



# UNIVERSITY OF NEVADA RENO

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NBMG OPEN-FILE REPORT 83-2

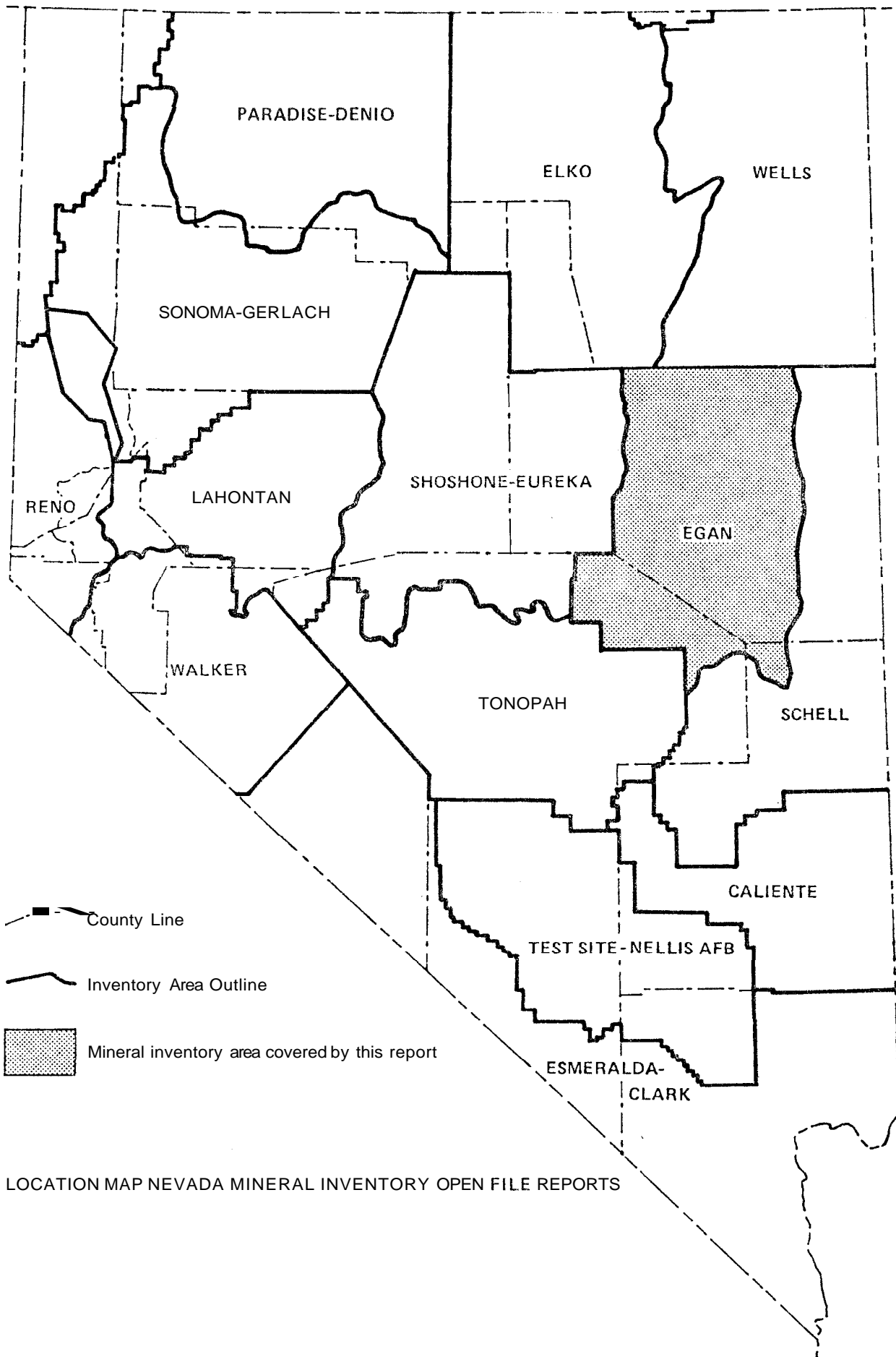
RESULTS OF GEOCHEMICAL SAMPLING WITHIN **THE**  
EGAN RESOURCE AREA, WHITE PINE, NYE, AND LINCOLN COUNTIES,  
NEVADA (PORTIONS OF THE **ELY, LUND, AND ELKO 2<sup>O</sup>** SHEETS)

by J. V. Tingley and Jo L. Bentz

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 Egan Resource Area, under Bureau of Land Management  
Contract #YA-553-CTO-78.

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

See NBMG 83-1 for Inventory Report.



LOCATION MAP NEVADA MINERAL INVENTORY OPEN FILE REPORTS

**Sample Description**

Sample Number	Location	Description
098	Quad: <u>Milk Ranch Spring</u> Sec: <u>25</u> T: <u>9N</u> R: <u>64E</u> UTM: <u>4276040</u> N <u>0697050</u> E	ab, garnet skarn with quartz calcite, chlorite, pyrite, sphalerite, fine-grained diagenetic silicates, MnO and Al <sub>2</sub> O <sub>3</sub> fill. Fluorescence (blue- white fluorescence).
099	Quad: <u>Milk Ranch Spring</u> Sec: <u>25</u> T: <u>9N</u> R: <u>64E</u> UTM: <u>4276420</u> N <u>0697080</u> E	Siliceous gossan, CuOx, FeOx and Mn clots, fluorite.
100	Quad: <u>Silver King Well</u> Sec: <u>Unsurv.</u> T: <u>5N</u> R: <u>63E</u> UTM: <u>4233030</u> N <u>0683250</u> E	Dump, grab brown jasperoid, hematite gossan.
	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
267	Quad <u>SIDEHILL PASS</u> Sec <u>Unsurv.</u> T <u>N</u> R <u>63E</u> UTM <u>4239220</u> N <u>0686000</u>	<u>Dump, grab, gossan with spots galena quartz, calcite CuOx, Cinn-br limonite in vugs.</u>
268	Quad: <u>SIDEHILL PASS</u> Sec: <u>Unsurv.</u> T: <u>5N</u> R: <u>63E</u> UTM: <u>4239290</u> <u>0686040</u> E	<u>Outcrop, random chip, bleach mod Kaolinized quartz porphyry <u>limonite</u> points, flooding(weak) along fractur</u>
269	Quad: <u>SIDEHILL PASS</u> Sec: <u>Unsurv.</u> T: <u>5N</u> R: <u>63E</u> UTM: <u>4239650</u> N <u>0686000</u> E	<u>Dump, grab, gossan, limonite hematit clots galena, vugs with cerrusite.</u>
270	Quad <u>CURRIE PLANIMETRIC 30' &amp; CURRIE 3'</u> Sec <u>13(?)</u> T: <u>25N</u> <u>SW 7.5</u> R: <u>63E</u> UTM: _____ N _____ E	<u>Dump, black shale coal fragments,</u> <u>(Sample not sent for analysis)</u>
271	Quad <u>CURRIE PLANIMETRIC 30' and Curric</u> Sec: <u>3 SW 7.5</u> T: _____ R: _____ UTM: _____ N _____ E	<u>Dump, black carbonaceous shale clots gypsum, some grey-brown LS fragments.</u> <u>(Sample not sent for analysis)</u>
272	Quad <u>AURUM 2 NW</u> Sec: <u>Unsurv.</u> T _____ R: _____ UTM <u>4421800</u> N <u>0676910</u> E	<u>Grab, rock, white quartz with stibcor ite, stibnite, massive calcite, scheelite present.</u>
273	Quad <u>AURUM 2 NW</u> Sec: _____ T: _____ R: _____ UTM: <u>4421470</u> N <u>0677970</u> E	<u>Dump, milk-white vein quartz with white calcite, spots tetrahedrite. Small amount of galena.</u>
274	Quad: <u>AURUM 2 NW</u> Sec: _____ T: _____ R: _____ UTM <u>4421480</u> N <u>0678000</u>	<u>Dump, grab, siliceous gossan from "vein", limestone breccia with calcit veining, silica.</u>
275	Quad <u>AURUM 2 NW</u> Sec <u>Unsurv.</u> T _____ R _____ UTM <u>4425300</u> N <u>0681260</u> E <u>District Cherry Cr.</u>	<u>Select dump sample, grey-white marble white calcite, clots very-fine graine sulfide w/ruby-red tarnish.</u>



**Sample Description**

Sample Number	Location	Description
276	Quad: <u>Aurum 2 NW</u> Sec: <u>Unsurv.</u> T: _____ R: _____ UTM: <u>4425150</u> N <u>0680810</u> E	Brecciated quartz vein, limonite points in vugs, free gold with dark hematite spots in cellular quartz areas in vugs.
_____	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	_____ _____ _____
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	_____ _____ _____
_____	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	_____ _____ _____

**Sample Description**

Sample Number	Location	Description
277	Quad: AURUM 2 NE Sec: Unsurv. T: R: UTM 44253513 N 0682650 E District Cherry Creek	Select dump, vein quartz, blebs gale tetrahedrite, milk white quartz.
278	Quad: AURUM 2 NE Sec: Unsurv. T: R: UTM 4425340 N 0682200 E	Select dump, vein quartz, dense, cle chalcedonic, clouds fn-grained sulf some tetrahedrite, galena, pyrite.
	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: _____ Set: _____ T: _____ R: _____ UTM: _____ N _____ E	

**Sample Description**

Sample Number	Location	Description
279	Quad: Aurum 2 NE Sec: Unsurv. T: R: UTM: 4429500 N 0682350 E	Dump, pale green porphyritic rock, chlorite, sericite, quartz.
280	Quad: Aurum 2 NE Sec: Unsurv. T: R: UTM: 4425880 N 0682660 E	Dump, white vein quartz, with small dots magnetite-hematite, some CuOx staining.
281	Quad: Aurum 2 NE Sec: Unsurv. T: R: UTM: 4225800 N 0682580	Select dump, vein quartz with small clear quartz crystals in vugs, limonite, bluegreen CuOx staining, scheelite present.
282	Quad: Aurum 2 NW Sec: Unsurv. T: R: UTM: 4421190 N 0681150 E	Select dump, vein quartz, milk white with clots sphalerite, galena, chalcopyrite, some pyrite clots, massive hematite in schist.
283	Quad: Aurum 2 NW Sec: Unsurv. T: R: UTM: 4421700 N 0680950 E	Select dump, white vein quartz with galena, sphalerite, pyrite, some chalcopyrite.
284	Quad: Butte Valley 4 SW Sec: Unsurv. T: R: UTM: 4382580 N 0655260 E	Select, dump, soft, banded, gossanous material, solution cavity filling, dark brown limonite, MnO <sub>2</sub> , black calcite crystals.
285	Quad: Butte Valley 1 SE Sec: Unsurv. T: R: UTM: 4403900 N 0664620 E	Select dump, gossan-jasperoid, with hematite.
286	Quad: Green Springs 15 <sup>1</sup> Sec: 27 T 15N R: 57 E UTM: 4332950 N 0626050 E	Rock chip, pale brown jasperoid, dark red on weathered surface, MnO film, Quartz-calcite veining.
287	Quad: Shingle Pass 7 1/2 Sec: 1 T 8N R: 62 E UTM: 4271210 N 0677410 E	Select dump, soft, pale cinnamon-brown limonites material probably solution cavity filled.

Sample Description

Sample Number	Location	Description
431	Quad: Railroad Pass 15' Sec: 25 T: 25N R: 54E UTM: 4429850 N 0599275 E District Huntington Creek	Silic replaced ls, dense, impure + with abundant Cuox Sm, amt, gossan + brx. Poss. chalcocite.
432	Quad: Railroad Pass 15' Sec: 36 T: 25W R: 54E UTM: 4429450 N 0599500 E District Huntington Creek	Crudely layered tactite with bands of red garnet, calcite + epid/diops + containing scattered clots of hematite minor pyrite + chalcopyrite. Very minor scheelite.
433	Quad: Railroad Pass 15' Sec: 25 T: 25N R: 54E UTM: 4429975 N 0599700 E District Huntington Creek	Garnet-bearing skarn with abundant Cuox, also Cuoxs cement silic. brx frags. Minor sulfides also.
	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
509	Quad: <u>Pancake Summit 15'</u> Sec: <u>1</u> T: <u>16N</u> R: <u>55E</u> UTM: <u>4348820</u> N <u>0609570</u> E	Barite vein in dolom.
	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	
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	

**Sample Description**

Sample Number	Location	Description
533	Quad: Green Springs 15' Sec: 15 T: 16N R: 57E UTM: 4345100 N 0625200 E Monte Cristo Property White Pine District	Drill core chips, garnet, diopside, epidote skarn, pyrite trace molybdenite, scheelite.
534	Quad: Green Springs 15' Sec: 22 T: 16N R: 57E UTM: 4344150 N 0625290 E Seligman Skarn White Pine District	Massive garnet-diopside skarn, white quartz lenses, clots and streaks chalcopyrite, pyrite.
535	Quad: Green Springs 15' Sec: 21 T: 16N R: 57E UTM: 4344550 N 0623800 E Monte Cristo Property White Pine District	Massive garnet skarn, cuts on east contact of Monte Cristo stock.
536	Quad: Green Springs 15' Sec: 22 T: 16N R: 57E UTM: 4344000 N 0625500 E Chester Group White Pine District	Quartz vein, vuggy, with bands hematite limonite, MnO and CuOx staining.
537	Quad: Pancake Summit 15' Sec: 9 T: 16N R: 57E UTM: 4346100 N 0625000 E Seligman Mine White Pine District	Gossan sample from adit dump.
538	Quad: Pancake Summit 15' Sec: 10 T: 16N R: 57E UTM: 4346700 N 0625000 E Seligman Mine White Pine District	Gossan in vein quartz, clots cerussite galena.
539	Quad: Pancake Summit 15' Sec: 16 T: 16N R: 57E UTM: 4346100 N 0624750 E Unnamed Prospect White Pine District	Massive garnet skarn, disseminated scheelite.
540	Quad: Pancake Summit 15' Sec: 16 T: 16N R: 57E UTM: 4346100 N 0624750 E	Quartz vein in skarn, clots gossan, fine-grained silver-grey sulfide, CuOx, MnO.
541	Quad: Pancake Summit 15' Sec: 11 T: 16N R: 57E UTM: 4347700 N 0626600 E Unnamed Lead Prospect White Pine District	White calcite vein, clots silver-grey sulfide, possibly galena, CuOx stain.

**Sample Description**

Sample Number	Location	Description
542	Quad: Pancake Summit 15' Sec: 11 T: 16N R: 57E UTM: 4347450 N 0626825 E Becky #1 Claim White Pine District	Massive gossan with cerussite, galena  (Re-sample of #916)
543	Quad: Pancake Summit 15' Sec: 3 T: 16N R: 57E UTM: 4348258 N 0626080 E Jerry A Mine White Pine District	Massive gossan, jasperoid, clots of cerussite.
544	Quad: Pancake Summit 15' Sec: 3 T: 16N R: 57E UTM: 4348250 N 062650 E Dog Star Mine White Pine District	Massive cerussite, clots of dull yellow oxide(?)  (Re-sample of #914)
545	Quad: Pancake Summit 15' Sec: 3 T: 16N R: 57E UTM: 4348325 N 0626325 E Dog Star Mine White Pine District	FeOx gossan with cerussite, smithsonite  (Re-sample of #913)
546	Quad: Pancake Summit 15' Sec: 16 T: 16N R: 57E UTM: 4345500 N 0624110 E Hopi Claim White Pine District	Quartz vein with clots and lenses stibnite, arsenopyrite, pyrite, bournonite, and possibly some jamesonite
547	Quad: Green Springs 15' Sec: 23 T: 16N R: 57E UTM: 4343690 N 0627810 E Ne Plus Ultra Mine White Pine District	Massive hematite-limonite gossan, cerussite, some CuOx.  (Re-sample of #926)
548	Quad: Green Springs 15' Sec: 23 T: 16N R: 57E UTM: 4343625 N 0627930 E Rocco - Homestead Mine White Pine District	Replacement ore, some white quartz, clots galena, cerussite, CuOx stain.
549	Quad: Green Springs 15' Sec: 25 T: 16N R: 57E UTM: 4342750 N 0628550 E Great Valley Mine White Pine District	Gossan, clots galena, CuOx.
550	Quad: Pancake Summit 15' Sec: 16 T: 16N R: 57E UTM: 4345400 N 0623550 E Silver Bell Mine White Pine District	Garnet-quartz skarn, CuOx-stained, scattered, large (2mm) scheelite crystals, sprays of bladed bismutite, bismuthinite, pyrite, chalcopyrite.

**Sample Description**

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551	Quad: <u>Pancake Summit 15'</u> Sec: <u>16</u> T: <u>16N</u> R: <u>57E</u> UTM: <u>4345400</u> N <u>0623550</u> E <u>Silver Bell Mine</u> <u>White Pine District</u>	Quartz-sulfide ore, clots massive pyrite, chalcopyrite, bismutite, bismuthinite, some scheelite.
552	Quad: <u>Pinto Summit 15'</u> Sec: <u>25</u> T: <u>18N</u> R: <u>54E</u> UTM: <u>4361100</u> N <u>0600400</u> E <u>Alhambra Hills Pit</u> <u>Pinto District</u>	Vein quartz with clots galena, sphalerite, cerussite, iron oxides, veins in silicated dolomite.
	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**

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672	Quad: <u>Saw Mill Canyon</u> Sec: <u>17</u> T: <u>12N</u> R: <u>63E</u> UTM: <u>4308340</u> N <u>0680270</u> E <u>District-Ellison</u>	<u>Green, dense, siliceous altered</u> <u>ign brx? with blk lenses + veinlets</u> <u>with sulfides (pyrite + chalcopyrite)</u>
	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	
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	

## Sample Description

Sample Number	Location	Description
701	Quad: Duck Creek Valley 7 1/2 Sec: 14 T: 18 N R: 64 E UTM: 4367050 N 0694400 E	Light tan to beige rextallized limest with replacement pods of galena. Coars calcite fills vugs.
702	Quad: Duck Creek Valley 7 1/2 Sec: 11 T: 18 N R: 64 E UTM: 4367650 N 0694250 E	Tan-beige rextallized limestone with pods of galena and small amount CuO, associated with coarse calcite. Some breccia and quartz vein also.
703	Quad: McGill 7 1/2 Sec: 22 T: 18 N R: 64 E UTM: 436400 N 0693300 E	Mottled grey to red-brown silic lime- stone with pods of galena (2-4 cm) an vugs filled with FeOx stained hemimor phite(?) crystals. Some breccia and calcite pods and small amount CuO.
704	Quad: Cleve Creek Baldy 7 1/2 Sec: 10(?) Unsurvey T: 17 N R: 65 E UTM: 4358400 N 0701980 E	Tan to orange(Fe stained) marly silic limestone and limestone breccia with pods and stringers of very fine cryst ine galena. Some CuOx coatings and gossan.
705	Quad: Cleve Creek Baldy 7 1/2 Sec: 8 T: 16 N R: 65 E UTM: 4348700 N 0699060 E	Gossan, punky, FeOxs abundant (hematit and limonite). Also FeOx stained limestone, orange-brown color, some galena pods and siliceous veinlets.
706	Quad: Comins Lake 7 1/2 Sec: 10 T: 15 W R: 64 E UTM: 4339320 N 0693330 E	Sample of Mn rich ore from ore bin at Vietti Shaft. Rks have massive to acicular and bladed crystals of pyrol site, some calcite also. Rk is grey- black in color.
707	Quad: Comins Lake 7 1/2 Sec: 10 T: 15 N R: 64 E UTM: 4339260 N 0693240 E	Silic red siltstone and grey limestone breccia with calcite veins and pods, FeOxs and silic coatings. Small amount punky gossan.
708	Quad: Comins Lake 7 1/2 Sec: 10 T: 15 N R: 64 E UTM: 4339600 N 0693100 E	Slightly calcareous, red-grey Sh and silty Sh fragments from drill hole cuttings. Probably chairman Sh. Limon and silic coatings on Sh fragments.
709	Quad: Comins Lake 7 1/2 Sec: 10 T: 15 N R: 64 E UTM: 4339520 N 0693080 E	FeOx stained, punky limestone/siltston and gossan with calcite filled vugs. A few Mn nodules.

**Sample Description**

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710	Quad: <u>Cave Creek Reservoir 7 1/2</u> Sec: <u>34</u> T: <u>16 N</u> R: <u>64 E</u> UTM: <u>4342325</u> N <u>0694300</u> E	Altered and silic med. grey silty limestone + calcite cemented breccia of same. Some Mn and silic coatings. Vugs filled with terminated quartz crystal. CuO noted but not observed in sample.
711	Quad: <u>Comins Lake 7 1/2</u> Silic Sec: <u>33</u> T: <u>16 N</u> R: <u>64 E</u> UTM: <u>4341920</u> N <u>0692710</u> E	Grey-brown limestone and limestone breccia. Some clasts are small pebble size, Fe stained and with quartz veinlets. Al calcite veins and pods in fractured limestone.
712	Quad: <u>Comins Lake 7 1/2</u> Sec: <u>34</u> T: <u>16 N</u> R: <u>64 E</u> UTM: <u>4342340</u> N <u>0693470</u> E	Silica cemented, siliceous limestone breccia. Fragments are light tan to grey brown. Quartz + calcite fills vugs. Mn and silic lenses and coatings.
713	Quad: <u>Comins Lake 7 1/2</u> Sec: <u>33</u> T: <u>16 N</u> R: <u>64 E</u> UTM: <u>4342580</u> N <u>0692800</u> E	Mottled tan-brown silic limestone with chrysocolla, azurite, malachite and Fe sulphate(?) staining. Some samples are vuggy and breccia. Small pods of galena, pyrite and Mn oxides. Sulfid ghosts and silic vein. Possibly epid in vugs.
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
714	Quad: <u>Comins Lake 7 1/2</u> Sec: <u>28</u> T: <u>16 N</u> R: <u>64 E</u> UTM: <u>4343250</u> N <u>0692240</u> E	Light to med. grey silic limestone breccia with calcite in vugs and as cement. Some very altered FeOx stain limestone CuOxs and possibly Ferromol. Sample is variable as taken from
715	Quad: <u>Reipetown 7 1/2</u> Sec: <u>?</u> T: <u>17 N</u> R: <u>61 E</u> UTM: <u>4357350</u> N <u>0666480</u> E	random localities within open pit mine. Grey-brown silty limestone with few crinoid fragments cut by fine silic veinlets and coarser calcite veins, silic breccia cemented with calcite and some
716	Quad: <u>Reipetown 7 1/2</u> Sec: <u>7</u> T: <u>17 N</u> R: <u>62 E</u> UTM: <u>4357670</u> N <u>0670040</u> E	fractured rock. Small amount Fe and Mn stains. Yellow to grey slightly silic limestone with gastropod(?) fossils. Some altered punky limestone with Fe Mn stains. No mineralization observed.
717	Quad: <u>Reipetown 7 1/2</u> Sec: <u>7</u> T: <u>17 N</u> R: <u>62 E</u> UTM: <u>4358080</u> N <u>0670100</u> E	Silic grey-brown limestone and limestone breccia. Some FeOxs.

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718	Quad: Reipetown 7 1/2 Sec: 29 T: 17 N R: 62 E UTM: 4352770 N 0670930 E	Several rock types 1) limonite stained silic. brown gossan 2) Silic greenish limestone with oxid pyrite(?) 3) Maroon shale breccia 4) Coarse calcite vein with gossan and FeOxs.
719	Quad: Reipetown 7 1/2 Sec: 31 T: 17 N R: 62 E UTM: 4351540 N 0669950 E	Purple, banded, not well sorted quartzite with Fe-Mn spots possibly indicating the rock once carried pyrite (disseminated) Rock contains lithic fragments.
720	Quad: Reipetown 7 1/2 Sec: 5 T: 16 N R: 62 E UTM: 4348890 N 0670480 E	White-blue, banded, Fe stained, vuggy vein. White bands are formed of radiating hemimorphite crystals, blue may be CuOx or smithsonite.
721	Quad: Reipetown 7 1/2 Sec: 7 T: 16 N R: 62 E UTM: 4348220 N 0669210 E	Grey-silic limestone breccia cemented with FeOxs, carb (and silica). Rock is coated with limonite and hematite Oxide has vuggy appearance due to dissolved sulfides in matrix of breccia.
722	Quad: Reipetown 7 1/2 Sec: 7 T: 16 N R: 62 E UTM: 4348270 N 0669080 E	Lt. to dk brown, sandy silic limestone with vugs, vein and fracture fillings of concentric ringed malachite, small amount azurite. Some rock sheared.
723	Quad: Reipetown 7 1/2 Sec: 7 T: 16 N R: 62 E UTM: 4348100 N 0669280 E	1) Rextallized limestone with CuOx on fractures. 2) Silic brown limestone breccia with calcite veins and matrix fillings of fluorite, garnet, pink unknown (feld?) and silic and FeOx.
724	Quad: Giroux Wash 7 1/2 Sec: 29 T: 16 N R: 62 E UTM: 4343760 N 0670950 E	Loosely consolidated, calcareous red siltstone. Siltstone contains some pebble size fragments. No mineralization observed. Sample taken from inside adit.
725	Quad: Reipetown 7 1/2 Sec: 13 T: 16 N R: 61 E UTM: 4346220 N 0668250 E	Slightly calcareous, red-tan unconsolidated clay and silt with small vugs. Sample taken from inside adit.
726	Quad: Reipetown 7 1/2 corner of: 7, 12, 13, 18 Sec: T: 16 N R: 62 E UTM: 4347250 N 0668670 E	Altered volcanic(?) or Sediment(?) Loosely consolidated with conspicuous white concretions of secondary origin. Rock is porous and slightly calcareous along fractures.

**Sample Description**

Sample Number	Location	Description
727	Quad: Ely 7 1/2 Sec: 3 T: 15 N R: 62 E UTM: 4339820 N 0673250 E	Calcite vein and calcite cemented breccia with sandy yellow altered silstone/limestone fragments. No mineralization observed.
728	Quad: Ely 7 1/2 Sec: 24 T: 16 N R: 62 E UTM: 4345220 N 0678070 E	Light grey-brown, finely crystalline limestone with some fossil fragments. Rock is cut by siliceous and calcite veinlets. Small amount FeOxs on fracture surfaces.
729	Quad: Ely 7 1/2 Sec: 29 T: 16 N R: 63 E UTM: 4343680 N 0680780 E	Mottled orange-tan, fossiliferous limestone with calcite veinlets, some FeOxs and Fe rich pods. Some lithic fragments in sample.
	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
779	Quad: Ely 15' Sec: 17 T: 14 W R: 63 E UTM: 4327150 N 06793350 E	Outcrop sample of grey to red-brown jasperoid with abundant FeOxs. Rock thoroughly silicified. Some Fe-silic veinlets.
780	Quad: Ely 15' Sec: 17 T: 14 W R: 63 E UTM: 4327400 N 0679125 E	Jasperoid and jasperoid breccia with quartz cement and quartz veinlets. Some vuggy vein material with CuOxs and possibly galena.
781	Quad: Saw Mill Canyon 7 1/2 Sec: 8 T: 12 N R: 63 E UTM: 4308 N E	Green, alter. igneous breccia with sediment clasts, phenos and sulfide in matrix. Some of rock is silic.
	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
783	Quad: <u>Connors Pass 7 1/2</u> Sec: <u>16(?)</u> T: <u>14 W</u> R: <u>65 E</u> UTM: <u>4328250</u> N <u>0701080</u> E	Slibnite bearing clasts( probably re- placed limestone) and jasperoid clast are contained in a silic breccia. Sb Oxs form part of cementing agent i a few samples. Also find quartz vein lets and irregular siliceous blebs.
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
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	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
801	Quad: Mt. Grafton 7 1/2 Sec: 31(?) T: 10 N R: 65 E UTM: 4284930 N 0698480 E	Massive (with few vugs), milky white quartz vein with coarse (1cm) to fine subcubedral crystals of heubnerite, some in discontinuous lenses and irregular pods. Some Mn stains.
802	Quad: Mt. Grafton 7 1/2 Sec: 5 T: 9 N R: 65 E UTM: 4282600 N 0699730 E	Sheared milky white quartz vein with clots of heubnerite. Coarse bluish-white fluorite found in clots and along fractures. Yellow oxide may be Ferro
803	Quad: Mt. Grafton 7 1/2 Sec: 5 T: 9 N R: 65 E UTM: 4282650 N 0699860 E	Sheared, massive, grey-white quartz vein with sericitic coatings on fracture surfaces.
804	Quad: Milk Ranch Spring 7 1/2 Sec: 33 T: 9 N R: 65 E UTM: 4274660 N 0700980 E	Sheared and brecciated quartz vein and mottled brown limestone, in part silicified. Some box work FeOxs. No Scheelite observed with lamping.
805	Quad: Milk Ranch Spring 7 1/2 Sec: 32 (?) T: 9 N R: 65 E UTM: 4274750 N 0699430 E	Rust-Red crystalline to shaley limestone. Some limestone breccia with grey limestone fragments in a crystalline red calcite matrix with fine green vugs.
806	Quad: Milk Ranch Spring 7 1/2 Sec: 32 T: 9 N R: 65 E UTM: 4274780 N 0699440 E	Light grey limestone, some silic, with CuOx and Fe rich clots. Evidence of gossan in sheared limestone (breccia with calcite pods and veinlets. Yell oxide probably FeOx.
807	Quad: Mt. Grafton 7 1/2 Sec: 19 (?) T: 9 N R: 65 E UTM: 4277550 N 0698220 E	Quartz vein, vugs with terminated quartz prisms, with FeOx and Mn on prisms and fractures in a micaceous brown siltstone. (host rock)
808	Quad: Mt. Grafton 7 1/2 Sec: 19 (?) T: 9 N R: 65 E UTM: 4277650 N 0698220 E	Altered green-brown limestone with calcite veins and pods. small amount gossany inclusions. Tactite type with alternating diopside/chlorite rock contains pyrite/chalcopyrite.
809	Quad: Mt. Grafton 7 1/2 Sec: 19 (?) T: 9 N R: 65 E UTM: 4277740 N 0698260 E	Altered, green-brown, silic, limey siltstone. Tactite type rock (fine-grained) which, has small flecks scheelite and pods of pyrite/chalcopyrite and FeOxs.



**Sample Description**

Sample Number	Location	Description
810	Quad: Milk Ranch Spring 7 1/2 Sec: 19(?) T: 9 N R: 65 E UTM: 4277370 N 0697740 E	Limonite and Mn stained vuggy gossan with silic. Tactite fragments, and vein and vug filling of milky white alkalai feld(?). Small amount scheelite when lamped.
810 S	Quad: Milk Ranch Spring 7 1/2 Sec: 19(?) T: 9 N R: 65 E UTM: 4277370 N 0697740 E	Dense, fine-grained, greenish tactite with possible diopside, garnet, tremolite chlorite composition. contains vugs of calcite, coarse flakes of scheelite and clots of pyrite and
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	chalcopyrite. Slightly vuggy with prismatic quartz crystals.
811	Quad: Milk Ranch Spring 7 1/2 Sec: 31 (?) T: 9 N R: 65 E UTM: 4274210 N 0698390 E	Sugary, vuggy quartz vein and quartz (vein) cemented breccia with silic, lithic fragments. Some gossan and FeOx inclusions. Small amount CuOxs (azurite + malachite), some associated
812	Quad: Milk Ranch Spring 7 1/2 Sec: 31(?) T: 9 N R: 65 E UTM: 4274010 N 0697670 E	with black clots of tetrahedrite. Massive milky white quartz vein with calcite pods and veinlets, some grey silic limestone fragments(?) Also rocks have azurite and malachite. Oxi
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	occur in clumps and as coatings small amount sulfides and rock breccia.
813	Quad: Milk Ranch Spring 7 1/2 Sec: 31(?) W border T: 9 N R: 65 E UTM: 4274390 N 0697610 E	Grey to white massive quartz vein with few scattered vugs filled with calcite. CuOxs coat fracture surfaces and occur in clots (oxid tetrahedrite?) Unidentified yellow oxid probably from Fe in vugs and fractures.
814 S	Quad: Shingle Pass SE 7 1/2 Sec: 26 T: 9 W R: 64 E UTM: 4276220 N 0695580 E	Fractured (in part) slightly vug milky white, sugary quartz veins with vugs and lenses filled with oxid and unoxid pyrite (fine cubes), FeOxs and
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	sericite developed on fracture surfaces. Some quartzite with Cu Oxs.

**Sample Description**

Sample Number	Location	Description
814 W	Quad: <u>Shingle Pass Se 7 1/2</u> Sec: <u>26</u> T: <u>9 N</u> R: <u>64 E</u> UTM: <u>4276220</u> N <u>0695580</u> E	Vuggy, oxid, quartz vein with coarse massive wolframite crystals and goss altered, inclusions. Some botryoidal hematite and chalcopryite.
815	Quad: <u>Parker Station 7 1/2</u> Sec: <u>16</u> T: <u>9 N</u> R: <u>64 E</u> UTM: <u>4279220</u> N <u>0691720</u> E	Quartz vein in brown quartzites and limestones. Some calcite pods. lcn ovoid pods of galena, CuOxs on coati and along fractures.
816	Quad: <u>Parker Station 7 1/2</u> Sec: <u>16</u> T: <u>9 N</u> R: <u>64 E</u> UTM: <u>4279340</u> N <u>0691880</u> E	Quartz vein, sheared, and quartz cemented breccia with limestone /quartzite fragments containing clots of tetrahedrite, CuOxs and yellow-green oxide coating, probably form sulfides.
817	Quad: <u>Parker Station 7 1/2</u> Sec: <u>16</u> T: <u>9 N</u> R: <u>64 E</u> UTM: <u>4279360</u> N <u>0691570</u> E	Vuggy quartz veins and veinlets in a brown-grey silic limestone, clots and lenses of galena and pyrite, sometimes mixed CuOxs staining possibly tetrahedrite, FeOx from sulfide.
818 A	Quad: <u>Parker Station 7 1/2</u> Sec: <u>9</u> T: <u>9N</u> R: <u>64 E</u> UTM: <u>4279510</u> N <u>0691570</u> E	Brown silic limestone with quartz veins, some cross-cutting, with clots of CuOx and tetrahedrite (black spots).
818 B	Quad: <u>Parker Station 7 1/2</u> Sec: <u>9</u> T: <u>9N</u> R: <u>64 E</u> UTM: <u>4279510</u> N <u>0691570</u> E	Milky white, clean quartzite with malachite and azurite stains along fractures, FeOx calcite veinlets, possibly flecks of Oxide sulfides.
819	Quad: <u>Parker Station 7 1/2</u> Sec: <u>32(?)</u> T: <u>10 N</u> R: <u>64 E</u> UTM: <u>4284130</u> N <u>0690070</u> E	Silic brown, mottled limestone with clots and lenses of Fe + Mn masses coatings. Some pyrite, possibly galena pods galena and CuOxs in quartz vein also.
820 A	Quad: <u>Sawmill Canyon 7 1/2</u> Sec: <u>7, 18</u> T: <u>12 N</u> R: <u>63 E</u> UTM: <u>4308320</u> N <u>0679470</u> E	Replaced white to tan crystalline limestone with irregular lenses of massive to crystalline chalcocite and CuOxs. CuOxs also along cross-cutting fractures.
820 B	Quad: <u>Sawmill Canyon 7 1/2</u> Sec: <u>7, 18</u> T: <u>12 N</u> R: <u>63 E</u> UTM: <u>4308320</u> N <u>0679470</u> E	Skarn type rock with pods and irregular lenses of chalcocite. Skarn minerals include green garnet, calcite, and possibly small amount epidote. CuOxs common.

**Sample Description**

Sample Number	Location	Description
821 A	Quad: Sawmill Canyon 7 1/2 Sec: 7 (?) T: 12 N R: 63 E UTM: 4308900 N 0679440 E	Grey-green, recrystallized limestone with bornite, chalcopyrite, pyrite, chalcocite(?) occurring in pods and associated with vug fillings of calc. Some CuOx and possibly tetrahedrite.
821 B	Quad: Sawmill Canyon 7 1/2 Sec: 7 (?) T: 12 N R: 63 E UTM: 4308900 N 0679440 E	White to tan slightly siliceous limestone with same minerals as 821 A.
822	Quad: Sawmill Canyon 7 1/2 Sec: 17 (?) T: 12 N R: 63 E UTM: 4307880 N 0680440 E	Fe and siliceous cemented quartzite breccia with small pebble to med. pebble size fragments of FeOx veined quartzite (fragments of well sorted, white varicose). Also altered quartzite with veinlets (some cross-cutting) of FeOxs and oxides.
823	Quad: Sawmill Canyon 7 1/2 Sec: 17 (?) T: 12 N R: 63 E UTM: 4308320 N 0680270 E	Flow banded (alternating white and grey) rhyolite with clots and coating of hematite and limonite.
824	Quad: Sawmill Canyon 7 1/2 Sec: 17 (?) T: 12 N R: 63 E UTM: 4308320 N 0680270 E	Hematite and limonite stained gossan collected from table outside of old buildings.
825	Quad: Currant Mtn. 15' Sec: 21 (?) T: 12 N R: 58 E UTM: 4304725 N 0634575 E	Light, green-tan, calc-silicate rock with cubical prisms of vesuvianite, calcite and possible fluorite. Rock is compositionally banded and may contain pyrite and/or magnetite. Sample contains small flecks scheelite.
826	Quad: Currant Mtn. 15' Sec: 21 (?) T: 12 N R: 58 E UTM: 4304550 N 0634300 E	White aplitic dike rock with quartz phenocrysts in a siliceous quartz feldspar matrix. Contains disseminated oxidized pyrite. Contains clots of scheelite on fracture surfaces and veinlets.
825 Q	Quad: Currant Mtn. 15' Sec: 21 (?) T: 12 N R: 58 E UTM: 4304725 N 0634575 E	Clear to grey, massive to vuggy quartz vein with sericitic clots and filled (sericitic) fractures. Fe and Mn oxides.
827	Quad: Currant Mtn. 15' Sec: 5? T: 11 N R: 58 E UTM: 4300750 N 0631850 E	Lt. green + pink compositionally banded siliceous calc-silicate rock with small clots of sulfides + small amount tiny flecks of scheelite (low molybdenum).

**Sample Description**

Sample Number	Location	Description
828	Quad: <u>Moody Peak 15'</u> Sec: <u>36</u> T: <u>16N</u> R: <u>54E</u> UTM: <u>4340250</u> N <u>0600600</u> E	Buff-orange, altered, silic ls with thin lenses of galena + concentric rings of amplexite.
829	Quad: <u>Moody Peak 15'</u> Sec: <u>5</u> T: <u>15W</u> R: <u>55E</u> UTM: <u>4339725</u> N <u>0602975</u> E	Silic ls, jasperoid with hematite stains, some brecciation + veining. Sample was lost-no geo chem.
830	Quad: <u>Moody Peak 15'</u> Sec: <u>5</u> T: <u>15N</u> R: <u>55E</u> UTM: <u>4339125</u> N <u>06035000</u> E	Calcareous, Fe-stained, yellow to buff to red colored siltstone (Pilot Shale), with Fe-stained fractures, part of sample bleached and oxidized.
831	Quad: <u>Moody Peak 15'</u> Sec: <u>15?</u> T: <u>15N</u> R: <u>55E</u> UTM: <u>4336900</u> N <u>0606575</u> E	Silic shale breccia + gossan like material, highly silic, red-brown color with white opaline filled vugs + some vugs filled with Fe + silic botryoidal masses.
832	Quad: <u>Railroad Pass 15'</u> Sec: <u>31</u> T: <u>25N</u> R: <u>55E</u> UTM: <u>4428775</u> N <u>0601325</u> E	Silic + Feox altered siltst/ss with malachite + azurite on fracture + as veinlets. Some clots of pyrite, chalcopyrite. Also xtalline barite in veins cut by malachite veinlets.
833	Quad: <u>Diamond Springs 15'</u> Sec: <u>6</u> T: <u>24N</u> R: <u>55E</u> UTM: <u>4426925</u> N <u>0602100</u> E	Buff-yellow, silty ss with Cuox in fractures + staining sample. Rk contains rounded, fine chert pebble.
834	Quad: <u>Badger Hole Spring 7½</u> Sec: <u>32</u> T: <u>13N</u> R: <u>61E</u> UTM: <u>4311380</u> N <u>0662050</u> E	Lt grey-white, kaolinitized intrusive with scattered qtz eyes. Contains siliceous veinlets + is limonite stained in places.
835	Quad: <u>Badger Hole Spring 7½</u> Sec: <u>33</u> T: <u>13N</u> R: <u>61E</u> UTM: <u>4311350</u> N <u>0662080</u> E	Very fine grained jasperoid + jasp. breccia with powder blue opaline lenses, some Fe-silic lenses. Brecc is highly silicated + has gnosts of pyrite.
836	Quad: <u>Badger Hole Spring 7½</u> Sec: <u>32</u> T: <u>13N</u> R: <u>61E</u> UTM: <u>4311340</u> N <u>0661990</u> E	Highly silic, Feox jasperoid + jasp breccia with poss volc liths also?, and Fe+silic fractures. Some very fi grued dispersed sulfides + clots of sulfides.

Sample Description

Sample Number	Location	Description
837	Quad: Sawmill Canyon 7 1/2' Sec: 18 T: 12W R: 63E UTM: 4308320 N 0679680 E	Stockwork veined granitic porphyry. Veining is Fe + silic. Feox coat rk.
838	Quad: Sawmill Canyon 7 1/2' Sec: 18 T: 12N R: 63E UTM: 4308000 N 0679600 E	Silica + carbonate cemented breccia w/silic ls frags. Abundant Feox + 1 Ferro mo/staining (bright yellow).
839	Quad: Sawmill Canyon 7 1/2' Sec: 18 T: 12N R: 63E UTM: 4307740 N 0679130 E	Limonite stained, silicified gossan slightly punky.
840	Quad: Sawmill Canyon 7 1/2' Sec: 18 T: 12N R: 63E UTM: 4307660 N 0678140 E	Tan-white rextallized ls + calcite w/azurite, malachite + hematite stains. Also clots of oxide Fe-Mn, poss. from pyrite.
841	Quad: Sawmill Canyon 7 1/2 Sec: 18 T: 12N R: 63E UTM: 4306910 N 0679060 E	Highly silic Fe-rich gossan breccia w/silts + ?/ls? Frag + gossan-like material/(punky + silic) as matrix, limonite in vugs + along fractures, Red-brown color.
842	Quad: Sawmill Canyon 7 1/2' Sec: 18 T: 12W R: 63E UTM: _____ N _____ E	Beige ls w/abundant azurite + malachite vug fillings + masses part of sample is just Cu <sub>oxe</sub> .
843	Quad: Sawmill Canyon 7 1/2' Sec: 19 T: 12W R: 63E UTM: 4306620 N 0679170 E	Fe-rich vuggy gossan, some calcareous coatings + vug fillings. Fe <sub>oxs</sub> + pos of galena. Some samples are brecciated.
844	Quad: Aurum 2 NW Sec: 26 T: 24N R: 62E UTM: 4420750 N 0677560 E	Limonite + Mn stained altered ls /s abundant pods + veins of coarse xtalline calcite, some brecciation + brown calcite. Scheelite flakes, scattered, discovered w/ lamping.
845	Quad: Butte Valley 1 NE Sec: 2 (south border) T: 23N R: 61E UTM: 4416940 N 0667130 E	Dk gray silic ls + silic ls breccia w/ radiating bladed stibnite xtals, Also yellow + white Sb oxides after stibnite. Drusy qtz coats vugs + fractures.

**Sample Description**

Sample Number	Location	Description
846	Quad: <u>Butte Valley 1 WE</u> Sec2 (south border) T: <u>23N</u> R: <u>61E</u> UTM: <u>4416950</u> N <u>0667100</u> E	Dk grey silic ls w/qtz veins + gossa pods. vugs filled w/calcite. Sb oxides occur in Feox qtz vein. Some fine silica cementing breccia also.
847	Quad: <u>Butte Valley 1 NE</u> Sec: <u>2</u> T: <u>23N</u> R: <u>61E</u> UTM: <u>4417100</u> N <u>0667260</u> E District - <u>Cherry Creek</u>	Red-brown, limonite + hematite rich, punky gossan + altered ls. Calcite coatings, some siliceous boxworks.
848	Quad: <u>Butte Valley 1 NE</u> Sec: <u>2</u> T: <u>23N</u> R: <u>61E</u> UTM: <u>4416980</u> N <u>0667100</u> E	Altered, calcite-rich clay + ls frags from oxidized rd cut below Nv. Sb Mi
849	Quad: <u>Morey Peak 7 1/2'</u> Sec: <u>5</u> T: <u>9W</u> R: <u>51E</u> UTM: <u>4280120</u> N <u>0564930</u> E <u>Morey District</u>	Altered tuff + qtz veins w/bands of rhodochosite, sphalerite + sulfides. Clots of Ruby Ag also present.
850	Quad: <u>Morey Peak 7 1/2'</u> Sec: <u>5</u> T: <u>9W</u> R: <u>51E</u> UTM: <u>4280150</u> N <u>0564680</u> E <u>Morey District</u>	Pyrite bearing vein material w/ sphalerite, rhodochosite + qtz.
851	Quad: <u>Morey Peak 7 1/2'</u> Sec: <u>5</u> T: <u>9W</u> R: <u>51E</u> UTM: <u>4280150</u> N <u>0564680</u> E <u>Morey District</u>	Same as 850, xcept w/chalcopyrite + jamesonite?
852	Quad: <u>Cold Creek Ranch 15'</u> Sec: <u>15</u> T: <u>22N</u> R: <u>57E</u> UTM: <u>4403850</u> N <u>0625175</u> E <u>District (Area of Alligator Ridge)</u>	Beige to red siltstone, Feox coatings sm amount JSP + silic, siltstone.
853	Quad: <u>Cold Creek Ranch 15'</u> Sec: <u>17</u> T: <u>24N</u> R: <u>57E</u> UTM: <u>4424400</u> N <u>0620750</u> E <u>District (Bald Mt.)</u>	Yellow-brown limey shales, some calcite veinlets. Sample is from several localities within drilled area.
854	Quad: <u>Cold Creek Ranch 15'</u> Sec: <u>22</u> T: <u>24N</u> R: <u>57E</u> UTM: <u>4421980</u> N <u>0624875</u> E <u>District (Bald Mtn.)</u>	Red-brown silic + replaced ls w/clots + stringers of Cuoxs. Calcite + qtz. veins. Sm amt altered intrusive also

Sample Description

Sample Number	Location	Description
855	Quad: <u>Gold Creek Ranch 15'</u> Sec: <u>22</u> T: <u>24N</u> R: <u>57E</u> UTM: <u>4421980</u> N <u>0624875</u> E District (Bald Mtn.)	Silic, orange-brown ls w/qtz veinlets + Cuoxs. Malachite coats fractures, some limonite also.
856	Quad: <u>Aurum 2 NW 7 1/2'</u> Sec: <u>23?</u> T: <u>24N</u> R: <u>62E</u> UTM: <u>4423320</u> N <u>0676150</u> E District - Cherry Creek	Grey, fine-grained qtzite brx cement bysilica + cut thru by siliceous Fe-stained veinlets.
857	Quad: <u>Aurum 2 NW 7 1/2'</u> Sec: <u>27?</u> T: <u>24N</u> R: <u>62E</u> UTM: <u>4421680</u> N <u>0675540</u> E District - Cherry Creek	Coarse, calcite veined, Feox stained ls. Sm amt pyrite. Select dump.
858	Quad: <u>Aurum 2 NW 7 1/2'</u> Sec: <u>23?</u> T: <u>24W</u> R: <u>62E</u> UTM: <u>4422520</u> N <u>0576760</u> E District - Cherry Creek	Silic, grey ls + qtz vein, vuggy, milky wht color, w/ pods of galena, pyrite ghosts. Possibly finely dissem. native Ag + stibnite?
859	Quad: <u>Aurum 2 NW 7 1/2'</u> Sec: <u>3?</u> T: <u>20N</u> R: <u>62E</u> UTM: <u>4389620</u> N <u>0673540</u> E District - Hunter	Altered ls w/pods of galena + discon lenses of hemimorphite xtals, Cuoxs. limonite staining. Some breccia als
860	Quad: <u>Aurum 3 NW 7 1/2'</u> Sec: <u>33?</u> T: <u>21W</u> R: <u>62E</u> UTM: <u>4389960</u> N <u>0673750</u> E District - Hunter	Punky, Fe-rich, limonite stained gossan w/ sm. amt Cuoxs. Select dump.
861	Quad: <u>Aurum 3 NW 7 1/2'</u> Sec: <u>3?</u> T: <u>20N</u> R: <u>62E</u> UTM: <u>4388540</u> N <u>0672720</u> E District - Hunter	Maroon colored mudstone. Supposed fluorite? No obvious mineralization. Select chip.
862	Quad: <u>Aurum 3 NW 7 1/2'</u> Sec: <u>3?</u> T: <u>20W</u> R: <u>62E</u> UTM: <u>4389460</u> N <u>0673850</u> E District - Hunter	Fe stained gossan, some dense pieces some punky.
863A	Quad: <u>Aurum 2 NW 7 1/2'</u> Sec: <u>6?</u> T: <u>23W</u> R: <u>63E</u> UTM: <u>4418780</u> N <u>0680920</u> E District - Cherry Creek	Clear purple (+ sm. amt. green) fluor form coarse vein material w/banded appearance.

**Sample Description**

Sample Number	Location	Description
863B	Quad: <u>Aurum 2 NW</u> Sec: <u>6?</u> T: <u>23W</u> R: <u>63E</u> UTM: <u>4418780</u> N <u>0680920</u> E	Buff to yellow colored, altered intrusive w/ fine veins + pods of fluorite + also qtz.
864	Quad: <u>Butte Valley 1 SE</u> Sec: <u>12?</u> T: <u>23N</u> R: <u>61E</u> UTM: <u>4415500</u> N <u>0669000</u> E (Approx. loc.) District - Cherry Creek	Grey to milky wht. barite cementing + replacing jsp + jsp breccia. Some coarse vein barite. Minor oxid. sulfides noted.
865	Quad: <u>Butte Valley 1 SE</u> Sec: <u>12?</u> T: <u>23N</u> R: <u>61E</u> UTM: <u>4415500</u> N <u>0669000</u> E (Approx. loc.)	Orange weath (Fe-rich) silic ls + ls breccia w/vein fillings + replace ment w/ barite; massive to xtalline. Xtals of jarosite (x-ray confirmed) form vug fillings in a few pieces of sample. Coethite also noted as weath. product.
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
866	Quad: <u>Aurum 2 NW</u> Sec: <u>13?</u> T: <u>23N</u> R: <u>62E</u> UTM: <u>4415900</u> N <u>0678920</u> E District - Cherry Creek	Milky wht qtz vein, some vein materi. brecciated w/ lg flakes scheelite + lesser amt greenish fluorite? Als some pyrite cubes + Feox. Sample hi graded from original sample. Poss. huebnerite in altered wallrock.
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
867	Quad: <u>Aurum 3 NW</u> Sec: <u>36?</u> T: <u>22N</u> R: <u>62E</u> UTM: <u>4400610</u> N <u>0678610</u> E District - Telegraph	Grnish altered (chlor.), andesitic rk some lithic frags. Limonitic + hematitic staining, poss. from sulfi Some brecciation + leaching of feld- spars. No scheelite observed w/lamping.
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
868	Quad: <u>Aurum 2 SW</u> Sec: <u>26?</u> T: <u>23N</u> R: <u>62E</u> UTM: <u>4410380</u> N <u>0677310</u> E District - Cherry Creek	Milky-white massive qtz vein + greenis pebbly ss (Prospect Mtn. qtzite) w/ pyrite cubes + Feox staining.



**Sample Description**

Sample Number	Location	Description
869	Quad: Aurum 1 SW Sec: 29 T: 23W R: 65E UTM: 4412560 N 0700620 E District (Aurum)	Dk grey silic/ls + ls brx w coarse calcite + qtz veins. Scheelite occurs as sm. flecks in vein materia Cuox + tetrahedrite noted in sample descript. Some drussy qtz vug fillin
870	Quad: Aurum 1 SW Sec: 29? T: 23N R: 65E UTM: 4412280 N 0700080 E District (Aurum)	Gry-brown, limy siltst breccia w/Feo + calcite pods + cement. Some brown calcite + gossan included in sample.
871	Quad: Aurum 1 SW Sec: 29? T: 23N R: 65E UTM: 4412080 N 0700160 E District (Aurum)	Calcite vein + ls breccia w/ calcite + qtz cement. No obvious min. Shows no scheelite when lamped.
872	Quad: Aurum 3 SW Sec: 9? T: 20N R: 63E UTM: 4387540 N 0681360 E District - Granite	Qtz vein + coarse-grned granitic rk w/ sm unoxid. pyrite. Intrusive slightly chloritized. Some limonite stains on qtz vein.
873	Quad: Aurum 3 NW Sec: 6? T: 20N R: 63E UTM: 4388990 N 0678070 E District - Granite	Qtzite + qtz vein w/clots + fract. fillings of coarse to fine pyrite xtals, some oxidized, most not oxid. Mn + Feoxs.
874	Quad: Aurum 3 SW Sec: 7 T: 20N R: 63E UTM: 4386210 N 0677440 E District - Granite	Ls(?) + qtzite brx w/vuggy, irregular qtz vein cement. Pods + lenses of finely xtalline galena. Vug filling of qtz + sericite. Feox on weath surfaces.
875	Quad: Aurum 3 SW Sec: 24? T: 20N R: 62E UTM: 4384200 N 0677880 E District - Granite	Carbonaceous siltstones + rextall. ls w/calcite + Feox coatings. Some calcite veins. Sample from adit wal + dump.
876	Quad: Aurum 3 SW Sec: 19? T: 20N R: 63E UTM: 4383450 N 0678000 E District - Granite	Qtz vein breccia cemented w/ a mixtu of silica, Feoxs + calcite. Pts. of veins gossany. Also calcite + Fe-ri gouge. Slicks obsrv. on 1 sample piece.
877	Quad: Aurum 3 SW Sec: 19? T: 20W R: 63E UTM: 4383470 N 0678060 E	Milky wht massive qtz vein w/thin veinlets of Feoxs + clumps of pyrite or indiv. xtals.

## Sample Description

Sample Number	Location	Description
878	Quad: Aurum 3 SW Sec: 19? T: 20W R: 63E UTM: 4382980 N 0676880 E District - Granite	Grey to tan, slightly silic ls breccia containing fine breccia frags in calcite gouge w/ finely crystalline, irregular pods of galena. Galena pods also brecciated.
879	Quad: Aurum 3 SW Sec: 31? T: 20W R: 63E UTM: 4380720 N 0677800 E District - Granite	Vitreous to milky-grey qtz vein w/ pods of orange gossan enclosed in vein material. Some Mn dendrites.
880	Quad: Aurum 3 NW Sec: 3 T: 20W R: 62E UTM: 4388340 N 0673440 E District - Hunter	Silic, Fe-rich gossan w/ silic vug fillings. Sm. amt. silic, brecc. dolom.
881	Quad: Aurum 3 NW Sec: 3? T: 20W R: 62E UTM: 4388020 N 0673290 E District - Hunter	Altered intrusive dike rock w/ coarse alk feld phenos, smokey qtz + mafics Groundmass + plag. alter. to clays + Feoxs. Feox poss. from magnetite.
882	Quad: Aurum 3 NW Sec: 32? T: 21N R: 62E UTM: 4390850 N 0672140 E District - Hunter	Jasperoid + silic. shale frags in breccia cemented by silica + FeOx.
883	Quad: Aurum 3 NW Sec: 29? T: 21W R: 62E UTM: 4392100 N 0672270 E District - Hunter	Jsp. brx w/dk grey silic ls frags in a deep-red silic. matrix. Some limonite stained gossan also.
884	Quad: Aurum 3 NW Sec: 29? T: 21N R: 62E UTM: 4392880 N 0672620 E District - Hunter	Red-brown jasperoid breccia w/ inclusions + cement of Fe-rich gossan Sm. amt. Cuox.
885	Quad: Aurum 3 NW Sec: 29? T: 21N R: 62E UTM: 4392880 N 0672580 E	Gray jasperoid breccia cemented by blue-green to purple colored, glassy amorphous min. poss chrysocolla?
886	Quad: Pinto Summit 15' Sec: 1 T: 16N R: 54E UTM: 4349550 N 0600225 E District - Pancake	Silic. gossan, very orange + Fe-rich, also some sheared ls.

**Sample Description**

Sample Number	Location	Description
887	Quad: Pancake Summit 15' Sec: 23? T: 17N R: 55E UTM: 4353550 N 0608500 E District - Pancake	Red to brown finely laminated silt-stones + mudstones. Calcite coatings + abundant Feoxs on weath. surfaces.
888	Quad: McGill 7 1/2' Sec: 14 T: 18N R: 63E UTM: 4365700 N 0684450 E District - San Francisco	Grey qtzite + felsic dike rk w/ sm xtals of unoxid. pyrite.
889	Quad: McGill 7 1/2' Sec: 14 T: 18N R: 63E UTM: 4366325 N 0684500 E District - San Francisco	Grey, fine-grained qtzite w/ Feox veinlets, sheared appearance.
890	Quad: McGill 7 1/2' Sec: 14 T: 18N R: 63E UTM: 4366450 N 0684300 E District - San Francisco	Grey-brn silic ls w/ Cuoxs + qtz veinlets, some disseminated pyrite. Rk is sheared.
891	Quad: McGill 7 1/2' Sec: 26 T: 18N R: 63E UTM: 4363100 N 0684300 E District - San Francisco	Highly altered intrusive w/ clots of wht mica + oxid. sulfides, some unoxid. pyrite up to .5 cm in length.
892A	Quad: McGill 7 1/2' Sec: 3 T: 17N R: 63E UTM: 4360325 N 0683250 E District - San Francisco	Sheared qtzite w/ fracture fillings + lenses + veinlets of Cuox, plus bornite + pyrite, poss. sphalerite. Sm amt galena also.
892B	Quad: McGill 15' Sec: 3 T: 17W R: 63E UTM: 4360325 N 0683250 E	Sheared qtzite w/ lemon yellow + yellow green oxides coating fractures.
893	Quad: Ruth 7 1/2' Sec: 9 T: 17N R: 63E UTM: 4358700 N 0682200 E District - San Francisco	Sheared qtzite brx w/ gossany parts + Feox veins. Heavy Feox staining on weath surfaces. Poss pyrite.
894	Quad: Ruth 7 1/2' Sec: 9 T: 17N R: 63E UTM: 4358600 N 0681980 E District - San Francisco	Sample contains very white to grey ls w/ calcite veining + sulfides + tactite w/ lg amt of pyrite, chalcopyrite + poss. chalcocite. Also some very hi-grade ore from fissures w/ galena + other sulfides.

**Sample Description**

Sample Number	Location	Description
895	Quad: East Ely 7 1/2' Sec: 10 T: 16N R: 64E UTM: 4348025 N 0693025 E District - Duck Creek	Brecciated Qtzite + grey ls w/ pods of coarse calcite + abundant Fe staining.
896	Quad: East Ely 7 1/2' Sec: 4 T: 16N R: 64E UTM: 4350850 N 0692200 E District - Duck Creek	Red-brown altered dacitic intrusive rk w/ altered feld (now clay), Qtz phenos + bt? phenos. Rk is dense + brecciated in part.
897	Quad: East Ely 7 1/2' Sec: 4 T: 16W R: 64E UTM: 4350950 N 0692500 E	Qtz vein + Qtz vein breccia w/ gossan inclusion + clots of galena + pyrite. Some silic ls w/ calcite pod. Qtz vein cut by hematite stringers.
898	Quad: East Ely 7 1/2' Sec: 33 T: 17N R: 64E UTM: 4351125 N 0692475 E	Milky wht to vitreous Qtz vein cut by gossany or hematitic veins + veinlets. Some vuggy gossan inclusions + clots of galena.
899	Quad: East Ely 7 1/2' Sec: 34 T: 17N R: 64E UTM: 4352450 N 0693000 E District - Duck Creek	Sheared Qtz vein w/ Cuox + sm amt. oxid. pyrite. Feox veinlets cross-cut sample.
900	Quad: East Ely 7 1/2' Sec: 28 T: 17N R: 64E UTM: 4353325 N 0692075 E District - Duck Creek	Qtzite breccia w/ frags cut by Feox veining. Gossany inclusions indicate past presence of sulfides. Abundant Feox coatings on fract.
901	Quad: Butte Valley 2 NW Sec: 35? T: 24N R: 57E UTM: 4419610 N 0628520 E District (Bard Mtn)	Lt brown to red silic siltst. + siltst breccia w/ Feox + sm amt barite occurring on fractures Some frags veined w/ silic + rebrecciated Abundant Feoxs. Grab from several
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	diff. localities.
902	Quad: Butte Valley 2 NW Sec: 31? T: 24N R: 58E UTM: 4419180 N 062900 _____ E	Red-yellow, altered Qtz monzonite w/ altered feld phenos, and fresh Qtz Matrix greenish or Fe stained. Sefer grab from drill rd cut.

**Sample Description**

Sample Number	Location	Description
903	Quad: Butte Valley 2 NW Sec: 30? T: 24 W R: 58E UTM: 4419530 N 0623880 E	Hydrothermal vent breccia w/ign and rebrecciated sed clasts in oxid, alt ed, silic matrix some inclusions of gossan frags. Poss. sm amt barite in Fe-silic cement.
904	Quad: Cold Creek Ranch 15' Sec: 20 T: 24N R: 57E UTM: 4422900 N 0621625 E District- Bald Mtn.	Dense, dk grn, calc-silicate rk w/ti disseminated flecks of scheelite and moly. Rk cut by qtz veins, which co tain moly but not scheelite.
905	Quad: Connors Pass 7 1/2 ' Sec: 16 T: 14N R: 65E UTM: 4328300 N 0700225 E District-Taylor	Calcite vein + sm amt calcite cement ls breccia w/CuOxs + limonite stain Select grab from transition zone west of Argus Pit.
906	Quad: Connors Pass 7 1/2 ' Sec: 16 T: 14N R: 65E UTM: 4328320 N 0700300 E	Grey silic ls + silic ls breccia cemented w/calcite. No obvious mineralization.
907	Quad: Connors Pass 7 1/2 ' Sec: 16 T: 14N R: 65E UTM: 4328400 N 0700400 E	Flat grey, fine-grained, rhyodacitic dike rk w/significant amt of dissemi ated pyrite. Rk shows slicks + qtz veining.
908	Quad: Carrant 15' Sec: 26 T: 10N R: 58E UTM: 4284475 N 0638050 E	Bt and smokey qtz phenos are set in alt orange, silic grndmass in this rhyolite rock. Also rhyolite breccia containing coarser grained volcanic clasts and poss. sed clast. Rk conta
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	altered feld. + oxid pyrite? in clasts + weathered breccia matrix.
909	Quad: Carrant 15' Sec: 9 T: 10 N R: 58E UTM: 4288950 N 0634250 E District - Carrant	Tan to pink altered rhyolite w/bt, q alk feld?, and hmbld phenos in altere grndmass. feld. dissolved(leached?) some samples. Sample is sheared and has some silic veining.
910	Quad: Carrant Mtn 15' Sec: 28 T: 11N R: 58E UTM: 4293900 N 0634275 E District - Carrant	Silic veined, Fe-rich conglomerate? o breccia? from resistant outcrop near calcite workings.

**Sample Description**

Sample Number	Location	Description
911	Quad: Currant Mtn. 15' Sec: 8 T: 11N R: 59E UTM: 4298125 N 0641650 E District - Currant	Red, silic, jasperoid breccia cemented with drusy quartz veins, some vugs in veins w/terminated qtz prisms. Some frags. revealed by thin silic veinlets. Poss. Au in qtz veins.
912	Quad: Currant Mtn. 15' Sec: 17 T: 11N R: 59E UTM: 4297300 N 0641725 E District - Currant	Jasperoid, hydrothermal breccia cemented w/radiating, white vuggy qtz which contains visible gold. Silic frags x-cut by later qtz veinlets.
913	Quad: Pancake Summit 15' Sec: 3 T: 16N R: 57E UTM: 4348325 N 0626325 E	Yellow-brown earthy gossan and silic ls (replaced), pods and irregular lens of calcite. Part of sample is finely brecciated.
914	Quad: Pancake Summit 15' Sec: 3 T: 16N R: 57E UTM: 4348250 N 0626250 E District - W.P.	Silic replaced dk grey to brown ls w/irregular pods and lenses of steel grey, cerussite crystals. Also yellow oxides of Pb?
915	Quad: Pancake Summit 15' Sec: 11 T: 16N R: 57E UTM: 4347950 N 0626750 E District - W. P.	Quartzite conglomerate in red silty matrix cut by light red to pink vein of brecciated material and thin Fe-s veinlets.
916	Quad: Pancake Summit 15' Sec: 11 T: 16 N R: 57 E UTM: 4347450 N 0626825 E District - W.P.	Breccia containing angular silic frags ls, (grey) and mudstone (brown) w/a vuggy, opaline and silic-filled matrix. Also replaced ls w/anglesite and/or cerussite occurring in lenses and pods.
917	Quad: Pancake Summit 15' Sec: 14 T: 16N R: 57E UTM: 4346500 N 0626900 E District - W.P.	Silty ls breccia w/vuggy pink and white calcite matrix. Limonite stained, silic gossan also.
918	Quad: Pancake Summit 15' Sec: 14 T: 16N R: 57E UTM: 4345950 N 0676750 E District - W.P.	Quartzite breccia w/gossany matrix, also some replaced ls w/pyrite crystals developed on fracture surfaces. Stippled work of Fe veinlets in quartzite fragments.
919	Quad: Pancake Summit 15' Sec: 13 T: 16N R: 57 E UTM: 4346250 N 0629275 E District W.P.	Pinkish grey ls and ls breccia cut by and cemented w/calcite vein material. Some FeOx boxworks in 1 sample and FeOx on breccia fragment surfaces.

**Sample Description**

Sample Number	Location	Description
920	Quad: <u>Treasure Hill 15'</u> Sec: <u>24</u> T: <u>16 N</u> R: <u>57E</u> UTM: <u>4344450</u> N <u>0629500</u> E District - W.P.	Banded, vuggy, highly oxid gossan w/s boxworks and lamina. Also silty gre brecciated ls w/recrystallized pods and veins of white calcite.
921	Quad: <u>Treasure Hill 15'</u> Sec: <u>30</u> T: <u>16N</u> R: <u>58E</u> UTM: <u>4343050</u> N <u>0629850</u> E District W.P.	Dense, Fe-silic gossan and silica veined med-grey host ls ;both types w/vugs and fracture fillings of blue green smithsonite, hemimorphite, azur and malachite. Smithsonite and
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	hemimorphite show botryoidal surface Also concentric bands of anglesite.
922	Quad: <u>Treasure Hill 15'</u> Sec: <u>30</u> T: <u>16N</u> R: <u>58E</u> UTM: <u>4342300</u> N <u>0630400</u> E District - W.P.	Med-grey ls and sm amt ls breccia w/calcite veins and veinlets in random spiderweb type orientation.
923	Quad: <u>Green Springs 15'</u> Sec: <u>25</u> T: <u>16N</u> R: <u>57E</u> UTM: <u>4342400</u> N <u>0629150</u> E District - W.P.	ls breccia w/random calcite veins and fine brecciated host rk in veins w/poss galena. Replaced ls also, slight silic., w/hemimorphite, malachite and poss. Pb CoO.
924	Quad: <u>Treasure Hill 15'</u> Sec: <u>25</u> T: <u>16N</u> R: <u>57E</u> UTM: <u>4342425</u> N <u>0629500</u> E District W.P.	Replaced, silic, grey to brown ls w/vu fillings and lenses of hemimorphite and malachite. Some pyrite in clots in bleached, recrystallized ls.
925	Quad: <u>Green Springs 15'</u> Sec: <u>24</u> T: <u>16N</u> R: <u>57E</u> UTM: <u>4344525</u> N <u>0628175</u> E District - W.P.	Flat-grey ls and small amount ls breccia cut by calcite filled veins and veinlets. Some FeOxs and small amount pyrite seen in breccia.
926	Quad: <u>Green Springs 15'</u> Sec: <u>23</u> T: <u>16N</u> R: <u>57E</u> UTM: <u>4343690</u> N <u>0627810</u> E District - W.P.	Altered, replaced ls w/clots pyrite, calcite, also calcite veins. Limoni and Fe stained thruout Cerrusite in one sample. Some silic med-grey ls breccia w/zinc silicate min. prob
927	Quad: <u>Green Springs 15'</u> Sec: <u>23</u> T: <u>16N</u> R: <u>57E</u> UTM: <u>4343500</u> N <u>0627925</u> E District - W.P.	angelesite also. Altered silic replace ls w/irregula bands of fine-grned Fe-silic material + calcite and cerrusite? Some dk grey silic rk w/malachite and silic veinls
		V. heavy sample. Hi Sn

**Sample Description**

Sample Number	Location	Description
928	Quad: Cold Creek Ranch 15' Sec: 23 T: 22N R: 57E UTM: 4402 N 0627 E Exact loc. of sample unknown since it was taken from pile of ore by crusher	Brecciated, pink colored pilot siltstone Siltstone gen. massive except where fractured and brecciated. Fractures contain FeOx, limonite and siliceous material. Fractures are open in part. Entire rock is silty
	District (So. of Bald Mt?) Quad: Sec: T: R: UTM: N E	
929	Quad: Green Springs 15' Sec: 1 T: 15N R: 57E UTM: 4338525 N 0629050 E District-W.P.	Sample is of dk brown and white coarse calcite vein and grey-purple, siliceous sandy ls w/ thin calcite veinlets. Rock is fractured and has white siliceous coatings on fractures.
930	Quad: Treasure Hill 15' Sec: 31 T: 16N R: 58E UTM: 4340475 N 0631075 E District - W.P.	Silty grey ls host rock which is brecciated and veined by approximate 2-3mm calcite veins. Fine to med. pebble size, fragments are oxidized and/or leached in vein. Vein matrix is carbonate- and Fe-Ox rich.
	Quad: Sec: T: R: UTM: N E	
931	Quad: Treasure Hill 15' Sec: 30 T: 16N R: 58E UTM: 4341825 N 0630925 E District W.P.	Dark grey, marly siliceous ls w/ lensoid open-spaced fractures filled w/ crystalline quartz. Also quartz and calcite fracture coatings. Part of sample is dk brown crystalline calcite vein.
932	Quad: Treasure Hill 15' Sec: 30 T: 16N R: 58 E UTM: 4342250 N 0630950 E District - W.P.	Brecciated, sandy-brown ls. Calcite "stalactites" fill fractures in brecciated material. Also vitreous, grey banded quartz vein w/ pyrite and small amount of CuOx and MnOx.
933	Quad: McGill 15' Sec: 33 T: 18 N R: 63E UTM: 4360475 N 0681300 E District - San Francisco	Purplish, med-grained quartzite w/ disseminated oxidized pyrite and cut by randomly oriented quartz veinlets also carrying pyrite.
934 A	Quad: Eureka 15' Sec: 8 T: 19N R: 55E UTM: 4376675 N 063550 E District - Newark	Milky-white, massive quartz vein w/ CuOx and clots of blk dull min (tetrahedrite). Poss. argentite. Also some pyrite noted. 5000 ppm Ag



**Sample Description**

Sample Number	Location	Description
934 B	Quad: Eureka 15' Sec: 8 T: 19 N R: 55 E UTM: 4376675 N 0603550 E District - Newark	Silic, dk-grey ls w/stockwork of fine qtz veinlets and fracture coating of light green min., poss ZnCo <sub>3</sub> or other zinc min. (Prob. smithsonite)
935	Quad: Eureka 15' Sec: 4 T: 19N R: 55E UTM: 4378175 N 0604375 E District - Newark	Dk grey ls, cut by calcite and qtz. veinlets are breccia fragments in calcite and silica cemented breccia w/CuOxs(sm amt) Also coarse calcite vein material.
936	Quad: Eureka 15' Sec: 9 T: 19N R: 55E UTM: 4375625 N 0603975 E District - Newark	Beige quartzite w/secondary qtz veinlets showing poss. tetrahedrite and CuOxs. Orange-yellow oxide coat surfaces. Some pyrite also.
937	Quad: Eureka 15' Sec: 17 T: 19N R: 55E UTM: 4374925 N 0603450 E District - Newark	Light brown silic ls w/qtz veins w/ and bright yellow oxides. Sample appears fractured.
938	Quad: Eureka 15' Sec: 17 T: 19N R: 55E UTM: 4374275 N 0603100 E District - Newark	Grey ls breccia, most w/carbonate and FeOx cement. Rk frags silic w/silic veinlets. Sm amt gossan. FeOx on weathered surfaces.
939	Quad: Pancake Summit 15' Sec: 29 T: 18 N R: 56 E UTM: 4362475 N 0613100 E District - Pancake	Conglomerate w/ interbedded siltstone. Finely laminated w/sub-rounded clast of siltstone and chert.
940	Quad: Ruth 7 1/2' Sec: 16 T: 16N R: 63E UTM: 4346900 N 0681480 E District - Robinson	Dk brown to orange, dense Fe and sil rich gossan w/irregular lenses of unoxid. Pyrite; also masses of fine crystalline pyrite. Some gossan is vuggy.
941	Quad: Ruth 7 1/2' Sec: 16 T: 16N R: 63E UTM: 4347100 N 0681460 E	Dk grey silic ls breccia and gossan, some w/calcite veinlets. Acicular malachite crystals grow in vugs and in siliceous lenses.
942	Quad: Ruth 7 1/2' Sec: 9 T: 16N R: 63E UTM: 4348580 N 0681540 E District - Robinson	Orange brown, silic (slightly) limey siltstone / mudstone. Siltstone has many fine fractures filled w/ acicular malachite. Part of sample is brecc. (grey ls) and part is siliceous slightly punky gossan.

**Sample Description**

Sample Number	Location	Description
943	Quad: <u>East Fly 7 1/2'</u> Sec: <u>3</u> T: <u>16N</u> R: <u>63E</u> UTM: <u>4349960</u> N <u>0683640</u> E <u>District-Robinson</u>	<u>Dk grey silic ls w/vug and vein fillings of white calcite. Some malachite staining in host rk and vein material. Poss. W.</u>
944	Quad: <u>Ruth 7 1/2'</u> Sec: <u>5</u> T: <u>16N</u> R: <u>63E</u> UTM: <u>4349920</u> N <u>0680720</u> E <u>District - Robinson</u>	<u>Mottled red-grey silic ls, forms fin frags in Fe and silic cemented brecc w/vug fillings of calcite and CuOx (malachite) and sm amt galena. Unid yellow prism min. also</u>
945	Quad: <u>Ruth 7 1/2'</u> Sec: <u>5</u> T: <u>16N</u> R: <u>63E</u> UTM: <u>4349620</u> N <u>0680780</u> E	<u>Mottled, silic, grey-brown ls w/silic veining (random orient), calcite in vugs, CuOxs and yellow green oxide (from Fe?). Some breccia and slicks. Also sm amt massive white qtz vein.</u>
946	Quad: <u>Ruth 7 1/2'</u> Sec: <u>6</u> T: <u>16N</u> R: <u>63E</u> UTM: <u>4349910</u> N <u>0678490</u> E <u>District - Robinson</u>	<u>Med-grey ls breccia, calcite in vugs FeOx abundant on weathered surfaces. Sm amt gossan inclusions in breccia.</u>
947 A	Quad: <u>Ruth 7 1/2'</u> Sec: <u>23</u> T: <u>17N</u> R: <u>62E</u> UTM: <u>4353880</u> N <u>0676060</u> E <u>District - Robinson</u>	<u>Limonite and hematite stained "jaspe like" gossan and silic mudstone. Some breccia and silic coatings.</u>
947B	Quad: <u>Ruth 7 1/2'</u> Sec: <u>2</u> T: <u>17N</u> R: <u>62E</u> UTM: <u>4358770</u> N <u>0675240</u> E <u>District - Robinson</u>	<u>Highly altered ls and mudstones. Most of sample is brecciated and cem. by l and silica. Abundant limonite alteration and oxidation of Fe.</u>
948	Quad: <u>Ruth 7 1/2'</u> Sec: <u>2</u> T: <u>17N</u> R: <u>62E</u> UTM: <u>4358640</u> N <u>0675280</u> E	<u>Beige, limy siltstone w/Fe staining. Also dk brown and yellow siliceous, Fe rich gossan type material. Sample mixture from several dumps in area.</u>
948 B	Quad: <u>Ruth 7 1/2'</u> Sec: <u>11</u> T: <u>17N</u> R: <u>62E</u> UTM: <u>4358200</u> N <u>0675120</u> E	<u>Grey to dk brown calcareous shales. Rk is fissile and shows minor amts of FeOx.</u>
949	Quad: <u>Ruth 7 1/2'</u> Sec: <u>15/22</u> T: <u>17N</u> R: <u>62E</u> UTM: <u>4355360</u> N <u>0674080</u> E <u>Exact location uncertain</u> <u>District - Robinson</u>	<u>Mottled purple, silic ls w/ limonitic and silic fracture fillings. Sm amt breccia w/carbonate cement.</u>

**Sample Description**

Sample Number	Location	Description
950	Quad: Ruth 7 1/2 ' Sec: 21 T: 17N R: 63E UTM: 4355530 N 0682020 E District - Robinson	Grey ls breccia cemented w/coarse white calcite. Siltstone w/ FeOx or weathered surface. No apparent mineralization.
951	Quad: Ruth 7 1/2 ' Sec: 7 T: 16N R: 63E UTM: 4348500 N 0679840 E District - Robinson	Hematitic gossan, some punky, some dense w/silic and calcite veined ls. Coarse brown calcite vein also. Muc Fe-alteration.
952	Quad: Ruth 7 1/2 ' Sec: 7 T: 16N R: 63E UTM: 4348220 N 0679740 E	Hematitic silic gossan, also some finely brecciated host rk(ls?) w/gos matrix. Abundant FeOxs. Sm amt CuOx
953	Quad: Ruth 7 1/2 ' Sec: 12 T: 16N R: 62E UTM: 4348050 N 0677220 E District - Robinson	Med. grned, chlor-sericit. altered, porphyritic monzonite intrusive w/cl and disseminated unoxid crystals of pyrite, chalcopyrite and bornite.
954	Quad: Ruth 7 1/2 ' Sec: 2 T: 16N R: 62E UTM: 4349180 N 0675560 E District - Robinson	Replaced ls consisting of lenses of crystalline to massive Mn mins. Als recrystallized altered ls w/FeOxs.
955	Quad: Ruth 7 1/2 ' Sec: 18 T: 16N R: 63E UTM: 4346850 N 0679020 E District - Robinson	Highly oxid and altered gossan and gouge. Some grey silic ls frags. al Select grab from dumps and walls of open pit.
956	Quad: Pinto Summit 15' Sec: 30 T: 18N R: 55E UTM: 4361650 N 0600775 E District - Pinto	Silic, replaced ls w/Mn and Fe stain and CuOxs clots and lenses of silica and pyrite.
957	Quad: Pinto Summit 15' Sec: 25 T: 18N R: 55E UTM: 4361200 N 0600450 E District - Pinto	Milky white quartz vein, massive and some what vuggy, w/isolated clots of galena, CuOxs, poss. tetrahedrite? a unknown yellow-grn, honeycomb min. filling vugs. Sm amt Fe-rich gossan
958	Quad: Pinto Summit 15' Sec: 26 T: 18N R: 54E UTM: 4362350 N 0597650 E District - Pinto	Silty grey dolomite w/irregular clots and veins(up to 1cm wide) of white crystalline barite. Portion of sample finely brecc.and recem. by FeOxs and barite. Some box work gos

**Sample Description**

Sample Number	Location	Description
959	Quad: Pinto Summit 15' Sec: 26 T: 18N R: 54E UTM: 4361950 N 0597700 E District - Pinto	Silty grey to light brown dolomite w/silic veining and CuOx (includ. Cu veinlets). Some fine breccia and yr green oxides includ. FeOxs. Hemimorphite on fractured surfaces.
960	Quad: Pinto Summit 15' Sec: 35 T: 18N R: 54E UTM: 4359950 N 0597700 E District - Pinto	Sample is bi-graded and contains poc of weathered galena and some finely brecc., Fe-stained dolomite w/CuOx. Stringers of galena and poss. sphalerite? Mn Ox abundant.
961	Quad: Aurum 3 SW 7 1/2' Sec: 35 T: 20N R: 62E UTM: 4380360 N 0675480 E District - Granite	Coarse crystalline calcite vein w/po galena. Calcite cemented brx w/fr galena and gossan. Some altered (re crystallized) ls w/anglesite and CuO
962	Quad: Aurum 3 SW 7 1/2' Sec: 1? T: 19N R: 62E UTM: 4378200 N 0676300 E District - Granite	Brx consisting of silty ls, galena a calcite cemented by coarse crystalli white calcite. CuOxs and Fe boxwork after sulfides. Also calcite vein w galena.
	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
970	Quad: Sherman Mtn. 15' Sec: 2 T: 25N R: 56E UTM: 4437775 N 0616850 E District - Chase	Outcrop sample: White xtalline, vuggy qtz vein and marly silic ls breccia cemented by cross-cutting qtz veins. Brx includ gossany and replaced frags. Some Mn stains.
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
971	Quad: Sherman Mtn. 15' Sec: 35 T: 26N R: 56E UTM: 4437750 N 0616750 E	Drill Cuttings from 395-400' interval composed of grey ls.
972	Quad: Sherman Mtn. 15' Sec: 35 T: 26N R: 56E UTM: 4438300 N 0616650 E District - Chase	Qtz cemented jasperoid breccia w/ fra silic. ls and siltstone and xtalline vuggy qtz vein. Pods of galena, pyri poss. covelite. Some CuOx and FeOxs. Radiating qtz cements brx.
973	Quad: Pinto Summit 15' Sec: 30 T: 18N R: 55E UTM: 4362350 N 0601300 E District - Pinto	Red brown alter. ls and silic ls breccia w/ siliceous and CaCo <sub>3</sub> veinl CuOxs and gossan noted in sample.
974	Quad: Pinto Summit 15' Sec: 36 T: 18N R: 54E UTM: 4360650 N 0600150 E District - Pinto	Rextallized, altered ls and silty ls w/gossany lenses and calcite and pyrite in veins cutting rk. Brown calcite occurs in veins also. Some qtz veins also w/pyrite.
975	Quad: Pinto Summit 15' Sec: 35 T: 18N R: 54E UTM: 43660100 N 0597925 E District - Pinto	Vuggy, sheared qtz vein w/lenses and pods of galena, also isloated xtals of pyrite and poss. tetrahedrite. Some silic ls and ls brx and gossan. CuOx and Fe veinlets.
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	
	Quad: _____ Sec: _____ T: _____ R: _____ UTM: _____ N _____ E	

# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	098	099	100				
Fe % (.05)	G(20)	G(20)	G(20)				
Mg % (.02)	2	.5	.1				
Ca % (.05)	15	1.5	.7				
Ti % (.002)	.015	.03	.002				
Mn (10)	G(5000)	1500	G(5000)				
Ag (.5)	N	500	N				
As (200)	N	10,000	200				
Au (10)	N	N	N				
B (10)	L	30	100				
Ba (20)	1500	700	5000				
Be (1)	200	7	1				
Bi (10)	L	50	N				
Cd (20)	200	100	N				
Co (5)	10	50	20				
Cr (10)	L	20	20				
Cu (5)	1000	G(20,000)	70				
La (20)	N	L	L				
Mo (5)	N	L	300				
Nb (20)	N	N	N				
Ni (5)	5	100	20				
Pb (10)	70	150	10				
Sb (100)	N	G(10,000)	N				
Sc (5)	N	5	L				
Sn (10)	30	70	N				
Sr (100)	N	N	200				
V (10)	L	15	10				
W (50)	500	100	N				
Y (10)	15	20	30				
Zn (200)	G(10,000)	G(10,000)	200				
Zr (10)	15	20	15				
Th (100)	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	267	268	269	270	271	272	273	274	275
Fe % (.05)	10	1.5	G(20)			.2	.2	1	2
Mg % (.02)	.2	.3	1			1.5	2	.3	1.5
Ca % (.05)	15	.5	2			5	7	10	G(20)
Ti % (.002)	.007	.1	.015	NOT	NOT	.015	.005	.005	.07
Mn (10)	5000	500	200	SENT	SENT	300	500	1000	5000
Ag (.5)	500	.5	500	SENT	SENT	20	2000	700	N
As (200)	L	N	10,000	FOR	FOR	N	N	N	N
Au (10)	N	N	N	ANALYSIS	ANALYSIS	N	N	N	N
B (10)	L	15	10			70	10	L	L
Ba (20)	L	500	200			300	5000	150	100
Be (1)	1	3	N			1	N	N	L
Bi (10)	20	N	15			N	N	N	N
Cd (20)	G(500)	N	100			N	50	N	N
Co (5)	15	N	N			N	N	N	10
Cr (10)	10	L	20			20	10	10	20
Cu (5)	20000	50	1000			20	3000	500	15
La (20)	L	N	L			N	N	N	50
Mo (5)	50	N	10			N	N	N	N
Nb (20)	N	L	N			N	N	N	N
Ni (5)	10	L	5			5	5	5	10
Pb (10)	G(20000)	200	G(20,000)			150	5000	1000	150
Sb (100)	200	N	1000			10,000	2000	300	N
Sc (5)	L	7	L			L	L	N	5
Sn (10)	150	N	70			N	N	N	N
Sr (100)	200	150	200			N	100	L	700
V (10)	10	20	70			10	L	30	15
W (50)	N	N	N			700	N	70	N
Y (10)	10	20	15			10	L	L	15
Zn (200)	G(10000)	N	200			200	1000	300	N
Zr (10)	N	150	15			15	L	L	30
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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	276	277	278	279	280	281	282	283	284
Fe % (.05)	1	1.5	.7	2	.2	.3	1.5	15	10
Mg % (.02)	.03	.7	.02	.5	.02	.2	.15	L	.5
Ca % (.05)	.05	G(20)	L	.2	L	1	.3	.05	G(20)
Ti % (.002)	.015	.07	.07	.2	.03	.002	.1	.02	.03
Mn (10)	30	700	L	150	10	70	5000	700	3000
Ag (.5)	50	50	500	2	100	500	1000	3000	15
As (200)	N	N	N	N	N	N	L	500	500
Au (10)	N	N	N	N	N	N	L	L	N
B (10)	2	L	20	20	15	10	20	N	L
Ba (20)	200	150	300	300	100	20	100	L	5000
Be (1)	N	N	N	5	N	N	L	N	5
Bi (10)	N	N	N	N	N	N	N	N	N
Cd (20)	N	N	N	N	N	N	200	G(800)	N
Co (5)	N	5	7	7	N	5	7	20	30
Cr (10)	L	20	15	10	10	15	10	20	50
Cu (5)	100	100	1000	20	1000	500	1500	5000	15
La (20)	N	N	20	200	N	N	L	20	L
Mo (5)	N	N	N	N	N	N	N	N	N
Nb (20)	N	N	N	20	N	N	N	N	N
Ni (5)	5	15	5	L	5	7	7	20	50
Pb (10)	200	5000	1000	70	100	700	5000	20,000	100
Sb (100)	100	N	500	N	L	150	1500	7000	100
Sc (5)	L	5	L	5	L	L	L	L	5
Sn (10)	N	N	N	10	N	N	N	30	N
Sr (100)	N	2000	N	N	N	N	N	N	200
V (10)	10	15	15	30	10	10	15	L	300
W (50)	N	N	N	N	N	700	N	N	300
Y (10)	L	20	L	30	L	L	L	N	20
Zn (200)	500	500	2000	N	N	5000	G(10000)	G(10000)	200
Zr (10)	10	10	200	300	20	L	20	10	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	285	286	287						
Fe % (.05)	10	3	20						
Mg % (.02)	.05	.2	1.5						
Ca % (.05)	.3	10	10						
Ti % (.002)	.15	.1	.1						
Mn (10)	70	1500	700						
Ag (.5)	200	5	1						
As (200)	10,000	L	500						
Au (10)	N	N	N						
B (10)	70	50	50						
Ba (20)	G(5000)	1000	200						
Be (1)	2	1	30						
Bi (10)	N	N	N						
Cd (20)	N	N	N						
Co (5)	N	30	50						
Cr (10)	200	100	150						
Cu (5)	50	15	200						
La (20)	70	20	50						
Mo (5)	20	10	10						
Nb (20)	N	N	N						
Ni (5)	30	200	500						
Pb (10)	10,000	1000	100						
Sb (100)	1000	N	L						
Sc (5)	7	5	5						
Sn (10)	N	N	N						
Sr (100)	2000	500	150						
V (10)	200	300	500						
W (50)	N	N	N						
Y (10)	70	15	30						
Zn (200)	500	L	1000						
Zr (10)	100	20	70						
Th (100)	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	431	432	433						
Fe % (.05)	20	20	15						
Mg % (.02)	.7	1	1.5						
Ca % (.05)	15	20	15						
Ti % (.002)	.07	.015	.05						
Mn (10)	2000	1000	700						
Ag (.5)	15	2	150						
As (200)	N	N	N						
Au (10)	N	N	N						
B (10)	N	L	N						
Ba (20)	L	L	L						
Be (1)	N	L	L						
Bi (10)	N	15	50						
Cd (20)	N	N	N						
Co (5)	150	10	70						
Cr (10)	30	100	100						
Cu (5)	20,000	1000	G(20,000)						
La (20)	N	N	N						
Mo (5)	N	N	30						
Nb (20)	N	N	N						
Ni (5)	700	20	100						
Pb (10)	30	70	50						
Sb (100)	N	N	N						
Sc (5)	L	N	5						
Sn (10)	200	70	150						
Sr (100)	N	N	N						
V (10)	70	30	100						
W (50)	N	N	N						
Y (10)	15	15	20						
Zn (200)	3000	200	700						
Zr (10)	L	10	20						
Th (100)	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 determinations are in parentheses.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

Element	Sample Number								
	509								
Fe % (.05)	L								
Mg % (.02)	10								
Ca % (.05)	20								
Ti % (.002)	.005								
Mn (10)	200								
Ag (.5)	N								
As (200)	N								
Au (10)	N								
B (10)	N								
Ba (20)	G(5000)								
Be (1)	N								
Bi (10)	N								
Cd (20)	N								
Co (5)	N								
Cr (10)	N								
Cu (5)	L								
La (20)	N								
Mo (5)	N								
Nb (20)	N								
Ni (5)	L								
Pb (10)	30								
Sb (100)	N								
Sc (5)	N								
Sn (10)	N								
Sr (100)	5000								
V (10)	10								
W (50)	N								
Y (10)	L								
Zn (200)	N								
Zr (10)	L								
Tl (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.

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# Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	533	534	535	536	537	538	539	540	541
Fe % (.05)	7	5	5	15	20	5	5	10	.2
Mg % (.02)	2	1	1.5	.03	1	.07	2	L	5
Ca % (.05)	15	15	15	2	7	.1	15	.07	10
Ti % (.002)	.3	.1	.15	.01	.01	L	.2	.01	.015
Mn (10)	5000	G5000	G5000	100	1000	500	G5000	100	1000
Ag (.5)	N	20	N	50	10	300	N	30	300
As (200)	N	N	N	N	500	10000	N	200	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	N	N	N	N	N	N	N	N	N
Ba (20)	300	L	L	L	300	N	50	N	N
Be (1)	15	L	L	L	L	L	3	N	N
Bi (10)	20	20	N	300	200	1000	L	700	N
Cd (20)	N	N	N	N	N	150	1	L	N
Co (5)	7	20	7	10	N	L	10	L	N
Cr (10)	50	20	20	L	L	10	20	L	N
Cu (5)	300	15000	100	5000	300	500	15	G20000	500
La (20)	30	N	N	L	N	L	L	N	L
Mo (5)	10	N	N	10	200	50	50	30	N
Nb (20)	L	N	N	N	N	L	N	N	N
Ni (5)	15	15	15	20	N	7	15	7	N
Pb (10)	50	20	10	1500	2000	G20000	20	700	2000
Sb (100)	N	N	N	N	N	2000	N	L	1000
Sc (5)	10	5	5	N	N	N	10	N	N
Sn (10)	20	30	20	N	N	15	30	15	N
Sr (100)	500	N	N	N	N	N	L	N	N
V (10)	150	30	50	20	20	L	30	L	L
W (50)	N	50	N	N	N	50	70	50	N
Y (10)	30	10	15	L	L	N	20	N	N
Zn (200)	500	700	N	5000	5000	2000	1500	G10000	N
Zr (10)	100	30	50	N	N	N	50	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.

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# Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	542	543	544	545	546	547	548	549	550
Fe % (.05)	G20	G20	5	10	.7	20	7	3	5
Mg % (.02)	.2	L	N	2	.02	.05	.3	.07	1.5
Ca % (.05)	.3	.5	L	5	.07	.07	.3	2	15
Ti % (.002)	.002	.002	.03	.002	.01	.003	L	.03	.2
Mn (10)	700	70	20	1500	20	300	2000	G5000	5000
Ag (.5)	300	200	200	300	300	500	500	200	3
As (200)	1000	3000	10000	1000	1000	700	1500	3000	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	N	N	N	N	15	N	N	N	L
Ba (20)	L	N	L	L	100	N	20	70	150
Be (1)	N	N	N	L	L	L	L	2	2
Bi (10)	20	30	150	150	N	70	70	N	30
Cd (20)	N	N	N	300	500	100	100	G500	N
Co (5)	N	N	N	N	N	N	N	10	10
Cr (10)	N	1	L	L	L	L	50	10	20
Cu (5)	500	700	700	700	2000	G20000	20000	10000	3000
La (20)	50	50	20	30	20	N	20	30	N
Mo (5)	N	N	N	5	200	N	100	N	150
Nb (20)	N	N	N	N	N	N	N	N	L
Ni (5)	N	N	5	L	5	L	10	20	15
Pb (10)	G20000	G20000	G20000	G20000	G20000	G20000	G20000	G20000	700
Sb (100)	1000	700	5000	300	G10000	1500	500	500	N
Sc (5)	N	N	N	N	N	N	N	5	7
Sn (10)	700	1000	G1000	200	N	500	300	30	50
Sr (100)	N	500	N	N	N	N	N	100	L
V (10)	15	L	L	10	L	10	L	20	50
W (50)	N	N	N	1	200	N	N	N	700
Y (10)	N	L	N	L	N	N	N	15	30
Zn (200)	G10000	3000	500	G10000	G10000	G10000	G10000	G10000	700
Zr (10)	N	N	L	N	15	N	N	L	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	551	552							
Fe % (.05)	10	.7							
Mg % (.02)	.07	2							
Ca % (.05)	.5	5							
Ti % (.002)	.005	.002							
Mn (10)	300	500							
Ag (.5)	500	200							
As (200)	N	N							
Au (10)	N	N							
B (10)	N	N							
Ba (20)	L	20							
Be (1)	L	L							
Bi (10)	G1000	30							
Cd (20)	N	N							
Co (5)	7	L							
Cr (10)	N	N							
Cu (5)	G20000	1500							
La (20)	N	20							
Mo (5)	700	N							
Nb (20)	N	N							
Ni (5)	15	L							
Pb (10)	5000	G20000							
Sb (100)	100	500							
Sc (5)	N	N							
Sn (10)	N	G1000							
Sr (100)	N	N							
V (10)	L	L							
W (50)	200	N							
Y (10)	N	N							
Zn (200)	2000	10000							
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.

# Semi-Quantitative Spectrographic Analysis

Element	Sample Number									
	701	702	703	704	705	706	707	708	70	
Fe % (.05)	1.5	.7	.5	.7	G20	.5	.5	.5	10	
Mg % (.02)	7	10	.7	1	.02	.1	.07	.7	.05	
Ca % (.05)	20	20	7	5	.5	2	20	.3	3	
Ti % (.002)	.1	.01	.003	.015	.003	L	.015	.5	.02	
Mn (10)	1500	1000	200	300	300	G5000	G(5000)	500	G(5000)	
Ag (.5)	100	50	500	300	200	150	150	2	50	
As (200)	N	200	L	500	5000	L	2000	N	7000	
Au (10)	N	N	N	N	N	N	N	N	N	
B (10)	20	N	10	10	10	L	15	200	20	
Ba (20)	70	L	20	100	70	700	70	200	300	
Be (1)	1	L	L	L	1	N	2	2	3	
Bi (10)	N	N	N	N	N	N	N	N	N	
Cd (20)	20	200	70	N	N	N	20	N	N	
Co (5)	L	N	N	N	N	50	N	15	N	
Cr (10)	10	L	L	30	50	N	50	200	50	
Cu (5)	150	3000	1000	700	500	20	30	50	15	
La (20)	30	N	L	L	20	200	50	50	70	
Mo (5)	N	N	N	5	L	20	5	10	7	
Nb (20)	L	N	N	N	L	L	N	L	N	
Ni (5)	L	N	L	5	10	10	10	50	5	
Pb (10)	G20,000	G(20,000)	G(20,000)	G(20,000)	10,000	50	10,000	300	3000	
Sb (100)	200	150	500	1500	300	N	300	N	100	
Sc (5)	L	L	N	L	N	L	L	20	N	
Sn (10)	N	30	N	N	N	N	150	N	70	
Sr (100)	1000	150	500	1500	N	300	L	300	500	
V (10)	10	L	10	70	500	200	300	300	150	
W (50)	N	N	N	N	N	50	L	N	N	
Y (10)	L	10	N	10	50	10	50	70	20	
Zn (200)	1500	G(10,000)	G(10,000)	L	10,000	1000	2000	200	2000	
Zr (10)	20	L	L	10	L	N	10	150	10	
Ti <sub>2</sub> (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

	710	711	712	713	714	715	716	717	718
Fe % (.05)	.15	.7	.1	.7	.2	1	.5	.15	20
Mg % (.02)	.07	.5	.05	.07	1.5	.7	1.5	.5	.2
Ca % (.05)	7	1.5	2	3	7	G20	5	2	1
Ti % (.002)	.15	.05	.01	.007	.15	.07	.2	.02	.2
Mn (10)	200	1000	5000	500	150	300	100	70	50
Ag (.5)	500	50	500	1000	150	5	.7	.7	2
As (200)	200	L	N	2000	200	N	N	N	200
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	100	30	20	30	100	20	150	150	100
Ba (20)	70	100	1000	150	70	70	300	150	500
Be (1)	L	1	N	1.5	1	L	L	L	1
Bi (10)	N	N	N	N	N	N	N	N	N
Cd (20)	N	50	500	300	30	N	N	N	100
Co (5)	N	L	L	N	7	N	L	N	N
Cr (10)	100	20	N	10	70	50	70	30	5000
Cu (5)	30	30	500	20,000	1000	20	7	L	200
La (20)	L	50	30	L	L	50	L	L	50
Mo (5)	7	N	L	10	30	N	N	N	15
Nb (20)	N	L	L	N	N	N	N	N	L
Ni (5)	10	10	10	5	20	10	7	5	1000
Pb (10)	1000	500	2000	G(20,000)	3,000	700	100	50	150
Sb (100)	100	N	200	2000	200	N	N	N	N
Sc (5)	5	N	N	N	5	L	L	N	7
Sn (10)	N	N	N	15	N	N	N	N	N
Sr (100)	150	N	N	200	N	30	N	N	300
V (10)	70	50	50	70	150	50	50	15	2000
W (50)	N	N	200	50	50	N	N	N	N
Y (10)	10	10	N	L	10	10	15	10	50
Zn (200)	2000	1000	2000	G(10,000)	1000	L	N	N	2000
Zr (10)	70	20	N	N	30	150	300	30	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.



# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	719	720	721	722	723	724			
Fe % (.05)	5	.1	20	7	10	1.5			
Mg % (.02)	.1	L	.05	2	2	1			
Ca % (.05)	.5	2	10	5	20	20			
Ti % (.002)	.05	.002	.07	.05	.05	.3			
Mn (10)	1500	G(5000)	300	G5000	2000	200			
Ag (.5)	N	2	15	N	700	.5			
As (200)	N	N	200	N	N	N			
Au (10)	N	N	N	N	N	N			
B (10)	20	30	15	20	10	100			
Ba (20)	50	100	L	20	L	1000			
Be (1)	1	L	L	3	L	N			
Bi (10)	N	N	30	N	200	N			
Cd (20)	N	500	N	N	200	N			
Co (5)	10	N	N	100	N	10			
Cr (10)	30	15	50	100	300	70			
Cu (5)	20	3000	1000	G20,000	20,000	10			
La (20)	50	L	N	70	70	20			
Mo (5)	L	N	15	50	10	N			
Nb (20)	L	N	N	L	N	N			
Ni (5)	30	20	10	70	30	20			
Pb (10)	50	100	15,000	50	G(20,000)	20			
Sb (100)	N	N	100	N	150	N			
Sc (5)	7	L	L	L	5	7			
Sn (10)	N	N	N	N	100	N			
Sr (100)	N	N	N	N	200	100			
V (10)	100	30	200	50	100	50			
W (50)	N	N	N	N	50	N			
Y (10)	20	15	10	200	30	20			
Zn (200)	200	G(10,000)	10,000	L	10,000	N			
Zr (10)	150	10	50	50	30	500			
Th (100)	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.

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# Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	725	726	727	728	729				
Fe % (.05)	1.5	7	.7	.15	2				
Mg % (.02)	.7	1	.7	.5	.5				
Ca % (.05)	3	2	G(20)	20	G(20)				
Ti % (.002)	.3	.3	.1	.01	.002				
Mn (10)	700	200	200	300	700				
Ag (.5)	.7	.5	N	1.5	N				
As (200)	N	N	N	N	N				
Au (10)	N	N	N	N	N				
B (10)	150	100	20	20	N				
Ba (20)	1000	1000	150	L	30				
Be (1)	5	3	N	L	L				
Bi (10)	N	N	N	N	N				
Cd (20)	N	N	N	N	N				
Co (5)	10	5	5	N	L				
Cr (10)	70	70	100	100	30				
Cu (5)	30	20	5	15	7				
La (20)	70	70	N	N	N				
Mo (5)	5	5	N	N	7				
Nb (20)	20	20	N	N	N				
Ni (5)	15	7	15	15	30				
Pb (10)	150	150	100	100	30				
Sb (100)	N	N	N	N	N				
Sc (5)	10	10	5	L	L				
Sn (10)	N	N	N	N	N				
Sr (100)	200	300	200	500	500				
V (10)	70	300	20	20	30				
W (50)	N	N	N	N	N				
Y (10)	50	20	15	20	10				
Zn (200)	N	200	L	N	N				
Zr (10)	300	500	70	15	20				
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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	779	780	781						
Fe % (.05)	1	.5	1.5						
Mg % (.02)	.1	.03	1.5						
Ca % (.05)	.5	1	5						
Ti % (.002)	.07	.01	.1						
Mn (10)	20	50	300						
Ag (.5)	15	30	1						
As (200)	N	N	N						
Au (10)	N	N	N						
B (10)	50	30	20						
Ba (20)	300	5000	1000						
Be (1)	1.5	3	2						
Bi (10)	N	N	N						
Cd (20)	N	N	N						
Co (5)	L	N	N						
Cr (10)	100	30	20						
Cu (5)	70	200	100						
La (20)	70	N	70						
Mo (5)	10	20	7						
Nb (20)	N	N	20						
Ni (5)	70	7	5						
Pb (10)	10	100	100						
Sb (100)	N	150	N						
Sc (5)	L	L	7						
Sn (10)	N	N	15						
Sr (100)	N	N	200						
V (10)	100	20	20						
W (50)	N	N	N						
Y (10)	50	10	50						
Zn (200)	200	N	200						
Zr (10)	30	10	200						
Th (100)	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	783							
Fe % (.05)	.1							
Mg % (.02)	L							
Ca % (.05)	.2							
Ti % (.002)	.015							
Mn (10)	300							
Ag (.5)	200							
As (200)	1000							
Au (10)	10							
B (10)	20							
Ba (20)	1500							
Be (1)	N							
Bi (10)	N							
Cd (20)	N							
Co (5)	L							
Cr (10)	N							
Cu (5)	500							
La (20)	100							
Mo (5)	N							
Nb (20)	L							
Ni (5)	L							
Pb (10)	200							
Sb (100)	G12,000							
Sc (5)	N							
Sn (10)	N							
Sr (100)	L							
V (10)	L							
W (50)	N							
Y (10)	N							
Zn (200)	1500							
Zr (10)	L							
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.

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# Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	801	802	803	804	805	806	807	808	809
Fe % (.05)	1.5	.3	.2	.7	2	.3	5	15	10
Mg % (.02)	.1	.15	.7	3	1	.7	.5	1	1.5
Ca % (.05)	.05	.7	.3	10	G(20)	10	.2	15	15
Ti % (.002)	.07	.05	.1	.002	.007	.015	.5	.03	.1
Mn (10)	G(5000)	G(5000)	200	2000	2000	200	500	G5000	G(5000)
Ag (.5)	20	500	500	7	20	1000	.5	N	N
As (200)	200	N	N	N	700	N	N	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	20	50	100	20	N	30	50	70	L
Ba (20)	1000	2000	100	100	700	70	700	200	20
Be (1)	10	10	15	1.5	10	1.5	15	200	150
Bi (10)	N	N	N	N	N	N	N	N	20
Cd (20)	N	N	N	N	N	200	N	70	50
Co (5)	10	L	N	L	50	N	7	10	10
Cr (10)	20	10	30	L	10	15	70	20	30
Cu (5)	300	300	10	20	70	3000	50	500	300
La (20)	50	N	L	N	N	N	70	50	50
Mo (5)	N	N	N	N	5	30	10	N	20
Nb (20)	L	N	N	N	N	N	L	L	N
Ni (5)	20	5	5	L	70	7	15	L	10
Pb (10)	150	1500	30	50	500	5000	20	50	30
Sb (100)	L	700	L	L	200	3000	N	N	N
Sc (5)	7	7	L	L	N	N	15	L	5
Sn (10)	N	N	N	N	N	N	20	100	200
Sr (100)	500	5000	150	L	300	L	N	100	150
V (10)	15	10	20	30	200	70	70	20	20
W (50)	10,000	10,000	N	100	100	50	L	50	150
Y (10)	15	L	10	L	10	L	70	20	30
Zn (200)	200	N	N	20	300	20	500	5000	5000
Zr (10)	50	20	70	L	10	10	500	150	100
Ti (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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	810	811	812	813	814S	814W	815	816	817
Fe % (.05)	15	1	.5	.05	10	3	2	.15	1.5
Mg % (.02)	.7	.7	.5	.02	.02	L	.05	.02	.02
Ca % (.05)	1	1.5	3	.15	L	L	.5	.05	1
Ti % (.002)	.07	.007	.02	L	.01	.005	.07	.015	.02
Mn (10)	G(5000)	300	300	20	150	1000	150	30	700
Ag (.5)	10	1500	700	300	150	30	700	500	150
As (200)	500	300	L	700	2000	N	3000	3000	300
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	10	20	50	50	15	10	70	30	50
Ba (20)	700	20	200	50	3000	100	200	300	50
Be (1)	150	3	10	1	1	2	1	L	L
Bi (10)	300	N	N	N	50	70	N	150	N
Cd (20)	200	70	100	70	N	N	100	100	N
Co (5)	50	N	L	N	20	N	10	N	10
Cr (10)	20	10	10	15	L	10	20	10	20
Cu (5)	1000	1000	5000	3000	500	1000	7000	7000	5000
La (20)	50	L	50	N	N	L	L	N	L
Mo (5)	N	5	5	L	15	N	5	N	7
Nb (20)	N	N	L	N	N	N	N	N	N
Ni (5)	20	5	10	5	10	5	5	L	10
Pb (10)	70	5000	3000	7000	700	150	20,000	20,000	10,000
Sb (100)	L	1000	2000	3000	500	200	7000	5000	1000
Sc (5)	5	N	N	N	5	L	5	L	5
Sn (10)	70	N	N	N	N	N	N	N	N
Sr (100)	N	500	300	N	N	N	200	200	N
V (10)	50	70	20	10	10	10	20	100	15
W (50)	150	N	N	N	500	200	N	N	N
Y (10)	50	N	L	L	15	10	50	10	20
Zn (200)	G(10,000)	2000	10,000	2000	700	500	1000	300	500
Zr (10)	20	L	10	L	20	L	70	15	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	818A	818B	819	820A	820B	821A	821B	822	823
Fe % (.05)	1	.1	5	5	15	3	1.5	7	1.5
Mg % (.02)	.2	.05	.03	3	1	3	10	.07	.3
Ca % (.05)	2	1	2	20	G20	20	20	.5	1.5
Ti % (.002)	.05	.05	.015	.07	.1	.07	.05	.01	.1
Mn (10)	100	100	500	700	500	1000	500	200	200
Ag (.5)	1000	500	15	700	200	300	1000	N	3
As (200)	1000	N	L	N	N	N	N	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	50	20	30	30	50	N	20	50	20
Ba (20)	1000	200	500	N	L	5000	700	L	5000
Be (1)	3	2	1	L	L	N	L	5	15
Bi (10)	50	10	N	500	150	300	1000	N	L
Cd (20)	100	20	50	N	N	N	N	N	N
Co (5)	L	L	10	10	L	L	L	20	N
Cr (10)	20	10	10	30	30	100	30	15	N
Cu (5)	20,000	10,000	200	G(20,000)	G20,000	20,000	G(20,000)	300	200
La (20)	50	50	N	50	30	L	L	L	200
Mo (5)	10	N	N	N	N	N	30	50	N
Nb (20)	L	L	N	N	L	N	N	N	20
Ni (5)	10	N	30	15	10	50	10	150	L
Pb (10)	3000	700	5000	150	70	150	150	20	300
Sb (100)	G10,000	3000	100	N	N	N	200	N	N
Sc (5)	N	N	L	7	5	5	5	N	5
Sn (10)	N	N	N	300	500	300	70	N	N
Sr (100)	L	N	200	N	N	300	N	N	300
V (10)	30	10	15	15	20	30	20	20	10
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	10	20	L	50	50	30	10	10	70
Zn (200)	1000	200	500	200	N	200	200	1500	L
Zr (10)	30	200	15	50	70	70	50	20	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

	824	825	8250	826				
Fe % (.05)	20	3	.15	.2				
Mg % (.02)	L	3	.05	.03				
Ca % (.05)	L	G20	.05	.5				
Ti % (.002)	.015	.3	.01	.007				
Mn (10)	L	1000	700	150				
Ag (.5)	5	2	1	1.5				
As (200)	1000	N	N	N				
Au (10)	N	N	N	N				
B (10)	N	100	30	10				
Ba (20)	20	200	100	150				
Be (1)	L	30	20	5				
Bi (10)	N	50	30	N				
Cd (20)	70	N	N	N				
Co (5)	L	15	L	N				
Cr (10)	15	100	10	L				
Cu (5)	1500	70	20	20				
La (20)	N	50	N	50				
Mo (5)	N	N	N	N				
Nb (20)	N	L	N	30				
Ni (5)	L	20	5	5				
Pb (10)	G(20,000)	50	30	100				
Sb (100)	L	N	N	N				
Sc (5)	N	20	N	10				
Sn (10)	N	50	N	N				
Sr (100)	N	1500	N	150				
V (10)	10	50	15	L				
W (50)	N	70	N	N				
Y (10)	10	70	N	150				
Zn (200)	10,000	500	N	N				
Zr (10)	20	100	N	70				
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

	827	828	829						
Fe % (.05)	10	10							
Mg % (.02)	3	.5							
Ca % (.05)	20	1							
Ti % (.002)	.3	.01							
Mn (10)	G5000	200							
Ag (.5)	N	N							
As (200)	N	L							
Au (10)	N	N							
B (10)	50	20							
Ba (20)	20	70							
Be (1)	15	L							
Bi (10)	N	N							
Cd (20)	N	G500							
Co (5)	20	N							
Cr (10)	150	10							
Cu (5)	100	30							
La (20)	50	50							
Mo (5)	N	N							
Nb (20)	20	L							
Ni (5)	20	L							
Pb (10)	50	G20,000							
Sb (100)	N	N							
Sc (5)	20	N							
Sn (10)	150	N							
Sr (100)	500	N							
V (10)	300	50							
W (50)	300	N							
Y (10)	70	L							
Zn (200)	500	G10,000							
Zr (10)	200	N							
Th (100)	N	N							

NOT SENT FOR ANALYSIS

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

	830	831	832	833	834	835	836	837	838
Fe % (.05)	1.5	20	20	1.5	2	.3	5	.5	15
Mg % (.02)	2	.05	.02	.3	.1	.02	.02	.02	.3
Ca % (.05)	7	1	.05	.3	1	.1	.2	L	5
Ti % (.002)	.2	.01	.005	.2	.5	.07	.03	.05	.03
Mn (10)	300	200	20	200	70	50	2000	300	2000
Ag (.5)	.5	5	150	500	1	.5	N	.7	1
As (200)	N	500	5000	7000	L	N	1000	N	L
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	100	10	L	200	20	70	100	20	20
Ba (20)	700	300	G5,000	700	200	700	2000	1000	100
Be (1)	1	N	L	1.5	1.5	L	L	1.5	2
Bi (10)	N	N	N	N	N	N	N	N	N
Cd (20)	N	N	30	300	N	N	N	N	N
Co (5)	5	N	70	150	L	N	10	L	L
Cr (10)	70	50	L	100	30	70	150	10	20
Cu (5)	70	70	G(20,000)	G(20,000)	30	10	200	150	70
La (20)	L	N	N	L	100	L	50	50	50
Mo (5)	10	5	10	700	N	N	20	50	70
Nb (20)	L	N	N	N	20	N	L	L	L
Ni (5)	20	50	7	100	L	L	50	L	L
Pb (10)	70	200	700	2000	300	L	30	70	200
Sb (100)	N	N	150	500	N	N	500	N	N
Sc (5)	7	N	N	5	15	L	N	L	N
Sn (10)	N	N	N	N	N	N	N	N	30
Sr (100)	200	N	3000	N	200	L	300	100	N
V (10)	50	700	50	50	200	30	20	10	20
W (50)	N	N	N	N	L	N	N	N	N
Y (10)	15	L	15	50	50	15	15	50	10
Zn (200)	N	3000	2000	10,000	N	N	300	300	1000
Zr (10)	100	N	N	300	150	150	30	150	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

Element	Sample Number								
	837 X								
Fe % (.05)	5								
Mg % (.02)	.03								
Ca % (.05)	.05								
Ti % (.002)	.1								
Mn (10)	2000								
Ag (.5)	1								
As (200)	N								
Au (10)	N								
B (10)	10								
Ba (20)	1000								
Be (1)	L								
Bi (10)	N								
Cd (20)	N								
Co (5)	5								
Cr (10)	10								
Cu (5)	100								
La (20)	150								
Mo (5)	50								
Nb (20)	20								
Ni (5)	L								
Pb (10)	20								
Sb (100)	N								
Sc (5)	L								
Sn (10)	N								
Sr (100)	100								
V (10)	L								
W (50)	N								
Y (10)	30								
Zn (200)	N								
Zr (10)	200								
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.  
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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	839	840	841	842	843	844	845	846	847
Fe % (.05)	20	2	20	1.5	G20	3	.2	1	2
Mg % (.02)	.1	.2	.05	.05	.02	.5	.03	.1	.05
Ca % (.05)	1	G20	L	15	L	G20	1	.2	.7
Ti % (.002)	.1	.07	.05	.05	.02	.07	.02	.15	.015
Mn (10)	70	200	50	1000	100	3000	200	L	70
Ag (.5)	5	200	70	10	50	70	N	N	1
As (200)	G10,000	500	3000	3000	1000	200	200	500	3000
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	20	10	20	L	N	L	10	100	20
Ba (20)	200	150	100	50	L	500	500	G(5000)	300
Be (1)	1	L	1	L	N	1	1.5	1	1
Bi (10)	20	700	N	1	N	N	N	N	N
Cd (20)	N	50	100	G500	50	150	N	N	N
Co (5)	30	50	L	70	N	15	N	5	N
Cr (10)	50	50	30	L	10	200	N	70	10
Cu (5)	2000	20,000	7000	G20,000	1500	200	100	150	20
La (20)	50	50	50	50	30	30	50	L	L
Mo (5)	50	20	N	N	N	N	N	10	7
Nb (20)	L	N	L	L	L	L	L	L	N
Ni (5)	50	20	10	10	15	50	5	20	15
Pb (10)	50	500	5000	300	G20,000	3000	50	L	2000
Sb (100)	200	L	200	N	L	L	G10,000	G(10,000)	3000
Sc (5)	L	L	5	5	5	10	N	5	N
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	L	200	L	N	L	700	L	200	L
V (10)	20	20	50	20	50	200	20	70	70
W (50)	N	N	N	N	N	200	N	N	50
Y (10)	20	20	N	20	L	10	L	10	L
Zn (200)	2000	700	10,000	G10,000	G10,000	5000	N	L	500
Zr (10)	100	70	30	30	10	20	10	30	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	848	849						
Fe % (.05)	10	3						
Mg % (.02)	.5	.5						
Ca % (.05)	1	10						
Ti % (.002)	.3	.02						
Mn (10)	20	G(5000)						
Ag (.5)	1	2000						
As (200)	1000	2000						
Au (10)	N	N						
B (10)	100	N						
Ba (20)	G5000	150						
Be (1)	2	N						
Bi (10)	N	N						
Cd (20)	N	150						
Co (5)	10	N						
Cr (10)	150	N						
Cu (5)	70	1000						
La (20)	30	L						
Mo (5)	10	N						
Nb (20)	L	N						
Ni (5)	50	L						
Pb (10)	70	G(20000)						
Sb (100)	1500	10000						
Sc (5)	10	L						
Sn (10)	N	500						
Sr (100)	500	300						
V (10)	300	50						
W (50)	L	N						
Y (10)	20	15						
Zn (200)	L	10000						
Zr (10)	200	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	850	851	851 A	852	853	854	855	856	
Fe % (.05)	15	20	10	3	2	10	7	.15	
Mg % (.02)	.15	.7	.07	.7	1	.05	.1	1	
Ca % (.05)	1	15	.15	7	20	.2	3	7	
Ti % (.002)	.015	.015	.007	.3	.2	.2	.07	.005	
Mn (10)	G(5,000)	500	G(5000)	200	1000	100	2000	300	
Ag (.5)	700	10	5000	3	2	150	200	2	
As (200)	G(10,000)	2000	7000	200	1500	7000	10,000	N	
Au (10)	N	N	N	N	N	10	N	N	
B (10)	20	N	10	200	150	L	70	10	
Ba (20)	100	200	50	5000	500	500	5000	20	
Be (1)	3	N	L	N	1	1	L	N	
Bi (10)	N	200	N	N	N	500	1000	N	
Cd (20)	500	N	G(500)	N	N	N	N	N	
Co (5)	N	N	N	20	10	10	200	N	
Cr (10)	N	L	N	100	100	20	20	10	
Cu (5)	2000	500	3000	50	20	20,000	G(20,000)	L	
La (20)	N	20	L	20	50	50	L	L	
Mo (5)	20	N	N	20	N	200	200	N	
Nb (20)	N	N	N	N	N	L	N	N	
Ni (5)	L	L	L	50	20	10	10	5	
Pb (10)	G(20,000)	2000	G(20,000)	70	200	70	200	30	
Sb (100)	10,000	L	G(10,000)	200	L	2000	7,000	N	
Sc (5)	L	N	L	10	10	5	7	N	
Sn (10)	700	20	1000	N	N	100	200	N	
Sr (100)	N	L	N	7	500	200	L	N	
V (10)	50	30	10	300	70	30	30	10	
W (50)	N	N	N	N	N	300	200	N	
Y (10)	30	N	15	20	20	30	20	N	
Zn (200)	G(10,000)	5000	G(10,000)	200	N	200	500	N	
Zr (10)	30	N	N	200	50	300	70	20	
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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	857	858	859	860	861	862	863A	863B	864
Fe % (.05)	2	.3	10	20	10	G20	.15	2	.2
Mg % (.02)	1	.7	3	.07	.7	.05	.07	.5	.05
Ca % (.05)	10	1	10	.7	.07	.05	20	.7	.05
Ti % (.002)	.2	.02	.005	.005	.3	.005	.015	.3	.02
Mn (10)	700	150	2000	200	50	150	100	700	70
Ag (.5)	1	1500	300	1000	1	200	1.5	2	N
As (200)	200	N	G(10,000)	10,000	N	G10,000	N	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	200	L	10	10	200	N	N	L	N
Ba (20)	50	700	L	220	G(5000)	100	200	1000	G5000
Be (1)	1	L	L	5	1.5	1.5	2	5	N
Bi (10)	N	L	N	N	N	N	10	N	N
Cd (20)	N	N	G(500)	150	N	N	N	N	N
Co (5)	20	L	N	N	N	L	N	L	N
Cr (10)	70	N	20	L	150	70	L	L	N
Cu (5)	10	700	G(20,000)	G(20,000)	50	10,000	5	50	L
La (20)	L	20	N	N	50	30	L	50	20
Mo (5)	5	N	50	70	30	300	20	50	N
Nb (20)	N	L	N	N	L	L	N	L	N
Ni (5)	20	5	10	5	10	7	N	5	L
Pb (10)	100	G20,000	G(20,000)	20,000	70	G20,000	70	300	20
Sb (100)	N	1000	1500	1000	N	700	N	L	200
Sc (5)	7	N	L	N	7	N	5	7	N
Sn (10)	N	N	100	100	N	50	N	N	N
Sr (100)	300	200	N	N	300	L	200	L	2000
V (10)	70	15	10	200	100	15	10	30	10
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	15	L	20	L	15	L	300	20	L
Zn (200)	N	G10,000	G(10,000)	G(10,000)	N	G10,000	N	N	N
Zr (10)	500	L	N	L	150	L	20	2.0	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.

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# Semi-Quantitative Spectrographic Analysis

Element	Sample Number							
	865	866	867	868	869	870	871	872
Fe % (.05)	7	7	2	.1	.1	15	.7	1.5
Mg % (.02)	.1	.2	.5	.05	.07	3	10	.3
Ca % (.05)	.1	2	1	.05	3	20	20	2
Ti % (.002)	.07	.1	.3	.05	.02	.015	.03	.15
Mn (10)	20	500	200	100	100	700	700	300
Ag (.5)	L	.5	N	.05	1000	70	7	200
As (200)	3000	N	N	N	500	1500	N	L
Au (10)	N	N	N	N	N	N	N	N
B (10)	20	L	30	30	20	L	15	20
Ba (20)	G5000	1500	2000	150	70	100	50	700
Be (1)	1.5	5	2	L	L	1.5*	1	2
Bi (10)	N	10	L	N	N	N	N	N
Cd (20)	N	N	N	N	N	N	N	N
Co (5)	L	L	L	N	N	7	N	N
Cr (10)	30	N	L	15	15	10	20	15
Cu (5)	50	30	10	7	200	30	15	5
La (20)	50	30	70	N	L	N	N	50
Mo (5)	10	N	N	N	N	70	7	150
Nb (20)	L	N	N	N	N	N	N	20
Ni (5)	20	L	L	L	L	20	5	L
Pb (10)	100	20	100	30	150	150	50	150
Sb (100)	G10,000	N	N	N	500	L	N	1
Sc (5)	L	N	7	N	N	5	L	5
Sn (10)	N	N	N	N	N	N	N	N
Sr (100)	2000	L	1000	N	N	L	L	L
V (10)	30	20	100	10	15	150	30	20
W (50)	N	500	N	N	N	N	N	N
Y (10)	10	15	20	L	L	15	10	30
Zn (200)	N	N	N	N	N	L	N	N
Zr (10)	20	100	300	70	10	L	20	70
Th (100)	N	N	N	N	N	N	N	N

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Fe, Mg, Ti reported in %, all other elements reported in ppm.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	873	874						
Fe % (.05)								
Mg % (.02)								
Ca % (.05)								
Ti % (.002)								
Mn (10)								
Ag (.5)								
As (200)								
Au (10)								
B (10)								
Ba (20)		X						
Be (1)								
Bi (10)								
Cd (20)								
Co (5)								
Cr (10)								
Cu (5)								
La (20)								
Mo (5)								
Nb (20)								
Ni (5)								
Pb (10)								
Sb (100)								
Sc (5)								
Sn (10)								
Sr (100)								
V (10)								
W (50)								
Y (10)								
Zn (200)								
Zr (10)								
Th (100)								

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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	875	876	877	878	879	880	881	882	883
Fe % (.05)	2	3	2	.5	1	G20	1.5	10	3
Mg % (.02)	7	.15	L	10	.05	.2	.2	.05	.1
Ca % (.05)	20	10	L	15	.1	.2	3	.15	.2
Ti % (.002)	.07	.015	L	.015	.05	.01	.3	.03	.07
Mn (10)	1500	1000	50	700	500	150	300	50	100
Ag (.5)	L	20	2	50	.7	N	N	N	.5
As (200)	N	N	N	N	N	200	N	700	300
Au (10)	N	30	N	N	N	N	N	N	N
B (10)	L	15	10	N	30	10	20	30	50
Ba (20)	300	G(5000)	150	100	150	700	700	500	200
Be (1)	L	1	N	L	L	2	5	1	N
Bi (10)	N	N	N	N	N	N	N	N	N
Cd (20)	N	L	N	N	N	N	N	N	N
Co (5)	15	L	L	5	N	L	L	N	N
Cr (10)	30	10	N	15	10	10	10	1500	300
Cu (5)	7	150	10	300	7	50	7	20	20
La (20)	50	L	50	N	L	30	70	50	70
Mo (5)	5	5	N	50	N	100	5	10	5
Nb (20)	N	N	N	N	N	L	20	N	N
Ni (5)	10	5	L	5	5	20	L	70	70
Pb (10)	100	300	200	G(20,000)	70	500	100	10	L
Sb (100)	N	N	N	200	N	200	N	N	N
Sc (5)	7	N	N	L	5	N	5	N	L
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	500	L	N	1000	N	N	N	500	200
V (10)	30	30	10	70	15	100	50	1000	300
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	70	10	L	L	10	10	20	15	30
Zn (200)	N	200	N	5000	N	5000	L	300	300
Zr (10)	100	20	N	10	50	10	300	15	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.

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# Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	884	885	886	887	888	889	890	891	892 A
Fe % (.05)	7	.2	20	5	.5	.7	.2	2	3
Mg % (.02)	.07	.15	2	5	.07	.2	.02	.5	.05
Ca % (.05)	.1	.5	3	7	.1	.15	L	.15	.05
Ti % (.002)	.05	.015	.02	.5	.05	.07	.015	.7	.03
Mn (10)	50	100	100	2000	200	70	50	2000	50
Ag (.5)	N	2	L	N	7	L	10	7	50
As (200)	500	300	N	N	N	N	N	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	50	100	50	150	20	30	20	70	50
Ba (20)	1500	1000	5000	1000	100	200	1000	1000	1500
Be (1)	3	7	L	1.5	3	3	L	2	L
Bi (10)	N	N	N	N	N	N	N	N	10
Cd (20)	N	N	50	N	N	N	N	N	L
Co (5)	L	20	N	20	N	N	N	7	15
Cr (10)	5000	5000	30	150	10	15	15	20	15
Cu (5)	100	200	50	30	20	10	5000	15	G(20,000)
La (20)	100	30	N	50	N	N	N	70	N
Mo (5)	20	L	L	10	N	N	N	L	7
Nb (20)	N	N	N	L	20	N	N	30	N
Ni (5)	150	200	15	70	5	L	5	5	10
Pb (10)	50	70	15,000	100	50	20	1000	50	300
Sb (100)	L	2000	N	N	N	N	700	N	N
Sc (5)	7	20	L	15	N	N	N	15	N
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	500	L	L	L	N	N	N	L	N
V (10)	200	50	100	100	10	15	10	70	70
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	50	150	N	30	10	15	10	30	L
Zn (200)	300	1000	G(10,000)	N	N	N	700	N	300
Zr (10)	20	N	L	100	70	100	L	150	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	892 B	893	894	895	896	897	898	899	900
Fe % (.05)	1	20	2	.3	20	15	10	.5	10
Mg % (.02)	.07	.03	1.5	.3	.3	.7	.02	L	.2
Ca % (.05)	.15	.1	7	20	1.5	20	.15	L	.05
Ti % (.002)	.015	.03	.05	.03	.15	.02	L	L	.07
Mn (10)	150	200	5000	200	200	300	50	500	150
Ag (.5)	300	10	5000	3	N	20	300	1	1
As (200)	N	N	N	N	2000	1000	500	N	200
Au (10)	N	N	10	N	N	N	N	N	N
B (10)	20	20	10	30	30	70	15	30	50
Ba (20)	2000	100	20	70	1500	200	L	70	100
Be (1)	L	L	1	L	20	1	L	L	1
Bi (10)	700	100	30	N	N	100	500	N	N
Cd (20)	70	N	G(500)	N	N	N	N	N	N
Co (5)	7	L	L	N	L	10	N	L	15
Cr (10)	15	L	20	20	30	20	L	30	10
Cu (5)	5,000	500	10,000	7	15	500	30	5,000	50
La (20)	N	N	N	N	100	20	N	N	30
Mo (5)	5	100	15	N	10	L	N	N	N
Nb (20)	N	N	N	N	L	N	N	N	N
Ni (5)	5	L	10	5	50	L	L	7	10
Pb (10)	7000	70	G(20,000)	100	200	5000	G(20,000)	20	200
Sb (100)	N	N	150	N	300	N	N	N	N
Sc (5)	N	N	L	L	7	N	N	N	N
Sn (10)	N	N	N	N	N	N	N	N	N
Sr (100)	N	N	L	200	L	L	200	N	N
V (10)	2000	50	15	10	100	10	15	15	30
W (50)	N	N	N	N	150	N	N	N	N
Y (10)	10	10	L	L	50	L	N	L	L
Zn (200)	1000	1500	G(10,000)	N	200	500	N	N	N
Zr (10)	20	50	50	30	50	N	N	N	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.

# Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	901	902	903	904	905	906	907	908	909
Fe % (.05)	3	5	10	10	.5	.2	7	1.5	2
Mg % (.02)	.2	.3	.05	2	.3	1	2	.5	.5
Ca % (.05)	.07	.07	.05	10	20	15	5	15	1
Ti % (.002)	.3	.3	.1	.2	.01	.05	.5	.2	.2
Mn (10)	70	70	150	5000	G5000	1000	700	500	200
Ag (.5)	N	1	3	2	1500	300	10	2	N
As (200)	200	1000	3000	N	1500	N	N	L	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	100	150	50	50	N	50	200	100	50
Ba (20)	G5000	G5000	G5000	300	100	150	500	2000	2000
Be (1)	1.5	2	5	30	N	N	1	2	2
Bi (10)	N	N	N	300	L	N	N	N	N
Cd (20)	N	N	N	N	500	N	N	N	N
Co (5)	L	L	L	30	N	N	30	L	L
Cr (10)	50	20	50	50	10	20	300	10	10
Cu (5)	50	50	20	20	10,000	150	100	10	5
La (20)	30	50	30	30	50	20	100	150	150
Mo (5)	50	L	20	50	L	L	N	N	N
Nb (20)	L	L	L	N	L	L	L	L	L
Ni (5)	50	50	50	20	N	L	70	L	L
Pb (10)	20	300	50	20	20,000	700	70	50	50
Sb (100)	200	100	200	L	10,000	500	L	N	N
Sc (5)	10	10	5	N	N	N	30	10	7
Sn (10)	N	N	N	50	20	N	N	N	N
Sr (100)	200	L	L	200	300	200	200	1000	500
V (10)	500	150	100	100	L	50	200	50	50
W (50)	N	N	N	1000	N	N	N	L	N
Y (10)	20	20	15	10	L	L	30	50	30
Zn (200)	300	500	100	L	10,000	1000	N	N	N
Zr (10)	70	200	200	150	N	150	300	300	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

	910	911	912					
Fe % (.05)	3	.5	.7					
Mg % (.02)	.1	.1	.1					
Ca % (.05)	.5	.05	.15					
Ti % (.002)	.15	.07	.1					
Mn (10)	200	20	20					
Ag (.5)	L	1	5					
As (200)	700	N	N					
Au (10)	N	N	N					
B (10)	50	50	30					
Ba (20)	150	150	5000					
Be (1)	2	1	1.5					
Bi (10)	N	N	N					
Cd (20)	N	N	N					
Co (5)	10	N	N					
Cr (10)	70	20	50					
Cu (5)	30	7	20					
La (20)	50	L	20					
Mo (5)	15	10	10					
Nb (20)	L	N	N					
Ni (5)	100	5	15					
Pb (10)	20	15	10					
Sb (100)	100	N	N					
Sc (5)	5	L	5					
Sn (10)	N	N	N					
Sr (100)	100	N	150					
V (10)	200	30	70					
W (50)	N	N	N					
Y (10)	100	L	10					
Zn (200)	1500	N	N					
Zr (10)	100	15	70					
Th (100)	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	913	914	915	916	917	918	919	920	921
Fe % (.05)	G20	20	10	G20	G20	20	1	20	10
Mg % (.02)	L	L	.3	L	1	.7	.7	.07	1
Ca % (.05)	.05	L	.5	L	15	10	G20	10	5
Ti % (.002)	L	L	.015	.02	.01	.02	.05	.02	.01
Mn (10)	20	100	150	150	500	5000	300	300	G5000
Ag (.5)	7	200	10	10	5	10	3	1	100
As (200)	2000	10,000	500	3000	500	500	N	N	1500
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	10	20	10	L	N	20	20	20	20
Ba (20)	70	N	70	70	50	200	100	700	N
Be (1)	N	N	N	N	N	N	N	15	N
Bi (10)	N	N	N	70	N	N	N	N	N
Cd (20)	N	N	N	N	20	50	N	N	500
Co (5)	L	N	L	L	N	N	N	30	N
Cr (10)	10	20	10	10	10	10	20	10	L
Cu (5)	700	700	100	500	500	300	10	30	G20,000
La (20)	30	100	30	L	30	50	L	50	L
Mo (5)	70	N	L	N	N	N	N	N	N
Nb (20)	L	L	L	L	L	L	N	L	L
Ni (5)	L	L	L	L	L	L	5	500	10
Pb (10)	20,000	G20,000	200	15,000	5000	G20,000	1000	100	10,000
Sb (100)	700	2000	L	100	L	L	N	N	1500
Sc (5)	N	N	N	N	N	N	L	N	N
Sn (10)	200	G1000	N	200	70	150	N	N	70
Sr (100)	N	N	N	N	L	N	200	N	N
V (10)	L	10	15	15	20	L	15	10	70
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	10	N	N	10	10	N	20	50	N
Zn (200)	10,000	2000	1500	2000	5000	5000	N	5000	G10,000
Zr (10)	L	N	20	L	L	10	100	N	L
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.

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# Semi-Quantitative Spectrographic Analysis

Element	Sample Number								
	922	923	924	925	926	927	928	929	930
Fe % (.05)	.5	1	10	1	7	G20	1	.1	1
Mg % (.02)	.5	7	1	.7	7	L	.2	.15	1
Ca % (.05)	G20	G20	10	G20	15	L	.07	10	G20
Ti % (.002)	.03	.05	.01	.05	.015	.02	.3	.015	.1
Mn (10)	G5000	2000	G5000	1000	1500	1000	10	G(5,000)	5000
Ag (.5)	100	500	50	7	200	100	20	30	.50
As (200)	N	1000	500	N	200	700	700	N	N
Au (10)	N	N	N	N	N	N	L	N	N
B (10)	L	20	L	L	20	N	200	20	20
Ba (20)	700	N	20	50	L	50	1000	30	150
Be (1)	N	N	N	N	N	L	1	L	N
Bi (10)	N	N	20	N	N	N	N	N	N
Cd (20)	N	N	G500	N	100	N	N	N	50
Co (5)	N	N	N	N	N	N	N	N	30
Cr (10)	10	20	N	30	10	20	70	10	50
Cu (5)	500	700	10,000	150	1000	20,000	50	20	300
La (20)	30	20	30	20	20	200	50	L	20
Mo (5)	N	N	N	N	15	N	7	N	N
Nb (20)	N	N	L	N	L	L	L	N	N
Ni (5)	7	L	L	L	5	L	5	5	15
Pb (10)	1500	20,000	5000	500	20,000	20,000	30	L	7000
Sb (100)	L	3000	L	L	100	700	100	N	200
Sc (5)	N	N	N	5	N	N	7	L	5
Sn (10)	N	N	30	N	100	G1000	N	N	N
Sr (100)	100	100	N	150	100	N	500	N	150
V (10)	15	15	10	20	20	20	150	15	30
W (50)	N	N	N	N	200	N	N	N	N
Y (10)	N	N	L	20	N	10	20	L	15
Zn (200)	500	G10,000	G10,000	200	G10,000	10,000	N	N	500
Zr (10)	10	L	N	50	N	L	300	30	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	931	932	933	934 A	934 B	935	936	937	938
Fe % (.05)	.5	.5	.7	.05	L	.2	.2	2	2
Mg % (.02)	.5	.2	.1	.5	G10	G10	2	2	10
Ca % (.05)	20	G20	1	1	G20	G20	10	7	20
Ti % (.002)	.07	.05	.1	.005	.02	.03	.01	.015	.02
Mn (10)	G5000	5000	200	100	300	500	200	1500	1500
Ag (.5)	700	200	10	5000	100	500	500	200	20
As (200)	200	L	N	2000	N	N	200	3000	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	20	20	10	10	L	L	10	20	L
Ba (20)	150	100	70	G5000	1500	100	500	700	70
Be (1)	N	N	L	N	N	N	N	2	2
Bi (10)	N	N	N	N	N	N	N	N	N
Cd (20)	N	L	N	500	N	L	N	G500	N
Co (5)	N	L	N	N	N	N	N	N	N
Cr (10)	20	10	10	L	L	20	10	10	15
Cu (5)	300	100	15	15,000	300	2000	2000	G20,000	300
La (20)	20	20	20	50	20	20	20	50	20
Mo (5)	N	N	N	30	N	N	N	20	N
Nb (20)	N	N	L	L	N	N	N	N	N
Ni (5)	5	5	5	5	N	5	5	5	5
Pb (10)	1000	500	30	20,000	1000	15,000	20,000	G20,000	5000
Sb (100)	L	300	N	G10,000	200	500	2000	G10,000	300
Sc (5)	N	N	N	N	N	N	N	N	N
Sn (10)	N	N	N	20	N	N	N	150	10
Sr (100)	L	100	N	N	N	200	N	150	L
V (10)	30	20	30	L	L	10	50	L	10
W (50)	N	N	N	500	N	N	N	100	50
Y (10)	L	L	50	N	N	N	N	N	N
Zn (200)	200	N	N	G10,000	10,000	2000	2000	G10,000	500
Zr (10)	30	20	200	N	N	N	50	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.

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# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	939	940	941	942	943 Y	943 Z	944	945	946
Fe % (.05)	3	G20	20	20	3	.2	1	.2	20
Mg % (.02)	.1	.15	2	.7	.1	5	5	.1	.1
Ca % (.05)	.3	.1	10	1	.5	15	15	.5	.5
Ti % (.002)	.07	.005	.01	.05	.07	.015	.05	.02	.05
Mn (10)	150	20	500	300	150	5000	3000	100	100
Ag (.5)	3	7	200	50	2	1000	1000	1000	2
As (200)	L	1500	2000	1500	700	500	2000	5000	2000
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	50	20	L	L	50	20	20	30	20
Ba (20)	700	5000	50	50	200	500	2000	150	100
Be (1)	L	2	N	1	2	L	2	N	2
Bi (10)	N	300	N	200	N	N	N	L	N
Cd (20)	N	N	N	N	N	150	200	N	20
Co (5)	L	10	N	N	N	N	N	N	N
Cr (10)	20	70	L	200	300	20	150	20	200
Cu (5)	50	3,000	G20,000	G20,000	50	10,000	15000	G20,000	150
La (20)	20	N	20	20	50	50	50	20	20
Mo (5)	N	100	N	N	N	N	300	50	70
Nb (20)	L	N	L	L	L	N	L	L	L
Ni (5)	20	70	10	15	50	5	5	10	150
Pb (10)	50	700	500	1000	100	15,000	G20,000	G20,000	100
Sb (100)	N	100	N	200	N	500	200	200	L
Sc (5)	5	L	N	N	N	N	N	N	5
Sn (10)	N	N	LNC	150	N	N	10	N	N
Sr (100)	L	N	N	N	200	L	150	N	L
V (10)	100	70	100	50	200	70	100	3000	500
W (50)	N	150	N	50	N	N	70	N	N
Y (10)	10	10	N	N	20	N	N	N	20
Zn (200)	N	2,000	10,000	G10,000	500	G10,000	G10,000	G10,000	5000
Zr (10)	100	N	N	N	30	N	N	N	L
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

	947A	947B	948	949	950	951	952	953	954
Fe % (.05)	20	20	20	3	.5	20	G20	10	1.5
Mg % (.02)	.2	.2	.5	.1	.5	1.5	L	1.5	.7
Ca % (.05)	.5	3	3	2	G20	10	L	5	10
Ti % (.002)	.02	.15	.07	.015	.03	.01	.02	.5	.003
Mn (10)	L	20	50	50	500	1000	20	1500	G(5000)
Ag (.5)	N	L	5	1.5	N	15	70	2	1500
As (200)	N	20	L	L	N	700	500	N	N
Au (10)	N	N	N	N	N	N	N	N	N
B (10)	50	50	20	20	L	N	L	20	10
Ba (20)	1500	2000	1000	150	700	50	G5000	1000	150
Be (1)	N	N	N	N	N	N	N	2	N
Bi (10)	N	N	N	N	N	1000	100	N	N
Cd (20)	N	N	N	N	N	N	N	N	100
Co (5)	N	N	N	L	N	N	N	L	N
Cr (10)	500	500	G5000	30	20	15	70	10	50
Cu (5)	70	30	50	50	10	500	1000	100	300
La (20)	50	100	200	50	20	20	20	100	20
Mo (5)	N	N	N	.15	N	N	20	L	30
Nb (20)	L	20	L	L	L	N	L	L	N
Ni (5)	20	20	70	20	L	L	7	L	50
Pb (10)	50	50	50	100	70	7000	10,000	200	10000
Sb (100)	N	N	L	L	N	N	L	N	N
Sc (5)	N	5	5	N	N	L	N	20	L
Sn (10)	30	50	N	N	N	N	20	N	N
Sr (100)	300	1000	1000	L	300	N	200	1000	1000
V (10)	5000	1500	2000	150	15	20	50	200	200
W (50)	N	N	N	N	N	N	N	N	N
Y (10)	L	20	200	N	15	N	L	50	L
Zn (200)	700	500	1000	N	N	5000	5000	500	5000
Zr (10)	L	30	20	20	100	N	10	300	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

Element

Sample Number

	955	956	957	958	959	960	961	962	
Fe % (.05)	15	15	7	10	2	15	.5		
Mg % (.02)	.15	1.5	.02	3	5	.1	.7		
Ca % (.05)	1	2	.2	5	7	.2	20		
Ti % (.002)	.15	.01	.002	.007	.015	.007	.007		
Mn (10)	G5000	300	70	100	5000	30	700		
Ag (.5)	70	300	500	3	3000	1500	150		
As (200)	1000	700	1000	N	L	N	N		
Au (10)	N	N	N	N	N	N	N		
B (10)	50	10	20	N	30	L	N		
Ba (20)	1000	150	3000	G(5000)	1500	G(5000)	150		
Be (1)	N	L	L	1	L	2	L		
Bi (10)	100	N	700	N	N	15	N		
Cd (20)	N	100	N	N	150	30	N		
Co (5)	N	7	N	5	L	L	N		
Cr (10)	150	10	10	L	20	N	L		
Cu (5)	500	5000	7000	150	15,000	10,000	700		
La (20)	50	N	N	N	N	L	N		
Mo (5)	50	5	N	L	L	10	N		
Nb (20)	L	N	N	N	N	N	N		
Ni (5)	30	70	5	15	10	30	L		
Pb (10)	1500	G(20,000)	20,000	150	15,000	G(20,000)	G(20,000)		
Sb (100)	L	1500	100	N	3000	1000	700		
Sc (5)	7	N	N	L	L	L	L		
Sn (10)	30	1000	G(1000)	15	30	G(1000)	N		
Sr (100)	300	N	N	5000	N	1000	500		
V (10)	200	L	L	300	500	10	15		
W (50)	50	N	N	N	N	N	N		
Y (10)	70	L	L	L	10	10	10		
Zn (200)	5000	10,000	1500	300	10,000	10,000	L		
Zr (10)	50	N	N	N	L	L	10		
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.

# Semi-Quantitative Spectrographic Analysis

Element

Sample Number

	970	971	972	973	974	975			
Fe % (.05)	1	5	1.5	3	10	3			
Mg % (.02)	.07	10	.3	.3	3	.03			
Ca % (.05)	.5	20	.7	1	20	.05			
Ti % (.002)	.002	L	L	.01	.015	L			
Mn (10)	2000	G(5000)	700	700	1500	30			
Ag (.5)	.7	N	15	500	15	500			
As (200)	N	N	L	3000	N	N			
Au (10)	N	N	N	N	N	N			
B (10)	30	N	20	30	L	15			
Ba (20)	300	20	100	5000	5000	50			
Be (1)	L	L	L	L	1	L			
Bi (10)	N	N	N	N	50	N			
Cd (20)	N	N	N	100	N	L			
Co (5)	N	15	N	N	N	N			
Cr (10)	10	N	15	15	15	10			
Cu (5)	70	50	1000	10,000	150	2000			
La (20)	N	N	N	N	N	N			
Mo (5)	N	N	7	200	N	N			
Nb (20)	N	N	N	N	N	N			
Ni (5)	5	L	L	15	7	5			
Pb (10)	150	200	20,000	20,000	500	G(20,000)			
Sb (100)	100	N	700	2000	N	200			
Sc (5)	N	N	N	N	L	N			
Sn (10)	N	N	N	150	150	G(1000)			
Sr (100)	N	L	N	N	200	N			
V (10)	10	L	L	50	20	L			
W (50)	N	N	N	N	N	N			
Y (10)	10	L	10	10	L	10			
Zn (200)	N	N	N	G(10,000)	1500	2000			
Zr (10)	L	L	L	L	N	N			
Th (100)	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.



# Atomic-Absorption Analysis

Element

Sample Number

83-2

	260	262	263	265	268	267	268	269	270
As (5)	20	900	2	30	7	110	5	G 1000	
Au (.05)	2.00	.05	N (.05)	1.00	13.00	N (.05)	N (.05)	.10	
Sb (1)	30	G (200)	60	4	N (1)	100	1	700	
Zn (5)	150	G (2000)	200	25	5	4800	55	G 1000	

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

# Atomic-Absorption Analysis

Element

Sample Number

83-2

	271	272	273	274	275	276	277	278	279
As (5)		15	50	30	10	20	15	5	N(5)
Au (.05)		.05	.40	.05	N(.05)	.05	.10	.05	N(.05)
Sb (1)		61000	1000	180	10	120	20	200	5
Zn (5)		135	400	210	20	600	240	1020	65

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 determined.



# Atomic-Adsorbption Analysis

Element

Sample Number

83-2

	280	281	282	283	284	285	286	287	<del>288</del>
As (5)	N(5)	L(5)	50	170	280	G(200)	G(200)	380	<del>60</del>
Au (.05)	.20	.15	8.25	5.50	.05	.25	L(.05)	N(.05)	<del>N(.05)</del>
Sb (1)	98	105	360	1200	100	220	11	45	<del>3</del>
Zn (5)	75	1000	5300	G(10,000)	250	250	110	620	<del>640</del>

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

# Atomic-Absorbion Analysis

Element

Sample Number

83-2

	<del>428</del>	429	<del>430</del>	431	432	433	<del>434</del>	435	<del>436</del>
As (5)	<del>15</del>	<del>10</del>	<del>N(5)</del>	10	L(5)	25	<del>520</del>	<del>35</del>	<del>65</del>
Au (.05)	<del>.05</del>	<del>N(.05)</del>	<del>N(.05)</del>	.03	.15	.30	<del>.35</del>	<del>120</del>	
Sb (1)	<del>820</del>	<del>22</del>	<del>55</del>	1	N(1)	6	<del>G(1000)</del>	<del>100</del>	<del>59</del>
Zn (5)	<del>65</del>	<del>1260</del>	<del>10</del>	G1000	240	40	<del>G(2000)</del>	<del>260</del>	<del>G200</del>

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

# Atomic-Absorption Analysis

Element

Sample Number

83-2

	501	502	503	504	505	506	507	508	509
As (5)	N	N	10	N	15	200	N	N	5
Au (.05)	<del>N(.05)</del>	<del>N(.05)</del>	<del>N(.05)</del>	<del>N(.05)</del>	<del>N(.05)</del>	<del>N(.05)</del>	<del>N(.05)</del>	<del>N(.05)</del>	<del>N(.05)</del>
Sb (1)	5	N	6	N	4	N	N	1	1
Zn (5)	61000	40	35	45	N(5)	400	20	N	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

# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

Element	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8
As (5)	<del>670</del>	<del>671</del>	672	<del>673</del>	<del>674</del>	<del>675</del>	<del>776</del>	<del>777</del>
	<del>35</del>	<del>N(5)</del>	N(5)	<del>100</del>	<del>G2000</del>	<del>G2000</del>		
Au (.05)	<del>N(.05)</del>	<del>N(.05)</del>		<del>10</del>	<del>2.3</del>	<del>.90</del>		
Sb (1)	<del>2</del>	<del>N(1)</del>	N(1)	<del>140</del>	<del>670</del>	<del>50</del>		
Zn (5)	<del>5</del>	<del>75</del>	70					

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

## Atomic-Adsorbntion Analysis

Sample Number

83-2

Element

	701	702	703	704	705	706	707	708	709
As (5)	5	330	50	270	G200	100	1800	10	G2000
Au (.05)	.05	N(0.05)	N	0.15	3.1	.25	0.50	.10	0.15
Sb (1)	57	120	270	G1000	G100	12	310	2	79
Zn (5)	G200	G2000	G2000	L(5)	G200	G200	G2000	35	G2000
Au Sw		10.00 g	10.00 g	10.00 g			10.00 g		10.00

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, &lt; = detected, but below value shown.

# Atomic-Absorbption Analysis

Element

Sample Number

83-2

	710	711	712	713	714	715	716	717	718
As (5)	370	20	30	G2000	210	5	N(5)	N	410
Au (.05)	0.55	.65	.30	0.15	0.25	.05	N	N	N
Sb (1)	110	8	100	G1000	95	1	1	N(1)	11
Zn (5)	G2000	G200	G200	G2000	1600	20	25	25	G2000
Au Sw	10.00 g			10.00 g	10.00 g		10.00 g	10.00g	10.00

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.

# Atomic-Absorption Analysis

Element

Sample Number

83-2

	719	720	721	722	723	724	725	726	727
As (5)	15	20	550	L(5)	30	N(5)	5	65	5
Au (.05)	.05	N	0.30	.40	2.8	L(.05)	N	N	N
Sb (1)	1	2	49	1	80	6	1	3	N
Zn (5)	120	G2000	G2000	120	G2000	30	95	240	85
AuSw	10.00 g	10.00 g	10.00 g		10.00 g		10.00 g	10.00 g	10.00 g

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 or limit of detection.

# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

Element	728	729	730	731	732	733	734	735	736A
As (5)	5	40	<del>5</del>	<del>N(5)</del>	<del>90</del>	200	480	400	40
Au (.05)	N	N	N(.05)	N(.05)	.15	.05	N(.05)	.05	.10
Sb (1)	N	N	40	4	80	G(4000)	80	G(4000)	600
Zn (5)	60	50	G(2000)	430	G(4000)	1800	G(2000)	700	400
Au Sw	10.00 g	10.00 g							
Hg (.2)			<del>NA</del>	<del>NA</del>					

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.



# Atomic-Absorption Analysis

Element

Sample Number

8342

	<del>777B</del>	<del>778</del>	779	780	781	<del>782</del>	783	<del>784</del>	785
As (5)	<del>270</del>	<del>1200</del>	50	35	5		G200		
Au (.05)	<del>L(.05)</del>	<del>1.2</del>	N(.05)	N(.05)	N(.05)		.30		
Sb (1)	<del>8</del>	<del>240</del>	18	210	1		G100		
Zn (5)	<del>120</del>	<del>2600</del>	240	90	220		5		

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

# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

	801	802	803	804	805	806	807	808	809
As (5)	170	170	20	130	1400	75	120	L(5)	10
Au (.05)	N(0.05)	0.05	0.25	0.10	N	8.4	N	.10	N
Sb (1)	31	780	23	27	210	G1000	N(1)	2	N
Zn (5)	50	45	10	240	590	G2000	460	G200	G2000
Au Sw	10.00 g		10.00 g		10.00 g		10.00 g		10.00

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.

# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

Element	810	811	812	813	814S	814W	815	816	817
As (.05)	580	340	40	440	1300	150	G2000	1200	400
Au (.05)	0.05	0.25	.05	0.10	L(.05)	N	L	G1000	N
Sb (1)	37	910	G100	G1000	370	180	G1000	G1000	G1000
Zn (5)	G2000	G2000	G200	G2000	600	360	1000	390	400
Hg(.2)	10.00g	10.00 g		10.00 g	10.00 g	10.00 g	10.00 g	10.00 g	10.00

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

# Atomic-Absorption Analysis

Element

Sample Number

83-2

	810 sul								
As (5)	L(5)								
Au (.05)	N								
Sb (1)	2								
Zn (5)	G2000								
Au Sw	10.00 g								



# Atomic-Absorption Analysis

Element

Sample Number

83-2

Element	818B	819	820A	820B	821A	821B	822	823	824
As (5)	20	160	20	L(5)	10	10	75	L(5)	1400
Au (.05)	.05	9.4	1.1	.70	0.12	0.25	N	N(.05)	N
Sb (1)	G100	88	3	2	5	240	5	3	75
Zn (5)	100	590	20	25	95	90	1200	55	G2000
Au Sw		10.00 g	10.00 g		10.00 g	10.00 g	10.00 g		10.00

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.

# Atomic-Absorption Analysis

Element

Sample Number

83-2

	825	825Q	826	827	828	829	830	831	832
As (5)	N(5)	25	N(5)	N(5)	60		85	460	G2000
Au (.05)	.05	N	L(.05)	L(.05)	.05		L	0.05	N
Sb (1)	2	1	9	N(1)	7		12	26	120
Zn (5)	170	35	40	60	G200		25	G2000	780
Au Sw		10.00 g					10.00 g	10.00 g	10.00

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.

# Atomic-Absorption Analysis

Element

Sample Number

83-2

	833	834	835	836	837	837X	838	839	840	
As (5)	G2000	70	95	G200	N(5)	N(5)	70	G200	G200	
Au (.05)	N	L(.05)	N	L(.05)	L(.05)	L(.05)	N(.05)	.15	.05	
Sb (1)	290	4	8	G100	67	2	3	100	16	
Zn (5)	G2000	45	10	45	15	130	G200	G200	G200	
Au Sw	10.00 g									10.00 g

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.



# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

	837								
As (5)	5								
Au (.05)	L(.05)								
Sb (1)	1								
Zn (5)	60								

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; M = not detected at limit of detection

## Atomic-Adsorbption Analysis

Element

Sample Number

83-2

	841	842	843	844	845	846	847	848	849
As (5)	G200	G200	G200	150	50	120	1200	G200	1800
Au (.05)	N(.05)	N(.05)	N(.05)	.40	.50	0.10	N	.05	.10
Sb (1)	87	2	16	29	G100	G1000	430	G100	G(4000)
Zn (5)	G200	G200	G200	G200	10	20	N	80	G(4000)
Au Sw						10.00 g	10.00 g		

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

# Atomic-Adsorption Analysis

Element

Sample Number

83-2

	850	851A	851B	852	853	854	855	856	857
As (5)	G2000	G2000	G200	120	1200	G200	G2000	N(5)	250
Au (.05)	N	H	.20	.35	N	9.3	N	.05	N
Sb (1)	G1000	G1000	13	90	34	G100	G1000	N	13
Zn (5)	G2000	G2000	G200	100	60	140	250	5	35
Au Sw	10.00 g	10.00 g			10.00 g		10.00 g		10.00

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

# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

	858	859	860	861	862	863A	863B	864	865
As (5)	10	G2000	G2000	110	G200	L(5)	L(5)	L(5)	G200
Au (.05)	.07	N	N	N(0.05)	.45	0.15	.05	.05	L(.05)
Sb (1)	G100	G1000	G1000	28	G100	2	G100	48	G100
Zn (5)	G200	G2000	G2000	40	G200	20	35	L(5)	15
Au Sw		10.00 g	10.00 g	10.00 g		10.00 g			

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 level of detection.

# Atomic-Adsorbption Analysis

Element

Sample Number

832

	866	867	868	869	870	871	872	873	874
As (5)	L(5)	L(5)	N	430	1800	10	140	35	5
Au (.05)	.05	.05	L	2.6	N	0.80	0.50	.90	.05
Sb (1)	1	2	N(1)	420	46	2	N	26	560
Zn (5)	10	15	20	45	80	20	25	860	65
Au Sw			10.00 g	10.00 g	10.00 g	10.00 g	10.00 g		

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

# Atomic-Absorption Analysis

Element

Sample Number

83-2

	875	876	878	879	880	881	882	883	884
As (5)	10	55	L	25	120	40	580	65	620
Au (.05)	0.10	1.8	0.20	N	.15	N	2.8	.15	0.20
Sb (1)	10	55	150	1	G100	2	36	26	64
Zn (5)	30	50	G2000	20	G200	55	240	.15	360
Au Sw	10.00 g	10.00 g	10.00 g	10.00 g		10.00 g	10.00 g		10.00

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 limit of detection

# Atomic-Absorption Analysis

Element

Sample Number

83-2

	877								
As (5)	20								
Au (.05)	22								
Sb (1)	1								
Zn (5)	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

# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

	885	886	887	888	889	890	891	892A	892B
As (5)	G200	450	40	5	35	50	180	15	85
Au (.05)	.10	N	2.8	N	2.4	0.50	N(0.05)	N	0.25
Sb (1)	16	10	1	N	N	540	3	3	2
Zn (5)	G200	G2000	80	40	25	490	70	370	980
Au Sw							10.00 g	10.00 g	10.00

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 level shown.



# Atomic-Adsorbption Analysis

Element

Sample Number

83-2

	893	894	895	896	897	898	899	900	901
As (5)	150	120	N(5)	1500	G200	520	L	100	75
Au (.05)	N	N	N	0.05	.10	N	N	.20	.35
Sb (1)	11	110	N(1)	240	6	10	N	1	60
Zn (5)	1100	G2000	35	130	160	10	5	15	85
Au Sw	10.00 g	10.00 g	10.00 g	10.00 g		10.00 g	10.00g		

Analysis by Branch of Exploration Geochemistry, U.S. Geol. Survey, Denver, Colorado  
All elements reported in ppm.  
Lower limits of determination are in parentheses.  
Quantities less than lower limits are reported as < LL

# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

Element	920	921	922	923	924	925	926	927	928
As (5)	20	G200	L(5)	G200	G200	10	130	G200	560
Au (.05)	L(.05)	.05	.05	.05	.05	.05	L(.05)	L(.05)	N
Sb (1)	N(1)	G100	6	G100	12	5	29	G100	70
Zn (5)	G200	G200	100	G200	G200	55	G200	G200	30
Au Sw									10.00 g

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

# Atomic-Adsorbption Analysis

Element

Sample Number

83-2

	902	903	904	905	906	907	908	909	910
As (5)	G200	G200	N(5)	G200	10	15	95	N(5)	G200
Au (.05)	.10	.05	9.0	H.05	.25	.05	.05	.05	L(.05)
Sb (1)	23	46	5	G100	G100	5	1	N(1)	19
Zn (5)	160	190	20	G(200)	G200				

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

Atomic-Adsorbntion Analysis

Sample Number

Element

83-2

Table with 10 columns (Sample Numbers 929-936) and 6 rows (Elements As, Au, Sb, Zn, Au Sw). Data includes detection limits (N) and concentration values (G, L).

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

# Atomic-Absorbance Analysis

Sample Number

83-2

Element

	937								
As (5)	G200								
Au (.05)	.05								
Sb (1)	G100								
Zn (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; M = not detected at limit of detection

# Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

	938	939	940	941	942	943Y	943Z	944	945
As (5)	25	L(5)	G2000	G200	G200	G200	G200	G200	G200
Au (.05)	L(.05)	N(.05)	0.05	.05	N(.05)	L(.05)	H.05	H.06	.20
Sb (1)	78	N(1)	90	1	85	16	100	35	88
Zn (5)	G200	15	G2000	G200	G200	170	G200	G200	G200
Au Sw			10.00 g						

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.

# Atomic-Absorption Analysis

Element

Sample Number

83-2

Element	Sample Number								
As (5)	180								
Au (.05)	.60								
Sb (1)	220								
Zn (5)	G1000								

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. M = not detected at limit of detection.

# Atomic-Adsorbtion Analysis

Sample Number

83-2

Element

	946	947A	947B	948A	949	950	951	952	953
As (5)	G200	55	180	80	35	10	800	G200	L(5)
Au (.05)	L(.05)	L(.05)	N(.05)	.05	.05	L(05)	.25	.10	.05
Sb (1)	14	2	24	2	11	N(1)	3	15	1
Zn (5)	G200	G200	70	G200	50	5	G(4000)	G200	100

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 less than limit.



Element

# Atomic-Adsorbtion Analysis

Sample Number

83-2

	948B								
As (5)	100								
Au (.05)	N(.05)								
Sb (1)	4								
Zn (5)	140								

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.

Atomic-Adsorbtion Analysis

Element

Sample Number

83-2

Element	954	955							
As (5)	40	G200							
Au (.05)	.35	2.7							
Sb (1)	13	18							
Zn (5)	G(4000)	G200							

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

# Atomic-Absorption Analysis

Element

Sample Number

83-2

Element	956	957	958	959	960	961	962	<del>963</del>	<del>964</del>
As (5)	780	710	110	220	45	20	55	<del>65</del>	<del>5</del>
Au (.05)	N	N(.05)	N	N	0.10	N	L(.05)	<del>L(.05)</del>	<del>.10</del>
Sb (1)	G1000	16	22	G1000	530	340	560	<del>G(1000)</del>	<del>6</del>
Zn (5)	G2000	1600	340	G2000	850	30	G1000	<del>G(2000)</del>	<del>60</del>
Au Sw	10.00 g	10.00 g	10.00 g	10.00 g	10.00 g	10.00 g			

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

# Atomic-Adsorbption Analysis

Element

Sample Number

83-2

	<del>965</del>	<del>966</del>	<del>967</del>	<del>968</del>	<del>969</del>	970	971	972	973
As (5)	<del>5</del>	<del>N(5)</del>	<del>280</del>	<del>G(4000)</del>	<del>90</del>	20	15	60	1400
Au (.05)	<del>.05</del>	<del>N(.05)</del>	<del>N(.05)</del>	<del>.05</del>	<del>L(.05)</del>	0.05	N	L	N
Sb (1)	<del>5</del>	<del>2</del>	<del>G(1000)</del>	<del>340</del>	<del>110</del>	19	13	760	G1000
Zn (5)	<del>100</del>	<del>10</del>	<del>40</del>	<del>G(4000)</del>	<del>300</del>	15	20	50	G2000
Au Sw						10.00 g	10.00 g	10.00 g	10.00 g

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 = not detected at limit of detection, < detected, but below value shown.

# Atomic-Absorbption Analysis

Element

Sample Number

83-2

	974	975	976	977	978A	978B	979A	979B	980
As (5)	70	40	5	130	10	5	25	20	25
Au (.05)	N	N	N(.05)	.05	N(.05)	N(.05)	N(.05)	L(.05)	N(.05)
Sb (1)	10	160	110	160	20	5	6	6	10
Zn (5)	G2000	G2000	N(.05)	G(2000)	1180	120	40	25	210
Au Sw	10.00 g	10.00 g							

Analysis by Research 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 < value shown but below value shown.

12-2-57