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**GEOCHEMICAL TRACE-ELEMENT DATA FROM ROCKS COLLECTED  
IN THE PETERSVILLE (YENTNA) MINING DISTRICT, 1998**

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D.S. Pinney, D.J. Szumigala, J.L. Mayer, S.A. Liss, K.H. Clautice,  
A.M. McCarthy, D.L. LePain, R.A. Combellick, and N.M. Strandberg

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## INTRODUCTION

In June and August, 1998, the Alaska Division of Geological & Geophysical Surveys carried out a geological field survey of the Petersville (Yentna) mining district to provide ground-truthing of airborne geophysical surveys that had been previously flown. During the survey 153 rock samples were collected for trace-element analysis. The locations of these samples are shown on Sheet 1. An abbreviated description for each sample is tabulated in Table 1. Location data and trace-element data are tabulated for each sample in Table 2.

## ANALYTICAL METHODS

All analyses were performed by Chemex Labs, Inc. Gold was separated using fire assay procedures and analyzed using AAS (atomic absorption spectroscopy), ICP (inductively coupled plasma), and gravimetric techniques. Platinum-group elements were separated using fire assay procedures and analyzed with ICP (inductively coupled plasma) equipment. Tin was analyzed using AAS (atomic absorption spectroscopy). All other trace elements were analyzed by ICP-AES (inductively coupled plasma - atomic emission spectroscopy) methods. Analytical detection limits are tabulated in Table 3.

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SHEET 1. LOCATION MAP OF ROCK SAMPLES ANALYZED FOR TRACE ELEMENTS, PETERSVILLE (YENTNA) MINING DISTRICT, ALASKA, 1998, 1:63,360 SCALE, 1 SHEET (IN POCKET)	
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Table 1. Rock samples collected in the Petersville (Yentna) mining district during June and August, 1998, and analyzed for trace elements.

(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area)

Sample	Description
98AM010A	Quartz cobble from Kahiltna sandstone
98AM021B	Quartz monzodiorite (?) dike
98AM033A	Intrusive body, most likely a dike; porphyritic
98DL166-1	Light pink to tan, granitic (?) dike; possibly fine grained rhyolite
98DL166-2	Dark gray, very fine grained sandstone; probably hornfelsed
98DL185-1	Tan-pink granitic dike; rubble crop
98DS005A	White quartz veinlets with limonite-filled vugs, trace oxidized pyrite, and minor phyllite wall rock; 0.64 cm wide
98DS007A	Quartz-veined lithic quartzite w/ disseminated pyrite in vein and host; veins 0.25- 0.50cm wide
98DS008B	Quartz-chlorite-pyrite veins in 0.65cm-wide granite dike
98DS011A	Black fissile phyllite, may be slightly calcareous; trace pyrite; 20% actinolite; grab sample
98DS012A	Fine grained biotite granite with occasional equigranular porphyritic feldspar grains 1-3 mm across
98DS013A	Quartz-feldspar veins in granite; smoky quartz center, peripheral white feldspar; possible cassiterite in veins; veinlets to 0.75cm; 9x15m area grab sample
98DS014A	Border phase to biotite granite; dark gray; fine grained; abundant black biotite; may be dike; 23 -30.5 m wide
98DS014B	Black granofels of biotite and cordierite; yellow-orange iron oxide stain on fractures; cut by quartz veins; 1-2% fine grained disseminated pyrrhotite
98DS017A	Light gray to tan-colored aplite with rosettes of biotite; rubble crop
98DS017B	White bull quartz veins up to 2.5cm wide cutting biotite granite
98DS019A	Hornfelsed black phyllite with abundant lath-shaped andalusite crystals (1mmx10mm)
98DS023A	Graywacke & lithic sandstone interlayered with argillite; salt&pepper; sand grains to 0.5mm diameter; occasional black shale rip up in sandstone layer
98DS024A	Sandstone with 0.65-2.0cm wide bull quartz veins; rare pegmatite veins 0.65-1.3cm wide; minor limonite stains in vugs; sampled over 6x15m area
98DS026A	Black, metamorphosed lithic sandstone/graywacke and shale; no obvious mineralization
98DS026B	White bull quartz veins in float, some vuggy w/ well-terminated quartz crystals 0.65x1.3 cm in size; coated w/ dark brown iron oxide; veins 1.3-5.1cm wide
98DS027A	Mixed graywacke and argillite; more of a metamorphosed graywacke than a phyllitic argillite
98DS028A	40% graywacke, 60% phyllite; altered feldspars or limonite; high lithic content; disseminated pyrite; rare vuggy quartz veins range 0.25-2.5 cm wide
98DS029A	Brick-colored, felsic dike w/ minor quartz veinlets, limonite, sulfides; veins 0.25-0.5 cm wide; sampled over 1.5x3.0m area, select sample of quartz
98DS031A	Felsic/granite dike w/ disseminated arsenopyrite & pyrite; dike ~ 1.5-3.0m wide
98DS034A	Graywacke w/ fairly abundant quartz & limonite veinlets; vein density approx. 10-16 per meter, vary from hair width to 1.3 cm wide
98DS036B	Abundant bull white quartz vein rubble in graywacke; 5.1cm-wide vein sampled.
98DS039A	Fine grained monzodiorite with less than 1% disseminated pyrite
98DS041A	Moderately sericite altered monzodiorite w/ quartz & equant amberite veins to 10.2cm wide; large veins (0.25-0.5cm wide) are 95% quartz/ 5% carbonate
98DS047A	Andalusite- & cordierite-rich hornfels and hornfelsed phyllite
98DS049A	Black, carbonaceous hornfelsed phyllite w/ trace very fine grained disseminated pyrrhotite; rare glassy quartz veinlets 0.5-1.0cm wide
98DS050A	White/light gray felsic rock; 5% quartz eyes 1mm diameter, ~5% limonite spots 1mm diameter & trace highly tarnished arsenopyrite or pyrite
98DS051A	Black, platy phyllite & lithic sandstone; some fracture/foliation surfaces limonite-stained; 5% pyrite molds to 0.25 cm; 9.1m diameter rubble area sampled
98DS052A	Black graywacke w/ oxidized pyrite cubes to 0.4cm; select sample w/ abundant quartz-limonite veining w/ trace pyrite in matrix
98DS053A	Gray & black banded hornfels w/ pyrite porphyroblasts
98DS054A	Dark gray to black hornfelsed, fine grained, lithic sandstone; no visible sulfides or veining
98DS058A	Greenish gray, fine grained monzodiorite w/ trace disseminated pyrite; rare white quartz xenoliths to 0.75x2.5cm

Table 1. Rock samples collected in the Petersville (Yentna) mining district during June and August, 1998, and analyzed for trace elements.

(Samples marked "\*" were collected in the Yenfo Hills, outside of the map area)

Sample	Description
98DS059A	Medium gray hornfelsed graywacke; trace pyrite (0.25cm cubes) oxidized to limonite, rare white bull quartz veins to 1.3cm wide
98DS060B	Quartz-veined phyllite rubble w/ abundant limonite
98DS061A	Quartz-veined phyllite; veins to 5.1cm wide w/ limonite stains on fractures & weathered surfaces; very fine-grained gray-black mineral; select sample
98DS062A	White quartz veins to 15.25cm wide; fragmented inclusions of phyllite enveloped by quartz; rare vugs in quartz w/ some well terminated crystals
98DS063A	Pale greenish-gray, fine grained monzodiorite w/ biotite phenocrysts; moderate sericite alteration & disseminated limonite; rare quartz veinlets
98DS063B	Select sample of quartz-veined, pyrite-rich monzodiorite
98DS063C	Quartz-veined phyllite; veins to 7.6cm thick w/ incorporated phyllite clasts; minor iron oxide (limonite) staining; vein zone 1.8m wide in rubble
98DS064A	Quartz-veined graywacke; veins vary from 0.25-2.5cm wide; graywacke oxidized to brown w/ orange limonite speckles
98DS065A	Bull quartz veins to 12.7cm wide w/ minor limonite on fractures; some veins pale green - chlorite?; select sample
98DS068A	Dark gray Kahiltna Formation graywacke w/ rare quartz veins & 1-2% pyrite cubes to 0.40cm across
98DS070A	Epidote-altered granite; overall pale green color w/ spots of yellow green (epidote) throughout
98DS072B	White quartz veins w/ limonite in phyllite; largest vein cobble 5.1x7.6x15.2cm; minor breccia of phyllite in quartz; orange & black iron oxide & manganese oxide
98DS072C	More iron-oxide stained than 98DS072A; Liesegang bonding common; several pieces w/ slickensides
98DS073A	Select sample of quartz-pyrite-chlorite veins in phyllite; trace amounts pyrite; largest piece 15.2x20.3x20.3cm; limonite partially filling vugs & fractures
98DS080A	Light gray alaskite dike, 0.9m wide, w/ rare quartz veins (0.25-0.65cm wide); common small brown-red iron oxide spots
98DS081A	Select sample of quartz-veined alaskite dike (1.5-1.85m wide) intruding graywacke; light gray to white; minor sericite alteration of biotite
98DS081B	Quartz veins in graywacke w/in 9m of dikes; graywacke bleached or replaced by light gray silica w/ vuggy quartz veins; iron oxide staining near dike
98DS081C	Light gray to white alaskite fragments, weathers white; biotite content ~10%; possible hornblende; minor sericite alteration of biotite
98DS082A	Dull brownish-gray, biotite-rich granite dike w/ rare quartz stringers & trace disseminated pyrrhotite spots; weak reddish-brown iron oxide stain on fractures
98DS083A	Quartz-veined alaskite dikes; three dikes sampled over 3.05m width; generally light tan to orange; one dike strongly argillized
98DS083B	Strongly quartz-veined black siltstone; quartz veins to 5.1cm wide, some vuggy; local iron oxide stain on fractures; siltstone wall rock commonly brecciated
98DS084A	Select sample of dark gray quartz veins in graywacke; veins average 0.25-0.5cm wide; some veins to 5.1cm wide
98DS086A	Select sample of quartz veins and quartz-veined biotite granite/alaskite; quartz veins locally vuggy sub-parallel to vein walls; sampled vein 6.35cm wide
98DS086B	Brick red, iron-oxide-rich soil and rock, ~3.8cm wide; broken rock is mixture of massive arsenopyrite & sericite
98DS087A	Fault breccia & gray sedimentary clasts cemented by light yellow argillized material, possibly altered graywacke
98DS089A	Arsenopyrite-bearing granite; select sample of richest arsenopyrite material; includes a few quartz-veined arsenopyrite-rich cobbles
98DS090A*	Light gray hornfels w/ disseminated pyrrhotite & minor quartz veins & sulfides
98DS091A*	Light gray hornfels w/ disseminated pyrrhotite & pyrrhotite or aplite veinlets
98DS092A*	Arsenopyrite and quartz-rich veins; select sample; Z seams each ~15.2cm wide
98DS093A	Possible fault mineralization; strongly limonite-stained phyllite w/ irregular white quartz veins; largest piece 2.55x5.1x10.2cm; slickensides present
98DS094A	Strongly iron-oxide-stained phyllite w/ 0.65-1.3cm cubic depressions; abundant polished surfaces & slickensides
98DS095A	Grab sample of strongly iron-oxide-stained phyllite; stained width ~9.15m; rock shattered into platey pieces 2.55-5.1cm across
98DS098A	Select sample of quartz vein; iron stained; chlorite & sericite; largest quartz chunk 7.6x7.6x15.2cm w/ polished phyllite on one side.
98DS099A	Reddish brown silica-carbonate-sericite-altered dike w/ disseminated, altered, striated arsenopyrite; cobble cores are greenish, fine grained, & react to HCl
98DS099B	Grab sample of ladder veins of white quartz w/ trace disseminated arsenopyrite crystals to 0.76cm across long dimension
98DS100A	Grab sample of contact between 2.45m-thick alaskite dike & graywacke; graywacke altered near contact w/ common vugs of chlorite alteration
98DS101A	3.05m-wide, arsenopyrite-bearing, carbonate- & sericite-altered dike

Table 1. Rock samples collected in the Petersville (Yentna) mining district during June and August, 1998, and analyzed for trace elements.

(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area)

Sample	Description
98DS101B	Select sample of quartz veins & reddish brown clay/wall rock
98DS101C	White fault gouge w/ well-formed arsenopyrite crystals
98DS104A	Float pieces of yellow-orange fault breccia; matrix is clay or altered rock; clasts are rounded to sub-angular quartz; moderate iron oxide (limonite) pervasive
98DS104B	Iron-oxide-stained, altered graywacke w/ pyrite cubes; broken rock is olive green w/ abundant sericite flakes; sampled area measures 4.6m across
98DS106A	Quartz gash veins w/ local breccia host clasts; iron oxide & manganese oxide staining; sampled 10-12 different veins varying in width from 1.3-7.6cm
98DS107A	Grab sample of pale green-gray siltstone w/ black-brown iron oxide in fractures; sample area 2.45x 0.9m
98DS108A	Iron-oxide-stained & altered siltstone w/ minor quartz veins; trench wall sampled
98DS110A	Punky, altered phyllite & siltstone; black layers contain abundant sulfides; up to 30% pyrite as 0.25cm cubes in black, altered graywacke; grab sample
98DS111A	2.45m-wide altered dike w/ quartz veins, pyrite & fuchsite; pod of light green rock measures 1.5x0.6x 0.2m
98DS111B	Black, clay-rich shear zone ~7.6-10.2cm wide; clay contains shattered white quartz veins & 10% pyrite cubes less than ~0.25cm across
98DS112A	Pale green alaskite dike w/ 1% disseminated pyrite cubes; iron-oxide-stained fractures; feldspars mostly altered to yellow clay; grab sample
98DS112C	Select sample of 0.25cm-wide quartz-veined alaskite w/ iron oxide & arsenopyrite crystals to 0.5cm diameter
98DS113A	Alaskite dike; gray on fresh surfaces w/ limonite (orange) spots; glassy quartz eyes; some feldspar phenocrysts are white & slightly soft
98DS113B	Select sample of graywacke w/ quartz veins to 1.3cm wide
98DS114A	Light gray alaskite dike; area roughly 30.5m diameter
98DS115A	Light tan alaskite dike; white to buff weathered surface; iron staining on fractures
98DS116B	Fine grained biotite granite; roughly 9.14m across; good white color anomaly
98DS117A	Pale green clay; possible fault gouge or sheared igneous rock; sample collected from placer pit; not washed, possible placer gold contamination
98DS118A	Grab sample of pale green alaskite dike ~3.05m wide; 1-2% sulfides (pyrite) now almost completely oxidized to iron oxide
98DS118B	Mottled black&white, 2.5cm-wide quartz veins; some spiderweb veining; trace sulfides & weak iron oxide in fractures; select sample
98DS119A	Slightly iron-oxide-stained siltstone w/ disseminated pyrite crystals to 0.75cm across
98DS120A	5.1cm-wide, quartz-iron-oxide vein in graywacke; quartz w/ splinters perpendicular to vein strike; brown iron-oxide-rich earth fill crevices; select sample
98DS121A	Sample similar to 98DS120A; mostly rubble, some veins ~perpendicular to cleavage & bedding (like 98DS120A); vein rubble to 20.3cm wide
98DS122A	Outcrop sample of white quartz veins w/ iron oxide spots; iron oxide concentrated along vein margins; veins from 0.25-20.3-cm wide
98DS122B	Iron-oxide-stained phyllite; no obvious mineralization; sample avoids quartz veinlets; iron stained on joint surfaces
98DS123A	Quartz vein w/ chocolate brown iron oxide & sheared Kahiltna Formation wall rock
98DS124A	Pink to light gray alaskite dike w/ iron oxide spots; 3.05m wide; 1% chlorite spots; slightly sericite altered
98KC005A	Limonite-stained quartz veining to 5.1cm
98KC007D	Quartz veins to 7.6cm
98KC010B	Vuggy quartz vein material in rubble crop w/ sandstone
98KC012A	Vuggy quartz veins w/ chlorite; sub-parallel to foliation
98KC015	Abundant vein quartz in Kahiltna; vuggy w/ some limonite; ~50% of frost rubble is quartz, rest is graywacke and slate
98KC018B	Milky white quartz vein w/ limonite vugs
98KC019A	Rubble crop granite
98KC019C	Rubble crop, fine grained, mafic dike(?); could be fine grained biotite monzodiorite dike, but possibly just a fine grained phase of A
98KC020A	Fine grained biotite-feldspar porphyry dikes; gray aphanitic groundmass; feldspar to 2mm, biotite to 1mm in size
98KC023	Fresher and darker dike than 98KC019C and 98KC020A ; scattered over 15.25m in rubble crop

Table 1. Rock samples collected in the Petersville (Yentna) mining district during June and August, 1998, and analyzed for trace elements.

(Samples marked "\*\*" were collected in the Yento Hills, outside of the map area)

Sample	Description
98KC024A	Felsic (monzonite?) intrusive or very large dike
98KC024B	Monzonite (?) w/ black needle-like mineral (does not appear to be tourmaline)
98KC025	Limonite-altered biotite monzonite w/ pyrrhotite
98NS014	Hornfelsed graywacke w/ 2.5cm-wide quartz vein
98NS015	Vugs in quartz vein intruding slate
98NS016	Vuggy quartz vein w/ limonite; rusty quartz
98RC009E	Hard silt or siltstone
98RC009F	Green to brown siltstone w/ vertical platy cleavage
98SL003A	Red-stained, sandy/silty, layered & folded rock; some alteration
98SL008	Altered quartz & sandstone; orange stained
98SL018A	Orange quartz vein(?)
98SL018B	Stained tuff(?)
98SL018C	Shale/phyllite
98SL035A	Massive, blue to dark gray quartz
98SL035B	Aplite dike, possibly felsic
98SL051	Granite; potassium feldspar phenocrysts, probably an alkali granite
98SL053A	Felsic dike; quartz predominates
98SL053B	Felsic dike; potassium feldspar predominates
98SL055A	Iron-stained shale; some pyrite
98SL055B	Iron-stained quartz vein
98SL090	Aplite dike; white feldspars & quartz eyes
98SL099	Aplite dike; felsic
98SL101	Felsic dike; very altered, red-stained; feldspar crystals, hornblende lathes, quartz eyes, & pyrite; 7.6m wide zone
98SL104	Syenite monzodiorite intrusive or dike; very altered; prominent 1-3 square mm potassium feldspar crystals
98SL112	Quartz feldspar intrusive w/ sulfides
98SL127A	Iron-stained quartz w/ sheared sandstone & shale
98SL130	Medium grained biotite-hornblende granite
98SL156	Light to medium gray, fine grained quartzite(?); mica & pyrite crystals; layer 5cm thick
98SL159A	Quartz-rich phase of felsic dike; some minor biotite; may be dike or pluton
98SL160A	Sandstone w/ tortured structure & quartz veins
98SL160B	Shale w/ tortured structure & quartz veins
98SL163	Light gray rock; quartz-rich; feldspar on weathered surface; mica w/ some biotite; sulfides much less than 1% in rock; contains felsic veins w/ more sulfides
98SL174	Leucocratic granite w/ minor biotite
98SL187	Alaskite-like dike rock; remains of pyrite
98SL188	Biotite granite
98SL192A	Felsic dike/vein
98SL192B	Granite

Table 1. Rock samples collected in the Petersville (Yentna) mining district during June and August, 1998, and analyzed for trace elements.

(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area)

Sample	Description
98SL192C	Hornfelsed graywacke
98SL192D	Hornfelsed shale
98SL194	Stained quartz vein
98SL202A	Biotite-hornfelsed granite
98SL202B	Gray, unstained quartz vein w/ sulfides



Table 2. Concentration of trace elements in Petersville (Yentna) mining district rock samples collected in June and August, 1998.

(Samples marked "\*" were collected in the Yento Hills, outside of the map area; NA = not analyzed)

Sample	Long.	Lat.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb
98AM010A	151.60216	62.37254	<5	<2	0.12	<2	60	<5	<2	0.04	<5	3	228	3	1.13	<10	<1	0.01	<10	0.01	2100	<1	<0.01	14	100	2
98AM021B	151.07204	62.54912	35	0.2	1.16	<2	240	<5	<2	0.15	2	7	39	22	1.39	<10	<1	0.29	30	0.24	590	<1	0.09	23	520	8
98AM033A	150.96737	62.60666	<5	<2	1.04	22	230	<5	<2	0.25	<5	3	62	7	1.06	<10	<1	0.31	10	0.28	275	<1	0.08	7	360	6
98DL166-1	150.99211	62.59612	<5	0.2	0.61	<2	10	<5	<2	0.04	<5	<1	69	1	0.70	<10	<1	0.24	10	<0.01	180	<1	0.09	3	60	22
98DL166-2	150.99211	62.59612	<5	<2	1.95	<2	100	<5	<2	0.27	<5	12	90	21	2.92	<10	<1	0.16	10	0.82	355	<1	0.02	48	680	6
98DL185-1	150.98727	62.58984	<5	0.2	0.78	114	210	<5	<2	0.51	<5	3	41	4	1.03	<10	<1	0.22	<10	0.20	245	<1	0.07	4	330	8
98DS005A	151.02529	62.50975	10	0.2	1.93	18	90	<5	<2	0.21	<5	13	208	36	3.84	<10	<1	0.18	<10	0.77	2090	1	0.02	49	520	16
98DS007A	151.02446	62.50208	<5	0.4	1.86	12	80	<5	<2	0.15	<5	11	232	11	3.32	<10	<1	0.15	10	0.63	125	<1	0.07	39	670	12
98DS008B	151.02496	62.50160	<5	<2	0.84	<2	130	<5	<2	0.10	<5	3	207	5	1.17	<10	<1	0.20	10	0.19	290	<1	0.04	6	420	12
98DS011A	151.07604	62.52371	<5	<2	3.40	8	300	0.5	<2	0.18	<5	13	160	33	4.71	<10	<1	1.08	20	1.27	505	<1	0.02	50	860	8
98DS012A	151.07756	62.52286	<5	<2	1.53	<2	530	<5	<2	0.32	<5	4	124	3	2.20	<10	<1	0.67	10	0.48	335	1	0.11	6	520	4
98DS013A	151.07836	62.52247	<5	<2	1.42	<2	470	<5	<2	0.27	<5	4	119	1	2.07	<10	<1	0.64	10	0.47	320	1	0.09	5	480	6
98DS014A	151.07982	62.52138	<5	<2	1.54	<2	470	<5	<2	0.32	<5	5	75	7	2.28	<10	<1	0.78	30	0.51	305	2	0.14	6	570	2
98DS014B	151.07982	62.52138	5	<2	3.35	<2	800	0.5	<2	0.53	<5	9	170	89	4.38	<10	<1	1.64	30	1.60	525	1	0.10	20	1220	<2
98DS017A	151.08293	62.51917	5	<2	0.58	6	<10	<5	<2	0.03	<5	1	167	6	0.59	<10	<1	0.29	<10	<0.01	70	5	0.14	3	30	24
98DS017B	151.08293	62.51917	10	<2	0.38	<2	70	<5	<2	0.04	<5	2	368	5	0.98	<10	<1	0.20	<10	0.13	95	109	0.03	9	120	<2
98DS019A	151.08482	62.51849	<5	<2	3.71	2	460	0.5	<2	0.18	<5	13	199	38	5.34	10	<1	1.54	20	1.42	650	2	0.04	43	960	2
98DS023A	151.09902	62.51142	<5	<2	2.97	18	180	<5	<2	0.16	<5	11	133	17	4.64	<10	<1	0.36	10	1.04	1615	1	0.03	45	840	10
98DS024A	151.10845	62.50872	<5	<2	1.34	10	60	<5	<2	0.06	<5	9	308	13	2.59	<10	<1	0.11	<10	0.51	460	3	0.03	39	310	6
98DS026A	151.05749	62.53995	<5	<2	2.69	6	210	<5	<2	0.22	<5	15	139	27	4.23	<10	<1	0.32	10	0.93	625	1	0.03	57	780	14
98DS026B	151.05749	62.53995	<5	<2	0.50	<2	40	<5	<2	0.02	<5	4	324	7	1.04	<10	<1	0.06	<10	0.16	135	1	0.01	12	100	2
98DS027A	151.05682	62.54110	<5	<2	2.21	10	230	<5	<2	0.26	<5	12	192	21	3.48	<10	<1	0.28	10	0.72	790	1	0.04	50	950	10
98DS028A	150.89989	62.60842	10	<2	2.38	36	80	<5	<2	0.29	<5	11	116	31	4.31	<10	<1	0.16	<10	0.93	395	1	0.02	56	690	12
98DS029A	150.89796	62.60741	20	<2	0.91	90	260	<5	<2	0.18	0.5	6	27	14	1.53	<10	<1	0.36	10	0.05	310	1	0.07	10	840	10
98DS031A	150.89756	62.61110	20	<2	0.72	266	270	<5	<2	0.65	0.5	<1	37	13	0.49	<10	<1	0.39	<10	0.03	275	1	0.09	1	90	6
98DS034A	150.89660	62.61337	<5	<2	0.80	12	50	<5	<2	0.57	<5	10	230	17	2.36	<10	<1	0.11	<10	0.26	820	2	0.02	26	340	18
98DS036B	150.96501	62.53961	<5	<2	0.25	4	10	<5	<2	0.01	<5	3	293	8	0.69	<10	<1	0.02	<10	0.09	65	1	0.01	10	80	6
98DS039A	150.89753	62.60693	5	<2	3.40	<2	120	0.5	2	3.24	<5	16	19	9	5.14	10	<1	0.22	10	1.81	1050	3	0.12	8	1760	8
98DS041A	150.89651	62.60657	<5	<2	0.63	6	30	<5	<2	1.15	<5	8	307	3	1.66	<10	<1	0.05	<10	0.73	545	2	0.02	14	440	12
98DS047A	151.10674	62.51550	<5	0.2	3.13	2	330	<5	<2	0.18	<5	12	181	16	4.39	10	<1	1.20	10	1.30	445	2	0.03	47	780	6
98DS049A	151.10088	62.51738	<5	0.2	2.78	<2	360	<5	<2	0.38	<5	11	218	50	3.67	<10	<1	1.10	<10	0.96	495	2	0.07	37	600	4
98DS050A	150.89386	62.62485	<5	<2	0.60	6	10	1.0	<2	0.02	<5	<1	50	<1	0.30	<10	<1	0.36	<10	0.01	95	<1	0.13	1	70	18
98DS051A	150.87303	62.58593	<5	<2	2.63	6	90	<5	2	0.13	<5	13	97	36	4.84	<10	<1	0.17	<10	1.06	870	1	0.02	57	1010	16
98DS052A	150.87150	62.58660	<5	<2	2.51	18	100	<5	<2	0.07	<5	9	130	19	4.55	<10	<1	0.17	<10	0.97	275	1	0.03	48	780	14
98DS053A	150.85888	62.58945	5	<2	2.79	4	80	<5	<2	0.11	<5	13	102	29	4.58	<10	<1	0.18	<10	1.30	970	<1	0.01	41	600	8
98DS054A	150.71348	62.57815	<5	<2	1.98	8	140	<5	<2	0.21	<5	10	141	13	2.79	<10	<1	0.25	10	0.99	280	<1	0.05	42	520	8
98DS058A	150.84348	62.60951	<5	<2	3.78	8	70	<5	<2	3.09	<5	25	275	44	4.46	10	<1	0.06	10	3.94	940	2	0.03	113	2000	8

Table 2. Concentration of trace elements in Petersville (Yentna) mining district rock samples collected in June and August, 1998.

(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area; NA = not analyzed)

Sample	Long.	Lat.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb
98DS059A	150.83832	62.60942	10	<2	1.98	18	60	<5	<2	0.12	<5	11	141	23	3.43	<10	<1	0.15	<10	0.80	180	1	0.02	46	590	8
98DS060B	150.98261	62.54859	295	0.2	1.56	140	60	0.5	<2	0.48	<5	15	137	75	3.68	<10	<1	0.13	<10	0.53	300	1	0.04	31	590	18
98DS061A	150.98257	62.54834	5	<2	0.74	4	30	<5	<2	0.04	<5	16	240	13	1.76	<10	<1	0.06	<10	0.23	305	1	0.01	22	370	8
98DS062A	150.98308	62.54712	<5	<2	0.36	<2	10	<5	<2	0.05	<5	3	330	10	0.91	<10	<1	0.03	<10	0.13	65	1	0.01	10	240	6
98DS063A	150.98409	62.54406	<5	<2	1.25	<2	300	<5	<2	0.81	<5	1	32	2	1.57	<10	<1	0.37	30	0.22	410	1	0.06	1	440	16
98DS063B	150.98409	62.54406	<5	<2	1.33	4	310	<5	<2	0.08	<5	4	38	9	1.63	<10	<1	0.39	30	0.25	455	2	0.08	4	420	12
98DS063C	150.98409	62.54406	5	<2	1.14	6	60	<5	<2	0.09	<5	9	286	19	2.10	<10	<1	0.10	<10	0.42	665	1	0.02	30	430	8
98DS064A	150.98402	62.54178	655	<2	0.58	22	40	<5	<2	0.05	<5	7	244	11	2.07	<10	<1	0.09	<10	0.11	250	1	0.05	24	390	8
98DS065A	150.98391	62.54064	10	<2	0.24	<2	10	<5	<2	0.04	<5	2	325	6	0.84	<10	<1	0.02	<10	0.06	260	1	0.01	9	250	8
98DS068A	150.98073	62.53440	<5	<2	2.12	6	80	<5	<2	0.11	<5	10	141	12	3.32	<10	<1	0.19	<10	0.74	150	1	0.03	54	550	8
98DS070A	150.98255	62.52692	<5	<2	0.82	6	410	<5	<2	0.03	<5	<1	92	1	0.29	<10	<1	0.43	10	0.03	70	<1	0.09	3	140	28
98DS072B	150.99754	62.54785	<5	<2	1.05	8	50	<5	<2	0.07	<5	8	264	19	2.29	<10	<1	0.10	<10	0.36	430	1	0.01	29	430	10
98DS072C	150.99754	62.54785	310	0.2	0.65	296	110	<5	<2	0.04	<5	3	48	12	1.64	<10	<1	0.16	10	0.07	40	1	0.14	9	650	8
98DS073A	150.99788	62.54566	<5	<2	1.18	8	10	<5	<2	0.10	<5	4	248	14	2.47	<10	<1	0.03	<10	0.46	70	1	<0.1	18	480	8
98DS080A	150.97326	62.59923	<5	<2	0.56	<2	160	<5	2	0.55	<5	6	32	3	0.83	<10	<1	0.20	10	0.08	635	<1	0.07	6	400	2
98DS081A	150.97150	62.59834	<5	<2	0.95	22	160	<5	<2	0.09	<5	3	73	5	1.03	<10	<1	0.21	10	0.30	215	<1	0.08	7	310	2
98DS081B	150.97150	62.59834	<5	<2	1.33	12	40	<5	<2	0.08	<5	15	120	17	2.18	<10	<1	0.10	<10	0.52	615	1	0.01	32	380	2
98DS081C	150.97150	62.59834	<5	<2	0.97	46	190	<5	<2	1.14	<5	1	38	6	0.97	<10	<1	0.28	<10	0.31	210	<1	0.07	4	350	6
98DS082A	150.96693	62.59748	<5	<2	2.09	10	470	<5	<2	2.65	<5	15	73	15	3.50	10	<1	0.76	20	1.45	820	<1	0.03	13	1200	2
98DS083A	150.96475	62.59682	25	1.2	0.69	62	90	<5	<2	0.04	<5	2	162	32	1.12	<10	<1	0.12	10	0.16	125	<1	0.05	6	280	2
98DS083B	150.96475	62.59682	10	0.2	1.49	44	60	<5	<2	0.05	<5	10	112	24	2.54	<10	<1	0.14	<10	0.56	380	1	0.01	39	330	8
98DS084A	150.96317	62.59540	<5	<2	0.68	<2	30	<5	<2	0.05	<5	5	205	9	1.78	<10	<1	0.06	<10	0.21	625	<1	0.01	20	220	10
98DS086A	150.95902	62.59290	275	<2	0.26	2060	70	<5	<2	0.06	<5	1	170	5	1.11	<10	<1	0.09	<10	0.03	200	1	0.04	5	160	4
98DS086B	150.95902	62.59290	>10000	3	0.73	>10000	30	<5	8	0.16	<5	27	9	18	>15.00	<10	5	0.10	<10	0.12	110	18	<0.1	27	<10	30
98DS087A	150.95966	62.58879	65	0.2	4.23	596	90	<5	<2	0.31	<5	26	101	308	9.36	10	<1	0.12	10	1.29	445	1	0.03	77	3470	20
98DS089A	150.95493	62.58751	345	<2	0.84	>10000	180	<5	<2	0.16	<5	5	29	6	2.96	<10	<1	0.19	10	0.15	180	2	0.06	7	540	4
98DS090A*	151.23925	62.17838	55	0.2	2.55	206	90	<5	<2	0.95	<5	17	86	157	5.30	10	1	0.26	<10	1.68	1505	2	0.04	50	660	8
98DS091A*	151.24538	62.17698	45	<2	3.70	896	120	<5	<2	1.46	<5	14	68	205	6.16	10	<1	0.42	<10	2.21	695	<1	0.04	23	510	<2
98DS092A*	151.24783	62.17460	120	<2	2.66	1950	30	<5	6	0.14	<5	13	209	23	3.98	10	1	0.01	<10	2.99	1475	1	<0.1	106	180	<2
98DS093A	150.98677	62.58290	120	2	1.60	380	80	<5	2	0.60	0.5	7	90	449	11.05	<10	1	0.10	<10	0.46	970	3	0.05	32	4110	72
98DS094A	150.98296	62.58135	<5	0.2	1.86	28	140	<5	<2	<0.1	<5	2	62	13	3.76	<10	<1	0.20	10	0.78	245	3	0.03	17	540	14
98DS095A	150.97568	62.57909	10	0.2	2.18	32	190	<5	<2	0.04	<5	5	57	38	4.46	<10	<1	0.27	10	0.87	425	4	0.03	21	870	16
98DS098A	150.97139	62.57583	5	<2	0.98	40	20	<5	<2	0.01	<5	15	163	63	0.96	<10	<1	0.03	<10	0.07	250	2	<0.1	132	260	4
98DS099A	150.95377	62.58376	325	1.4	0.64	4030	200	<5	<2	0.85	0.5	2	46	20	1.85	<10	<1	0.33	<10	0.04	440	1	0.05	6	800	8
98DS099B	150.95377	62.58376	860	0.4	0.17	2120	40	<5	<2	0.04	<5	1	162	5	0.74	<10	<1	0.06	<10	0.01	190	2	0.01	5	150	2
98DS100A	150.95555	62.58357	1715	0.6	0.63	5210	150	<5	<2	0.14	<5	3	56	42	2.49	<10	<1	0.26	10	0.04	145	1	0.03	11	600	6
98DS101A	150.95591	62.58139	270	0.8	0.75	5920	240	<5	2	0.15	0.5	3	49	23	1.81	<10	<1	0.37	10	0.04	675	3	0.06	8	700	10

Table 2. Concentration of trace elements in Petersville (Yentna) mining district rock samples collected in June and August, 1998.

(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area; NA = not analyzed)

Sample	Long.	Lat.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb
98DS101B	150.95591	62.58139	>10000	0.8	0.45	3190	90	<.5	2	0.13	<.5	5	239	7	1.72	<10	<1	0.15	<10	0.07	410	1	0.02	11	500	12
98DS101C	150.95591	62.58139	>10000	2.2	1.43	>10000	180	<.5	<2	0.52	<.5	12	45	20	4.23	<10	1	0.38	10	0.38	150	5	0.03	19	1820	6
98DS104A	150.88286	62.58521	115	<2	1.04	30	140	<.5	<2	0.04	<.5	25	137	35	11.45	<10	<1	0.11	10	0.03	1585	1	<.01	38	380	16
98DS104B	150.88286	62.58521	95	<2	2.10	44	120	<.5	2	0.04	<.5	19	99	28	5.05	<10	1	0.16	10	0.41	215	1	0.01	89	480	8
98DS106A	150.79020	62.51780	5	<2	0.77	28	30	<.5	<2	0.05	<.5	6	211	8	1.79	<10	<1	0.06	<10	0.34	1110	1	0.01	22	240	4
98DS107A	150.86515	62.57824	<5	0.2	2.26	2	270	<.5	<2	0.10	1.5	34	53	50	7.87	<10	<1	0.14	10	0.46	8060	1	0.01	82	400	10
98DS108A	150.86504	62.57763	90	<2	1.26	18	140	0.5	<2	0.02	<.5	14	113	41	3.00	<10	<1	0.23	10	0.08	1100	<1	0.02	31	80	34
98DS110A	150.84805	62.57966	140	0.2	0.62	130	80	<.5	<2	0.10	<.5	20	27	58	5.26	<10	<1	0.14	<10	0.01	1150	1	0.05	40	1800	30
98DS111A	150.84550	62.57871	110	0.8	1.60	80	60	<.5	<2	0.35	0.5	21	134	27	5.27	<10	1	0.16	<10	0.67	85	4	0.03	37	1440	8
98DS111B	150.84550	62.57871	40	0.8	1.70	66	80	<.5	<2	0.31	<.5	14	77	40	4.44	<10	1	0.19	<10	0.64	110	3	0.02	66	1110	14
98DS112A	150.88866	62.62386	<5	<2	0.66	26	10	0.5	2	0.06	<.5	<1	46	<1	0.38	<10	<1	0.29	<10	0.03	65	<1	0.08	1	70	16
98DS112C	150.88866	62.62386	8940	1.4	0.42	3620	120	<.5	2	0.04	<.5	<1	87	15	1.39	<10	<1	0.21	<10	0.01	85	<1	0.05	2	240	10
98DS113A	150.89262	62.62398	40	0.4	0.55	54	10	0.5	<2	0.05	<.5	<1	77	2	0.47	<10	<1	0.31	<10	0.01	280	1	0.10	3	60	36
98DS113B	150.89262	62.62398	5	<2	1.67	30	50	<.5	<2	0.14	<.5	12	164	19	3.28	<10	<1	0.12	10	0.59	445	1	0.03	45	530	10
98DS114A	150.94619	62.61087	<5	0.6	0.58	6	<10	1.0	2	0.01	<.5	<1	61	2	0.50	<10	<1	0.31	10	<.01	60	1	0.09	4	90	20
98DS115A	150.93477	62.61543	<5	<2	0.48	<2	<10	0.5	2	<.01	<.5	<1	48	3	0.34	<10	<1	0.22	<10	<.01	90	<1	0.07	1	80	16
98DS116B	150.88579	62.62698	5	<2	2.50	28	60	<.5	2	0.14	<.5	10	177	35	4.28	<10	<1	0.15	10	0.93	450	<1	0.02	54	760	16
98DS117A	151.05410	62.51068	<5	<2	1.57	6	110	<.5	<2	0.04	<.5	5	65	25	1.18	<10	<1	0.14	10	0.21	170	<1	0.01	26	70	10
98DS118A	150.96945	62.57513	90	0.2	0.70	284	180	<.5	<2	0.05	<.5	1	59	16	0.58	<10	<1	0.29	<10	0.08	175	<1	0.08	3	170	18
98DS118B	150.96945	62.57513	25	<2	1.73	46	110	<.5	<2	0.12	<.5	11	128	21	2.88	<10	<1	0.13	10	0.78	700	1	0.02	47	470	14
98DS119A	150.96536	62.57469	30	0.2	1.58	68	160	<.5	<2	0.14	<.5	3	50	30	2.86	<10	<1	0.26	20	0.48	55	3	0.03	25	330	12
98DS120A	150.78430	62.51360	<5	<2	0.2	<2	10	<.5	<2	0.03	<.5	2	430	4	0.84	<10	<1	0.02	<10	0.05	750	1	<.01	7	80	8
98DS121A	150.78760	62.51520	<5	<2	0.4	<2	20	<.5	<2	0.05	<.5	4	368	6	0.93	<10	<1	0.04	<10	0.15	510	1	0.01	13	170	4
98DS122A	150.79020	62.51840	<5	<2	0.73	10	40	<.5	<2	0.09	<.5	9	326	24	1.52	<10	<1	0.09	<10	0.26	665	1	0.01	21	410	8
98DS122B	150.79020	62.51840	50	0.2	2.93	46	120	<.5	<2	0.1	<.5	10	85	61	6.56	<10	<1	0.26	10	1.16	305	<1	0.02	60	770	16
98DS123A	150.79500	62.52240	5	0.2	1.59	48	90	<.5	<2	0.08	<.5	18	239	49	3.43	<10	<1	0.16	10	0.5	2130	3	0.02	45	430	12
98DS124A	150.79630	62.52320	<5	<2	0.76	6	170	<.5	<2	0.48	<.5	2	59	3	0.82	<10	<1	0.29	10	0.15	240	<1	0.09	2	270	16
98KC005A	151.05485	62.51045	<5	<2	1.97	10	240	1.0	<2	0.81	0.5	10	257	15	3.38	<10	<1	0.23	10	0.21	1205	1	0.01	22	4190	88
98KC007D	151.05610	62.50959	<5	<2	1.53	<2	80	<.5	<2	0.07	<.5	16	210	30	3.53	<10	<1	0.14	<10	0.32	305	<1	0.01	28	40	6
98KC010B	150.94390	62.42020	<5	<2	1.09	8	40	<.5	<2	0.05	<.5	14	251	18	2.16	<10	<1	0.08	<10	0.42	2320	2	0.03	33	270	6
98KC012A	150.94708	62.41334	<5	<2	0.84	<2	30	<.5	<2	0.06	<.5	5	263	7	1.61	<10	<1	0.06	<10	0.36	860	<1	0.02	20	250	10
98KC015	150.91616	62.45709	<5	<2	0.14	4	<10	<.5	<2	0.09	<.5	1	359	8	0.72	<10	<1	0.03	<10	<.01	40	1	0.01	6	390	8
98KC018B	150.90041	62.44914	<5	<2	0.49	6	40	<.5	<2	0.04	<.5	16	442	15	1.14	<10	<1	0.05	<10	0.13	1510	2	0.02	27	220	4
98KC019A	150.92750	62.45726	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98KC019C	150.92750	62.45726	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98KC020A	151.09959	62.53111	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98KC023	151.10555	62.52555	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 2. Concentration of trace elements in Petersville (Yentna) mining district rock samples collected in June and August, 1998.

(Samples marked "\*" were collected in the Yentna Hills, outside of the map area; NA = not analyzed)

Sample	Long.	Lat.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb
98KC024A	151.10841	62.52518	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98KC024B	151.10841	62.52518	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98KC025	151.10373	62.52137	70	<2	0.95	550	220	<5	<2	0.66	0.5	6	29	10	2.22	<10	<1	0.22	40	0.07	540	<1	0.10	14	750	16
98NS014	150.92530	62.45712	<5	<2	3.08	32	130	<5	<2	0.13	<5	15	155	32	5.07	<10	<1	0.32	10	1.21	855	1	0.04	44	680	6
98NS015	150.92328	62.45696	<5	<2	1.11	10	60	<5	<2	0.13	<5	9	300	18	1.85	<10	<1	0.13	<10	0.40	810	1	0.02	23	300	4
98NS016	150.91483	62.45527	<5	<2	0.95	6	50	<5	<2	0.03	<5	11	324	24	1.82	<10	<1	0.13	<10	0.31	375	1	0.02	22	220	10
98RC009E	151.45163	62.40643	5	<2	1.87	<2	200	0.5	<2	0.14	0.5	21	63	24	3.71	<10	<1	0.29	<10	0.12	710	<1	0.08	56	110	10
98RC009F	151.45163	62.40643	<5	<2	2.35	44	470	0.5	2	0.22	1.5	27	69	62	7.36	<10	<1	0.26	<10	0.35	795	<1	0.04	141	760	32
98SL003A	150.96130	62.45000	25	0.4	3.69	88	50	<5	2	0.50	<5	16	97	52	8.21	<10	<1	0.12	<10	1.49	915	1	0.01	61	3080	50
98SL008	150.88401	62.45069	<5	<2	1.12	4	50	<5	<2	0.04	<5	8	249	31	2.09	<10	<1	0.09	<10	0.41	255	1	0.03	27	340	18
98SL018A	150.91325	62.43789	35	<2	1.62	92	140	0.5	<2	<0.1	<5	3	25	7	2.56	<10	<1	0.25	40	0.23	255	<1	0.08	5	540	16
98SL018B	150.91325	62.43789	50	<2	1.26	92	90	<5	<2	0.01	<5	2	61	15	2.37	<10	<1	0.19	30	0.22	225	<1	0.09	4	530	16
98SL018C	150.91325	62.43789	<5	<2	3.13	2	130	<5	<2	0.12	<5	10	69	23	4.27	<10	<1	0.35	10	1.08	470	1	0.03	51	620	2
98SL035A	150.84806	62.48130	15	<2	1.12	30	100	0.5	<2	0.13	<5	3	48	1	1.43	<10	<1	0.26	20	0.31	305	<1	0.09	5	490	12
98SL035B	150.84806	62.48130	<5	<2	1.16	8	80	0.5	<2	0.08	<5	1	57	2	1.32	<10	<1	0.42	30	0.24	70	<1	0.07	9	490	14
98SL051	150.95090	62.45441	<5	<2	1.84	<2	200	<5	<2	0.51	<5	9	43	29	2.53	<10	<1	0.25	<10	0.80	535	1	0.08	10	1070	2
98SL053A	150.94192	62.45911	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
98SL053B	150.94192	62.45911	<5	<2	0.59	<2	<10	0.5	<2	<0.1	<5	<1	78	<1	0.33	<10	<1	0.40	<10	<0.1	20	<1	0.09	1	50	8
98SL055A	150.94357	62.46048	5	<2	2.57	46	60	<5	<2	0.10	<5	4	109	13	5.39	<10	<1	0.14	<10	1.26	535	6	0.02	53	800	44
98SL055B	150.94357	62.46048	<5	<2	0.15	2	10	<5	<2	0.33	<5	16	272	12	0.70	<10	<1	0.01	<10	0.04	1400	1	0.01	33	240	6
98SL090	150.76190	62.55071	<5	<2	0.79	8	220	<5	<2	0.04	<5	3	39	5	0.75	<10	<1	0.32	10	0.07	50	<1	0.09	3	280	12
98SL099	150.87814	62.47574	5	<2	0.53	10	10	0.5	<2	0.03	<5	<1	107	1	0.52	<10	<1	0.34	<10	<0.1	115	<1	0.08	1	50	16
98SL101	150.86812	62.47259	<5	<2	1.81	6	130	<5	<2	0.46	<5	2	33	17	1.20	<10	<1	0.09	<10	0.31	90	1	0.11	6	220	2
98SL104	150.85397	62.46870	10	<2	1.24	<2	80	<5	<2	0.23	<5	6	57	18	1.37	<10	<1	0.08	<10	0.78	445	<1	0.11	15	310	6
98SL112	150.82598	62.50591	<5	<2	1.58	<2	280	<5	<2	0.75	1.5	5	29	12	2.03	<10	<1	0.38	10	0.49	435	3	0.06	6	820	14
98SL127A	150.94090	62.45420	<5	<2	2.59	24	90	<5	<2	0.08	<5	10	221	42	4.13	<10	<1	0.22	10	1.06	790	<1	0.01	45	560	6
98SL130	150.92584	62.45742	<5	<2	1.56	6	240	<5	<2	0.79	<5	6	119	12	1.57	<10	<1	0.54	10	0.49	290	<1	0.09	8	670	4
98SL156	150.85197	62.50386	25	<2	2.44	6	80	<5	<2	0.10	<5	9	161	17	3.91	<10	<1	0.19	<10	1.18	305	<1	0.03	64	480	8
98SL159A	150.83633	62.50476	<5	<2	4.10	<2	100	<5	<2	2.79	<5	28	257	39	5.11	10	<1	0.20	<10	3.36	1400	<1	0.02	72	750	4
98SL160A	150.83339	62.50412	<5	<2	1.73	8	70	<5	<2	0.09	<5	8	368	9	2.60	<10	<1	0.18	10	0.77	215	<1	0.03	33	370	4
98SL160B	150.83339	62.50412	<5	<2	2.60	<2	80	<5	<2	0.12	<5	9	109	13	4.12	<10	<1	0.18	10	1.24	345	<1	0.01	45	690	8
98SL163	150.82473	62.50837	<5	<2	3.02	<2	60	<5	<2	2.10	<5	15	143	15	3.62	10	<1	0.07	10	2.17	570	1	0.14	15	1060	<2
98SL174	150.79022	62.60171	<5	<2	0.90	56	330	<5	<2	0.19	<5	1	49	11	0.73	<10	<1	0.49	30	0.10	145	<1	0.05	3	530	16
98SL187	150.77947	62.52154	<5	<2	0.81	<2	230	<5	<2	0.05	<5	2	84	8	0.80	<10	<1	0.38	10	0.06	130	<1	0.09	3	280	18
98SL188	150.75783	62.53538	<5	<2	1.73	8	130	<5	<2	0.35	<5	8	56	19	2.37	<10	<1	0.30	10	0.78	455	<1	0.08	16	690	12
98SL192A	151.00313	62.62754	25	2	0.74	582	130	<5	6	0.07	1.5	1	170	6	0.43	<10	<1	0.28	<10	0.04	35	6	0.07	4	300	116
98SL192B	151.00313	62.62754	<5	<2	2.03	40	900	0.5	<2	0.65	<5	10	79	16	3.59	<10	<1	1.02	40	1.17	660	1	0.06	12	790	6

Table 2. Concentration of trace elements in Petersville (Yentna) mining district rock samples collected in June and August, 1998.

(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area; NA = not analyzed)

Sample	Long.	Lat.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb
98SL192C	151.00313	62.62754	55	0.2	2.26	362	230	0.5	<2	0.08	<.5	17	53	36	4.28	<10	<1	0.48	30	0.49	395	1	0.03	66	670	14
98SL192D	151.00313	62.62754	20	<2	2.50	60	270	<.5	<2	0.12	<.5	16	56	7	3.79	<10	<1	0.39	30	0.62	955	<1	0.04	68	860	8
98SL194	150.99825	62.62501	620	1	1.09	376	90	<.5	10	<.01	<.5	3	180	81	3.53	<10	<1	0.20	10	0.22	40	<1	0.03	5	370	14
98SL202A	150.95866	62.63754	10	<2	2.55	<2	110	<.5	<2	1.81	<.5	21	197	58	3.15	<10	<1	0.21	<10	2.17	565	<1	0.19	43	1240	<2
98SL202B	150.95866	62.63754	<5	<2	3.74	<2	160	<.5	<2	2.72	<.5	26	287	60	4.99	10	<1	0.03	10	3.66	1040	1	0.03	53	1360	<2

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(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area; NA = not analyzed)

Sample	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn	Au2	Au3	Pt	Pd	Rh	Sn
98AM010A	<2	2	19	<.01	<10	<10	5	<10	18	NA	NA	NA	NA	NA	NA
98AM021B	<2	<1	27	<.01	<10	<10	5	<10	102	NA	NA	NA	NA	NA	<2
98AM033A	<2	<1	27	<.01	<10	<10	6	<10	46	NA	NA	NA	NA	NA	<2
98DL166-1	<2	<1	4	<.01	<10	<10	<1	<10	56	NA	NA	NA	NA	NA	<2
98DL166-2	<2	2	25	<.01	<10	<10	28	<10	74	NA	NA	NA	NA	NA	NA
98DL185-1	<2	1	34	<.01	<10	<10	5	<10	42	NA	NA	NA	NA	NA	2
98DS005A	<2	4	38	<.01	<10	<10	31	<10	92	NA	NA	NA	NA	NA	NA
98DS007A	<2	4	39	<.01	<10	<10	43	<10	82	NA	NA	NA	NA	NA	NA
98DS008B	<2	<1	26	<.01	<10	<10	3	<10	56	NA	NA	NA	NA	NA	NA
98DS011A	<2	9	23	0.12	<10	<10	121	<10	86	NA	NA	NA	NA	NA	NA
98DS012A	<2	3	59	0.18	<10	<10	22	<10	106	NA	NA	NA	NA	NA	<2
98DS013A	<2	3	50	0.17	<10	<10	21	<10	98	NA	NA	NA	NA	NA	NA
98DS014A	<2	3	64	0.20	<10	<10	25	<10	90	NA	NA	NA	NA	NA	<2
98DS014B	<2	8	103	0.30	<10	<10	124	<10	102	NA	NA	NA	NA	NA	NA
98DS017A	<2	<1	5	<.01	<10	<10	1	<10	6	NA	NA	NA	NA	NA	<2
98DS017B	<2	1	10	0.04	<10	<10	14	<10	14	NA	NA	NA	NA	NA	<2
98DS019A	<2	12	20	0.18	<10	<10	144	<10	104	NA	NA	NA	NA	NA	NA
98DS023A	<2	3	35	0.07	<10	<10	48	<10	108	NA	NA	NA	NA	NA	NA
98DS024A	<2	1	13	<.01	<10	<10	22	<10	84	NA	NA	NA	NA	NA	<2
98DS026A	<2	3	30	0.03	<10	<10	41	<10	108	NA	NA	NA	NA	NA	NA
98DS026B	<2	<1	4	<.01	<10	<10	9	<10	18	NA	NA	NA	NA	NA	NA
98DS027A	<2	3	32	<.01	<10	<10	34	<10	88	NA	NA	NA	NA	NA	NA
98DS028A	<2	4	22	<.01	<10	<10	38	<10	114	NA	NA	NA	NA	NA	NA
98DS029A	<2	1	24	<.01	<10	<10	5	<10	70	NA	NA	NA	NA	NA	<2
98DS031A	<2	<1	51	<.01	<10	<10	<1	<10	44	NA	NA	NA	NA	NA	<2
98DS034A	<2	2	19	<.01	<10	<10	15	<10	52	NA	NA	NA	NA	NA	NA
98DS036B	<2	<1	3	<.01	<10	<10	5	<10	14	NA	NA	NA	NA	NA	NA
98DS039A	<2	11	323	0.02	<10	<10	68	<10	104	NA	NA	NA	NA	NA	<2
98DS041A	<2	4	273	<.01	<10	<10	26	<10	34	NA	NA	NA	NA	NA	2
98DS047A	<2	10	15	0.12	<10	<10	121	<10	106	NA	NA	NA	NA	NA	NA
98DS049A	<2	9	34	0.13	<10	<10	89	<10	86	NA	NA	NA	NA	NA	NA
98DS050A	<2	<1	1	<.01	<10	<10	<1	<10	54	NA	NA	NA	NA	NA	<2
98DS051A	<2	3	35	<.01	<10	<10	46	<10	122	NA	NA	NA	NA	NA	NA
98DS052A	<2	3	13	<.01	<10	<10	41	<10	110	NA	NA	NA	NA	NA	NA
98DS053A	<2	3	15	0.01	<10	<10	44	<10	106	NA	NA	NA	NA	NA	NA
98DS054A	<2	3	22	<.01	<10	<10	35	<10	70	NA	NA	NA	NA	NA	NA
98DS058A	<2	11	663	0.01	<10	<10	115	<10	94	NA	NA	NA	NA	NA	<2

Table 2. Concentration of trace elements in Petersville (Yentna) mining district rock samples collected in June and August, 1998.

(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area; NA = not analyzed)

Sample	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn	Au2	Au3	Pt	Pd	Rh	Sn
98DS059A	<2	3	16	<.01	<10	<10	31	<10	86	NA	NA	NA	NA	NA	NA
98DS060B	<2	3	20	<.01	<10	<10	28	<10	84	NA	NA	NA	NA	NA	NA
98DS061A	<2	1	13	<.01	<10	<10	12	<10	42	NA	NA	NA	NA	NA	<2
98DS062A	<2	<1	17	<.01	<10	<10	7	<10	18	NA	NA	NA	NA	NA	NA
98DS063A	<2	<1	179	<.01	<10	<10	1	<10	80	NA	NA	NA	NA	NA	<2
98DS063B	<2	<1	27	<.01	<10	<10	1	<10	54	NA	NA	NA	NA	NA	<2
98DS063C	<2	1	23	<.01	<10	<10	20	<10	58	NA	NA	NA	NA	NA	NA
98DS064A	<2	3	11	<.01	<10	<10	13	<10	46	NA	NA	NA	NA	NA	NA
98DS065A	<2	<1	17	<.01	<10	<10	5	<10	14	NA	NA	NA	NA	NA	NA
98DS068A	<2	3	16	<.01	<10	<10	35	<10	88	NA	NA	NA	NA	NA	NA
98DS070A	<2	<1	13	<.01	<10	<10	<1	<10	80	NA	NA	NA	NA	NA	<2
98DS072B	<2	1	18	<.01	<10	<10	17	<10	54	NA	NA	NA	NA	NA	NA
98DS072C	<2	4	20	<.01	<10	<10	10	<10	30	NA	NA	NA	NA	NA	<2
98DS073A	<2	<1	33	<.01	<10	<10	22	<10	54	NA	NA	NA	NA	NA	NA
98DS080A	<2	<1	26	<.01	<10	<10	2	<10	26	NA	NA	NA	NA	NA	<2
98DS081A	2	<1	17	<.01	<10	<10	7	<10	36	NA	NA	NA	NA	NA	2
98DS081B	2	1	11	<.01	<10	<10	37	<10	54	NA	NA	NA	NA	NA	NA
98DS081C	2	<1	79	<.01	<10	<10	7	<10	34	NA	NA	NA	NA	NA	<2
98DS082A	<2	5	129	0.13	<10	<10	48	<10	94	NA	NA	NA	NA	NA	<2
98DS083A	<2	<1	13	<.01	<10	<10	8	<10	28	NA	NA	NA	NA	NA	<2
98DS083B	<2	1	17	<.01	<10	<10	26	<10	74	NA	NA	NA	NA	NA	NA
98DS084A	<2	1	8	<.01	<10	<10	8	<10	30	NA	NA	NA	NA	NA	NA
98DS086A	<2	<1	13	<.01	<10	<10	1	<10	14	NA	NA	NA	NA	NA	<2
98DS086B	110	<1	1045	<.01	<10	<10	3	30	4	0.350	NA	NA	NA	NA	NA
98DS087A	<2	6	136	<.01	<10	<10	57	<10	170	NA	NA	NA	NA	NA	NA
98DS089A	8	1	117	<.01	<10	<10	4	<10	64	NA	NA	NA	NA	NA	<2
98DS090A*	6	10	45	0.01	<10	<10	78	<10	104	NA	<.001	<.002	<.002	<.001	NA
98DS091A*	6	8	50	0.05	<10	<10	101	<10	88	NA	<.001	<.002	<.002	<.001	NA
98DS092A*	<2	4	11	<.01	<10	<10	38	<10	126	NA	NA	NA	NA	NA	NA
98DS093A	<2	6	123	<.01	<10	<10	34	<10	174	NA	NA	NA	NA	NA	NA
98DS094A	<2	1	18	<.01	<10	<10	29	<10	74	NA	NA	NA	NA	NA	NA
98DS095A	<2	3	34	<.01	<10	<10	36	<10	90	NA	NA	NA	NA	NA	NA
98DS098A	<2	1	4	<.01	<10	<10	4	<10	70	NA	NA	NA	NA	NA	NA
98DS099A	2	<1	82	<.01	<10	<10	3	<10	74	NA	NA	NA	NA	NA	<2
98DS099B	<2	<1	15	<.01	<10	<10	1	40	14	NA	NA	NA	NA	NA	NA
98DS100A	2	1	125	<.01	<10	<10	4	<10	32	NA	NA	NA	NA	NA	NA
98DS101A	<2	<1	42	<.01	<10	<10	3	<10	60	NA	NA	NA	NA	NA	<2

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(Samples marked "\*\*\*" were collected in the Yenlo Hills, outside of the map area; NA = not analyzed)

Sample	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn	Au2	Au3	Pt	Pd	Rh	Sn
98DS101B	<2	1	30	<.01	<10	<10	7	<10	20	0.667	NA	NA	NA	NA	NA
98DS101C	6	3	58	<.01	<10	<10	19	<10	60	0.489	NA	NA	NA	NA	NA
98DS104A	<2	5	12	<.01	<10	<10	42	<10	122	NA	NA	NA	NA	NA	NA
98DS104B	<2	3	23	<.01	<10	<10	34	<10	216	NA	NA	NA	NA	NA	NA
98DS106A	<2	2	12	<.01	<10	<10	12	<10	34	NA	NA	NA	NA	NA	NA
98DS107A	<2	3	55	<.01	<10	<10	34	<10	150	NA	NA	NA	NA	NA	NA
98DS108A	<2	4	18	<.01	<10	<10	29	<10	74	NA	NA	NA	NA	NA	NA
98DS110A	<2	5	26	<.01	<10	<10	10	<10	80	NA	NA	NA	NA	NA	NA
98DS111A	<2	3	60	<.01	<10	<10	46	<10	86	NA	NA	NA	NA	NA	<2
98DS111B	<2	5	104	<.01	<10	<10	29	<10	106	NA	NA	NA	NA	NA	NA
98DS112A	<2	<1	7	<.01	<10	<10	<1	<10	76	NA	NA	NA	NA	NA	<2
98DS112C	6	<1	13	<.01	<10	<10	1	<10	18	NA	NA	NA	NA	NA	<2
98DS113A	<2	<1	4	<.01	<10	<10	<1	<10	118	NA	NA	NA	NA	NA	<2
98DS113B	<2	2	17	<.01	<10	<10	23	<10	78	NA	NA	NA	NA	NA	NA
98DS114A	<2	<1	1	<.01	<10	<10	<1	<10	66	NA	NA	NA	NA	NA	<2
98DS115A	<2	<1	1	<.01	<10	<10	<1	<10	68	NA	NA	NA	NA	NA	<2
98DS116B	<2	3	29	<.01	<10	<10	33	<10	94	NA	NA	NA	NA	NA	<2
98DS117A	<2	3	38	0.01	<10	<10	17	<10	58	NA	NA	NA	NA	NA	NA
98DS118A	<2	<1	15	<.01	<10	<10	1	<10	24	NA	NA	NA	NA	NA	<2
98DS118B	<2	3	19	<.01	<10	<10	26	<10	82	NA	NA	NA	NA	NA	NA
98DS119A	2	1	18	<.01	<10	<10	26	<10	46	NA	NA	NA	NA	NA	<2
98DS120A	<2	<1	5	<.01	<10	<10	4	<10	10	NA	NA	NA	NA	NA	NA
98DS121A	<2	1	10	<.01	<10	<10	7	<10	18	NA	NA	NA	NA	NA	NA
98DS122A	<2	1	22	<.01	<10	<10	11	<10	32	NA	NA	NA	NA	NA	NA
98DS122B	<2	4	24	<.01	<10	<10	41	<10	122	NA	NA	NA	NA	NA	NA
98DS123A	<2	4	30	<.01	<10	<10	24	<10	98	NA	NA	NA	NA	NA	NA
98DS124A	2	<1	48	<.01	<10	<10	3	<10	48	NA	NA	NA	NA	NA	<2
98KC005A	<2	4	174	<.01	<10	<10	31	<10	56	NA	NA	NA	NA	NA	NA
98KC007D	<2	3	118	0.08	<10	<10	51	<10	46	NA	NA	NA	NA	NA	NA
98KC010B	<2	2	14	<.01	<10	<10	20	<10	68	NA	NA	NA	NA	NA	NA
98KC012A	<2	2	14	<.01	<10	<10	16	<10	34	NA	NA	NA	NA	NA	NA
98KC015	<2	2	24	<.01	<10	<10	3	<10	8	NA	NA	NA	NA	NA	NA
98KC018B	<2	1	19	<.01	<10	<10	8	<10	38	NA	NA	NA	NA	NA	NA
98KC019A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2
98KC019C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2
98KC020A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2
98KC023	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2



Table 2. Concentration of trace elements in Petersville (Yentna) mining district rock samples collected in June and August, 1998.  
(Samples marked "\*" were collected in the Yenlo Hills, outside of the map area; NA = not analyzed)

Sample	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn	Au2	Au3	Pt	Pd	Rh	Sn
98KC024A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2
98KC024B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
98KC025	<2	4	54	<.01	<10	<10	6	<10	122	NA	NA	NA	NA	NA	2
98NS014	<2	4	24	<.01	<10	<10	57	<10	104	NA	NA	NA	NA	NA	NA
98NS015	<2	3	24	<.01	<10	<10	21	<10	50	NA	NA	NA	NA	NA	NA
98NS016	<2	1	12	<.01	<10	<10	17	<10	42	NA	NA	NA	NA	NA	NA
98RC009E	<2	6	25	<.01	<10	<10	35	<10	144	NA	NA	NA	NA	NA	NA
98RC009F	2	10	182	<.01	<10	<10	60	<10	358	NA	NA	NA	NA	NA	NA
98SL003A	<2	6	82	<.01	<10	<10	62	<10	196	NA	NA	NA	NA	NA	NA
98SL008	<2	1	20	<.01	<10	<10	20	<10	48	NA	NA	NA	NA	NA	NA
98SL018A	<2	1	21	<.01	<10	<10	14	<10	66	NA	NA	NA	NA	NA	NA
98SL018B	<2	1	20	<.01	<10	<10	12	<10	52	NA	NA	NA	NA	NA	NA
98SL018C	<2	4	20	<.01	<10	<10	48	<10	120	NA	NA	NA	NA	NA	NA
98SL035A	<2	1	20	0.02	<10	<10	17	<10	60	NA	NA	NA	NA	NA	NA
98SL035B	<2	1	11	<.01	<10	<10	13	<10	50	NA	NA	NA	NA	NA	<2
98SL051	<2	2	195	0.09	<10	<10	20	<10	106	NA	NA	NA	NA	NA	<2
98SL053A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2
98SL053B	<2	<1	3	<.01	<10	<10	<1	<10	42	NA	NA	NA	NA	NA	<2
98SL055A	<2	4	16	<.01	<10	<10	54	<10	104	NA	NA	NA	NA	NA	NA
98SL055B	<2	2	55	<.01	<10	<10	3	<10	66	NA	NA	NA	NA	NA	NA
98SL090	<2	<1	13	<.01	<10	<10	3	<10	34	NA	NA	NA	NA	NA	<2
98SL099	<2	<1	2	<.01	<10	<10	<1	<10	60	NA	NA	NA	NA	NA	<2
98SL101	<2	2	62	0.02	<10	<10	16	<10	30	NA	NA	NA	NA	NA	<2
98SL104	<2	3	25	0.03	<10	<10	24	<10	52	NA	NA	NA	NA	NA	<2
98SL112	<2	1	85	<.01	<10	<10	10	<10	124	NA	NA	NA	NA	NA	<2
98SL127A	<2	3	22	<.01	<10	<10	37	<10	108	NA	NA	NA	NA	NA	NA
98SL130	<2	3	354	0.11	<10	<10	28	<10	50	NA	NA	NA	NA	NA	<2
98SL156	<2	2	21	<.01	<10	<10	34	<10	82	NA	NA	NA	NA	NA	NA
98SL159A	<2	12	168	<.01	<10	<10	103	<10	98	NA	NA	NA	NA	NA	NA
98SL160A	<2	1	19	<.01	<10	<10	27	<10	58	NA	NA	NA	NA	NA	NA
98SL160B	<2	3	23	<.01	<10	<10	34	<10	90	NA	NA	NA	NA	NA	NA
98SL163	<2	4	111	0.21	<10	<10	89	<10	62	NA	NA	NA	NA	NA	<2
98SL174	<2	<1	27	<.01	<10	<10	3	<10	42	NA	NA	NA	NA	NA	<2
98SL187	<2	<1	16	<.01	<10	<10	3	<10	40	NA	NA	NA	NA	NA	<2
98SL188	<2	2	91	0.01	<10	<10	22	<10	80	NA	NA	NA	NA	NA	<2
98SL192A	<2	<1	12	<.01	<10	<10	3	<10	76	NA	NA	NA	NA	NA	<2
98SL192B	<2	8	62	0.18	<10	<10	77	<10	158	NA	NA	NA	NA	NA	<2

Table 2. Concentration of trace elements in Petersville (Yentna) mining district rock samples collected in June and August, 1998.  
 (Samples marked "\*" were collected in the Yenlo Hills, outside of the map area; NA = not analyzed)

Sample	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn	Au2	Au3	Pt	Pd	Rh	Sn
98SL192C	<2	4	15	<.01	<10	<10	41	<10	106	NA	NA	NA	NA	NA	NA
98SL192D	<2	3	20	<.01	<10	<10	34	<10	60	NA	NA	NA	NA	NA	NA
98SL194	2	3	21	<.01	<10	<10	18	<10	12	NA	NA	NA	NA	NA	NA
98SL202A	<2	9	131	0.18	<10	<10	94	<10	58	NA	NA	NA	NA	NA	<2
98SL202B	<2	18	230	0.25	<10	<10	173	<10	88	NA	NA	NA	NA	NA	NA

Table 3. Detection limits for geochemical analyses.

(Analytical methods: FA-AAS = Fire Assay-Atomic Absorption Spectroscopy, ICP-AES = Inductively Coupled Plasma-Atomic Emission Spectroscopy, FA-GRAV = Fire Assay-Gravimetric, FA-ICP-ARRAY = Fire Assay-Inductively Coupled Plasma, and AAS = Atomic Emission Spectroscopy)

Element	Units	Lower Detection Limit	Upper Detection Limit	Analytical Method
Au	ppb	5	10,000.00	FA-AAS
Ag	ppm	0.2	100	ICP-AES
Al	percent	0.01	15	ICP-AES
As	ppm	2	1	ICP-AES
Ba	ppm	10	1	ICP-AES
Be	ppm	0.5	100	ICP-AES
Bi	ppm	2	1	ICP-AES
Ca	percent	0.01	15	ICP-AES
Cd	ppm	0.5	500	ICP-AES
Co	ppm	1	1	ICP-AES
Cr	ppm	1	1	ICP-AES
Cu	ppm	1	1	ICP-AES
Fe	percent	0.01	15	ICP-AES
Ga	ppm	10	1	ICP-AES
Hg	ppm	1	1	ICP-AES
K	percent	0.01	10	ICP-AES
La	ppm	10	1	ICP-AES
Mg	percent	0.01	15	ICP-AES
Mn	ppm	5	1	ICP-AES
Mo	ppm	1	1	ICP-AES
Na	percent	0.01	10	ICP-AES
Ni	ppm	1	1	ICP-AES
P	ppm	10	1	ICP-AES
Pb	ppm	2	1	ICP-AES
Sb	ppm	2	1	ICP-AES
Sc	ppm	1	1	ICP-AES
Sr	ppm	1	1	ICP-AES
Ti	percent	0.01	10	ICP-AES
Tl	ppm	10	1	ICP-AES
U	ppm	10	1	ICP-AES
V	ppm	1	1	ICP-AES
W	ppm	10	1	ICP-AES
Zn	ppm	2	1	ICP-AES
Au2	oz/T	0.002	30	FA-GRAV
Au3	oz/T	0.001	20	FA-ICP-ARRAY
Pt	oz/T	0.002	20	FA-ICP-ARRAY
Pd	oz/T	0.002	20	FA-ICP-ARRAY
Rh	oz/T	0.001	20	FA-ICP-ARRAY
Sn	ppm	2	1000	AAS