

Table II Gold Analyses, Spi Lake Area

Sample Number	Gold p.p.b. (ounces/ton in brackets)	Rock Type	Setting	Northing	Easting
1	* L5	Banded, foliate, chlorite, garnet, magnetite exhalite	120 feet thick main zone oxide exhalite extension of upper unit 4 into adjacent mafic flow sequence	6879400N	635400E
2	L5	Sugary chert	10 feet thick mixed facies interflow exhalite, probable extension of upper unit 4 into adjacent mafic flow sequence	6879900N	635700E
3	50,25	Pyritic massive sugary chert	Banded sulfide chert exhalite in zone up to 10 ft. thick; associated with #4, near base of unit 2.	6878400N	638600E
"	5	" "	"	"	"
"	"	Pyritic laminated sugary chert	"	"	"
4	30	Pyrrhotite rich sugary chert	Banded sulfide, chert exhalite in zone up to 15' thick; near base of unit 2	6878700N	638700E
"	L5	Massive sugary chert	"	"	"
5	10,L5	Banded magnetite and sugary chert plus some disseminated pyrite	Extension of samples #3 & #4. Main exhalite zone up to 150 feet thick, banded chert, pyrrhotite magnetite and chlorite, near base of unit 2.	6878500N	639300E
6	10	Banded, boudinaged and foliate chert plus heavy sulfide	Sulfide facies banded exhalite, (maximum 50' thick) of main zone; extension of upper unit 2 into adjacent mafic flow sequence	6880500N	640600E
"	5	Brecciated, banded pyrite and chert	"	"	"
7	20	Laminated sugary chert and magnetite	One foot thick banded interflow oxide exhalite in mafic flow sequence, unit 1 (?)	6878200N	647000E
8	25,10	Laminated sugary chert plus magnetite and pyrite	Minimum 1 1/2 foot thick banded mixed chert magnetite, pyrite exhalite in adjacent flow sequence just under extension of Unit 2	6879700N	648000E
9	5	Banded magnetite and chlorite, trace pyrite	Two or three foot thick oxide exhalite band near base of unit 2	6869000N	647300E
10	L5,L5	Pyritic felsic volcanic	Gossan in felsic pyroclastics of unit 2	6870100N	649700E
11	5	Sugary jasper, with disseminated pyrite veined by quartz	Zero to 10 foot thick oxide exhalite zone, boudinaged probable extension of main zone in unit 4	6866800N	652400E
"	L5	Sugary banded magnetite and chert	"	"	"
12	L5	Pyritic felsic schist	Gossan on felsic breccia of unit 4, narrow zones	6890500N	653800E
"	5	Massive carbonate with trace pyrite	Discontinuous zones in felsic breccias of unit 4	"	"
13	L5	Massive siliceous carbonate, trace pyrite	"Larder Lake" type carbonate exhalite several tens of feet thick associated with fine grained sediments near top of unit 4	6880800N	346300E
14	3500(.112) 10750(.344) 16750(.536)	Coarse grained siliceous carbonate with disseminated arsenopyrite cut by irregular quartz veins.	In "Larder Lake" type carbonate exhalite up to 100 feet thick associated with clastic sediments near top (?) of unit 4	6875800N	346700E
15	L5	Banded, brecciated chert and magnetite	Several foot thick oxide facies exhalite band in felsic volcanics of unit 4 May be extension of main zone	6876100N	348200E
16	L5	Banded chert and tuff	"Larder Lake" type carbonate exhalite at least 75 feet thick near top of unit 4	6878600N	348000E
"	"	Massive grey-green siliceous carbonate	"	"	"
"	25	Foliated grey siliceous carbonate, trace pyrite	"	"	"
"	L5	Massive grey-green carbonate vague quartz veins, some disseminated pyrite	"	"	"
"	"	Foliate, chloritic carbonate	"	"	"
"	5,L5	Beige siliceous carbonate	"	"	"
"	20	Black shale with disseminated pyrite	"	"	"
17	85,5	Silicate rich, massive iron sulfide; plus chalcopryrite and sphalerite	Polymetallic sulfide facies of the main exhalite zone within unit 4	6885100N	349500E
"	55	Silicate rich massive sulfide sphalerite and pyrite with some chalcopryrite	"	"	"
"	30	Massive pyrite, some chalcopryrite	"	"	"
"	20,25	Galena rich massive pyrite, some sphalerite	(This specimen also contains 80 p.p.m. silver)	"	"
18	L5,L5	Siliceous siderite with disseminated pyrite	Carbonate facies exhalite of main zone in unit 4	6881400N	355000E
"	L5	Banded, chert and siderite	"	"	"
19	10	Massive intermediate lava with spheroidal aggregates of pyrite	Along strike extension of #20	6881600N	363800E
20	370	Massive iron sulfide with sugary chert	Interflow sulfide exhalite and veins up to several feet thick in flow sequence of unit 5	6881500N	364200E
"	1430(.046) 80	Massive pyrite with lesser sphalerite and chalcopryrite	"	"	"
"	910(.029)	Felsic volcanic veined and spotted with pyrrhotite and chalcopryrite	"	"	"
21	20	Silicates plus coarse pyrite and trace of chalcopryrite	Large gossan on pyritic mafic tuffs interbedded with gabbroic flow sequence of unit 3 and near granite contact	6877800N	379600E
22	5	Silicates plus some pyrite	Pyritic, tuffaceous interflow material in mafic low sequence, Unit 3 in contact zone of granite	6877200N	381100E
23	240,245	Massive iron sulfides plus iron silicates and quartz	Interflow sulfide exhalite, less than 10 ft thick in large xenolith in agmatite near unit 4 or 8	6873600N	383000E
24	5	Laminated magnetite	Probable main zone exhalite near top of felsic volcanics in unit 4 (or 6?)	6876000N	384300E
25	20	Banded chert calc.-silicate, magnetite	High-grade metamorphosed extension of main exhalite zone in unit 4 (?) in septum between major lobes of Kaminak Batholith	6883400N	397100E
26	220,220	Massive pyrite with trace chalcopryrite	Massive sulfide exhalite in possible extension of upper unit 6	6911800N	376000E
"	110	Massive quartz with spheroidal aggregates of pyrite	"	"	"
27	5	Pyritic intermediate volcanic	Light gossan near top of felsic unit 4	6905300N	376600E
28	L5 to 20	Mixed facies, banded exhalite; locally rich in iron sulfides trace chalcopryrite	Main exhalite zone up to 150 feet thick in unit 4. Prominently banded with chert magnetite, pyrite and chlorite	6904300N to 6903500N	376300E to 378100E
29	15	Banded magnetite, chert, and trace pyrite	Mixed facies exhalite from main zone at the top of unit 4	6902600N	385400E
30	55,15	Massive pyrrhotite	Spot outcrop of sulfide facies within main zone of exhalite near top of unit 4	6902300N	386600E
31	5	Banded, brecciated chert/limestone	Carbonate phase of the main exhalite zone near the top of unit 4	69002200N	387400E
32	25	Brecciated bands of laminated pyrite in a siliceous carbonate matrix	Sulfide rich phase of the main exhalite zone near the top of unit 4	6902100N	388100E
33	80	Cherty tuffs with disseminated pyrite and minor chalcopryrite	Gossan in intermediate, predominantly flow sequence of unit 5	6904600N	387800E
34	35	Laminated chert fragments in coarse massive pyrite matrix	Sulfide rich phase of main exhalite zone at top of unit 4	6903500N	389200E
"	10	Laminated pyrite, chert carbonate and silicates	Sulfide rich phase of carbonate exhalite main zone at the top of unit 4	"	"
"	15	Laminated siderite and chert with minor pyrite	Main exhalite zone, carbonate facies at top of unit 4. Overlain by carbonate rich pillow lava	"	"
35	20	Pyritic, siliceous massive siderite	Main exhalite zone, carbonate facies, at top of unit 4. Mainly well banded	6903000N	389900E
36	L5,15	Banded chert/magnetite	Oxide exhalite from main zone at top of unit 4	6902200N	391200E
37	5	Banded carbonate and chert	Thin carbonate exhalite zone in felsic breccia near base of unit 6	6906200N	393600E
38	5	Banded chert/siderite exhalite; no visible sulfide	One ft. thick exhalite zone in felsic tuffs of unit 6	6904900N	396600E
39	260, 295	Pyritic, siliceous, massive carbonate	Carbonate exhalite fragment in rhyolite breccias toward the top of unit 6	6907100N	399300E
40	15	Massive fine grained carbonate	Carbonate exhalite fragment in rhyolite breccia towards the top of unit 6	6906200N	400300E
41	10	Massive, fine grained carbonate and sericite schist	Carbonate exhalite fragments in rhyolite breccia towards the top of unit 6	6905500N	401900E
42	20	Rhyolite breccia with trace pyrite	"Mill Rock" towards top of unit 6	6913600N	406000E
43	L5	Massive pyrite lenses in sugary quartz	50 foot thick gossan zone in felsic volcanics of unit 6. Possibly sulfide exhalite	6914400N	410400E
44	15	Sugary quartz with pyrite laminae	Possible 2 ft. thick pod of exhalite in rhyolite pyroclastics of unit 6	6914100N	411500E
45	L5	Siliceous calcium carbonate plus silicates	Tuffaceous limestone exhalite, probable main zone near top of unit 6	6912300N	424400E
46	275,290	Pyritic felsic volcanic tuff and breccia	Near top of unit 6	6912100N	425400E
47	5	Pyritic interflow tuff	Intermediate tuff about 20 feet thick in mafic flow sequence immediately above unit 6	6911300N	42600E

* L means less than

OPEN FILE
146
MAY 1973
GEOLOGICAL SURVEY
OTTAWA

OLIVIA
GEOLOGICAL
SURVEY
OTTAWA