DOE / PASO
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COLLECTION
1236
ENEWETAK FOLDER #9
FOLDER GENERAL CORRESPONDENCL
FY 1978

405196



April 10, 1978

Major Max Toch JTG Enewetak Atoll APO San Francisco 96333

Dear Major Toch:

This is intended to provide further identification and documentation for the eight groundwater wells on Runit which should be preserved if possible for further research use. Although there was not time for detailed mapping on my visit to Runit, the officer there accompanied me to all of the wells and we discussed in detail how to identify all of the wells. The attached map, this letter, and his observations will permit easy identification of all wells.

Descriptions: all ARU wells are 4" gray PVC with a white threaded coupler and a gray cap. The PVC casing has thin vertical slots. All have been marked with yellow plastic tape; in addition, ARU-2 and ARU-3 still had the remains of marker flags (white flagpole with red pennant) attached to them on 28 March.

ARU-1 is in an open area just north of the region which has been cleared; it is directly lagoonward of the first ocean-side bunker north of the tower building, between the road and the lagoon shore. Marked with tape.

ARU-2 is about 25 m inland from the large concrete block on the lagoon beach at the point where a metal pipe comes out from under the island onto the beach. It is marked with tape and a flag.

ARU-3 is on the oceanward side of the old road leading to the N.E. side of the crater, about 75 m S.E. of the crater rim. It is marked with tape and a flag.

The XRU wells are all 2" white PVC, with vertical slots and without caps. XRU-2a, 3 and 5 have a pair of 4" PVC casing pieces set up so that one 4" piece serves as a sleeve around the 2" casing. All have been marked with yellow tape; 2a, 3 and 5 also have the remains of flags attached. Major Max Toch Page 2 April 10, 1978

XRU-1 is a 2" slotted casing on the rim of the crater at the end of the same roadway containing ARU-3. It is marked with tape; I believe that the remains of a flag are attached or nearby.

XRU-2a is about 20 m E. of ARU-3. It has 4" casing sleeves, and is marked with tape and a flag. I believe it is slightly N.W. of the location indicated on the attached map.

XRU-3 is the southernmost of the northern Runit wells, located in a grass and vine covered open area lagoonward of the road. It has 4" sleeve casings and is marked with tape and a flag. It is somewhat W. and slightly S. of the location indicated on the attached map.

XRU-5 is about 10 m from the S.W. lip of the crater; it is marked with tape, a flag, and has 4" sleeve casings.

XRU-6 is on the beach directly lagoonward of XRU-5; it is a bare (and bent) 2" casing, marked with tape only.

All of the wells with flag poles attached are easily visible from anywhere in the vicinity; the unflagged ones should be readily identifiable from this letter, plus the attached map/ description. For the purposes of comparison, none of the miscellaneous pipes or casings protruding from the ground have tape or flag markers, and I believe that none of them have slotted casings. No effort need be made to preserve these other, unidentified, wells.

While on Runit I was asked if it would be all right if some of the wells were extended or shortened to conform to anticipated changes in ground elevation. This is certainly acceptable; the only request is that every effort be made to avoid knocking local surface soil into the well, either through or beside the casing.

I want to thank you and all of the others involved for your cooperation and assistance. If I can be of any further help, please call on me, either directly or through the PASO representative.

Sincerely yours,

Robert W. Buddemeier Associate Professor

RWB:ctk Encl. cc: Frank Lybecker, DOE/PASO V Harry Brown, DOE/PASO Vic Noshkin, LLL

3/28/75

Wong Buddemeier, & Brown met with May Toch & Maj Husterd, agreed that wells in crater of no use and need not be preserved. Buddemein taking grid mop to Runit 3/28/98 and will make with Ribbons and on May wohat to preserves Will be written up. Check with ERSP Mp for results hut 3/25



4/1 Per Harry - Buddemier is writing up and will submit to GHSO by 4/10 for transmitted to Enjurtah.

COL.

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investigation of the radiological conditions, both from the standpoint of present distributions as well as future clean-up efforts, three wells were drilled for groundwater studies and five EXPOE wells were set with slotted casing and made available for sampling. The wells are concentrated in the sparsely vegetated area immediately south of Cactus crater, but one well was drilled about onethird the length of the island from Cactus near a suspected Pu burial site.

ARU-1

This is the well drilled near the suspected Pu burial site. It is about 925 m SE from the center of Cactus crater, about 25 m SW of the road and 50 m NE of the lagoon beach. Vegetation is very sparse. The well was drilled on 3/6/75 to a depth of 10 m and cased to total depth. Elevation - 2.2 m AMSL(S).

ARU-2

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Located about 125 m from the center of Cactus crater along a line running just east of south. Drilled on 3/7/74 to a depth of 11 m and cased to total depth. Elevation - 2.2 m AMSL(S).

ARU-3

Located about 115 m from the center of Cactus crater along a line running midway between east and southeast. Drilled on 7/15/74 to a depth of 10 m and cased to total depth. Elevation - 2.0 m AMSL.

<u>XRU-1</u>

Located about 65 m due east from the center of Cactus crater. Drilled from 3/6/74 to 3/14/74 to a depth of 53 m and cased to total depth. Elevation - 3.05 m AMSL(S).

XRU-2a

Located about 115 m from the center of Cactus crater along a line running east of southeast. Drilled from 3/8/74 to 3/14/74 to a depth of 50 m and cased to total depth. Elevation - 2.34 m AMSL(S).

<u>XRU-3</u>

Located on essentially the same ESE bearing from the center of Cactus crater as XRU-2a at a distance of about 190 m from the center of the crater. Drilled from 3/14/74 to 3/21/74 to a depth of 73 m and cased to total depth. Elevation - 2.68 m AMSL(S).

<u>XRU-5</u>

Located about 60 m from the center of Cactus crater along a line running west of south. This well is just off the crater lip, about 65 m inland from the edge of the lagoon. Drilled from 3/21/74 to 3/27/74 to a depth of 52 m and cased to total depth. Elevation - 1.83 m AMSL(S).

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XRU-6

Located along the same west of south bearing as XRU-5 at a distance of about 90 m from the center of Cactus crater. Drilled from 3/22/74 to 3/29/74 to a depth of 47 m and cased to total depth. Elevation - 1.92 m AMSL(S).

DAVID (Japtan)

This island with an area of 0.44 km^2 , Fig. 7, is located at the east channel entrance and was used as a rest area during the test program. It received about 1 R/h of fallout and present background levels are about 1 μ R/h over the entire island. No elevated levels of contamination were observed during the 1972 survey in either soil or biota



Fig. 7. Well location on David (Japtan), Enewetak.

samples. Since Japtan will probably be the first island resettled by the Marshallese, one well, AJA-1, was drilled to assess water quality and quantity. It is located at the edge of dense vegetation about 50 m south of the center of the island and 50 m northwest from the metal communications building near the center of the island. The well was drilled 3/2/74 to a depth of 11 m and cased to total depth. Elevation - 1.95 m AMSL.

ELMER (Parry, Medren)

Elmer (Fig. 8, area of 0.74 km^2) was used as scientific headquarters during the test programs and received only 2.6 R/h of fallout. Background, soil and biota radioactivity levels are similar to those on David. Like David, Elmer will be among the first islands to be resettled and, at present, is designated for a permanent village. One well, APA-1, was therefore drilled to assess ground-water supply. It is located approximately 220 m southeast of the southern dock and 220 m northeast of the boat ramp. It was drilled 3/1/74 to a depth of 12 m and cased to total depth. Elevation - 4.03 m AMSL(S).

LEROY (Rigili)

Leroy, Fig. 9, is unique in several respects among the islands included

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