CRIB MINERAL RESOURCES FILE 12

RECORD IDENTIFICATION
RECORD NO.......... M061401
RECORD TYPE........ XIJ
COUNTRY/ORGANIZATION: USGS
MAP CODE NO. OF REC.

REPORTER
NAME.................. JOHNSON, MAUREEN G.
UPDATED.............. 01 01
BY..................... FERNS, MARK L.; (BROOKS, HOWARD C.)

NAME AND LOCATION
DEPOSIT NAME........ SPARKS

MINING DISTRICT/AREA/SUBDIST. GOLD HILL

COUNTRY CODE.............. US
COUNTRY NAME: UNITED STATES

STATE CODE.............. OR
STATE NAME: OREGON

COUNTY.................. JACKSON
DRAINAGE AREA........... 17 ROGUE RIVER
PHYSIOGRAPHIC PROV........ 13 KLAMATH MOUNTAINS
LAND CLASSIFICATION.... 01

QUAD SCALE QUAD NO OR NAME
1: 62500 NIMER

LATITUDE LONGITUDE
42-33-29N 123-07-56W

UTM NORTING UTM EASTING UTM ZONE NO
4711450.0 489150.0 10

THP...... 35S
RANGE.... 04W
SECTION.. 02
MERIDIAN: WILAMETTE

LOCATION COMMENTS: E 1/2

COMMODITY INFORMATION
COMMODITIES PRESENT.......... AU TLD
EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. 2

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:
Pegmatite Dike

FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA
SIZE OF DEPOSIT........ SMALL
MAX WIDTH................ 15 FT
STRIKE OF OREBODY..... N60W
DIP OF OREBODY........ 70SE

DESCRIPTION OF WORKINGS
SURFACE AND UNDERGROUND

COMMENTS (DESCRIPTION OF WORKINGS):
SURFACE TRENCHES AND 126 FT OF DEVELOPMENT IN TWO CAVED ADITS.

PRODUCTION
UNDETERMINED
23 AU? OCCUR

1930-1943 AU?

GEOLGY AND MINERALOGY

AGE OF HOST ROCKS.............. LJUR-CRET
HOST ROCK TYPES................. PEGMATITE DIORITE

AGE OF ASSOC. IGNEOUS ROCKS.. LJUR-CRET
IGNEOUS ROCK TYPES............. GABBRO

PERTINENT MINERALOGY............ QUARTZ, MICROCLINE, TOURMALINE, TIN REPORTED BUT NOT CONFIRMED BY ASSAYS IN GABBRO

GENERAL REFERENCES
1) OREGON METAL MINES HANDBOOK, 1943, ODGMI BULL 14-C, VOL 2, SEC 2, P 109
SPARKS MINE (gold, feldspar)  Gold Hill area
Jackson County

An area of gabbro is intruded by a pegmatite dike. The dike consists of some graphic granite with tourmaline as the principal accessory mineral.

Owner: H. W. Sparks, Rogue River, Oregon.
Location: NE\textsuperscript{4} and SE\textsuperscript{4} sec. 2, T. 35 S., R. 4 W., 120 acres of deeded land. Property lies 1.1 miles up Evans Creek from Winter on a hillside north of the road.

History: Worked intermittently since 1930 as a gold property. Presence of tin in the gabbro was reported, but could not be confirmed. Two assays, B.G. 1035 and B.G. 1036, showed no tin. At present the property is idle.

Development: There are several trenches, principally on the pegmatite dike. One adit, now caved, trended N. 25 W. for 90 feet with a drift N. 30 E., for 35 feet. The adit is reported to be along the contact of the gabbro and pegmatite.


Geology: The country rock is classified by Diller (Riddle folio) as granite but this particular hill is composed of coarse- to medium-grained gabbro. Freshly broken surfaces have a greenish cast. The gabbro has been intruded by a pegmatite dike or dikes. Portions of the pegmatite resemble graphic granite. Principal minerals are quartz and feldspar, with tourmaline as the principal accessory mineral. A very small amount of biotite was seen at the south
end of the dike.

The feldspar in the dike is white to glassy and weathers to a light buff. Most of it appears to be orthoclase (microcline?) but polysynthetic twinning suggests that some plagioclase (albite?) is present. In general the feldspar may represent a microcline-albite intergrowth.

The dike apparently follows the crest of a small ridge. It trends N. 60 W and dips about 70 S. E., in a trench near the caffer adit. Elsewhere, the dike is poorly exposed by trenching and is well covered by mantle rock. Unless the dike is a series of smaller parallel dikes, the width is in excess of 15 feet.

Pegmatite float covers the southwest hillslope and in a few places pegmatite is exposed by pits. These places seem to represent small pegmatite bodies as they cannot be traced for any distance.

1. Name of property **Sparks Mine**
Operating company (or individual) **H. W. Sparks**, Rogue River, Oregon
Address
Location of property **Evans Creek mining District, 8 miles north of**
Acreage of holdings **Rogue River, 120 acres in N. E. 1/2 and S. E. 1/4 of S. 2, T. 3 W., R. 4 W.**
2. History of property, past and recent: **Worked in offhand way since 1930**

3. History of production: **None**

4. Development: Number of levels, lengths of drifts and cross-cuts, raises, etc.: **Several surface open cuts. One cross cut tunnel runs N. 25° W., 90 feet with a drift N. 33° E., 36 feet.**

5. General description and equipment on hand, topography, country rocks, elevation, timber, water, snow fall, climate, power, etc. **No equipment; mountainous topography; country rock is decomposed granite; elevation 1700 feet; plenty of mine timber; water for domestic use only.**

6. Geology - General and local. Ore geology - type of deposit, i.e., vein, mineralized zone, bed; contact relations, attitude and orientation, vein minerals, gangue, type of mineralization, alteration, enrichment, etc. **Regmatite in granite. Feglioclase, quartz, biotite, black tourmaline are the minerals. Strike N. 73° E. dip 63° S. 15° wide**

7. Metallurgy - nature of ore, hard or soft, free-milling, base, direct shipping, etc. **Kind of mill and equipment in use or planned, current daily tonnage of ore or concentrates, approximate value, freight rates to smelter, etc.**

Not ready for mill

8. Remarks - economics: High or low cost, principal drawbacks, reasons for success or failure, apparent life of operation based on apparent quantity of ore available. **In the event there is sale for the feldspar, it would be almost impossible to separate it from the quartz and vice versa.**

**J. E. Morrison, informant**
I worked on the Messenger sample DG-72 sometime ago and failed to find tin in concentrations as high as 0.001 percent. The other sample which came in half an hour ago, DG-72, and I assume is Messenger sample, also failed to show tin. Synthetic standards show tin plainly at .001 percent. Other samples you sent, namely, 42-T9, 42-T10, 42-T11, have also been analyzed for tin. The sample 42-T11, which is the feldspar, shows about 0.001 percent. The others do not show tin. Please tell Ray that I have not forgotten the work on the potassium and will get the results in on that as soon as possible. As a matter of record, I believe I wrote you regarding the nickel samples for J. S. Walsh you left here when you were in Portland. Traces of nickel were present but nothing of commercial grade.

From a letter from Dr. H.C. It.
SPARKS MINE

This is the first "real" pegmatite dike seen in this country. The feldspar possibilities should be investigated further. To do this, some small amount of surface trenching should be done to limit the dike. Carefully taken samples are necessary. In addition to spectrographic analysis, mechanical testing to suggest possibilities of recovery could be made. A topographic map should be made of a small area so that tonnage could be computed.

These suggestions are being made for consideration by the Portland Office.

Ray C. Treasher,  
Field Geologist,  
March 24, 1943.
Letter to Gov. Snell, to EKN, to RCT relative to inspection of enormous tin and tungsten property on Evans Creek.

Arrangements were made to inspect this property in 1942, but at the critical moment, Mr. Sparks advised that he did not want it looked at by us.

Then, later, he writes Gov. Snell about his property and we are urged to go look at it.

The property will be reported in the Jackson County catalog as the Sparks property.

Mr. Sparks is over 87; he is almost crippled, and very hard of hearing. Background is given well in his letter to Gov. Snell, dated Jan. 18, 1943. I called on him and was taken to his assay laboratory where he showed me concentrates of tungsten, both hubernite and scheelite as well as tin. Later, the ultra-violet light showed no scheelite in his high grade scheelite concentrates.

Tuesday, March 23rd, 1943, was set for the visit. Sparks went along. We went up the West side road, Evans Creek, to about sec. 22, where we went into a barnyard. Outcrops of metavolcanic rock represent an enormous tungsten ledge that runs from Evans Creek, west over the ridge. Tin ore occurs on the south side of the tungsten ledge. The tungsten is scheelite, according to Sparks. Also, numerous outcrops of scheelite occur in the bed of Evans Creek. There is no reason why an enormous development cannot be made here. I took samples in order to please the old man. He couldn't find his "tin rock".

By the way, all these rocks are saturated with chlorides. It is necessary to make the fusions with "top heat". Crucibles are set on asbestos; the charge is made as usual except that niter is added. After half an hour of such heating, the heat is really applied for the chlorides have all been driven off. When complete, the lead or tin button rides on top of the slag. A man once told him that the button was 75% tin.

We went to his property in sec. 2, T. 35 S., R. 4 W. above Wimer. Gabbro is cut by a pegmatite dike. Any of the gabbro is "tin rock". We covered the hillside, inch by inch, for the old man has difficulty in walking. I saw acres and acres of tin rock. I finally had to sample the gabbro in order to satisfy Sparks. Eventually, we got to his tunnel, which of course was caved and inaccessible. But he courteously gave me a sample of his high-grade tin ore for a spectorgraphic analysis.

It was a pleasant spring day, delightfully warm and balmy, if you get what I mean. The wild flowers were in profusion, and the birds were singing. The view was magnificent.

Ray C. Treasher,
Field Geologist,
March 24, 1943.