Site Inspection Report for the Abandoned and Inactive Mines in Idaho on U.S. Bureau of Land Management Property in the Pahsimeroi Valley, Lemhi County, Idaho

Virginia S. Gillerman
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Field Inspection conducted by Virginia S. Gillerman Tracy Morrison and Bruce Otto
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INTRODUCTION

This report summarizes data collected at three inactive mine sites located on or near BLM administered land along the west side of the Lemhi Range and adjoining Pahsimeroi Valley, Lemhi County, Idaho. Field examinations were conducted for the BLM Challis Resource Area in the summer of 2001. Two of the sites (ID-0084-00010 and ID-0084-00011) constitute the Ima Mine (DU-399) and Millsite (DU-401) complex, located in the Blue Wing Mining District near the tiny town of Patterson. The third site (ID-0084-00015), the Nest Egg or Magnum Mining Corporation property, is a small prospect further north along the range front. The site investigations focused on both physical safety hazards and potential environmental problems. Data were collected using a Trimble Asset Surveyor GPS receiver and data logger. Figure 1 is a location map for the Pahsimeroi Valley properties.

LOCATION

The Pahsimeroi Valley is one of Idaho’s more isolated valleys, situated in southeastern Lemhi County between the Lemhi Range to the east and the backside of the Lost River Range to the west. Only a few ranches and tiny settlements are found there, and the single paved road goes from the turnoff of State Highway 75 at Ellis southward to May and Patterson and eventually to Howe. The town of Patterson lies at the mouth of the narrow canyon of Patterson Creek which drains the western side of the Lemhi Range. The Ima mine complex lies next to the creek a mile upstream from town. A well-used, single lane dirt road follows the north side of the creek and provides access to the millsite. The mine workings and mill are in T14N, R23E, Section 23, principally on the north side of the creek, but adits, structures and waste dumps are also located on the south side. The mill complex lies in the bottom of the canyon and is bisected by Patterson Creek, which did not have a bridge over it in 2001. The swift-flowing and fairly deep water plus the deep incision through the waste dumps prevented access to the south side of the creek, but most features could be adequately seen from the north side. Access might be possible in late autumn with a safety rope. The old mine roads to the upper workings were sloughed in and inaccessible to trucks, though ATV’s could probably reach them. The Ima mine site is located on the Patterson 7.5 minute quadrangle and the Leadore 100,000 scale topographic map. While the upper mine workings are on patented claims, the millsite and tailings appear to be either on BLM property or very close to the BLM-Private property boundary.

The Nest Egg property is located in Section 3, T15N, R21E, along the range front between Ennis Gulch and Morgan Creek on the east side of the Pahsimeroi Valley. Access is by a jeep trail from the Pahsimeroi Valley road at Ennis.
See pocket behind this page.

Figure 1. Location Map for AML Properties Visited in 2001 in Pahsimeroi Valley, Lemhi County, Idaho. Map is in pocket behind this page.
GEOLOGY

The Pahsimeroi Valley displays “classic” Basin and Range topography and structure. The range-front on the east side of the valley is steep and characterized by large alluvial fans where streams exited the uplifted block of the Lemhi Range. Rocks on the west flank of the Lemhi Range, and particularly in the Blue Wing mining district, consist predominantly of Precambrian quartzites with lesser argillite and siltite. The Precambrian units are thought to be Proterozoic in age and have been assigned to the Apple Creek and Gunsight Formations, with other units possible in the region. The exact stratigraphy is disputable and most of the units are in thrust contact with each other. Small exposures of Eocene-age volcanic rocks and Tertiary sediments are found on the down-thrown, valley side of the range-bounding fault. The steep sides of Patterson Canyon are dominantly quartzite talus eroded from the ridges above the mine area. Other Quaternary alluvial deposits and landslide deposits are locally present. Glacial deposits and a few Paleozoic units are found in the higher portions of the range. Geologic references are listed in the “References” section.

The mines in the Blue Wing mining district exploited tungsten and base metal-bearing quartz vein deposits localized around a granitic stock that was exposed in the lower level of the Ima mine and in drill core. The deposit is zoned with mineralization in the outer zone veins hosted by Gunsight and Apple Creek Formation metasediments, and the inner zone of disseminated and veinlet ore hosted by the granite. Outer zone minerals include pyrite, huebnerite (iron tungstate), scheelite (calcium tungstate), tetrahedrite, galena, sphalerite, and chalcopyrite in veins of quartz, fluorite, calcite, orthoclase, and rhodochrosite. The outer zone was as much as 900 feet wide, 2000 feet long, and 700 feet deep. The inner zone was below the mine workings and explored with drilling. Drill core of the granite was found in a trench onsite. Ore minerals of the inner zone include molybdenite, huebnerite, chalcopyrite, and pyrite in sericite and silica altered granite (McHugh and others, 1991, cited in Mitchell 1999; also see other general references). Tungsten was the major economic commodity.

Mitchell (1999) compiled the history of the Ima mine, which was operated by a succession of companies from 1900 until approximately 1982, with a large increase in production from 1937 through WWII until 1957 when the federal government stopped buying tungsten for the strategic stockpile and the price dropped. By then, the mine was owned by Bradley Mining Company who had started leasing in 1945 and completed the purchase of Ima Mines in 1955. Milling was accomplished through gravity and flotation circuits followed by a magnetic separation circuit and bulk sulfide flotation (Mitchell, 1999). Drilling during World War II was directed by the U.S. Bureau of Mines. Starting in 1951, the Defense Minerals Administration (DMA) and its successor, the Defense Minerals Exploration Administration (DMEA), along with U.S. Bureau of Mines, became active partners (with a 75% participation stake) in the development and exploration of the mine. It was during this period that the workings on the south side of Patterson Creek were developed. Bradley closed the Ima in 1957 when the price of tungsten dropped. Various lessees conducted exploration and development work for tungsten and molybdenum until 1982. The mill was dismantled in 1960. Total recorded production for the Ima between 1934 and 1982 was some 198,333 standard units of
tungsten oxide (WO$_3$) from 743,069 tons of ore and 3,314 tons of old tailings (Mitchell, 1999). A standard unit of tungsten trioxide is 20 pounds, i.e. 1 percent of a short ton. Significant amounts of silver, copper, lead and zinc were also recovered. Quartz vein pieces with variable, but minor, amounts of pyrite, molybdenite, heubnerite, and oxide copper were found on the waste dumps during the site visit.
HAZARD ASSESSMENT

SUMMARY

Mine hazards are summarized in Table 1. All significant hazards are located at the Ima mine (Site 11 or DU-399) and Ima millsite (Site 10 or DU-401). Geochemical data are listed in Table 2.

Table 1. Summary of sites in the Pahsimeroi Valley, Lemhi County, Idaho. Site name in bold indicates property has one or more significant potential environmental or physical hazards. Under “Environmental Hazards”: T = a mill tailings problem, D = dump material in or near waterway, WQ = potentially poor water quality. Under “Physical Hazards”, features are: A = adit, P = prospect pit, S = shaft, St = stope; where O = open, C = caved, and ? = unknown condition or number.

<table>
<thead>
<tr>
<th>BLM Site Number (GPS Data File)</th>
<th>IGS Property Number</th>
<th>Mine Name</th>
<th>Environmental Hazard</th>
<th>Physical Hazard</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID-0084-00010 (DU-401)</td>
<td>DU-401</td>
<td><strong>Ima Millsite</strong></td>
<td>3T</td>
<td>Structures</td>
<td>Concentrate Spills in Mill, Slag on Dump, Tailings and Waste Dumps cut by creek and near road. Transformer ? Very large site partially on BLM land.</td>
</tr>
<tr>
<td>ID-0084-00011 (DU-399)</td>
<td>DU-399</td>
<td><strong>Ima Mine</strong></td>
<td>1 Landfill</td>
<td>5AO</td>
<td>Large site with easy access; recent human use. Huge open adit near BLM.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>WQ?</td>
<td>2AC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D</td>
<td>Structures</td>
<td></td>
</tr>
<tr>
<td>ID-0084-00015</td>
<td>DU-314</td>
<td>Nest Egg (Magnum Mining Corp.)</td>
<td>1 Trench</td>
<td></td>
<td>No action needed.</td>
</tr>
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Table 2a: Surface Water Samples at Ima Mine and Millsite (Summer 2001)

<table>
<thead>
<tr>
<th>Element (Results in Mg/L)</th>
<th>W-01-6 Patterson Creek, just below Ima Millsite</th>
<th>W-01-7 Patterson Creek, at edge of Tailings Pile #1</th>
<th>W-01-8 Patterson Creek, by Tailings Pile #2, west of highway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag</td>
<td></td>
<td>&lt;0.005</td>
<td>&lt;0.10</td>
</tr>
<tr>
<td>Al</td>
<td></td>
<td>&lt;0.10</td>
<td></td>
</tr>
<tr>
<td>As</td>
<td>&lt;0.10</td>
<td></td>
<td>&lt;0.10</td>
</tr>
<tr>
<td>Ba</td>
<td></td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>Be</td>
<td></td>
<td>&lt;0.005</td>
<td></td>
</tr>
<tr>
<td>Bo</td>
<td></td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Ca</td>
<td></td>
<td>7.27</td>
<td></td>
</tr>
<tr>
<td>Cd</td>
<td>&lt;0.005</td>
<td>&lt;0.005</td>
<td>&lt;0.005</td>
</tr>
<tr>
<td>Co</td>
<td>&lt;0.02</td>
<td></td>
<td>&lt;0.02</td>
</tr>
<tr>
<td>Cr</td>
<td></td>
<td>&lt;0.05</td>
<td></td>
</tr>
<tr>
<td>Cu</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Fe</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Pb</td>
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<td>&lt;0.05</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Mg</td>
<td></td>
<td>5.38</td>
<td></td>
</tr>
<tr>
<td>Mn</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Mo</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Ni</td>
<td></td>
<td>&lt;0.02</td>
<td></td>
</tr>
<tr>
<td>K</td>
<td></td>
<td>0.04</td>
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</tr>
<tr>
<td>Si</td>
<td></td>
<td>2.92</td>
<td></td>
</tr>
<tr>
<td>Na</td>
<td></td>
<td>1.71</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td></td>
<td>&lt;0.05</td>
<td></td>
</tr>
<tr>
<td>Zn</td>
<td>0.012</td>
<td>0.01</td>
<td>&lt;0.005</td>
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Table 2b: Analyses of Solid Materials from Ima Mine and Millsite, Lemhi County, Idaho.
(Analyzed by ALS Chemex)

<table>
<thead>
<tr>
<th>Element</th>
<th>I-A</th>
<th>I-B</th>
<th>DU-399</th>
<th>7-19-A</th>
<th>7-19-B</th>
<th>7-19-C</th>
<th>7-19-D</th>
<th>DU-401A</th>
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<tbody>
<tr>
<td>Au ppb</td>
<td>16</td>
<td>16</td>
<td>320</td>
<td>80</td>
<td>1760</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hg ppb</td>
<td>100</td>
<td>11</td>
<td>73</td>
<td>&gt;100</td>
<td>63</td>
<td>&gt;100</td>
<td>32</td>
<td>23</td>
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<tr>
<td>Ag ppm</td>
<td>11</td>
<td>7</td>
<td>73</td>
<td>&gt;100</td>
<td>63</td>
<td>&gt;100</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>Al %</td>
<td>1.69</td>
<td>1.2</td>
<td>2.03</td>
<td>0.43</td>
<td>0.45</td>
<td>0.2</td>
<td>1.38</td>
<td>0.14</td>
</tr>
<tr>
<td>As ppm</td>
<td>20</td>
<td>40</td>
<td>73</td>
<td>&gt;100</td>
<td>63</td>
<td>&gt;100</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>Ba ppm</td>
<td>30</td>
<td>50</td>
<td>90</td>
<td>&lt;10</td>
<td>40</td>
<td>&gt;10</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Be ppm</td>
<td>4</td>
<td>2.5</td>
<td>3.5</td>
<td>0.5</td>
<td>1</td>
<td>&lt;0.5</td>
<td>2.5</td>
<td>&lt;0.5</td>
</tr>
<tr>
<td>Bi ppm</td>
<td>22</td>
<td>50</td>
<td>1735</td>
<td>845</td>
<td>984</td>
<td>986</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Ca %</td>
<td>1.2</td>
<td>0.62</td>
<td>0.94</td>
<td>9.7</td>
<td>2.8</td>
<td>0.73</td>
<td>3.8</td>
<td>0.26</td>
</tr>
<tr>
<td>Cd ppm</td>
<td>21</td>
<td>7</td>
<td>33.5</td>
<td>302</td>
<td>102.5</td>
<td>37.5</td>
<td>&gt;500</td>
<td>12.5</td>
</tr>
<tr>
<td>Co ppm</td>
<td>3</td>
<td>1</td>
<td>11</td>
<td>54</td>
<td>150</td>
<td></td>
<td>22</td>
<td>82</td>
</tr>
<tr>
<td>Cr ppm</td>
<td>195</td>
<td>85</td>
<td>262</td>
<td>113</td>
<td>107</td>
<td>732</td>
<td>150</td>
<td>684</td>
</tr>
<tr>
<td>Cu ppm</td>
<td>275</td>
<td>370</td>
<td>2690</td>
<td>1165</td>
<td>2650</td>
<td>1875</td>
<td>441</td>
<td>876</td>
</tr>
<tr>
<td>Fe %</td>
<td>0.72</td>
<td>0.36</td>
<td>1.11</td>
<td>9.94</td>
<td>7.22</td>
<td>&gt;25.00</td>
<td>15.02</td>
<td>&gt;25.00</td>
</tr>
<tr>
<td>K %</td>
<td>1.04</td>
<td>0.58</td>
<td>1.11</td>
<td>0.26</td>
<td>0.24</td>
<td>0.09</td>
<td>0.84</td>
<td>0.06</td>
</tr>
<tr>
<td>Mg %</td>
<td>0.29</td>
<td>0.18</td>
<td>0.3</td>
<td>0.04</td>
<td>0.06</td>
<td>0.08</td>
<td>0.15</td>
<td>0.01</td>
</tr>
<tr>
<td>Mn ppm</td>
<td>172</td>
<td>1975</td>
<td>3200</td>
<td>&gt;10000</td>
<td>&gt;10000</td>
<td>&gt;10000</td>
<td>8020</td>
<td>6860</td>
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<tr>
<td>Mo ppm</td>
<td>116</td>
<td>31</td>
<td>94</td>
<td>1965</td>
<td>488</td>
<td>1325</td>
<td>603</td>
<td>302</td>
</tr>
<tr>
<td>Na %</td>
<td>0.04</td>
<td>0.04</td>
<td>0.09</td>
<td>0.01</td>
<td>&lt;0.01</td>
<td>0.03</td>
<td>0.04</td>
<td>0.02</td>
</tr>
<tr>
<td>Ni ppm</td>
<td>11</td>
<td>14</td>
<td>13</td>
<td>30</td>
<td>210</td>
<td>24</td>
<td>307</td>
<td></td>
</tr>
<tr>
<td>P ppm</td>
<td>130</td>
<td>60</td>
<td>190</td>
<td>340</td>
<td>90</td>
<td>70</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>Pb ppm</td>
<td>406</td>
<td>312</td>
<td>1558</td>
<td>&gt;10000</td>
<td>&gt;10000</td>
<td>&gt;10000</td>
<td>1374</td>
<td>2060</td>
</tr>
<tr>
<td>S %</td>
<td>0.36</td>
<td>0.18</td>
<td>0.85</td>
<td>&gt;10.00</td>
<td>5.4</td>
<td>4.31</td>
<td>&gt;10.00</td>
<td>1.3</td>
</tr>
<tr>
<td>Sb ppm</td>
<td>110</td>
<td>175</td>
<td>1365</td>
<td>2880</td>
<td>875</td>
<td>990</td>
<td>765</td>
<td>180</td>
</tr>
<tr>
<td>Sr ppm</td>
<td>8</td>
<td>6</td>
<td>9</td>
<td>38</td>
<td>31</td>
<td>15</td>
<td>45</td>
<td>11</td>
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<tr>
<td>Ti %</td>
<td>0.37</td>
<td>0.02</td>
<td>0.24</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>V ppm</td>
<td>15</td>
<td>7</td>
<td>17</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>0.15</td>
</tr>
<tr>
<td>W ppm</td>
<td>1360</td>
<td>1010</td>
<td>3000</td>
<td>710</td>
<td>360</td>
<td>550</td>
<td>390</td>
<td>&gt;10000</td>
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<tr>
<td>Zn ppm</td>
<td>1275</td>
<td>360</td>
<td>1857</td>
<td>&gt;10000</td>
<td>&gt;10000</td>
<td>1374</td>
<td>2060</td>
<td>706</td>
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<tr>
<td>Ag oz/ton</td>
<td>10.95</td>
<td></td>
<td></td>
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<tr>
<td>Pb %</td>
<td>4.07</td>
<td>2.37</td>
<td>1.84</td>
<td>3.73</td>
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<td></td>
<td></td>
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<tr>
<td>Zn %</td>
<td>1.94</td>
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</tr>
</tbody>
</table>

Sample I-A: Ima Tailings - Pile #1 by mill road (Point 9).
Sample I-B: Ima Tailings - Pile #2, west of highway.
DU-399: Ima Millsite, crushed ore in bin by mill.
7-19-A: Ima Millsite, concentrate in wood bin.
7-19-B: Ima Millsite, brown concentrate pile on mill floor.
7-19-C: Ima Millsite, contents of burned barrel and slag.
7-19-D: Ima Millsite, pyritic concentrate pile.
DU-401A: Ima Millsite, slag-like material by road next to creek and mill.
SITE ID-0084-00015: Nest Egg/Magnum Mining (DU-314)

The single trench observed at the property does not pose a hazard. The Nest Egg is noted
Unfortunately, the field crew did not have a geiger counter on site. However, only minor
exploration stage workings were noted, so it is doubtful that the radiation levels are high or
hazardous. Access by the public appeared to be minimal, and the site is dry.

SITE ID-0084-00010: Ima Millsite (DU-401)

The Ima millsite is located adjacent to the well-used road up Patterson Canyon. Part of
the millsite and much of the upper tailings pile is on the strip of BLM land adjoining the creek,
as illustrated on the maps in the site checklists. A survey is recommended to determine the exact
property boundary. The large tailings piles and waste dumps bisected by the creek are perhaps
the most visible environmental hazards, and these appear to be largely on BLM property.
Tailings Pile # 1 is adjacent to Patterson Creek and both are clearly visible from the access road.
Tails have clearly mobilized during high water events, locally being transported across the road
next to the creek. Minor spills of concentrate and slag within and near the mill foundation do
present a contamination problem (see analyses in Table 2), but the volume of material is small
and can easily be cleaned up. The concentrates contained up to several percent lead, zinc, and
sulfur, as well as high mercury, silver, cadmium, manganese, copper and iron.

Two of the three large tailings piles are situated on the alluvial fan out in the Pahsimeroi
Valley to the west of the paved road. The light-colored, fine sand-size tails are relatively clean,
apparently consisting mostly of quartz, but the two samples analyzed did contain approximately
300 ppm of lead and copper, somewhat higher zinc values, and 1000 ppm tungsten. Sulfur was
less than 0.5 weight percent. While highly visible, and located primarily on BLM land, the tails
are principally a sediment problem due to wind erosion and occasional flooding of Patterson
Creek. It was not clear how many people actually live in Patterson, but the number is few and
no dwellings were noted immediately next to the tailings piles. Tire marks indicate that people
do drive on the tailings piles, but that is probably not a major hazard given the composition of
the tailings and the sparse population. Whether they impact fish habitat or not is harder to say.
Analyses (Table 2) of water in Patterson Creek revealed surprisingly little contamination from
the mine site. Only a sample just below the main mill site had a slightly elevated zinc content of
0.012 mg/L, while further down, the water was at or below detection limits in zinc and other
heavy metals. The water in Patterson Creek had neutral pH values (8.1) and fairly low specific
conductivities (100 microsiems). Some channel reconstruction and armoring of the waste dumps
along the creek channel at the millsite would help prevent future erosion of mineralized material
into the creek.

Other items which deserve attention are the transformer at the power substation next to
the road, and the landfill trench at the mine site east of the mill. There is little left of the mill
buildings themselves except the foundation and metal bins, but minor cleanup and trash removal
would be warranted if a cleanup is done.
SITE ID-0084-00011 (DU-399): Ima Mine (Bluewing District)

The Ima mine has adits on several levels on the north side of Patterson Creek. The mine workings are accessed via a steep road which leaves the main road just east of the mill area, near the landfill trench, as shown in the map in the field checklist appended to this report. A recent fire ring, minor litter, and beer cans indicated that the adits had been explored by the public just prior to the field visit. Adit 1, the main upper tunnel, was wide open and inviting to explore. Timber and nails from a collapsed cabin and leaning “dry” shack on the dump present some physical safety hazards. The main lower tunnel, Adit 4, has a huge (15’x15’) open portal with two large wooden doors, but the lock was gone and recent cigarette butts were noted inside. Mine timbers in the roof were breaking, but some steel support is also present. An ATV could easily be driven inside. The portal to Adit 4 is on or very close to BLM property. A busted pipe on the west side of the dump for Adit 4 was gushing a large flow of water. It is likely that the pipe drains Adit 4 and the rest of the mine workings. The pH was measured at 7.8 and the specific conductivity at 150, a benign value. This water partially flows through a small, well-vegetated wetlands and thence discharges into Patterson Creek, though the exact flow path was obscure. Adit 5, by the mill site was caved a short ways in, but appeared to have had minor seasonal water discharge. A small pool of water in the portal had a pH of 7.6 and conductivity of 640, which was probably amplified through evaporation. Water analyses are given in Table 2. Only samples of Patterson Creek were collected. Any further study might sample the discharge points, particularly earlier in the year. The very uppermost adit, Adit 2, was not examined as it is above Adit 1 and nearly inaccessable. At least two open adits were also clearly visible on the south side of the creek, but that area is more difficult to reach and the adits appeared to be dry.

An octagonal wooden water tank sits on the steep slope between Adit 1 and Adit 4. This attractive structure is historic and should be saved and even restored. Remnants of some type of tram are also present on the slope. On an uglier note, trash cleanup is recommended for the landfill trench, which is probably on BLM property, and around the out buildings east of the mill site. The property has several large waste dumps, including those on both sides of the creek near the mill. Pyrite is common, but not especially abundant in the waste rock, and the creek seems fairly clean, as determined by geochemical results in Table 2.
SELECTED REFERENCES


AML SITE INSPECTION FIELD CHECKLISTS
FOR SITES IN THE PAHSIMEROI VALLEY,
LEMHI COUNTY, IDAHO
A. SITE IDENTIFICATION
ID Number: 1D008400015
Site/Mine Name: Nest Egg (Magnum Mining Corp.) Primary Commodity: 650 (Uranium U.O.
IGS Number: DU-314

B. LOCATION DATA
USGS Quad: Ennis Gulch LAT: LONG: OR
UTM Coord: 4948886 N 26553 E Zone 12 AND
Township: 15 N Range: 21 E Section: 3 Subdivision: SE
Meridian: 08 County: Lemhi 059
Surface: BLM X Non-BLM Mineral Estate: BLM X Non-BLM

C. ACCESS
Visible from: Nearest road _0 Trail _ Population center ___
Access by: 2wd _ 4wd X Hike _ Other ___
Access disturbance in need of reclamation: Length ___ Width ___ Acres ___
Road Log: Access via Pahsimeroi Valley Road from Ennis about 5 miles to 4wd road to range front.

Recent human use: N Describe:

D. SITE DESCRIPTION
Acres: <.5 Elevation: 5500
General slope (degrees): 0-10 _ 11-35 X _ >35 _
Floodplain: Disturbance in _ Adjacent to _ NA X
Recent mineral activity N Describe:

E. MINING/EXPLORATION FEATURES (Provide numbers of features)
Open adits _ Closed adits _ Open inclines _ Closed inclines _
Open shafts _ Closed shafts _ Stoops _
Other openings _ Type _
Trenches 1 Length 500 _ Prospects _ / Open drill holes _
Pits >30 ft. deep _ Pits <30 ft. deep _ Pit highwall length ______
Waste dumps: <0.1 ac _ 0.1 - 5 ac _ >5 ac _
Tailings: <0.1 ac _ 0.1 - 5 ac _ >5 ac _
Heaps _ Dredge _
Ponds _ Dams _
Mills _ Type _
Explosives _ Describe:
Equipment/Machinery _ / Headframes _ / Trestles/tramways _
Powerlines _
Structures N Type _
Condition: Good _ Fair _ Poor _ Number Locked _
Homesites _
Other:

(08/97, swm)
BLM AML INVENTORY FIELD CHECKLIST

ID Number: ID 0084-00015
IGS: DU-314

F. ENVIRONMENTAL FEATURES

VEGETATION
Vegetation: Healthy ☑ / Stressed ☐ / Dead ☐ / Nonexistent ☐
Evidence of natural revegetation: ☐ / Describe: grass, sage

ANIMALS
Evidence: ☑ / Presence: ☐ / Describe: Deer scat

GEOLOGY
Staining of soils ☑ Describe: Local minor Fe stain
Sulfide minerals ☐ Type(s):
Tailings: Confined ☐ / Unconfined ☐ / Unknown ☐

HYDROLOGY
No water on site
Sketch # ☐

Water flowing from workings: ☐
Standing water in workings: ☐
Water through/over tailings: ☐
waste rock: ☐
ore: ☐

Adjacent water sources:
Ground water: ☐
Surface water: ☐
Surface H2O above site: ☐
Surface H2O below site: ☐

Evidence of aquatic life ☐ Location: Location Describe:

Water bed color: White ☐ / Yellow ☐ / Yellow-Orange ☐ / Orange ☐
Brown ☐ / Green ☐ / Grey-Black ☐ / Other

Samples collected: ☐ Sketch #(s):

G. POTENTIAL HAZARDOUS MATERIALS (Provide numbers of features) None

Chemical piles or spills ☐ / Acid or Chemical odor ☐ / Asbestos ☐
Petrochemical Products ☐ / Dump sites ☐
Power Substations ☐ / Transformers ☐

Barrels, Tanks, Containers ☐ Leaking ☐ Contents:
Evidence of Underground Storage Tanks ☐ Describe:

Other:

RADIATION
Sketch # ☐ mR/hr gamma ☐ WL alpha ☐
Background ☐
Adit/Incline ☐
Shaft ☐
H. RECLAMATION Good Condition

SITE CONDITIONS
Erosion: Riils _____ / Gullies _____ / Sheetwash X
Unstable Rock _____ / Slope instability _____ / Wind erosion _____

MITIGATION STATUS
None X / Fencing _____ / Signs _____ / Safety hazards mitigated _____
Other: ________________________________________________________

Mitigation condition: Good X / Fair _____ / Poor _____
Site ID tags: _____ / Locations: __________________________

OPTIONAL: Identify the critical reclamation measures needed:

____ Cable nets, grates ______ Topsoil, soil amendments
____ Permanent seal ______ Revegetation
____ Gates ______ Stabilize/destroy structures
____ Backfill openings, pit ______ Drainage control
____ Recontour ______ Water treatment
____ Fences ______ Wildlife closure
____ Warning signs X No action
____ Plug open drill holes ______ Trash / clean up
____ Other: No action needed

I. SITE SKETCH
Show orientation, approximate scale, access route, adjacent drainages, and locations of features on attached sketch map. Use the feature symbols provided in the map legend on page 6.

J. GLOBAL POSITIONING SYSTEM DATA X ______________ Rover File name: R073115A

K. PHOTOGRAPHS
Number of photographs taken: 1. Roll 1, Frame #1

L. ACTION
Site requires immediate investigation _____ by: Law Enforcement _____ / BLM _____
HAZMAT _____ / Other ________________

Reason: ______________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
(03/95)
Figure 15-1: Site map of the Nest Egg mine, Lemhi County, Idaho (USGS Lemhi Pass 7.5 topographic map).
## M. FEATURES - PROVIDE DIMENSIONS IN FEET.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Length</th>
<th>Width</th>
<th>Height or Depth</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road/Prospect</td>
<td>500 ft</td>
<td>15 ft</td>
<td>5 ft</td>
<td>None</td>
</tr>
</tbody>
</table>

Field Notes:

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INSPECTED BY: Bruce Otto
TITLE: Geologist
DATE: 07-20-2001

INSPECTED BY: Tracy Morrison
TITLE: Geologist
DATE: 07-20-2001 (03/95)
<table>
<thead>
<tr>
<th>Roll Number</th>
<th>Frame Number</th>
<th>Direction</th>
<th>Location/Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-5</td>
<td>1</td>
<td>120°</td>
<td>Road/ cat cut</td>
</tr>
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<tr>
<td>(03/95)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A. SITE IDENTIFICATION
Other BLM ID Number: 
Locatable _____ / Leasable _____ / Salable _____
Operator (last known): 
Commodities: Primary __________ / Secondary __________
Other Agency ID Number: __________ Agency: __________

B. LOCATION DATA
Site is in _____ or within a mile _____ of:
ACEC _____ / WSA _____ / Wilderness Area _____ / Riparian Area _____
Nominated for Designation to National Wild & Scenic River System _____

C. ACCESS
Distance in Miles to Closest Public:
Road _____ Dwelling _____ School _____
Potable Water _____ Water Source _____ Trail _____
Campground/Picnic Area _____ Other Public Use _____

D. SITE DESCRIPTION
Nearest named drainage: __________ Distance: _______

G. POTENTIAL HAZARDOUS MATERIALS
Site is under regulatory action _____
CERCLIS Number __________ OR
Federal Docket Number __________

H. RECLAMATION: Closure Information
Clearances: Threatened & Endangered Species __________
Cultural Resources __________
Historic __________
Other __________

Date reclamation completed: __________
Type of closure: __________ Cost: __________
Comments: __________________________

Monitoring frequency: _____ Dates of monitoring visits: __________________________

(NOTE: The letters for the items above correspond to those on pp. 1 - 3 of this Checklist)
I. INTERVIEWS

Name ________________________________
Address __________________________________

Phone __________________________________
Affiliation ________________________________

Comments: __________________________________
___________________________________________
___________________________________________
___________________________________________
___________________________________________

Name __________________________________
Address ________________________________

Phone __________________________________
Affiliation ________________________________

Comments: __________________________________
___________________________________________
___________________________________________
___________________________________________
___________________________________________

Name __________________________________
Address ________________________________

Phone __________________________________
Affiliation ________________________________

Comments: __________________________________
___________________________________________
___________________________________________
___________________________________________
___________________________________________

19
Figure 15-2: Road cut by bulldozer. View looking 120 degrees. (Roll 01-6, Neg #9215, Frame 1; photograph by Bruce Otto; July 30, 2001).
A. SITE IDENTIFICATION
ID Number: 1D-0084-00010
Site/Mine Name: Ima Millsite Primary Commodity: 641 Tungsten
IGS Number: DU-401 (Ima Tailings, millsite) (See Site 00011 for mine)

B. LOCATION DATA
USGS Quad: Patterson LAT: LONG: OR
UTM Coord: 4934148 N 286102 E Zone 12 AND
Township: 14N Range: 23E Section: 23 Subdivision: NE/4; SW/4; & Sec. 27 N/2
Meridian: 08 County: 059 Lemhi
Surface: BLM X / Non-BLM X Mineral Estate: BLM X / Non-BLM X

C. ACCESS
Visible from: Nearest road 3 / Trail 3 / Population center 2
Access by: 2wd X / 4wd / Hike / Other
Access disturbance in need of reclamation: Length _____ / Width _____ / Acres _____
Road Log: Main road up Patterson Creek-no bridge over to south side of creek, water too high to wade across
Recent human use: Y Describe: Campers at the mouth of the canyon, cans/ cigarette butts

D. SITE DESCRIPTION
Acreage: 40 + Elevation: 6200
General slope (degrees): 0-10 X / 11-35 / >35
Floodplain: Disturbance in X / Adjacent to / NA
Recent mineral activity N Describe: last worked in the 1950's

E. MINING/EXPLORATION FEATURES (Provide numbers of features) see site 11
Open adits _____ / Closed adits _____ / Open inclines _____ / Closed inclines _____
Open shafts _____ / Closed shafts _____ / Stopes _____
Other openings _____ Type
Trenches ____ Length _______ / Prospects ____ / Open drill holes ______
Pits >30 ft. deep ____ / Pits <30 ft. deep ____ / Pit highwall length _______
Waste dumps: <0.1 ac ____ / 0.1 - 5 ac 1 / >5 ac 1
Tailings: <0.1 ac ____ / 0.1 - 5 ac _____ / >5 ac 3 Tails #1-3
Heaps ____ / Dredge _____
Ponds ____ / Dams _____
Mills 1 Type Flotation , Gravity
Explosives ____ Describe:
Equipment/Machinery Y / Headframes ____ / Trestles/ tramways ______
Powerlines 1
Structures 7 Type mill foundation, mine buildings, shop, ore bins
Condition: Good ____ / Fair X ____ / Poor __ / Number Locked 0
Homesites 0
Other: Also smelter?, metal ore bins by mill, some wood structures on tails #1

(08/97, swm)
H. RECLAMATION

SITE CONDITIONS
Erosion: Rills / Gullies / Sheetwash
Unstable Rock: Talus / Slope instability / Wind erosion

MITIGATION STATUS
None / Fencing / Signs / Safety hazards mitigated
Other:

Mitigation condition: Good / Fair / Poor
Site ID tags: / Locations:

OPTIONAL: Identify the critical reclamation measures needed:

- Cable nets, grates
- Permanent seal
- Gates
- Backfill openings, pit
- Recontour
- Fences
- Warning signs
- Plug open drill holes
- Other:

Topsoil, soil amendments
Revegetation
Stabilize/destroy structures
Drainage control
Water treatment
Wildlife closure
No action
Trash / clean up

Should check for transformer at power pole. Eliminating wind erosion and locals driving on tails will be difficult.

I. SITE SKETCH
Show orientation, approximate scale, access route, adjacent drainages, and locations of features on attached sketch map. Use the feature symbols provided in the map legend on page 6.

J. GLOBAL POSITIONING SYSTEM DATA
Rover File name: Du-401

K. PHOTOGRAPHS
Number of photographs taken: 13 Roll 01-2, #22-4; Roll 01-3, Frames 1-10

L. ACTION
Site requires immediate investigation by: Law Enforcement / BLM / HAZMAT / Other

Reason:

(03/95)
Figure 10-1: Site map of the Ima Mill, Lemhi County, Idaho (USGS Patterson 7.5 topographic map).
Figure 10-2: Site map of the Lower Tailings from the Ima Millsite, Lemhi County, Idaho (USGS Patterson 7.5 topographic map).
### M. FEATURES - PROVIDE DIMENSIONS IN FEET.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Length</th>
<th>Width</th>
<th>Height or Depth</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road 1</td>
<td>1 mile +</td>
<td></td>
<td></td>
<td>Ok, minor flooding</td>
</tr>
<tr>
<td>Perimeter 1 (Mill Foundation)</td>
<td></td>
<td></td>
<td>6 ft high concrete walls</td>
<td>Needs clean up</td>
</tr>
<tr>
<td>Building 1 other 1 = Point</td>
<td>25 ft</td>
<td>20 ft</td>
<td>6 ft deep</td>
<td>Rusty H₂O inside. Destroy and drain it?</td>
</tr>
<tr>
<td>Slag pile (other 2)</td>
<td>4 ft</td>
<td>4 ft</td>
<td>2 ft</td>
<td>In mill</td>
</tr>
<tr>
<td>Slag pile (other 3) Sample Du401a</td>
<td>25 ft</td>
<td>25 ft</td>
<td>2 ft</td>
<td>Along bank from road to creek</td>
</tr>
<tr>
<td>Building 2 (other 4)</td>
<td>10 ft</td>
<td></td>
<td></td>
<td>Concrete foundation</td>
</tr>
<tr>
<td>Building 3 perimeter 2</td>
<td>50 ft</td>
<td>50 ft</td>
<td>3 ft high concrete</td>
<td>Concrete foundation, Old mill?</td>
</tr>
<tr>
<td>Building 4 perimeter 3</td>
<td>70 ft</td>
<td>60 ft</td>
<td>15 ft</td>
<td>new concrete block building (shop?)</td>
</tr>
<tr>
<td>Power pole with transformer (other 5)</td>
<td>4 poles 20 ft</td>
<td>10 ft</td>
<td>30 ft</td>
<td>Check and remove</td>
</tr>
<tr>
<td>Point 6, east edge (edge of tails #1)</td>
<td></td>
<td></td>
<td>6 ft</td>
<td>Upstream limit W-01-6</td>
</tr>
<tr>
<td>Point 7, edge of creek tails #1</td>
<td></td>
<td></td>
<td>4-6 ft</td>
<td>W-01-7 water sample</td>
</tr>
<tr>
<td>Point 8 west edge of tails #1</td>
<td>?</td>
<td>&lt;100 ft</td>
<td>1-2 ft</td>
<td>Approximate</td>
</tr>
<tr>
<td>Feature</td>
<td>Length</td>
<td>Width</td>
<td>Height or Depth</td>
<td>Mitigation</td>
</tr>
<tr>
<td>------------------</td>
<td>--------</td>
<td>--------</td>
<td>-----------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Tails #2</td>
<td>2500 ft</td>
<td>1000 ft</td>
<td>2-3 ft</td>
<td>Windblown dunes and ripples</td>
</tr>
<tr>
<td>Points 9 and 10</td>
<td>Tails #2, NE SE corners</td>
<td>sample l-b</td>
<td></td>
<td>lots of campers use area</td>
</tr>
<tr>
<td>Points 11 and 12</td>
<td>SW NW corners</td>
<td>Water sample W-01-8</td>
<td></td>
<td>By tailings #2</td>
</tr>
<tr>
<td>Point 13</td>
<td>Water sample</td>
<td>(gps error may have two points)</td>
<td></td>
<td>Sample l-A of tailings next to creek</td>
</tr>
<tr>
<td>Point 14</td>
<td>point on access road</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Field Notes:

This is a huge and complex site. Review of the land status suggests that while the orebody was on patented ground, most of the millsite is located on a narrow strip of BLM-owned land adjacent to Patterson Creek. Likewise most of Tailings Pile #1 is on BLM land. Large mill foundation is concrete; low walls w/ metal cylinder storage tank and metal ore bin outside of walls. Lots of large rocks and iron bolts sticking out of concrete. There is an odd pile of slag-like material (?) in the middle of the mill, associated with a burned barrel. There is also a waste dump of slag along the south side of road, overlying part of the waste dump and extending down to the creek. Slag sample is Du-401a.

Perimeter 2 corresponds to a second foundation, perhaps an older mill building, mine office or tram house. It has heavy duty concrete with iron bolts. The building of Perimeter 3 is a newer concrete cinder block construction building with a wood roof. It is fairly intact but the interior is trashed. Sheet rock has been pulled off. Trash and packrat nests and some old iron machinery litter the inside, which also has a strong petroleum/oil odor, suggesting that the building may have been a machinery shop of some sorts. It should be cleaned up.

Adjacent to the road and midway between the mill foundation and "Perimeter 2" building, there is a small wood bridge over a spring/swampy area with healthy water plants. Next to the road and marked as GPS point "Other 5" is a power substation, consisting of 4 poles with wires and an old and new transformer box (?). Three of the poles are new; one is old. The poles are marked with metal tags with numbers and a "WFCO 6/98" and "NWTT 1996 chlorobicrin" inscriptions. It appeared that the wires are no longer in use, as the buildings are destroyed. It may be worth a call to the power company to see about removing the poles or checking for hazardous materials.

The water under the bridge appears clean and hosts lots of water plants, and seems to emanate from a "spring" near the talus behind the poles. Further investigation suggests that the water is coming from a partially collapsed pipe near the main adit (See Site ID-0084-00011 for further description.)

There are three large and distinct tailings pile. Pile #1 is mostly on BLM ground and fills in the canyon on the south side of the creek. Like the others, it is very fine-grained white sand, appearing to consist predominantly of quartz. Two samples were taken for chemical analysis. Dirt bike or ORV tracks were seen on the tailings. Wind erosion was also noted, and the tailings have clearly been remobilized during flood and high water events which at times have covered the access road.

Tailings Piles # 2 and # 3 are also shown accurately on the topographic map. They are located in
F. ENVIRONMENTAL FEATURES

VEGETATION
Vegetation: Healthy ____ / Stressed X / Dead ____ / Nonexistent ____
Evidence of natural revegetation: Yes / Describe: some aspens and willows on tailings and next to tails and creek. Most of the tails are barren sand.

ANIMALS
Evidence: X / Presence: X / Describe: squirrels and some deer scat

GEOLOGY
Staining of soils X / Describe: Fe
Sulfide minerals X / Type(s): pyrite, molybdenite, huebnerite.
Tailings: Confined ____ / Unconfined X / Unknown ____

HYDROLOGY
Water flowing from workings: __________ pH __________ Conductivity __________ Flow (GPM) __________ Sketch # __________
Standing water in workings: __________
Water through tailings: Creek 8.1 100 100 __________
Caved adit/spring by power pole ore: __________
Adjacent water sources:
Ground water: __________
Surface water: Creek 8.1 100 100 Lower millsite
Surface H2O above site: Creek 8.2 110 100 50'
Surface H2O below site: Creek 8.2 100 40 1/2 Mile by highway
Evidence of aquatic life N / Location: Describe: Stream is clear, minor water plants present

Water bed color: White ____ / Yellow ____ / Yellow-Orange ____ / Orange ____
Brown X / Green ____ / Grey-Black ____ / Other __________

Samples collected: 3 / Sketch # (s): W-01-6, W-01-7, W-01-8 (water in creek)
Solids collect: Du-401a and 7-19-A thru 7-19D (see notes)

G. POTENTIAL HAZARDOUS MATERIALS (Provide numbers of features)

Chemical piles or spills ____ / Acid or Chemical odor X on dump ____ / Asbestos ____
Petrochemical Products ____ / Dump sites ___
Power Substations 1 / Transformers 1
Barrels, Tanks, Containers Leaking ____ / Contents: 55 gallon crushed barrel by spring
Evidence of Underground Storage Tanks ____ / Describe: __________

Other: burned slag- like material in mill and waste dump by road, some concentrate spilled on mill floor

RADIATION
Background Sketch # mR/hr gamma WL alpha
Adit/Incline ____ __________ __________
Shaft ____ __________ __________
Other: millsite ____ Background __________

(03/95)
the valley below the canyon mouth, apparently on private ground. Pile # 2 also appeared to have been used as a recreational site, due to its sandy beach type character. The tailings are very white and composed principally of quartz sand from the crushed ore.

INSPECTED BY: V. Gillerman       TITLE: Geologist       DATE: 6/24/01, 7/19/01
INSPECTED BY: T. Morrison        TITLE: Geologist       DATE: 6/24/01, 7/19/01
<table>
<thead>
<tr>
<th>Roll Number</th>
<th>Frame Number</th>
<th>Direction</th>
<th>Location/Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-2 (neg. 6158)</td>
<td>21</td>
<td>270</td>
<td>Mill foundation and ore bin</td>
</tr>
<tr>
<td>01-2</td>
<td>22</td>
<td>170</td>
<td>Stone chimney on S. side of creek</td>
</tr>
<tr>
<td>01-2</td>
<td>23</td>
<td></td>
<td>Standing water in concrete foundation</td>
</tr>
<tr>
<td>01-2</td>
<td>24</td>
<td>350</td>
<td>Slag pile (?) in the middle of the mill</td>
</tr>
<tr>
<td>01-3 (neg. 6160)</td>
<td>01</td>
<td>180</td>
<td>Slag pile, 1 ft thick on dump</td>
</tr>
<tr>
<td>01-3</td>
<td>02</td>
<td>225</td>
<td>Tailings #1 below mill, blowing in wind</td>
</tr>
<tr>
<td>01-3</td>
<td>03</td>
<td>225</td>
<td>Tailings #1, mostly on BLM</td>
</tr>
<tr>
<td>01-3</td>
<td>04</td>
<td>0</td>
<td>Perimeter 2 and 3 bldgs, near substation</td>
</tr>
<tr>
<td>01-3</td>
<td>05</td>
<td>260</td>
<td>Powerline with transformer box</td>
</tr>
<tr>
<td>01-3</td>
<td>06</td>
<td></td>
<td>Tailings</td>
</tr>
<tr>
<td>01-3</td>
<td>07</td>
<td>135</td>
<td>Lower end of BLM tailings pile #1, tire tracks</td>
</tr>
<tr>
<td>01-3</td>
<td>08</td>
<td>070</td>
<td>Tailings #1 by truck, looking back at W-01-7 site</td>
</tr>
<tr>
<td>01-3</td>
<td>09</td>
<td>090</td>
<td>Tailings pile #2-sample site l-b</td>
</tr>
<tr>
<td>01-3</td>
<td>10</td>
<td>230</td>
<td>Tailings pile #2 with tire tracks</td>
</tr>
</tbody>
</table>

(03/95)
A. SITE IDENTIFICATION
Other BLM ID Number: ________________________________
Locatable _____ / Leasable _____ / Salable _____
Operator (last known): ________________________________
Commodities: Primary __________________ / Secondary __________________
Other Agency ID Number: __________________________ Agency: ________

B. LOCATION DATA
Site is in _____ or within a mile _____ of:
   ACEC _____ / WSA _____ / Wilderness Area _____ / Riparian Area _____
   Nominated for Designation to National Wild & Scenic River System _____

C. ACCESS
Distance in Miles to Closest Public:
   Road _______ Dwelling _______ School _______
   Potable Water _______ Water Source _______ Trail _______
   Campground/Picnic Area ______ Other Public Use _______

D. SITE DESCRIPTION
Nearest named drainage: ____________________________ Distance: _______

G. POTENTIAL HAZARDOUS MATERIALS
Site is under regulatory action _____
CERCLIS Number __________________________ OR
Federal Docket Number __________________________

H. RECLAMATION: Closure Information
Clearances: Threatened & Endangered Species __________________________
           Cultural Resources __________________________
           Historic __________________________
           Other __________________________

Date reclamation completed: __________________________ Cost: _______
Type of closure: __________________ Comments: __________________
                 __________________
                 __________________

Monitoring frequency: _________ Dates of monitoring visits:
   __________________________
   __________________________
   __________________________
   __________________________

(NOTE: The letters for the items above correspond to those on pp. 1 - 3 of this Checklist)

(03/95)
I. INTERVIEWS

Name ________________________________________________
Address
____________________________________________________

Phone
____________________________________________________
Affiliation
____________________________________________________

Comments:
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________

Name ________________________________________________
Address
____________________________________________________

Phone
____________________________________________________
Affiliation
____________________________________________________

Comments:
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________

Name ________________________________________________
Address
____________________________________________________

Phone
____________________________________________________
Affiliation
____________________________________________________

Comments:
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________
____________________________________________________
Figure 10-3: Ima mill foundation and ore bin in good shape. View looking 270 degrees. (Roll 01-2, Neg. #6158, frame 21. Photograph by V. S. Gillerman, 2001).

Figure 10-4: Stone chimney on south side of creek. View looking 170 degrees. (Roll 01-2, Neg. #6158, frame 22. Photograph by V. S. Gillerman, 2001).
Figure 10-5: Standing water in concrete foundation of building 1, east of mill. (Roll 01-2, Neg. #6158, frame 23. Photograph by V. S. Gillerman, 2001).

Figure 10-6: Slag pile in the middle of the mill foundation. View looking 350 degrees. (Roll 01-2, Neg. #6158, frame 24. Photograph by V. S. Gillerman, 2001).
Figure 10-7: Slag pile, 1 ft thick on the mill site dump, extending down to stream. View looking 180 degrees. (Roll 01-3, Neg. #6160, frame 01. Photograph by V. S. Gillerman, 2001).

Figure 10-8: Tailings Pile #1 below mill with tailings blowing in the wind. View looking 225 degrees. (Roll 01-3, Neg. #6160, frame 02. Photograph by V. S. Gillerman, 2001).
Figure 10-9: Tailings Pile #1, on BLM land, with yellow mill site dump in lower right. View looking 225 degrees. (Roll 01-3, Neg. #6160, frame 03. Photograph by V. S. Gillerman, 2001).

Figure 10-10: Perimeter 2 foundation and perimeter and 3 building. View looking 0 degrees. (Roll 01-3, Neg. #6160, frame 04. Photograph by V. S. Gillerman, 2001).
Figure 10-11: Power line and transformer box suspended by aging timber structure. View looking 260 degrees. (Roll 01-3, Neg. #6160, frame 05. Photograph by V. S. Gillerman, 2001).

Figure 10-12: Tailings Pile #1 on south side of creek. (Roll 01-3, Neg. #6160, frame 06. Photograph by V. S. Gillerman, 2001).
Figure 10-13: Lower end of BLM tailings pile #1 with tire tracks in upper left corner of photo. View looking 135 degrees. (Roll 01-3, Neg. #6160, frame 07. Photograph by V. S. Gillerman, 2002).

Figure 10-14: Tailings #1 by truck, looking back at W-01-7 sample site. View looking 070 degrees. (Roll 01-3, Neg. #6160, frame 08. Photograph by V. S. Gillerman, 2001).
Figure 10-15: Tailings pile #2-sample site I-B. View looking 090 degrees. (Roll 01-3, Neg. #6160, frame 09. Photograph by V. S. Gillerman, 2001).

Figure 10-16: Tailings pile #2 with tire tracks in valley at Patterson. View looking 230 degrees. (Roll 01-3, Neg. #6160, frame 10. Photograph by V. S. Gillerman, 2001).
A. SITE IDENTIFICATION
ID Number: 1D 00840011
Site/Mine Name: Ima Mine (Bluewing District) Primary Commodity: 641, 170, 540, 700 (Tungsten, Cu, Ag, Zn)
IGS Number: DU-399

B. LOCATION DATA
USGS Quad: Patterson LAT: LONG: OR
UTM Coord: 4934154 N 286109 E Zone 12 AND
Township: 14 N Range: 23 E Section: 23 Subdivision: NE
Meridian: 08 County: 059
Surface: BLM X / Non-BLM X Mineral Estate: BLM X / Non-BLM X

C. ACCESS
Visible from: Nearest road 3 / Trail 3 / Population center 2
Access by: 2wd X / 4wd / Hike / Other
Access disturbance in need of reclamation: Length / Width / Acres
Road Log: Main road up to Patterson Creek
No access to the south side of the creek
Recent human use: Y Describe: beer cans, graffiti, fire ring and new propane tank on Adit 1 waste dump.

D. SITE DESCRIPTION
Acreage: 40 Elevation: 62-6800 ft
General slope (degrees): 0-10 / 11-35 X / >35
Floodplain: Disturbance in X / Adjacent to X / NA
Recent mineral activity N Describe: 1950's exploration-USBM

E. MINING/EXPLORATION FEATURES (Provide numbers of features)
Open adits 5 / Closed adits 2 / Open inlines ___ / Closed inlines ___
Open shafts ___ / Closed shafts ___ / Stopes ___
Other openings ___ Type ___
Trenches 1 Length 30 ft / Prospects 2 / Open drill holes ___
(w/landfill)
Pits >30 ft. deep ___ / Pits <30 ft. deep ___ / Pit highwall length ___
Waste dumps: <0.1 ac 3 / 0.1 - 5 ac 2 / >5 ac 1 (Southside)
Tailings: <0.1 ac ___ / 0.1 - 5 ac ___ / >5 ac ___
Heaps ___ / Dredge ___
Ponds ___ / Dams ___
Mills ___ Type , , , , (See Site 10, Du-401 for mill information)
Explosives ___ Describe: ___
Equipment/Machinery ___ / Headframes ___ / Trestles/tramways 2 wood skids
Powerlines ___
Structures 9 Type Mine buildings, cabins
Condition: Good ___ / Fair X / Poor X / Number Locked 0
Homesites ___
Other: Hunters camps ___

(08/97, swm)
F. ENVIRONMENTAL FEATURES

VEGETATION
Vegetation: Healthy ____ / Stressed X / Dead ____ / Nonexistent ____
Evidence of natural revegetation: X / Describe: minor brush and grass on dumps

ANIMALS
Evidence: Y / Presence: ____ / Describe: deer scat and bugs

GEOLOGY
Staining of soils Y Describe: yellow-brown
Sulfide minerals Y Type(s): pyrite, molybdenite, heubnerite, Oxide Cu, chalcopyrite
Tailings: Confined ____ / Unconfined ____ / Unknown ____ (See site 10)

HYDROLOGY
Water flowing from workings: 1
Standing water in workings: 1
Water through/over tailings: 
Creek through waste rock: 1
ore: 
Wood bridge seep/wetlands: 7.4

Adjacent water sources:
Ground water:
Surface water: 1 creek
Surface H2O above site: creek
Surface H2O below site: creek

Evidence of aquatic life Y Location: Wood bridge

Water bed color: White ____ / Yellow ____ / Yellow-Orange ____ / Orange ____
Brown ____ / Green ____ / Grey-Black X / Other ____

Samples collected: N Sketch #():

G. POTENTIAL HAZARDOUS MATERIALS (Provide numbers of features)

Chemical piles or spills ____ / Acid or Chemical odor ____ / Asbestos ____
Petrochemical Products ? / Dump sites 1
Power Substations ____ / Transformers ____ (See site 10)

Barrels, Tanks, Containers 15 Leaking ____ Contents: Empty, unknown
Evidence of Underground Storage Tanks ____ Describe:

Other:

RADIATION
Background Sketch # mR/hr gamma WL alpha
Adit/Incline less than .15 mR/hr On dumps

40
H. RECLAMATION

SITE CONDITIONS
Erosion: Rills / Gullies / Sheetwash
Unstable Rock / Slope instability / Steep Talus Slopes / Wind erosion

MITIGATION STATUS
None / Fencing / Signs / Safety hazards mitigated
Other:

Mitigation condition: Good / Fair / Poor
Site ID tags: / Locations:

OPTIONAL: Identify the critical reclamation measures needed:

- Cable nets, grates
- Permanent seal
- Gates
- Backfill openings, pit
- Recontour
- Fences
- Warning signs
- Plug open drill holes
- Other:

Should check to see if landfill dump is on BLM property

The large main open adits - Adits 4 and Adit 1 seem particularly likely to get visitors.
The lower adit, #4, may have its portal on BLM land.

I. SITE SKETCH
Show orientation, approximate scale, access route, adjacent drainages, and locations of features on attached sketch map. Use the feature symbols provided in the map legend on page 6.

J. GLOBAL POSITIONING SYSTEM DATA [Y] Rover File name: DU399

K. PHOTOGRAPHS
Number of photographs taken: 17, Roll 01-3 (neg. #6160), Frames #11-28

L. ACTION
Site requires immediate investigation by: Law Enforcement / BLM / HAZMAT / Other
Reason:

(03/95)
Figure 11-1: Site map of the Ima Mine, Lemhi County, Idaho (USGS Patterson 7.5 topographic map).
### M. FEATURES - PROVIDE DIMENSIONS IN FEET.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Length</th>
<th>Width</th>
<th>Height or Depth</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbed Area: Site by landfill-</td>
<td>100 ft</td>
<td>70 ft</td>
<td>1 ft</td>
<td>Cleanup needed, tails and sulfide material</td>
</tr>
<tr>
<td>(Perimeter 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landfill (Point 1)</td>
<td>40 ft</td>
<td>10 ft</td>
<td>6 ft</td>
<td>Trash clean up &amp; bury</td>
</tr>
<tr>
<td>Road 1</td>
<td>10 ft</td>
<td></td>
<td>Main access road to upper tunnel</td>
<td>OK</td>
</tr>
<tr>
<td>Adit 1 (point 2)</td>
<td>long ways</td>
<td>7</td>
<td>5'4&quot;</td>
<td>OPEN, Upper main tunnel</td>
</tr>
<tr>
<td>Perimeter 2 Waste dump 1</td>
<td>250 ft</td>
<td>200 ft</td>
<td>15 ft</td>
<td>OK, top of dump</td>
</tr>
<tr>
<td>Building 1 (point 3)</td>
<td>15 ft</td>
<td>10 ft</td>
<td>10 ft</td>
<td>Wood, leaning</td>
</tr>
<tr>
<td>Building 2</td>
<td></td>
<td></td>
<td></td>
<td>No GPS</td>
</tr>
<tr>
<td>Building 3 (point 4)</td>
<td>25 ft</td>
<td></td>
<td>on Dump 1</td>
<td>Collapsed wood, with nails and trash</td>
</tr>
<tr>
<td>Adit 2</td>
<td></td>
<td></td>
<td></td>
<td>Uppermost, not visited</td>
</tr>
<tr>
<td>Adit 3 (point 5)</td>
<td>10 ft</td>
<td>4 ft</td>
<td>2 ft</td>
<td>Partially Caved</td>
</tr>
<tr>
<td>Water Tower (point 6)</td>
<td>40 ft</td>
<td>40 ft</td>
<td>20 ft</td>
<td>OK, wood historic octagonal tank</td>
</tr>
<tr>
<td>Road 2</td>
<td>10 ft</td>
<td></td>
<td>9 + switch backs</td>
<td>Exploration road</td>
</tr>
<tr>
<td>Building 4 (point 7)</td>
<td>20 ft</td>
<td>15 ft</td>
<td>2 ft</td>
<td>Old nails, furnace</td>
</tr>
<tr>
<td>Building 5 (point 8)</td>
<td>40 ft</td>
<td>10 ft</td>
<td>10 ft</td>
<td>Log cabin (fair condition)</td>
</tr>
<tr>
<td>Feature</td>
<td>Length</td>
<td>Width</td>
<td>Height or Depth</td>
<td>Mitigation</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------</td>
<td>-------</td>
<td>-----------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Building 6 (point 9)</td>
<td>30 ft</td>
<td>20 ft</td>
<td>10 ft</td>
<td>Poor condition, sheetrock pulled off.</td>
</tr>
<tr>
<td>Adit 4 (Main Tunnel)</td>
<td>very long ways</td>
<td>15 ft</td>
<td>15 ft</td>
<td>HUGE and OPEN, Dangerous! Lock gone.</td>
</tr>
<tr>
<td>Waste dump 4 (perimeter 3)</td>
<td></td>
<td></td>
<td></td>
<td>Piped adit drain on side</td>
</tr>
<tr>
<td>Adit 5</td>
<td>10 ft</td>
<td>6 ft</td>
<td>4 ft</td>
<td>Caved, by millsite. Small water discharge.</td>
</tr>
<tr>
<td>Waste dump 5 (perimeter 4)</td>
<td>Very large dump</td>
<td>at mill site</td>
<td>cut by creek</td>
<td>At mill site</td>
</tr>
<tr>
<td>Adit 6 (Lower Southside Adit)</td>
<td></td>
<td></td>
<td></td>
<td>GPS by offset OPEN, Lower adit south of creek.</td>
</tr>
<tr>
<td>Adit 7 (Upper Southside Adit)</td>
<td></td>
<td></td>
<td></td>
<td>GPS by offset OPEN, Upper adit south of creek.</td>
</tr>
<tr>
<td>Waste dump 6</td>
<td>Huge(200'?)</td>
<td>80'</td>
<td>20'</td>
<td>Dump south of creek. GPS by offset</td>
</tr>
</tbody>
</table>
SEE SITE ID-0084-00010 (DU-401) FOR MILLSITE INFORMATION.

The lma mine is a large and complex site. The mine workings are located in quartzitic rocks on both sides of Patterson Creek. There is a good dirt road which goes up the creek from Patterson. Tailings occupy the bottom of the canyon on the south side of the creek. There was no access to the south side of the creek. This is probably good, as it would deter the casual visitor from visiting the workings over there. The main adits are easily visible from the road. The main workings are on patented ground but are tightly flanked by BLM land.

Perimeter 1 locates a disturbed site near the landfill trench of “Point 1”. It is past the millsite and near where the lower end of the mine road forks off the main road up Patterson Creek. Mixed sulfide-stained rocks, possible old tailings?, and numerous old barrels are present. Point 1 is a landfill trench close to Perimeter 1. Both sit above the creek level and probably above high water on a small topographic bench just below the steep hillside. The trench has a sizeable collection of old rock core, oil drums, wood, barrels, and plastic buckets. Fourteen rusty, 55 gallon barrels (most with bullet holes) are hidden in sagebrush on a grassy spot to the west of the landfill. Anything in the barrels has probably leaked out. If nothing else, the landfill and barrels should be buried.

The road to the upper workings and several large dumps is easily visible from the main road and accessible by walking and probably by ATVs. Adit 1 is the Upper Tunnel at about 6500' elevation, and the adit goes in at a 310º direction. The wood portal is in good condition, and the tunnel is open in solid rock. A metal pipe hangs in the adit, and rail extends out of the adit and downhill on the east side of a “dry” building (Building 1) in front of the tunnel. A fairly new pack of cigarettes and beer cans were seen by the portal. The “dry” is a small wood building which is leaning outwards, nearly ready to fall off the top of the dump. A cinder block chimney also leans. There is abundant lumber, nails, rat droppings, and other junk in the building. A small metal shack (Building 2) in fairly good condition sits on bedrock above the portal. Building 3 is the remains of a totally collapsed wood house which sat in the center of the dump. There are lots of nails and roofing insulation material. The large waste dump to Adit 1 had many examples of mineralized quartz vein material, numerous railroad ties, lumber with nails, etc. on it.

Adit 2 and Waste Dump 2 were not visited, but could be seen approximately 200 feet vertically above Adit 1. No road was obvious.

Adit 3 is partly caved, leaving only a 2 foot high opening, and the portal is at an intermediate level along the mine road and just above the water tower. The octagonal shaped, wood water storage tank is a spectacular historic structure and should be preserved. The straw insulation is visible where a few boards have come off. The tank appeared to be in good condition, but it should be examined and reinforced to keep it in good shape.

The Main Lower Tunnel, Adit 4, sits above creek level on the north side of the main road and luckily is hidden by trees on top of a small dump (Dump 4, Perimeter 3). It is HUGE, and extends at 310 degree azimuth into the hill. The large, heavy wood doors were closed, but the lock was busted and the doors could be opened. Cool air and a dump, musty odor was noted. Recent cigarette butts and a campfire remains were inside. About 20 feet inside the adit, the 12-inch thick timbers in the back(roof) were breaking. This is NOT SAFE, and needs some secure gate or closure. The mine was large enough that a visitor could get lost, and the tunnel is big enough to easily drive a 4-wheeler into. The portal to Adit 4 may be on BLM land.

Hidden in the trees on the west side of Waste Dump 4 is a partly crushed and broken pipe sticking out of the ground and gushing water. It is probably the source of water in the pond/swamp by the wood bridge the road goes over. It is likely that the pipe is carrying mine drainage from the workings. Additional water sampling here is suggested.

Buildings 4 and 5 were log cabins near the main road. Building 4 was collapsed with an old stove inside; the other was in fair condition.
<table>
<thead>
<tr>
<th>Roll Number</th>
<th>Frame Number</th>
<th>Direction</th>
<th>Location/Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-3 (neg. # 6160)</td>
<td>11</td>
<td>070</td>
<td>Trash- landfill trench</td>
</tr>
<tr>
<td>01-3</td>
<td>12</td>
<td>270</td>
<td>Adit 1 upper tunnel-OPEN</td>
</tr>
<tr>
<td>01-3</td>
<td>13</td>
<td>310</td>
<td>Adit 1 interior</td>
</tr>
<tr>
<td>01-3</td>
<td>14</td>
<td>040</td>
<td>Building 1, wood “Dry” by portal, in front and Building 2, a metal shed, in rear.</td>
</tr>
<tr>
<td>01-3</td>
<td>15</td>
<td>315</td>
<td>Adit 2 and dump uphill (not visited)</td>
</tr>
<tr>
<td>01-3</td>
<td>16</td>
<td>220</td>
<td>Tailings #1 (BLM) -Site 10, DU-401</td>
</tr>
<tr>
<td>01-3</td>
<td>17</td>
<td>155</td>
<td>Southside Adits- wide open (6 ft. wide)</td>
</tr>
<tr>
<td>01-3</td>
<td>18</td>
<td>320</td>
<td>Outcrop of quartz vein cut by fault</td>
</tr>
<tr>
<td>01-3</td>
<td>19</td>
<td>0</td>
<td>Adit 3, partially caved inside and out</td>
</tr>
<tr>
<td>01-3</td>
<td>20</td>
<td>035</td>
<td>Wooden water tank w/ straw insulation</td>
</tr>
<tr>
<td>01-3</td>
<td>21</td>
<td>230</td>
<td>View down Patterson Creek-with Southside dump and tailings</td>
</tr>
<tr>
<td>01-3</td>
<td>22</td>
<td></td>
<td>Buildings</td>
</tr>
<tr>
<td>01-3</td>
<td>23</td>
<td>300</td>
<td>Main Adit 4- huge portal with doors unlocked</td>
</tr>
<tr>
<td>01-3</td>
<td>24</td>
<td>300</td>
<td>Adit 4 interior-Timbers snapping in back of portal</td>
</tr>
<tr>
<td>01-3</td>
<td>25</td>
<td>310</td>
<td>Water flowing from busted pipe below W. side of Waste Dump 4 (probably adit drainage).</td>
</tr>
<tr>
<td>01-3</td>
<td>26</td>
<td>340</td>
<td>Adit 5-K.C.I. adit by mill, caved 10 ft. in</td>
</tr>
<tr>
<td>01-3</td>
<td>27</td>
<td>340</td>
<td>Adit 5, standing water at portal</td>
</tr>
<tr>
<td>01-3</td>
<td>28</td>
<td>165</td>
<td>Southside Dump and Adit 6</td>
</tr>
</tbody>
</table>

(03/95)
A. SITE IDENTIFICATION
Other BLM ID Number: __________________________
Locatable _____ / Leasable _____ / Salable _____
Operator (last known): __________________________
Commodities: Primary ______________________ / Secondary ______________________
Other Agency ID Number: ______________________ Agency: ______________________

B. LOCATION DATA
Site is in _____ or within a mile _____ of:
ACEC _____ / WSA _____ / Wilderness Area _____ / Riparian Area _____
Nominated for Designation to National Wild & Scenic River System _____

C. ACCESS
Distance in Miles to Closest Public:
Road _______ Dwelling _______ School _______
Potable Water _______ Water Source _______ Trail _______
Campground/Picnic Area _______ Other Public Use _______

D. SITE DESCRIPTION
Nearest named drainage: __________________________ Distance: _______

G. POTENTIAL HAZARDOUS MATERIALS
Site is under regulatory action _____
CERCLIS Number ______________________ OR
Federal Docket Number ______________________

H. RECLAMATION: Closure Information
Clearances: Threatened & Endangered Species ______________________
Cultural Resources ______________________
Historic ______________________
Other ______________________

Date reclamation completed: ______________________
Type of closure: ______________________ Cost: ______________________
Comments: ______________________
______________________________
______________________________
______________________________

Monitoring frequency: ________ Dates of monitoring visits: ______________________
______________________________
______________________________
______________________________

(NOTE: The letters for the items above correspond to those on pp. 1 - 3 of this Checklist)

(03/95)
I. INTERVIEWS

Name ________________________________
Address ________________________________________________________________________

Phone _________________________________________________________________________
Affiliation ____________________________________________________________________

Comments: ____________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Name ________________________________
Address ________________________________________________________________________

Phone _________________________________________________________________________
Affiliation ____________________________________________________________________

Comments: ____________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Name ________________________________
Address ________________________________________________________________________

Phone _________________________________________________________________________
Affiliation ____________________________________________________________________

Comments: ____________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

(03/95)
Figure 11-2: Trash in open trench landfill. View looking 070 degrees. (Roll 01-3, Neg. #6160, frame 11. Photograph by V. S. Gillerman, 2001).

Figure 11-3: Adit 1 tunnel is open and easily accessible with wooden portal in good shape. View looking 270 degrees. (Roll 01-3, Neg #6160, frame 12. Photograph by V. S. Gillerman, 2001).
Figure 11-4: Interior of Adit #1 in good shape with minor rock fall. View looking 310 degrees. (Roll 01-3, Neg. #6160, frame 13. Photograph by V. S. Gillerman, 2001).

Figure 11-5: Building 1 (foreground) in poor shape on Adit 1 dump. Building 2 (to rear) in fair shape. View looking 040 degrees. (Roll 01-3, Neg. #6160, frame 14. Photograph by V. S. Gillerman, 2001).
Figure 11-6: Adit 2 and dump, uphill from Adit #1, were not visited. View looking 315 degrees. (Roll 01-3, Neg. #6160, frame 15. Photograph by V. S. Gillerman, 2001).

Figure 11-7: Tailings Pile #1 on BLM land at Site 10, DU-401. View looking 220 degrees. (Roll 01-3, Neg. #6160, frame 16. Photograph by V. S. Gillerman, 2001).
Figure 11-8: South side Adits have portals that are easily accessible, wide open, and in fair to poor shape. View looking 155 degrees. (Roll 01-3, Neg. #6160, frame 17. Photograph by V. S. Gillerman, 2001).
Figure 11-9: Outcrop of quartz vein cut by a fault, next to mine road near Adit 3. View looking 320 degrees. (Roll 01-3, Neg. #6160, frame 18. Photograph by V. S. Gillerman, 2001).

Figure 11-10: Adit 3 portal is partially caved inside and out. View looking north. (Roll 01-3, Neg. #6160, frame 19. Photograph by V. S. Gillerman, 2001).
Figure 11-11: Wooden water tank with straw insulation in fair condition. View looking 035 degrees. (Roll 01-3, Neg. #6160, frame 20. Photograph by V. S. Gillerman, 2001).

Figure 11-12: View looking down Patterson Creek at South side dump and tailings. View looking 230 degrees. (Roll 01-3, Neg. #6160, frame 21. Photograph by V. S. Gillerman, 2001).
Figure 11-13: Buildings 5 and 6 in fair to poor condition. (Roll 01-3, Neg. #6160, frame 22. Photograph by V. S. Gillerman, 2001).

Figure 11-14: Main Adit 4 with huge open portal in good shape with doors unlocked. View looking 300 degrees. (Roll 01-3, Neg. #6160, frame 23. Photograph by V. S. Gillerman, 2001).
Figure 11-15: Adit 4 interior. Timbers snapping under pressure in back of portal. View looking 300 degrees. (Roll 01-3, Neg. #6160, frame 24. Photograph by V. S. Gillerman, 2001).

Figure 11-16: Water flowing from busted pipe below west side of Waste Dump 4 (probably adit drainage). View looking 310 degrees. (Roll 01-3, Neg. #6160, frame 25. Photograph by V. S. Gillerman, 2001).
Figure 11-17: Adit 5-K.C.L. Adit, by mill, caved 10 ft. inside and barely accessible. View looking 340 degrees. (Roll 01-3, Neg. #6160, frame 26. Photograph by V. S. Gillerman, 2001).

Figure 11-18: Adit 5 partially caved with standing water at portal. View looking 340 degrees. (Roll 01-3, Neg. #6160, frame 27. Photograph by V. S. Gillerman, 2001).
Figure 11-19: South side Dump and Adit 6 portal behind phone pole. Note brick chimney, wooden debris, and deep (> 6 ft.) erosion of stream through waste dump. View looking 165 degrees. (Roll 01-3, Neg. #6160, frame 27. Photograph by V. S. Gillerman, 2001).