



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 115, Federal Building
Santa Fe, New Mexico 87501

March 25, 1969

File - USGS

Group

8947
TA 33
Mr. William Kennedy, Group Leader
Group H-6
Los Alamos Scientific Laboratory
Los Alamos, New Mexico 87544

Subject: Waste disposal sumps near Bldg. 86, TA-33

Dear Bill:

Vanner Holmes, H-1, and I spent several days trying to locate the waste disposal sumps at Bldg. 86 at TA-33. We ran into a lot of confusing data both in the field on the engineering drawings; however, I think we have now cleared up the matter.

We feel certain that waste water from cleaning hood at Bldg. 86 of which we are concerned with is disposed of into Sump "B" as shown on Drawing LASL-ENG-C-3359. We excavated a portion of the drain to Sump "B". Temperature change in the exposed pipe with hot water flowing into sinks of the cleaning hood indicated that the drain is connected to the sump.

Excavation around disposal area "K" as shown on Drawing LASL-ENG-R-3649, Sheet 14 of 15 revealed that the supposed vent pipe to the sump was just driven into the tuff. It was not connected to a drain or sump. Vanner is going to resolve the locations with Dean Meyers and Engineering.

John Abrahams and Fred Busch, USGS, drilled several holes near Sumps "A" and "B" in January and early February 1958 and collected samples of tuff for radiochemical analyses. I can find no record of the results and do not know whether H-6, H-7, or some other group made the particular type of analyses that was required. Abrahams (1963, p. 18) does state "Samples of tuff obtained several feet beneath the pits (sumps) did not contain measureable amounts of (contaminate)."



4698

Mr. William Kennedy

- 2 -

March 25, 1969

The attached table is a record of locations of test holes and samples collected. The sketch shows location of sumps "A" and "B" and septic tank in relation to southeast corner of the fence around Bldg. 86.

Source of data:

Abrahams, John H., 1963, Geologic and hydrologic environment of radioactive waste disposal sites at Los Alamos, New Mexico: U.S. Geol. Survey Admin. Rept., 35 p., 3 figs.

Report of U.S.G.S. work at Los Alamos for February 1958, Letter to AEC and LASL dated 3-31-58.

Field Notes USGS, January 30, February 4 and 5, 1958.

LASL-Drawing ENG-R-3649, Sheet 14 of 15, Materials Disposal Area K, HP Site TA-33.

LASL-Drawing ENG-C-3303, Sheet 2 of 66, Additional facilities TA-33, Bldg. 86, Plot Plan.

LASL-Drawing ENG-C-3359, Sheet 58 of 66, Septic tank and sump detail, TA-33, Bldg. 86.

LASL-Drawing ENG-C-21367, Sheet 5 of 7, Gas handling facilities improvement, piping diagram and specifications, TA-33, Bldg. 86.

Sincerely yours,



William D. Purtymun
Hydrologist

Encls:
cc:

for: W. E. Hale
District Chief, WRD

George Hilton, AEC, Los Alamos
Dean Meyers, H-1, LASL, Los Alamos
F. C. Koopman, USGS, Albuquerque

Location of test holes and samples collected near Sumps A and B, Bldg. 86, TA-33, January 30, February 4 and 5, 1958.

SUMP A

Hole 1

Located 4 feet north of center of sump. Samples collected at 4, 8, and 9 feet.

Hole 2

Located 6 feet east of center of sump. Samples collected at 4, 8, and 12 feet.

Note: Reported moisture contents in depth interval 4 to 12 feet ranged from 2 to 10 percent by weight.

SUMP B

Hole 1

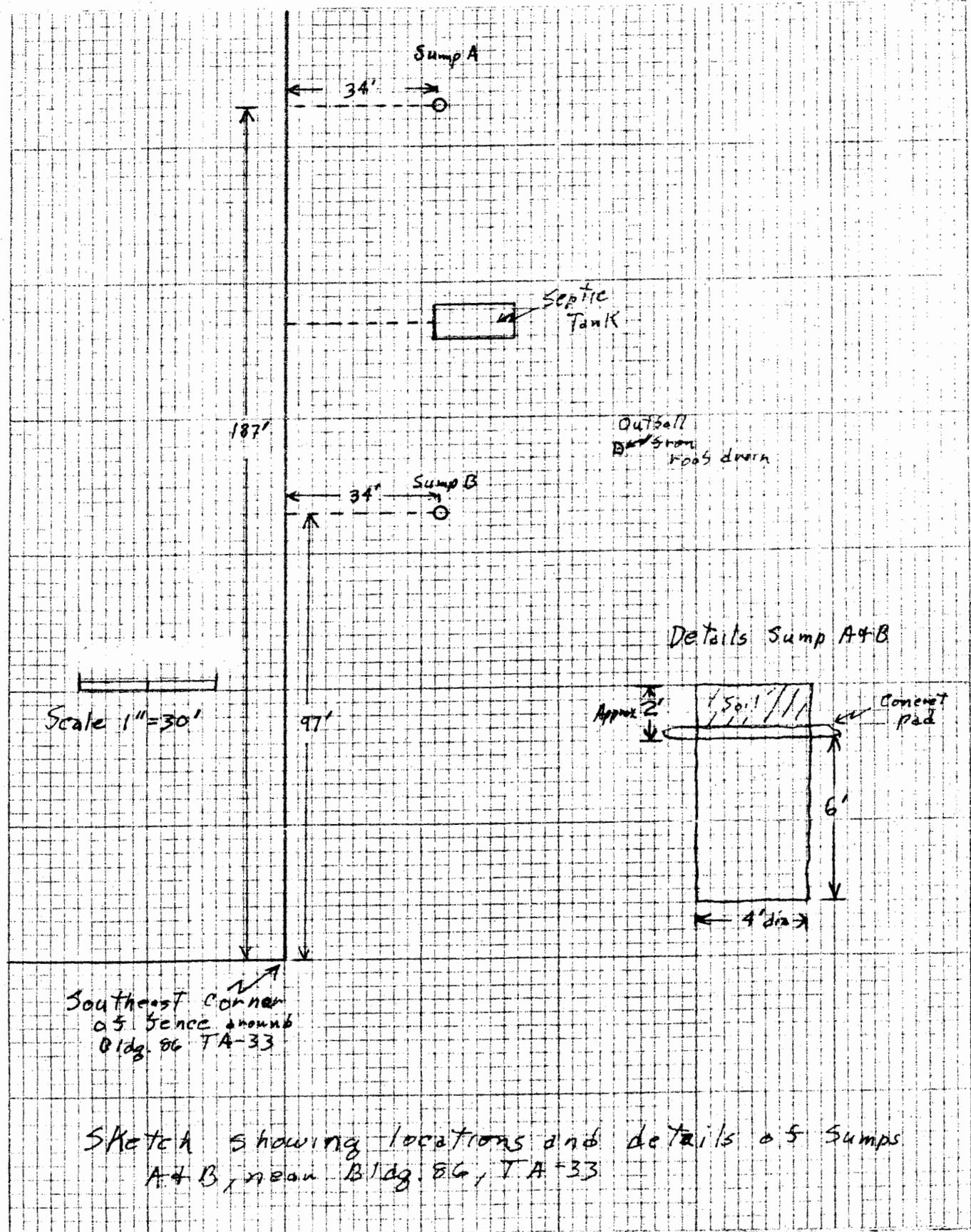
Located 4 feet north of center of sump. Samples collected at 4 and 7 feet.

Note: Reported moisture content at depth of 4 feet, 15 percent by weight; at 7 feet, 11 percent by weight.

Hole 2

Located 7 feet south of center of sump. Sample collected at 8 feet.

(DO NOT USE THIS SPACE EXCEPT FOR BINDING PURPOSES)



Room 115, Federal Building
Santa Fe, New Mexico 87501

March 25, 1969

Mr. William Kennedy, Group Leader
Group H-6
Los Alamos Scientific Laboratory
Los Alamos, New Mexico 87544

Subject: Waste disposal sumps near Bldg. 86, TA-33

Dear Bill:

Vanner Holmes, H-1, and I spent several days trying to locate the waste disposal sumps at Bldg. 86 at TA-33. We ran into a lot of confusing data both in the field on the engineering drawings; however, I think we have now cleared up the matter.

We feel certain that waste water from cleaning hood at Bldg. 86 of which we are concerned with is disposed of into Sump "B" as shown on Drawing LASL-ENG-C-3359. We excavated a portion of the drain to Sump "B". Temperature change in the exposed pipe with hot water flowing into sinks of the cleaning hood indicated that the drain is connected to the sump.

Excavation around disposal area "K" as shown on Drawing LASL-ENG-R-3649, Sheet 14 of 15 revealed that the supposed vent pipe to the sump was just driven into the tuff. It was not connected to a drain or sump. Vanner is going to resolve the locations with Dean Meyers and Engineering.

John Abrahams and Fred Busch, USGS, drilled several holes near Sumps "A" and "B" in January and early February 1958 and collected samples of tuff for radiochemical analyses. I can find no record of the results and do not know whether H-6, H-7, or some other group made the particular type of analyses that was required. Abrahams (1963, p. 18) does state "Samples of tuff obtained several feet beneath the pits (sumps) did not contain measureable amounts of (contaminate)."

Mr. William Kennedy

- 2 -

March 25, 1969

The attached table is a record of locations of test holes and samples collected. The sketch shows location of sumps "A" and "B" and septic tank in relation to southeast corner of the fence around Bldg. 86.

Source of data:

Abrahams, John H., 1963, Geologic and hydrologic environment of radioactive waste disposal sites at Los Alamos, New Mexico: U.S. Geol. Survey Admin. Rept., 35 p., 3 figs.

Report of U.S.G.S. work at Los Alamos for February 1958, Letter to AEC and LASL dated 3-31-58.

Field Notes USGS, January 30, February 4 and 5, 1958.

LASL-Drawing ENG-R-3649, Sheet 14 of 15, Materials Disposal Area K, HP Site TA-33.

LASL-Drawing ENG-C-3303, Sheet 2 of 66, Additional facilities TA-33, Bldg. 86, Plot Plan.

LASL-Drawing ENG-C-3359, Sheet 58 of 66, Septic tank and sump detail, TA-33, Bldg. 86.

LASL-Drawing ENG-C-21367, Sheet 5 of 7, Gas handling facilities improvement, piping diagram and specifications, TA-33, Bldg. 86.

Sincerely yours,

William D. Purtymun
Hydrologist

Encls:
cc:

for: W. E. Hale
District Chief, WRD

George Hilton, AEC, Los Alamos
Dean Meyers, H-1, LASL, Los Alamos
F. C. Koopman, USGS, Albuquerque

Location of test holes and samples collected near Sumps A and B, Bldg. 86, TA-33, January 30, February 4 and 5, 1958.

SUMP A

Hole 1

Located 4 feet north of center of sump. Samples collected at 4, 8, and 9 feet.

Hole 2

Located 6 feet east of center of sump. Samples collected at 4, 8, and 12 feet.

Note: Reported moisture contents in depth interval 4 to 12 feet ranged from 2 to 10 percent by weight.

SUMP B

Hole 1

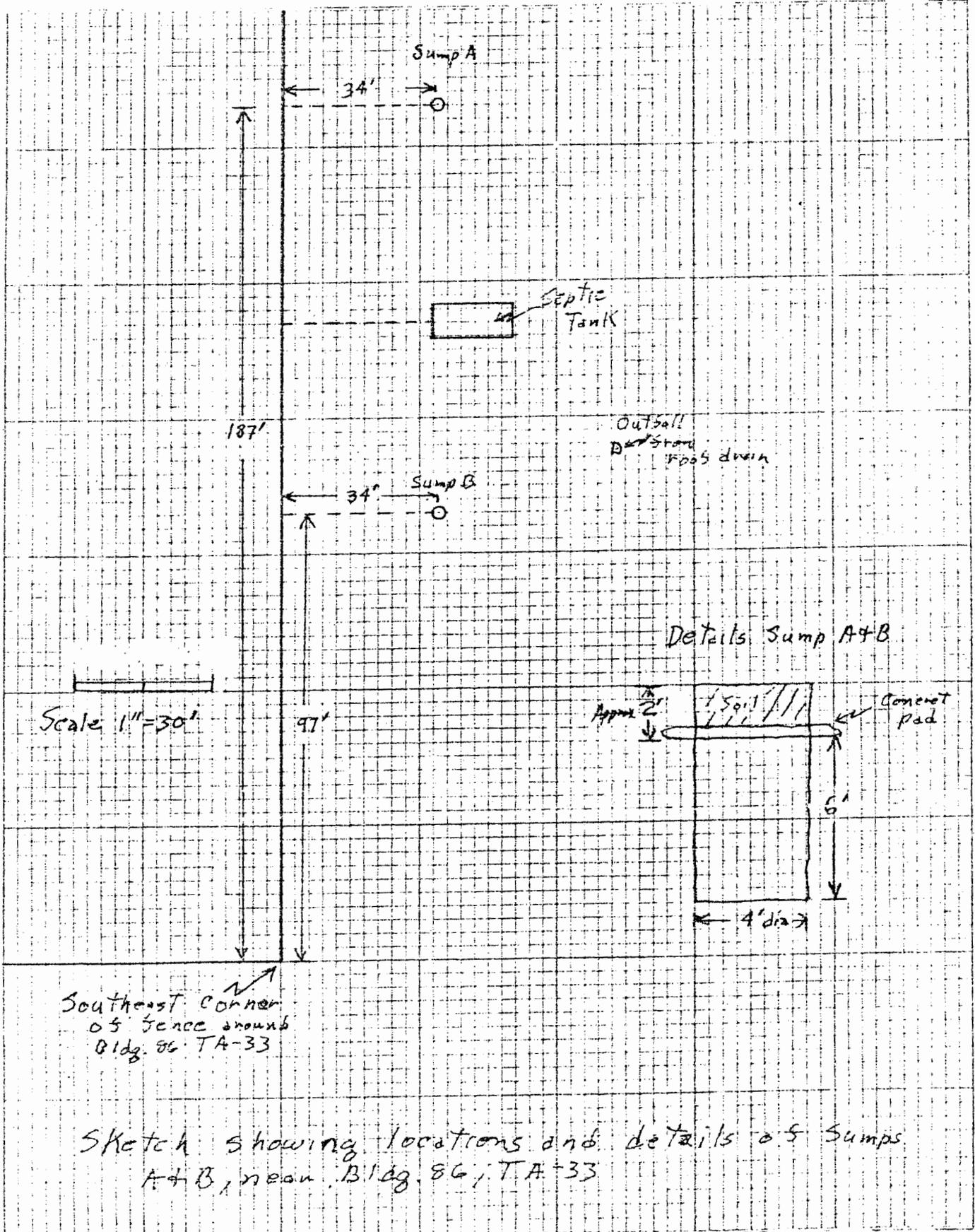
Located 4 feet north of center of sump. Samples collected at 4 and 7 feet.

Note: Reported moisture content at depth of 4 feet, 15 percent by weight; at 7 feet, 11 percent by weight.

Hole 2

Located 7 feet south of center of sump. Sample collected at 8 feet.

DO NOT USE THIS SPACE EXCEPT FOR BINDING PURPOSES



Scale 1" = 30'

Details Sump A+B

Southeast corner
of fence around
Bldg. 86, TA-33

Sketch showing locations and details of Sumps
A+B, near Bldg. 86, TA-33