Division of Geological & Geophysical Surveys

PUBLIC-DATA FILE 93-17

LAND SELECTION UNIT 17 (NULATO QUADRANGLE): REFERENCES, DGGS SAMPLE LOCATIONS, GEOCHEMICAL AND MAJOR OXIDE DATA

by

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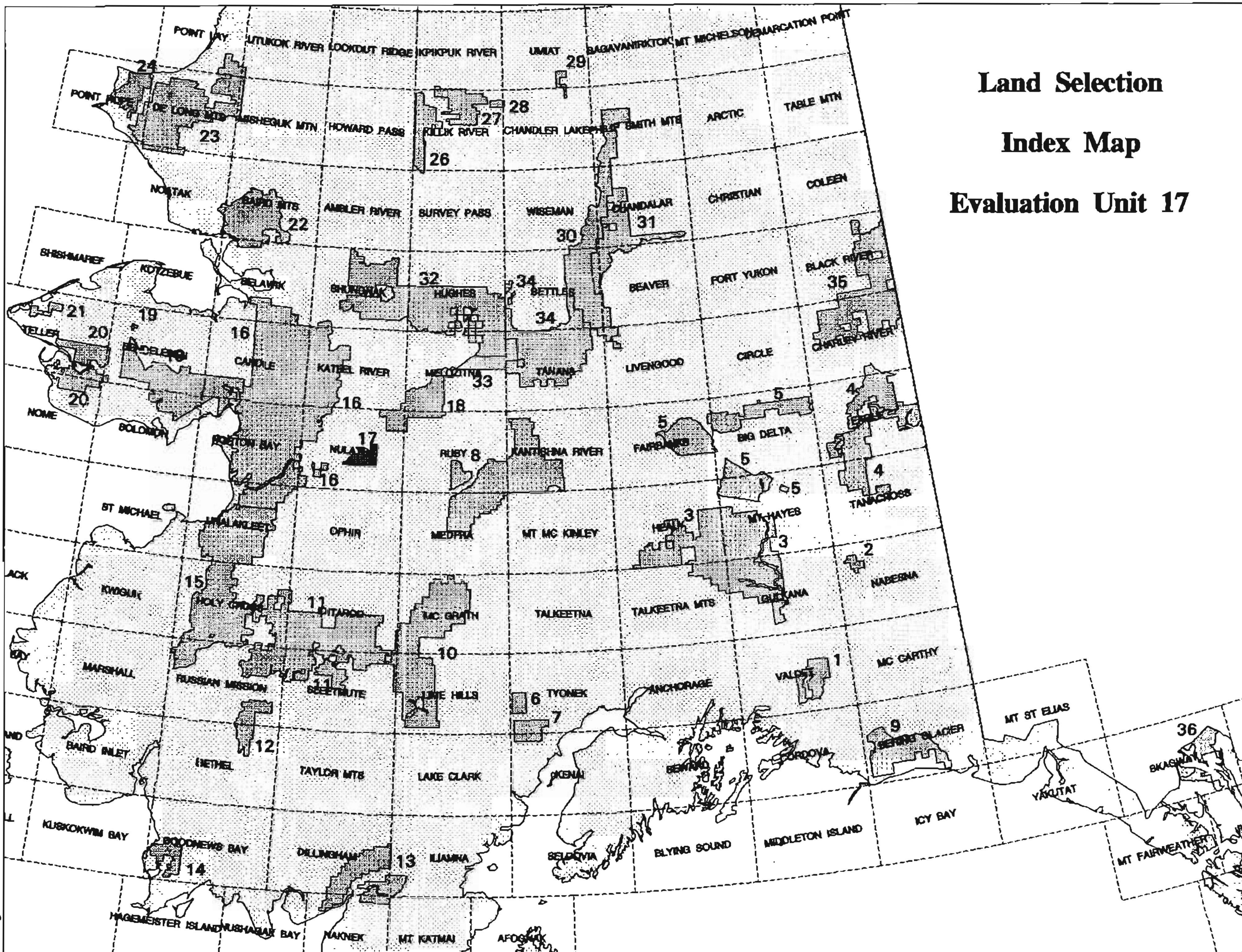
Land Selection

Index Map

Evaluation Unit 17



LAND SELECTION UNIT 17 (NULATO QUADRANGLE): REFERENCES, DGGS SAMPLE LOCATIONS, GEOCHEMICAL & MAJOR OXIDE DATA

Introduction:

Land Selection Unit 17 encompasses 198,000 acres in the Kaiyuh Hills south of the Yukon River, in the Nulato quadrangle. The authors spent several days of helicopter-supported field work in Unit 17 in 1991, in support of DGGS mineral resource evaluation of lands available for selection as State land. The analytical results from samples collected by DGGS are presented in this Public-data File, and the references used in the evaluation process are listed. The analytical data are also available on disk, by quadrangle, as part of the DGGS Public-Data File 93-37 series. NURE data were also used in the evaluative process, and maps of DGGS' statistical treatment of the NURE data will be available by quadrangle as part of the Public-Data File 93-38 series.

Samples collected by DGGS are briefly described in the first table. In the tables of trace element geochemical data, the asterisks in the left-hand column indicate the analytical procedure that we consider to be more reliable for those elements that were analyzed by more than one method. Negative numbers denote values below the analytical detection limit. Major oxide compositions are plotted in Figure 2 according to the method of Streckeisen and LeMaitre (1979). CIPW norms were calculated using the UAF/PETCAL program, with oxide values normalized on an anhydrous basis.

The discriminant scores presented on the major oxide table in this report (Au Discrim.) are a reflection of how similar the sampled rocks from Unit 17 are to other systems that formed gold deposits around the world. The score is based on the discriminant functions developed by Newberry and Burns (1989) and discussed in detail by Burns and others (1991). The discriminant functions statistically compare the composition of an unaltered Unit 17 plutonic rock to major-oxide compositions of unaltered plutonic rocks associated with gold deposits worldwide.

The discriminant score is a number between 0 and 100; a score of 100 indicates that the composition of the sample is indistinguishable from those of gold-associated plutons; a score of 0 indicates the opposite. The score is <u>not</u> directly proportional to the amount of gold present and does <u>not</u> indicate that there is gold at the sample site, but it is a good estimate of whether the sample belongs to a plutonic <u>system</u> that had the capability of depositing some gold.

Some important limitations that must be considered in the interpretation of the scores are:
1) Only analyses from relatively unaltered rocks can be used.
2) Rocks from porphyry Cu-Mo deposits (because of alteration) and aplites will both typically have a low discriminant score, even though they may be from systems that are related to gold.
3) Discriminant scores are not given for alkalic (nepheline-normative) rocks, but these rocks may be related to gold.
4) A small percentage of plutonic rocks may appear to be related to gold systems when they are not.
5) Since gold deposits appear to be concentrated in the country rock just above a pluton or in the uppermost part of a pluton, and the areal extent of plutonic exposure generally increases with depth of a given pluton, a large, deeply eroded pluton would be less likely to host gold even if the pluton had a highly favorable score.

Summary of Geology:

The northwestern part of the area is underlain by lower Paleozoic and/or Precambrian metamorphic rocks, in fault contact with Triassic basalt and chert to the southeast. The Perseverance polymetallic vein deposit is just outside the selection area, in the metamorphic sequence. The area adjacent to the deposit is considered to have high favorability for polymetallic vein resources, with a broadly distributed moderate favorability throughout the metamorphic sequence for additional resources. The metamorphic sequence is also generally favorable for volcanogenic massive sulfide and copper-molybdenum porphyry deposits, but is rated lower due to the lack of specific known deposits in the area.

The gold placer deposit in Camp Creek is derived from metamorphic sequence rocks; the source of gold is not known. Its presence, however, enhances the potential for endowment in the area, and placer favorability ranges from moderate to high. Platinum group metals, derived from ultramafic rocks discovered in the metamorphic sequence, locally add potential endowment to placer deposits. We consider the ultramafic rocks themselves to have only low potential for platinum group metal or chromium lode deposits.

The basalt and chert sequence was considered for basalt-hosted copper deposit potential, and no evidence was found to indicate more than a background favorability for copper.

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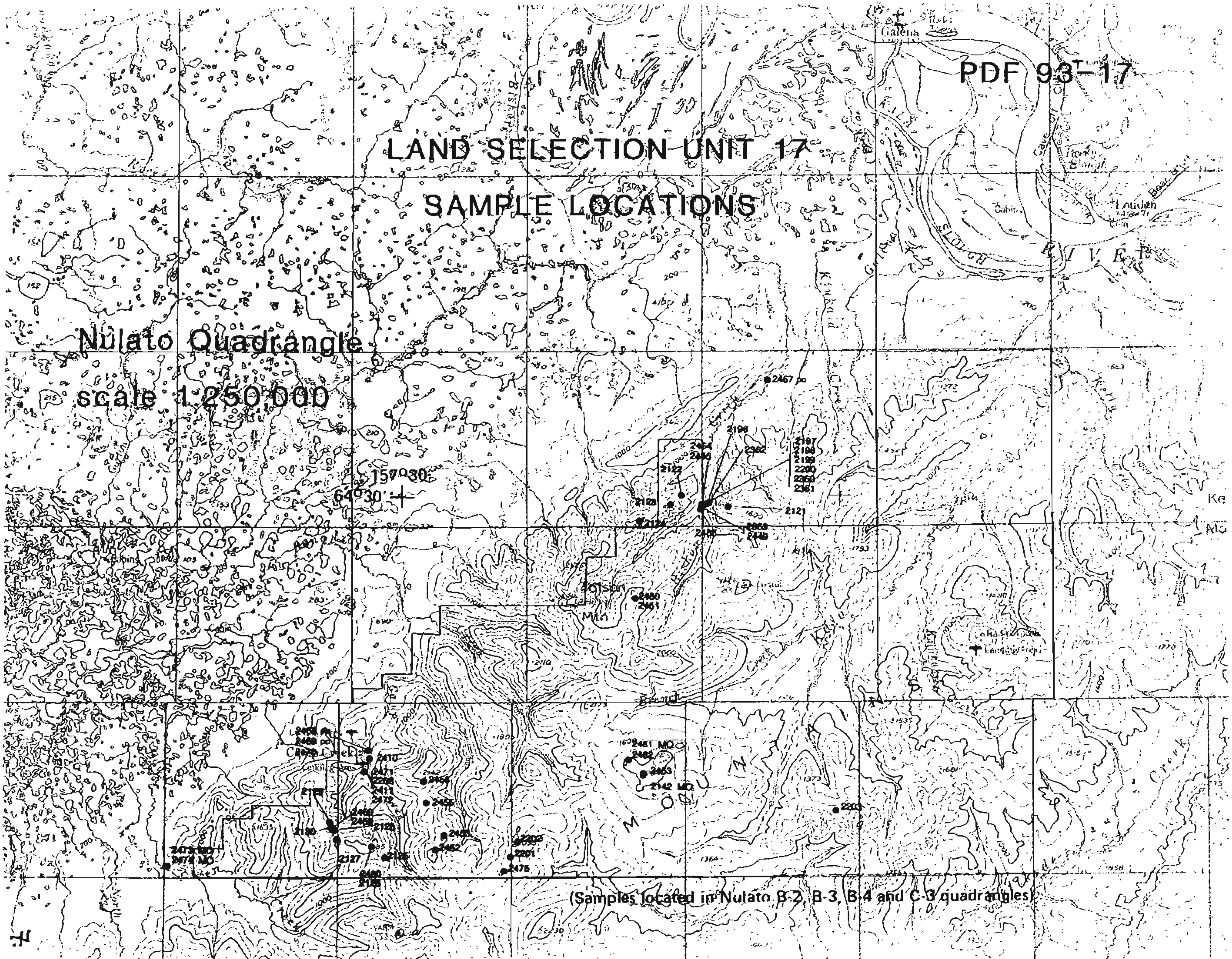

PDF 93-17
LAND SELECTION UNIT 17
SAMPLE LOCATIONS
Nulato Quadrangle
scale 1:250,000
(Samples located in Nulato B-2, B-3, B-4 and C-3 quadrangles)
157°30'
64°30'
Galena
Kinkaid Creek
Kelly
RIVER
SLOUGH
Louden
Cabin
Johnson Mtn
MOUNTAIN
2467
2196
2197
2198
2199
2200
2360
2361
2362
2464
2465
2122
2123
2124
2121
2448
2363
2449
2450
2451
2461 MO
2462
2453
2142 MO
2203
2202
2201
2475
2455
2452
2454
2458
2457
2456
2410
2471
2268
2411
2472
2460
2459
2120
2128
2127
2125
2480
2473 MO
2474 MO

LAND SELECTION UNIT 17 SAMPLES

QUAD	STATION NO.	GEOCHEM	MAJOR OXIDE	PAN CON	ROCK TYPE	LATITUDE			LONGITUDE		
						Degree	Minute	Second	Degree	Minute	Second
NUL B-3	91DNS94	2464			Folded quartz vein w/sulfosalt	64	29	45.899	157	9	28.209
NUL B-3	91DNS94	2465			Bleached chlorite albite schist in trench	64	29	45.899	157	9	28.209
NUL B-3	91DNS95	2466			Turquoise-colored fracture fill in quartzite	64	29	37.725	157	9	33.751
NUL B-3	91DNS93	2197			Schist within 25cm above sulfide vein, chip channel	64	29	49.965	157	8	59.968
NUL B-3	91DNS93	2198			Chlorite qtz sch, below sulfide vein, 35cm chip channel	64	29	49.965	157	8	59.968
NUL B-3	91DNS93	2199			Schist from footwall, channel 35-85cm below vein	64	29	49.965	157	8	59.968
NUL B-3	91DNS93	2200			Sulfide vein, 33cm channel	64	29	49.965	157	8	59.968
NUL B-3	91DNS93	2360			Graphitic schist from upper adit	64	29	49.965	157	8	59.968
NUL B-3	91DNS93	2361			5cm qtz vein in footwall, 25cm chip channel	64	29	49.965	157	8	59.968
NUL B-3	91DNS92	2196			Perseverence ore	64	29	47.309	157	9	7.6908
NUL B-3	91DNS106	2203			Basalt	64	20	38.331	157	0	20.743
NUL B-3	91DNS104	2202			Brecciated, quartzose, limonitic rock	64	19	46.402	157	22	9.2977
NUL B-3	91DNS103	2201			Punky quartz layers in qtz schist	64	19	20.061	157	22	38.807
NUL B-3	91DNS102	2475			Metabasite, cc veinlets w/py	64	18	55.289	157	23	3.7603
NUL B-3	91WG5	2124			Lt. green carbonate 'skarn' w/qtz veins	64	29	17.272	157	13	45.942
NUL B-3	91WG4	2123			Fe-stained silicified marble	64	29	46.445	157	11	37.595
NUL B-3	91WG2	2121			Banded, light gray quartzite	64	29	41.647	157	7	41.709
NUL B-3	91JK307		2412		Basalt	64	21	43.602	157	13	33.633
NUL B-3	91MW29	2363			Limonitic veinlets in white qtz-musc. schist	64	29	40.621	157	9	30.197
NUL B-3	91MW29	2449			Micaceous quartzite w/tourmaline	64	29	40.621	157	9	30.197
NUL B-3	91MW27	2362			Graphitic schist w/qtz. veins, Cataclasite?	64	29	49.787	157	8	58.938
NUL B-3	91MW30	2450			Quartzite	64	27	1.8437	157	14	4.4854
NUL B-3	91MW30	2451			Chloritoid(?) schist w/ankerite	64	27	1.8437	157	14	4.4854
NUL B-3	91MW38		2461		Metabasite	64	22	11.398	157	14	33.016
NUL B-3	91MW38	2462			Quartz vein chips	64	22	11.398	157	14	33.016
NUL B-3	91MW39	2463			Qtz. chips from phyllite, fault contact w/metabasite	64	21	46.764	157	13	31.536
NUL B-3	91MW34	2456			Qtz-ankerite veins in chl-mica schist	64	21	33.569	157	28	34.037
NUL B-3	91MW32	2453			Quartz vein w/ankerite(?)	64	19	58.697	157	27	10.545
NUL B-3	91MW31	2452			Limonite-stained laminations in quartzite	64	19	33.165	157	27	44.564
NUL B-3	2455	2455			Qtz chips from chl-mu-qtz schist	64	20	55.631	157	28	23.521
NUL B-4	91DNS99			2468	Camp Ck placer concentrate	64	22	29.865	157	32	20.68
NUL B-4	91DNS99			2469	Camp Ck placer concentrate	64	22	29.865	157	32	20.68
NUL B-4	91DNS99	2470			Chl-qtz schist w/qtz veins, minor sulfide	64	22	29.865	157	32	20.68
NUL B-4	91DNS100	2208			Duplicate of 2471, serpentinized ultramafic	64	21	51.022	157	32	38.351
NUL B-4	91DNS100	2471			Duplicate of 2208, serpentinized ultramafic	64	21	51.022	157	32	38.351
NUL B-4	91DNS100	2472			Serpentinite	64	21	51.022	157	32	38.351
NUL B-4	91DNS101		2473		V. coarse-gr. biotite granite	64	19	4.483	157	46	7.2873
NUL B-4	91DNS101		2474		Fine-gr. dike in coarse granite	64	19	4.483	157	46	7.2873
NUL B-4	91MW36	2460			Qtz-carbonate vein in ultramafic	64	20	10.163	157	34	51.849
NUL B-4	91MW36	2459			Fibrous actinolite veins in ultramafic	64	20	10.163	157	34	51.849
NUL B-4	91JK302	2410			Quartz in fault breccia	64	22	14.998	157	32	17.398
NUL B-4	91JK304	2411			Ultramafic from prospect pit	64	21	51.328	157	32	38.098
NUL B-4	91WG15	2129			Qtz. vein, 10cm thick, in qtz. schist w/ankerite(?)	64	20	21.891	157	34	59.715
NUL B-4	91WG16	2130			Ultramafic w/magnetite	64	20	12.649	157	34	53.703
NUL B-4	91WG14	2128			Fe-stained ultramafic, serpentinized	64	20	7.3544	157	34	42.107
NUL B-4	91WG13	2127			Foliated, fine-gr. meta-diorite w/py on fractures	64	19	51.734	157	34	29.689
NUL B-4	91WG10	2126			Duplicate of 2480, foliated greenstone	64	19	38.635	157	32	8.7041
NUL B-4	91WG10	2480			Duplicate of 2126, foliated greenstone	64	19	38.635	157	32	8.7041
NUL B-4	91WG9	2125			Qtz. schist w/folded qtz. veinlets	64	19	18.976	157	31	12.616
NUL C-3	91DNS98			2467	Draining SE side of terrace	64	33	30.089	157	4	55.476
NUL C-3	91WG3	2122			Medium-gray laminated limestone	64	30	3.0074	157	10	51.653

LAND SELECTION UNIT 17 ROCK GEOCHEMICAL ANALYSES (Analyses by Bondar-Clegg)

	METHOD	UNIT	L.LIMIT	U.LIMIT	2121	2122	2123	2124	2125	2126	2127	2128
Ag*	ICP	PPM	0.5	50	-0.5	0.8	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Ag	INAA	PPM	5	100	-5	-5	-5	-5	-5	-5	-5	-5
Al	ICP	PCT	0.01	10	0.98	0.08	1.16	3.07	4.17	5.94	5.31	1.8
As	ICP	PPM	5	2000	-5	12	11	15	23	-5	6	-5
As*	INAA	PPM	1	10000	9	1	3	2	14	-1	14	13
Au	INAA	PPB	5	10000	-5	-5	-5	-5	9	38	-5	-5
B	DCP	PPM	10	10000	-9	-10	-9	79	-9	-9	-9	-9
Ba	ICP	PPM	5	2000	97	22	102	57	1547	252	121	15
Ba*	INAA	PPM	100	20000	-100	-100	130	-100	1700	290	-100	-100
Bi	AA	PPM	1	2000	-1	-1	-1	-1	-1	-1	-1	-1
Br	INAA	PPM	1	1000	-1	-1	-1	-1	-1	-1	-1	-1
Ca	ICP	PCT	0.01	10	0.08	10	10	4.73	0.16	5.38	4.59	0.35
Cd*	ICP	PPM	2	2000	-2	-2	-2	-2	-2	-2	-2	-2
Cd	INAA	PPM	10	2000	-10	-10	-10	-10	-10	-10	-10	-10
Ce	INAA	PPM	10	10000	-10	-10	18	75	11	42	34	-10
Co*	ICP	PPM	1	20000	3	4	5	9	-1	30	23	56
Co	INAA	PPM	10	20000	-10	-10	-10	15	-10	51	41	68
Cr*	ICP	PPM	2	20000	22	4	30	29	59	21	55	412
Cr**	INAA	PPM	50	20000	-50	-50	53	55	84	-50	84	1400
Cs	INAA	PPM	1	10000	-1	-1	-1	-1	5	2	1	-1
Cu	ICP	PPM	1	20000	27	7	37	24	54	268	45	15
Eu	INAA	PPM	2	2000	-2	-2	-2	-2	-2	-2	-2	-2
Fe	ICP	PCT	0.01	10	0.47	0.18	1.25	1.51	2.74	8.68	6.93	4.8
Fe*	INAA	PCT	0.5	10	0.7	-0.5	1.8	1.9	3.3	10	9.1	6.1
Ga	ICP	PPM	10	2000	-10	-10	-10	-10	-10	-10	-10	-10
Hf	INAA	PPM	2	2000	-2	-2	-2	-2	3	5	3	-2
Ir	INAA	PPB	100	1000	-100	-100	-100	-100	-100	-100	-100	-100
K	ICP	PCT	0.01	10	0.36	0.04	0.55	0.57	1.08	0.18	0.19	0.05
La	ICP	PPM	5	2000	-5	-5	8	23	8	9	9	-5
La*	INAA	PPM	5	10000	-5	-5	9	33	8	15	15	-5
Li	ICP	PPM	2	2000	8	-2	5	25	32	114	32	-2
Lu	INAA	PPM	0.5	2000	-0.5	-0.5	-0.5	0.8	-0.5	0.8	0.6	-0.5
Mg	ICP	PCT	0.01	10	0.14	9.87	8.82	0.81	0.74	2.31	2.32	10
Mn	ICP	PPM	5	20000	312	177	108	780	556	1674	1091	940
Mo*	ICP	PPM	1	20000	-1	1	-1	-1	2	2	-1	-1
Mo	INAA	PPM	2	20000	-2	-2	-2	-2	4	3	4	-2
Na*	ICP	PCT	0.01	10	0.07	0.03	0.11	1.05	0.35	2.99	3.06	0.15
Na*	INAA	PCT	0.05	10	-0.05	0.11	0.15	1.2	0.37	3.3	3.4	0.18
Nb	ICP	PPM	5	2000	8	13	21	13	12	26	20	-5
Ni*	ICP	PPM	1	20000	11	4	11	24	27	40	35	878
Ni	INAA	PPM	20	20000	-20	-20	-20	-20	-20	-20	60	890
Pb	AA	PPM	2	10000	3	6	7	8	16	7	6	4
Pd	DCP	PPB	1	5000	-9	-9	-9	-9	-9	-9	-9	4
Pt	DCP	PPB	5	5000	-9	-9	-9	-9	-9	-9	-9	11
Rb	INAA	PPM	10	10000	28	-10	25	25	97	-10	-10	-10
Sb	ICP	PPM	5	2000	-5	-5	8	-5	-5	-5	-5	-5
Sb*	INAA	PPM	0.2	5000	0.9	1.1	1.1	1	2.1	4.2	1.6	1.7
Sc	INAA	PPM	0.5	2000	3.5	-0.5	5.9	20	11	43	36	17
Se	INAA	PPM	10	2000	-10	-10	-10	-10	-10	-10	-10	-10
Sm	INAA	PPM	0.2	2000	0.5	0.3	2	6	0.9	7	5.6	0.6
Sn*	ICP	PPM	20	2000	-20	26	26	-20	-20	-20	-20	26
Sn	INAA	PPM	200	20000	-200	-200	-200	-200	-200	-200	-200	-200
Sr	ICP	PPM	1	2000	8	93	67	98	64	223	231	7
Ta	ICP	PPM	5	2000	44	43	110	11	95	112	72	144
Ta*	INAA	PPM	1	2000	-1	-1	-1	-1	-1	1	1	-1
Tb	INAA	PPM	1	2000	-1	-1	-1	-1	-1	-1	1	-1
Te	AA	PPM	0.2	100	-9	-0.2	-9	-0.2	-9	-9	-9	-9
Te	ICP	PPM	25	2000	-25	-25	-25	-25	-25	-25	-25	-25
Te	INAA	PPM	20	2000	-20	-20	-20	-20	-20	-20	-20	-20
Th	INAA	PPM	0.5	2000	1.5	-0.5	1.6	10	6.4	1.6	2.7	-0.5
Ti	ICP	PCT	0.01	10	0.05	-0.01	0.12	0.23	0.26	1.4	1.02	0.19
U	INAA	PPM	0.5	2000	-0.5	4.6	2.8	1.2	2.2	0.5	0.8	-0.5
V	ICP	PPM	2	2000	17	31	62	91	126	403	311	121
W	ICP	PPM	20	2000	-20	-20	-20	-20	-20	-20	-20	-20
W*	INAA	PPM	2	2000	-2	-2	-2	-2	-2	-2	-2	-2
Y	ICP	PPM	5	2000	-5	-5	10	14	7	25	19	-5
Yb	INAA	PPM	5	2000	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	ICP	PPM	2	20000	11	6	59	31	84	99	77	44
Zn	INAA	PPM	200	20000	-200	-200	-200	-200	-200	250	-200	-200
Zr	ICP	PPM	5	2000	44	7	54	12	51	-5	-5	-5
Zr*	INAA	PPM	500	10000	-500	-500	-500	-500	-500	-500	-500	-500
Ag	FA	OPT	0.02	9166								
Pb	AA-LL	PCT	0.01									

LAND SELECTION UNIT 17 ROCK GEOCHEMICAL ANALYSES (Analyses by Bondar-Clegg)

	METHOD	2129	2130	2196	2197	2198	2199	2200	2201	2202	2203	2208
Ag*	ICP	-0.5	-0.5	50	26.1	50	2.3	50	7.4	1.5	-0.5	-0.5
Ag	INAA	-5	-5	100	26	100	-5	100	6	-5	-5	-5
Al	ICP	0.92	0.24	0.04	4.15	5.4	3.92	0.3	0.59	0.46	5.15	0.81
As	ICP	-5	17	137	28	17	-5	69	-5	-5	-5	12
As*	INAA	-1	8	-9	27	24	10	-9	14	3	3	16
Au	INAA	-5	-5	-1100	-5	-5	-5	-1000	-5	-5	-5	-5
B	DCP	-9	-9	-9	-9	147	49	-10	-9	-9	-9	-9
Ba	ICP	38	10	-5	693	463	644	10	54	202	166	36
Ba*	INAA	-100	-100	-3200	1100	880	930	-3000	-100	240	160	-100
Bi	AA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Br	INAA	-1	-1	-9	8	10	1	-9	3	-1	1	-1
Ca	ICP	0.04	0.02	0.12	0.16	1.08	2.16	0.24	0.02	0.01	6.36	0.09
Cd*	ICP	-2	-2	234.8	10.4	7	-2	24.9	-2	-2	-2	-2
Cd	INAA	-10	-10	-1400	-10	-10	-10	-1300	-10	-10	-10	-10
Ce	INAA	-10	-10	-400	70	53	81	-370	-10	-10	-10	-10
Co*	ICP	2	83	2	4	7	8	3	7	5	39	93
Co	INAA	-10	110	-61	-10	-10	-10	-61	-10	-10	50	110
Cr*	ICP	26	562	8	17	15	12	11	22	17	163	698
Cr**	INAA	-50	3100	-1200	-50	-50	53	-1100	-50	-50	440	3000
Cs	INAA	-1	-1	-11	3	4	3	-11	-1	-1	-1	-1
Cu	ICP	6	35	6515	76	26	20	99	32	180	72	22
Eu	INAA	-2	-2	-34	-2	-2	-2	-34	-2	-2	-2	-2
Fe	ICP	0.51	4.43	2.61	3.61	2.29	2.07	6.33	1.93	4.71	6.69	5.69
Fe*	INAA	0.6	5.3	-4	4.5	2.5	2.6	-9	2.2	5.3	6.9	6.7
Ga	ICP	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Hf	INAA	-2	-2	-37	4	-2	4	-35	-2	-2	-2	-2
Ir	INAA	-100	-100	-9	-100	-100	-100	-9	-100	-100	-100	-100
K	ICP	0.03	0.05	0.01	0.73	0.96	0.86	0.14	0.12	0.06	0.1	0.05
La	ICP	-5	-5	-5	23	27	23	-5	-5	-5	-5	-5
La*	INAA	-5	-5	-210	33	32	36	-110	-5	-5	-5	-5
Li	ICP	4	-2	-2	14	14	21	-2	-2	4	9	-2
Lu	INAA	-0.5	-0.5	-29	1	0.9	0.9	-12	-0.5	-0.5	-0.5	-0.5
Mg	ICP	0.25	10	0.22	0.59	0.75	0.94	0.31	0.11	0.09	3.77	10
Mn	ICP	157	601	4698	5140	3189	1030	7357	324	349	1196	843
Mo*	ICP	-1	-1	22	6	3	2	-1	1	-1	-1	-1
Mo	INAA	-2	-2	-210	3	3	-2	-190	2	-2	-2	-2
Na*	ICP	0.57	0.11	-0.01	0.09	0.13	0.12	0.02	0.06	0.07	1.65	0.12
Na*	INAA	0.58	0.17	-0.05	0.08	0.09	0.1	-0.05	0.08	0.07	1.8	0.17
Nb	ICP	-5	-5	11	7	11	10	-5	-5	-5	10	-5
Ni*	ICP	11	1352	3	9	6	9	3	18	5	105	1445
Ni	INAA	-20	1400	-410	29	-20	-20	-400	22	-20	120	1500
Pb	AA	5	26	10000	4371	10000	566	10000	1339	345	241	52
Pd	DCP	-9	3	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	DCP	-9	-5	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	INAA	-10	-10	-400	170	150	120	-400	14	-10	-10	-10
Sb	ICP	-5	9	2000	184	215	29	2000	81	16	22	-5
Sb*	INAA	0.5	5.6	5000	326	352	34.7	5000	110	17	14	7.5
Sc	INAA	0.9	5.3	-4.4	6.4	5.7	9.1	-4.4	2.1	3.2	43	9.1
Se	INAA	-10	-10	-240	-10	-10	-10	-230	-10	-10	-10	-10
Sm	INAA	0.3	-0.2	-5	6.2	5.3	6.2	-4.5	1	0.8	2.6	0.7
Sn*	ICP	-20	-20	204	-20	-20	-20	150	-20	-20	-20	-20
Sn	INAA	-200	-200	-7700	-200	-200	-200	-7300	-200	-200	-200	-200
Sr	ICP	6	1	10	9	20	55	10	13	93	132	5
Ta	ICP	27	156	232	51	72	81	90	-5	24	93	129
Ta*	INAA	-1	-1	-9	-1	-1	-1	-9	-1	-1	-1	-1
Tb	INAA	-1	-1	-6	1	-1	-1	-5	-1	-1	-1	-1
Te	AA	-9	-9	-9	-9	-0.2	3.7	-0.2	-9	-9	-9	-9
Te	ICP	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	INAA	-20	-20	-940	-20	-20	-20	-880	-20	-20	-20	-20
Th	INAA	-0.5	-0.5	-20	16	16	18	-18	1.1	-0.5	-0.5	-0.5
Ti	ICP	0.01	-0.01	-0.01	0.07	0.08	0.12	-0.01	0.02	0.01	0.49	0.02
U	INAA	-0.5	-0.5	-65	5.2	3.8	4.8	-61	1.7	1.5	-0.5	-0.5
V	ICP	12	17	-2	23	25	48	7	62	9	221	35
W	ICP	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	INAA	-2	-2	-9	-2	-2	-2	-9	-2	-2	-2	-2
Y	ICP	-5	-5	-5	14	16	15	-5	-5	9	15	-5
Yb	INAA	-5	-5	-120	12	10	-5	-110	-5	-5	-5	-5
Zn*	ICP	17	40	17736	1288	859	203	660	63	39	70	57
Zn	INAA	-200	-200	-14000	1200	860	-200	-2100	-200	-200	-200	-200
Zr	ICP	-5	-5	-5	83	92	89	7	-5	-5	17	-5
Zr*	INAA	-500	-500	-8600	-500	-500	-500	-8200	-500	-500	-500	-500
Ag	FA			115.13		5.29		82.1				
Pb	AA-LL			64		3.59		57.5				

LAND SELECTION UNIT 17 ROCK GEOCHEMICAL ANALYSES (Analyses by Bondar-Clegg)

	METHOD	2360	2361	2362	2363	2410	2411	2449	2450	2451	2452	2453
Ag*	ICP	10.2	0.7	4.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Ag	INAA	15	-5	6	-5	-5	-5	-5	-5	-5	-5	-5
Al	ICP	2.79	3.27	1.17	0.83	0.11	2.37	1.39	1.78	2.53	0.4	0.43
As	ICP	-5	45	13	29	-5	-5	-5	-5	-5	-5	-5
As*	INAA	25	25	19	16	-1	26	-1	13	-1	9	1
Au	INAA	-5	-5	-5	-5	-5	-5	-5	7	-5	-5	-5
B	DCP	58	51	-9	-9	-9	12	-9	41	25	-9	-9
Ba	ICP	685	160	155	47	36	34	359	387	471	59	53
Ba*	INAA	910	240	180	-100	-100	-100	440	460	540	-100	-100
Bi	AA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Br	INAA	4	4	4	-1	-1	-1	-1	-1	-1	-1	-1
Ca	ICP	9.4	6.53	0.43	2.68	0.15	0.13	0.14	0.02	8.68	0.06	10
Cd*	ICP	78.2	-2	7.7	-2	-2	-2	-2	-2	-2	-2	-2
Cd	INAA	96	-10	13	-10	-10	-10	-10	-10	-10	-10	-10
Ce	INAA	33	30	-10	19	-10	13	16	28	28	-10	-10
Co*	ICP	7	15	5	7	2	119	4	-1	30	-1	6
Co	INAA	-10	10	-10	-10	-10	140	-10	-10	36	-10	-10
Cr*	ICP	80	28	49	178	21	589	37	76	255	22	19
Cr**	INAA	65	-50	-50	280	-50	2300	-50	110	410	-50	-50
Cs	INAA	3	2	-1	-1	-1	-1	2	1	4	-1	-1
Cu	ICP	35	157	34	40	5	38	15	14	832	19	17
Eu	INAA	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Fe	ICP	10	5.29	4.59	1.25	0.08	7.66	1.19	1.22	6.07	0.63	1.24
Fe*	INAA	10	6.6	4.8	1.4	-0.5	8.8	1.4	1.5	7.5	0.7	1.5
Ga	ICP	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Hf	INAA	-2	-2	-2	-2	-2	-2	-2	-2	2	-2	-2
Ir	INAA	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	ICP	0.51	0.66	0.23	0.05	0.05	0.08	0.36	0.42	0.64	0.1	0.14
La	ICP	15	11	-5	12	-5	-5	6	12	7	-5	-5
La*	INAA	19	16	-5	6	-5	5	6	13	10	-5	-5
Li	ICP	8	21	4	5	-2	3	3	5	19	-2	3
Lu	INAA	-0.5	0.8	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Mg	ICP	1.28	2.05	0.24	0.94	0.1	10	0.19	0.15	2.38	0.14	3.35
Mn	ICP	20000	2839	10670	563	31	1165	58	67	2172	67	1297
Mo*	ICP	14	2	-1	33	7	5	-1	2	-1	2	-1
Mo	INAA	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Na*	ICP	0.16	0.09	0.02	-0.01	-0.01	0.17	0.06	0.25	0.54	0.04	0.03
Na*	INAA	0.1	0.08	-0.05	-0.05	-0.05	0.16	0.06	0.28	0.54	-0.05	0.07
Nb	ICP	9	7	-5	-5	-5	-5	-5	-5	16	-5	11
Ni*	ICP	26	17	15	59	4	1437	15	17	79	4	4
Ni	INAA	-20	-20	-20	51	-20	1400	-20	-20	61	-20	-20
Pb	AA	6269	57	1591	33	20	36	17	22	16	8	33
Pd	DCP	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Pt	DCP	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Rb	INAA	71	76	27	-10	-10	-10	35	23	29	-10	-10
Sb	ICP	68	35	85	-5	-5	-5	-5	-5	-5	-5	-5
Sb*	INAA	94.1	75.7	105	2.9	1.7	5	2.6	3.1	3.8	1.3	1.3
Sc	INAA	9	13	2.4	3.3	-0.5	15	3.9	7.2	26	1.5	3.3
Se	INAA	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	INAA	3.4	3.9	0.8	1.6	0.2	1.2	1.6	2.4	4.5	0.3	0.7
Sn*	ICP	41	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Sn	INAA	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	ICP	69	77	40	81	6	6	25	23	91	5	222
Ta	ICP	66	109	56	-5	42	222	102	19	71	49	146
Ta*	INAA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Tb	INAA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Te	AA	-0.2	-0.2	-9	-9	-9	-0.2	-9	-0.2	-0.2	-9	-9
Te	ICP	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	INAA	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	INAA	4.3	5.2	-0.5	1.5	-0.5	-0.5	1.7	1.3	1.1	-0.5	-0.5
Ti	ICP	0.13	0.21	0.02	0.07	-0.01	0.13	0.06	0.32	0.53	0.02	0.07
U	INAA	2.4	2.7	0.7	0.9	-0.5	0.7	1	3.1	-0.5	-0.5	0.9
V	ICP	94	156	17	41	4	84	61	90	153	8	49
W	ICP	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	INAA	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Y	ICP	20	18	6	8	-5	7	-5	5	10	-5	5
Yb	INAA	-5	6	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	ICP	11360	377	1346	28	15	86	13	24	62	25	3
Zn	INAA	12000	470	1300	-200	-200	-200	-200	-200	-200	-200	-200
Zr	ICP	22	25	-5	9	-5	-5	13	17	-5	-5	-5
Zr*	INAA	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
Ag	FA											
Pb	AA-LL											

LAND SELECTION UNIT 17 ROCK GEOCHEMICAL ANALYSES (Analyses by Bondar-Clegg)

	METHOD	2455	2456	2459	2460	2462	2463	2464	2465	2466	2470	2471
Ag*	ICP	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Ag	INAA	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Al	ICP	0.86	2.25	0.95	1.02	0.83	5.06	1.79	2.31	3.37	3.52	1.19
As	ICP	9	-5	16	5	-5	-5	7	-5	39	-5	-5
As*	INAA	8	2	19	-1	-1	2	11	9	73	21	14
Au	INAA	-5	-5	-5	-5	-5	62	-5	-5	-5	-5	-5
B	DCP	-9	-9	-9	-9	-9	-9	-9	32	-9	-9	-9
Ba	ICP	401	79	26	24	26	229	231	617	66	486	41
Ba*	INAA	430	-100	-100	-100	-100	220	290	800	-100	640	-100
Bi	AA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Br	INAA	-1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1
Ca	ICP	0.18	0.34	0.25	10	0.06	0.44	0.48	1.83	9.92	2.46	0.11
Cd*	ICP	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Cd	INAA	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Ce	INAA	-10	13	-10	-10	-10	34	47	50	-10	59	-10
Co*	ICP	2	6	75	9	-1	64	5	3	16	25	112
Co	INAA	-10	-10	83	-10	-10	85	-10	-10	18	30	140
Cr*	ICP	29	26	350	61	16	85	16	45	955	117	923
Cr**	INAA	-50	-50	2000	92	-50	110	-50	64	2100	150	2600
Cs	INAA	-1	-1	-1	-1	-1	-1	-1	2	-1	3	-1
Cu	ICP	17	9	9	12	4	551	10	16	11	86	46
Eu	INAA	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Fe	ICP	0.34	1.37	3.93	0.76	0.06	8.08	0.71	1.54	3.82	5.07	5.5
Fe*	INAA	-0.5	1.5	5	1	-0.5	10	0.9	2.1	5	6.7	7
Ga	ICP	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Hf	INAA	-2	-2	-2	-2	-2	3	-2	3	-2	4	-2
Ir	INAA	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100	-100
K	ICP	0.08	0.32	0.09	0.01	0.01	0.31	0.68	1.24	0.12	0.69	0.14
La	ICP	-5	7	-5	-5	-5	13	19	9	-5	8	-5
La*	INAA	-5	8	-5	-5	-5	18	28	27	-5	24	-5
Li	ICP	4	17	-2	3	2	38	3	13	21	39	-2
Lu	INAA	-0.5	-0.5	-0.5	-0.5	-0.5	0.6	0.7	-0.5	-0.5	0.7	-0.5
Mg	ICP	0.26	0.63	10	1.92	0.15	2.01	0.3	0.74	1.91	1.5	10
Mn	ICP	30	348	517	173	14	299	423	835	2547	977	957
Mo*	ICP	-1	-1	1	-1	-1	1	-1	1	2	-1	2
Mo	INAA	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Na*	ICP	0.03	0.4	0.17	-0.01	1.1	0.35	2.36	2.25	0.3	1.38	0.32
Na*	INAA	-0.05	0.42	0.17	-0.05	1.2	0.22	2.7	2.5	0.08	1.5	0.2
Nb	ICP	-5	-5	-5	15	13	41	9	10	13	14	8
Ni*	ICP	4	30	1300	47	5	53	7	18	152	50	1400
Ni	INAA	-20	29	1300	29	-20	42	-20	-20	160	44	1600
Pb	AA	20	15	25	12	8	15	30	32	15	26	8
Pd	DCP	-9	-9	4	-1	-9	-9	-9	-9	-9	-9	-9
Pt	DCP	-9	-9	9	-5	-9	-9	-9	-9	-9	-9	-9
Rb	INAA	-10	18	-10	-10	-10	-10	44	85	-10	49	-10
Sb	ICP	-5	-5	8	-5	-5	-5	-5	-5	-5	-5	7
Sb*	INAA	1.3	1	4	1	2.2	0.9	0.9	1.2	2.8	1.5	2.7
Sc	INAA	2.1	5.9	6.8	7.2	-0.5	15	2.1	5.9	22	25	12
Se	INAA	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10
Sm	INAA	0.6	1.3	0.2	0.8	-0.2	4	2.8	2.4	0.9	5.3	0.7
Sn*	ICP	-20	-20	24	-20	-20	-20	-20	-20	-20	-20	-20
Sn	INAA	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Sr	ICP	23	30	12	2000	4	37	46	145	164	113	6
Ta	ICP	53	22	133	97	-5	73	65	85	66	57	88
Ta*	INAA	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Tb	INAA	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1
Te	AA	-9	-9	-9	-9	-9	-9	-9	-0.2	-9	-9	-9
Te	ICP	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
Te	INAA	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
Th	INAA	0.9	2.2	-0.5	-0.5	-0.5	10	25	17	-0.5	6.6	-0.5
Ti	ICP	0.05	0.1	-0.01	0.02	-0.01	0.31	0.05	0.08	0.06	0.43	0.03
U	INAA	0.9	0.6	-0.5	-0.5	-0.5	2	3.3	2.9	0.8	2.4	-0.5
V	ICP	34	32	27	45	-2	116	9	35	126	204	52
W	ICP	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20	-20
W*	INAA	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Y	ICP	-5	6	-5	-5	-5	18	6	-5	6	12	-5
Yb	INAA	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
Zn*	ICP	12	45	65	5	7	17	53	55	44	105	92
Zn	INAA	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200	-200
Zr	ICP	-5	25	5	-5	100	117	39	33	16	22	11
Zr*	INAA	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500	-500
Ag	FA											
Pb	AA-LL											

LAND SELECTION UNIT 17 ROCK GEOCHEMICAL ANALYSES (Analyses by Bondar-Clegg)

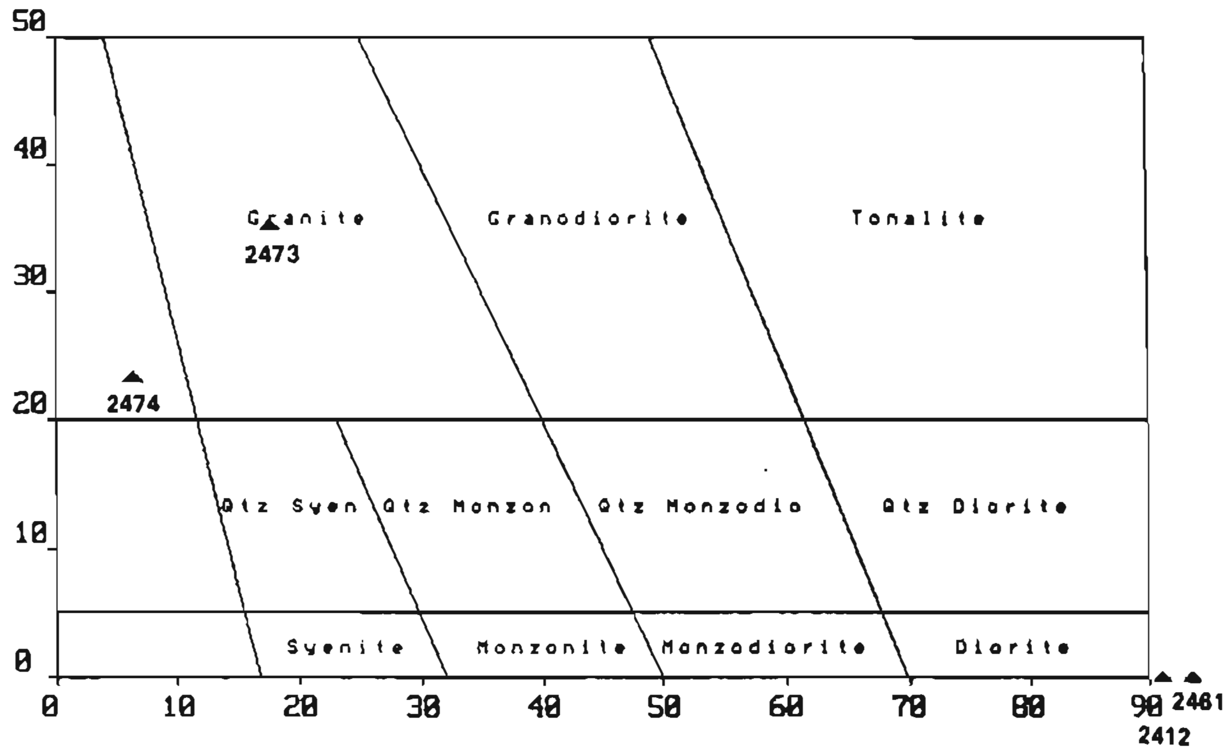
	METHOD	2472	2475	2480
Ag*	ICP	-0.5	-0.5	-0.5
Ag	INAA	-5	-5	-5
Al	ICP	1.12	5.17	3.84
As	ICP	27	-5	7
As*	INAA	33	3	1
Au	INAA	-5	-5	15
B	DCP	-9	-9	-9
Ba	ICP	30	946	228
Ba*	INAA	-100	1200	290
Bi	AA	-1	-1	-1
Br	INAA	-1	-1	1
Ca	ICP	0.12	5.01	4.63
Cd*	ICP	-2	-2	-2
Cd	INAA	-10	-10	-10
Ce	INAA	14	23	39
Co*	ICP	129	18	48
Co	INAA	140	19	57
Cr*	ICP	1874	81	23
Cr**	INAA	3900	92	-50
Cs	INAA	-1	-1	4
Cu	ICP	54	35	264
Eu	INAA	-2	-2	-2
Fe	ICP	6.99	6.13	8.92
Fe*	INAA	8.5	7.9	10
Ga	ICP	-10	-10	-10
Hf	INAA	-2	2	4
Ir	INAA	-100	-100	-100
K	ICP	0.13	0.47	0.16
La	ICP	-5	5	5
La*	INAA	6	10	16
Li	ICP	-2	11	110
Lu	INAA	-0.5	-0.5	0.8
Mg	ICP	10	2.81	2.32
Mn	ICP	723	853	1642
Mo*	ICP	4	2	-1
Mo	INAA	-2	-2	-2
Na*	ICP	0.3	3.52	2.91
Na*	INAA	0.22	3.6	3.3
Nb	ICP	6	23	17
Ni*	ICP	1862	85	48
Ni	INAA	1900	62	34
Pb	AA	18	15	58
Pd	DCP	-9	-9	-9
Pt	DCP	-9	-9	-9
Rb	INAA	-10	12	-10
Sb	ICP	6	-5	-5
Sb*	INAA	7.3	1.7	14
Sc	INAA	11	24	45
Se	INAA	-10	-10	-10
Sm	INAA	1.1	3.1	7.1
Sn*	ICP	33	-20	-20
Sn	INAA	-200	-200	-200
Sr	ICP	6	491	165
Ta	ICP	105	109	70
Ta*	INAA	-1	1	1
Tb	INAA	-1	-1	-1
Te	AA	-9	-9	-9
Te	ICP	-25	-25	-25
Te	INAA	-20	-20	-20
Th	INAA	-0.5	0.8	1.7
Ti	ICP	-0.01	0.77	1.11
U	INAA	0.8	0.5	-0.5
V	ICP	43	251	388
W	ICP	-20	-20	-20
W*	INAA	2	-2	-2
Y	ICP	6	11	14
Yb	INAA	-5	-5	-5
Zn*	ICP	70	61	120
Zn	INAA	-200	-200	200
Zr	ICP	9	-5	-5
Zr*	INAA	-500	-500	-500
Ag	FA			
Pb	AA-LL			

LAND SELECTION UNIT 17 PAN CONCENTRATES (Analayses by Bondar-Clegg)

	METHOD	UNIT	L.LIMIT	U.LIMIT	2467	2468	2469
Ag*	ICP	PPM	0.5	50	-0.5	-0.5	4.1
Ag	INAA	PPM	5	100	-5	-5	-5
Al	ICP	PCT	0.01	10	4.16	3.77	4.76
As	ICP	PPM	5	2000	15	-5	-5
As*	INAA	PPM	1	10000	13	14	22
Au	INAA	PPB	5	10000	49	1760	10000
Ba	ICP	PPM	5	2000	554	210	352
Ba*	INAA	PPM	100	20000	540	220	470
Bi	AA	PPM	1	2000	-1	-1	-1
Br	INAA	PPM	1	1000	2	-1	-1
Ca	ICP	PCT	0.01	10	1.46	2.33	2.45
Cd*	ICP	PPM	2	2000	-2	-2	-2
Cd	INAA	PPM	10	2000	-10	-10	-10
Ce	INAA	PPM	10	10000	100	94	68
Co*	ICP	PPM	1	20000	16	116	89
Co	INAA	PPM	10	20000	16	150	110
Cr*	ICP	PPM	2	20000	352	17036	14007
Cr**	INAA	PPM	50	20000	490	20000	20000
Cs	INAA	PPM	1	10000	2	-1	2
Cu	ICP	PPM	1	20000	28	30	36
Eu	INAA	PPM	2	2000	3	5	3
Fe	ICP	PCT	0.01	10	5.42	10	10
Fe*	INAA	PCT	0.5	10	7.4	10	10
Ga	ICP	PPM	10	2000	11	48	19
Hf	INAA	PPM	2	2000	5	3	4
Ir	INAA	PPB	100	1000	-100	-100	-100
K	ICP	PCT	0.01	10	0.79	0.34	0.51
La	ICP	PPM	5	2000	28	25	19
La*	INAA	PPM	5	10000	36	36	30
Li	ICP	PPM	2	2000	27	9	13
Lu	INAA	PPM	0.5	2000	2.7	9.4	7.8
Mg	ICP	PCT	0.01	10	1.21	1.15	1.43
Mn	ICP	PPM	5	20000	1185	7782	6858
Mo*	ICP	PPM	1	20000	3	10	4
Mo	INAA	PPM	2	20000	-2	-2	-2
Na*	ICP	PCT	0.01	10	0.99	0.64	0.77
Na*	INAA	PCT	0.05	10	0.77	0.3	0.47
Nb	ICP	PPM	5	2000	19	15	9
Ni*	ICP	PPM	1	20000	63	794	507
Ni	INAA	PPM	20	20000	49	880	540
Pb	AA	PPM	2	10000	27	21	38
Pd	DCP	PPB	1	5000		8	2
Pt	DCP	PPB	5	5000	13	13	23
Rb	INAA	PPM	10	10000	50	-10	-10
Sb	ICP	PPM	5	2000	20	112	77
Sb*	INAA	PPM	0.2	5000	3.1	2.3	3.5
Sc	INAA	PPM	0.5	2000	15	47	51.8
Se	INAA	PPM	10	2000	-10	-10	-10
Sm	INAA	PPM	0.2	2000	9.1	16	11
Sn*	ICP	PPM	20	2000	-20	39	-20
Sn	INAA	PPM	200	20000	-200	-200	-200
Sn**	XRF	PPM	5	10000		52	30
Sr	ICP	PPM	1	2000	95	130	124
Ta	ICP	PPM	5	2000	-5	-5	-5
Ta*	INAA	PPM	1	2000	1	1	1
Tb	INAA	PPM	1	2000	4	12	7
Te	ICP	PPM	25	2000	-25	-25	-25
Te	INAA	PPM	20	2000	-20	-20	-20
Th	INAA	PPM	0.5	2000	12	8	5.4
Ti	ICP	PCT	0.01	10	0.48	0.86	0.82
U	INAA	PPM	0.5	2000	4.7	9.2	5.7
V	ICP	PPM	2	2000	146	405	342
W	ICP	PPM	20	2000	-20	-20	119
W*	INAA	PPM	2	2000	-2	-2	-2
Y	ICP	PPM	5	2000	17	50	48
Yb	INAA	PPM	5	2000	15	51	31
Zn*	ICP	PPM	2	20000	109	389	366
Zn	INAA	PPM	200	20000	-200	390	440
Zr	ICP	PPM	5	2000	38	9	6
Zr*	INAA	PPM	500	10000	-500	-500	-500

LAND SELECTION UNIT 17 MAJOR OXIDES AND CIPW NORMS

Sample No.	2412	2461	2473	2474
SiO2	48.2	46.5	74.6	71.3
Al2O3	13.4	12.0	13.0	14.8
CaO	11.5	14.7	1.41	0.87
MgO	8.46	11.8	0.44	0.35
Na2O	2.11	1.26	2.99	3.23
K2O	0.42	0.2	5.09	7.33
FeO*	9.81	8.15	1.39	0.89
Fe2O3	2.46	2.29	0.44	0.44
FeO	7.6	6.1	1.0	0.5
MnO	0.17	0.14	0.03	0.02
TiO2	1.27	0.597	0.265	0.137
P2O5	0.13	0.05	0.07	0.19
LOI	3.77	3.77	0.47	0.47
SUM	99.5	99.4	99.8	99.6
Cr	235	707	14	<10
Rb	26	13	236	338
Sr	233	165	155	153
Y	22	15	41	33
Zr	73	34	197	35
Nb	11	18	29	19
Ba	399	202	525	506
CIPW NORMS				
Quartz	0.00	0.00	33.98	22.64
Corundum	0.00	0.00	0.18	0.43
Orthoclase	2.59	1.24	30.28	43.68
Albite	18.65	11.15	25.47	27.56
Anorthite	27.01	27.70	6.58	3.10
Diopside	25.64	38.52	0.00	0.00
Hypersthene	17.83	4.73	2.21	1.24
Olivine	1.72	11.88	0.00	0.00
Magnetite	3.73	3.47	0.64	0.64
Ilmenite	2.52	1.19	0.50	0.27
Apatite	0.31	0.12	0.16	0.44
SUM	100.00	100.00	100.00	100.00
Au Discrim.	NA	NA	53.49	0.00



50
40
30
20
10
0
Granite
2473
Granodiorite
Tonalite
2474
Qtz Syen
Qtz Monzon
Qtz Monzodio
Qtz Diorite
Syenite
Monzonite
Monzodiorite
Diorite
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40
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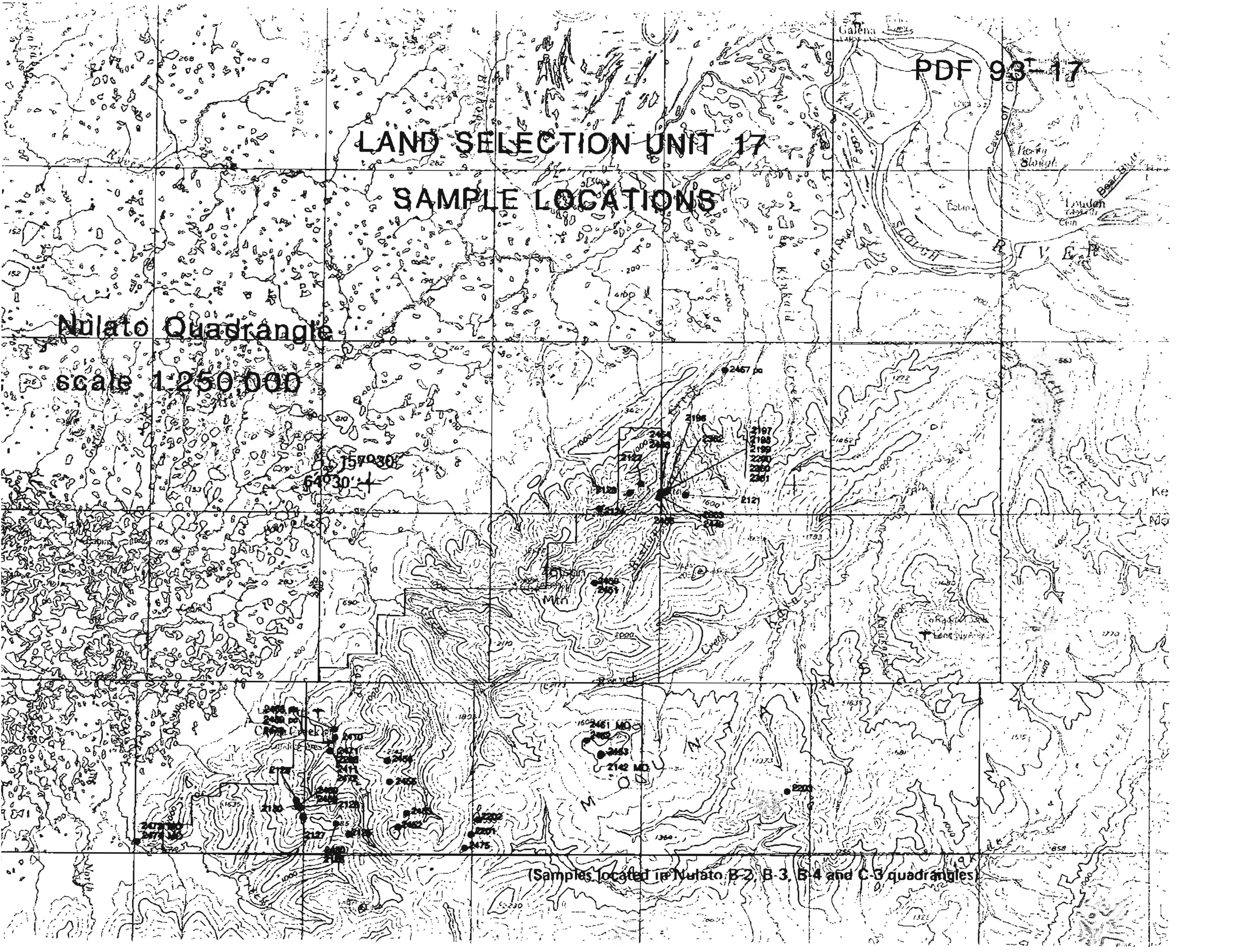
80
90
2461
2412


PDF 93-17
LAND SELECTION UNIT 17
SAMPLE LOCATIONS
Nulato Quadrangle
scale 1:250,000
157°30'
64°30'
Galena
Kinkaid
Creek
(Samples located in Nulato B-2, B-3, B-4 and C-3 quadrangles)