State Department of Geology and Mineral Industries

702 Woodlark Building
Portland 5, Oregon

RSP

MARK I GROUP (U. Mineral Occurrence)

Jackson County
Ashland District

Owners: Vernon Ritchie and Norman Nelson, Medford, Oregon.

Location: Two claims, the Mark I and Mark II, are located in the SW¼ of the SE¼ of Sec. 27, T. 40 S., R. 1 E. The lower pit, on Mark I claim, is about 100 yards N. 70° W. of the point where Colestin road crosses Mill Creek, about 8 miles from Highway 99. It is at 4500 feet elevation. The upper cut, on Mark II claim, is about 1100 feet east of the Mill Creek culvert, at 4860 feet elevation. Access to the pits from the road is by indistinct trails.

Development: There are two shallow discovery pits; one on each claim.

Geology: The claims lie within the Ashland granitic stock. The pits are in pegmatite dikes intrusive into the granodiorite. The pegmatite dikes are composed of very coarse-grained pink feldspar and quartz with minor amount of muscovite. Feldspar crystals 4 inches in diameter are common.

The pegmatites show anomalous radioactivity on the scintillator, about .04 MR/HR. In both pits certain spots will take the needle off the second scale, about .05 MR/HR.

The upper pegmatite dike apparently the larger, but its extremities are not exposed. Its surface outcrop is about 15 x 20 feet, but the dike may be flat lying and have less thickness. The surrounding area has considerable overburden and is quite brushy. At the lower cut the formation appears broken due to creep and the boundaries of the pegmatite, which is exposed only in the small pit, are indistinct. Nelson and Ritchie have

apparently dug through the pegmatite zone, and the bottom of the lower pit is in decomposed granite. A lime-silicate zone, about 8 x 12 inches, is exposed in the west wall of the pit. At this point considerable epidote and some garnet occur in the pegmatite. A greater amount of radioactivity is found in the walls of the lower pit, about 2 feet from the surface, than at greater depth. The south and west walls of the pit give the highest radioactivity.

Source of the radioactivity: A black mineral having flattened rectangular prismatic form, usually with wedge-shaped pyramid faces tapering from the narrow prism faces, and occasionally occurring in radiating aggregates, is the source of radioactivity in the pegmatites. These black rectangular crystals are nearly always euhedral. Some of the crystals have a dull yellow coating of some secondary substance, due probably to alteration. Fresh surfaces show vitreous luster and uneven to conchoidal fracture. Under the microscope fragments of the mineral have irregular shape and are yellow to translucent yellowish-brown. The mineral is isotropic and has refractive index greater than 1.77. Spectrographic analysis (PG-296, S-300) shows the following elements present in a carefully picked sample of the black mineral:

between	1 & 10%	-- Si, Fe, Ti, Zr, Nb, Y
between	0.1 & 1%	-- Mn, Th, Pb, U, Ce, As, Pr, Ta
between	.01 & 0.1%	- Al, Ca, Na, Hf, Sn
between	.001 & .01%	- Mg, V, Be, Co, Bi
below	.001%	- Cr, Ba, Ni, Cu

The mineral is believed to be polycrase but should probably be designated as euxenite-polycrase (George, 1949). It may, however, belong to the eschynite-priorite group which has similar composition and cannot be distinguished from euxenite and polycrase without determination of axial ratios. A sample of picked highgrade (PG-313, P-18865) assayed

0.01% U_3O_8 equivalent.

Conclusions: It is doubtful if these or similar occurrences will become commercial uranium deposits. The polycrase crystals are distributed too sparsely within the pegmatites and the pegmatites appear too small to justify mining of low grade and concentration by any method.

Visited: 9/1/55.

Informants: Vernon Ritchie & Norman Nelson

Reported by: Len Ramp

Reference: George, D'Arcy -- Mineralogy of Uranium and Thorium Bearing 1949 Minerals R. M. O. 563 U. S. A. E. C.

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PG-296
Spec. Ident

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

2033 First Street
Baker, Oregon

1069 State Office Building
Portland 1, Oregon

239 S.E. "H" Street
Grants Pass, Oregon

copy

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein as fully as possible and submit this blank filled out along with the sample.

Your name in full Len Ramp (DOGAMI)

Post office address P.O. Box 417 Grants Pass, Oregon

Are you a citizen of Oregon? Yes Date on which sample is sent 8-23-55

Name (or names) of owners of the property Norman Nelson & Vernon Ritchie

Are you hiring labor? Are you milling or shipping ore?

Name of claim sample obtained from Mark I Group

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Jackson Mining District Ashland

Township 40 S Range 1 E Section 27 Quarter section

How far from passable road? On Name of road Colstine Rd.

	Channel (length)	Grab	Assay for	Description
Sample no. 1			Spec. Ident.	
Sample no. 2				

(Samples for assay should be at least 1 pound in weight)

(Signed) L. R.

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description ~~Black vitreous elongate rectangular prism Xls radioactive translucent yellow brown under microscope samarskite (?). Crystals picked from pegmatite.~~

Sample number	GOLD oz./T.	GOLD Value	SILVER oz./T.	SILVER Value				
PG-296 S-300								

Report issued Card filed Report mailed 9-1-55 Called for

SIR-5

COPY

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1069 STATE OFFICE BUILDING
PORTLAND 1, OREGON

General Laboratory Number PG-296 Date 9/1/55 ~~8-29-55~~ ?

Spectrographic Laboratory Number S-300 Sample received from Len Ramp (DOGAMI)

QUALITATIVE SPECTROGRAPHIC ANALYSIS
(Quantities estimated to nearest power of ten)

1. Elements present in concentrations over 10%.

2. Elements present in concentrations 10% - 1%.

Si, Fe, Ti, Zr, Nb, Y

3. Elements present in concentrations 1% - 0.1%.

Mn, Th, Pb, U, Ce, As, Pr, Ta

4. Elements present in concentrations 0.1% - .01%.

Al, Ca, Na, Hf, Sn

5. Elements present in concentrations .01% - .001%.

Mg, V, Be, Co, Bi

6. Elements present in concentrations below .001%.

Cr, Ba, Ni, Cu

Probably samarskite E

Thomas C. Matthews, Spectroscopist

CRIB MINERAL RESOURCES FILE 12

RECORD IDENTIFICATION
- RECORD NO..... M013792
- RECORD TYPE..... X1M
- COUNTRY/ORGANIZATION. USGS
- FILE LINK ID..... CONSV
- MAP CODE NO. OF REC..

REPORTER
- NAME..... LEE, W
- DATE..... 74 01
- UPDATED..... 80 12
- BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION
- DEPOSIT NAME..... MARK I GROUP
- MINING DISTRICT/AREA/SUBDIST. ASHLAND
- COUNTRY CODE..... US
- COUNTRY NAME: UNITED STATES
- STATE CODE..... OR
- STATE NAME: OREGON
- COUNTY..... JACKSON

QUAD SCALE	QUAD NO OR NAME
1: 62500	ASHLAND

LATITUDE	LONGITUDE
42-03-43N	122-41-20W

UTM NORTHING	UTM EASTING	UTM ZONE NO
4656500.	525750.	+10

- TWP..... 40S
- RANGE.... 01E
- SECTION.. 27
- MERIDIAN. W.M.

COMMODITY INFORMATION
- COMMODITIES PRESENT..... U

OCCURRENCE(S) OR POTENTIAL PRODUCT(S):
- POTENTIAL.....
- OCCURRENCE..... U

MAIN ORE MINERALS:
EUXENITE

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. 1
PROPERTY IS INACTIVE
PRESENT/LAST OPERATOR.... VERNON RITCHIE, NORMAN NELSON, MEDFORD

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:
PEGMATITE

GEOLOGY AND MINERALOGY

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

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

LOCAL GEOLOGY
NAMES/AGE OF FORMATIONS,UNITS,OR ROCK TYPES
1) NAME: ASHLAND PLUTON
AGE: LJUR CRET

GENERAL COMMENTS
URANIUM MINERALS EUXENITE-POLYCRASE. HOST ROCK AND ASSOCIATED MINERALS PEGMATITE. U3O8 EQUIV. 10

GENERAL REFERENCES
1) THE ORE -BIN VOL. 17, NO. 12, DECEMBER 1955