

FILE NO. G-880

PAGE 3

KRAL NO.	IDENTIFICATION	ppb Au			KRAL No.	Identification	ppb Au		
121	BL22ST7S	45			151	L22NST18	L5		
122	8S	40			152	19	10		
123	9S	5			153	20	10		
124	10S	30			154	21	5		
125	11S	25			155	RCR 21	L5		
126	12S	15			156	22	L5		
127	13S	5							
128	14S	5				L means "Less than"			
129	15S	15				Au Method: -80 Mesh			
130	16S	10				Fire Assay			
131	17S	30				Atomic Absorption			
132	18S	30							
133	20S	10							
134	L22NST1	40							
135	2	L5							
136	3	5							
137	4	10							
138	5	30							
	6	5							
140	7	L5							
141	8	L5							
142	9	L5							
143	10	10							
	11	5							
	12	10							
	13	L5							
	14	L5							
	15	25							
	6	L5							
	7	5							

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GEOCHEMICAL LAB REPORT

Mr. Jack Butula
1423 Columbia Avenue
Trail, B.C.
V1R 1J7

DATE September 9, 1983

ANALYST _____

FILE NO. _____

FILE NO. G-905

KRAL NO.	IDENTIFICATION	ppb Au		KRAL No.	Identification	ppb Au	
1	L1 ST 23B	10		31	L21N ST 3	55	
2	24B	L5		32	4	10	
3	25B	L5		33	5	15	
4	26B	L5		34	6	20	
5	27B	20		35	7	35	
6	28B	15		36	8	15	
	29B	70		37	9	35	
8	L1 ST 30B	180		38	L21N ST 10	25	
9	31B	90		39	11	15	
10	32B	115		40	12	25	
11	33B	10		41	13	25	
12	34B	30		42	14	30	
13	35B	30		43	15	15	
14	L1-S-ST 26B	20		44	16	60	
15	L2N ST 20B	25		45	17	20	
16	21B	15		46	18	225	
17	22B	20		47	19	25	
18	L2A ST 25	10		48	L21N ST 20	20	
19	26	30		49	21	25	
	27	10		50	22	50	
21	28	15		51	23	35	
22	29	35		52	L21S ST 1	L5	
23	L3 ST 4S	15		53	2	5	
24	L3S CRSED ST 3A	25		54	3	5	
		320		55	4	10	
		15		56	5	L5	
		35		57	6	L5	
		L5		58	7	L5	
		L5		59	8	10	
		5		60	9	10	

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FILE NO. G-905

PAGE 2

KRAL NO.	IDENTIFICATION	ppb Au		KRAL No.	Identification	ppb Au	
61	L21S ST 10	5		91	ST C-1	380	
62	11	15					
63	12	30					
64	13	L5			L means "Less than"		
65	L22S ST 19	40					
66	21	20			Au Method: -80 Mesh		
67	22	10			Fire Assay		
					Atomic Absorption		
68	23	15					
69	24	25					
70	25	60					
71	26	15					
72	27	20					
73	28	10					
74	29	10					
75	L22S ST 30	30					
76	31	L5					
77	32	L5					
78	33	5					
79	34	5					
80	35	50					
81	L22S ST 36	10					
82	L21S ST 15A	5					
83	16A	15					
84	17A	10					
		20					
		25					
		350					
		10					
		35					
		5					

1220

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Mr. J. Butula
1423 Columbia Ave.
Trail, B.C.
V1R 1J7

DATE October 27, 1983

ANALYST _____

FILE NO. _____

FILE NO. G 964

KRAL NO.	IDENTIFICATION	ppb Au		KRAL #	Identification	ppb Au	
1	L2 AN ST 50B	25		31	L4A ST 22	20	
2	51B	20		32	23	20	
3	52B	45		33	24	10	
4	L3 ST A	180		34	25	L5	
5	ST 1A	350		35	26	5	
6	L3A ST 1S	30		36	27	35	
7	ST A	30		37	28	20	
8	ST 1A	10					
9	L4 ST 1A	35					
10	L4A ST 1	20					
11	ST 2	L5			L means "less than"		
12	ST 3	5					
13	ST 4	110			Au Method: -80 Mesh		
14	ST 5	10			Fire Assay		
15	ST 6	15			Atomic Absorption		
16	ST 7	20					
17	ST 8	20					
18	ST 9	25					
19	ST 10	L5					
20	ST 11	L5					
21	ST 12	L5					
22	ST 13	15					
23	ST 14	10					
24	ST 15	450					
	ST 16	30					
	ST 17	60					
	ST 18	20					
	ST 19	10					
	ST 20	15					
	ST 21	15					

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GEOCHEMICAL LAB REPORT

Mr. J. Butula
1423 Columbia Ave.
Trail, B.C.
V1R 1J7

DATE November 3, 1983

ANALYST _____

FILE NO. G 974

FILE NO. _____

KRAL NO.	IDENTIFICATION	ppb Au							
1	L2 AN ST 46B	125							
2	ST 47B	15							
3	ST 48B	175							
4	ST 49B	75							
5	ST 53B	L5							
6	ST 54B	15							
	ST 102	25							
8	ST 103	25							
9	ST 104	L5							
10	ST 105	155							
11	ST 106	850							
12	ST 201	130							
13	ST 202	125							
14	ST 203	15							
15	ST 204	350							
16	ST 205	10							
17	ST 301	5							
18	ST 302	5							
19	ST 303	L5							
20	ST 304	L5							
	L means "less than"								
	Au Method: -80 Mesh								
	Fire Assay								
	Atomic Absorption								

2000

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GEOCHEMICAL LAB REPORT

McMahon Resources Ltd.
1423 Columbia Ave.,
Trail, B.C.
V1R 1J7

DATE July 16, 1984

ANALYST _____

FILE NO. _____ Attn: Mr. J. Butula

FILE NO. G 1121

KRAL NO.	IDENTIFICATION		ppb Au		KRAL #	Identification	ppb Au		
1	L1S	Sta B	30		31	ST 12	15		
2	L3S	ST 0	25		32	ST 13	510		
3		ST 2A	135		33	ST 14	200		
4	L1N	ST 1BN	20		34	ST 15	95		
5		ST 1B	30		35	ST 16	35		
6		ST 2B	90		36	ST 17	35		
7		ST 3B	20		37	ST 18	15		
8		ST 4B	35		38	ST 19	5		
9		ST 5B	55		39	ST 20	140		
10		ST 7B	50		40	ST 21	25		
11		ST 8B	55		41	ST 22	25		
12		ST 9B	55		42	ST 23	10		
13		ST10B	35		43	ST 24	105		
14		ST12B	35		44	ST 25	25		
15		ST13B	35		45	ST 26	35		
16		ST14B	30		46	ST 27	35		
17		ST15B	20		47	ST 28	10		
18		ST17B	75		48	ST 29	60		
19		ST18B	80		49	ST 30	45		
20		ST19B	60		50	ST 31	50		
21		ST21B	15		51	L21S ST 14	20		
22		ST22B	30						
23	L2	ST 1BN	65						
24	L3N	ST 1	115						
25		ST 2	105						
26		ST 3	40						
27		ST 4	35						
28		ST 9S	35						
29		ST10S	15						
30		ST11S	40						

Au Method: -80 mesh
Fire assay
Atomic absorption



