3260 0019

URANIUM-OCCURRENCE

REPORT

Quad Name A90< WELLS Item 19 >

Quad Scale A100< 2,5,0,0,0,0 >

Deposit No. B40< 3 >

Deposit Name A10 < South Fork claims (nos. 1 and 2), Pixley No. 1 claim >

Synonym Name(s) A11 < East, south fork >

District or Area A30 < Mountain City >

Country A40 < U,S > U,S State Nevada

State Code A50 < 3,2 > 3,2 County A60 < Elko >
(Enter code twice from List D)

Position from Prominent Locality A82 < 1.0 mile northeast of the Bieroth Ranch on the north side of Pixley Creek >

Field Checked G1 < 7,9 0,6 > By G2< Proffitt, Jerry L. >
Yr Mo Last name First Initial

Latitude A70 < 4,1 4,9 5,6 N > Longitude A80 < 1,1,5 4,6 2,2 W >
Deg Min Sec Deg Min Sec

Township A77 < 0,4,6 N > Range A78 < 0,5,4 E > Section A79 < 3,5 >
N/S E/W

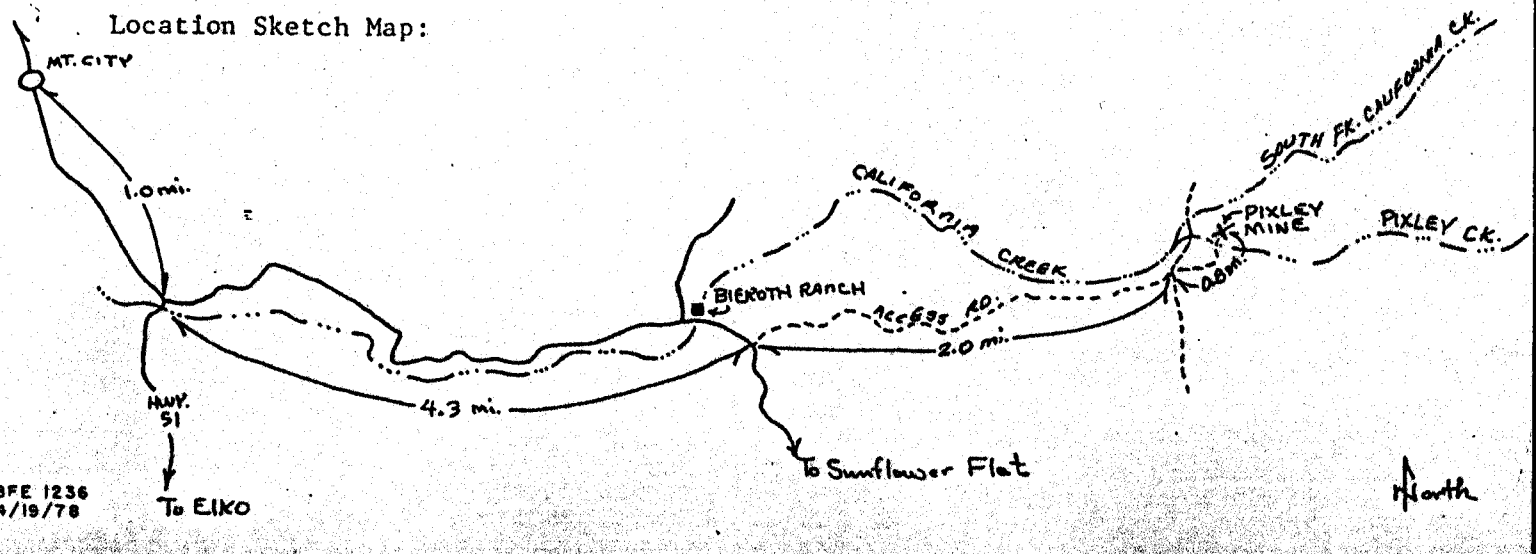
Meridian A81 < Mt. Diablo > Altitude A107 < 6500 FT > FT/M

Quad Scale A91 < 6,2,5,0,0 > Quad Name A92 < Mountain City >
(7½' or 15' quad)

Physiographic Province A63 < 1,2 > Basin and Range >
(List K)

Location Comments A83 < 1.0 miles south of Mountain City Standard Station turn east on road to Sunflower Flat for 4.3 miles. A dirt, unimproved road to the left (north) > *

Location Sketch Map:



BFE 1236
4/19/78

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Quad Name WELLS

Deposit No. 3

Commodities Present:
C10 <U>

Commodities Produced:
MAJOR <U> COPROD <>

MINOR <> BYPROD <>

Potential Commodities:
POTEN <U> OCCUR <>

Commodity Comments C50 <>

Status of Exploration and Development A20 < 2 >
(1 = occurrence, 2 = raw prospect, 3 = developed prospect, 4 = producer)

Comments on Exploration and Development L110 < Recent exploration consists of several drill holes which were probably to meet assessment requirements. Development > *

Property is A21 (Active) (A22) (Inactive) (Circle appropriate labels)

Workings are (M120) (Surface) M130 (Underground) M140 (Both)

Description of Workings M220< Workings consist of three shallow open pits, two of which do not appear to be particularly noteworthy, and a third which has an area > *

Cumulative Uranium Production PROD (YES) NO (SML) MED LGE (circle)

DH2
G7<U> accuracy <A C C> G7A< thousands of 1b. 4 5 1 1> G7B<LB> G7C< years > G7D< grade 0.12 % U3O8>

Source of Information D9 < U.S. Atomic Energy Commission production records. >

Production Comments D10 <>

Reserves and Potential Resources

EH
E1<U> accuracy <> E1A< thousands of 1b. > E1B<LB> E1C< year of est. > E1D< grade % U3O8>

Source of Information E7 <>

Comments E8 <>

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Quad Name WELLS

Deposit No. 3

Deposit Form/Shape M10 < Lens shaped. >

Length M40 < UNK > M41 < FT/M >

Width M50 < UNK > M51 < >

Thickness M60 < UNK > M61 < >

Strike M70 < UNK >

Dip M80 < UNK >

Size M15 (circle letter):

lb U308

(A) 0 - 20,000
B 20,000 - 200,000
C 200,000 - 2 million
D 2 million - 20 million
E More than 20 million

Tectonic Setting N15 < Mobile Belt >

Major Regional Structures N5 < Northern edge of the Basin and Range >

Local Structures N70 < An east-west trending fault is postulated to coincide with Pixley Creek, down on the south. Two parallel, high-angle normal faults trending north-south along the west side of Pixley have displacements of approximately > *

Host-FM. Name U1 < Unnamed. > Member U2 < >

Host Rock K1 < T E R T | | | | | | | | | Sandstone, arkosic, tuffaceous fine to very coarse-grained, yellow gray to white, subangular, in part biotite-rich, feldspars commonly altered to clay, biotites etched, strong limonite and hematite staining. >

(Age) (Rock type, texture, composition, color, alteration, attitude, geometry, structure, etc.)

Host-Rock Environment U3 < Sedimentary depositional environment. >
(Sed. dep. environ., metamorphic facies, ign. environ.)

Comments on Associated Rocks U4 < The swale in which the arkosic host is found is incised into a quartzmonzonite of Cretaceous age. Locally it is overlain by volcaniclastic rocks consisting of welded and nonwelded ash-flow and air-fall tuffs and vitrophyres. >

Ore Minerals C30 < Autunite, renardite, carnotite are the reported ore minerals. >

Gangue Minerals K4 < Gypsum, trace secondary silica and questionable sulphur. >

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Alteration N75 < Devitrificaiton of tuffs to montmorillonite; alteration of pyrite to limonite, carbon to soot, feldspars to clay, local veinlets of silica. >

Reductants U5 < Clays, carbonaceous debris and pyrite >

Analytical Data (General) C43 < None >

Radiometric Data (General) U6 < 5 to 8 times BG (250 x 600 ft), 8 times BG (5 x 10 ft), 12.5 times BG (5 x 8 ft), 20 times BG (4 x 8 ft), 10 times BG (2 x 10 ft), 30 times BG (2 x 10 ft). >
(No. times background and dimensions)

Ore Controls K5 < Mineralization was controlled by a paleochannel on the quartzmonzoni surface. The sediments and volcaniclastics within the channel provided the porosity needed to allow the uranium-bearing waters to come in contact with the clay and organic reductants. >

Deposit Class C40 < Hydroallogenic > Class No. U7 < 5,4,10 >

Comments on Geology N85 < Early Tertiary sediments and volcaniclastic rocks deposited on the quartzmonzonite surface were dated by Ephedra pollen as 40 million years old; Oligocene(?). Mineralization occurred between 40 and 20 million years ago. Postmineralization faulting in several places offsets mineralized horizons or juxtaposed them against the quartzmonzonite. The local faulting which disrupted > *

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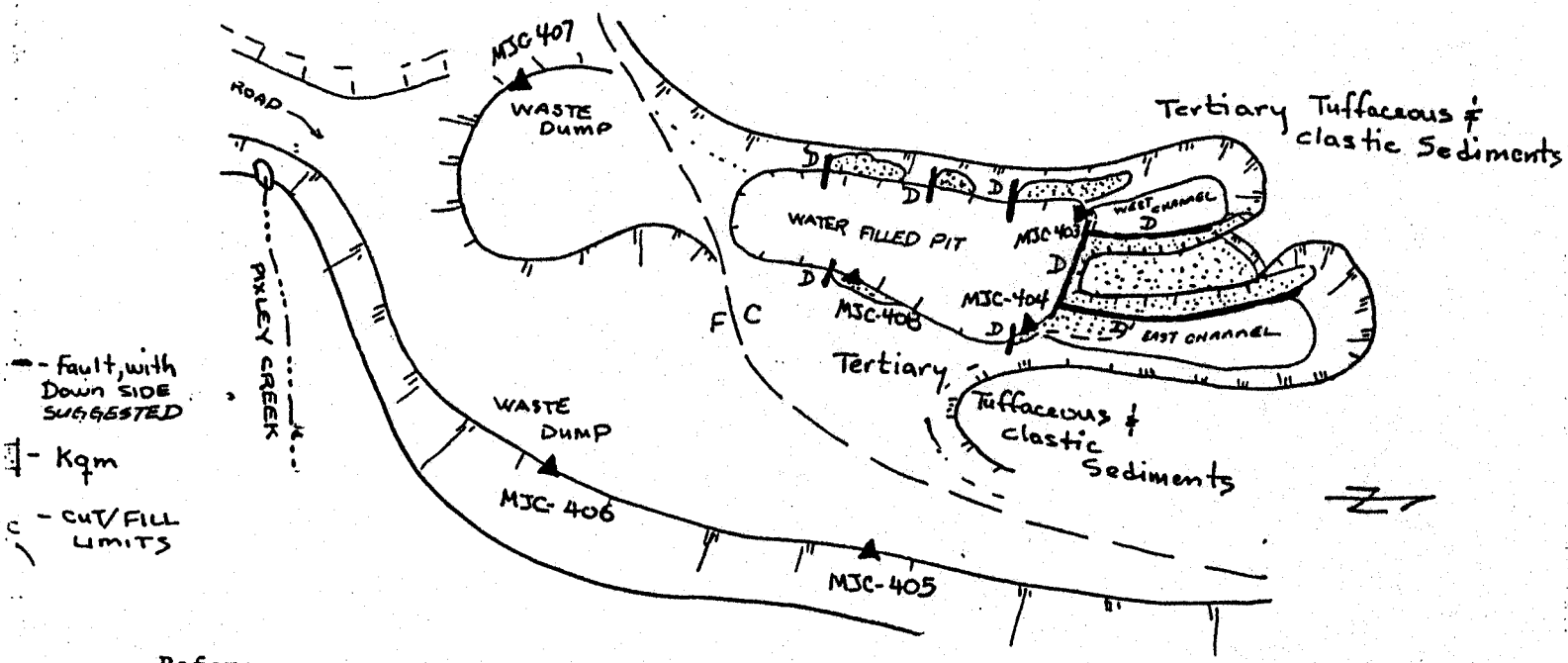
Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MJC 403	Grab sample from carbonaceous channel bottom	445 ppm
MJC 404	Grab sample from carbonaceous channel bottom	445 ppm
MJC 405	2 ft. channel sample from edge of dump	473 ppm
MJC 406	2 ft. channel sample from edge of dump	749 ppm
MJC 407	2 ft. channel sample from edge of dump	162 ppm
MJC 408	Grab sample of Kgm grus on edge of pond	1532 ppm

Geologic Sketch Map and/or Section, with Sample Locations:



References:

F1 <Garside, Larry, J., 1973, Radioactive Mineral Occurrences in Nevada: Nevada Bureau of Mines and Geology Bulletin 81, p. 42, No. 140>

F2 <U.S. Bureau of Mines Minerals Yearbook, 1960>

F3 <Birkholz, Donald O., 1978, Uranium Deposits in Volcaniclastic Rocks near Mountain City Nevada: AAPG-SEPM Annual Convention, April, 1978, Oklahoma City, OK>

F4 <>

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Continuation from p. 1-5:

Label

A83 < after 2.0 miles leads to an intersection of three roads. Take center road through gate for 0.8 miles to mine. >

L110 < consists of three shallow open pits, one of which contains ponded water. >

M220 < f 7200 square feet. Its depth is unknown due to ponded water. >

N70 < 300 feet, down on the west. Within the Pixley occurrence several high-angle normal faults exist. These faults have juxtaposed the quartzmonzonite of Cretaceous age against Tertiary tuffaceous and clastic sedimentary rocks. There appears to be two normal sets. One set strikes easterly and appears to be en echelon and down-thrown on the south. The second set has faulted a horst of quartzmonzonite into the Tertiary sedimentary rocks, producing what seems to be two channels. >

N85 < Pixley mineralization appears to be of a stair-step-type with the down side to the south. The minor displacements do not preclude the possibility of having additional mineralization up-or down-gradient. >