UNIVERSITY OF NEVADA RENO

Nevada Bureau of Mines and Geology
University of Nevada Reno
Reno, Nevada 89557-0088
(702) 784-6691

11 October 1983

NBMG OPEN-FILE REPORT 83-12

RESULTS OF GEOCHEMICAL SAMPLING WITHIN ESMERALDA-STATELINE RESOURCE AREA, ESMERALDA, CLARK, AND SOUTHERN NYE COUNTIES, NEVADA (PORTIONS OF DEATH VALLEY, GOLDFIELD, KINGMAN, LAS VEGAS, MARIPOSA AND TONOPAH 2° SHEETS)

by Peggy L. Smith and J. V. Tingley

Samples collected by Nevada Bureau of Mines and Geology and analyzed by Branch of Exploration Research, United States Geological Survey, as part of the Mineral Inventory of the Esmeralda-Stateline Resource Area, under Bureau of Land Management Contract #YA-553-CT1-1058.

This information should be considered preliminary. It has not been edited or checked for completeness or accuracy.

See NBMG 83-11 for Inventory Report.

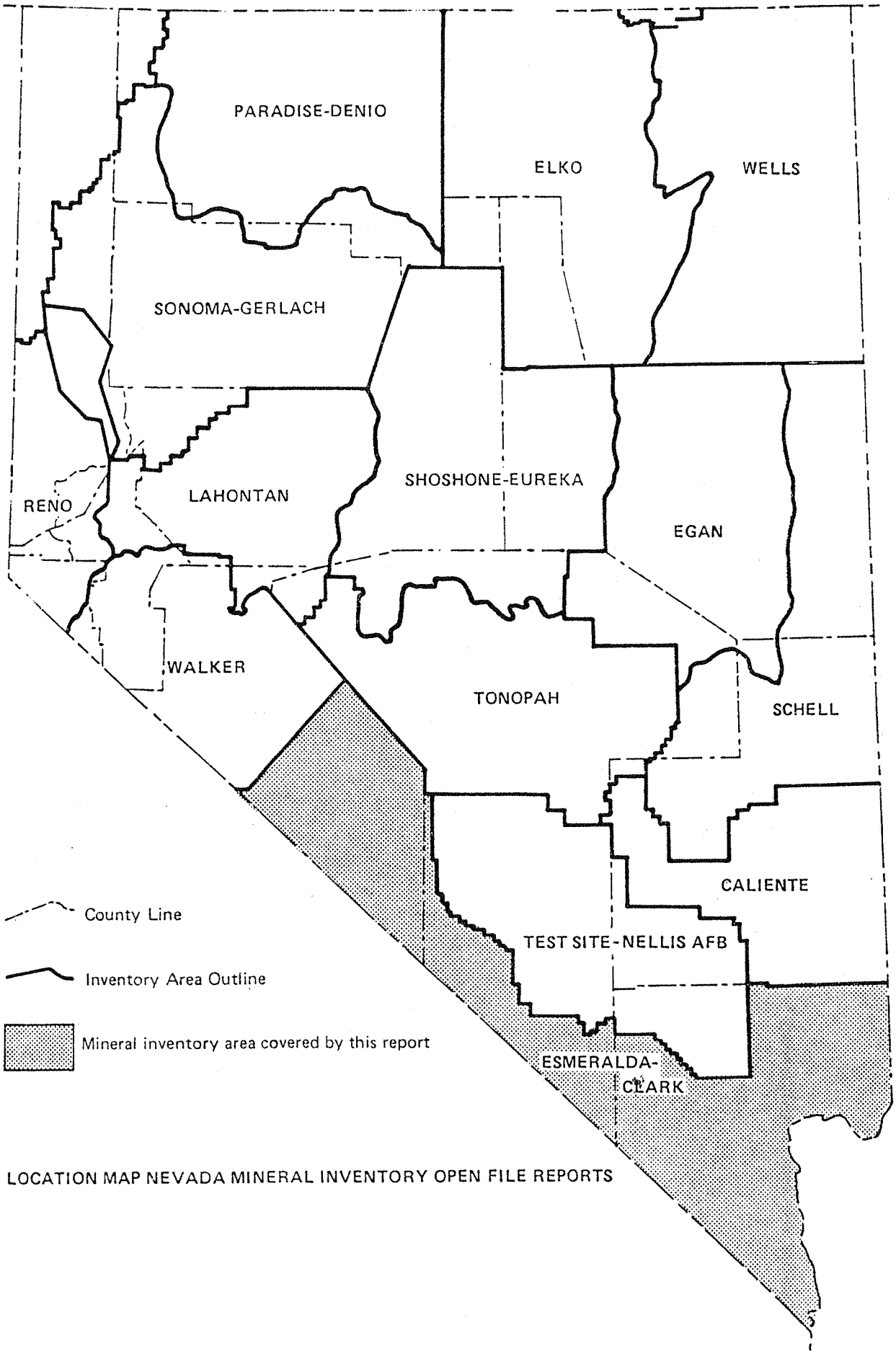
Same reference maps as NBMG Open File report 83-11

Same reference maps as NBMG Open File report 83-11

[redacted]

(Analyses not complete, will be added when received)

DATE ~~PURCHASED~~ (COPIED): _____



LOCATION MAP NEVADA MINERAL INVENTORY OPEN FILE REPORTS

Sample Description

Sample Number	Location	Description
374	Quad: Bare Mtn. 15' Sec: 11 T: 13S R: 47 1/2E UTM: 4076880 N 0532400 E Gold Spar (Diamond Queen) Bare Mtn. District	Flurorite-rich breccia, fragments of dolomite & shale, minor rhyolite dike fragments, FeOx, clay, breccia fragmen. kaolinized, jarossite, calcite.
375	Quad: Bare Mtn. 15' Sec: 11 T: 13S R: 47 1/2E UTM: 4076800 N 0532250 E GoldSpar (Diamond Queen) Bare Mtn. District	Cellular gossan breccia white quartz, calcite, purple fluorite.
376	Quad: Bare Mtn. 15' Sec: (?) 5 T: 13S R: 48E (?) UTM: 4075600 N 0531900 E Ambrose Pit (Sterling) Bare Mtn. District	FeOx-stained brecciated siltstone shale, silicified jasperoid, vugs lined with calcite, possibly some fluorite.
377	Quad: Bare Mtn. 15' Sec: (?) 5 T: 13S R: 48E (?) UTM: 4075800 N 0531900 E Sterling Gold Mine Bare Mtn. District	Brecciated dolomite with fluorite, kaolinized shale with jarosite, massive jasperoid with jarosite crystals form dolomite.
378	Quad: Springdale 15' Sec: 1 T: 11S R: 46E UTM: 4096000 N 0519850 E Connection Shaft (Pioneer Prospect) Bare Mtn. District	Dull red (hematite) Limestone breccia, silica veinlets, clots of red-black hematite along fractures, white calcite veining.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
436	Quad: Lone Mtn. 15' Esmeralda Sec: 34 T: 3N R: 42E UTM: 4213700 N 0478400 E West Tonopah Mine Tonopah District	White quartz vein material, yellowish powder coats surface, drusy quartz line vugs, finely disseminated pyrite, crystals euhedral, blebs of fine grained galena, quartz vein massive to
	Quad: Sec: T: R: UTM: N E	sacchroidal, minor FeOx-MnO2 staining, very fine boxworks.
437	Quad: Lone Mtn. 15' Esmeralda Sec: 29 T: 3N R: 42E UTM: 4214790 N 0475300 E Lambertucci Claims Tonopah District	Drill cuttings, medium grey shales.
438	Quad: Lone Mtn. 15' Esmeralda Sec: 29 T: 3N R: 42E UTM: 4214410 N 0475510 E Lambertucci Claims Tonopah District	White clay chips, limonite stained, spheroidal weathering patterns adamantine, mineral colorless coats surfaces, thin lamalae.
439	Quad: Lone Mtn. 15' Esmeralda Sec: 20 T: 3N R: 42E UTM: 4214550 N 0476370 E None Tonopah District	Slightly porphyretic(plagioclase phenocrysts), chloritized rock propylitized, quartz eyes, pods of crystalline epidote, rock fine grained matrix, greenish grey, maroon staining.
440	Quad: Lone Mtn. 15' Esmeralda Sec: 4 T: 2N R: 42E UTM: 4212500 N 0478180 E Three Hills Claims Divide District	Silicified, hydrothermally altered, tuffaceous sand-stone breccia, MnO2 stained on exposed surfaces, anhedral drusy quartz in cavities.
441	Quad: Tonopah 7 1/2 ' Sec: 34 T: 3N R: 42E UTM: 4213640 N 0478610 E Great Western Mine Tonopah District	White to medium grey, sacchroidal quartz vein material with disseminated blebs of pyrite, yellow oxides coat surfaces, drusy quartz coats vugs & fractures FeOx stained.
442	Quad: Mud Lake 15' Sec: 26 T: 2N R: 42E UTM: 4205340 N 0479100 E Divide Mine Divide District	Bleached, lithic rich, slightly chloritized tuff, surfaces coated with drusy quartz.
443	Quad: Mud Lake 15' Sec: 7 T: 1N R: 43E UTM: 4201230 N 0482420 E Colorado #3 Claims Divide District	White to grey massive to sacchroidal material, highly fractured, limonite-MnO2 stained, abundant drusy quartz.

Sample Description

Sample Number	Location	Description
444	Quad: Mud Lake 15' Sec: 6 T: 1N R: 43E UTM: 4202310 N 0483510 E Treasure Hill Claims Klondyke District	Silicified, fractured, rhyolite with biotite phenocrysts, weathered, vuggy, pinkish-cream colored quartz pseudo-morphic vein material, after calcite.
445	Quad: Mud Lake 15' Sec: 25 T: 1N R: 42E UTM: 4196140 N 0481560 E No Name Klondike District	White, massive, highly fractured, quartz vein material coated, with ferro-magnesium minerals, and secondary copper, fine boxworks coated with yellow-brown oxides.
446	Quad: Mud Lake 15' Sec: 30 T: 1N R: 43E UTM: 4195830 N 0482940 E East Klondyke Mine Klondyke District	White, intergrown crystalline, quartz vein material, highly fractured, surfaces coated with ferro-magnesium oxides, copper carbonates, yellow oxides, calcite, crysocolla pods &
	Quad: Sec: T: R: UTM: N E	in fractures of quartz, crystalline wolfenite coats surfaces, minor boxworks, limonite stained.
447	Quad: Mud Lake 15' Sec: 36 T: 1N R: 42E UTM: 4194890 N 0480890 E Treasure Hill Claims Divide District	White quartz vein material, fractured, coated with powdery limonite minor MnO2, oxidized pyrite crystals, crystalline calcite coats surfaces.
448	Quad: Goldfield 15' Sec: 16 T: 3S R: 44E UTM: 4170700 N 0495700 E Free Gold # 1 Claims Goldfield District	Heavily FeOx stained, vuggy, heavy, gossan, some drusy quartz.
449	Quad: Goldfield 15' Sec: 36 T: 2S R 42E UTM: 4174600 N 0481260 E Idaho Claim Goldfield District	Altered, bleached, sacchroidal siliceous volcanic rock, coated with yellow oxides, boxworks.
450	Quad: Goldfield 15' Sec: 19 T: 2S R: 44# UTM: 4177420 N 0491970 E THG Claims Goldfield	White quartz vein material, chalcedonic, finely disseminated malachite, euhedral quartz & opaline fills vugs, drusy quartz coats surfaces, pyrite ghosts, MnO2 stain exposed surfaces,
	Quad: Sec: T: R: UTM: N E	boxworks.

Sample Description

Sample Number	Location	Description
451	Quad: Mud Lake 15' Sec: 13 T: 2S R: 43E UTM: 4179880 N 0491470 E No Name Goldfield District	Silicified and unsilicified rhyolite surfaces coated with drusy quartz & crystalline calcite, in unsilicified rock feldspars altered, rock limonitic stained, minor boxworks.
452	Quad: Mud Lake 15' Sec: 14 T: 2S R: 43E UTM: 4179770 N 0489120 E No Name Goldfield District	Bleached, altered, slightly porphyritic quartz rich rhyolite, cut with chalcedonic veining, gossany pods, and areas minor hematite staining.
453	Quad: Goldfield 15' Sec: 3 T: 3S R: 43E UTM: 4172150 N 0488980 E No Name Goldfield District	Bleached, altered, silicified rhyolite, coated with yellow oxides, minor limonite staining, boxworks.
454	Quad: Goldfield 15' Sec: 2 T: 4S R: 42E UTM: 4164400 N 0478910 E None Goldfield District	Heavy, dense, black rock (wad), chert nodules slightly FeOx stained.
455	Quad: Goldfield 15' Sec: 15 T: 4S R: 42E UTM: 4160350 N 0478350 E Rosary One Claim Goldfield District	Grey-brown mud stone, slightly calcareous, gossany, vuggy, boxworks, Fe-Mn stained, fine grained galena & pyrite occurring along fracture surfaces & veins, also in gossan area.
456	Quad: Lone Mtn. 15' Sec: 33 T: 3N R: 40E UTM: 4213500 N 0457700 E Heidi Mine Lone Mtn. District	White, massive quartz vein material with pods and individual crystals of galena, zones of limonite staining, FeOx stained boxworks, dendritic MnO2.
457	Quad: Lone Mtn. 15' Sec: 11 T: 3N R: 40E UTM: 4211150 N 0460000 E None Lone Mtn. District	Heavily Fe-Mn stained gossan, dense, vuggy, specularite.
458	Quad: Lone Mtn. 15' Sec: 13 T: 2N R: 40E UTM: 4209500 N 0462350 E None Lone Mtn. District	White quartz vein material, fractured, massive to sugary, coated with yellowish oxides, FeOx stained, fine crystalline sulfides.
459	Quad: Rhyolite Ridge 15' Sec: 33 T: 2N R: 37E UTM: 4204250 N 0423975 E Coaldale Prospect Claim Rock Hill District	Medium grey prophyritic igneous, extrusive with smokey grey and clear quartz and sanidine phenocrysts, MnO2 stains, dk grey siliceous veinlets, minor FeOx stains.

Sample Description

Sample Number	Location	Description
460	Quad: Rhyolite Ridge 15' Sec: 33 T: 2N R: 37E UTM: 4204780 N 0423230 E None Silver Peak District	Fe-Mn replaced sinter, dense, pods of opaline Fe stained.
461	Quad: Devils Gate 7 1/2' Sec: 31 T: 3N R: 39E UTM: 4214090 N 0444545 E Black Rock Prospect Claim Gilbert District	White to pale smokey quartz vein material, laminated, host rock dk grey fine grained silicified mud stone, vein very vuggy, yellow powdery oxides coats surfaces, FeOx-MnO2 stained, drusy quartz coat vugs & fracture surfaces, chalcedonic.
	Quad: Sec: T: R: UTM: N E	
462	Quad: Rhyolite Ridge 15' Sec: 6 T: 1N R: 37E UTM: 4202350 N 0421420 E Hombre Claims Silver Peak District	White to red chalcedony cementing cinnabar bearing volcanic rock, host rock lithic rich with quartz & sanidine phenocrysts, heavily MnO2 stained, weathered boxworks.
463	Quad: Rhyolite Ridge 15' Sec: 5 T: 1N R: 37E UTM: 4202850 N 0422100 E Hombre Claims Silver Peak District	Chalcedonic vein/breccia, medium grey, minor cinnabar, minor MnO2.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
516	Quad: Candelaria 7 1/2' Sec: 3 T: 3N R: 35E UTM: 4222280 N 0406550 E Red Band Claim Near Rock Hill District	Barite Vein.
517	Quad: Silver Peak 15' Sec: 29 T: 1N R: 40E UTM: 4195150 N 0455900 E American Claims Silver Peak District	Barite Vein.
518	Quad: Miller Mtn. 7 1/2' Sec: 10 T: 2N R: 34E UTM: 4210380 N 0397100 E Molly Claim Black Horse District	Barite Vein.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
532	Quad: Miller Mtn. 7 1/2' Sec: 22 T: 3N R: 34E UTM: 4217680 N 0396700 E Noquez Black Horse	Bedded Barite.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1001	Quad: High Peak 7 1/2' Sec: 20 T: 18S R: 52E UTM: 4025205 N 0576400 E Copper Giant Mine Johnnie District	Bull quartz vein/gouge material with specularite cementing and infilling fractures, hematite stained, pods and stringers crystalline barite interspersed in specularite and quartz, minor copper staining, slickensides.
	Quad: Sec: T: R: UTM: N E	
1002	Quad: Mt Shader 7 1/2' Sec: 22 T: 18S R: 52E UTM: 4026075 N 0579180 E No Name Johnnie District	Coarse grained, purplish hematite stained quartzite with copper carbonates coating surfaces and filling fractures, hematite/pyrite specks oxidizing, minor limonite staining, radiating malachite/bronchantite, malachite pseudomorphs after azurite.
	Quad: Sec: T: R: UTM: N E	
1003	Quad: Bare Mountain 15' Sec: 20 T: 12S R: 47E UTM: 4081800 N 0523400 E Balik Claims Bare Mountain District	Limonite-Mn stained gossan, specularite bands and surface coatings, some mammillary, irridescent oxidization, very crumbly.
1004A	Quad: Bare Mountain 15' Sec: 21 T: 12S R: 47E UTM: 4081400 N 0523750 E Balik Claims (adit) Bare Mountain District	Bull quartz vein material, moderately fractured with FeOx (mostly limonite) coating surfaces, flecks of pyrite/hematite oxidized, Mn (surface coating & dendritic), pods & blotches of sericite, some fresh and bleached pods and veinlets of dark green, micaceous mineral, fragile.
	Quad: Sec: T: R: UTM: N E	
1004B	Quad: Bare Mountain 15' Sec: 21 T: 12S R: 47E UTM: 4081400 N 0523750 E Balik Claims (above adit) Bare Mountain District	White bull quartz vein, moderately fractured, FeOx-Mn stained on fresh and fracture surfaces, pods of gossany material, with stringers and surface coating malachite, dendritic pyrolusite, country rock highly sericitic, almost mica schist, within pod of gossany material smaller pods chalcopyrite, rock very dense/heavy.
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1005	Quad: Big Dune 15' Sec: Unsurveyed T: 15S R: 47E UTM: 4056500 N 0525300 E WC-TH Claims Lee District	White bull quartz vein, fractured, limonite-Mn stained, phyllitic schist, slightly chloritized country rock, vein vuggy with limonite coated rhombohedral ghosts, sericite on vein and country rock, oxidized gouge material, gossany.
	Quad: Sec: T: R: UTM: N E	
1006	Quad: Big Dune 15' Sec: Unsurveyed T: 15S R: 47E UTM: 4051650 N 0531000 E Treasure Hill Claims Lee District	Quartz vein material with breccia, highly fractured and sheared, limonite-Mn stained, hematite pods, drusy quartz coats fresh surfaces, specularite, hematite pods becoming gossany.
1007	Quad: Big Dune 15' Sec: Unsurveyed T: 15S R: 47E UTM: 4052920 N 0531710 E Treasure Hill Claims Lee District	White bull quartz, minor fractures, specks, pods of oxidized hematite, minor FeOx staining, light dusting emerald green substance (animal, mineral?) pods and coating sericite, slickensides.
	Quad: Sec: T: R: UTM: N E	
1008	Quad: Big Dune 15' Sec: Unsurveyed T: 15S R: 47E UTM: 4052940 N 0533510 E Treasure Hill 569 -Claims Lee District	White quartz vein breccia cemented with hematite stained silica, some second brecciation, veinlets of chalcedony, fragments of green quartzite, drusy quartz filling vugs.
1009	Quad: Mt. Shrader 7 1/2' Sec: 2 T: 18S R: 52E UTM: 4030000 N 0581890 E Congresss Mine Area Johnnie District	White quartz vein breccia vein cemented with limonite stained silica, blotches/dendritic pyrolusite, minor drusy quartz coating surfaces.
1010	Quad: Mt. Shrader 7 1/2' Sec: 1 T: 18S R: 52E UTM: 4030240 N 0582075 E Congress Mine Area Johnnie District	White quartz vein material, highly fractured and sheared, FeOx stained and cemented, bleached, minor Mn, pods green quartzite.
1011	Quad: Mt. Shrader 7 1/2' Sec: 1 T: 18S R: 52E UTM: 4030240 N 0582075 E Congress Mine Area Johnnie District	Bull quartz, highly fractured, limonite stained on surfaces and fractures, minor Mn staining, no apparent mineralization.

Sample Description

Sample Number	Location	Description
1012	Quad: Mt. Shrader 7 1/2' Sec: 1 T: 18S R: 52E UTM: 4030220 N 0582710 E Congress Mine Area Johnnie District	White quartz vein material, highly fractured, minor FeOx staining, slightly gossany, acicular malachite, massive in veinlets, hematite pods, drusy quartz, minor breccia cemented with hematite and manganese, one piece heavier than rest.
	Quad: Sec: T: R: UTM: N E	
1013	Quad: Bare Mountain 15' Sec: Unsurveyed T: 13S R: 48E UTM: 4075845 N 0532200 E Diamond Queen (Stirling Mine) Bare Mountain District	Gossan/breccia with disseminated, crystalline coatings and veinlets of white to purple fluorite, limonite/hematite staining the fluorite, breccia appears to be crystalline limestone/dolomite, fluorite acts as cement in breccia/shear, coats vugs.
	Quad: Sec: T: R: UTM: N E	
1014	Quad: Bare Mountain 15' Sec: Unsurveyed T: 13S R: 48E UTM: 4075845 N 0532200 E Diamond Queen (Stirling Mine) Bare Mountain District	Medium grey, fine grained sandstone breccia cemented with bleached calcite. Minor limonite-hematite staining from hematite grains dispersed in sandstone, calcite crystals line vugs, minor blotches of MnO2, sandstone grains subrounded.
	Quad: Sec: T: R: UTM: N E	
1015	Quad: Bare Mountain 15' Sec: Unsurveyed T: 14S R: 47E UTM: 4067700 N 0533450 E Black Marble Mtn.Claim (north end) Bare Mountain District	Highly altered, bleached shear/gouge medium grey limestone, with FeOx staining, fractures/vugs lined with mammillary white calcite, veinlets calcite cement shear, some breccia.
1016	Quad: Bare Mountain 15' Sec: Unsurveyed T: 14S R: 47E UTM: 4069150 N 0532250 E Silver Peak Claims Bare Mountain District	Brownish, bleached, sericitized shear/gouge material with pods and stringers argentiferous galena, fine-grained, pods oxidized pyrite/hematite, drusy quartz cement, fine-grained copper and iron phosphate interspersed in galena pods, country rock phyllitic, almost schistose, rocks heavy, dense.
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1017	Quad: Bare Mountain 15' Sec: Unsurveyed T: 13S R: 48E UTM: 4071430 N 0530770 E Lookout #1 Claim (adit) Bare Mountain District	Pyritic, phyllitic schist, quartz veinlets, oxidized pyrite/hematite stained, seriticized, quartz/sericite banding.
1018	Quad: Bare Mountain 15' Sec: Unsurveyed T: 13S R: 48E UTM: 4071430 N 0530770 E Lookout #1 Claim (N10E Shaft) Bare Mountain District	White quartz vein/breccia, seriticized stained with MnO2 and limonite, malachite, chrysocolla, hemimorphite coat surfaces and fill vugs, disseminated pods and stringers hematite/pyrite
	Quad: Sec: T: R: UTM: N E	minor bleaching, rock heavy and dense, minor patches of gossan, drusy quartz, patches of schist.
1019	Quad: Bare Mountain 15' Sec: Unsurveyed T: 13S R: 48E UTM: 4073730 N 0531200 E Bonanza Claim Bare Mountain District	Pinkish, slightly bleached, sacchroidal quartzite, with pods and stringers fresh and altered argentiferous galena, MnO2 blotches and dendritic, crystalline and massive malachite, galena also
	Quad: Sec: T: R: UTM: N E	in sprays in shear/gouge, minor sericite.
1020	Quad: Bare Mountain 15' Sec: Unsurveyed T: 13S R: 48E UTM: 4073600 N 0530750 E Tungsten Canyon #2 Claim Bare Mountain District	White quartz vein material, slightly fractured with FeOx stains, pyrite ghosts, dendritic and massive MnO2, limonite staining, gossan, sericite.
1021	Quad: Bare Mountain 15' Sec: Unsurveyed T: 13S R: 48E UTM: 4073500 N 0530760 E Tungsten Canyon #3 Bare Mountain District	White quartz vein, slightly fractured, limonite stained, pods country rock, light, greenish-grey quartzite, euhedral quartz, crystals coat surfaces and fill vugs, pyrite ghosts, dendritic
	Quad: Sec: T: R: UTM: N E	MnO2.
1022	Quad: Mt. Schader 7 1/2' Sec: 12 T: 18S R: 52E UTM: 4029475 N 0582480 E ERD claims Johnnie District	White massive quartz vein material, fractured, gossany pockets, limonite stained.

Sample Description

Sample Number	Location	Description
1023	Quad: Mt. Schader 7 1/2' Sec: 20 T: 17S R: 53E UTM: 4035500 N 0585290 E Johnnie Mine (Stamp pad) Johnnie District	White quartz vein/breccia material, silicified slightly vuggy, FeOx-MnO2 stained, oxidized sulfide, minor malachite coats surface.
1024	Quad: Mt. Schader 7 1/2' Sec: 29 T: 17S R: 53E UTM: 4034420 N 0585110 E Butterfly Claim Johnnie District	White and FeOx stained, massive to crystalline quartz vein, highly fractured, vuggy, band quartzite, oxidized pyrite, limonite staining minor MnO2..
1025	Quad: Mt. Schader 7 1/2' Sec: 26 T: 17S R: 52E UTM: 4033660 N 0581080 E Purple Sage Claim Johnnie District	White, massive, fractured quartz vein material cutting grey LS/dolomite with pods & stringers crystalline argentiferous galena, FeOx stained, dendritic and surface.
1026	Quad: Mt. Schader 7 1/2' Sec: 23 T: 17S R: 52E UTM: 4034500 N 0581720 E Delta Claim Johnnie District	White, massive quartz vein cutting light grey quartzite that has been fractured & brecciated & cemented with MnO2 stained silica pods of oxidized hematite, cellular boxworks, gossany pods.
	Quad: Sec: T: R: UTM: N E	
1027	Quad: Mt. Schader 7 1/2' Sec: 23 T: 17S R: 52E UTM: 4034780 N 0580320 E Butterfly Claims Johnnie District	White, massive, quartz vein fractured, limonite stained with pods of yellow-brown sphalerite, specks malachite, minor MnO2.
1028	Quad: Bare Mountain 15' Sec: 23 T: 12S R: 47E UTM: 4081950 N 0527350 E Daisy Mine 400 Level Bare Mountain District	Purple fluorite, crystalline & massive, with minor calcite, crystals; minor limonite coating surface, fractured, almost brecciated.
1029	Quad: Bare Mountain 15' Sec: 23 T: 12S R: 47E UTM: 4081950 N 0527350 E Daisy Mine 1st level Bare Mountain District	Limonite stained mudstone/gouge with nodules fluorite filling cavities, banding.
1030	Quad: Bare Mountain 15' Sec: 22 T: 12S R: 47E UTM: 4081780 N 0526750 E Shorter White Claims Bare Mountain District	Blue, green, purple, crystalline fluorite vein material, fine to massive banding, limonite staining.

Sample Description

Sample Number	Location	Description
1031	Quad: Bare Mountain 15' Sec: 22 T: 12S R: 47E UTM: 4081780 N 0526750 E Shorter White Claim Bare Mountain District	Limonite stained, kaolinized gouge material, dolomite, massive fluorite.
1032	Quad: Bare Mountain 15' Sec: 22 T: 12S R: 47E UTM: 4081130 N 0526560 E Shorter White Claim Bare Mountain District	(A) Heavily FeOx stained gouge, fluorite crystals & bands, calcite. (B) Limonite stained gouge, calcite cellular boxworks, dk grey silicified LS/dolomite, fluorite crystals coat surfaces & fill cavities.
	Quad: Sec: T: R: UTM: N E	
1033	Quad: Bare Mountain 15' Sec: 22 T: 12S R: 47E UTM: 4081130 N 0526560 E Shorter White Claim Bare Mountain District	Crystalline yellow & purple fluorite, same banding.
1034	Quad: Bare Mountain 15' Sec: 23 T: 12S R: 47E UTM: 4080800 N 0527420 E Lode Queen #2 Claim Bare Mountain District	LS breccia cemented with crystalline calcite, abundant FeOx staining.
1035	Quad: Bare Mountain 15' Sec: 23 T: 12S R: 47E UTM: 4080590 N 0527400 E Lode Queen Claim Bare Mountain District	Heavily FeOx stained LS gouge material cemented with crystalline calcite, cellular boxworks, veining, slicks.
1036	Quad: Bare Mountain 15' Sec: 32 T: 11S R: 48E UTM: 4087300 N 0532100 E Zeolite Deposit Claim Bare Mountain District	White, light, slightly vuggy, massive zeolite, fragments.
1037	Quad: Bare Mountain 15' Sec: Unsurveyed T: 11S R: 48E UTM: 4089600 N 0532300 E Thompson Mine Bare Mountain District	Opaline, vein & breccia, bearing finely disseminated cinnabar and possibly carnotite, host rock bleached & altered rhyolite.
1038	Quad: Bare Mountain 15' Sec: 19 T: 11S R: 48E UTM: 4090100 N 0531600 E White Claims Bare Mountain District	Opaline/sinter, vuggy, coated with calcite, cinnabar interspersed throughout matrix, in fractures and breccia, limonitic, calcareous.

Sample Description

Sample Number	Location	Description
1039	Quad: Bare Mountain 15' Sec: Unsurveyed T: 11S R: 48E UTM: 4090290 N 0531500 E Silicou Mine Near Bare Mountain District	White, bleached, siliceous, slightly quartz porphyritic rock coated with opaline & calcite, alaskite dike.
1040	Quad: Bare Mountain 15' Sec: Unsurveyed T: 12S R: 48E UTM: 4083600 N 0531160 E Telluride Mine (Lower Working) Bare Mountain District	(A) Medium grey to muddy brown LS breccia with hematite staining, crystalline calcite cement with intergrown fluorite crystals, minor dendritic pyrolusite, calcite veinlets.
	Quad: Sec: T: R: UTM: N E	(B) SS breccia, cellular boxworks, minor FeOx-MnO2 staining, brecciated fluorite crystals, with abundant cavities, calcareous cement.
1041	Quad: Bare Mountain 15' Sec: Unsurveyed T: 12S R: 48E UTM: 4083700 N 0530950 E Telluride Mine Area Near Bare Mountian District	Purplish-grey, altered, rhyolitic intrusive, quartz eyes, cellular boxworks, limonitic-MnO2 stained.
1042	Quad: Bare Mountain 15' Sec: 18 T: 12S R: 48E UTM: 4083340 N 0530900 E Telluride Mine (Main) Bare Mountain District	(A) Medium grey LS stained with hematite, fractured, some breccia. (B) Kaolinized, white to yellow to purple vein material, (altered fluorin?) cellular boxworks, crumbly, slicks.
1043	Quad: Bare Mountain 15' Sec: 17 T: 12S R: 48E UTM: 4083000 N 0532200 E	(A) Gossan, dense, extremely fine boxworks, FeOx stained. (B) Gossany breccia, rest as above.
1044	Quad: Bare Mountain 15' Sec: 18 T: 12S R: 48E UTM: 4082640 N 0531575 E None Bare Mountain District	Gossany LS/dolomitic breccia, large cellular boxworks, heavily FeOx stained, fragments fractured, some silicification.
1045	Quad: Bare Mountain 15' Sec: 24 T: 12S R: 48E UTM: 4081200 N 0529480 E None Bare Mountain District	Gossan, dense, boxworks, FeOx-MnO2 stained.
1046	Quad: Bare Mountain 15' Sec: 23 T: 12S R: 48E UTM: 4081920 N 0528480 E BVC Claim Bare Mountain District	Gossan, FeOx-MnO2, vuggy, specularite, flow banding.

Sample Description

Sample Number	Location	Description
1047	Quad: Bare Mountain 15' Sec: 23 T: 12S R: 48E UTM: 4081820 N 0528510 E BVC Claims Bare Mountain District	
1048	Quad: Bare Mountain 15' Sec: 17 T: 12S R: 47E UTM: 4083380 N 0522920 E Wildcat Claim Near Bare Mountain District	Platy, gossan, MnO2 stained, minor FeOx, "cooked rock", specularite, flow banding.
1049	Quad: Spector Range 15' Sec: 14 T: 16S R: 51E UTM: 4046720 N 0570310 E None No District	Crystalline calcite veining/breccia hematite stained subhedral crystals.
1050	Quad: Lathrup Wells 15' Sec: 15 T: 15S R: 50E UTM: 4055350 N 055840 0 E None No District	Reddish to blackish grey, coarse to fine grained siliceous sediments cut with quartz veinlets and coated with chrysacolla/turquoise, minor breccia, hematite staining, slicks.
1051	Quad: Lathrup Wells 15' Sec: 20,29 T: 16S R: 50E UTM: 4043720 N 0556360 E Cat Claim Ash Meadows District	White crumbly evaporite, borates.
1052	Quad: Bullfrog 15' Sec: 12 T: 12S R: 46E UTM: 4083760 N 0519680 E None Bullfrog District	Altered rhyolite, cut with quartz veinlets, vuggy, stained with FeOx, quartz eyes, slightly brecciated.
1053	Quad: Bullfrog 15' Sec: 15 T: 12S R: 46E UTM: 4082700 N 0515910 E Golden Age Claim Bullfrog District	Rhyolite, quartz phenocrysts coated with calcite.
1054	Quad: Bullfrog 15' Sec: 15 T: 12S R: 46E UTM: 4083550 N 0516190 E None Bullfrog District	Bleached rhyolite coated with massive MnO2, quartz pheno crysts, inclusion of fine grained siliceous material, minor FeOx stains.
1055	Quad: Bullfrog 15' Sec: 18,19 T: 12S R: 47E UTM: 4082080 N 0522040 E Golden Center Claim Bullfrog District	Skarn, massive actinolite with pods of phlogopite, calcite, FeOx staining.

Sample Description

Sample Number	Location	Description
1056	Quad: Bullfrog 15' Sec: 18 T: 12S R: 47E UTM: 4082710 N 0521590 E None Bullfrog District	White massive quartz vein material, fractured, limonite stained, minor sericite, minor MnO2 coating surface.
1057	Quad: Bullfrog 15' Sec: 24 T: 12S R: 46E UTM: 4081050 N 0520290 E None Bullfrog District	White quartz vein/breccia material, vugs sericite, Fe-MnO2 stained, pyrite ghosts.
1058	Quad: Bullfrog 15' Sec: 13 T: 12S R: 46E UTM: 4082200 N 0520360 E Vandenberg Mine Bullfrog District	Altered, bleached tuff, minor amount lithic fragments, minor hematite pods, argillitized.
1059	Quad: Bullfrog 15' Sec: 13 T: 12S R: 46E UTM: 4083120 N 0520030 E Clay Angel Claim Bullfrog District	Argillitized ash tuff sparse quartz phenocrysts, minor cellular boxworks, MnO2 stains.
1060	Quad: Bare Mountain 15' Sec: 17 T: 12S R: 47E UTM: 4083360 N 0522430 E Wildcat Claim Bare Mountain District	Chalcedonic quartz vein cutting highly altered rhyolite, extremely fine cellular boxworks, limonite staining, fractured.
1061	Quad: Bullfrog 15' Sec: 8 T: 12S R: 47E UTM: 4084800 N 0622200 E Surprise/Wonder Claim Bullfrog District	Chalcedonic quartz vein cutting highly altered rhyolite, minor opaline, limonite staining, minor MnO2 staining
1062	Quad: Bare Mountain 15' Sec: 10 T: 12S R: 47E UTM: 4084900 N 0526730 E BVC Claim Bare Mountain District	Vesicular rhyolite filled opaline, cinnabar coats surface, minor MnO2.
1063	Quad: Bare Mountain 15' Sec: 10 T: 12S R: 47E UTM: 4085220 N 0526810 E None Bare Mountain District	Blackish-grey, equigranular igneous extrusive with fine graned red crystals, amygdaloidal, dark micas, acicular pyroxene.
1064	Quad: Bare Mountain 15' Sec: 19 T: 11S R: 48E UTM: 4091100 N 0530880 E None Bare Mountain District	Heavily hematite stained, bleached rhyolite, cut with siliceous veinlets, MnO2 stains.

Sample Description

Sample Number	Location	Description
1065	Quad: Thirsty Canyon 15' Sec: Unsurveyed T: 11S R: 48E UTM: 4096330 N 0537210 E Jim Spicer Claims Bare Mountain District	Heavily hematite stained rhyolitic ash tuff, kaolinized quartz phenocrysts.
1066	Quad: Thirsty Canyon 15' Sec: 28 T: 10S R: 47E UTM: 4098900 N 0524020 E AG Claims - Spicer Bare Mountain District	Banded rhyolite, MnO2 stained crystal rich - biotite, sanidine, quartz, slightly vuggy.
1067	Quad: Thirsty Canyon 15' Sec: 20 T: 10S R: 47E UTM: 4100910 N 0522360 E AG Claims - Spicer Bare Mountain District	Rhyolitic ash tuff bleached, silicified cut with siliceous veinlets, flow banding, vugs lined with crystalline quartz Fe-Mn stains on fractures.
1068	Quad: Thirsty Canyon 15' Sec: 20 T: 10S R: 47E UTM: 4100910 N 0522360 E AG Claims - Spicer Bare Mountain District	Bleached, kaolinized ash tuff stained with yellow oxides, drusy quartz lines vugs, siliceous veinlets, slight chloritization.
1069	Quad: Thirsty Canyon 15' Sec: 29 T: 10S R: 47E UTM: 4099320 N 0522550 E AG Claims - Spicer Bare Mountain District	Bleached, kaolinized ash tuff, limonitic stained, coated with calcite, drusy quartz fills vugs flow band patterns, dendritic pyrolusite.
1070	Quad: Miller Mountain 7 1/2' Sec: 29 T: 2N R: 34E UTM: 4207120 N 0392680 E Diatom King Mine Black Horse District	Diatomaceous Earth.
1071	Quad: Miller Mountain 7 1/2' Sec: 24 T: 2N R: 34E UTM: 4208180 N 0400220 E Constellation Claims Black Horse District	(A) Garnet-epidote banded tactite, lamping revealed no scheelite, powellite or moly, wollastonite intergrown, rock fractured, infilled with calcite, calcite coats fresh surface.
	Quad: Sec: T: R: UTM: N E	(B) Rock same as 1071A but with crystalline molybdenite disseminated throughout.
1072	Quad: Miller Mountain 7 1/2' Sec: 13 T: 2N R: 34E UTM: 4208780 N 0400050 E Quartz Claims Black Horse District	Massive feldspar crystals interspersed with biotite crystals, crystalline quartz veins, perthitic texture, principle mineral Microcline, slightly sericitized minor FeOx staining, Fm biotite.

Sample Description

Sample Number	Location	Description
1073	Quad: Miller Mountain 7 1/2' Sec: 22 T: 2N R: 34E UTM: 4208380 N 0396075 E None Black Horse District	Highly fractured, sacchroided, quartz vein, Fe-Mn stained, secondary copper minerals, specularite, sulfides(chalcopyrite, bornite) intergrown in vein, minor gossan, minor chrysacolla.
1074	Quad: Miller Mountain 7 1/2' Sec: 14 T: 2S R: 34E UTM: 4209220 N 0397350 E Molly claims (Black Horse Mine) Black Horse District	Massive garnet-epidote tatite, cut with crystalline calcite veins, no result from lamping, dendritic pyrolusite, minor boxworks.
1075	Quad: Columbus 7 1/2' Sec: Unsurveyed T: 2N R: 35E UTM: 4207900 N 0402180 E Jeta Claims Black Horse District	(A) Heavily FeOx stained gossan, boxworks, dense, heavy. (B) Garnet-epidote tactite, no results from lamping, green dusty coating, on rock calcite veining, dendritic pyrolusite.
	Quad: Sec: T: R: UTM: N E	
1076	Quad: Columbus 7 1/2' Sec: Unsurveyed T: 2N R: 35E UTM: 4207375 N 0401980 E Jeta Claims Black Horse District	Gossan, heavily FeOx stained, boxworks.
1077	Quad: Columbus 7 1/2' Sec: Unsurveyed T: 2N R: 35E UTM: 4207300 N 0401980 E Jeta Claim Black Horse District	Garnet-epidote tactite with pods of powellite interspersed, minor opal coat surfaces.
1078	Quad: Columbus 7 1/2' Sec: Unsurveyed T: 2N R: 35E UTM: 4210180 N 0403840 E Sidewinder Claims Black Horse District	Banded yellow, brown, green, red black jasper with disseminated black specks (MnO2?), some gossany areas, vuggy, patches of opal.
1079	Quad: Candelaria 7 1/2' Sec: 11 T: 3N R: 35E UTM: 4220680 N 0408120 E Ruth Claims No District Rock Hill area	Pale blueish turquoise in punky, light colored mud/siltstone, also in siliceous veins, minor quartz veins.
1080	Quad: Candelaria 7 1/2' Sec: 1,12 T: 3N R: 35N UTM: 4221400 N 0409390 E Property Claims Rock Hill District	Limonite stained mudstone, gossany, boxworks, vugs filled with milky silica, no observed mineralization.

Sample Description

Sample Number	Location	Description
1081	Quad: Miller Mountain 7 1/2' Sec: 15 T: 2N R: 34E UTM: 4210180 N 0396710 E North Molly Claims (Maxfield Mines) Black Horse District	Crystalline garnet-epidote tactite, pods and zones of disseminated huebnerite-ferberite. Minor Fe staining, MnO2 coats surfaces.
1082	Quad: Rock Hill 7 1/2' Sec: 3 T: 3N R: 36E UTM: 4222440 N 0416240 E DHW Claim Rock Hill District	Host rock medium grey, very fine grained quartzite cut with pyrite bearing, FeOx-MnO2 stained, vuggy quartz vein, massive pyrite/chalcopyrite bearing tremolite, FeOx stained.
1083	Quad: Rock Hill 7 1/2' Sec: 34 T: 4N R: 36E UTM: 4224100 N 0416280 E Easter Claim Rock Hill District	Quartz vein breccia heavily Fe & Mn stained very finely disseminated malachite, sericite, boxworks.
1084	Quad: Rock Hill 7 1/2' Sec: 34 T: 4N R: 36E UTM: 4223620 N 0415730 E Broken Toe Mine (DHW Claim) Rock Hill District	(A) White crystalline calcite vein with siderite, oxidized hematite, sericite pyrolusite, minor malachite, boxworks, limonite stained. (B) Greyish green rock bearing pyrite & chalcopyrite, banded, coarse grained, Fe stained quartz vein, minor boxworks, limonite stained, pods & veins crystalline calcite.
	Quad: Sec: T: R: UTM: N E	
1085	Quad: Rock Hill 7 1/2' Sec: 34 T: 4N R: 36E UTM: 4223450 N 0415690 E DHW Claims Rock Hill District	Fe stained, white granular SS, cemented calcite, pods of black crystalline calcite, rock cut with quartz veinlets.
1086	Quad: Rock Hill 7 1/2' Sec: 33 T: 4N R: 36E UTM: 4224000 N 0414525 E Blue Daisy Claim Rock Hill District	Heavily FeOx stained quartz vein material.
1087	Quad: Rock Hill 7 1/2' Sec: 33 T: 4N R: 36E UTM: 4223980 N 0414620 E Blue Daisy Claim Rock Hill District	White, crystalline, limonite-hematite stained, vuggy quartz vein breccia, boxworks, minor calcite.
1088	Quad: Rock Hill 7 1/2' Sec: Unsurveyed T: 4N R: 36E UTM: 4225980 N 0414600 E Dad Claims Rock Hill District	Fractured, sheared, almost brecciated cyrstalline FeOx stained quartz vein material vuggy, boxworks heavily hematite stained, calcite veinlets, pods of slightly magnetic mineral (pyrrhotite?)

Sample Description

Sample Number	Location	Description
1089	Quad: Rock Hill 7 1/2' Sec: Unsurveyed T: 4N R: 36E UTM: 4226480 N 0412900 E Redlick Claims Rock Hill District	Crystalline quartz vein material, highly fractured/brecciated stained with FeOx-MnO2, vugs, boxworks.
1090	Quad: Rock Hill 7 1/2' Sec: Unsurveyed T: 4N R: 36E UTM: 4226040 N 0413160 E Maria Claims Rock Hill District	FeOx-MnO2, stained breccia/gouge material, siliceous veinlets, minor boxworks, gossan.
1091	Quad: Candelaria 7 1/2' Sec: 1 T: 3N R: 35E UTM: 4222990 N 0409650 E Hitop Claims Rock Hill District	Brownish grey mud/siltstone with euhedral, oxidized pyrite crystals, dendritic pyrolusite, limonite stains.
1092	Quad: Candelaria 7 1/2' Sec: 36 T: 4N R: 35N UTM: 4223190 N 0409300 E Hitop Claims Rock Hill District	Fractured/brecciated massive quartz vein material, heavily FeOx-MnO2 stained, gossany, fine boxworks.
1093	Quad: Candelaria 7 1/2' Sec: 1 T: 3N R: 35E UTM: 4221780 N 0410275 E Silver Ridge Claim Near Rock Hill District	Limonite, kaolinized quartz shear material, minor MnO2, staining.
1094	Quad: Rock Hill 7 1/2' Sec: 8 T: 3N R: 36E UTM: 4221340 N 0412720 E Ace Claims Rock Hill District	Gossany, copper stained, boxworks, rock with calcite, coating surfaces, quartz veining, slicks, MnO2 staining, limonite staining.
1095	Quad: Coaldale NE 7 1/2' Sec: Unsurveyed T: Unsurveyed R: Uns. UTM: 4224080 N 0423410 E None Gilbert District	Diatomaceous earth.
1096	Quad: Coaldale NE 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4222070 N 0430800 E Charley Claims Gilbert District	Heavily Fe-Mn stained gouge material, cu (malachite & azurite) staining, gossany.
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1112	Quad: Lida 7 1/2' Sec: 8 T: 6S R: 41E UTM: 4143210 N 0459280 E Nancy Ann Claim Lida District	Dark Fe-Mn stained gossan that's cut with white, fractued quartz vein and is brecciated, abundant malachite, hematite staining, quartz vein carried oxidized sulfides, boxworks.
1113	Quad: Lida 7 1/2' Sec: 5 T: 6S R: 41E UTM: 4143810 N 0460310 E Lida Claim Lida District	Quartz gouge material, silt/mudstone breccia with massive quartz matrix, fine grained pyrite/chalcopyrite, fresh & oxidized, hematite replacement, fine grained malachite, FeOx staining, MnO2,
	Quad: Sec: T: R: UTM: N E	massive & dendritic breccia, vuggy, with euhedral quartz filling open spaces, minor gossan & boxworks, rock cut with quartz veinlets.
1114	Quad: Lida 7 1/2' Sec: 26 T: 5S R: 41E UTM: 4148400 N 0464570 E Lida Millsite Claim Lida District	Gossan breccia, abundant Fe-Mn staining, surface coated with mammillary malachite/chrysacolla boxworks filled with euhedralquartz, quartz cement, limonite host rock silt/mudstone,
	Quad: Sec: T: R: UTM: N E	bleached, limonite stained.
1115	Quad: Lida 7 1/2' Sec: 26 T: 5S R: 41E UTM: 4148390 N 0464610 E Lida Millsite Claim Lida District	White, euhedral, calcite, vein, heavy, chalcopyrite (massive & slightly oxidized) cutting fine grained light grey quartzite, minor malchite, minor Fe-Mn surface staining.
1116	Quad: Montezuma Peak SW 7 1/2' Sec: 34 T: 4S R: 41E UTM: 4155310 N 0463210 E None Railroad Springs District	Gouge/gossan, heavy chalcopyrite, tetrahedrite abundant malachite, cemented with crystalline calcite, abundant Fe-Mn staining, chalcocite.
1117	Quad: Montezuma Peak 7 1/2' Sec: 35 T: 4S R: 41E UTM: 4156450 N 0464205 E Joshua Claim Railroad Springs District	Fe-Mn gossan with Cu, malachite & azurite filling vugs & vein, light grey quartzite boxworks.
1118	Quad: Lida Wash 15' Sec: 11 T: 5S R: 40E UTM: 4152600 N 0454750 E Ruby Claim Railroad Springs District	Fine-grained, saccharoidal, white to dark grey quartz vein/gouge material, extremely fine grained sulfides disseminated throughout, pod of crystalline galena, yellow to rust oxides, very
		minor Cu intergrown with quartz, possible tetrahedrite grains, strong sulfide smell.

Sample Description

Sample Number	Location	Description
1119	Quad: Lida Wash 15' Sec: 35 T: 4S R: 40E UTM: 4155700 N 0454500 E Big 3 Mine Railroad Springs District	Light to dark grey, fine grained quartzite with minor shale, subhedral malachite pyrolusite minor gossan zones, hematite - limonite staining, minor breccia, minor azurite, sulfide appear to have oxidized.
	Quad: Sec: T: R: UTM: N E	
1120	Quad: Lida Wash 15' Sec: 35 T: 4S R: 40E UTM: 4155640 N 0454710 E Big 3 Manganese Claim Railroad Springs District	Reddish - Brown massive gossan, goethite, looks like iron-ore, hematite stained, minor breccia, patches calcite
1121	Quad: Montezuma Peak SW 7 1/2' Sec: 25 T: 4S R: 40E UTM: 4157270 N 0456150 E None Railroad Springs District	White, fractured quartz vein, malachite filled & oxidized sulfide, malachite coats surface, minor gossan zones, boxworks.
1122	Quad: Lida 7 1/2' Sec: 32 T: 5S R: 4E UTM: 4145240 N 0460140 E Dago Hills Claim Lida District	Quartz/calcite vein material with euhedral quartz filling vugs, white to dark grey, minor FeOx staining, host rock light grey mudstone cut with micro-vein of quartz, pods of galena, dendritic pyrolusite.
	Quad: Sec: T: R: UTM: N E	
1123	Quad: Magruder Mountain 15' Sec: 3 T: 6S R: 40E UTM: 4144900 N 0452920 E None Palmetto District	White, slightly fractured calcite/quartz vein material with sulfide filling fracture malachite coats surface, boxworks gossan, yellow oxides, chalcopyrite.
1124	Quad: Magruder Mountain 15' Sec: 32 T: 5S R: 40E UTM: 4145450 N 0453950 E None Palmetto District	Gossan, oxidizied sulfide (pyrite), malachite coats surface & fills fractures, heavy, Fe-Mn staining, chalcopyrite, argillized rock, quartzite & shale.
1125	Quad: Magruder Mountain 15' Sec: 33 T: 5S R: 40E UTM: 4145600 N 0451290 E Blue Dick Mine Palmetto District	White, massive to sacchroidal quartz vein/gouge material catting- pinkish-grey quartzite, small grain, pods & fillings of argentiferous galena, sphalerite & tetrahedrite, malachite coats surface minor breccia, gossany pods & zones, drusy quartz, minor Fe-Ox-MnO2, slightly vuggy.

Sample Description

Sample Number	Location	Description
1126	Quad: Magruder Mountain 15' Sec: 33 T: 5S R: 40E UTM: 4145480 N 0451120 E Blue Dick Mine Palmetto District	Hematite, stained, slightly calcareous silt/mudstone, gouge material, slicks silica coats surfaces, dendritic pyrolusite.
1127	Quad: Magruder Mountain 15' Sec: 33 T: 5S R: 40E UTM: 4145510 N 0451290 E Blue Dick Mine Palmetto District	Gossan, abundant hematite - limonite staining, fine grained boxworks.
1128	Quad: Magruder Mountain 15' Sec: 23 T: 5S R: 39E UTM: 4149080 N 0444200 E None Palmetto District	Skarn, tremolite/actinolite, vein calcite/siderite, very fine reddish-brown garnets. Lamped, no mineralization.
1129	Quad: Magruder Mountain 15' Sec: 22 T: 5S R: 39E UTM: 4149940 N 0441430 E Palmetto Mine Palmetto District	White, crystalline quartz vein with pods of crystalline galena, yellow oxides, open spaces pods of dark grey, dull, massive mineral.
1130	Quad: Magruder Mountain 15' Sec: 22 T: 5S R: 39E UTM: 4149350 N 0441820 E None Palmetto District	Silicified LS breccia cemented with white quartz , disseminated sulfide (pyrite, chalcopyrite, galena,) surface & fracture filled with chrysacolla, open spaces, olive green coating surfaces, minor gossan, breccia refractured.
	Quad: Sec: T: R: UTM: N E	
1131	Quad: Magruder Mountain 15' Sec: 15 T: 5S R: 39E UTM: 4150240 N 0442090 E None Palmetto District	White, massive to sacchroidal quartz vein with grain, pods & disseminated sulfide (galena, chalcopyrite,) psilomlane coats surface.
1132	Quad: Magruder Mountain 15' Sec: 13 T: 6S R: 38E UTM: 4141440 N 0437530 E None Sylvania District	Marble, white crystalline talc, white to greenish-grey.
1133	Quad: Rhyolite Ridge 15' Sec: 6 T: 1N R: 36E UTM: 4194800 N 0419100 E None Silver Peak District	White, yellow, clay-like evaporate, barite(?) crystalline sulfur coats surface, minor MnO2, slightly vuggy, (or visicular) fragments, minor bleached volcanic ash tuffs.

Sample Description

Sample Number	Location	Description
1134	Quad: Rhyolite Ridge 15' Sec: 32 T: 1S R: 38E UTM: 4185430 N 0430890 E Tommy Knodan Claim Silver Peak District	Limonite, fractured quartz vein/gouge matrix MnO_2 staining, slightly gossany boxworks, possible cinnabar infills fractures.
1135	Quad: Silver Peak 15' Sec: 11 T: 2S R: 38E UTM: 4182100 N 0435090 E BD Claim Silver Peak District	White fractured quartz vein, limonite, pyritic stained pods & disseminated argentiferous galena, open spaces, sulfide oxidized.
1136	Quad: Silver Peak 15' Sec: 2 T: 2S R: 38E UTM: 4183400 N 0436200 E Taky Claim Silver Peak District	White, massive quartz vein material with oxidized pyrite crystals filling vugs & fractures, limonite coat surface, euhedral quartz crystals fill vugs jarosite(?), gossany, boxworks.
1137	Quad: Silver Peak 15' Sec: 1 T: 2S R: 39E UTM: 4183410 N 0437910 E None Silver Peak District	White quartz vein, disseminated galena & pyrite, limonite stained gossan, rock fractured, Fe-Mn oxides stained, coated with yellow oxides.
1138	Quad: Sliver Peak 15' Sec: 15 . T: 2S R: 38E UTM: 4180350 N 0436070 E Coyote Mine Silver Peak District	Calcite/siderite vein, cutting silica, cementing breccia, boxworks, limonite stained gossan, sericite, chalcopyrite disseminated in gray crystalline calcite drusy quartz.
1139	Quad: Piper Peak 15' Sec: 33 T: 2S R: 38E UTM: 4174320 N 0433280 E Nivloc Mine Silver Peak District	Quartz/calcite/siderite vein/gouge material, sericite, pegmatite vein, Fe-Mn stains, vuggy, drusy quartz coat surface, pods & grains sulfide.
1140	Quad: Lida Wash 15' Sec: 28 T: 2S R: 39E UTM: 4177330 N 0442510 E Millsite Claims Silver Peak District	White, light grey sacchroidal quartz vein fractured, fine disseminated sulfide grains, minor Fe-Mn staining, bleached zones & siderite, boxworks, gossan zones.
1141	Quad: Roach Lake Sec: 36, 31 T: 18S R: 58,59E UTM: 3945150 N 0643450 E Copper Hill Claims Goodsprings District	Gossan, heavily hematite stained, dense, heavy, minor boxworks, abundantly coated with malachite/brochantite crystals along surfaces and filling vugs slicks, minor bleaching, gouge material, massive
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1142	Quad: Roach Lake 15' Sec: 8 T: 26S R: 58E UTM: 3952200 N 0636800 E Addison Mine Goodsprings District	Gossan, with abundant boxworks, vugs lined with drusy quartz and hemimorphite, limonitic/hematitic stained, cerussite interspersed in earthy material, minor brecciation, MnO2.
1143	Quad: Clark Mountain 15' Sec: 5 T: 26S R: 58E UTM: 3952950 N 0635150 E Jaws Mining and Mineral Claims Goodsprings District	Brownish-grey, fine grained limestone with pods and nodules of crystalline galena, oxidized cavities coated with very fine crystalline cerrusite and quartz, which are in turn coated with earthy hematite, minor limonite staining, minor MnO2, galena slightly argentiferous?
	Quad: Sec: T: R: UTM: N E	
1144	Quad: Clark Mountain 15' Sec: 6 T: 26S R: 58E UTM: 3953450 N 0634350 E (New) Milford Mine Goodsprings District	Limonitic stained gossan, extreme boxworks, chalcedonic globules deposited in some vugs, some pieces very heavy (barite?,lead?), localized silicification.
1145	Quad: Shenandoah Peak 15' Sec: 12 T: 25S R: 57E UTM: 3960425 N 0631975 E Unnamed Goodsprings District	Brownish to grey limestone, localized silicification, brecciated, cemented with chalcedonic silica and crystalline calcite, pods and clots crystalline galena occur in silica, altering to cerrusite and anglesite, minor Fe-Mn oxides, possibly zinc minerals interspersed in lead, drusy quartz.
	Quad: Sec: T: R: UTM: N E	
1146	Quad: Goodsprings 15' Sec: 32 T: 22S R: 60E UTM: 3983700 N 0654925 E Bard Operation North Arden District	Fine grained, crystalline gypsum, minor limonite staining on exposed surfaces.
1147	Quad: Goodsprings 15' Sec: 5 T: 23S R: 60E UTM: 3981950 N 0653800 E Bard Operations South Arden District	Sandstone, well sorted, grains well rounded, coated with iron oxides and local grains of dark mineral.
1148	Quad: Shenandoah Peak 15' Sec: 30 T: 24S R: 58E UTM: 3965525 N 0633800 E Kirby Mine Goodsprings District	Gossan, silicified, heavily Fe-Mn oxide, jarosite coats surfaces, heavy, dense.

Sample Description

Sample Number	Location	Description
1149	Quad: Shenandoah Peak 15' Sec: 1 T: 25S R: 57E UTM: 3963400 N 0632950 E Whale Mine Goodsprings District	Pinkish-grey, grainy, crystalline limestone with altered nodules of pinkish-white chert, abundant fine grained boxworks, calcite veinlets, some fine brecciation, calamine/hydrozincite.
	Quad: Sec: T: R: UTM: N E	
1150	Quad: Shenandoah Peak 15' Sec: 35 T: 24S R: 57E UTM: 3964950 N 0630950 E Shenandoah Mine Goodsprings District	Dark reddish-brown to limonitic stained, massive to crystalline limestone/dolomite, crystalline calcite veining, malachite crystals coat surfaces and cavities, rocks fractured, drusy quartz coat surfaces, chert nodules, MnO2.
	Quad: Sec: T: R: UTM: N E	
1151	Quad: Shenandoah Peak 15' Sec: 34 T: 24S R: 57E UTM: 3964700 N 0629150 E Boss Mine Goodsprings District	A) Bleached, altered, malachite stained shear material, minor Fe oxides MnO2, rocks highly fractured, slightly calcareous, localized silicification, brecciation, chert nodules, boxworks.
	Quad: Sec: T: R: UTM: N E	B) Dark grey dolomite breccia, cemented with white crystalline calcite, FeOx stains on exposed surfaces.
1152	Quad: Shenandoah Peak 15' Sec: 24 T: 24S R: 57E UTM: 3967075 N 0632500 E Chiquita Mine Goodsprings District	Highly altered, Fe-Mn oxide stained shear material, slicks, calcareous, crystalline calcite line cavities.
1153	Quad: Roach Lake 15' Sec: 25 T: 25S R: 58E UTM: 3957150 N 0642975 E Valley View Claims Goodsprings District	Medium to brownish, very fine grained limestone, quartz veinlets, heavier than expected (barite?), minor FeOx stains, some brecciation, minor slicks, brownish zones with circular grey zones distributed throughout rocks.
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1154	Quad: Goodsprings 15' Sec: 23 T: 25S R: 58E UTM: 5957900 N 0641125 E Jean Claims Goodsprings District	Light to medium brownish grey limestone dolomite breccia, abundant open spacing, pods and clots of altered galena, fresh and altered sphalerite (black) fragments of fractured barite(?), some fragments milled, drusy calcite and quartz coats surfaces, limonitic stains, chalcedonic quartz coats surfaces, local silicification, spots of orange fluorescence.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
1155	Quad: Goodsprings 15' Sec: 14 T: 25S R: 58E UTM: 3959575 N 0640950 E Houghton Mine Goodsprings District	A) Bleached, highly altered limestone/dolomite breccia, surfaces coated with hemimorphite, cherty fragments, abundant open spacing, limonite stains, rocks weathered white, chalky. B) Medium grey limestone/dolomite breccia, surface altered to white, earthy, coated with hemimorphite, cherty fragments, minor Fe-Mn oxides, rocks heavy, slightly vuggy, slight yellow fluorescence in area where hemimorphite occurs.
	Quad: Sec: T: R: UTM: N E	
1156	Quad: Goodsprings 15' Sec: 24 T: 25S R: 58E UTM: 3958550 N 0643100 E Ireland Mine Goodsprings District	Fe-Mn stained quartz vein/shear material abundant boxworks, rocks highly fractured, secondary calcite and silica coat surfaces, minor malachite.
1157	Quad: Gold Butte 15' Sec: Unsurveyed T: 19S R: 70E UTM: 4019250 N 0755375 E Vermiculite Mine Gold Butte District	Vermiculite
1158	Quad: Gold Butte 15' Sec: Unsurveyed T: 19S R: 70E UTM: 4018650 N 0755600 E Snowflake Mine Gold Butte District	Pegmatite dike, abundant pods of muscovite/biotite interspersed in massive quartz, graphic texture, granular feldspars intergrown in quartz.

Sample Description

Sample Number	Location	Description
1159	Quad: Gold Butte 15' Sec: Unsurveyed T: 18S R: 70E UTM: 4025500 N 0758075 E 538382685 for President Claims Gold Butte District	Sandstone, slightly calcareous, bleached, hematite stained, well indurated.
1160	Quad: Shenandoah Peak 15' Sec: 1 T: 24S R: 56E UTM: 3972250 N 0622150 E Green Monster Mine Goodsprings District	Limestone/dolomite breccia, grey, FeOx stained, massive clots smithsonite, hydrozincite follows calcite veinlets, hemimorphite coats cavities, rocks cut with calcite
	Quad: Sec: T: R: UTM: N E	and silica veinlets, possibly lead minerals (rocks very heavy), malachit pods and clots on surfaces, minor MnO2.
1161	Quad: Goodsprings 15' Sec: 17 T: 20S R: 58E UTM: 3970050 N 0636925 E Red Cloud Mine Goodsprings District	Medium grey limestone with granitic porphyritic intrusive, limonite stained, slicks, bleached, crystallin calcite coats surfaces, few hemimorphite crystals, local silicification.
1162	Quad: Goodsprings 15' Sec: 17 T: 24S R: 58E UTM: 3968700 N 0636400 E Prairie Flower Mine Goodsprings District	Limestone breccia cemented with calcite silica, fluorescence suggests hydrozincite, pods of crystalline galena, limonite stains, hemimorphite lines cavities, cerussite line fractures.
1163	Quad: Goodsprings 15' Sec: 20 T: 24S R: 58E UTM: 3968150 N 0635900 E Yellowpine Mine Goodsprings District	Highly altered limestone/dolomite breccia, Fe-Mn oxides, mammillary malachite, hemimorphite coat surfaces, anglesite rings surround altering galena pods, earthy, boxworks, silica veins, massive smithsonite.
	Quad: Sec: T: R: UTM: N E	
1164	Quad: Dry Lake 15' Sec: 6 T: 19S R: 63E UTM: 4021100 N 0681525 E Lead King Mine Dike District	Limestone breccia cemented with white to grey crystalline calcite bearing pods of crystalline galena. Galena is also finely disseminated throughout the limestone and calcite. Minor limonite stains.
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1165	Quad: Iceberg Canyon 15' Sec: 29 T: 20S R: 70E UTM: 4005325 N 0752600 E Windmill Mine Gold Butte District	Pegmatite, minor graphic texture, muscovite and green micas, dendritic pyrolusite, dark gray, crystalline mineral, altering to FeOx reaction rings and pyrolusite, pinkish-grey feldspars, pale green mottling in feldspars, colombite-tantalite crystals?
	Quad: Sec: T: R: UTM: N E	
1166	Quad: Virgin Peak 15' Sec: 21, 22 T: 15S R: 70E UTM: 4056100 N 0753550 E Key West Mine Bunkerville District	A) Highly altered shear material, surface coatings of chrysocolla/brochantite/malachite, Fe-Mn oxides, rocks highly fractured, schistose, micaceous, silicic, hornsfelsic.
	Quad: Sec: T: R: UTM: N E	B) Gossan, earthy, boxworks, heavily FeOx stained, minor copper on surfaces.
1167	Quad: Virgin Peak 15' Sec: 14 T: 15S R: 70E UTM: 4056900 N 0754300 E Great Eastern Mine Bunkerville District	Basic dike material, magnetic, micaceous, abundant slicks.
1168	Quad: Gold Butte 15' Sec: 10 T: 18S R: 70E UTM: 4029550 N 0754550 E Tramp Mine Gold Butte District	A) Pinkish white dolomite, brecciated, malachite/brochantite coat fractures and surfaces, crystalline dolomite cement, pods oxidized sulfides(probably chalcopyrite, now replaced with hematite, slightly vuggy, MnO_2, pyrolusite ghosts, slightly silicious, barite?
	Quad: Sec: T: R: UTM: N E	B) Gossan, heavily Mn stained, minor copper staining
	Quad: Sec: T: R: UTM: N E	C) Breccia, pods and fragments of oxidized (and some fresh) sulfides cemented by crystalline silica/calcite, abundant malachite staining, fractured, vuggy, boxworks, rhodochrosite encrustations.
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1169	Quad: Gold Butte 15' Sec: Unsurveyed T: 19S R: 71E UTM: 4023000 N 0762225 E Azure Ridge Mine (Esperzanta Claims) Gold Butte District	Highly altered, Fe-Mn oxide stained gossan, minor copper stains on fracture surfaces, heavy, dense, slight fluorescence suggests minor hydrozincite silica veinlets and mammillary deposits
1170A	Quad: Gold Butte 15' Sec: 8 T: 19S R: 70E UTM: 4020100 N 0751350 E Black Jack Mine Gold Butte District	Gossan, earthy, boxworks, white, soft, encrustation, jarosite.
1170B	Quad: Gold Butte 15' Sec: 8 T: 19S R: 70E UTM: 4019850 N 0751525 E Black Jack Mine Gold Butte District	Gossan, hornsfelsic, much more MnO_2 than sample A, slightly earthy, box-works silicious.
1170C	Quad: Gold Butte 15' Sec: 8 T: 19S R: 70E UTM: 4020050 N 0751525 E Black Jack Mine Gold Butte District	Gossan, dense, highly fractured, Fe-Mn oxides, boxworks.
1171	Quad: Hoover Dam 15' Sec: 14 T: 20S R: 65E UTM: 4009700 N 0706900 E Ore Car Mine Virgin River District	Tan to bluish, very fine grain to chalcedonic silica, slight boxworks, Fe-Mn oxide stained on exposed surfaces mottled bluish and tan surface.
1172	Quad: Hoover Dam 15' Sec: 6 T: 20S R: 66E UTM: 4010500 N 0710400 E Unnamed Virgin River District	Tuff(?), light green (chloritic alteration?), open spacing, silicious, abundant fresh and oxidized biotite.
1173	Quad: Henderson 7 1/2' Sec: 35 T: 21S R: 63E UTM: 3994750 N 0688333 E Three Kids Mine Las Vegas District	Wad, massive pyrolusite, dirty, heavy.
1174	Quad: Henderson 7 1/2' Sec: 35 T: 21S R: 63E UTM: 3994766 N 0687950 E Three Kids Mine Las Vegas District	Green, clayey, slightly calcareous fault gouge material, slicks, minor FeOx, lightweight.
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1175	Quad: Scottys Junction SW 7 1/2' Sec: 27 T: 7S R: 42E UTM: 4127525 N 0477875 E Sunrise Claims Tokop District	White quartz vein material carrying euhedral grains and clots of fresh pyrite, galena, chalcopyrite.
1176	Quad: Gold Point 7 1/2' Sec: 27 T: 7S R: 42E UTM: 4127890 N 0477190 E Gold Crest Claims Tokop District	Quartz vein material, brecciated, granular, abundant FeOx stains interspersed in grains, fractured, slightly vuggy, very minor copper stains, very finely disseminated sulfides.
	Quad: Sec: T: R: UTM: N E	(pyrite, chalcopyrite)
1177	Quad: Gold Point 7 1/2' Sec: 27 T: 7S R: 42E UTM: 4127910 N 0477150 E Gold Crest Claims Tokop District	White quartz vein material, slightly vuggy, euhedral to subhedral crystals, oxidized sulfides (pyrite, tetrahedrite minor galena), specks malachite, zones of sugary quartz pods speckled with
	Quad: Sec: T: R: UTM: N E	galena(?).
1178	Quad: Gold Point 7 1/2' Sec: 28 T: 7S R: 42E UTM: 4128150 N 0476900 E Ohio Mines Tokop District	White quartz vein material, carrying clots and specks of fresh and oxidized sulfides (galena, tetrahedrite?, minor pyrite, bornite), specks of malachite, quartz vuggy, euhedral to subhedral
	Quad: Sec: T: R: UTM: N E	crystals, vein crushed and fractured, surface coatings Mn-Fe, yellow oxides on surfaces, minor sericite, iron stained.
1179	Quad: Gold Point 7 1/2' Sec: 28 T: 7S R: 42E UTM: 4128150 N 0476825 E Ohio Mines Tokop District	Very fine grained limy mud/siltstone, laminated, fractured, carrying finely disseminated and oxidized pyrite, dendritic MnO2 coats surfaces, yellow oxides, minor quartzite, light brown
	Quad: Sec: T: R: UTM: N E	to dark grey.

Sample Description

Sample Number	Location	Description
1180	Quad: Gold Point 7 1/2' Sec: 29 T: 7S R: 42E UTM: 4128400 N 077133 E Joshua Claims Tokop DIstrict	White, granular quartz vein material slightly gossany/boxworks, very fine specks sphalerite, bands and stringers pink clayey substance cutting quartz, yellow oxides on surfaces, quartz very
	Quad: Sec: T: R: UTM: N E	vuggy, minor malachite specks and coating boxworks, oxidized pyrite, tetrahedrite?
1181	Quad: Gold Point 7 1/2' Sec: 29 T: 7S R: 42E UTM: 4128350 N 0477033 E Joshua Claims Tokop District	Argillically altered granitic rocks, quartz veinlets and stringers, mafics almost all gone, remnant biotite, oxidized clots pyrite(?)
1182	Quad: Gold Point 7 1/2' Sec: 34 T: 7S R: 42E UTM: 4126980 N 0476266 E Mabel Claims Tokop District	Dark grey mud/siltstone, fractured, cut with white crystalline calcite veinlets, malachite coat fracture surfaces, dendritic pyrolusite, garnet tactite, no fluorescence, small oxidized pyrite grains, minor epidote.
	Quad: Sec: T: R: UTM: N E	
1183	Quad: Gold Point 7 1/2' Sec: 34 T: 7S R: 42E UTM: 4126980 N 0476266 E Mabel Claims Tokop District	Fault gouge, heavily Fe-Mn oxides, host rock mud/siltstone, slicks.
1184	Quad: Gold Point 7 1/2' Sec: 34 T: 7S R: 42E UTM: 4126675 N 0476750 E Side Hill Claims Tokop District	White, massive quartz vein carrying clots, specks of fresh and oxidized sulfides disseminated through the vein and along abundant fractures, (pyrite, chalcopyrite, bornite, galena,
	Quad: Sec: T: R: UTM: N E	tetrahedrite), malachite coats surfaces and surrounds sulfides, abundant Fe-Mn oxide stains, yellow oxides coat surfaces.
1185	Quad: Gold Point 7 1/2' Sec: 34 T: 7S R: 42E UTM: 4126240 N 0476550 E Silver King Claims Tokop District	White to grey, fine-grained quartz vein bearing abundant sulfides(pyrite arsenopyrite) disseminated throughout it, minor boxworks, yellow oxides coat surfaces.

Sample Description

Sample Number	Location	Description
1186	Quad: Gold Point 7 1/2' Sec: 34 T: 7S R: 42E UTM: 4126000 N 0476620 E Alberto Mine Tokop District	Quartz vein breccia, cemented with hematite/MnO2 stained silica, fragments exhibit milling.
1187	Quad: Gold Point 7 1/2' Sec: 34 T: 7S R: 42E UTM: 4126000 N 0476450 E Alberto Mine Tokop District	Quartz vein breccia, cemented with hematite/MnO2 stained silica, not as cemented as 1186, almost fault gouge some argillic alteration.
1188	Quad: Gold Point 7 1/2' Sec: 9 T: 8S R: 42E UTM: 4123650 N 0476600 E Big Blossom Mine Tokop District	Crystalline calcite vein, vuggy, oxidized grains pyrite, host rock mud/siltstone, dark grey, wulfenite crystals(?) occur along exposed surface sediments brecciated,
	Quad: Sec: T: R: UTM: N E	metamorphosed to phyllite, clots of ferberite/heubnerite in quartz vein(?)
1189	Quad: Scottys Junction SW 7 1/2' Sec: 3 T: 8S R: 42E UTM: 4125060 N 0478300 E Rattlesnake Mine Tokop District	White quartz vein material, fractured, carrying grains and clots of galena, tetrahedrite, oxidized pyrite, reaction rings of malachite surround tetrahedrite grains, secondary silica
	Quad: Sec: T: R: UTM: N E	coats vugs and boxworks, silica veinlets cut vein, vein slightly gossany.
1190	Quad: Gold Point 7 1/2' Sec: 7 T: 8S R: 42E UTM: 4124200 N 0472800 E Empress Mine - lower adit Tokop District	White, quartz vein material carrying fresh and oxidized crystalline pyrite, slightly gossany, boxworks, surfaces coats with Fe-Mn oxides, secondary drusy silica coats surfaces.
1191	Quad: Gold Point 7 1/2' Sec: 7 T: 8S R: 42E UTM: 4124050 N 0472760 E Empress Mine - Upper adit Tokop District	Quartz vein/breccia, open spacing, cemented with limonite stained silica, quartz veinlets cutting breccia, later flooding of silica coats open spacing/vugs, small clots tetrahedrite,
	Quad: Sec: T: R: UTM: N E	malachite occurs around tetrahedrite.

Sample Description

Sample Number	Location	Description
1192	Quad: Gold Point 7 1/2' Sec: 7 T: 8S R: 42E UTM: 4124033 N 0472900 E Empress Mine Tokop District	Same description as 1191, however, vein more fractured as opposed to brecciated.
1193	Quad: Gold Point 7 1/2' Sec: 7 T: 8S R: 42E UTM: 4124010 N 0473690 E Sample Site 1193 Tokop District	Quartz vein/breccia, cemented with Fe-Mn oxide stained silica, boxworks, vuggy, surfaces coated with secondary silica, iridescent oxidization minerals on surfaces, oxidized pyrite pseudo-
	Quad: Sec: T: R: UTM: N E	morphs and ghosts, sericite.
1194	Quad: Gold Point 7 1/2' Sec: 8 T: 8S R: 42E UTM: 4124533 N 0474075 E Pinon Claims Tokop District	Sample mixture of Copper stained (silicates, sulfates, and carbonates) mud/siltstone, and garnet-epidote tactite with clots of magnetite, all rocks heavily Fe-Mn oxide stained,
	Quad: Sec: T: R: UTM: N E	some argillic alteration, rocks fracture small amount purple fluorite intergrown in garnets, some sericite.
1195	Quad: Gold Point 7 1/2' Sec: 7 T: 8S R: 42E UTM: 4123800 N 0472210 E Wonder Claims Tokop District	White quartz vein material, fractured, carrying clots, and grains of pyrite and chalcopyrite, and maybe some tetrahedrite, spots of malachite, FeOx stains, yellow, waxy mineral inter-
	Quad: Sec: T: R: UTM: N E	grown in quartz, minor boxworks, secondary silica coats open spaces, grains of covelite.
1196	Quad: Gold Point 7 1/2' Sec: 2 T: 8S R: 41E UTM: 4124420 N 0470310 E Katina Claims Tokop District	Quartz vein/shear material, heavily Fe-Mn oxide stained, pyrite and chalcopyrite ghosts, yellow oxides coat surfaces, vein crushed, brecciated in places, cut by secondary quartz
	Quad: Sec: T: R: UTM: N E	veinlets.

Sample Description

Sample Number	Location	Description
1197	Quad: Gold Point 7 1/2' Sec: 11 T: 8S R: 41E UTM: 4122975 N 0469790 E Teep Claims Tokop District	Massive white quartz vein carrying clots and grains of fresh pyrite, galena, chalcopyrite, minor boxworks, argillic alteration, secondary silica coats vein.
1198	Quad: Gold Point 7 1/2' Sec: 11 T: 8S R: 41E UTM: 4122975 N 0469790 E Teep Claims Tokop District	Chloritized granite, mafics altered out, oxidized pyrite on surfaces, sericite, MnO2 coat surfaces.
1199	Quad: Gold Point 7 1/2' Sec: 2 T: 8S R: 41E UTM: 4125260 N 0470480 E Long Shots Claims Tokop District	White quartz vein/shear material, carrying crystalline argentiferous(?) galena, intergrown with sphalerite, oxidized pyrite and chalcopyrite, tetrahedrite(?) , greenokite(?),
	Quad: Sec: T: R: UTM: N E	clots malachite, chrysocolla, open spacing coated with secondary chalcedony, rocks highly fractured.
1200	Quad: Gold Point 7 1/2' Sec: 2 T: 8S R: 41E UTM: 4125290 N 0470550 E Long Shots Claims Tokop District	Massive quartz vein, highly fractured, carrying clots and grains galena, surfaces coated with excessive amount of yellow secondary mineral, minor pyrite and chalcopyrite, specks
	Quad: Sec: T: R: UTM: N E	malachite, open spacing, very fine boxworks.
1286	Quad: Split Mountain 7 1/2' Sec: 3 T: 3S R: 41E UTM: 4173950 N 0466000 E Good Buddy Claims Montezuma District	Quartz vein associated with calcite veins, crystalline galena, tetrahedrite, radiating malachite, quartz massive to granular, hematite staining, oxidized and fresh pyrite.
1287	Quad: Split Mountain 7 1/2' Sec: 33 T: 2S R: 41E UTM: 4174150 N 0466475 E Sample Site 1287 Montezuma District	White quartz vein carrying fine-grained galena, sphalerite, pyrite, chalcopyrite tetrahedrite(?), grains and surface coatings malachite, azurite, some breccia fragments, silica veinlets.
1288	Quad: Split Mountain 7 1/2' Sec: 33 T: 2S R: 41E UTM: 4174260 N 0466450 E Sample Site 1288 Montezuma District	Gossan/boxwork quartz vein, ancicular malachite fills open spaces, silicified, rocks heavy, Fe-Mn oxide stained, few grains galena.

Sample Description

Sample Number	Location	Description
1201	Quad: Bare Mountain 15' Sec: 24 T: 12S R: 47E UTM: 4081450 N 0529440 E Secret Pass Claims Bare Mountain District	(A) Limonite stained gossan, desne, boxworks. (B) Calcite & quartz vein material slightly brecciated, hamtite stained, oxidized Fe minerals.
1202	Quad: Bare Mountain 15' Sec: 23 T: 12S R: 47E UTM: 4082000 N 0528460 E BVC Claim Bare Mountain District	Heavily Fe-Mn stained hydrothermal vein material, scaley, botryoidal, specularite.
1203	Quad: Bare Mountain 15' Sec: 24 T: 12S R: 47E UTM: 4081200 N 0528700 E Vidano Group Claim Bare Mountain District	Gossany, medium grey LS, calcite & chalcedony fills vugs, specularite coated boxworks, some silicification.
1204	Quad: Bare Mountain 15' Sec: 17 T: 12S R: 47E UTM: 4083280 N 0523400 E Wildcat Claim Bare Mountain District	White to grey quartz vein fractured, copper minerals coat surface, minor sulfide, minor MnO2.
1205	Quad: Bare Mountain 15' Sec: 3 T: 13S R: 47E UTM: 4076290 N 0526460 E Gold Ace Claim Bare Mountain District	White, anhedral quartz vein/breccia material, minor oxidized sulfide, along contact between vein & quartzite.
1206	Quad: Bare Mountain 15' Sec: 3 T: 13S R: 47E UTM: 4076290 N 0526460 E Gold Ace Claim Bare Mountain District	Gouge material, slicks, sericite phyllitic, hematite stained, biotite.
1207	Quad: Bare Mountain 15' Sec: 2 T: 13S R: 47E UTM: 4077010 N 0527010 E Arista Mine Bare Mountain District	Medium grey quartzite with quartz vein, crystalline pyrite & chalcopyrite disseminated throughout quartzite, sericite, minor Fe-Mn staining.
1208	Quad: Bare Mountain 15' Sec: 2 T: 13S R: 47E UTM: 4077010 N 0527010 E Arista Mine Bare Mountain District	Light grey, fine-grained quartzite, minor FeOx staining, minor stringer sulfide white quartz vein material.
1209	Quad: Bare Mountain 15' Sec: 34 T: 12S R: 47E UTM: 4077550 N 0525500 E Irene Claim Bare Mountain District	White quartz vein cutting Fe-stained quartzite, sericite with distinct schistosity, minor fine boxworks, phyllite zones.

Sample Description

Sample Number	Location	Description
1210	Quad: Bare Mountain 15' Sec: 33 T: 12S R: 47E UTM: 4077690 N 0525370 E Irene Claim Bare Mountain District	Pinkish grey quartzite, breccia cemented with massive white quartz, minor Fe-Mn staining, oxidized hematite-grains.
1211	Quad: Bare Mountain 15' Sec: 33 T: 12S R: 47E UTM: 4078590 N 0524795 E Irene Claim Bare Mountain District	White quartz vein material highly fractured & brecciated, FeOx-MnO2 stained, oxidized sulfide, cu minerals coating surface, sericite minor gossany pods.
1212	Quad: Bare Mountain 15' Sec: 2 T: 13S R: 47E UTM: 4076480 N 0527260 E Irene Claim Bare Mountain District	Gossan with quartz vein heavily FeOx stained, dense, cellular boxworks.
1213	Quad: Bare Mountain 15' Sec: 12 T: 13S R: 47E UTM: 4075500 N 0529156 E Carrara Quarry Claim Bare Mountain District	(A) Medium grey LS gouge, calcite veining, kaolinized. (B) White, crystalline platy LS/marble, minor limonite staining, dendritic pyrolusite.
1214	Quad: Bullfrog 15' Sec: 15 T: 12S R: 46E UTM: 4083300 N 0516250 E Senator Stewart Mine Bullfrog District	Rhyolite tuff, kaolinized, minor limonite & MnO2 staining, quartz eyes, mafics gone.
1215	Quad: Bullfrog 15' Sec: 16 T: 12S R: 46E UTM: 4083500 N 0515890 E Nat'l Bank Mine Bullfrog District	Sacchroidal, vitreous quartz vein material cementing medium gray, fine-grained siliceous breccia, speck of dark grey mineral, with hematite, oxidizing, open spaces filled with drusy
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	quartz crystals surface stained with dendritic pyrolusite, kaolinization, slight green staining.
1216	Quad: Springdale 15' Sec: 26 T: 10S R: 46E UTM: 4098300 N 0518310 E Vol Claim Bullfrog District	(A) Massive to sacchroidal quartz vein/breccia material, open spaces filled with drusy quartz, fine, platy boxworks, minor limonite staining, sooty pyrolusite coats surface, rock cut
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	with micro-veins of quartz. (B) Rhyolite breccia, cemented with quartz, silicified, FeOx stained, minor cellular boxworks, hematite stained, drusy quartz, minor MnO2.

Sample Description

Sample Number	Location	Description
1217	Quad: Springdale 15' Sec: 35 T: 10S R: 46E UTM: 4097600 N 0518000 E Bab Claim Bullfrog District	Quartz vein/Rhyolite gouge/breccia, heavily FeOx stained, Kaolinized.
1218	Quad: Springdale 15' Sec: 35 T: 10S R: 46E UTM: 4097680 N 0517900 E Bab Claim Bullfrog District	(A) Fine-grained, light grey quartz gouge material, abundant Fe-Mn stained open spacing, argillic alteration. (B) Silicified breccia fine-grained quartz, hyaline quartz, coats open space, minor hematite coats surfaces.
	Quad: Sec: T: R: UTM: N E	
1219	Quad: Springdale 15' Sec: 2 T: 11S R: 46E UTM: 4095260 N 0518505 E Pioneer Mine Bullfrog District	Rhyolite ash tuff, silicia fragments, Fe-Mn staining, open spaces coated with MnO2 stained quartz, chloritized, quartz veinlets.
1220	Quad: Bullfrog 15' Sec: 12 T: 11S R: 46E UTM: 4094400 N 0520420 E Dee Claim Bullfrog District	Gouge material, gossan heavy, abundant Fe (hematite) abundant pods white crystalline fill open spaces.
1221	Quad: Bullfrog 15' Sec: 26 T: 11S R: 46E UTM: 4089190 N 0518500 E P. C. Ext Claims Bullfrog District	Chloritized, argillic altered ash tuff, rhyolitic, minor FeOx staining.
1222	Quad: Bullfrog 15' Sec: 26 T: 11S R: 46E UTM: 4089220 N 0518810 E SN Claims Bullfrog District	Volcanic breccia banded rhyolitic ash tuff with cinnabar following bands line, abundant Fe-Mn staining argillic alteration, bleached, some silicification, drusy quartz/silicification coats surface.
	Quad: Sec: T: R: UTM: N E	
1223	Quad: Bullfrog 15' Sec: 9 T: 12S R: 46E UTM: 4084700 N 0515280 E Rhyolite Claims Bullfrog District	Argillic altered gouge, material slightly chloritized, spots of MnO2, limonitic stained, slightly fractured.

Sample Description

Sample Number	Location	Description
1224	Quad: Bullfrog 15' Sec: 36 T: 11S R: 45E UTM: 4087690 N 0509700 E Gold Bar Claim Bullfrog District	Rhyolitic breccia cemented with white to grey silica, silicified, minor boxworks, drusy quartz, fragments cut with siliceous veinlets, minor limonitic staining.
1225	Quad: Bare Mountain 15' Sec: 20 T: 12S R: 47E UTM: 4080830 N 0522350 E None Bare Mountain District	Massive fractured quartz vein with fresh & chloritized biotite in bands, stringer & pods. FeOx stained, dendritic pyrlousite siderite fragments associated with biotite.
1226	Quad: Goldfield 15' Sec: 12 T: 5S R: 43E UTM: 4155075 N 0495790 E Sterlog Claim Gp. Stonewall District	Epidote banded skarn with blob & stringers, black & white crystalline silica, blobs crystalline chalcopyrite.
1227	Quad: Goldfield 15' Sec: 12 T: 5S R: 43E UTM: 4151800 N 0491060 E Stonwall Mountain Ag Mines Stonewall District	Siliceous, grey, fine-grained quartzite/quartz vein material oxidized hematite pyrite in veinlets, argillic altered, drusy quartz some silicification.
1228	Quad: Goldfield 15' Sec: 5 T: 5S R: 43E UTM: 4154500 N 0485360 E Snow White Claims Cuprite District	Opaline sinter, brecciated, with disseminated Cinnabar, argillic altered in patches.
1229	Quad: Crow Springs 7 1/2' Sec: Unsurveyed T: 4N R: 39E UTM: Bingo Claim N E Gilbert District	Dense, Fe-Cu stained siliceous, rock, malachite/azurite, coat surface, quartz veining, slightly gossany, boxworks.
1230	Quad: Outlaw Springs 7 1/2' Sec: 6 T: 5N R: 40E UTM: 4241715 N 0454180 E Royston Mining Royston District	Porphyritic argillic volcanic, fracture filled & coated with turquoise yellow oxides and limonite coat surfaces.
1231	Quad: Crow Springs 7 1/2' Sec: Unsurveyed T: 4N R: 39E UTM: 4231560 N 0446810 E Western Gravel Co. Claims (Hurry up Gp. Gilbert District	Perlite, Obsidion, spheralite.
1232	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4227815 N 0440357 E None Gilbert District	Greenish grey, very fine-grained volcanic, highly fractured/brecciated, cemented with cinnabar-stained silica, rhyolitic fragments, possibly some bedded deposits.

Sample Description

Sample Number	Location	Description
1233	Quad: Benton 15' Sec: 5 T: 1S R: 33E UTM: 4194200 N 0384200 E Queen Mine Buena Vista District	Quartz vein material with clots galena, pyrite, chalcopyrite, Fe oxides.
1234	Quad: Benton 15' Sec: 5 T: 1S R: 33E UTM: 4194050 N 0383700 E Unnamed Buena Vista District	Vein quartz, FeOx-stained, tr. pyrite.
1235	Quad: Benton 15' Sec: 31 T: 1N R: 33E UTM: 4195100 N 0383700 E Unnamed Buena Vista District	Vein quartz, crushed, re-cemented, Fe-Ox & MnO, pyrite.
1236	Quad: Benton 15' Sec: 32 T: 1N R: 33E UTM: 4195550 N 0382850 E Upper Albert Mine Buena Vista District	Quartz vein, brecciated, cemented with FeOx, clots galena, cerrusite.
1237	Quad: Benton 15' Sec: 21 T: 1N R: 33N UTM: 4199080 N 0385250 E Wild Rose Mine Buena Vista District	Silicified rhyolite, oplite, cinnabar & yellow HgCl coatings on fractures.
1238	Quad: Benton 15' Sec: 21 T: 1N R: 33N UTM: 4198400 N 0385000 E Unnamed Fish Lake Valley District	Quartz vein material, calcite, crusts FeOx, MnO, Jarosite, Fine-grained pyrite.
1239	Quad: Benton 15' Sec: 21 T: 1N R: 33E UTM: 4198500 N 0385400 E Tip Top Mine Fish Lake Valley District	Quartz vein, lamellar quartz fine-grained black sulfides.
1240	Quad: Benton 15' Sec: 9 T: 1N R: 33E UTM: 4201300 N 0385120 E Moonlight Silver Moon Claim Buena Vista(?) District	Quartz vein, opalite, Fe oxides, fine-grained pyrite.
1241	Quad: Benton 15' Sec: 15 T: 1N R: 33N UTM: 4199150 N 0386700 E Buckskin Mine Fish Lake Valley District	Opalite breccia, cinnabar coatings Fe-Ox, silica cementing breccia fragments.

Sample Description

Sample Number	Location	Description
1242	Quad: Davis Mountain 15' Sec: 36 T: 1N R: 33E UTM: 4195300 N 0390760 E F & L Mine Fish Lake Valley District	White opalite breccia, silica cement, cinnabar coating fractures, yellow HgCl, some meta-cinnabar.
1243	Quad: Benton 15' Sec: 1 T: 1S R: 33E UTM: 4194100 N 0389960 E B & B Mine Fish Lake Valley District	Opalite, sinter, cinnabar, meta-cinnabar, HgCl coatings on fractures.
1244	Quad: Davis Mountain 15' Sec: 14 T: 1S R: 35E UTM: 4190750 N 0407750 E Riek Claim (Lake Hg Placer) Fish Lake Valley District	Opaline sinter, FeOx, cinnabar paint, sulfur.
1245	Quad: Davis Mountain 15' Sec: 21 T: 1S R: 34E UTM: 4188350 N 0393900 E McNutt Mine Fish Lake Valley District	Silicified rhyolite laced with dark silica veinlets, fine-grained pyrite.
1246	Quad: Davis Mountain 15' Sec: 21 T: 1S R: 34E UTM: 4188220 N 0393950 E McNutt Mine Fish Lake Valley District	Opalite breccia, silica cement, crusts & paint cinnabar, meta-cinnabar.
1247	Quad: Davis Mountain 15' Sec: 17 T: 1S R: 34E UTM: 4189650 N 0392900 E Crimson Crown Claim Fish Lake Valley District	Vitrophyre, veined with chalcedonic, quartz, FeOx & MnO staining, trace cinnabar.
1248	Quad: Davis Mountain 15' Sec: 18 T: 1S R: 34E UTM: 4189600 N 0391700 E Picture Rock Claim Fish Lake Valley District	Brecciated vein containing fragments silicified limestone, FeOx, pyrite.
1249	Quad: Davis Mountain 15' Sec: 17 T: 1S R: 34E UTM: 4189600 N 0391800 E Montana Claim Fish Lake Valley District	Brecciated quartz vein, silica cement, pods FeOx MnO, some pyrite.
1250	Quad: Davis Mountain 15' Sec: 18 T: 1S R: 34E UTM: 4190580 N 0390150 E Container Mine Fish Lake Valley District	Breccia, fragments silicified limestone cemented by silica, coatings of FeOx, yellow oxides(?) cinnabar, barite crystals.

Sample Description

Sample Number	Location	Description
1251	Quad: Davis Mountain 15' Sec: 18 T: 1S R: 34E UTM: 4190350 N 0390750 E Red Rock Mine Claim Fish Lake Valley District	Silicified quartzite breccia, cinnabar fracture fillings.
1252	Quad: Davis Mountain 15' Sec: 21 T: 2S R: 34E UTM: 4179900 N 0392600 E Mollini Mine Fish Lake Valley District	White vein quartz, Cu oxides.
1253	Quad: Davis Mountain 15' Sec: 19 T: 2S R: 36E UTM: 4179000 N 0409850 E Dyer Ranch Prospect Claim Dyer District	Black jasperoid, gossan, FeOx & MnO.
1254	Quad: Davis Mountain 15' Sec: 19 T: 2S R: 36E UTM: 4179300 N 0410000 E Dyer Ranch Shaft Dyer District	Vein quartz, clots, FeOx trace Cu oxides.
1255	Quad: Mt. Barcroft 15' Sec: 30 T: 2S R: 36E UTM: 4176600 N 0408460 E Bluff Mine Dyer District	Dark red & black jasperoid, gossan, FeOx, pods.
1256	Quad: Piper Peak 15' Sec: 16 T: 3S R: 36E UTM: 4171300 N 0412800 E Aztec Claim White Wolf District	Vein quartz, calcite, some FeOx.
1257 A	Quad: Magruder Mountain 15' Sec: 23 T: 6S R: 38E UTM: 4140020 N 0434810 E None Sylvania District	Light silicate skarn, gossan lenses, clots galena, pyrite, sphalerite.
1257 B	Quad: Magruder Mountain 15' Sec: 23 T: 6S R: 38E UTM: 4140020 N 0434810 E None Sylvania District	White vein quartz with tetrahedrite, galena, CuOx, cuts skarn.
1258	Quad: Magruder Mountain 15' Sec: 22 T: 6S R: 38E UTM: 4140050 N 0434760 E None Sylvania District	Garnet skarn, diopsite, chlorite, pyrite, molybdenite, some scheelite.

Sample Description

Sample Number	Location	Description
1259	Quad: Magruder Mountain 15' Sec: 23 T: 6S R: 38E UTM: 4139400 N 0436300 E Sylvania Mine Sylvania District	Gossan in light silicate skarn, massive galena, sphalerite, FeOx.
1260	Quad: Piper Peak 15' Sec: 30 T: 4S R: 38E UTM: 4156550 N 0429500 E None Windypah District	Vein quartz, leached sulfide cavities, FeOx stain.
1261	Quad: Piper Peak 15' Sec: 30 T: 3S R: 38E UTM: 4157900 N 0429660 E Gold Dust Claim Windypah District	Vein quartz, hematite clots, cubes pyrite.
1262	Quad: Piper Peak 15' Sec: 19 T: 4S R: 38E UTM: 4158560 N 0429460 E Gold Dust Claim Windypah District	Aplite dike, loaded with quartz veins, chlorite in aplite, FeOx stain.
1263 A	Quad: Piper Peak 15' Sec: 30 T: 4S R: 38E UTM: 4156810 N 0428550 E Copper Stack Claim Windypah District	Gossan in epidote-garnet skarn, CuOx staining, MnO, FeOx.
1263 B	Quad: Piper Peak 15' Sec: 30 T: 4S R: 38E UTM: 4156810 N 0428550 E Copper Stack Claim Windypah District	Garnet skarn with visible scheelite.
1264	Quad: Piper Peak 15' Sec: 5 T: 5S R: 38E UTM: 4154580 N 0318000 E Oppus #9 Claim Windypah District	Vein quartz, brecciated, CuOx, FeOx, MnO on fine-grained surfaces.
1265	Quad: Devils Gate 7 1/2' Sec: Unsurveyed T: 3N R: 38E UTM: 217980 N 0437289 E SG Claim Gilbert District	Altered, bleached silicified rhyolite, fractured, drusy quartz fills fissure veins, FeOx stained, open spaces, MnO2 stained quartz crystals.
1266	Quad: Devils Gate 7 1/2' Sec: Unsurveyed T: 3N R: 38E UTM: 4218335 N 0437500 E Pretty Boy Claim Gilbert District	Silicified, shale/mudstone breccia, cockscomb quartz cementing fragments, Fe-MnO staining, jarosite coats surface finely disseminated sulfides.

Sample Description

Sample Number	Location	Description
1267	Quad: Devils Gate 7 1/2' Sec: Unsurveyed T: 3N R: 38E UTM: 4218415 N 0436327 E None Gilbert District	Highly fractured, to brecciated mudstone, medium grey, heavily MnO2 stained, speularite coats, slightly gossany, possible barite, minor drusy quartz fill open spaces.
1268	Quad: Devils Gate 7 1/2' Sec: Unsurveyed T: 3N R: 38E UTM: 4218937 N 0436240 E S G Claim Gilbert District	Yellowish-white indurated, siliceous water-lain ash-tuff differentially weathered, limonitic stained. MnO2, stained.
1269	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 3N R: 38E UTM: 4221050 N 0436217 E Ohio Claims Gilbert District	Brownish-grey, slightly calcareous mudstone breccia, fragments look milled cemented with milky white, slightly drusy quartz, Fe-Mn stained.
1270	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 3N R: 38E UTM: 4221020 N 0436080 E Ohio Claim Gilbert District	Fine-grained volcanic breccia cut with and cemented with slightly chalcedonic quartz, limonititc /MnO2 stained, vuggy ash tuff fragments, quartz eyes.
1271	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 3N R: 38E UTM: 4222195 N 0437879 E NOR Claim Gilbert District	Fine to medium grained volcanic breccia sanidine crystals, cemented with/hematite stained silica, Fe-Mn stained, minor drusy quartz.
1272	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4224320 N 0438020 E GLB Claim Gilbert District	Vitreous to sacchroidal quartz gouge material bearing pyrite/arsenopyrite, fine anhedral crystals, FeOx stained cellular boxworks, jarosite coats surfaces, fractured, sulfides appear to be carried along & filling fractures
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
1273	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4225995 N 0438440 E None Gilbert District	Fractured, Fe-Mn stained siliceous seds, euhedral calcite veining, drusy quartz coats fractures, fine-grained sulfide occur in clots, stringer, & coating fracture surfaces, cellular boxworks, yellow oxides.
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	

Sample Description

Sample Number	Location	Description
1274	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4226365 N 0438425 E D.M. Homesteak Claim Gilbert District	Siliceous sed breccia, hydrothermal, chalcedonic cement, drusy quartz fill open spaces, limonitic staining, micro-quartz veinlets, breccia is brecciated, fragments milled.
1275	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4227140 N 0438880 E Mother's last(or lost) Hope Claim Gilbert District	Bleached, fractured, rhyolitic tuff, K-spars gone, clear to smoky quartz eye, Fe-Mn stained cellular boxworks, blobs & patches green mineral (?), fissures filled with massive light grey quartz.
	Quad: Sec: T: R: UTM: N E	
1276	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4228120 N 0438140 E None Gilbert District	Breccia, quartz & calcite cemented, siderite, pyrite grain(?), limonite stained, minor cellular boxworks, open spaces in breccia, minor gossan.
1277	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4226595 N 0439510 E Red Cloud Claims Gilbert District	(A) Volcanic breccia silicified, cemented with dark grey silica, rock Fe-Mn stained vuggy drusy quartz coats, open spaces, quartz veinlets x-cuts. (B) Greenish-grey, fine to coarse grained rhyolite and rhyolite breccia, exposed surface coated with dull green clayish alteration, FeOx staining.
	Quad: Sec: T: R: UTM: N E	
1278	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4223560 N 0440220 E GLB Claim Gilbert District	Gossan, dense, Fe-Mn stained quartz vein, limonite stained, moly, specular-ite, siderite.
1279	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4223500 N 0440279 E GLB Claim Gilbert District	Medium grey silicified, fine-grained sed. breccia cemented with silica, fine crystalline pyrite, arsenopyrite disseminated throughout rock, Fe-Mn stains, minor boxworks, gossan.
1280	Quad: Gilbert 7 1/2' Sec: Unsurveyed T: 4N R: 38E UTM: 4223960 N 0440625 E GLB Claim Gilbert District	(A) White, massive, fractured quartz vein material, clots & pods of galena & sphalerite, minor malachite & chrys-acolla stringer & coat fracture, Fe-Mn stains, gossan spots.
		(B) Next page.....

Sample Description

Sample Number	Location (Continued)	Description
1280	Quad: Gilbert 7 1/2' Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	(B) Greenish-grey LS with disseminated pyrite/chalcopyrite/moly, also in pods & clots, FeOx staining, skarn.
1281	Quad: Outlaw Springs SE 7 1/2' Sec: 31 T: 6N R: 40E UTM: 4242350 N 0453422 E Blue Bell Claims Royston District	Limonititc stained mud/siltstone, chert gouge/fracture material cut/pods-stringers, veinlets blue-green turquoise.
1282	Quad: Devils Gate 7 1/2' Sec: Unsurveyed T: 3N R: 38E UTM: 4215350 N 0434361 E Castle Rock Mine Gilbert District	Rhyolite & ash tuff breccia, fine crystalline pyrite in siliceous matrix, gossany zones, minor drusy quartz in open spaces.
1283	Quad: Piper Peak 15' Sec: 13 T: 4S R: 36E UTM: 4161353 N 0418005 E Lookout Mine Good Hope District	Heavy, dense, gossan, abundant hematite staining limonitic, malachite intergrown in gossan.
1284	Quad: Piper Peak 15' Sec: 12 T: 4S R: 36E UTM: 4162150 N 0418100 E K & M Claims White Wolf (Good Hope) District	Grey-brown silty LS, or calcareous siltstone, cut with/vein of agrentiferous galena, also pods & clots, slightly gossany vuggy, surface calcite, crystalline calcite fills fractures.
1285	Quad: Piper Peak 15' Sec: Unsurveyed T: 4S R: 37E UTM: 4158700 N 0421920 E None White Wolf (Good Hope) District	Calcareous, limonitic, fractured silt stone, fracture coated. with drusy quartz, calcite vein & blobs dendritic pyrolusite, jarosite(?) minor gossan patches & boxworks.
____	Quad: ____ Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	
____	Quad: ____ Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	
____	Quad: ____ Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	

Sample Description

Sample Number	Location	Description
1289	Quad: Split Mountain 7 1/2' Sec: 3 T: 3S R: 41E UTM: 4172533 N 0466075 E Radio Tower Shaft Montezuma District	Quartz vein/quartzite/mudstone breccia, with cement carrying very fine grained fresh and altered pyrite, rocks coated with greenish-grey alteration, minor FeOx coatings, quartz appears milled.
1290	Quad: Gold Point SW 7 1/2' Sec: 11 T: 7S R: 41E UTM: 4133600 N 0463790 E Sample Site 1290 Gold Point District	Quartz vein carrying tetrahedrite altering to malachite, azurite, and antimony oxides (?), chrysocolla, some brecciation, fragments milled, Fe-Mn staining along fractures and in breccia, grains of galena.
	Quad: Sec: T: R: UTM: N E	
1291	Quad: Gold Point SW 7 1/2' Sec: 11 T: 7S R: 41E UTM: 4133 N 0463810 E Sample Site 1291 Gold Point District	Fine grained, light grey, silicious intrusive, very fine mafics, oxidized pyrite crystals and ghosts.
1292	Quad: Gold Point 7 1/2' Sec: 4 T: 7S R: 41 1/2 E UTM: 4133810 N 0467010 E Jaboria Claim Gold Point District	Crystalline quartz vein carrying fresh and oxidized pyrite, argenopyrite(?), vein crushed and sheared.
1293	Quad: Gold Point 7 1/2' Sec: 4 T: 7S R: 41 1/2' UTM: 4133733 N 0466950 E Jaboria Claims Gold Point District	Quartzite gossan, heavily hematite stained, boxworks, pyrite ghosts, secondary silica coats surfaces, open spaces.
1294	Quad: Gold Point 7 1/2' Sec: 4 T: 7S R: 41 1/2' UTM: 4134080 N 0466950 E Jaboria Claims Gold Point District	Gossan, sacchroidal quartz, heavily limonite stained, breccia/shear, secondary silica coats surfaces.
1295	Quad: Gold Point 7 1/2' Sec: 4 T: 7S R: 41 1/2' UTM: 4133980 N 0466900 E Jaboria Claims Gold Point District	Quartz breccia/shear material, coated with secondary silica, carrying oxidized pyrite, FeOx stained.
1296	Quad: Gold Point 7 1/2' Sec: 4 T: 7S R: 41 1/2' UTM: 4133925 N 0466925 E Jaboria Claims Gold Point Claims	Quartz/calcite vein/shear material, carrying oxidized pyrite, FeOx stains, secondary quartz coats surfaces, euhedral quartz fills open spaces.

Sample Description

Sample Number	Location	Description
1297	Quad: Gold Point 7 1/2' Sec: 10 T: 7S R: 41 1/2 E UTM: 4133450 N 0467600 E Limepoint Claims Gold Point District	Oxidized ore, unknown host rock, argillically altered, yellow and purple oxides coat boxworks, surfaces, jarosite (?), brecciated quartz vein, quartzite?, sacchroidal silicious intrusive?
	Quad: Sec: T: R: UTM: N E	
1298	Quad: Gold Point 7 1/2' Sec: 10 T: 7S R: 41 1/2' UTM: 4133510 N 0467520 E Limepoint Claims Gold Point District	Mud/siltstone, slightly calcareous, cut by quartz veins and veinlets, rocks limonite stained, oxidized pyrite, minor brecciation, slightly vuggy.
1299	Quad: Gold Point 7 1/2' Sec: 9 T: 7S R: 41 1/2E UTM: 4133350 N 0467000 E Patent Claim MS 3535 Gold Point District	Coarse grained, quartz vein, limonite stained, argillically altered, open spacing, slightly brecciated, MnO2 coats surfaces.
1300	Quad: Gold Point SW 7 1/2' Sec: 13 T: 7S R: 41E UTM: 4131950 N 0465700 E North Star Claims Gold Point District	Quartz vein carrying oxidized chalcopyrite, clots malachite, abundant vugs with euhedral quartz crystals, boxworks, minor galena, possibly some tetrahedrite.
1363	Quad: Gold Point 7 1/2' Sec: 23 T: 7S R: 41 1/2' UTM: 4130850 N 0469890 E Browning Claims (Dunfee Shaft) Gold Point District	White quartz vein breccia/gouge carrying fine grained, fresh and oxidized pyrite and chalcopyrite, fragments exhibit milling, rocks limonitic stained, some boxworks,
	Quad: Sec: T: R: UTM: N E	slightly gossany, calcite crystals coat surfaces.
1364	Quad: Gold Point 7 1/2' Sec: 25 T: 7S R: 41 1/2E UTM: 4129100 N 0472000 E Mable Claims Gold Point District	Mud/siltstone gouge material, highly fractured, Fe-Mn oxide stained, minor silica coats surfaces.
1365	Quad: Gold Point 7 1/2' Sec: 26 T: 7S R: 41 1/2' UTM: 4129175 N 0470450 E Dun Claim Group Gold Point District	Dark brownish-grey mudstone, localized silicified, epidote coating fracture surfaces, dendritic pyrolusite, pods and clots and veinlets of greenish-black, bladed mineral, light grey streak, hardness between 4-5 calcite crystals coat surfaces.

Sample Description

Sample Number	Location	Description
1301	Quad: Mt. Perkins 15' Sec: 29 T: 26S R: 65E UTM: 3948350 N 0704100 E Olympian Claims Eldorado District	White, quartz vein, heavily Fe-Mn oxide staining, fractured, boxworks on exposed surfaces, sericite along micro-faults, earthy
1302	Quad: Mt. Perkins 15' Sec: 20 T: 26S R: 65E UTM: 3948700 N 0704150 E Olympian Claims Eldorado District	Quartz vein/gossan material, heavily FeOx stained, highly altered, boxworks, fractured, oxidized sulfides, calcite veinlets/pods.
1303	Quad: Nelson 15' Sec: 19 T: 26S R: 65E UTM: 3948600 N 0702700 E None Eldorado District	Quartz vein, highly fractured and brecciated, heavily limonite stained, boxworks, gossany, sheared, vuggy, drusy quartz, rocks cut with quartz veinlets, caliche on exposed surfaces.
1304	Quad: Nelson 15' Sec: 20 T: 26S R: 65E UTM: 3949150 N 0703400 E Capital Mining Camp Eldorado District	Quartz vein, massive to sacchroidal, vuggy, boxworks, heavily Fe-Mn oxide stained, minor specularite, some slickensides.
1305 A	Quad: Nelson 15' Sec: 17 T: 26S R: 65E UTM: 3951750 N 0703550 E Nevada Eagle Mine Eldorado District	White to light grey, quartz vein, highly fractured/brecciated, heavily Fe-Mn oxide stained, disseminated chalcopyrite in matrix, minor malachite coats the surface, some gossany material, fine boxworks.
	Quad: Sec: T: R: UTM: N E	
1305 B	Quad: Nelson 15' Sec: 17 T: 26S R: 65E UTM: 3951950 N 0703450 E Nevada Eagle Mine Eldorado District	Very fine grained, silicious tuff(?), heavily Fe-Mn oxide stained, minor gossan/boxwork zones, caliche coats surface.
1306	Quad: Nelson 15' Sec: 14 T: 26S R: 64E UTM: 3953610 N 0698750 E Morning Star Claims Eldorado District	Quartz vein/breccia, very fine grained, abundant limonite staining, fine and radiating boxworks, pyrolusite coats surfaces, fresh and oxidized pyrite disseminated through matrix.
1307	Quad: Nelson 15' Sec: 32 T: 25S R: 64E UTM: 3955350 N 0694300 E Patsy Claim Eldorado District	(A) Andesite, propylitic alteration, limonite staining, MnO2, mafics altered out. (B) Gouge Material, bleached, andesitic caliche, minor FeOx staining.

Sample Description

Sample Number	Location	Description
1308	Quad: Nelson 15' Sec: 5 T: 26S R: 64E UTM: 3954700 N 0693950 E Nevada Gold Co. Claims Eldorado District	Highly altered, fractured/brecciated intrusive, (andesite?), limonite/Mn-O2 stained, bleached, argillic alteration, cockscomb quartz coats open spaces, gossany, fine quartz veinlets cut rock.
	Quad: Sec: T: R: UTM: N E	
1309	Quad: Nelson 15' Sec: 25 T: 25S R: 63E UTM: 3957700 N 0690850 E None Eldorado District	White quartz vein material, possibly some barite (some rocks very heavy), surface and fractured coated with malachite, hematite stained, minor MnO2, slightly vuggy, rock slightly brecciated.
	Quad: Sec: T: R: UTM: N E	
1310	Quad: Nelson 15' Sec: 8 T: 26S R: 64E UTM: 3953150 N 0693150 E Wedge Claim Eldorado District	Propylitically altered andesite, minor limonite staining, highly fractured.
1311A	Quad: Nelson 15' Sec: 24 T: 26S R: 63E UTM: 3949600 N 0690300 E Tonne Claims Eldorado District	Silicious fault gouge material, heavily Fe-Mn oxide stained, fractured; some breccia with quartzite-like fragments, specularite in matrix; minor chloritic alteration; boxworks, gossany material;
	Quad: Sec: T: R: UTM: N E	quartz veinlets cut all rock types; quartz vein fragments in breccia.
1311B	Quad: Nelson 15' Sec: 24 T: 26S R: 63E UTM: 3949700 N 0690350 E Tonne Claims Eldorado District	Sacchroidal, light grey quartz vein, heavily Fe-Mn oxide stained, very fine boxworks, vuggy, highly fractured, some argillic alteration, seicite.
1312	Quad: Roach Lake 15' Sec: 32 T: 27S R: 60E UTM: 3935250 N 0656375 E Lucy Grey Mine Sunset District	Quartz vein material cutting equigranular, silicious intrusive; pods and veinlets calcite/siderite; oxidized and fresh galena and pyrite in calcite and quartz vein, argillic alteration,

(More on Next page)

Sample Description

Sample Number	Location	Description
1312	Quad: Roach Lake (CONTINUED) 15' Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	minor sericite, pods of black platy mineral (ferberite?), Fe-Mn oxides, slightly chloritized.
1313	Quad: Roach Lake 15' Sec: 6 T: 28S R: 60E UTM: 3934700 N 0654750 E Central, Daylight, Home & Mountain Claims Sunset District	Breccia, fragments of fine to medium grained granitic gneiss and light greenish-grey, fine grained extrusive, cemented with limonitic stained calcit and silica; light green, soft mineral
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	occurs in pods and specks throughout extrusive; dendritic pyrolusite, minor cockscomb quartz.
1314	Quad: Roach Lake 15' Sec: 6 T: 28S R: 60E UTM: 3934700 N 0654550 E Central, Daylight, Home & Mountain Claims Sunset District	(A) White quartz vein, limonitic stained, highly fractured, oxidized galena and pyrite, fractures coated with drusy quartz, sericite.
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	(B) Quartz vein in gouge material, heavily FeOx-MnO2 stained, argillic alteration, patches and pods of gossan, oxidized pyrite crystals up to 1 cm; argillically altered, feldspar rich intrusive.
1315	Quad: McCullough Mtn. 15' Sec: 24 T: 28S R: 60E UTM: 3929850 N 0662700 E Alene Ross Claims Crescent District	White, massive quartz vein with clots of tetrahedrite, and sprays of fresh and oxidized pyrite and chalcopyrite, malachite coats surfaces, vein highly fractured, sheared in places, crystals
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	of barite intermixed with quartz, specularite occurs along shear zones.
1316	Quad: McCullough Mtn. 15' Sec: 24 T: 28S R: 60E UTM: 3930000 N 0662550 E Alene Ross Claims Crescent District	Quartz vein/shear material, heavily Fe-Mn oxide stained, open spacing, malachite/brochantite coat exposed surfaces, along with drusy quartz, specularite occurs along shear zones.
1317	Quad: McCullough Mtn. 15' Sec: 36 T: 28S R: 61E UTM: 3926100 N 0672500 E Welcome Springs Claims Crescent District	White quartz vein/shear material, highly fractured, limonititc stained, fresh and oxidized sulfides (pyrite, chalcopyrite) some argillic alteration caliche, crystals subhedral to anhedral.

Sample Description

Sample Number	Location	Description
1318	Quad: Crescent Peak 15' Sec: 36 T: 28S R: 61E UTM: 3926300 N 0672550 E Welcome Springs Claims Crescent District	White quartz vein/breccia, highly fractured/brecciated, vuggy, siliceous matrix, heavily Fe-Mn oxide stained, gossany with fine boxworks, fresh and oxidized sulfides (pyrite, chalcopyrite) disseminated throughout the vein.
	Quad: Sec: T: R: UTM: N E	
1319	Quad: McCullough Mtn. 15' Sec: 10 T: 28S R: 61E UTM: 3931925 N 0668975 E MM 17/62 Claims Crescent District	Quartz shear material/mylonite(?), kaolinized, spots and coatings of malachite, drusy quartz, pyrite ghosts.
1320	Quad: Crescent Peak 15' Sec: 23 T: 28S R: 61E UTM: 3929200 N 0669800 E Luck Mine Crescent District	Quartz vein, drusy and cockscomb quartz coats surfaces, limonitic staining, abundant caliche, kaolinization, minor MnO2 staining, rock highly fractured.
1321	Quad: Boulder City NW 7 1/2' Sec: 28 T: 23S R: 63E UTM: 3977050 N 0684680 E ORO-Hondo Claims (Blue Quartz Mine) Alunite District	(A) Brecciated barite vein cemented with Fe-Mn oxide stained calcite, kaolinized, secondary barite formed crystals in open spaces, andesite fragments in matrix.
	Quad: Sec: T: R: UTM: N E	(B) Andesite, propylitically altered, barite veinlets and pods, minor Fe-Mn oxide stains, minor specks and surface coating of malachite, kaolinite.
1322	Quad: Boulder City NW 7 1/2' Sec: 28 T: 23S R: 63E UTM: 3977300 N 0684680 E ORO-Hondo Claims Alunite District	Andesite breccia, cemented with cockscomb quartz, copper (malachite) specks and crystals fill cavities, abundant open spacing, oxidized sulfides, minor Fe-Mn oxide stains, some silicification
1323	Quad: Boulder City NW 7 1/2' Sec: 18 T: 23S R: 63E UTM: 3980025 N 0681025 E Quo Vadis Mine Alunite District	Andesite breccia, cemented with cockscomb quartz, abundant open spacing, Fe-Mn oxide stained, minor malachite specks and crystals, oxidized pyrite in matrix.
1324	Quad: Boulder City NW 7 1/2' Sec: 18 T: 23S R: 63E UTM: 3980150 N 0681000 E Quo Vadis Mine Alunite District	Andesitic breccia, cemented with crystalline barite and silica, minor malachite coats surfaces and fills vugs, andesite propylitically altered, kaolinized, cockscomb quartz fill vugs and fissures, bright yellow oxide coats surfaces.

Sample Description

Sample Number	Location	Description
1325A	Quad: Boulder City NW 7 1/2' Sec: 13 T: 23S R: 63E UTM: 3980075 N 0681725 E Quo Vadis Mine Alunite District	Brecciated andesite cemented with crystalline and massive quartz/calcite siderite/barite, abundant open spacing boxworks, minor gossan zones, Fe-Mn oxide stains, earthy on surface, oxidized sulfides (pyrite).
	Quad: Sec: T: R: UTM: N E	
1325B	Quad: Boulder City NW 7 1/2' Sec: 13 T: 23S R: 63E UTM: 3980125 N 0681660 E Quo Vadis Mine Alunite District	Andesite breccia cemented with crystalline and massive quartz, cockscomb quartz line open spaces, hematite staining, calcite crystals intersperse with quartz.
1326A	Quad: Boulder City NW 7 1/2' Sec: 2 T: 23S R: 63E UTM: 3982910 N 0688280 E Alunite Mine Alunite District	Argillically altered tuff, very fine grained, greenish, some Fe-Mn oxide stained, andesitic?, minor boxworks.
1326B	Quad: Boulder City NW 7 1/2' Sec: 2 T: 23S R: 63E UTM: 3982900 N 0688280 E Alunite Mine Alunite District	Alunite vein material, highly fractured, massive, Fe-Mn oxide stained.
1327	Quad: Boulder City NW 7 1/2' Sec: 2 T: 23S R: 63E UTM: 3983650 N 0687400 E None Alunite District	Breccia, abundant Fe-Mn oxide stained, fragments tuffs, minor specks of malachite, gossany/boxworks zones, jarosite, drusy quartz, quartz microveinlets.
1328	Quad: Crescent Peak 15' Sec: 22 T: 28S R: 61E UTM: 3928500 N 0668225 E Nippeno Mine Crescent District	Quartz/pegmatite vein, oxidized pyrite minor boxworks, abundant Fe-Mn oxide stained, minor malachite coats vugs, crystalline calcite coats fractures, opaline/drusy quartz also coats surfaces.
	Quad: Sec: T: R: UTM: N E	
1329	Quad: Crescent Peak 15' Sec: 26 T: 28S R: 61E UTM: 3927900 N 0669775 E None Crescent District	Pegmatitic/granitic intrusion, cut with euhedral quartz vein bearing oxidized sulfides (pyrite, chalcopyrite, and fresh sphalerite, galena) as pods, disseminated grains, and /
		NEXT PAGE.....

Sample Description

Sample Number	Location (CONTINUED)	Description
1329	Quad: Crescent Peak 15' Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	veinlets, cutting both intrusive and quartz vein, secondary malachite coats exposed surfaces, Fe-Mn oxides, kaolinized, slightly graphic texture.
1330	Quad: Crescent Peak 15' Sec: 26, 35 T: 28S R: 61E UTM: 3926975 N 0669775 E Crescent Mine (Tiger Lily Claims) Crescent District	Silicious intrusive (granitoid), almost pegmatitic, course grained, disseminated, massive and veinlets of fresh and oxidized sulfides (pyrite, chalcopyrite), argillic alteration.
1331	Quad: Nelson 15' Sec: 2,3 T: 26S R: 64E UTM: 3953650 N 0697950 E MM 13/47 Claims Eldorado District	Greenish-grey (propylitic alteration?) fine to medium grained intrusive, cut with fresh and oxidized sulfides (pyrite, chalcopyrite) bearing quartz vein, surface deposit calcite, slicks.
1332	Quad: Nelson 15' Sec: 12 T: 26S R: 64E UTM: 3953300 N 0700375 E MM 7/10 Claims Eldorado District	Andesite, fractured/brecciated, cut by quartz veins, disseminated oxidized and fresh pyrite/chalcopyrite in fracture/breccia zones, propylitic alteration, minor hematitic stains,
1333	Quad: Homer Mtn. 15' Sec: 10 T: 32S R: 64E UTM: 3893775 N 0697500 E None Newberry District	Intrusive, fine grained, silicious, argillic altered, gossany with box-works, abundent Fe-Mn oxide stains, fractured, almost brecciated, some silicification; rock cut with quartz veins and veinlets.
____	Quad: ____ Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	
1334	Quad: Homer Mtn. 15' Sec: 10 T: 32S R: 64E UTM: 3895000 N 0697500 E None Newberry District	Quartz vein/shear material, specularite interspersed with fractured quartz; calcite/siderite veinlets and pods; caliche on surfaces; minor cockscomb/ drusy quartz, open spacing, Mn-Fe oxides.
____	Quad: ____ Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	
1335A	Quad: Homer Mtn. 15' Sec: 30 T: 31S R: 65E UTM: 3898850 N 0702300 E Juniper Mine Newberry District	Massive to crystalline quartz vein material, vuggy, sheared, oxidized pyrite, platy green mineral (ferberite? little or no Fe staining, minor Mn, host rock mylonitic,

Sample Description

Sample Number	Location	Description
1335B	Quad: Homer Mtn. 15' Sec: 30 T: 31S R: 65E UTM: 3898950 N 0702300 E Juniper Mine Newberry District	Bleached, silicious dike material, oxidized pyrite and mafics, (aplitic?)
1336	Quad: Spirit Mtn. 15' Sec: Unsurveyed T: 31S R: 65E UTM: 3904100 N 0705700 E Christmas Tree Pass Workings Newberry District	Quartz vein/shear material in mylonite fresh and altered pyrite and chalcopyrite along veins and disseminated throughout mylonite, minor limonite staining, rock fractured with microfaults offsetting quartz veins.
	Quad: Sec: T: R: UTM: N E	
1337	Quad: Searchlight 15' Sec: 5, 6 T: 31S R: 65E UTM: 3905000 N 0703600 E None Newberry District	Dark grey, silicious rock, with very fine, disseminated pyrite grains(fresh and oxidized), some silicification, argillic alteration, abundant FeOx stains, brecciation, cemented with massive and cockscomb quartz, open spacing.
	Quad: Sec: T: R: UTM: N E	
1338	Quad: Spirit Mtn. 15' Sec: Unsurveyed T: 31S R: 65E UTM: 3906700 N 0705250 E Jetco Claims Newberry District	Heavily Fe-Mn oxide, malachite stained quartz-rich intrusive (?), shear material argillically altered, (could possibly be a highly altered granitic gneiss) Gossany zones.
1339	Quad: Spirit Mtn. 15' Sec: Unsurveyed T: 31S R: 65E UTM: 3906700 N 0705250 E Jetco Claims Newberry District	White, massive quartz vein with fresh and oxidized sulfides, vein almost pegmatitic with feldspar crystals up to 2 inches, chloritized zones, MnO2 coat surfaces.
1340	Quad: Spirit Mtn. 15' Sec: Unsurveyed T: 31S R: 65E UTM: 3904950 N 0706000 E Jetco Claims(Yellowstone Mine) Newberry District	Quartz vein/shear material, highly fractured (almost shattered appearance) limonitic stained, spots of MnO2, minor sericite, massive feldspar interspersed in vein.
1341	Quad: Spirit Mtn. 15' Sec: Unsurveyed T: 31S R: 65E UTM: 3906700 N 0705250 E Jetco Claims Newberry District	Quartz vein material hgihly fractured, bearing masses and clots of fresh and oxidized sulfides (pyrite, chalcopyrite, galena), secondary malachite staining, abundant Fe-Mn oxides, gossany and boxwork zones, open spacing in vein.

Sample Description

Sample Number	Location	Description
1342	Quad: Spirit Mtn. 15' Sec: Unsurveyed T: 30S R: 65E UTM: 3907850 N 0705800 E Jetco Claims (Roman Mine) Newberry District	White quartz vein, highly fractured, minor malachite and azurite along with Fe-Mn oxide stains, oxidized sulfides (pyrite and chalcopyrite).
1343	Quad: Spirit Mtn. 15' Sec: Unsurveyed T: 30S R: 65E UTM: 3910350 N 0706250 E Jetco Claims (Potential Mine) Newberry District	White quartz vein, fractured, fresh and oxidized pyrite, pyrite ghosts, limonitic and MnO2 stains, rocks heavier than expected (barite?)
1344	Quad: Nelson 15' Sec: 28 T: 27S R: 64E UTM: 3938600 N 0695375 E Hosak Claims Searchlight District	Quartz vein/pegmatite vein, feldspar rich, highly fractured, graphic texture, limonite staining, pods muscovite, pods epidote, oxidized pyrite crystals.
1345	Quad: Nelson 15' Sec: 29 T: 27S R: 64E UTM: 3937300 N 0695000 E Blue Jay Claims Searchlight District	Pegmatite dike, graphic texture, minor garnets, abundant feldspar, some sericite and oxidization of mafics.
1346	Quad: Nelson 15' Sec: 33 T: 27S R: 64E UTM: 3936900 N 0695300 E St. Louis Mine Searchlight District	Massive white quartz vein, highly fractured, with pods and sprays of fresh and oxidized galena, pyrite, tetrahedrite (?), secondary malachite coats surfaces, abundant Fe-Mn oxides minor gossan zones.
	Quad: Sec: T: R: UTM: N E	
1347	Quad: Searchlight 15' Sec: 33 T: 28S R: 64E UTM: 3926800 N 0696350 E Badge Claims (New Era Mine) Searchlight District	Andesite breccia, cemented with massive and cockscomb quartz, propylitic alteration, fragments stained by hematite, minor calcite, drusy quartz lines open spaces, andesite porphyritic
1348	Quad: Searchlight 15' Sec: 32 T: 28S R: 64E UTM: 3926575 N 0694400 E Shoshone Cons. Lode Mining Claims (Big Casino Mine) Searchlight District	Brecciated andesitic porphyry with disseminated fresh and oxidized sulfides (pyrite, chalcopyrite), malachite coats surfaces, pods of oxidized/hematitic stained areas, abundant vugs/open spacing, rocks very heavy and dense, kaolinized, sulfides fill fractures, clots of galena.
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1349	Quad: Searchlight 15' Sec: 27, 34 T: 28S R: 63E UTM: 3927200 N 0688200 E Sante Fe M & M Claims Searchlight District	Andesite breccia, cemented with calcite and silica, vuggy, propylitically altered, Fe-Mn oxide stained, patches of apple green mineral (epidote?), argillic alteration.
1350	Quad: Searchlight 15' Sec: 22 T: 28S R: 63E UTM: 3928850 N 0688350 E Searchlight M & M Mine Searchlight District	(A) Argillically altered igneous porphyry intrusive, bleached, limoniti stained, MnO2 coats surfaces, (B) Porphyritic intrusive breccia, cemented with cockscomb quartz,
	Quad: Sec: T: R: UTM: N E	abundant open spacing, minor limonitic hematitic staining, argillic alteration.
1351	Quad: Searchlight 15' Sec: 21 T: 28S R: 63E UTM: 3929700 N 0685700 E Searchlight Western Ming Co. Claims Searchlight District	Argillically altered shear material, silicious, porphyritic intrusive, some brecciation, quartz cemented.
1352	Quad: Searchlight 15' Sec: 22 T: 28S R: 63E UTM: 392300 N 0688350 E Blossom Mine Searchlight District	Intrusive, argillic altered, (monzonite?) brecciated/fractured, cemented with massive and cockscomb quartz, open spacing.
1353	Quad: Searchlight 15' Sec: 36 T: 28S R: 63E UTM: 3926500 N 0692100 E Pittsburg Mine Searchlight District	Breccia, andesitic(?) tuff, cemented with silica, hematite stained, argillic alteration, silicified, boxworks, vuggy, drusy quartz.
1354	Quad: Searchlight 15' Sec: 20 T: 29S R: 64E UTM: 3919600 N 0694300 E Mammoth Mine Searchlight District	Rhyolite dike material, heavily FeOx stained, cut with quartz veinlets, cockscomb quartz fractures line, oxidized pyrite ghosts, fibrous substance coats exposed surfaces,
	Quad: Sec: T: R: UTM: N E	rock silicified, bleached.
1355	Quad: Searchlight 15' Sec: 3 T: 29S R: 63E UTM: 3925200 N 0688500 E Good Hope Mine Searchlight District	(A) Gossany, heavily Fe-Mn oxide stained, friable, rocks, shear materia from footwall of fault, minor malachite stains. (B) Andesite breccia, very fine
		(Continued on Next Page).....

Sample Description

Sample Number	Location	Description
1355	Quad: Searchlight 15' (Continued) Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	grained fragments, cemented with sulfide bearing quartz, cockscomb quartz fills open spacing, sulfides oxidized, minor Fe-Mn oxide staining, minor malachite coats surfaces.
1356	Quad: Searchlight 15' Sec: 23 T: 28S R: 63E UTM: 3929900 N 0689650 E Jet Mine Searchlight District	Sparry calcite vein material with andesitic fragments, minor Fe-Mn oxide stains.
1357	Quad: Searchlight 15' Sec: 24 T: 28S R: 63E UTM: 3930100 N 0691100 E Searchlight Cons. M & M Claims Searchlight District	Breccia, andesite, argillic and propylitic alteration, hematitic stained, cemented with sparry calcite, rock highly fractured, almost shattere feldspars altered out.
1358	Quad: Nelson 15' Sec: 7 T: 28S R: 64E UTM: 3933075 N 0693275 E None Searchlight District	Granitic gneiss/mylonite with oxidized sulfides (pyrite, chalcopyrite?), feldspars altered out producing honeycomb texture, minor Fe-Mn oxides, abundant biotote, almost shistose.
1359	Quad: Goodsprings 15' Sec: 33 T: 24S R: 58E UTM: 3964950 N 0637750 E Columbia Mine Goodsprings District	(A) Gossany, argillic, slightly calcareous gouge material, heavily FeOx stained, minor malachite. (B) Calcite vein material with silty, calcareous fragments, abundantly
____	Quad: ____ Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	stained with Fe-Mn-Cu oxides, malachite/azurite stains, fresh and oxidized sulfides, gossany, boxworks, some breccia material.
1360	Quad: Goodsprings 15' Sec: 3 T: 25S R: 58E UTM: 3963050 N 0639500 E Jean Claims Goodsprings District	Quartz/calcite veins, with pods and grains fresh and oxidized galena, gossany zones, some silicification, abundant Fe-Mn oxide stains, rocks fractured and brecciated, some boxwork
1361	Quad: Goodsprings 15' Sec: 3 T: 25S R: 58E UTM: 3963100 N 0639450 E Jean Claims Goodsprings District	Vuggy, limonite stained zinc ore (smithsonite), with fissures filled white calcite, cerrusite and hemimorphite crystals coat surfaces, ore in contact with hematitic stained
____	Quad: ____ Sec: ____ T: ____ R: ____ UTM: ____ N ____ E	calcareous sandstone, some silicification, calcite crystals coat surfaces, abundant open spacing, some drusy quartz.

Sample Description

Sample Number	Location	Description
1362	Quad: Goodsprings 15' Sec: 33 T: 25S R: 58E UTM: 3964100 N 0638500 E Argentena Mine Goodsprings District	Loosely consolidated, slightly calcareous, limonitic stained sandstone, pods of crystalline galena, altered to cerussite, thin coating of drusy quartz, minor malachite staining,
	Quad: Sec: T: R: UTM: N E	rock very porous, almost vuggy, some brecciation/fault gouge material, patches of massive pyrolusite, pods of argillite, hemimorphite coats surface.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1366	Quad: Gold Point SW 7 1/2' Sec: 26 T: 7S R: 41E UTM: 4127620 N 0463980 E Stateline Mine (Rudy D Claims) Gold Point District	Quartz vein carrying fresh and oxidize pyrite and chalcopyrite, boxworks, Fe-Mn oxide stains, sulfides occur in pods, clots, and stringers, secondary silica coats surfaces.
1367	Quad: Magruder Mountain 15' Sec: 3 T: 8S R: 40E UTM: 4125300 N 0453500 E Pilot Claims Tule Canyon District	Quartz vein, highly fractured, almost brecciated, fragments milled, abundant sericite, clots and pods oxidized sulfides (pyrite, chalcopyrite?), speck malachite, - open spaces lined with
	Quad: Sec: T: R: UTM: N E	euhedral-subhedral quartz crystals, MnO2 stains, vein in contact with argillically altered, silicious intrusive.
1368	Quad: Magruder Mountain 15' Sec: 28 T: 7S R: 40E UTM: 4127375 N 0452000 E Eagle Pass Claims Tule Canyon District	Quartz veins, granular, bearing oxidized sulfides, open spacing, euhedral quartz crystals, pods and grains oxidized tetrahedrite(?), surface coating of malachite, sericite
	Quad: Sec: T: R: UTM: N E	host rock mudstone.
1369	Quad: Magruder Mountain 15' Sec: 28 T: 7S R: 40E UTM: 4127350 N 0451900 E Eagle Pass Claims Tule Canyon District	Argillically altered, bleached, quartz monzonite, surface coated with bright yellow oxides, minor dendritic pyrolusite.
1370	Quad: Magruder Mountain 15' Sec: 27 T: 7S R: 40E UTM: 4127750 N 0452750 E Eagle Pass Claims Tule Canyon District	Quartz vein/breccia, fragments milled oxidized pyrite, abundant MnO2 stains, very fine boxworks, bright yellow oxides coating surface, minor copper stains.
1371	Quad: Magruder Mountain 15' Sec: 21 T: 7S R: 40E UTM: 4130400 N 0451520 E Big Wedge Claims Tule Canyon District	Quartz vein material carrying clots of fresh and oxidized galena, tetrahedrite pyrite. Abundant malachite, chalcanthite? chrysacolla, yellow oxides, chalcedony coats open spaces, very fine
	Quad: Sec: T: R: UTM: N E	quartz veinlets, sericite.

Sample Description

Sample Number	Location	Description
1372	Quad: Magruder Mountain 15' Sec: 3 T: 7S R: 40E UTM: 4035000 N 0452750 E Bat Claims Tule Canyon District	Intergrown quartz/calcite vein material siderite, limonite stains, minor open spacing, very minor oxidized pyrite, yellow oxides on surface, quartz fragments milled in breccia.
1373	Quad: Mount Jackson 7 1/2' Sec: Unsurveyed T: 5S R: 42E UTM: 4147775 N 0470875 E Grace Claims Cuprite District	Dark grey, crystalline LS, coated crystalline calcite, stringers and surface coatings malachite and other copper alteration minerals, oxidized tetrahedrite(?), very fine boxworks.
1374	Quad: Split Mountain 7 1/2' Sec: 15 T: 3S R: 41E UTM: 4169900 N 0466500 E MR Lode Claim Montezuma District	Quartz vein material, abundant open spacing, euhedral crystals intergrown, small clots galena, surface coating of copper alteration minerals, abundant MnO2, drusy quartz on surface, minor
	Quad: Sec: T: R: UTM: N E	FeOx stains, some argillic alteration, Yellow oxides.
1375	Quad: Split Mountain 7 1/2' Sec: 21 T: 3S R: 41E UTM: 4169200 N 0464350 E Montezuma Hg Prospect Montezuma District	Brecciated sinter(?) or a bedded silica cemented with cinnabar bearing silica, fragments medium gray, laminated, silica light grey, cement, cinnabar occ occurs as specks, veinlets, as coatings
	Quad: Sec: T: R: UTM: N E	in open spaces in breccia, calcite also coats open spaces in breccia, some pieces abundantly stained MnO2, also disseminated coloring silica dark grey.
1376	Quad: Montezuma Peak 7 1/2' Sec: 15 T: 3S R: 41E UTM: 4169800 N 0467033 E MR Lode Claims Montezuma District	Gossan, heavily Fe-Mn oxide stained, very fine boxworks, hydrothermally altered, early.
1377	Quad: Paymaster Canyon 7 1/2' Sec: 12 T: 1N R: 40E UTM: 4201450 N 0462080 E Sample Site 1377 Lone Mountain District	Limestone/mudstone coated with malachit cerrusite, secondary oxide minerals, oxidized pyrite, FeOx stains, fractured MnO2 massive coating surface, slightly gossany, boxworks.
1378	Quad: Paymaster Canyon 71/2' Sec: 1 T: 1N R: 40E UTM: 4201850 N 0462400 E Sample Site 1378 Lone Mountain District	Greenish-grey metasediments, coated with chrysocolla/malachite/tenorite, oxidized pyrite, limonite pseudomorphs surface coatings quartz crystals, MnO2 coatings, specular hematite.

Sample Description

Sample Number	Location	Description
1379	Quad: Paymaster Canyon 7 1/2' Sec: 5 T: 1N R: 41E UTM: 4202075 N 0465760 E Zebra Silver Claims Lone Mountain District	Hydrothermal quartz veins with crystals radiating from nucleation points, fresh and oxidized pyrite, chalcopyrite, tetrahedrite(?), grains malachite, chalcedony coats open spaces, Fe-Mn oxide stains, quartz crushed/fractured.
	Quad: Sec: T: R: UTM: N E	
1380	Quad: Paymaster Canyon 7 1/2' Sec: 7 T: 1N R: 41E UTM: 4201300 N 0464150 E Blue Silver Claims Lone Mountain District	Quartzite/limestone, coated with malachite, tenorite, yellow-green oxide slightly gossany, fine boxworks, MnO2, crystalline calcite on surfaces, oxidized pyrite.
1381	Quad: Paymaster Canyon 7 1/2' Sec: 36 T: 1N R: 40E UTM: 4194110 N 0457750 E Paymaster Claims (North Workings) Weepah District	Quartz vein, highly crushed and shattered carrying oxidized pyrite crystals, minor FeOx stains, minor boxworks.
1382	Quad: Paymaster Canyon 7 1/2' Sec: 36 T: 1N R: 40E UTM: 4193520 N 0457710 E Paymaster Mine Weepah District	Quartz vein, crushed/fractured, euhedra crystals in open spaces, heavily FeOx stained, pods of light greenish-yellow almost sericite appearing mineral.
1383	Quad: Silverpeak 15' Sec: Unsurveyed T: 1N R: 40E UTM: 4198300 N 0450900 E Jackson Claim (Patented) Weepah District	Quartz vein, oxidized pyrite, surface coatings of malachite drusy quartz, crystalline calcite, boxworks, minor gossan, silicification.
1384	Quad: Silverpeak 15' Sec: Unsurveyed T: 1N R: 39E UTM: 4195600 N 0441500 E Alum Pure/Sulfur Pure Patented C1 Weepah District	White, crumbly, argillically altered rhyolite, native sulphur crystals on fracture surfaces, alum sulphate (kaolinite?) occurring in veins, pods, and along fracture surfaces.
1385	Quad: Silverpeak 15' Sec: Unsurveyed T: 1N R: 40E UTM: 4202000 N 0454100 E Swanson Claims Lone Mountain District	Quartzite/mudstone with disseminated and stringers fresh and oxidized pyrite Hematite stains on surface, fractured, chalcopyrite, sacchroidal quartz vein with crystalline calcite, very fine
	Quad: Sec: T: R: UTM: N E	grained, aplitic dike material, all carrying fresh pyrite, minor chalcopyrit

Sample Description

Sample Number	Location	Description
1386	Quad: Montezuma Peak 7 1/2' Sec: 5 T: 3S R: 42E UTM: 4173780 N 0474300 E Nevada Eagle Mine Montezuma District	Mudstone/phyllite breccia, cemented whitish calcareous, carrying oxidized pyrite, open spacing, rocks limonite/ hematite stained.
1387	Quad: Montezuma Peak 7 1/2' Sec: 31 T: 2S R: 42E UTM: 4175725 N 0473200 E MS 3427 Claims Montezuma District	Breccia, silicious, heavily hematite stained, volcanic origin, chalcedonic coating open spaces.
1388	Quad: Montezuma Peak 7 1/2' Sec: 35 T: 2S R: 41E UTM: 4175190 N 0469620 E Brickyard Claims Montezuma District	Quartz vein, fractured, coated with MnO2, FeOx, psilomelane, minor jarosite, iridescent oxides, specular hematite.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
1401	Quad: Virgin Peak 15' Sec: Unsurveyed T: 15S R: 71E UTM: 4058200 N 0761420 E Walker-Tri-State Mine Bunkerville District	Upper Adits: Dump sample, white vein quartz, in pegmatite, with muscovite, scheelite, huebnerite, pyrite.
1402	Quad: Virgin Peak 15' Sec: Unsurveyed T: 15S R: 71E UTM: 4058420 N 0761700 E Walker-Tri-State Mine Bunkerville District	Lower Adits: Quartz from pegmatite in schist, trace scheelite.
1403	Quad: Davis Dam 15' Sec: 35 T: 31S R: 66E UTM: 3897950 N 0718900 E Homestake Group Newberry District	Dump sample, vein quartz, hematite and MnO stain.
1404	Quad: Davis Dam 15' Sec: 34 T: 31S R: 66E UTM: 3898500 N 0718200 E Wiley Inspiration Mine Newberry District	Quartz-carbonate breccia in andesite.
1405	Quad: Nelson 15' Sec: 24 T: 27S R: 64E UTM: 3938350 N 0701200 E Rockerfeller (upper west) Mine Newberry District	Dump, quartz cemented, brecciated vein, hematite-limonite pockets, barite crystals coating vugs, fracture surfaces.
1406	Quad: Nelson 15' Sec: 25 T: 27S R: 64E UTM: 3938200 N 0701500 E Rockefeller Mine Newberry District	Dump, Heavy FeOx gossan in quartz-cemented breccia specular hematite, Cuox stain.
1407	Quad: Nelson 15' Sec: 30 T: 27S R: 65E UTM: 3937800 N 0702200 E Roadside Shaft (unnamed) Newberry District	Dump sample, breccia cemented with quartz, Cuox stain, small barite crystals in vugs.
1408	Quad: Nelson 15' Sec: 30 T: 27S R: 65E UTM: 3937700 N 0702750 E Breccia Prospect (unnamed) Newberry District	Silicified breccia, mainly andesite fragments, some granitic gneiss, clear quartz, hematite - MnO.
1409	Quad: Nelson 15' Sec: 31 T: 27S R: 65E UTM: 3937000 N 0702750 E Camp Dupont (north) Newberry District	Banded white quartz vein, yellow-orange, mammillary coatings, specular hematite, barite crystals.

Sample Description

Sample Number	Location	Description
1410	Quad: Nelson 15' Sec: 31 T: 27S R: 65E UTM: 3936850 N 0702850 E Camp Dupont (north) Newberry District	Greenish, porphyritic andesite, quartz cemented, calcite, heavy MnO.
1411	Quad: Nelson 15' Sec: 6 T: 28S R: 65E UTM: 3935050 N 0702600 E Copper Mountain (Black Mt.)Prospect Newberry District	Breccia, specular hematite, some Cuox, Cu silicates, rock fragments sericitized.
1412	Quad: Searchlight 15' Sec: 34 T: 28S R: 63E UTM: 3926050 N 0688400 E Duplex Mine Area Searchlight District	Silicified, brecciated vein material, clots jasper, veined with silica, copper silicates, clots chalcocite, some wulfe nite in vugs.
1413	Quad: Crescent Peak 15' Sec: 31 T: 28S R: 61E UTM: 3926550 N 0663300 E Lilly (Calvada) Group Crescent Peak District	Silicified quartzite, brecciated, hematite, MnO coatings, jarosite crystals in vugs.
1414	Quad: Nelson 15' Sec: 17 T: 26S R: 64E UTM: 3950500 N 0694650 E Golden Empire Mine El Dorado District	Outcrop of quartz vein, shattered, limonite in vugs, clots MnO_2.
1415	Quad: Nelson 15' Sec: 17 T: 26S R: 64E UTM: 3950800 N 0693700 E Sunshine Claim El Dorado District	Sheared, brecciated vein material, pods white quartz, coatings and points limonite, MnO.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	

Sample Description

Sample Number	Location	Description
2001	Quad: Nelson 15' Sec: 21 T: 26S R: 64E UTM: 3649400 N 0960000 E Oro Plata Mine El Dorado District	Silicified quartz porphyry, silicified igneous rock "coating" in quartz matrix, disseminated pyrite, dark sulfide, possibly tetrahedrite, ruby silver(?)
2002	Quad: Goodsprings 15' Sec: 15 T: 23S R: 58E UTM: 3979500 N 0638400 E Ninety nine Mine Goodsprings District	Brecciated, silicified dolomite, calcite, clots and pods limonite, hemimorphite crystals in cavities, some black sphalerite clots.
2003	Quad: Shenandoah Peak 15' Sec: 12 T: 23S R: 57E UTM: 3980300 N 0631600 E Potosi Mine (area) Goodsprings District	Outcrop, silicified breccia, jasper lense, clots gossan.
2004	Quad: Shenandoah Peak 15' Sec: 12 T: 23S R: 57E UTM: 3980400 N 0631850 E Potosi Mine Goodsprings District	Sphalerite-galena clots with white calcite in silicified dolomite, Some hydrozinrite - replacement ore from main dump.
2005	Quad: Gilbert SE 7 1/2' Sec: Unsurveyed T: 2N R: 39E UTM: 42008450 N 0452420 E Alpine Eagle Area Lone Mountain (Alpine)	Dump, recrystallized, silicated dolomite, some Cuox stain.
2006	Quad: Gilbert SE 7 1/2' Sec: Unsurveyed T: 2N R: 39E UTM: 4209450 N 0450850 E Alpine Mine Lone Mountain (Alpine)	Dump, seams of MnO-rich replacement ore crusts on blocks of dolomite in shear, gossan clots, Cuox, aurichalcite-some show masses of cellular MnO with Hemimorphite, aurichalcite, malachite lining cavities.
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	
	Quad: Sec: T: R: UTM: N E	

Semi-Quantitative Spectrographic Analysis

lement | Sample Number

	374	375	376	377	378				
Fe %(.05)	3	3	2	10	2				
Mg %(.02)	7	7	3	.5	3				
Ca %(.05)	20	15	10	10	G20				
Ti %(.002)	.02	.007	.3	.7	.1				
Mn(10)	200	500	700	70	5000				
Ag(.5)	L	L	5	5	3				
As(200)	500	500	1000	G10000	N				
Au(10)	N	30	70	10	N				
B(10)	N	N	50	50	10				
Ba(20)	30	50	150	150	200				
Be(1)	1	2	1.5	1	1.5				
Bi(10)	N	N	N	N	N				
Cd(20)	N	N	N	N	N				
Co(5)	N	N	7	N	10				
Cr(10)	15	10	20	30	30				
Cu(5)	15	20	30	50	20				
La(20)	20	20	20	20	20				
Mo(5)	1000	200	70	200	10				
Nb(20)	N	N	N	L	N				
Ni(5)	5	7	15	15	20				
Pb(10)	50	100	150	2000	50				
Sb(100)	1000	2000	500	1500	N				
Sc(5)	N	N	5	7	7				
Sn(10)	N	N	N	N	N				
Sr(100)	200	L	L	300	500				
V(10)	30	70	50	150	30				
W(50)	N	N	N	N	N				
Y(10)	20	15	10	20	50				
Zn(200)	N	300	N	700	N				
Zr(10)	30	L	70	100	50				
Th(100)	N	N	N	N	N				

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

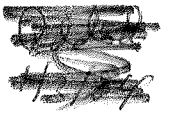
Qdtd
1/3/84

Semi-Quantitative Spectrographic Analysis

Element / Sample Number

	436	437	438	439	440	441	442	443	444
Fe %(.05)	.7	1	3	3	.3	.3	.3	.3	.3
Mg %(.02)	.05	.5	.1	1	.03	.05	.15	.07	.05
Ca %(.05)	.1	3	10	2	.07	.07	.07	.1	.1
Ti %(.002)	L	.3	.15	.3	.07	.05	.1	.07	.07
Mn(10)	3000	300	200	500	150	200	150	150	200
Ag(.5)	1000	5	.7	N	10	300	20	2	2
As(200)	N	N	1500	N	N	N	N	N	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	L	70	300	L	N	N	L	10	L
Ba(20)	50	1000	200	1000	200	500	300	500	700
Be(1)	3	2	1	L	3	2	2	1.5	3
Bi(10)	N	N	N	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	N	7	7	10	N	N	N	L	N
Cr(10)	10	30	20	70	10	10	10	L	L
Cu(5)	30	5	30	15	L	30	10	10	5
La(20)	N	30	20	50	L	L	20	20	L
Mo(5)	20	7	700	N	N	70	500	15	N
Nb(20)	N	N	N	N	N	N	N	N	N
Ni(5)	5	15	20	20	5	7	5	5	5
Pb(10)	300	20	20	30	20	300	30	70	10
Sb(100)	N	N	500	N	N	N	N	N	N
Sc(5)	N	7	15	10	N	N	N	N	N
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	N	1000	1500	1500	200	N	200	150	150
V(10)	30	100	700	150	20	20	50	50	10
W(50)	N	N	L	N	N	N	N	N	N
Y(10)	N	20	20	20	N	N	N	N	N
Zn(200)	700	N	N	N	N	500	N	N	N
Zr(10)	N	100	50	150	20	20	50	20	30
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.



Semi-Quantitative Spectrographic Analysis

Element | Sample Number

	516	517	518			532			
Fe % (.05)	1.5	.2	15			.15			
Mg % (.02)	L	.07	.1			L			
Ca % (.05)	.07	.05	L			L			
Ti % (.002)	L	.07	.05			.01			
Mn (10)	5000	15	700			50			
Ag (.5)	15	.5	.7			7			
As (200)	N	N	N			N			
Au (10)	N	N	N			N			
B (10)	N	15	10			N			
Ba (20)	G(5000)	G(5000)	G(5000)			G(5000)			
Be (1)	N	N	5			N			
Bi (10)	N	N	N			N			
Cd (20)	N	N	N			N			
Co (5)	5	L	5			N			
Cr (10)	N	20	20			10			
Cu (5)	500	30	30			50			
La (20)	N	L	N			N			
Mo (5)	N	N	N			N			
Nb (20)	N	N	N			N			
Ni (5)	20	5	20			L			
Pb (10)	20	2000	15,000			L			
Sb (100)	L	N	L			N			
Sc (5)	L	5	5			N			
Sn (10)	N	N	N			N			
Sr (100)	G(5000)	G(5000)	5000			2000			
V (10)	10	15	100			30			
W (50)	N	N	N			N			
Y (10)	10	10	50			10			
Zn (200)	200	L	500			N			
Zr (10)	L	100	30			L			
Th (100)	N	N	N			N			

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

Element / Sample Number

	1001	1002	1003	1004A	1004B	1005	1006	1007	1008
Fe %(.05)	10	1	G(20)	.3	10	1	5	.2	1.5
Mg %(.02)	.02	.1	.3	.02	.05	.07	.02	.02	.03
Ca %(.05)	N	L	.2	N	.15	.5	L	L	.3
Ti %(.002)	.02	.05	.005	.03	.03	.007	.015	.002	.02
Mn(10)	300	30	G(5000)	200	100	2000	70	10	150
Ag(.5)	L	15	N	N	20	N	.5	L	L
As(200)	N	N	500	N	N	N	N	N	300
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	15	50	150	10	20	30	15	15	20
Ba(20)	G(5000)	2000	5000	20	20	20	300	L	50
Be(1)	N	L	50	N	N	N	N	N	N
Bi(10)	N	N	N	N	50	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	7	7	50	7	15	15	10	5	7
Cr(10)	10	10	15	10	10	10	15	10	10
Cu(5)	30	20000	70	7	7000	10	30	5	10
La(20)	L	N	20	20	N	L	L	20	L
Mo(5)	N	N	20	N	30	N	N	N	N
Nb(20)	N	N	N	N	N	N	N	N	N
Ni(5)	7	5	30	5	70	30	10	5	10
Pb(10)	10	50	700	N	1500	30	100	L	20
Sb(100)	N	N	N	N	N	N	N	N	N
Sc(5)	L	L	N	N	N	N	N	N	L
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	1500	200	L	N	N	N	L	N	L
V(10)	150	100	10	10	10	10	30	10	20
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	N	10	200	N	N	L	L	L	L
Zn(200)	N	N	1000	N	N	N	N	N	N
Zr(10)	10	150	N	L	N	L	10	L	30
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

Element — Sample Number

	1009	1010	1011	1012	1013	1014	1015	1016	1017
Fe %(.05)	.3	1	.15	1	5	1	1.5	1.5	7
Mg %(.02)	.3	2	.02	.05	1.5	5	7	3	7
Ca %(.05)	3	2	.1	.5	G(20)	G(20)	G(20)	10	15
Ti %(.002)	.03	.007	.003	.01	.05	.07	.2	.15	.5
Mn(10)	100	300	70	50	20	50	300	300	70
Ag(.5)	1.5	N	L	10	N	N	1	2000	20
As(200)	N	N	N	N	N	N	N	N	N
Au(10)	N	N	N	15	N	N	N	N	N
B(10)	20	10	15	20	N	20	70	150	200
Ba(20)	50	150	L	L	20	70	150	G(5000)	300
Be(1)	N	N	N	N	1	1	1	1	5
Bi(10)	N	N	N	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	G(500)	N
Co(5)	5	7	7	5	N	N	10	7	30
Cr(10)	10	10	15	10	N	N	30	30	150
Cu(5)	30	50	5	7000	20	10	15	3000	70
La(20)	20	L	30	N	20	50	20	30	150
Mo(5)	B	5	N	150	2000	100	N	N	N
Nb(20)	N	N	N	N	N	N	N	N	30
Ni(5)	7	10	5	5	L	L	15	10	70
Pb(10)	150	N	15	10000	100	70	50	G(20000)	200
Sb(100)	N	N	N	N	100	100	1000	G(5000)	700
Sc(5)	L	N	N	N	N	N	5	5	20
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	100	150	L	100	100	100	1000	G(5000)	700
V(10)	15	15	10	15	10	20	50	30	150
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	L	L	L	L	50	50	20	10	70
Zn(200)	N	N	N	N	N	N	N	G(10000)	N
Zr(10)	20	10	L	20	50	100	50	70	300
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

Element / Sample Number

	1018	1019	1020	1021					
Fe % (.05)	3	3	1	1					
Mg % (.02)	10	5	.7	.07					
Ca % (.05)	20	10	7	.2					
Ti % (.002)	.05	.2	.015	.15					
Mn (10)	1000	3000	1000	30					
Ag (.5)	2000	700	30	1.5					
As (200)	N	N	N	N					
Au (10)	N	N	N	N					
B (10)	50	100	30	30					
Ba (20)	2000	700	50	300					
Be (1)	N	1.5	N	N					
Bi (10)	N	N	N	N					
Cd (20)	G(500)	500	G(500)	N					
Co (5)	10	10	7	5					
Cr (10)	15	30	10	10					
Cu (5)	7000	3000	300	10					
La (20)	20	50	20	20					
Mo (5)	20	10	L	20					
Nb (20)	N	N	N	N					
Ni (5)	7	7	5	2					
Pb (10)	G(20000)	20000	1000	150					
Sb (100)	10000	3000	100	N					
Sc (5)	5	10	L	5					
Sn (10)	N	N	N	N					
Sr (100)	700	150	100	L					
V (10)	20	30	10	20					
W (50)	N	5000	3000	10000					
Y (10)	15	200	15	15					
Zn (200)	G(10000)	10000	10000	N					
Zr (10)	50	300	50	500					
Th (100)	N	N	N	N					

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

lement — Sample Number

	1022	1023	1024	1025	1026	1027	1028	1029	1030
Fe %(.05)	.7	2	.07	.7	1	2	.5	2	.2
Mg %(.02)	.07	.02	L	1.5	.05	2	2	1	.15
Ca %(.05)	.2	.05	L	5	.5	7	G20	15	G20
Ti %(.002)	.15	.007	.02	.015	.1	.07	.1	.1	.007
Mn(10)	500	1500	L	1000	30	1500	100	150	L
Ag(.5)	1.5	70	3	7	.1	2	N	N	10
As(200)	N	N	N	N	N	N	N	700	L
Au(10)	N	N	N	N	N	N	N	N	20
B(10)	30	N	N	10	20	20	30	50	N
Ba(20)	100	150	20	20	150	150	50	30	20
Be(1)	L	N	N	L	L	L	1	2	N
Bi(10)	N	50	N	N	N	N	N	L	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	L	5	L	5	5	10	L	7	N
Cr(10)	20	10	10	L	L	20	15	15	N
Cu(5)	30	7000	30	10	15	150	5	7	10
La(20)	L	N	N	L	L	20	20	50	20
Mo(5)	N	N	N	N	N	N	200	500	700
Nb(20)	N	N	N	N	N	N	N	L	N
Ni(5)	7	7	5	10	7	50	7	7	10
Pb(10)	300	20000	150	5000	70	1500	50	150	70
Sb(100)	N	N	N	N	N	N	150	L	1000
Sc(5)	L	N	N	N	N	5	5	7	N
Sn(10)	N	N	N	N	N	N	N	15	N
Sr(100)	N	100	N	N	N	150	N	N	200
V(10)	30	20	15	10	30	20	100	70	20
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	L	N	N	N	20	20	20	70	70
Zn(200)	N	N	N	G10000	N	5000	N	N	N
Zr(10)	100	15	30	10	100	15	50	150	N
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1031	1032A	1032B	1033	1034	1035	1036	1037	1038
Fe %(.05)	2	1.5	1.5	N	3	7	.05	.07	.1
Mg %(.02)	.2	.2	3	.03	.3	.5	.15	.1	.05
Ca %(.05)	20	20	15	G20	G20	10	.2	.2	.5
Ti %(.002)	.02	.02	.03	L	.07	.5	.07	.1	.07
Mn(10)	100	150	300	L	1500	1000	15	15	L
Ag(.5)	L	N	N	N	.5	N	N	N	N
As(200)	200	1500	1000	N	2000	5000	N	N	N
Au(10)	N	N	N	N	L	15	N	N	N
B(10)	15	N	L	N	N	N	20	100	70
Ba(20)	100	30	30	N	50	150	30	20	20
Be(1)	L	3	L	1.5	L	1.5	L	N	N
Bi(10)	N	N	L	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	5	L	L	N	L	15	L	L	N
Cr(10)	15	L	10	N	20	70	L	10	15
Cu(5)	15	5	5	N	15	30	L	L	L
La(20)	L	20	20	L	20	30	L	20	L
Mo(5)	2000	2000	G2000	70	70	20	7	10	L
Nb(20)	N	N	N	N	N	L	30	30	20
Ni(5)	10	L	5	N	7	20	5	7	5
Pb(10)	70	70	50	20	50	50	70	30	30
Sb(100)	1000	2000	1500	100	100	300	N	N	N
Sc(5)	N	L	N	N	5	10	L	N	N
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	200	N	L	150	200	N	L	N	N
V(10)	50	200	150	10	30	100	15	15	15
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	30	15	10	N	20	30	L	L	N
Zn(200)	N	N	N	N	N	N	N	N	N
Zr(10)	10	15	10	N	20	150	50	200	150
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Added 11/3/84

Semi-Quantitative Spectrographic Analysis

lement	Sample Number								
	1039	1040A	1040B	1041	1042A	1042B	1043A	1043B	1044
Fe %(.05)	L	.5	.15	.7	.15	15	20	15	10
Mg %(.02)	L	3	1.5	.3	10	3	.3	1	5
Ca %(.05)	.1	20	20	.3	20	7	.7	1	15
Ti %(.002)	.07	.15	.015	.3	.005	.02	.02	.05	.005
Mn(10)	10	300	300	500	200	700	1000	200	200
Ag(.5)	N	15	50	150	.5	L	N	N	N
As(200)	N	N	N	500	N	N	1000	500	300
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	10	30	10	50	N	50	20	150	N
Ba(20)	300	G5000	G5000	1000	L	150	150	150	30
Be(1)	1.5	N	N	1	N	10	15	2	L
Bi(10)	N	N	N	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	N	N	N	5	N	30	20	15	N
Cr(10)	10	20	10	L	10	15	L	15	L
Cu(5)	L	15	50	15	L	15	20	30	20
La(20)	L	20	L	30	L	L	20	20	N
Mo(5)	N	10	10	L	N	70	200	15	10
Nb(20)	L	N	N	N	N	N	N	N	N
Ni(5)	5	L	L	L	N	70	50	50	20
Pb(10)	70	30	50	30	20	50	20	20	300
Sb(100)	N	N	100	N	N	N	N	N	100
Sc(5)	N	L	N	L	N	10	N	5	N
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	N	1000	700	N	150	150	N	150	N
V(10)	15	50	30	70	15	150	70	100	70
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	N	15	15	15	L	100	50	50	10
Zn(200)	N	N	N	N	N	1000	1000	300	2000
Zr(10)	70	70	15	150	30	10	30	100	N
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

ement	Sample Number								
	1045	1046	1048	1049	1050	1051	1052	1053	1054
Fe %(.05)	15	G20	G20	.5	5	.7	.3	.5	.7
Mg %(.02)	.2	1	.3	.3	.5	3	.1	.2	.2
Ca %(.05)	.7	2	.7	20	.5	3	.07	.7	.1
Ti %(.002)	.07	.02	.003	L	1	.05	.07	.1	.07
Mn(10)	500	2000	100	150	2000	100	300	700	G5000
Ag(.5)	N	N	N	N	30	N	N	L	30
As(200)	700	500	200	N	N	N	N	N	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	50	N	N	N	150	20	10	20	10
Ba(20)	G5000	1000	700	L	700	L	70	300	100
Be(1)	7	3	1	N	L	7	5	3	15
Bi(10)	N	N	N	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	5	150	50	N	50	N	N	N	L
Cr(10)	30	10	10	L	50	N	L	N	L
Cu(5)	50	70	700	20	G20000	700	15	15	15
La(20)	N	N	N	N	20	20	20	30	20
Mo(5)	50	N	N	N	N	N	N	N	N
Nb(20)	N	N	N	N	L	30	20	L	20
NI(5)	300	500	150	N	15	L	5	5	5
Pb(10)	50	20	15	15	70	50	30	70	100
Sb(100)	N	N	N	N	N	N	N	N	N
Sc(5)	10	N	N	N	10	L	N	N	L
Sn(10)	N	N	N	N	N	N	N	N	L
Sr(100)	150	N	N	300	300	300	N	150	L
V(10)	200	50	500	15	150	15	15	30	30
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	20	30	15	N	70	20	20	30	30
Zn(200)	700	2000	200	N	N	N	N	N	N
Zr(10)	30	N	N	N	500	70	70	100	50
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

ement

Sample Number

	1055	1056	1057	1058	1059	1060	1061	1062	1063
Fe %(.05)	5	.2	1	.5	.7	.5	.1	.3	7
Mg %(.02)	5	.07	.2	.3	.5	.07	.05	.3	3
Ca %(.05)	15	1	.03	.15	1.5	.5	.5	.3	5
Ti %(.002)	.3	.03	.3	.05	.2	.1	.03	.05	.7
Mn(10)	1000	100	300	3000	1000	300	300	700	1000
Ag(.5)	N	2	3	N	N	N	N	N	N
As(200)	N	N	N	N	N	N	N	N	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	N	L	L	70	50	30	30	30	N
Ba(20)	30	50	50	150	200	200	100	L	1000
Be(1)	1	N	1.5	5	3	3	3	5	N
Bi(10)	10	N	N	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	10	L	7	N	5	5	N	N	20
Cr(10)	70	L	30	L	10	10	L	L	100
Cu(5)	20	7	30	L	L	L	N	L	50
La(20)	20	L	20	20	30	20	50	L	30
Mo(5)	N	N	N	N	N	N	N	N	N
Nb(20)	L	N	N	20	20	L	L	20	N
Ni(5)	20	7	20	5	5	5	5	5	70
Pb(10)	30	30	10	30	70	50	20	50	30
Sb(100)	N	N	N	N	N	N	N	N	N
Sc(5)	10	N	L	L	L	N	N	L	20
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	200	N	L	L	150	200	300	100	500
V(10)	100	20	30	30	30	20	L	L	200
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	30	N	L	20	30	10	20	20	20
Zn(200)	N	N	N	N	N	N	N	N	N
Zr(10)	100	L	150	50	150	100	70	30	200
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1064	1065	1066	1067	1068	1069	1070	1071 A	1071 B
Fe %(.05)	3	.3	1	.3	.7	.7	.7	1.5	3
Mg %(.02)	.07	.07	.3	.05	.15	.3	.2	2	1
Ca %(.05)	.15	.07	.5	.05	.5	.5	.7	G20	10
Ti %(.002)	.07	.07	.2	.15	.15	.2	.15	.05	.015
Mn(10)	50	150	1000	70	150	1000	700	G5000	5000
Ag(.5)	N	2	N	N	N	N	N	N	N
As(200)	N	N	N	N	N	N	N	N	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	20	20	20	L	20	10	100	15	N
Ba(20)	200	700	1500	300	500	500	300	20	N
Be(1)	5	2	1.5	1.5	1.5	2	3	L	L
Bi(10)	N	N	N	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	N	N	N	N	N	N	5	N	7
Cr(10)	N	N	N	L	N	L	20	30	10
Cu(5)	L	L	L	L	5	L	20	5	30
La(20)	30	30	50	30	30	30	20	L	N
Mo(5)	L	30	N	N	5	N	5	15	200
Nb(20)	L	L	L	L	L	L	L	N	N
Ni(5)	5	5	5	L	L	L	20	N	7
Pb(10)	50	70	50	50	50	70	30	15	15
Sb(100)	N	N	N	N	N	N	N	N	N
Sc(5)	N	N	N	N	L	L	5	L	N
Sn(10)	N	N	N	N	N	N	N	20	70
Sr(100)	100	N	500	L	200	200	100	100	N
V(10)	20	20	50	15	30	20	70	20	20
W(50)	N	N	N	N	N	N	N	N	100
Y(10)	30	15	20	15	20	20	30	L	N
Zn(200)	N	N	N	N	N	N	N	N	N
Zr(10)	70	150	200	150	150	300	150	15	N
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Ad Leaf
1/3/84

Semi-Quantitative Spectrographic Analysis

lement | Sample Number

	1072	1073	1074	1075 A	1075 B	1076	1077	1078	1079
Fe %(.05)	L	3	5	15	3	20	3	7	1.5
Mg %(.02)	L	.15	.3	1.5	1.5	.07	2	.07	.02
Ca %(.05)	.07	.07	15	10	10	1.5	20	.5	.1
Ti %(.002)	.02	.05	.05	.2	.1	.07	.1	.005	.03
Mn(10)	30	70	5000	G5000	G5000	100	G5000	5000	15
Ag(.5)	N	30	N	N	N	N	N	N	7
As(200)	N	N	N	N	N	N	N	N	300
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	N	20	N	70	N	100	N	100	70
Ba(20)	50	150	L	100	L	50	L	200	70
Be(1)	N	N	2	1	1.5	N	1	5	10
Bi(10)	N	L	L	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	N	15	7	30	15	15	10	7	5
Cr(10)	N	30	30	100	20	20	50	10	300
Cu(5)	N	10000	70	1500	15	500	15	7	7000
La(20)	N	N	N	70	20	L	L	L	L
Mo(5)	N	10	15	1000	500	500	150	L	10
Nb(20)	N	N	N	N	N	N	N	N	N
Ni(5)	L	50	15	20	15	5	15	5	20
Pb(10)	70	L	30	15	L	10	15	15	10
Sb(100)	N	N	N	N	N	N	N	N	N
Sc(5)	N	N	L	10	5	N	7	30	L
Sn(10)	N	20	50	30	30	N	30	N	N
Sr(100)	N	N	N	200	N	N	L	L	N
V(10)	L	20	50	150	50	30	30	200	150
W(50)	N	N	200	150	100	L	N	N	N
Y(10)	N	N	15	20	20	10	15	20	L
Zn(200)	N	300	N	L	L	N	N	200	N
Zr(10)	N	30	15	20	30	20	30	15	20
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Added
1/3/84

Semi-Quantitative Spectrographic Analysis

lement | Sample Number

	1080	1081	1082	1083	1084 A	1084 B	1085	1086	1087
Fe % (.05)	.5	2	5	1	3	1	.7	10	5
Mg % (.02)	.15	.5	5	.02	.2	3	2	.15	.03
Ca % (.05)	.07	15	7	.07	15	20	20	1	1.5
Ti % (.002)	.2	.1	.7	.002	.02	.07	.15	.03	L
Mn (10)	10	G5000	1000	15	500	2000	700	150	100
Ag (.5)	1.5	1000	5	10	15	15	.5	3	15
As (200)	N	N	N	300	N	N	N	G10000	5000
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	30	L	10	L	30	L	N	100	20
Ba (20)	700	30	300	500	1000	200	500	150	20
Be (1)	N	10	7	L	10	30	L	100	N
Bi (10)	L	G1000	30	10	100	200	N	L	30
Cd (20)	N	300	N	N	N	N	N	N	N
Co (5)	N	20	20	N	L	L	5	10	10
Cr (10)	50	20	100	N	N	15	30	20	L
Cu (5)	70	30	50	200	1000	100	70	500	300
La (20)	20	20	20	L	L	20	20	N	L
Mo (5)	L	N	N	700	200	50	5	L	5
Nb (20)	N	N	N	N	N	N	N	N	N
Ni (5)	5	5	150	10	7	15	20	20	10
Pb (10)	20	G20000	500	100	500	200	30	200	2000
Sb (100)	N	N	N	30	N	N	N	L	N
Sc (5)	7	L	10	N	L	5	L	L	N
Sn (10)	N	50	N	N	30	N	N	N	N
Sr (100)	L	150	300	N	300	300	1000	500	N
V (10)	150	70	100	L	150	300	150	100	10
W (50)	N	N	N	N	N	500	N	N	N
Y (10)	L	L	15	N	20	30	20	N	N
Zn (200)	N	G10000	200	N	7000	700	N	N	N
Zr (10)	30	15	50	L	N	30	50	15	N
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Added
1/3/84

Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	1088	1089	1090	1091	1092	1093	1094	1095	1096
Fe % (.05)	5	1	5	1.5	7	1	2	.5	15
Mg % (.02)	.07	.02	.07	.7	.02	3	7	.1	.07
Ca % (.05)	10	.7	.1	1	.05	.15	10	.1	.2
Ti % (.002)	.003	.002	.3	.3	L	N	.07	.07	.05
Mn (10)	200	300	150	500	70	700	1000	20	3000
Ag (.5)	5	15	1.5	1	500	2	N	N	N
As (200)	10000	1500	N	N	3000	N	1000	N	1500
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	30	10	150	50	30	30	70	150	150
Ba (20)	L	20	500	500	L	50	300	70	150
Be (1)	N	N	N	100	N	N	N	N	5
Bi (10)	L	L	N	N	700	L	N	N	N
Cd (20)	500	N	N	N	150	N	N	N	N
Co (5)	15	30	L	7	L	30	30	L	700
Cr (10)	15	L	15	100	10	500	500	20	200
Cu (5)	200	70	20	50	300	5	20	20	15000
La (20)	L	N	L	20	L	N	L	20	20
Mo (5)	N	N	10	N	30	N	N	N	N
Nb (20)	N	L	N	N	N	N	N	N	N
Ni (5)	15	10	15	70	7	500	300	5	1000
Pb (10)	3000	500	30	100	20000	150	50	30	150
Sb (100)	L	L	150	N	2000	N	N	N	100
Sc (5)	N	N	L	7	N	L	7	L	L
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	L	N	150	N	N	N	1000	L	L
V (10)	100	20	50	100	10	20	30	70	300
W (50)	L	N	N	N	N	N	N	N	N
Y (10)	N	N	L	20	N	N	10	L	200
Zn (200)	G10000	500	N	700	10000	N	N	N	1000
Zr (10)	N	L	100	100	N	N	L	20	20
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Added
11/3/84

Semi-Quantitative Spectrographic Analysis

Element — Sample Number

	1112	1113	1114	1115	1116	1117	1118	1119	1120
Fe % (.05)	15	1.5	15	7	15	7	.3	.7	20
Mg % (.02)	.05	.1	.01	.5	.1	.07	.02	.02	.03
Ca % (.05)	.15	1.5	.5	15	3	.2	.05	.1	.07
Ti % (.002)	.03	.07	.05	.07	.02	.03	.015	L	.015
Mn (10)	500	300	300	500	700	500	15	200	150
Ag (.5)	10	500	3	70	10	50	2000	70	2
As (200)	1500	N	N	N	300	3000	N	1500	2000
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	N	50	70	N	70	70	L	L	N
Ba (20)	70	100	20	10	100	70	10	50	70
Be (1)	N	1	3	N	N	L	L	N	N
Bi (10)	200	G1000	200	10	N	150	L	200	L
Cd (20)	N	200	N	N	N	N	150	N	N
Co (5)	20	10	50	70	100	20	N	15	15
Cr (10)	L	20	10	10	15	10	15	15	15
Cu (5)	10000	15000	20000	20000	G20000	G20000	2000	3000	1000
La (20)	N	20	L	30	20	20	20	N	N
Mo (5)	N	N	L	N	20	30	N	N	N
Nb (20)	N	N	N	N	N	N	N	N	N
Ni (5)	30	10	70	300	100	70	7	20	30
Pb (10)	200	10000	30	20	50	200	10000	150	70
Sb (100)	N	200	N	N	N	3000	1500	L	N
Sc (5)	L	5	N	10	5	L	N	N	N
Sn (10)	N	N	N	N	N	N	N	50	N
Sr (100)	N	N	N	150	N	L	N	N	N
V (10)	10	30	100	20	200	150	10	10	50
W (50)	N	N	200	N	N	N	N	N	N
Y (10)	10	10	30	20	30	10	N	N	L
Zn (200)	200	G10000	N	N	N	N	5000	N	N
Zr (10)	L	50	15	30	N	15	L	N	N
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1121	1122	1123	1124	1125	1126	1127	1128	1129
Fe % (.05)	.3	.7	7	20	.5	1.5	15	1.5	.1
Mg % (.02)	L	.2	1	.07	2	7	.3	5	.02
Ca % (.05)	.5	10	1.5	.1	3	G20	20	G20	.05
Ti % (.002)	.015	.07	.03	.03	L	L	.003	.05	.002
Mn (10)	300	700	500	100	300	700	300	1000	150
Ag (.5)	1500	2000	150	20	1500	7	30	N	100
As (200)	500	N	N	2000	N	N	300	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	15	30	30	30	N	N	N	N	N
Ba (20)	20	70	10	50	N	N	30	10	150
Be (1)	1.5	L	L	N	N	L	L	3	N
Bi (10)	N	N	500	100	10	N	100	N	N
Cd (20)	200	N	N	G500	N	N	N	N	N
Co (5)	N	N	20	30	15	N	50	N	N
Cr (10)	L	N	L	10	L	N	N	30	20
Cu (5)	2000	500	20000	G20000	1500	50	150	20	50
La (20)	L	L	N	N	N	L	N	20	N
Mo (5)	N	N	15	20	N	5	20	5	150
Nb (20)	N	N	N	N	N	N	N	N	N
Ni (5)	10	10	15	50	5	L	30	20	20
Pb (10)	7000	5000	50	150	20000	1500	300	20	G20000
Sb (100)	1500	500	N	N	1500	N	L	N	L
Sc (5)	N	L	N	N	N	5	5	5	N
Sn (10)	N	N	100	10	N	N	N	N	N
Sr (100)	N	100	N	N	L	200	N	300	N
V (10)	15	15	50	50	L	15	20	100	200
W (50)	N	N	L	N	N	N	N	N	N
Y (10)	N	10	10	L	N	15	15	15	N
Zn (200)	3000	7000	700	N	G10000	3000	N	N	500
Zr (10)	10	50	N	10	N	N	N	20	N
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

ashleel
4/3/84

Semi-Quantitative Spectrographic Analysis

ement | Sample Number

	1130	1131	1132	1133	1134	1135	1136	1137	1138
Fe % (.05)	.3	.2	.3	.7	.3	.3	.7	.3	5
Mg % (.02)	.03	.03	.01	.3	.05	.03	L	.03	.2
Ca % (.05)	.07	.05	1.5	.1	.07	L	L	L	10
Ti % (.002)	.03	.007	.1	.5	.015	.002	.02	.02	.03
Mn (10)	50	300	150	50	15	70	10	15	1000
Ag (.5)	200	200	L	2	15	100	1.5	5	20
As (200)	N	N	N	N	N	N	N	N	N
Au (10)	N	N	N	N	15	L	N	N	15
B (10)	15	N	N	200	N	N	N	N	N
Ba (20)	1000	20	20	300	300	N	N	20	70
Be (1)	N	N	N	1.5	N	N	N	N	1
Bi (10)	L	70	N	N	10	150	N	L	N
Cd (20)	N	70	N	N	N	150	N	N	N
Co (5)	N	N	N	L	N	L	5	L	N
Cr (10)	20	15	N	30	10	10	10	10	20
Cu (5)	3000	7000	20	50	30	20	20	15	15
La (20)	L	L	L	30	N	N	N	N	N
Mo (5)	500	100	N	30	N	N	N	N	N
Nb (20)	N	N	N	L	N	N	N	N	N
Ni (5)	15	15	5	10	5	7	10	5	L
Pb (10)	3000	G20000	100	70	500	G20000	150	1500	1500
Sb (100)	L	150	N	100	N	N	N	N	N
Sc (5)	N	N	N	7	N	N	N	L	L
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	N	N	N	N	L	N	N	N	500
V (10)	500	700	20	70	L	L	10	10	10
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	N	N	N	15	N	N	N	N	10
Zn (200)	500	2000	N	N	N	5000	N	N	500
Zr (10)	15	10	N	150	10	L	10	15	15
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

QQ'ded
1/3/84

Semi-Quantitative Spectrographic Analysis

lement — Sample Number

	1139	1140	1141	1142	1143	1144	1145	1146	1147
Fe % (.05)	.5	.7	20	10	.5	20	.2	L	.2
Mg % (.02)	.3	.07	.3	.03	1	.03	1	.2	.05
Ca % (.05)	1	1.5	.15	.1	2	.07	5	10	.1
Ti % (.002)	.07	.07	.03	.02	.005	.003	.03	.005	.01
Mn (10)	700	300	50	200	150	30	150	20	30
Ag (.5)	300	20	20	300	100	2	20	N	N
As (200)	N	N	1500	1000	N	N	N	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	10	10	100	150	20	20	30	N	10
Ba (20)	100	500	30	20	2000	50	70	20	50
Be (1)	30	1.5	L	L	N	N	1	L	L
Bi (10)	N	L	100	N	N	N	N	N	N
Cd (20)	N	N	N	300	300	N	L	N	N
Co (5)	5	L	1000	50	N	N	N	N	7
Cr (10)	15	20	10	20	15	10	30	L	10
Cu (5)	50	30	G20000	1000	100	15	30	L	500
La (20)	L	20	N	L	L	N	N	N	N
Mo (5)	10	L	200	70	1000	100	200	N	L
Nb (20)	N	L	N	N	N	N	N	N	N
Ni (5)	7	7	5000	150	20	20	5	20	30
Pb (10)	200	700	1500	1000	G20000	1500	7000	50	70
Sb (100)	N	N	N	N	200	N	300	N	N
Sc (5)	N	L	N	N	N	N	N	N	N
Sn (10)	N	N	N	N	15	N	N	N	N
Sr (100)	N	N	N	N	500	N	N	500	N
V (10)	10	30	300	30	30	10	N	15	15
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	N	10	10	20	N	10	15	N	N
Zn (200)	N	L	1000	G10000	G10000	G10000	1000	N	N
Zr (10)	20	30	15	20	N	N	L	70	30
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

Element — Sample Number

	1148	1149	1150	1151 A	1151 B	1152	1153	1154	1155 A
Fe % (.05)	G20	.5	3	1.5	.2	5	1.5	1	.5
Mg % (.02)	.03	10	2	5	5	10	5	5	3
Ca % (.05)	.05	10	7	5	15	10	20	7	10
Ti % (.002)	.05	.007	.007	.005	L	.05	.01	.007	.05
Mn (10)	30	500	150	300	150	2000	1500	1000	200
Ag (.5)	7	70	30	50	N	.5	2	100	30
As (200)	200	N	700	L	N	300	N	500	200
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	L	15	20	70	N	L	N	L	20
Ba (20)	L	N	50	N	N	100	N	N	20
Be (1)	L	L	L	L	N	L	N	L	N
Bi (10)	N	N	1000	700	L	N	N	N	N
Cd (20)	N	G500	20	N	N	N	N	G500	G500
Co (5)	N	20	500	300	15	20	N	50	70
Cr (10)	50	15	20	20	L	L	N	50	20
Cu (5)	5	150	G20000	G20000	500	200	30	700	700
La (20)	20	N	N	N	N	N	N	20	L
Mo (5)	L	N	20	10	N	10	N	500	15
Nb (20)	N	N	N	N	N	N	N	N	N
Ni (5)	N	50	150	100	5	70	N	50	70
Pb (10)	7000	1000	1500	1000	200	200	100	G20000	1000
Sb (100)	200	N	L	N	N	L	N	150	N
Sc (5)	N	N	N	N	N	N	N	N	L
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	N	N	100	200	N	N	500	200	N
V (10)	15	20	50	200	L	50	L	1000	100
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	N	15	10	10	10	10	N	15	15
Zn (200)	1500	G10000	3000	1000	L	700	N	5000	G10000
Zr (10)	10	N	N	20	N	70	N	L	15
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1155 B	1156	1157	1158	1159	1160	1161	1162	1163
Fe %(.05)	.2	5	5	.2	.2	.7	.5	.7	.7
Mg %(.02)	.2	.1	3	.1	3	3	.1	.5	2
Ca %(.05)	1	.15	5	.7	10	15	3	20	5
Ti %(.002)	.02	.005	.3	.05	.05	.003	.2	.002	L
Mn(10)	200	50	1000	50	70	100	100	300	200
Ag(.5)	70	150	L	N	N	200	2	30	150
As(200)	300	700	N	N	N	500	200	2000	1500
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	50	L	N	15	70	10	50	N	10
Ba(20)	20	20	300	300	100	L	150	100	30
Be(1)	N	1	N	2	N	N	L	N	L
Bi(10)	N	100	N	N	N	N	N	L	N
Cd(20)	G500	N	N	N	N	G500	N	G500	G500
Co(5)	70	7	50	N	N	L	L	30	70
Cr(10)	20	15	1000	L	15	20	70	30	20
Cu(5)	700	7000	70	10	20	2000	30	1500	3000
La(20)	20	N	N	L	N	20	20	20	L
Mo(5)	N	7	N	N	N	100	10	70	200
Nb(20)	N	N	N	N	N	N	N	N	N
Ni(5)	150	10	200	L	5	50	15	100	200
Pb(10)	1000	G20000	200	150	100	15000	100	G20000	20000
Sb(100)	N	N	N	N	N	N	150	1000	L
Sc(5)	L	N	30	5	N	N	L	N	N
Sn(10)	N	N	N	10	N	10	N	N	N
Sr(100)	N	150	200	150	700	N	200	N	N
V(10)	200	30	150	10	20	30	70	200	20
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	L	N	20	N	N	20	15	L	10
Zn(200)	G10000	1500	N	N	300	G10000	300	G10000	G10000
Zr(10)	15	N	20	30	15	N	150	N	N
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

Element — Sample Number

	1164	1165	1166 A	1166 B	1167	1168 A	1168 B	1168 C	1169
Fe % (.05)	.07	2	3	20	10	1	20	5	15
Mg % (.02)	7	.2	2	.15	10	7	.5	5	.3
Ca % (.05)	15	.7	.7	.07	3	7	.7	10	.7
Ti % (.002)	L	.03	.07	.07	.5	L	L	L	.015
Mn (10)	150	200	700	100	2000	200	100	150	70
Ag (.5)	150	1	5	7	.7	N	3	5	200
As (200)	N	N	N	N	N	N	1000	1500	700
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	15	20	L	N	100	N	N	15	100
Ba (20)	L	200	150	20	150	N	70	N	20
Be (1)	L	7	L	N	L	L	N	L	3
Bi (10)	N	N	N	N	N	N	N	N	20
Cd (20)	500	N	N	N	N	N	N	N	G500
Co (5)	N	N	300	70	70	200	150	5000	50
Cr (10)	20	L	200	1000	5000	100	10	20	50
Cu (5)	100	30	15000	3000	1000	G20000	20000	G20000	5000
La (20)	N	N	N	N	N	N	N	N	N
Mo (5)	30	50	5	5	N	N	200	30	20
Nb (20)	N	N	N	N	N	N	N	N	N
Ni (5)	20	10	G5000	5000	1500	500	300	2000	20
Pb (10)	G20000	2000	70	20	500	500	100	300	G20000
Sb (100)	L	N	N	N	N	N	100	200	100
Sc (5)	N	N	5	5	30	N	N	N	L
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	2000	200	200	N	100	N	N	N	1000
V (10)	20	15	20	50	100	100	2000	200	200
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	20	20	L	N	15	10	15	N	L
Zn (200)	10000	200	700	500	N	N	500	N	G10000
Zr (10)	N	20	30	15	50	N	N	N	10
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1170 A	1171	1172	1173	1174	1175	1176	1177	1178
Fe % (.05)	G20	.1	1	.5	20	7	5	1	20
Mg % (.02)	.15	.07	.5	.7	2	L	.03	.02	.02
Ca % (.05)	.1	5	1	1.5	1	L	.05	L	L
Ti % (.002)	.03	L	.2	.07	.1	L	.07	.02	.02
Mn (10)	70	10	300	G5000	1000	N	50	20	200
Ag (.5)	N	N	N	.7	10	5	5	7	30
As (200)	L	N	N	500	2000	700	1500	500	2000
Au (10)	N	N	N	N	N	N	N	N	L
B (10)	100	70	50	150	G20000	10	20	10	10
Ba (20)	300	N	500	1500	150	L	300	L	500
Be (1)	N	L	5	L	1.5	L	1.5	L	2
Bi (10)	N	N	N	N	N	N	N	N	20
Cd (20)	N	N	N	N	20	N	50	N	N
Co (5)	30	N	N	10	10	N	N	N	N
Cr (10)	20	N	N	10	15	N	N	N	L
Cu (5)	3000	30	20	700	500	150	50	150	200
La (20)	30	N	30	N	20	50	50	50	50
Mo (5)	50	N	N	150	15	10	N	N	20
Nb (20)	N	N	L	N	N	L	20	L	20
Ni (5)	50	7	15	20	30	N	N	N	L
Pb (10)	100	70	50	G20000	200	3000	1000	2000	10,000
Sb (100)	N	N	N	N	N	N	L	L	1000
Sc (5)	N	N	N	N	5	N	N	N	N
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	N	N	1500	G5000	200	N	300	N	N
V (10)	1000	20	20	70	50	50	50	50	150
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	N	N	10	10	20	L	L	L	L
Zn (200)	700	N	N	200	1500	2000	200	L	500
Zr (10)	L	N	150	50	70	N	70	20	50
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement	Sample Number								
	1170 B	1170 C							
Fe %(.05)	G20	G20							
Mg %(.02)	.1	.15							
Ca %(.05)	.15	3							
Ti %(.002)	.007	L							
Mn(10)	150	30							
Ag(.5)	N	L							
As(200)	N	N							
Au(10)	N	N							
B(10)	30	30							
Ba(20)	70	20							
Be(1)	N	N							
Bi(10)	N	N							
Cd(20)	N	N							
Co(5)	15	15							
Cr(10)	10	10							
Cu(5)	1000	500							
La(20)	20	20							
Mo(5)	N	L							
Nb(20)	N	N							
Ni(5)	30	30							
Pb(10)	100	150							
Sb(100)	N	N							
Sc(5)	N	N							
Sn(10)	N	N							
Sr(100)	N	N							
V(10)	2000	3000							
W(50)	N	N							
Y(10)	N	N							
Zn(200)	N	500							
Zr(10)	N	N							
Th(100)	N	N							

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

'ement | Sample Number

	1179	1180	1181	1182	1183	1184	1185	1186	1187
Fe %(.05)	10	1	.5	10	G20	10	2	7	10
Mg %(.02)	2	.05	.05	2	.2	.02	.02	.03	L
Ca %(.05)	15	L	L	20	.5	.05	.1	L	L
Ti %(.002)	.3	.05	.07	.2	.2	.01	.01	.02	.015
Mn(10)	700	20	N	2000	200	700	50	200	100
Ag(.5)	10	10	5	5	5	30	10	5	3
As(200)	N	L	N	N	1000	300	G10,000	200	500
Au(10)	N	N	N	N	N	L	L	N	N
B(10)	30	20	20	50	200	20	10	20	20
Ba(20)	700	200	700	150	100	200	L	L	L
Be(1)	5	1	1.5	10	10	1.5	L	1.5	2
Bi(10)	N	70	30	L	20	N	L	N	N
Cd(20)	N	20	N	20	N	50	N	N	N
Co(5)	10	N	N	50	L	N	N	N	N
Cr(10)	100	L	N	100	70	L	N	L	L
Cu(5)	50	100	10	2000	1000	1500	70	50	30
La(20)	50	50	50	100	50	50	50	50	50
Mo(5)	N	N	N	N	100	500	N	N	L
Nb(20)	20	20	20	20	20	20	20	20	20
Ni(5)	50	N	N	50	10	10	5	L	10
Pb(10)	150	500	70	20	30	7000	1500	500	200
Sb(100)	N	N	N	N	N	L	N	N	N
Sc(5)	20	N	N	20	20	N	N	N	L
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	2000	L	L	2000	500	N	N	N	N
V(10)	100	20	20	50	200	200	10	20	50
W(50)	N	N	N	N	200	N	N	N	N
Y(10)	20	L	N	50	20	L	L	L	L
Zn(200)	300	700	L	3000	2000	3000	300	L	700
Zr(10)	200	30	200	100	100	N	N	20	50
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement	Sample Number								
	1188	1189	1190	1191	1192	1193	1194	1195	1196
Fe % (.05)	7	5	7	3	2	20	G20	3	.7
Mg % (.02)	.2	L	.05	.02	.02	.02	1.5	.03	L
Ca % (.05)	20	.1	L	L	L	L	20	L	L
Ti % (.002)	.1	.01	.03	.002	.002	.002	.2	.1	L
Mn (10)	700	50	20	100	20	700	G50000	50	20
Ag (.5)	20	50	2	10	30	20	50	50	5
As (200)	N	5000	200	200	L	L	N	200	N
Au (10)	N	500	N	N	50	N	N	20	N
B (10)	50	10	20	15	15	20	20	20	L
Ba (20)	100	L	50	N	N	150	300	200	20
Be (1)	5	L	5	2	1.5	L	7	5	1
Bi (10)	N	N	L	N	N	10	50	N	N
Cd (20)	70	N	N	N	N	N	N	N	20
Co (5)	N	N	70	N	N	100	70	N	N
Cr (10)	20	N	N	L	N	N	50	N	N
Cu (5)	100	150	150	150	700	500	20,000	2000	200
La (20)	50	50	50	50	50	50	50	50	50
Mo (5)	10	300	200	1000	500	30	20	500	200
Nb (20)	20	20	20	20	20	20	20	L	L
Ni (5)	20	30	20	N	N	20	20	N	N
Pb (10)	1000	7000	1000	2000	5000	500	70	5000	1000
Sb (100)	N	L	N	100	N	100	N	N	N
Sc (5)	5	N	N	N	N	N	L	N	N
Sn (10)	N	N	N	N	N	N	100	N	N
Sr (100)	100	100	N	N	N	N	500	N	N
V (10)	20	50	200	500	700	100	100	50	50
W (50)	N	L	N	N	L	100	500	N	N
Y (10)	10	L	N	N	N	N	50	N	N
Zn (200)	1000	700	700	1500	1000	700	1000	700	1500
Zr (10)	30	N	N	N	N	N	100	70	N
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement	Sample Number								
	1197	1198	1199	1200	1201 A	1201 B	1202	1203	1204
Fe %(.05)	.7	1	3	2	5	.1	G20	10	.2
Mg %(.02)	.02	.5	L	L	.5	L	.2	.2	1.5
Ca %(.05)	L	L	.05	L	10	1	.3	.7	7
Ti %(.002)	L	.05	L	L	.03	.007	L	.002	.07
Mn(10)	200	200	70	20	G5000	200	G5000	3000	150
Ag(.5)	300	7	100	30	N	N	N	L	700
As(200)	300	N	N	N	200	N	500	N	200
Au(10)	N	N	50	50	N	N	N	N	30
B(10)	L	100	20	10	50	10	20	30	L
Ba(20)	L	500	200	200	G5000	500	1500	G5000	100
Be(1)	2	7	1	1	2	L	3	10	L
Bi(10)	N	N	L	L	N	N	N	N	N
Cd(20)	30	N	N	N	L	N	N	20	30
Co(5)	N	N	N	N	10	N	300	300	N
Cr(10)	N	N	N	N	20	N	L	L	N
Cu(5)	100	20	10,000	1000	100	10	20	100	10000
La(20)	50	50	50	50	20	N	N	N	N
Mo(5)	N	N	300	500	N	70	N	N	N
Nb(20)	L	L	20	20	N	N	N	N	N
Ni(5)	N	N	N	N	300	10	700	700	20
Pb(10)	2000	50	G20,000	20,000	150	N	20	20	2000
Sb(100)	N	N	L	100	L	N	N	N	3000
Sc(5)	N	N	N	N	10	N	N	N	N
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	N	N	L	N	200	N	N	N	100
V(10)	20	20	100	500	700	10	10	200	30
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	N	N	N	N	30	N	20	70	N
Zn(200)	2000	700	2000	1000	1500	N	1500	2000	2000
Zr(10)	N	50	N	N	20	10	N	N	10
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 11/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1205	1206	1207	1208	1209	1210	1211	1212	1213 A
Fe % (.05)	1	2	2	3	2	.15	1	10	.15
Mg % (.02)	.15	2	1	1	5	10	1	.2	7
Ca % (.05)	.3	7	2	1.5	7	20	2	.05	15
Ti % (.002)	.07	.3	.2	.3	.2	.01	.1	.3	.005
Mn (10)	30	150	1000	1000	700	150	100	150	150
Ag (.5)	10	15	1	.7	2	2	200	10	2
As (200)	N	N	N	N	N	N	700	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	15	200	20	30	50	L	G2000	70	N
Ba (20)	100	300	300	300	200	N	G5000	500	20
Be (1)	1	3	2	3	2	L	L	1	N
Bi (10)	N	N	N	N	N	N	15	N	N
Cd (20)	N	N	N	N	N	N	70	N	N
Co (5)	10	10	15	20	15	N	5	15	N
Cr (10)	15	50	50	70	50	N	10	50	N
Cu (5)	150	70	15	30	20	10	2000	70	30
La (20)	N	50	50	30	50	N	N	30	N
Mo (5)	30	30	N	N	N	N	N	N	N
Nb (20)	N	N	N	N	N	N	N	N	N
Ni (5)	15	30	50	70	50	50	30	70	20
Pb (10)	50	100	20	30	70	50	15000	70	100
Sb (100)	N	100	N	N	N	N	3000	N	N
Sc (5)	N	10	10	10	7	N	N	5	N
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	N	100	200	100	150	100	300	N	150
V (10)	15	50	50	100	50	L	30	20	L
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	N	15	20	30	20	10	10	15	N
Zn (200)	N	N	N	N	N	N	1500	N	N
Zr (10)	70	100	100	150	70	L	50	200	N
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

ad Dec 1/3/84

Semi-Quantitative Spectrographic Analysis

ement	Sample Number								
	1213 B								
Fe %(.05)	1								
Mg %(.02)	10								
Ca %(.05)	20								
Ti %(.002)	.1								
Mn(10)	300								
Ag(.5)	1								
As(200)	N								
Au(10)	N								
B(10)	50								
Ba(20)	200								
Be(1)	1								
Bi(10)	N								
Cd(20)	N								
Co(5)	N								
Cr(10)	20								
Cu(5)	20								
La(20)	20								
Mo(5)	N								
Nb(20)	N								
Ni(5)	30								
Pb(10)	70								
Sb(100)	N								
Sc(5)	L								
Sn(10)	N								
Sr(100)	300								
V(10)	15								
W(50)	N								
Y(10)	20								
Zn(200)	N								
Zr(10)	50								
Th(100)	N								

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1214	1215	1216 A	1217	1218 A	1218 B	1219	1220	1221
Fe %(.05)	1.5	1	.05	2	.7	L	.7	G20	.5
Mg %(.02)	.3	.5	.05	.1	.15	.02	.2	.3	.1
Ca %(.05)	.1	1	1.5	.07	.1	L	.1	.15	.2
Ti %(.002)	.2	.15	.005	.02	.03	.005	.5	.7	.5
Mn(10)	5000	1000	1000	G5000	G5000	100	500	1500	100
Ag(.5)	2	50	10	1.5	2	L	.7	L	N
As(200)	N	L	N	L	N	N	N	1000	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	100	50	10	70	50	30	10	50	20
Ba(20)	70	150	70	70	100	N	300	1500	200
Be(1)	3	5	30	30	70	20	7	7	2
Bi(10)	N	N	N	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	N	7	10	N	N	N	30	N	N
Cr(10)	N	30	N	N	L	N	N	70	15
Cu(5)	10	20	5	7	10	7	5	30	5
La(20)	70	20	N	20	20	N	50	30	50
Mo(5)	N	N	N	30	N	N	30	7	N
Nb(20)	20	L	N	L	N	N	L	N	N
Ni(5)	N	30	10	20	7	20	15	300	20
Pb(10)	100	70	N	10	20	N	N	70	30
Sb(100)	N	N	N	150	200	200	N	N	N
Sc(5)	L	5	N	N	N	N	N	10	N
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	N	N	N	100	100	N	N	N	300
V(10)	15	50	L	50	20	L	20	20	10
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	20	20	10	15	15	N	20	50	N
Zn(200)	N	N	N	300	N	N	N	1000	N
Zr(10)	100	70	10	100	70	N	70	70	100
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

lement	Sample Number								
	1216B								
Fe %(.05)	.7								
Mg %(.02)	L								
Ca %(.05)	1								
Ti %(.002)	.05								
Mn(10)	200								
Ag(.5)	2								
As(200)	N								
Au(10)	N								
B(10)	20								
Ba(20)	100								
Be(1)	15								
Bi(10)	N								
Cd(20)	N								
Co(5)	N								
Cr(10)	N								
Cu(5)	5								
La(20)	30								
Mo(5)	N								
Nb(20)	N								
Ni(5)	N								
Pb(10)	10								
Sb(100)	N								
Sc(5)	N								
Sn(10)	N								
Sr(100)	N								
V(10)	10								
W(50)	N								
Y(10)	10								
Zn(200)	N								
Zr(10)	70								
Th(100)	N								

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/2/84

Semi-Quantitative Spectrographic Analysis

Element — Sample Number

	1222	1223	1224	1225	1226	1227	1228	1229	1230
Fe %(.05)	2	10	.5	.5	2	.7	.1	15	3
Mg %(.02)	.07	2	.05	.2	1.5	G10	.05	.05	.5
Ca %(.05)	.1	1	.7	2	10	15	.1	3	.1
Ti %(.002)	.1	G1	.1	.03	.15	.01	.15	.05	.2
Mn(10)	70	1500	150	700	3000	1000	200	100	70
Ag(.5)	N	N	5	3	30	1.5	N	200	2
As(200)	N	N	N	L	N	N	N	G10000	L
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	50	20	10	L	30	N	150	300	200
Ba(20)	300	500	300	30	300	N	500	700	1000
Be(1)	2	7	50	L	5	L	L	2	2
Bi(10)	N	N	N	N	N	N	N	1000	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	N	30	N	N	7	N	N	30	N
Cr(10)	L	700	L	10	50	N	N	10	20
Cu(5)	7	50	L	10	10	10	5	G20000	1000
La(20)	100	50	20	N	20	N	N	200	50
Mo(5)	N	N	N	10	N	N	N	300	30
Nb(20)	20	N	N	N	N	N	L	N	N
Ni(5)	20	200	15	20	15	N	N	50	N
Pb(10)	30	10	10	300	150	30	20	1000	20
Sb(100)	N	N	N	N	N	N	N	300	N
Sc(5)	5	20	N	N	7	N	N	5	20
Sn(10)	N	N	N	N	N	N	N	30	N
Sr(100)	500	300	100	N	1000	100	N	700	300
V(10)	10	100	10	L	30	L	20	100	100
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	70	30	10	10	15	10	N	15	10
Zn(200)	N	L	N	N	N	N	N	500	N
Zr(10)	100	150	100	N	50	15	150	L	70
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement	Sample Number								
	1231	1232							
Fe %(.05)	.7	2							
Mg %(.02)	.05	.2							
Ca %(.05)	.2	.7							
Ti %(.002)	.07	.5							
Mn(10)	700	300							
Ag(.5)	L	L							
As(200)	N	N							
Au(10)	N	N							
B(10)	100	50							
Ba(20)	30	1000							
Be(1)	5	1							
Bi(10)	N	N							
Cd(20)	N	N							
Co(5)	N	10							
Cr(10)	L	10							
Cu(5)	10	7							
La(20)	50	30							
Mo(5)	5	N							
Nb(20)	L	N							
Ni(5)	N	5							
Pb(10)	50	20							
Sb(100)	N	N							
Sc(5)	N	5							
Sn(10)	N	N							
Sr(100)	N	500							
V(10)	L	70							
W(50)	N	N							
Y(10)	20	10							
Zn(200)	N	N							
Zr(10)	70	100							
Th(100)	N	N							

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

lement — Sample Number

	1233	1234	1235	1236	1237	1238	1239	1240	1241
Fe %(.05)	2	3	2	2	.05	3	.3	1	.5
Mg %(.02)	.2	.7	.7	.03	L	.05	.05	L	.03
Ca %(.05)	.5	5	2	.05	.05	.07	.07	L	1
Ti %(.002)	.3	.03	.07	.5	.07	.2	.05	.3	.03
Mn(10)	700	2000	1500	30	15	1000	.200	20	30
Ag(.5)	5000	70	7	30	5	10	500	N	1.5
As(200)	500	N	N	N	N	N	N	N	N
Au(10)	N	N	N	15	N	N	30	N	N
B(10)	30	20	20	20	10	N	N	10	N
Ba(20)	30	20	30	70	100	1000	200	200	150
Be(1)	45	1	1	L	7	5	50	L	5
Bi(10)	N	50	L	L	N	N	N	15	N
Cd(20)	G(500)	70	N	N	N	N	N	N	N
Co(5)	15	15	10	7	L	10	5	7	N
Cr(10)	10	L	10	10	L	L	N	L	10
Cu(5)	10000	150	150	200	15	20	20	15	5
La(20)	20	L	L	N	70	20	L	L	20
Mo(5)	7	N	N	N	200	10	10	10	N
Nb(20)	N	N	N	N	30	N	N	N	N
Ni(5)	15	20	20	10	L	10	7	10	5
Pb(10)	G(20000)	1000	150	2000	200	50	20	50	30
Sb(100)	3000	N	N	N	100	N	100	L	L
Sc(5)	7	7	5	5	N	L	N	L	N
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	N	150	L	N	N	500	100	N	N
V(10)	50	30	30	50	10	70	15	10	70
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	15	50	20	N	70	10	N	N	10
Zn(200)	G(10000)	2000	N	1000	N	N	N	N	N
Zr(10)	70	10	20	20	50	70	20	100	30
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

Element — Sample Number

	1242	1243	1244	1245	1246	1247	1248	1249	1250
Fe % (.05)	L	.15	.15	.7	L	.3	.7	2	.05
Mg % (.02)	N	L	L	.02	L	.15	.1	3	.5
Ca % (.05)	L	.07	L	.07	.07	.5	.2	3	.05
Ti % (.002)	.05	.3	.07	.07	.05	.03	.02	.1	.03
Mn (10)	L	L	L	20	15	150	70	3000	70
Ag (.5)	.5	L	N	N	.5	N	5	N	10
As (200)	N	N	N	L	N	N	L	L	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	N	N	N	30	10	15	L	N	L
Ba (20)	300	700	50	300	150	100	20	50	1000
Be (1)	N	N	N	7	1	7	15	3	N
Bi (10)	N	N	N	N	N	N	N	N	N
Cd (20)	N	N	N	N	N	N	N	N	N
Co (5)	N	N	N	N	N	N	N	20	L
Cr (10)	L	L	10	N	L	L	L	L	15
Cu (5)	7	10	L	L	L	L	15	70	15
La (20)	20	30	L	3	L	20	L	L	L
Mo (5)	N	L	L	N	N	N	N	N	N
Nb (20)	N	N	20	N	N	L	N	N	N
Ni (5)	5	5	7	5	5	5	7	30	5
Pb (10)	G 30	30	30	50	30	50	50	15	200
Sb (100)	N	N	N	L	N	L	200	L	300
Sc (5)	N	L	N	N	N	L	N	L	N
Sn (10)	N	N	N	N	N q	N	N	N	N
Sr (100)	N	500	N	N	N	500	N	N	N
V (10)	10	70	L	20	L	15	15	20	30
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	N	L	11	15	N	L	N	10	10
Zn (200)	N	N	N	N	N	N	N	N	N
Zr (10)	70	70	70	50	50	30	10	30	15
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

lement	Sample Number								
	1251	1252	1253	1254	1255	1256	1257	1257A	1258
Fe %(.05)	.1	3	G(20)	5	15	5	5	.5	7
Mg %(.02)	L	.1	.7	.05	.1	.5	3	.5	3
Ca %(.05)	.2	3	.5	.07	.1	2	15	5	10
Ti %(.002)	.002	.05	.015	.1	.03	.3	.03	.007	.1
Mn(10)	15	3000	200	20	200	300	G(5000)	5000	5000
Ag(.5)	5	700	N	3000	5	1	100	3000	G(5000)
As(200)	N	N	N	10000	N	N	N	2000	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	N	10	70	200	N	N	N	L	N
Ba(20)	500	G(5000)	70	70	50	1000	N	N	N
Be(1)	L	1.5	L	1	N	1	1	10	10
Bi(10)	N	N	N	N	N	N	N	70	N
Cd(20)	N	N	N	N	N	N	500	300	N
Co(5)	N	7	L	N	5	7	10	L	10
Cr(10)	10	N	20	10	30	50	10	10	20
Cu(5)	7	1000	30	1000	20	300	500	G(20000)	200
La(20)	L	N	N	20	N	30	L	30	L
Mo(5)	N	15	N	N	N	30	N	N	2000
Nb(20)	N	N	N	N	N	N	N	N	N
Ni(5)	5	5	50	5	10	70	10	5	15
Pb(10)	30	3000	100	G(20000)	1000	70	20000	10000	100
Sb(100)	150	500	N	1500	N	N	L	G(10000)	100
Sc(5)	N	L	N	5	N	7	N	N	5
Sn(10)	N	N	N	N	N	N	30	N	70
Sr(100)	L	1000	N	500	N	300	150	N	N
V(10)	15	10	70	30	300	500	15	10	100
W(50)	N	N	N	N	N	50	N	N	100
Y(10)	L	L	10	10	N	20	10	N	20
Zn(200)	N	5000	G(10000)	1500	N	N	G(10000)	10000	N
Zr(10)	N	10	N	50	N	70	30	N	15
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

Semi-Quantitative Spectrographic Analysis

lement — Sample Number

	1259	1260	1261	1262	1263	1263A	1264	1265	1266
Fe %(.05)	3	.7	1.5	.7	3	5	2	1	5
Mg %(.02)	1.5	.05	L	.07	.3	.3	L	.15	.07
Ca %(.05)	3	.05	.05	.05	2	15	.07	.05	.07
Ti %(.002)	.07	.07	.007	.1	.1	.1	.002	.1	.1
Mn(10)	5000	50	50	300	5000	G(5000)	70	50	100
Ag(.5)	700	5	2	10	15	N	150	50	2
As(200)	N	N	N	N	N	N	200	200	700
Au(10)	N	N	N	N	N	N	N	200	N
B(10)	L	L	L	30	30	N	N	30	50
Ba(20)	20	100	150	700	150	20	N	700	700
Be(1)	1.5	1	3	3	10	15	N	1	2
Bi(10)	20	N	N	N	L	N	200	N	N
Cd(20)	G(500)	N	N	N	70	150	N	N	N
Co(5)	N	N	50	7	15	7	L	N	5
Cr(10)	15	L	10	L	30	20	10	L	30
Cu(5)	200	15	10	70	15000	500	7000	L	50
La(20)	L	L	N	20	20	N	N	20	N
Mo(5)	10	7	7	N	L	5	7	10	15
Nb(20)	N	N	N	N	N	N	N	N	N
Ni(5)	L	5	10	5	15	L	7	N	70
Pb(10)	G(20000)	1500	500	700	30	30	2000	N	N
Sb(100)	300	N	N	N	N	N	1000	N	N
Sc(5)	L	N	N	L	5	N	N	N	N
Sn(10)	G(1000)	N	N	N	30	150	N	N	N
Sr(100)	150	N	N	N	N	N	N	N	N
V(10)	30	30	10	50	100	150	L	70	200
W(50)	N	N	N	N	200	200	N	N	N
Y(10)	20	N	N	L	10	15	N	10	10
Zn(200)	G(10000)	300	N	N	G(10000)	G(10000)	200	N	500
Zr(10)	10	15	15	50	200	50	N	70	50
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

lement | Sample Number

	1267	1268	1269	1270	1271	1272	1273	1274	1275
Fe % (.05)	2	1	5	3	1.5	3	5	1	1.5
Mg % (.02)	.15	.1	1	.3	L	.2	.2	.7	.2
Ca % (.05)	L	1	.3	.2	.05	L	1.5	.2	.05
Ti % (.002)	.15	.15	.7	.2	.03	.15	.5	.2	.3
Mn (10)	200	150	200	200	150	100	3000	200	30
Ag (.5)	2	N	1.5	1.5	10	30	5	10	10
As (200)	500	N	N	200	500	300	1000	N	300
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	70	30	20	20	10	100	150	10	50
Ba (20)	2000	300	1500	1500	300	700	2000	700	1500
Be (1)	3	L	1.5	2	2	1.5	2	1	2
Bi (10)	N	N	N	N	N	10	N	N	15
Cd (20)	N	N	N	N	N	N	N	N	N
Co (5)	5	N	15	7	N	N	15	N	N
Cr (10)	30	L	100	20	20	10	70	10	70
Cu (5)	20	15	30	L	20	200	150	30	500
La (20)	N	N	20	30	20	20	20	N	50
Mo (5)	7	N	N	N	30	N	20	N	10
Nb (20)	N	N	N	N	N	N	N	N	L
Ni (5)	20	5	70	10	20	10	70	7	30
Pb (10)	10	N	10	10	200	300	100	N	50
Sb (100)	N	N	N	N	300	200	N	N	N
Sc (5)	L	L	15	5	N	5	10	L	5
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	100	100	200	200	200	N	N	N	700
V (10)	100	70	150	100	100	70	150	70	70
W (50)	N	N	N	L	N	N	N	N	N
Y (10)	N	N	10	10	20	10	20	N	N
Zn (200)	N	N	N	N	N	N	700	N	N
Zr (10)	50	50	100	100	10	50	150	50	100
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

lement | Sample Number

	1276	1277 A	1277 B	1278	1279	1280 A	1280 B	1281	1282
Fe % (.05)	1.5	1.5	3	G20	7	1	5	5	3
Mg % (.02)	.1	.5	.1	.15	L	.02	1	.07	.2
Ca % (.05)	.2	.15	.5	2	.05	.1	10	1	L
Ti % (.002)	.07	.2	.5	.01	.015	.02	.2	.2	.05
Mn (10)	150	150	700	G5000	G5000	300	1500	100	100
Ag (.5)	150	10	1.5	1.5	5	200	7	3	100
As (200)	700	300	L	500	10000	1500	1000	500	1000
Au (10)	N	N	N	N	N	N	N	N	L
B (10)	15	30	30	20	L	50	300	150	20
Ba (20)	300	700	2000	70	200	100	1000	1000	200
Be (1)	3	2	2	3	1	L	5	2	2
Bi (10)	N	N	N	N	N	N	50	N	N
Cd (20)	N	N	N	N	N	50	N	N	N
Co (5)	N	N	15	30	5	N	20	N	N
Cr (10)	N	70	50	20	100	15	20	300	N
Cu (5)	100	30	30	1000	300	1000	500	2000	10
La (20)	20	20	30	N	N	N	50	30	50
Mo (5)	300	7	N	1500	30	50	1000	15	500
Nb (20)	N	N	N	N	N	N	N	N	20
Ni (5)	50	15	30	100	30	10	70	10	N
Pb (10)	70	N	15	50	50	15000	1000	10000	100
Sb (100)	300	N	N	L	200	1000	L	N	500
Sc (5)	5	7	10	7	N	N	10	10	7
Sn (10)	N	N	N	N	N	N	10	N	N
Sr (100)	N	200	200	N	N	N	100	300	100
V (10)	200	150	100	70	10	15	50	200	200
W (50)	N	N	N	N	N	L	N	N	N
Y (10)	20	10	10	30	N	N	30	20	30
Zn (200)	N	N	N	1000	N	2000	500	700	L
Zr (10)	150	70	70	N	L	L	100	70	70
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

1/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1283	1284	1285	1286	1287	1288	1289	1290	1291
Fe %(.05)	G20	20	3	3	1	G20	5	1	2
Mg %(.02)	.05	1	2	1	1.5	.02	.02	.02	.5
Ca %(.05)	.2	15	5	1.5	1	L	.05	L	.1
Ti %(.002)	.002	.02	.003	.02	.1	.02	.02	.005	.2
Mn(10)	500	5000	G5000	500	500	20	700	70	500
Ag(.5)	3	100	1	150	200	100	2	1000	10
As(200)	G10000	N	N	200	200	500	L	L	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	70	150	15	20	50	100	10	20	100
Ba(20)	N	20	200	L	50	L	L	L	500
Be(1)	L	L	L	1	1	1	L	L	7
Bi(10)	200	N	N	N	L	50	N	L	L
Cd(20)	L	N	N	200	500	N	N	100	N
Co(5)	50	15	10	N	N	N	N	N	N
Cr(10)	10	20	100	N	N	N	N	N	N
Cu(5)	3000	70	30	2000	1500	2000	200	2000	70
La(20)	N	N	N	50	50	50	50	50	70
Mo(5)	L	15	20	N	200	L	N	1000	10
Nb(20)	N	N	N	20	L	L	L	L	20
Ni(5)	50	50	50	N	L	N	5	N	N
Pb(10)	100	G20000	200	20,000	20,000	G20,000	200	10,000	200
Sb(100)	N	N	N	1,000	3,000	1,000	L	2,000	N
Sc(5)	N	N	N	N	N	N	N	N	5
Sn(10)	N	N	N	100	30	300	N	N	N
Sr(100)	N	700	N	N	N	N	N	N	L
V(10)	20	10	50	10	10	10	10	50	20
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	N	15	50	L	L	N	L	L	L
Zn(200)	1000	700	N	10,000	G10,000	3,000	L	1,000	200
Zr(10)	N	N	N	50	100	20	L	L	200
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement

Sample Number

	1292	1293	1294	1295	1296	1297	1298	1299	1300
Fe %(.05)	2	15	15	3	10	20	5	2	10
Mg %(.02)	.02	1	.15	.05	.2	.7	.5	.1	.02
Ca %(.05)	L	.5	.2	.2	20	3	.2	.1	L
Ti %(.002)	.01	.2	.05	.02	.02	.2	.2	.1	L
Mn(10)	20	500	70	70	2000	100	300	700	100
Ag(.5)	20	2	50	50	30	30	30	1	50
As(200)	200	500	7000	500	200	500	1000	L	500
Au(10)	N	N	N	N	N	N	N	N	20
B(10)	20	500	100	20	20	100	100	50	20
Ba(20)	L	150	100	20	50	300	200	L	L
Be(1)	2	2	2	1	1	2	7	2	1
Bi(10)	N	15	N	N	N	10	N	N	50
Cd(20)	N	N	N	N	L	N	20	N	N
Co(5)	N	20	N	N	10	10	N	N	N
Cr(10)	N	50	N	10	N	50	50	L	N
Cu(5)	70	20	15	20	20	150	70	5	1000
La(20)	50	50	50	50	50	70	50	50	50
Mo(5)	N	20	N	N	N	10	N	N	500
Nb(20)	20	20	20	20	20	20	20	20	L
Ni(5)	N	15	10	5	30	15	20	20	N
Pb(10)	100	50	300	700	300	20,000	2000	10	10,000
Sb(100)	L	N	L	L	N	100	L	N	100
Sc(5)	N	10	5	N	5	15	10	N	N
Sn(10)	N	50	N	N	N	N	N	N	N
Sr(100)	N	L	200	N	100	500	N	N	N
V(10)	10	100	100	100	50	70	50	50	10
W(50)	N	L	500	N	N	N	100	L	N
Y(10)	L	50	L	L	50	50	20	L	L
Zn(200)	1,000	L	L	200	300	500	1000	L	2000
Zr(10)	L	200	20	50	50	200	200	50	N
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 11/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1301	1302	1303	1304	1305 A	1305 B	1306	1307 A	1307 B
Fe %(.05)	3	5	7	3	7	.7	1.5	3	1.5
Mg %(.02)	.02	.07	.1	.1	.05	.05	.02	1.5	.7
Ca %(.05)	.05	2	1	.05	.05	1.5	L	1	2
Ti %(.002)	.07	.1	.07	.01	.1	.1	.1	.5	.3
Mn(10)	100	50	150	500	150	100	200	500	700
Ag(.5)	2	1.5	15	3	50	1	1500	5	2
As(200)	L	300	N	200	300	N	500	N	N
Au(10)	N	N	N	20	L	N	N	N	N
B(10)	20	20	50	10	30	10	15	10	20
Ba(20)	100	200	200	100	70	150	150	1000	1000
Be(1)	3	1.5	3	3	3	5	1	2	2
Bi(10)	N	N	15	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	N	N	N	10	15	N	N	15	10
Cr(10)	15	L	10	L	70	L	10	200	700
Cu(5)	20	30	200	30	1000	10	100	30	20
La(20)	20	70	20	N	N	70	N	50	30
Mo(5)	20	50	50	10	50	N	30	N	N
Nb(20)	N	N	N	N	N	20	N	N	N
Ni(5)	5	N	7	20	50	20	20	70	70
Pb(10)	500	1500	1500	100	1500	50	5000	100	20
Sb(100)	N	N	N	N	N	N	N	N	N
Sc(5)	5	15	L	N	10	N	N	10	3
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	N	100	N	N	100	150	N	700	300
V(10)	70	70	70	20	300	10	10	100	100
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	20	15	15	10	N	15	N	15	15
Zn(200)	N	N	500	N	700	N	L	N	N
Zr(10)	50	700	70	20	L	150	150	150	100
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 4/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1308	1309	1310	1311A	1311B	1312	1313	1314A	1314B
Fe % (.05)	3	.5	2	2	2	1.5	2	.3	5
Mg % (.02)	.5	.2	1.5	.5	.1	.1	2	.07	.2
Ca % (.05)	.15	.07	1.5	.1	L	2	7	5	2
Ti % (.002)	.5	.05	.7	.2	.1	.1	.3	.02	.3
Mn (10)	150	70	500	300	100	500	700	700	1000
Ag (.5)	3	5	1	100	100	2	2	3	.7
As (200)	N	N	N	N	700	N	N	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	30	L	20	200	50	10	200	10	50
Ba (20)	1000	70	1500	500	500	500	200	70	500
Be (1)	3	L	2	3	1.5	1.5	1.5	L	1.5
Bi (10)	N	N	N	N	N	N	N	N	N
Cd (20)	N	N	N	N	N	N	N	N	N
Co (5)	5	7	15	5	N	N	7	N	15
Cr (10)	70	10	70	30	20	L	500	L	20
Cu (5)	30	5000	100	200	30	50	7	10	5
La (20)	20	N	50	30	30	20	20	N	70
Mo (5)	15	N	N	7	50	N	7	N	10
Nb (20)	L	N	N	N	N	N	N	N	N
Ni (5)	70	20	30	20	15	15	50	20	20
Pb (10)	20	N	30	500	500	300	30	3000	100
Sb (100)	N	N	N	N	N	N	N	N	N
Sc (5)	5	N	10	L	N	N	15	N	10
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	300	N	700	200	200	N	200	N	N
V (10)	70	20	50	70	100	15	100	10	50
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	15	10	15	N	N	20	20	15	30
Zn (200)	N	N	N	1000	N	300	N	N	N
Zr (10)	150	50	150	70	50	100	70	N	500
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

ad Diel 11/3/84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1209								
As (5)	10								
Au (.05)	.05								
Sb (1)	N(2)								
Zn (5)	20								
Au wT	10								

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All element ported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1210	1211	1212	1213A	1213B	1214	1215	1216A	1217
As (5)	N(10)	400	30	L(10)	N(10)	130	10	10	200
Au (.05)	L(.05)	.50	3.5	L(.05)	L(.05)	2.0	4.6	1.0	.15
Sb (1)	N(2)	G1000	4	N(2)	N(2)	2	1	N(2)	2
Zn (5)	20	1900	15	5	10	35	65	25	210
Au wT	10	10	10	10	10			10	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1216B
As (5)	160
Au (.05)	.20
Sb (1)	2
Zn (5)	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1218A	1218B	1219	1220	1221	1222	1223	1224	1225
As (5)	70	L(10)	20	900	10	10	70	10	N(10)
Au (.05)	.50	.10	.10	.05	.05	L(.05)	.05	.10	.05
Sb (1)	2	N(2)	6	48	N(2)	N(2)	2	N(2)	N(2)
Zn (5)	110	N(5)	25	340	N(5)	N(5)	180	15	5
Au wT	10	10	10	10	10	10	10	10	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1226	1227	1228	1229	1230	1231	1232	1233	1234
As (5)	10	10	N(10)	G2000	180	N(10)	10	G200	35
Au (.05)	.05	L(.05)	.10	.50	.05	L(.05)	.05		
Sb (1)	4	1	3	136	8	3	N(1)	G100	15
Zn (5)	85	5	N(5)	15	15	5	10	G200	G200
Au wT				10					

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element — Sample Number

83-12

	1235	1236	1237	1238	1239	1240	1241	1242	1243
As (5)	15	25	15	85	40	50	60	5	5
Au (.05)									
Sb (1)	N(1)	11	22	6	N(1)	3	23	N(1)	N(1)
Zn (5)	85	G200	5	40	25	10	25	5	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parenthesis.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1244	1245	1246	1247	1248	1249	1250	1251	1252
As (5)	5	170	L(5)	10	160	G200	10	35	L(10)
Au (.05)									.50
Sb (1)	N(1)	10	N(1)	19	G100	3	G100	G100	3
Zn (5)	10	20	5	20	40	G200	25	5	55

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Semi-Quantitative Spectrographic Analysis

Element — Sample Number

	1315	1316	1317	1318	1319	1320	1321A	1321B	1322
Fe %(.05)	2	5	2	1.5	2	2	1	5	1
Mg %(.02)	.05	.05	.07	L	.1	.1	.1	2	.5
Ca %(.05)	3	1.5	2	L	.3	1.5	10	1	1.5
Ti %(.002)	.03	.02	.05	.015	.3	.2	.07	.7	.2
Mn(10)	1000	1000	500	30	200	500	2000	5000	500
Ag(.5)	3	5	5	150	20	3	N	3	3
As(200)	N	N	N	N	200	N	N	N	L
Au(10)	N	15	N	N	N	N	N	N	N
B(10)	10	15	15	10	30	15	N	20	10
Ba(20)	G5000	500	150	100	300	500	G5000	G5000	2000
Be(1)	1	3	1	L	5	2	2	2	2
Bi(10)	N	N	N	N	15	N	N	10	N
Cd(20)	N	N	N	N	N	N	N	N	L
Co(5)	10	10	15	N	10	N	N	30	5
Cr(10)	N	10	15	10	15	10	30	100	20
Cu(5)	1000	2000	500	500	7000	100	50	10000	1000
La(20)	N	N	N	N	50	20	20	70	N
Mo(5)	N	5	N	30	20	10	N	N	15
Nb(20)	N	N	N	N	L	N	N	N	N
Ni(5)	15	10	50	20	50	N	30	70	50
Pb(10)	500	200	150	1000	1000	300	70	200	5000
Sb(100)	N	N	N	N	200	N	N	N	N
Sc(5)	N	N	N	N	7	5	N	15	N
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	200	N	100	100	N	N	G5000	700	100
V(10)	L	15	20	20	70	50	20	100	50
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	15	15	N	N	10	20	10	20	N
Zn(200)	N	N	N	N	300	200	N	700	5000
Zr(10)	20	100	20	L	150	100	30	200	20
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement	Sample Number								
	1323	1324	1325A	1325B	1326A	1326B	1327	1328	1329
Fe %(.05)	5	3	1.5	2	3	.15	2	1	3
Mg %(.02)	1	.7	.7	.5	.7	.02	.03	.02	.3
Ca %(.05)	.2	7	20	5	.07	2	L	.5	.05
Ti %(.002)	1	.15	.005	.2	.3	.03	.5	.07	.2
Mn(10)	2000	3000	G5000	2000	200	100	150	1000	300
Ag(.5)	1.5	5	20	.5	N	N	1	2	150
As(200)	N	500	N	N	N	N	N	N	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	30	L 15	15	10	50	10	30	10	L
Ba(20)	2000	G5000	500	1500	1000	2000	G5000	300	700
Be(1)	1.5	1	3	1.5	1.5	N	2	1	3
Bi(10)	N	50	N	N	N	N	N	N	30
Cd(20)	N	20	70	N	N	N	N	N	200
Co(5)	30	30	7	15	5	N	N	N	N
Cr(10)	70	50	10	70	15	L	30	L	10
Cu(5)	300	5000	1000	100	50	5	100	100	3000
La(20)	50	30	N	30	70	N	100	N	100
Mo(5)	30	20	15	N	N	N	30	10	N
Nb(20)	N	N	N	N	L	N	L	N	N
Ni(5)	70	100	30	50	20	20	30	15	20
Pb(10)	700	15000	10000	200	70	N	20	1000	15000
Sb(100)	N	N	N	N	N	N	N	N	N
Sc(5)	15	5	N	7	5	N	7	N	L
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	300	3000	300	200	200	100	700	N	100
V(10)	100	70	50	100	70	L	70	50	30
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	30	15	10	15	20	N	20	N	30
Zn(200)	2000	G10000	G10000	300	N	N	N	1500	G10000
Zr(10)	150	70	N	70	150	200	150	50	200
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1330	1331	1332	1333	1334	1335A	1335B	1336	1337
Fe %(.05)	3	3	2	7	1.5	1	.7	5	2
Mg %(.02)	.3	1	1	.5	.3	.2	.15	.3	.3
Ca %(.05)	.7	1	10	.2	.5	.15	.2	.5	.15
Ti %(.002)	.2	.3	.5	.7	.2	.1	.1	.7	.5
Mn(10)	1500	1000	1500	300	700	300	500	1000	300
Ag(.5)	N	15	3	7	1	70	1	15	3
As(200)	N	N	N	L	N	N	N	N	N
Au(10)	N	N	N	10	N	G500	N	N	N
B(10)	10	20	150	100	L	L	10	15	15
Ba(20)	700	1500	1500	700	300	300	500	700	700
Be(1)	1	3	5	10	L	L	2	1.5	2
Bi(10)	N	N	N	N	N	N	N	N	N
Cd(20)	N	N	N	N	N	N	N	N	N
Co(5)	15	20	10	5	7	5	15	15	7
Cr(10)	15	70	70	20	10	10	L	20	10
Cu(5)	50	30	30	30	70	7	200	30	20
La(20)	100	150	50	30	N	N	50	70	20
Mo(5)	100	N	N	70	N	N	N	5	500
Nb(20)	N	N	N	L	N	N	20	N	N
Ni(5)	50	50	70	30	30	5	20	10	30
Pb(10)	100	1000	70	1000	200	20	200	500	70
Sb(100)	N	N	N	N	N	N	N	N	N
Sc(5)	5	7	5	20	10	N	N	15	10
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	200	700	500	300	N	N	N	200	N
V(10)	50	100	50	150	70	50	15	70	70
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	20	20	10	50	20	10	30	50	15
Zn(200)	L	200	N	300	N	N	N	N	N
Zr(10)	100	200	100	200	100	70	100	200	150
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

85-12

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1338	1339	1340	1341	1342	1343	1344	1345	1346
Fe %(.05)	7	.3	1	3	1	1	.5	.2	2
%(.02)	.7	.02	.05	.1	.07	.3	.15	.07	.02
Ca %(.05)	2	.05	.1	.05	.7	1	.1	.15	L
Ti %(.002)	1	.15	.5	.03	.3	.5	.07	.005	L
Mn(10)	1500	100	200	500	300	300	100	150	200
Ag(.5)	10	N	L	200	200	2	2	L	5
As(200)	N	N	N	N	N	N	N	N	N
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	100	10	L	L	50	10	10	50	L
Ba(20)	1000	700	50	150	G5000	500	700	200	70
Be(1)	2	5	1.5	L	1	1.5	3	7	L
Bi(10)	N	N	N	15	N	N	N	N	N
Cd(20)	N	N	N	100	50	N	N	N	L
Co(5)	20	N	5	10	N	N	N	N	20
Cr(10)	30	N	10	10	L	L	N	L	10
Cu(5)	15000	200	10	5000	1000	70	20	10	1500
(20)	100	N	100	N	20	20	N	N	N
Mo(5)	10	N	N	N	N	N	N	N	30
Nb(20)	L	N	N	N	N	N	N	N	N
Ni(5)	20	N	10	5	5	N	5	5	100
Pb(10)	1000	70	50	15000	5000	100	150	70	2000
Sb(100)	N	N	N	N	2000	N	N	N	N
Sc(5)	20	N	N	5	7	N	N	N	N
Sn(10)	N	N	N	N	N	N	N	N	N
Sr(100)	200	100	N	N	300	N	100	N	N
V(10)	100	10	20	10	15	50	10	L	30
W(50)	N	N	N	N	N	N	N	N	N
Y(10)	50	N	N	10	15	10	L	L	10
Zn(200)	1000	N	G10000	10000	500	N	N	N	500
Zr(10)	200	20	50	30	100	100	N	N	N
(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
- Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/13/84

83-12

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1347	1348	1349	1350A	1350B	1351	1352	1353	
Fe %(.05)	3	2	1.5	3	.7	2	.7		
Mg %(.02)	1	.5	1	1	.3	.3	.5		
Ca %(.05)	.2	.1	2	.3	.1	.7	1		
Ti %(.002)	.5	.1	.3	.5	.15	.2	.2		
Mn(10)	700	500	700	500	150	700	700		
Ag(.5)	5	500	7	2	5	2	3		
As(200)	N	N	N	N	N	N	N		
Au(10)	N	100	N	N	N	N	N		
B(10)	20	L	10	70	10	30	L		
Ba(20)	1500	300	1000	2000	700	700	700		
Be(1)	2	1	2	3	2	3	1.5		
Bi(10)	N	N	N	N	N	N	N		
Cd(20)	N	G500	20	N	N	N	N		
Co(5)	10	15	10	7	N	10	N		
Cr(10)	70	10	10	70	L	30	30		
Cu(5)	50	1500	300	70	50	30	30		
La(20)	50	N	30	100	20	30	N		
Mo(5)	15	N	N	N	N	N	N		
Nb(20)	N	N	N	N	N	N	N		
Ni(5)	50	10	10	50	10	20	15		
Pb(10)	50	G20000	2000	200	150	70	200		
Sb(100)	N	N	N	N	N	N	N		
Sc(5)	7	N	5	7	N	N	N		
Sn(10)	N	N	N	N	N	N	N		
Sr(100)	300	N	500	500	100	200	100		
V(10)	100	20	70	70	20	50	50		
W(50)	N	N	N	N	N	N	N		
Y(10)	10	N	10	10	N	10	N		
Zn(200)	N	G10000	1500	N	N	N	500		
Zr(10)	100	50	70	100	70	100	50		
Th(100)	N	N	N	N	N	N	N		

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/2/84

Semi-Quantitative Spectrographic Analysis

ement — Sample Number

	1354	1355A	1355B	1356	1357	1358	1359 A	1359B	1360
Fe % (.05)	.7	5	2	.2	2	1.5	2	7	1.5
Mg % (.02)	.15	.1	.7	.3	1	.5	10	7	2
Ca % (.05)	L	.07	.5	20	15	1	10	10	3
Ti % (.002)	.15	.07	.2	.03	.3	.15	.15	.05	L
Mn (10)	100	200	1500	3000	2000	700	1000	150	500
Ag (.5)	.5	10	5	N	2	L	10	150	1500
As (200)	N	N	N	N	N	N	700	1500	1500
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	30	15	10	N	10	10	200	150	20
Ba (20)	500	200	1000	100	1500	500	30	L	L
Be (1)	3	1.5	1	7	3	1.5	1	1	L
Bi (10)	N	N	N	N	N	N	70	G1000	N
Cd (20)	N	N	30	N	N	N	N	N	500
Co (5)	N	N	10	N	10	7	G5000	1500	30
Cr (10)	N	15	20	20	50	15	100	50	10
Cu (5)	20	10000	3000	100	50	70	5000	G20000	1000
La (20)	100	50	30	50	70	70	N	N	N
Mo (5)	10	30	70	N	7	N	15	70	100
Nb (20)	20	N	N	N	N	N	N	N	N
Ni (5)	7	5	20	10	30	10	1000	700	30
Pb (10)	50	15000	1500	300	150	70	1000	7000	G20000
Sb (100)	N	N	N	N	N	N	N	100	3000
Sc (5)	N	N	L	N	7	7	10	N	N
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	N	N	200	1000	700	200	N	N	100
V (10)	10	50	70	10	50	20	50	50	150
W (50)	N	L	N	N	N	N	N	N	N
Y (10)	30	N	10	N	15	30	10	15	N
Zn (200)	N	1500	10000	N	N	N	500	L	G10000
Zr (10)	150	30	70	10	70	100	50	20	N
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/2/84

Semi-Quantitative Spectrographic Analysis

ement

Sample Number

	1361	1362							
Fe %(.05)	5	.5							
Mg %(.02)	.5	3							
Ca %(.05)	10	7							
Ti %(.002)	L	.002							
Mn(10)	150	300							
Ag(.5)	70	300							
As(200)	1000	1000							
Au(10)	N	N							
B(10)	100	50							
Ba(20)	30	100							
Be(1)	L	L							
Bi(10)	N	N							
Cd(20)	G500	G500							
Co(5)	15	10							
Cr(10)	30	50							
Cu(5)	3000	2000							
La(20)	N	N							
Mo(5)	20	200							
Nb(20)	N	N							
Ni(5)	30	50							
Pb(10)	15000	G20000							
Sb(100)	300	700							
Sc(5)	N	N							
Sn(10)	N	N							
Sr(100)	N	N							
V(10)	1000	5000							
W(50)	N	N							
Y(10)	N	N							
Zn(200)	G10000	G10000							
Zr(10)	N	N							
Th(100)	N	N							

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 1/3/84

Semi-Quantitative Spectrographic Analysis

lement — Sample Number

	1363	1364	1365	1366	1367	1368	1369	1370	1371
Fe %(.05)	5	G20	20	10	2	3	2	.5	.2
Mg %(.02)	.02	.7	1	.02	.05	.05	.5	.05	.05
Ca %(.05)	1.5	1	10	.05	.05	.05	.1	.1	.07
Ti %(.002)	.05	.2	.2	.02	.05	.05	.2	.002	.002
Mn(10)	300	300	5000	200	100	100	200	100	200
Ag(.5)	30	10	2	3	5	1000	10	50	200
As(200)	1000	1000	N	500	L	N	N	N	300
Au(10)	10	N	N	N	N	L	N	10	N
B(10)	20	150	20	10	10	50	200	10	20
Ba(20)	100	300	20	50	150	150	500	150	20
Be(1)	1	1	10	.5	1	2	7	1	2
Bi(10)	N	50	N	300	L	1000	L	20	N
Cd(20)	20	N	N	N	N	20	N	N	N
Co(5)	N	50	15	50	N	N	N	N	N
Cr(10)	N	70	50	N	N	N	N	N	N
Cu(5)	100	500	10	200	70	2000	150	500	1000
La(20)	50	50	100	50	50	70	50	50	50
Mo(5)	N	10	50	20	10	10	N	20	1000
Nb(20)	L	L	L	20	L	20	L	L	L
Ni(5)	10	50	10	10	N	N	L	N	N
Pb(10)	1000	70	20	30	1000	G20,000	500	G20,000	10,000
Sb(100)	100	L	N	N	L	L	N	L	2000
Sc(5)	N	15	10	N	N	N	5	N	N
Sn(10)	N	50	10	N	N	N	N	N	N
Sr(100)	N	100	500	N	N	L	N	N	N
V(10)	20	500	50	50	50	20	50	20	200
W(50)	N	N	N	1000	N	N	N	N	100
Y(10)	20	50	20	L	L	L	N	N	N
Zn(200)	1000	200	200	L	200	2000	3000	200	2000
Zr(10)	20	200	100	N	20	50	200	N	N
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 5 June 84

Semi-Quantitative Spectrographic Analysis

lement — Sample Number

	1372	1373	1374	1375	1376	1377	1378	1379	1380
Fe %(.05)	.5	20	1	L	G20	5	G20	2	15
Mg %(.02)	.1	1.5	.7	.05	.1	.1	2	.02	.3
Ca %(.05)	7	20	5	.5	L	20	15	.2	3
Ti %(.002)	.02	.01	.05	.1	.02	.02	.3	L	.07
Mn(10)	700	5000	5000	100	5000	G5000	G5000	G5000	G5000
Ag(.5)	3	2	500	2	1	7	50	100	70
As(200)	N	300	L	N	L	L	N	N	700
Au(10)	N	N	N	N	N	N	N	N	N
B(10)	50	300	20	500	L	50	70	20	200
Ba(20)	150	200	50	150	L	50	L	500	1000
Be(1)	2	2	L	2	10	2	10	1.5	1
Bi(10)	N	N	G1000	N	N	50	30	N	L
Cd(20)	100	N	50	N	N	200	20	N	100
Co(5)	N	50	5	N	300	70	200	N	100
Cr(10)	20	N	10	N	N	N	50	N	20
Cu(5)	100	G20,000	1000	50	50	20,000	G20,000	500	G20,000
La(20)	50	L	50	50	L	50	50	50	50
Mo(5)	N	N	N	N	N	N	N	N	20
Nb(20)	L	L	L	50	L	L	L	L	L
Ni(5)	N	200	L	N	200	10	20	N	10
Pb(10)	700	100	G20,000	150	20	G20,000	20,000	500	G20,000
Sb(100)	N	L	1000	L	N	200	N	N	100
Sc(5)	N	5	N	N	L	N	20	N	5
Sn(10)	N	N	N	N	N	N	20	N	N
Sr(100)	N	100	100	N	N	100	500	100	200
V(10)	50	70	20	10	20	20	50	50	30
W(50)	N	N	N	N	N	N	N	N	L
Y(10)	L	100	L	N	300	N	70	L	20
Zn(200)	200	200	3000	L	2000	G10,000	2000	500	G10,000
Zr(10)	L	N	20	200	N	L	100	N	200
Th(100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

5 Jun 84

Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	1381	1382	1383	1384	1385	1386	1387	1388	1389
Fe % (.05)	5	.5	3	.15	10	7	7	5	G20
Mg % (.02)	.05	L	L	L	2	1	.02	.1	.5
Ca % (.05)	.1	L	.7	L	2	.2	L	L	3
Ti % (.002)	.1	.005	.002	.5	.5	.5	.1	.15	.01
Mn (10)	500	100	100	50	300	300	50	50	3000
Ag (.5)	50	100	20	2	7	.5	.5	.5	50
As (200)	2000	500	5000	N	N	L	N	1000	2000
Au (10)	N	N	L	N	N	N	N	N	N
B (10)	100	20	10	30	200	200	50	70	50
Ba (20)	150	20	20	700	1500	700	100	150	20
Be (1)	1	L	L	L	1	5	10	1	1
Bi (10)	N	N	L	N	L	N	N	N	10
Cd (20)	N	N	N	N	20	N	N	N	20
Co (5)	L	N	20	N	20	L	N	N	N
Cr (10)	10	N	N	10	30	100	10	10	N
Cu (5)	300	70	1000	70	500	50	20	10	1000
La (20)	50	50	50	50	50	50	50	50	50
Mo (5)	N	N	N	N	N	N	N	N	N
Nb (20)	L	L	20	20	20	20	20	20	L
Ni (5)	10	N	10	N	20	20	L	5	5
Pb (10)	200	5000	700	100	1000	50	100	20	G20,000
Sb (100)	100	700	N	N	L	N	N	N	100
Sc (5)	5	N	N	5	10	20	5	5	6
Sn (10)	N	N	N	N	100	N	N	N	200
Sr (100)	N	N	N	500	L	100	200	N	N
V (10)	30	10	10	50	200	100	100	50	30
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	50	L	L	L	L	50	20	L	L
Zn (200)	2000	L	200	L	2000	L	N	N	5000
Zr (10)	100	N	N	200	200	300	L	200	20
Th (100)	N	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 5 Jan 84

Semi-Quantitative Spectrographic Analysis

-3-12

lement	Sample Number							
	1408	1409	1410	1411	1412	1413	1414	1415
Fe %(.05)	5	5	3	G20	7	5	5	20
Mg %(.02)	1	1	1	1.5	.5	.3	1	.2
Ca %(.05)	.05	5	5	3	.5	.5	1.5	.05
Ti %(.002)	.2	.1	.15	.02	.2	.2	.2	.15
Mn(10)	2000	3000	G5000	1500	1000	50	500	200
Ag(.5)	3	5	5	2	100	2	100	20
As(200)	N	500	L	N	N	N	5000	700
Au(10)	N	N	N	N	N	N	N	N
B(10)	20	20	10	50	50	50	20	20
Ba(20)	1000	1500	1000	300	300	2000	200	200
Be(1)	1	7	5	7	5	5	3	5
Bi(10)	N	10	N	30	30	20	N	10
Cd(20)	L	100	200	N	N	N	N	N
Co(5)	10	10	5	100	10	L	N	N
Cr(10)	20	50	20	L	20	N	10	20
Cu(5)	150	150	200	G20,000	G20,000	2000	150	200
La(20)	50	50	50	50	50	50	50	50
Mo(5)	N	100	5	L	L	50	5	20
Nb(20)	20	20	20	20	20	20	20	20
Ni(5)	15	15	10	30	10	N	N	L
Pb(10)	500	7000	10,000	150	G20,000	100	5000	150
Sb(100)	N	N	N	N	N	L	L	N
Sc(5)	10	5	5	5	5	5	5	5
Sn(10)	N	N	N	N	N	N	N	N
Sr(100)	200	100	100	100	300	200	200	L
V(10)	100	70	70	70	50	50	50	100
W(50)	N	50	100	50	50	N	N	N
Y(10)	10	N	N	10	L	100	20	10
Zn(200)	1000	7000	7000	500	G10,000	L	1000	500
Zr(10)	100	100	200	20	100	200	50	100
Th(100)	N	N	N	N	N	N	N	N

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 5 Jun 84

Semi-Quantitative Spectrographic Analysis

lement — Sample Number

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Fe %(.05)	7	5	7	.7	1	1	10		
Mg %(.02)	.05	3	.2	3	G10	3	2		
Ca %(.05)	L	10	1	10	20	1.5	.05		
Ti %(.002)	.05	.01	.01	.005	.05	.2	.3		
Mn(10)	100	300	70	100	500	300	1500		
Ag(.5)	500	100	2	100	200	200	2000		
As(200)	G10,000	700	200	300	N	L	200		
Au(10)	N	N	N	N	N	N	L		
B(10)	20	100	20	20	L	500	30		
Ba(20)	200	50	20	L	50	150	1500		
Be(1)	2	1	L	L	L	2	2		
Bi(10)	N	N	N	N	G1000	50	N		
Cd(20)	N	G500	20	G500	500	500	N		
Co(5)	N	70	20	L	5	20	20		
Cr(10)	N	50	N	L	N	N	N		
Cu(5)	200	2000	150	700	200	G20,000	100		
La(20)	50	50	50	50	50	50	70		
Mo(5)	20	10	200	50	N	200	G2000		
Nb(20)	20	L	L	L	L	20	L		
Ni(5)	10	200	100	100	L	10	10		
Pb(10)	2000	G20,000	200	G20,000	7000	G20,000	2000		
Sb(100)	200	200	L	300	N	1000	L		
Sc(5)	5	L	N	N	L	L	10		
Sn(10)	L	N	N	N	50	L	N		
Sr(100)	L	L	N	N	200	100	300		
V(10)	50	10,000	150	20	20	50	500		
W(50)	N	N	N	N	N	70	N		
Y(10)	20	N	N	N	N	N	10		
Zn(200)	500	G10,000	2000	G10,000	2000	G10,000	500		
Zr(10)	50	20	N	N	N	50	100		
Th(100)	N	N	N	N	N	N	N		

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

added 5 Jun 84

Atomic-Adsorbtion Analysis

Element

Sample Number

83-12

	2001	2002	2003	2004	2005	2006	2007	2008	2009
As (5)	G2000	1100	190	300	5	65	130		
Au (.05)	3.1	.05	L(.05)	N(.05)	.05	.25	3.5		
Sb (1)	64	180	4	160	6	610	28		
Zn (5)									

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Semi-Quantitative Spectrographic Analysis

lement	Sample Number								
	2010	2011							
Fe % (.05)	1	20							
Mg % (.02)	1.5	1							
Ca % (.05)	7	1							
Ti % (.002)	.02	.1							
Mn (10)	2000	G5000							
Ag (.5)	2	1000							
As (200)	N	2000							
Au (10)	N	N							
B (10)	100	500							
Ba (20)	300	1000							
Be (1)	G1000	2							
Bi (10)	L	10							
Cd (20)	N	200							
Co (5)	N	10							
Cr (10)	N	700							
Cu (5)	50	1500							
La (20)	50	70							
Mo (5)	L	10							
Nb (20)	L	L							
Ni (5)	N	1000							
Pb (10)	200	20,000							
Sb (100)	N	10,000							
Sc (5)	N	15							
Sn (10)	500	100							
Sr (100)	N	1000							
V (10)	10	100							
W (50)	N	N							
Y (10)	N	50							
Zn (200)	200	G10,000							
Zr (10)	L	70							
Th (100)	N	N							

Analysis by Branch Exploration Research, U.S. Geol. Survey, Denver, Colorado
Fe, Mg, Ti reported in %, all other elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

ashlock
5 June 84

Atomic-Adsorbtion Analysis

Element

Sample Number

83-12

	374	375	376	377	378				
As (5)	G200		G200		50				
Au (.05)									
Sb (1)	G100		G100		3				
Zn (5)	15		35		80				

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown. N = not detected at limit of detection.

added 10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	428	429	430	431	432	433	434	435	436
As (5)	15	10	N(5)	10	L(5)	25	520	35	65
Au (.05)	.05	N(.05)	N(.05)	.03	.15	.30	.35	120	
Sb (1)	320	22	55	1	N(1)	6	G(1000)	100	59
Zn (5)	65	1260	10	G1000	240	40	G(2000)	260	G200

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	437	438	439	440	441	442	443	444	445
As (5)	80	G200	5	110	35	30	25	15	G200
Au (.05)									
Sb (1)	5	G100	N(1)	3	19	5	3	2	G100
Zn (5)	65	130	75	15	G200	25	55	10	G200

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	446	447	448	449	450	451	452	453	454
As (5)	160	20	110	5	L(5)	140	220	30	70
Au (.05)						.15	1.2	N(.05)	.10
Sb (1)	60	16	47	2	N(1)	20	35	N(1)	N(1)
Zn (5)	G200	G200	55	20	5	85	10	5	G200

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown N = not detected at limit of detection < detected but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element

Sample Number 83-12

	455	456	457	458	459	460	461	462	463
As (5)		20	G200	G200	G200	G200	G200	20	30
Au (.05)									
Sb (1)		3	20	12	G100	25	12	1	2
Zn (5)		G200	G200	45	5	G200	N(5)	10	20

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1008	1009	1010	1011	1012	1013	1014	1015	1016
As (5)	N(5)	N(5)	N(5)	N(5)	5	130	25	15	45
Au (.05)	N(.05)	6.25	N(.05)	N(.05)	32.80	2.0	1.10	N(.05)	.15
Sb (1)	5	N(1)	3	5	7	460	390	6	G(1000)
Zn (5)	10	110	10	5	10	10	20	15	G(2000)
Hg(.2)	.24	.35	.14	.20	.50	G(5.0)	1.5	.24	G(5.0)

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1001	1002	1003	1004A	1004B	1005	1006	1007	XXXXX
As (5)	5	N(5)	350	N(5)	10	N(5)	20	N(5)	XXXXX
Au (.05)	N(.05)	N(.05)	N(.05)	N(.05)	31.70	N(.05)	.05	N(.05)	XXXXX
Sb (1)	N(1)	10	2	N(1)	N(1)	N(1)	3	N(1)	XXXXX
Zn (5)	10	10	670	5	30	15	30	5	XXXXX
Hg(.2)	.30	.50	.60	.20	25	.35	.10	.30	XXXXX

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element

Sample Number

83-12

	510	511	512	513	514	515	516	517	518
As (5)	L(5)	210	5	5	5	N	40	N	80
Au (.05)	N(.05)	N(.05)	N(.05)	N(.05)	N(.05)	N(.05)	.05	N(.05)	N(.05)
Sb (1)	N(1)	600	5	N	1	1	.85	8	31
Zn (5)	30	380	5	N(5)	N	15	220	230	680

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

Plus greater than, minus less than, N not detected at limit of determination

10-29-84

Atomic-Adsorbtion Analysis

Element

Sample Number 83-12

	528	529	530	531	532	533	534	535	536
As (5)	N	5	N	N	5	10	10	L(5)	220
Au (.05)	N(.05)	N(.05)	N(.05)	N(.05)	N(.05)				
Sb (1)	N	N(1)	N	1	2	5	N(1)	N(1)	35
Zn (5)	N	370	5	N(5)	N	G(200)	G(200)	40	G(200)

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown. N = not detected at limit of detection. < = detected, but below value shown.

10-29-84

Atomic-Adsorbtion Analysis

lement — Sample Number

83-12

	1269	1270	1271	1272	1273	1274	1275	1276	1277A
As (5)	90	250	400	230	690	30	30	1000	450
Au (.05)	1.5	.40	.20	.10	.05	1.1	.05	7.0	1.5
Sb (1)	3	6	130	74	16	4	N(2)	124	2
Zn (5)	90	100	85	10	760	35	15	5	15
Au wT							10	10	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1277B	1278	1279	1280A	1280B	1281	1282	1283	1284
As (5)	150	580	G2000	900	60	420	700	G2000	50
Au (.05)	.10	.10	.25	.10	.10	.05	3.3	.70	.05
Sb (1)	N(2)	34	102	670	8	30	130	14	10
Zn (5)	40	400	10	400	210	200		150	350
Au wT	10	10	10	10	10	10		10	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
[illegible] greater than value shown. N

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1294	1295	1296	1297	1298	1299	1300	1301	1302
As (5)	G2000	250	280	650	500	75	280	240	400
Au (.05)	.60	.45	.60	2.2	1.3	.05	29	.10	L(.05)
Sb (1)	40	30	4	74	28	2	72	4	4
Zn (5)								95	35

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1285	1286	1287	1288	1289	1290	1291	1292	1293
As (5)	110	280	180	680	70	200	N(5)	130	450
Au (.05)	.05	.05	.05	.95	L(.05)	1.25	L(.05)	1.4	.05
Sb (1)	N(2)	G1000	G1000	G1000	L(2)	G1000	4	16	2
Zn (5)	25								
Au wT	10								

Analysis by [illegible]h Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements [illegible]ed in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1303	1304	1305A	1305B	1306	1307A	1307B	1308	1309
As (5)	60	430	310	10	400	30	30	10	10
Au (.05)	3.6	38.0	5.4	2.6	1.6	L(.05)	.05	.10	.05
Sb (1)	6	3	42	4	16	2	1	1	2
Zn (5)	600	160	240	30	280	85	65	80	L(5)

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parenthesis.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1310	1311A	1311B	1312	1313	1314A	1314B	1315	1316
As (5)	L(10)	50	600	L(10)	L(10)	N(10)	30	10	30
Au (.05)	.90	.05	.30	.05	L(.05)	.40	3.3	1.1	11.0
Sb (1)	1	5	5	N(1)	2	3	N(1)	N(1)	5
Zn (5)	65	1000	90	170	85	130	35	90	45

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
> = greater than value shown. N = [illegible]

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1317	1318	1319	1320	1321A	1321B	1322	1323	1324
As (5)	30	100	250	10	20	100	120	20	800
Au (.05)	7.3	5.9	.15	10.0	.05	2.5	.15	.20	2.0
Sb (1)	3	5	150	3	3	3	3	4	5
Zn (5)	60	170	180	290	35	340	G2000	1100	G2000

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown. N = not detected at limit of detection

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-13

	1325A	1325B	1326A	1326B	1327	1328	1329	1330	1331
As (5)	90	30	N(10)	N(10)	20	N(10)	N(10)	N(10)	N(10)
Au (.05)	.25	.75	L(.05)	.10	.50	3.5	2.3	L(.05)	.25
Sb (1)	6	4	2	2	2	2	3	2	3
Zn (5)	G2000	250	60	N(5)	5	730	G2000	70	95

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1332	1333	1334	1335A	1335B	1336	1337	1338	1339
As (5)	20	90	N(10)	N(10)	L(10)	N(10)	L(10)	N(10)	N(10)
Au (.05)	.10	6.6	10.0	60.0	.20	2.5	3.4	.55	L(.05)
Sb (1)	3	4	3	3	3	4	4	5	2
Zn (5)	60	130	80	45	60	40	35	600	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1340	1341	1342	1343	1344	1345	1346	1347	1348
As (5)		N(10)	110	N(10)	N(10)	N(10)	N(10)	10	N(10)
Au (.05)		11.0	.90	.30	L(.05)	L(.05)	1.6	1.0	L(.05)
Sb (1)		3	840	4	L(1)	1	2	1	1
Zn (5)		G2000	250	20	10	L(5)	400	70	20

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1348X	1349	1350A	1350B	1351	1352	1353	1354	1355A
As (5)	N(10)	10	40	L(10)	10	N(10)		N(10)	10
Au (.05)	16.0	.20	.05	13.0	.15	48.0		1.6	5.9
Sb (1)	7	N(1)	2	N(1)	2	1		2	2
Zn (5)	G2000	750	60	30	35	220		15	800

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1355B	1356	1357	1358	1359A	1359B	1360	1361	1362
As (5)	L(10)	N(10)	N(10)	N(10)	560	650	650	800	900
Au (.05)	5.8	.10	L(.05)	L(.05)	L(.05)	.25	.10	.10	.05
Sb (1)	2	2	2	1	18	85	730	100	270
Zn (5)	G2000	25	35	25	300	30	G2000	G2000	G2000
Au wT							10	10	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

10-29-84

Atomic-Adsorbtion Analysis

Element — Sample Number

83-10

	1026	1027	1028	1029	1030	1031	1032A	1032B	1033
As (5)	30	15	170	700	90	750	1000	700	20
Au (.05)									
Sb (1)	L(2)	L(2)	120	60	600	950	G1000	G1000	84
Zn (5)	30	G2000	35	70	100	280	110	70	N(5)

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element — Sample Number

	1034	1035	1036	1037	1038	1039	1040A	1040B	104
As (5)	G2000	G200	15	L(5)	N(5)	N(5)	50	10	300
Au (.05)									
Sb (1)	70	G200	L(2)	N(2)	N(2)	N(2)	18	58	6
Zn (5)	25	100	N(5)	N(5)	N(5)	N(5)	20	35	30

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, L = detected, but below value shown.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1042A	1042B	1043A	1043B	1044	1045	1046	1047	1048
As (5)	5	140	860	700	250	650	470		300
Au (.05)									
Sb (1)	L(2)	10	8	4	52	12	2		300
Zn (5)	10	280	230	200	900	240	600		180

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-1?

	1049	1050	1051	1052	1053	1054	1055	1056	1057
As (5)	140	55	25	L(5)	15	25	N(5)	10	20
Au (.05)									
Sb (1)	32	6	2	N(2)	N(2)	N(2)	N(2)	N(2)	N(2)
Zn (5)	5	L(5)	10	15	15	80	10	5	20

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

lement | Sample Number

83-1

	1058	1059	1060	1061	1062	1063	1064	1065	1066
As (5)	20	20	20	20	20	10	20	30	10
Au (.05)									
Sb (1)	N(2)	N(2)	N(2)	N(2)	N(2)	N(2)	N(2)	N(2)	N(2)
Zn (5)	10	10	20	5	30	100	20	15	45

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

lement — Sample Number

83-12

	1067	1068	1069	1070	1071A	1071B	1072	1073	1074
As (5)	10	20	20	10	10	5	L(5)	10	10
Au (.05)				L(.05)	N(.05)	N(.05)	N(.05)	.10	N(.05)
Sb (1)	N(2)	N(2)	N(2)	N(1)	N(1)	N(1)	N(1)	N(1)	N(1)
Zn (5)	25	15	40	40	190	70	5	G200	40

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element

Sample Number

83-12

	1075A	1075B	1076	1077	1078	1079	1080	1081	1082
As (5)	L(5)	N(5)	90	L(5)	100	G200	170	20	20
Au (.05)	N(.05)	N(.05)	N(.05)	N(.05)	N(.05)	.15	L(.05)		
Sb (1)	N(1)	N(1)	1	N(1)	N(1)	24	3	N(2)	N(2)
Zn (5)	110	85	30	70	230	100	25	G(2000)	50

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1083	1084A	1084B	1085	1086	1087	1088	1089	1090
As (5)	500	30	20	10	G(2000)	G(2000)	G(2000)	G(2000)	350
Au (.05)									
Sb (1)	130	22	2	N(2)	44	16	51	38	66
Zn (5)	35	G(2000)	600	60	50	50	G(2000)	200	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1091	1092	1093	1094	1095	1096	[redacted]	[redacted]	[redacted]
As (5)	50	G(2000)	30	850	20	G(2000)			
Au (.05)									
Sb (1)	4	G(1000)	4	12	2	110			
Zn (5)	450	1600	20	30	10	240			

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	[redacted]	[redacted]	[redacted]	1112	1113	1114	1115	1116	1117
As (5)				G200			75		G200
Au (.05)				2.6			.15		.05
Sb (1)				22			N(1)		G100
Zn (5)				G200			140		30

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1118	1119	1120	1121	1122	1123	1124	1125	1126
As (5)	G200	G200	G200		30	25	6	40	6
Au (.05)	.25	2.3	.35		.10	.10	2.2	33	.05
Sb (1)	G100	28	24		G100	1	3	G100	10
Zn (5)	G200	30	15		G200	G200	80	G200	G200

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

lement | Sample Number

83-12

	1127	1128	1129	1130	1131	1132	1133	1134	1135
As (5)	G200	10	10						
Au (.05)	.05	N(.05)	5.3						
Sb (1)	44	N(1)	100						
Zn (5)	170	15	G200						

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G — greater than value shown. N — not detected at limit of detection. < — detected, but below value shown.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1140	1141	1142	1143	1144	1145	1146	1147	1148
As (5)	25	1000	850	10	450	130	40	20	50
Au (.05)	.10					.05	L(.05)		L(.05)
Sb (1)	4	22	2	170	23	200	N(2)	N(2)	160
Zn (5)	120	550	G(2000)	G(2000)	G(2000)	760	15	30	800
Au wT							10		

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1149	1150	1151A	1151B	1152	1153	1154	1155A	1155B
As (5)	50	41	16		360	L(10)	450	100	400
Au (.05)	L(.05)	.20	.20	2.9	.05	L(.05)	.05		
Sb (1)	2	41	16	2	170	2	170	15	27
Zn (5)	G200	570	390	210	400	50	G2000	G(2000)	G(2000)

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1156	1157	1158	1159	1160				
As (5)	650	10	10	40	450				
Au (.05)									
Sb (1)	29	N(2)	N(2)	N(2)	18				
Zn (5)	320	65	50	80	G(2000				

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1161	1162	1163	1164	1165	1166A	1166B	1167	1168A
As (5)	300	G(2000)	G(2000)	N(10)	20	20	10	10	80
Au (.05)				N(.05)	L(.05)			.05	.05
Sb (1)	100	G(1000)	100	28	N(2)	N(2)	N(2)	N(2)	12
Zn (5)	170	G(2000)	G(2000)	G2000	10	180	270	20	5
Au wT				10	10			10	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1168B	1168C	1169	1170A	1170B	1170C	1171	1172	1173
As (5)	1400	650	850	150	50	110	20	10	680
Au (.05)		.05		.05	.10	.05	L(.05)	.05	.10
Sb (1)	130	120	70	20	N(2)	N(2)	N(2)	N(2)	2
Zn (5)	20	10	G(2000)	G2000	180	150	5	80	230
Au wT		10		10	10	10	10	10	

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1174	1175	1176	1177	1178	1179	1180	1181	1182
As (5)	1400	220	600	320	1800	20	130	15	5
Au (.05)	.15	4.5	.70	.60	4.6	N(.05)	.55	L(.05)	N(.05)
Sb (1)	18	4	34	26	110	N	N	N	N
Zn (5)	690								

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

Element	1183	1184	1185	1186	1187	1188	1189	1190	1191
As (5)	1000	140	G2000	120	220	35	G2000	100	110
Au (.05)	2.0	18	2.3	.70	.35	.90	19	2.7	2.6
Sb (1)	4	28	6	14	2	6	40	12	80
Zn (5)									

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements [illegible] in ppm.

Lower limits of determination are in parentheses.

[illegible]

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-12

	1192	1193	1194	1195	1196	1197	1198	1199	1200
As (5)	160	130	5	90	10	100	L(5)		
Au (.05)	6.5	.40	.20	5.2	1.5	1.7	L(.05)		
Sb (1)	14	88	L	8	2	20	4		
Zn (5)									

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown N = not detected at limit of detection < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number 83-12

	1201A	1201B	1202	1203	1204	1205	1206	1207	1208
As (5)	400	10	500	40	230	40	40	10	10
Au (.05)	.25	.05	.05	.10	.40	.70	2.0	.30	.15
Sb (1)	44	N(2)	2	2	G1000	4	18	N(2)	N(2)
Zn (5)	1700	10	600	1900	1600	20	45	20	25
Au wT	10	10	10	10	10	10	10	10	10

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.
G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown

10-29-84

Atomic-Adsorbtion Analysis

lement — Sample Number

83-12

	1253	1254	1255	1256	1257A	1257B	1258	1259	1260
As (5)	G200	G200	180	30	G(200)	25	N(5)	170	10
Au (.05)									
Sb (1)	N(1)	G100	25	N(1)	G100	78	16	G100	2
Zn (5)	G200	G200	55	25	G200	G200	50	G200	G200

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, < detected but below value shown

10-29-84

Atomic-Adsorbtion Analysis

Element — Sample Number

83-12

	1261	1262	1263A	1263B	1264	1265	1266	1267	1268
As (5)	5	50	10	30	220	280	440	770	50
Au (.05)						51.0	.15	.10	L(.05
Sb (1)	2	7	N(1)	N(1)	G100	45	87	50	11
Zn (5)	30	60	G200	G200	G200	L(5)	400	60	L(5)

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado

All elements reported in ppm.

Lower limits of determination are in parentheses.

G = greater than value shown, N = not detected at limit of detection, < detected, but below value shown.

10-29-84

Atomic-Adsorbtion Analysis

Element | Sample Number

83-17

	1017	1018	1019	1020	1021	1022	1023	1024	1025
As (5)	5	200	115	5	N(5)	10	40	10	25
Au (.05)	N(.05)	2.05	.25	.05	1.00				
Sb (1)	9	G(1000)	G(1000)	50	8	L(2)	12	L(2)	6
Zn (5)	80	G(2000)	G(2000)	G(2000)	20	20	50	20	G(2000
Hg(.2)	G(5.0)	G(5.0)	G(5.0)	G(5.0)	1.5				

Analysis by Branch Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado
All elements reported in ppm.
Lower limits of determination are in parentheses.

10-29-84