



ANALYTICAL SERVICES REQUEST

Submitter W J McMillan Date submitted Feb 1/84 Date started Feb 2/84
 Number of samples 5 Date required Feb 7/84 Date reported Feb 7/84
 Special instructions Highmont has been getting high carbon content in their Mo circuit - looking for cadmium
 Project _____ Area _____ Priority _____ Chief Analyst W J McMillan
 Air photo _____ Card 1 of 1 PRINT CLEARLY (use dark pen or pencil)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
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SPECTROGRAPHIC REPORT

1 Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	2 Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	3 Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	Si ___ Al ___ Mg ___ Ca ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___
4 Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	5 Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	6 Si ___ Al ___ Mg ___ Ca ___ Fe ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___	Si ___ Al ___ Mg ___ Ca ___ Pb ___ Cu ___ Zn ___ Mn ___ Ag ___ V ___ Ti ___ Ni ___ Co ___ Na ___ K ___ W ___

X-RAY DIFFRACTION REPORT AND COMMENTS

Sample # (Lab.)	(Field)	Description of x-ray sample	Mineralogy	wt. % non-carbonate C
2P396	1	Dark, greenish grey fracture lining.	Quartz > Albite > Calcite > Kaolinite > Montmorillonite & Sericite > Illite	0.03 ± 0.02
2P397	2	Black to greenish grey fracture lining.	Quartz > Albite > Calcite > Kaolinite > Sericite + Illite > trace Montmorillonite + Molybdenite ± manganese oxide (?)	0.02 ± 0.02
2P398	3	Dark grey fracture lining with molybdenite.	Molybdenite > Quartz > Calcite > Sericite > Montmorillonite & Kaolinite > trace Bornite (?) ± Albite ± Ussmannite (Mo ₃ O ₇ · nH ₂ O?).	0.03 ± 0.02
2P399	4	Dark grey fracture lining with bluish tint.	Quartz > Albite > Kaolinite & Montmorillonite > Calcite > Sericite > trace Molybdenite ± manganese oxide (?) / Ussmannite (Mo ₃ O ₇ · nH ₂ O?).	0.01 ± 0.02
2P400	5	Dark grey fracture lining with brownish tint.	Kaolinite ± chlorite > Calcite & Montmorillonite > Albite > Quartz > Hematite + Goethite > trace Sericite.	0.01 ± 0.02

In summary, the submitted suite of samples does not seem to contain any significant amount of non-carbonate carbon. The traces of carbon detected could have resulted from remnants of calcite that survived the dilute acid attack prior to carbon analysis or from interference of the abundant sulfides present (Sample #3). Note that with the exception of sample #4, all samples contain an excess of 10 wt. % calcite.

KEY		ANALYTICAL METHOD	
UMFC	ultramafic	AA	ATOMIC ABSORPTION
ANDS	andesite	AH	HYDRIDE GENERATION
BSLT	basalt	FA	FIRE ASSAY
CRBN	carbonatite	ES	EMMISSION SPEC
DCIT	dacite	XR	X-RAY FLUORESCENCE
DORT	diorite	WC	WET CHEMICAL
GBBR	gabbro	CL	COLORIMETRIC
GRNT	granite	CV	COLD VAPOUR
GRDR	granodiorite		
GRNS	greenstone		
MNZN	monzonite		
OBSD	obsidian		
PNLT	phonolite		
QZPP	quartz porphyry		
RYLT	rhyolite		
SRPN	serpentinite		
SNKN	shonkinite		
SYNT	syenite		
TRCT	trachyte		
TUFF	tuff		
AMPB	amphibolite		
CLCC	calc-silicate		
GNSS	gneiss		
MRBL	marble		
PLLT	phyllite		
SCST	schist		
HRFL	hornfels		
SKRN	skarn		
GOUG	gouge		
ARGL	argillite		
CHRT	chert		
COAL	coal		
DLMT	dolomite		
LMSN	limestone		
MARL	marl		
QRTZ	quartzite		
SNDS	sandstone		
SHLE	shale		
SLSN	siltstone		
MRLZ	mineralization		
MVSP	massive sulphide		
DISS	disseminated		
SCKK	stockwork		
VEIN	vein		
ALRZ	alteration		

COLUMNS 28-31

04	Proterozoic	12	Cambrian	21	Mississippian	34	Jurassic
05	Helikian	14	Ordovician	22	Pennsylvanian	36	Cretaceous
06	Hadrynian	16	Silurian	24	Permian	40	Cenozoic
10	Paleozoic	18	Devonian	30	Mesozoic	42	Tertiary
11	Prot.-Paleozoic	20	Carboniferous	32	Triassic	44	Quaternary
						50	Unknown

COLUMNS 36-43

Mineral Inventory Number or property name

COLUMNS 44-80

Comments

COLUMN 34

SAMPLE TYPE	
1	Single grab sample
2	Channel/chip
3	Composite sample
4	Drill core
5	Talus or transported
6	Soil
7	Silt
8	Other

COLUMN 35

% SULPHIDE	
0	<0.5
1	0.5-1
2	1-10
3	10-50
4	>50

SAMPLE PREPARATION

W	TUNGSTEN CARBIDE
C	CERAMIC
S	STEEL