<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Lot No.</th>
<th>Type and Description</th>
<th>Emulsion</th>
<th>Location</th>
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<tbody>
<tr>
<td>W120A</td>
<td></td>
<td>Veinlet 2½&quot; thick 10.25</td>
<td></td>
<td>NW wall SSS 13X-CJ level</td>
</tr>
<tr>
<td>W120A</td>
<td></td>
<td>do 10&quot; do 0.38</td>
<td></td>
<td>NW wall SSS 13X-CJ level</td>
</tr>
<tr>
<td>W130A</td>
<td></td>
<td>do 5&quot; do 3.02</td>
<td></td>
<td>S wall SSS 13X-CJ level</td>
</tr>
<tr>
<td>W131A</td>
<td></td>
<td>do 5&quot; do 0.51</td>
<td></td>
<td>S wall S103 3693 level</td>
</tr>
</tbody>
</table>

*Four 3 to 3½-inch veinlets

---

1. Name of Property: Galena mine
2. Direction to Property: West of Wallace 1.7 mi., up Lake Creek 1 mi.
3. Owner or Lessee: American Smelting and Refining
4. Address: Wallace, Idaho
5. Published References:
   - Rossman, F. L., and Calkins, F. C., 1933, Geology and ore deposits of the
     Coeur d'Alene mining district, Shoshone Co., Idaho: U.S. Geol. Survey
     Prof. Paper 62; Shannon, J. C., and McConnel, R. E., 1939, The silver belt
     of the Coeur d'Alene district, Idaho: Idaho Dep. of Mines and Geol.,
     Pamphlet No. 30.
6. Type of Examination: Reconnaissance for radioactivity.
7. Radioactive Deposit: Type and Age: Vein-Age, probably pre-Cambrian.
   - Revett quartzite of the pre-Cambrian belt series
5. Sample Description:
   - One material present: Pitchblende
   - One mineralogical association: None
   - Quartz and pyrite
8. Geologic Relationship:
   - Intimately mixed
9. Geology:
   - Strike approximately E-W. Dip 80° N. S.
   - Maximum 3 to 8 feet
   - Thin veinlets
10. Sample Radiometric Data:
    - Precision Radiation Instruments Scintillator Card, III. (Spokane)
    - Average reading per deposit 0.26 mR/hr
    - Background reading 0.02 - 0.022 mR/hr
    - Max. 20 mR/hr
11. Radiometric Data:
    - Sample W120A: Veinlet 2½" thick 10.25
    - Sample W120A: do 10" do 0.38
    - Sample W130A: do 5" do 3.02
    - Sample W131A: do 5" do 0.51

---

12. Unpublished References: None
13. Property of ownership executed: Yes
14. Publication report to follow: Yes
## TRACE ELEMENTS PRELIMINARY RECONNAISSANCE REPORT
### SUPPLEMENTARY LABORATORY DATA

**DATE OF COLLECTING:** August 22, 1956

**REPORT BY:** F. C. Armstrong and P. L. Wais

**LOCATION:** Idaho, Shoshone District

### 1. NAME OF PROPERTY:
Galena Mine

### 2. OWNER OR LESSEE:
American Smelting and Refining Company, and Bay Mines, Inc.

### 3. SAMPLES:

<table>
<thead>
<tr>
<th>SAMPLE NO.</th>
<th>LOT NO.</th>
<th>TYPE OF SAMPLE</th>
<th>MATERIAL</th>
<th>U COMPONENT</th>
<th>TOTAL COMPONENTS</th>
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</thead>
<tbody>
<tr>
<td>W-128A</td>
<td>1685</td>
<td>Channel Vainlet of</td>
<td>quartz, pyrite, and pitchblende</td>
<td>0.34</td>
<td>0.33</td>
</tr>
<tr>
<td>W-128A</td>
<td>1685</td>
<td>Channel Same vainlet</td>
<td></td>
<td>0.36, 0.46</td>
<td>0.39</td>
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<tr>
<td>W-130A</td>
<td>1685</td>
<td>Channel</td>
<td>Lots of quartz</td>
<td>10.2</td>
<td>14.0, 13.5</td>
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<tr>
<td>W-130B</td>
<td>1685</td>
<td>Channel</td>
<td>pyrite and pitchblende</td>
<td>9.1</td>
<td>11.7, 11.0</td>
</tr>
<tr>
<td>W-131A</td>
<td>1685</td>
<td>Channel</td>
<td>Vainlet of quartz, pyrite and pitchblende</td>
<td>1.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

See attached sheet 2

---

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100. [ ] HDR, RAY, RECOMMEND
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D. SUPPLEMENTARY REPORT TO FOLLOW: No
In X-ray diffraction pattern for that part of sample U-123A indicated above shows uraninite and galena to be present in the highly radioactive material separated from the charmal sample.

Sample U-123A was cut 2½ inches thick and along about 6 inches of strike of a quartz-opalite-chalcedony veinlet at the west radioactive part. Sample U-123B was cut 1½ inches thick along the same veinlet along about 13 inches of strike. Samples U-123A and U-123B were cut side by side with U-123A being the more radioactive part of the two. U-123A was cut immediately adjacent to the fault shown in the map. The veinlet from thick these samples were cut is about 2½ inches thick near to the fault; it thickens along the strike and disappears about 8 feet from the fault. The veinlet adjacent to the veinlet in silicified and red this albitization extends about 6 inches into the hanging wall, and about 12 inches into the footwall of the veinlet.

Sample U-123B was cut 10 inches long across silicified and slightly red wallrock. In that 10 inches the sample cut two ½-inch and two 3/4-inch veinlets of quartz, opalite and chalcedony. The sample was cut in the downward wall near the bottom of the drift. The veinlet could be traced for only 2 to 3 feet along the strike.

Other veinlets similar to those sampled were seen in the back and north part of the exposure. These veinlets are from 1/4 inch to a knife edge thick. They are thinning near the fault. None of them exceed 3 feet in length, and most are discontinuous. Their distribution in the back and wall is not uniform.

None of these veinlets were seen in the hanging wall of the fault. Only one spot showing chalcedony radiactivity was found in the hanging wall of the fault. To be on the north wall immediately above the fault, but the cause of the chalcedony radiactivity is not apparent. The rock is not silicified or red.

The attitude of the veinlets suggests that they are filled tonalite rocks generally related to the fault. If they are filled tonalite rocks, veinlets should occur in the hanging wall of the fault. However, in the exposure in S5 137-63 the veinlets are restricted to the footwall of the fault.

A core a few feet on either side of the fault should be prospected. If the veinlets occur with regularity and in sufficient abundance there may be massive ore along the fault.

Sample U-123A was cut in the south wall of S55 65095E. At this spot quartz-opalite-chalcedony veinlets occur in red, silicified Rovato quartzite. The veinlets are about 1/4 inch thick and are irregular and discontinuous. Locally there are clefts in the veinlets that measure as much as 5 inches by 5 inches. It used with a knife that sample U-123A was cut. The core of veinlets, which is probably not over 10 inches thick, can be traced in the south wall for a critical length of about 2 feet. The core end of the core is cut off by a fault. The Company reports that since S55 65095 was being driven pieces of quartz-opalite-chalcedony veinlets were found in thin fault where it cut the Silver veins. Also cores fault onto a quartz-cleavage vein. The quartz-cleavage vein does not appear to be part of the Silver vein, but rather a branch vein that runs into the hanging wall of the Silver vein. The uranium-bearing veinlets apparently parallel the Silver vein through the quartz-cleavage vein fault into the Silver vein for 6 feet east of the fault and then branches off to the northwest. This branching of the quartz-cleavage vein forms the eastern end of the uranium-bearing veinlets. The uranium-bearing veinlets also appear to terminate up-dip against the quartz-cleavage vein. The radioactivity occurrence in S55 65095 does not warrant more exploration at this time.

The company also reports that the occurrence in S55 65095 to below the "C" band of the Galena fault and the occurrence in S55 137-63 is above the "C" band, and, therefore, that a projection cannot be made from one occurrence to the other even though they appear to line up pretty well on a map.
EXPLANATION

Fault, showing dip

Strike and dip of beds

Vein, showing dip

W-129A
Sample number and location
0.015

Milliroentgens per hour. Background in drift with "Scintillator" held in center of drift

20

Milliroentgens per hour; with "Scintillator" held against feature indicated

S4E 13 X-C N
Number of mine working place

Geologic and radiometric map showing the radioactive occurrences on the 2800-foot level of the Galena Mine, Shoshone County, Idaho