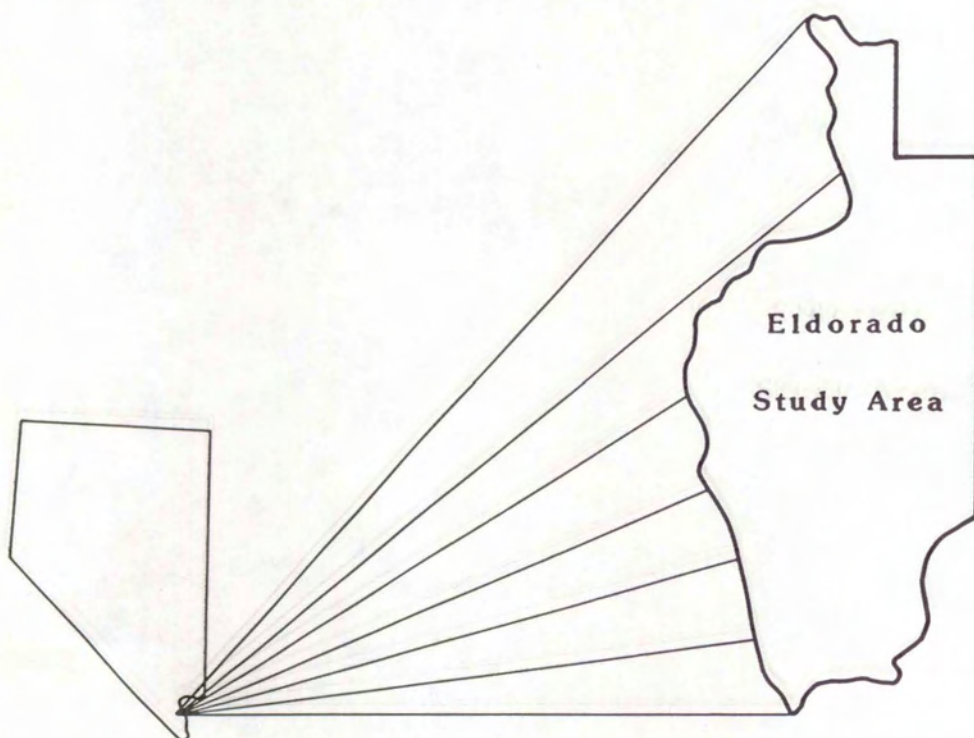


MLA

44-88

Mineral Land Assessment/1988
Open File Report

Mineral Resources of the Eldorado Study Area, Clark County, Nevada



BUREAU OF MINES

UNITED STATES DEPARTMENT OF THE INTERIOR

MINERAL RESOURCES OF THE ELDORADO
STUDY AREA, CLARK COUNTY, NEVADA

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MLA 44-88

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The claims were probably explored for silver and gold in the late 1800's, as were other Eldorado district properties. The Big Horn claims were staked during the 1950's uranium boom. Later exploration on the Inez claims again concentrated on precious metals. No production is reported and none is indicated by minor workings, which include one 121-ft-long adit and eight small prospect pits. Most of the workings occur along a northeasterly linear trend where copper oxide-bearing quartz veins are exposed on the surface, within Precambrian gneiss. The gneiss is cut in places by granitic dikes and plugs of uncertain age. Eighteen rock samples were taken (fig. 6 and table 3, nos. 44-61). Three select samples from dumps exceeded 1 percent copper. Small amounts of silver, lead, and zinc are also present, however, no gold was detected.

Two to three ft thick quartz veins with malachite and chrysocolla are more than 200 ft long and trend about N. 60° E. in Precambrian gneiss. Granitic dikes and pods are also common on the claims. The veins contain low-grade silver and base metals. However, the veins are not exposed well enough to allow quantification of resources with a high degree of accuracy.

A U.S. Atomic Energy Commission study cited by Garside (1973, p. 37-38) and Qualheim (1978, p. 9) reports 0.07 to 0.024 percent U_3O_8 associated with fractures in Precambrian metasedimentary rock on the Big Horn claims. Uranium minerals were not confirmed by the Garside or Qualheim studies nor found during the NURE study of the Kingman Quadrangle (Luning and others, 1982). No samples were analyzed for uranium during this study, but all samples were checked for radioactivity with a scintillometer, with negative results (20 to 40 cps using a Geometrix Model 101 scintillometer).

Montezuma Patented Claim Group

The Montezuma group (fig. 3, no. 9; fig. 7 and table 4) of four claims (Montezuma, Montezuma No. 1, Pizzaro, and Urbain), was patented in 1914. The property is owned by Edward Seggerson, Jr. of Las Vegas. The claims are situated at about 2300 ft elevation on the rugged east flank of the Eldorado Mountains. There are no paved or graded roads to the property. Access is by a 4-wheel drive road in a wash through the Lake Mead National Recreation Area. The area is 1.5 mi north of a dirt road leading to the Big Horn-Inez claims.

The property was surveyed for patent in 1911. At that time, the Montezuma lode had a 100-ft-deep shaft and a 35-ft-long adit; the Montezuma No. 2 lode had a 5-ft-long adit; the Urbain lode had a 106-ft-long adit; and the Pizzaro lode had an open chamber 6 ft high by 11.5 ft wide by 24 ft long, an open cut, and an adit with 17.5 ft of workings. Apparently little or no work has been done on these claims since they were surveyed. No production has been reported.

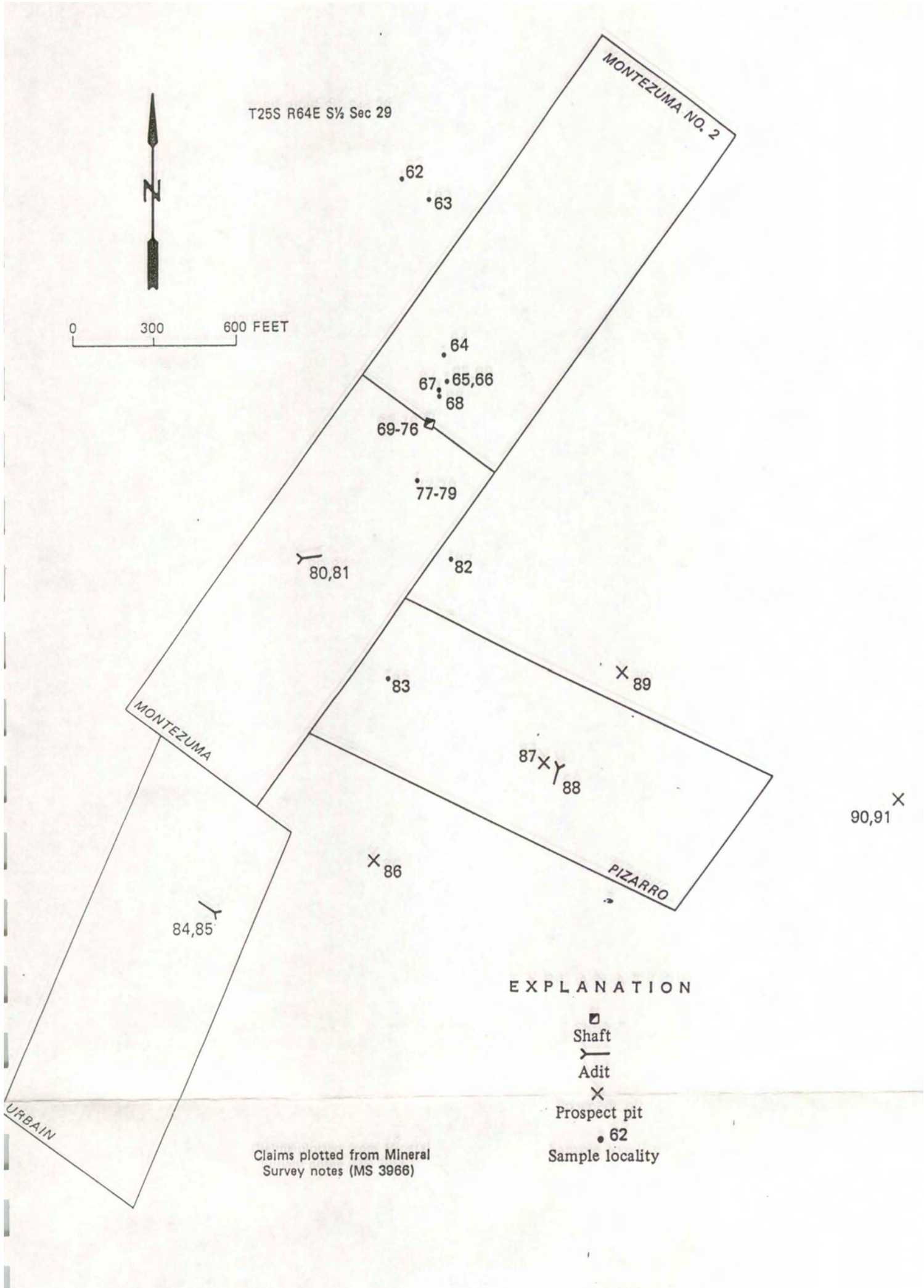


TABLE 4.--Analyses and description of samples from the Montezuma patented claim group, Eldorado study area, Clark County, NV

Sample no.	Sample type	Length (ft)	Description
62	Chip (intermittent)	50.0	Red iron-oxide stained fracture zone in gray rhyolite strikes N. 10° W. and dips 65° W.
63	do--	4.0	do.
64	do--	2.3	Red iron-oxide stained quartz veinlets in granite.
65	do--	3.1	Veinlets of chrysocolla-malachite and calcite in sheared granite.
66	do--	0.2	Calcite veinlet.
67	Grab	NA	Red iron-oxide stained patches in gneiss.
68	Chip	1.0	Brecciated sheared granite with small calcite veinlets.
69	do--	3.0	Unaltered granite.
70	do--	6.0	Brecciated gneiss with red and green stained gouge.
71	Select	NA	Malachite and chrysocolla from vein in brecciated gneiss.
72	Chip	5.0	Shattered schistose gneiss with minor gouge.
73	do--	6.0	Brecciated and silicified gneiss with black iron oxides.
74	do--	0.6	Intense limonite filling and chrysocolla coated brecciated zone in gneiss, strikes N. 35° E. and dips 71° NW.
75	do--	1.0	do.
76	do--	1.5	Garnetiferous gneiss adjoining breccia zone.
77	do--	1.8	Intensely fractured garnetiferous gneiss with intermixed granite.
78	do--	2.2	Fractured granite.
79	do--	1.0	Garnetiferous biotite gneiss.

TABLE 4.--Analyses and description of samples from the Montezuma patented claim group, Eldorado study area, Clark County, NV--Continued

Sample no.	Sample type	Length (ft)	Description
80	Chip	1.7	Red iron-oxide coated granite and quartz veinlet, all fractured.
81	do--	3.0	Intensely brecciated, red iron-oxide stained, propylitically altered granite.
82	do--	5.0	Brecciated granite with calcite matrix.
83	Select	NA	One ft diameter pod containing malachite and red iron-oxides in gray andesite.
84	Chip (intermittent)	80.0	Intermixed gneiss and granite.
85	Select	NA	Malachite stained rock with calcite and red iron-oxides from stockpile.
86	Chip	0.1	Gouge zone in granite trends N. 20° W., and dips 52° SW.
87	do-- (intermittent)	70.0	Propylitically altered and moderately fractured andesite.
88	do--	10.0	do.
89	do--	0.75	Malachite and red iron-oxide rich lens in gneiss. Lens at least 75 ft long and strike N. 60° E. and dip 45° NW.
90	do--	2.5	Brecciated andesite with some calcite and red iron-oxides.
91	do--	3.0	do.

TABLE 4. Analyses and description of samples from the Montezuma patented claim group, Eldorado study area, Clark County, NV

[N, none detected; --, not analyzed; all values in parts per million (ppm) unless otherwise noted]

Sample Number	Au	Ag	As	Ba	Bi	Cd	Co	Cr	Cu	Ga	Hg	Mn	Mo	Ni	Pb	Sb	Se	Tl	W	Zn
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
62	.030	N	21.	640	N	--	N	66	9.	--	0.10	71	6.	2	13.	5.	N	--	N	14.
63	N	N	7.	580	N	--	N	56	3.	--	0.05	92	7.	1	13.	N	N	--	N	7.
64	N	N	N	70	N	--	3.	153	31.	--	N	81	13.	4	94.	N	10.	--	N	113.
65	.005	0.9	63.	980	4.	--	8.	97	124.	--	N	498	8.	8	714.	N	9.	--	N	70.
66	.010	0.7	587.	2000	17.	--	4.	63	975.	--	0.10	5665	6.	3	9972.	N	6.	--	N	34.
67	.010	N	14.	1200	3.	--	6.	105	49.	--	N	261	13.	6	17.	6.	N	--	N	71.
68	.030	1.7	50.	1100	3.	--	8.	113	138.	--	0.05	523	9.	9	1017.	6.	16.	--	N	93.
69	.005	N	10.	930	7.	--	N	83	11.	--	0.05	65	7.	3	33.	N	N	--	N	44.
70	.160	2.3	20.	1100	N	--	9.	116	1199.	--	0.05	231	10.	17	3970.	N	6.	--	N	2016.
71	10.1	16.8	8.66	--	11.	1.36	--	--	41000.	2.18	6.41	--	213.	--	16000.	14.3	2.48	N	--	676.
72	.070	2.5	18.	1200	N	--	12.	104	3150.	--	0.20	451	25.	16	4700.	N	N	--	N	5300.
73	0.195	2.75	7.7	--	N	1.29	--	--	1618.	2.14	0.204	--	6.67	--	5500.	2.14	N	N	--	1223.
74	1.970	2.1	N	680	N	--	14.	63	5.83X	--	0.35	244	63.	14	7960.	11.	N	--	N	8865.
75	4.145	2.2	95.	700	N	--	17.	93	12225.	--	1.40	207	56.	35	5863.	9.	5.	--	N	3.312
76	N	N	14.	880	N	--	11.	106	47.	--	0.05	280	4.	33	154.	N	N	--	N	511.
77	.005	N	N	920	N	--	11.	107	21.	--	0.10	184	5.	36	7.	N	N	--	N	32.
78	.005	N	N	1300	3.	--	N	107	6.	--	N	34	10.	3	7.	6.	9.	--	N	19.
79	.005	N	6.	830	3.	--	19.	136	10.	--	N	189	3.	45	8.	N	7.	--	15.	46.
80	N	0.552	45.1	--	1.29	0.424	--	--	589.	0.632	N	--	40.7	--	125.	0.706	N	N	--	39.9
81	N	2.57	43.9	--	0.733	N	--	--	316.	N	N	--	12.	--	261.	1.33	N	N	--	5.47
82	N	0.082	20.	--	N	N	--	--	28.9	2.09	N	--	2.94	--	38.8	1.01	N	N	--	63.5
83	.080	1.6	30.	1500	25.	--	4.	62	10450.	--	0.05	97	10.	10	1157.	6.	N	--	N	430.
84	N	0.551	20.8	--	2.47	1.34	--	--	338.	3.2	0.133	--	6.14	--	154.	0.603	N	N	--	257.
85	0.071	2.74	29.2	--	26.7	3.45	--	--	42088.	6.41	13.7	--	9.04	--	1125.	N	1.45	N	--	99.4
86	N	0.122	5.24	--	0.476	0.894	--	--	233.	4.27	N	--	0.693	--	71.7	0.92	N	N	--	129.
87	N	0.099	9.91	--	N	0.266	--	--	41.9	4.96	N	--	2.36	--	50.5	1.37	0.963	0.496	--	117.
88	0.068	0.126	20.3	--	N	0.651	--	--	33.5	2.6	0.166	--	7.28	--	57.2	1.2	N	N	--	105.
89	.040	0.6	8.	2200	N	--	4.	80	1466.	--	N	56	7.	4	32.	9.	N	--	N	998.
90	N	0.056	4.28	--	N	0.299	--	--	27.3	5.86	N	--	4.49	--	118.	0.43	0.892	N	--	214.
91	N	0.087	23.9	--	N	0.59	--	--	23.5	2.28	N	--	4.05	--	143.	0.935	0.921	N	--	116.

No tellurium, platinum, or palladium was detected in sample nos. 71, 73, 81, and 83-91. These elements were not analyzed for in the other samples.

The claims are underlain by Precambrian gneiss and granitic dikes. Some andesitic volcanic rocks (Patsy mine volcanics?) are also present on all of the claims. The principal mineralized structure, a brecciated zone as wide as 12 ft, is exposed at the shaft which is on the common line between the Montezuma and Montezuma No. 2 claims (fig. 7). The zone trends approximately north. The breccia zone contains some quartz, calcite, and yellow and red iron-oxide zones 6 in. to 1 ft thick which contain malachite and chrysocolla.

Thirty samples were taken from in and near the claims (fig. 7, table 4). Gold content up to 10.1 ppm, silver up to 16.8 ppm, copper up to 5.83 percent, lead up to 1.6 percent, and zinc up to 3.31 percent were found in samples taken from around the shaft.

The copper mineralized rock was not traceable continuously for more than 50 ft along strike; however, the brecciated rock could be followed about 260 ft, N. 15° E. from the shaft and 50 ft south from the shaft. An EM-16 survey (Appendix) indicates that a strong structure follows this trend; a small copper-bearing outcrop, (fig. 7. no. 83) in andesitic volcanics about 1,000 ft south of the shaft may be on the same structure. A magnetometer was not useful in delineating structures in this area.

It is probable that mineralized rock on these claims correlates to rock found in similar geologic environments elsewhere in the Eldorado district, and in the Searchlight and Newberry mining districts (see Causey, 1988) and that low-grade vein precious- and base-metal deposits might be expected. The breccia zone is projected to be over 2,400 ft long following a trend of N. 85° E. between sample points 62 and 86 (fig. 7). While not well-defined in the volcanics which are exposed over much of this area, the breccia and associated mineralized rock is prominent in the underlying Precambrian formation.

Other prospects

The other five claim groups studied include the Flintstone group (Barney, Wilma, Fred, Betty, Bam Bam, and Pebbles), VAR, SINJUN (including the Silver Bullet claim), Eldorado, and Rusty Bit claims. Only the Silver Bullet claim, owned by Alfred Schleicher, was active in 1987. There was no other activity noted on the other claims during this study. All of these claims are on Tertiary volcanic rocks.

No mineralized rock was observed. However, 12 samples were above expected normal distribution of copper on the Flintstone, VAR and SINJUN claims. These five claim groups are summarized on Table 5 and sample analyses are shown on table 6.