

NOV 5 1980

Ref: SA/JFK

MEMORANDUM FOR: Guy Cunningham
Office of Executive Legal Director

FROM: Joel O. Lubenau
Acting Assistant Director
for State Agreements Program
Office of State Programs

Distribution:
FJKendig w/all enclosur
Dir. R/F
SA R/F
New Mexico File w/all
enclosures

SUBJECT: EVALUATION OF NEW MEXICO AGREEMENT AGAINST REVISED
CRITERIA SECY-80-472

By letter dated July 25, 1980 we provided the State of New Mexico with an evaluation of their Radiation Control Program as it relates to the minimum requirements necessary to maintain their authority to license uranium mills, Enclosure 1.

By letter dated September 8, 1980, New Mexico has provided a written response to the July 25, 1980 assessment, Enclosure 2. Copies of the States latest acts and regulations are attached as Enclosure 3.

We request your assistance in evaluating their response and seek your counsel in determining if the New Mexico Program is equivalent to the NRC Criteria, Enclosure 4.

If deficiencies are noted or changes are required please identify.

We plan to provide our final report to New Mexico by the end of the year and would appreciate your comments by the end of November, 1980.

A copy of your first assessment dated June 12, 1980 is attached for your convenience, Englosure 5.

Even though the Commission has not yet approved the "Revised Criteria, SECY-80-472" we are providing you the material so that you will have as much lead time as possible to complete the evaluation. If the Commission makes changes to the Revised Criteria, you will be provided copies of these changes so that you can adjust your evaluation if necessary.

Joel O. Lubenau
Acting Assistant Director
for State Agreements Program
Office of State Programs

8104230616

bc: S-1, A-3
W-1, E-1
W-1 (Beverly
Beverly)

15 AUG 1979

V. Moritz/grb
6/10/79

Jack Womack, Chief
Environmental Health Branch
Indian Health Service
P.O. Box G
Window Rock, AZ 86575

Dear Mr. Womack:

This letter is in reference to a monitoring program to detect the effects on drinking water of the recent United Nuclear Corporation spill in Churchrock, NM, as well as other discharges to the Rio Puerco.

We recommend that your office select at least one shallow well close to the river bed in the following locations:

Churchrock, NM,	Manuelito, NM,	Sanders, Az
Gallup, NM,	Lupton, Az,	
Mentmore, NM,	Houck, Az,	

These wells do not necessarily have to be "public water supplies".

Sampling should be performed according to the schedule attached. This office will provide laboratory support and any sampling materials you may need. Should you have any questions, please contact Vera Moritz of my staff at (PDS) of 415/556-8047.

Sincerely yours,

Terry L. Stumph
Chief,
Water Branch
Surveillance & Analysis Division

Attachment

cc: Ed Jeffrey, EPA Reg. VI
John Henderson, EPA Reg. VI
Francisco Garcia, NM BID
Robert Kaufmann, EPA-ENEL
Harold Tso, NEPC (Navajo Tribe)
James Scanlon, AZ DONS

Drinking Water Monitoring

document dated
10/10/79

Sampling program to monitor the effects of the United Nuclear Spill on 7/16/1979 and other discharges to the Rio Puerco.

1. Indian Health Service, Window Rock office will select at least seven shallow wells within one mile of the Rio Puerco bed in the following locations: Churchrock, Gallup, Montmore, Manuelito, Lupton, Houck and Sanders.
2. Sampling will be performed by Indian Health Service personnel.
3. Sample preservation: 1.5 ml conc. nitric acid/liter of sample.
4. Sample volume: 4 liters.
5. Sample identification: EPA form 9; distribution: tan-IHS white, blue, green and pink - attach to sample bottle.
6. Frequency: Samples from each well shall be collected on the following dates:
8/20, 8/27, 9/3, 9/10, 9/17, 10/15, 11/19, 12/17,
1/14, 2/18, 3/17, 6/16, 9/15, 12/17.
7. Duplicate samples for quality control:
One additional sample (4 liters each) will be collected from the following wells on the dates listed below:

8/20	Churchrock	1/4
8/27	Gallup	2/18
9/3	Montmore	3/17
9/17	Manuelito	6/16
10/15	Lupton	9/15
11/19	Houck	12/17
12/17	Sanders	
8. All samples should be mailed to US EPA Region IX
215 Fremont Street, San Francisco, Ca. 94105
attn. Vera Moritz (S-3-2).

10/16/77

Sampling program to monitor the effects of the United Nuclear Spill on July 16, 1979, and other discharges to the Rio Puerco.

1. The Gallup office of the Indian Health Service is collecting groundwater samples at 7 locations. The Flagstaff office of Arizona Department of Health Services is collecting surface water and sediment samples at 4 locations.

<u>IHS</u>	<u>ADHS</u>
1. Churchrock (Whitewell)	1. Holbrook
2. Churchrock (Windmill)	2. Petrified Forest
3. Tsayatch	3. Chamber
4. Manuelito	4. Lupton
5. Lupton	
6. Houck	
7. Sanders	

2. The IHS will sample weekly for 4 weeks, then monthly for 6 months, and then quarterly for 3 quarters. The ADHS will sample monthly for an indefinite period of time.

3. Duplicate samples for quality control:
One additional 4 liter sample will be collected by the IHS from the following wells on the dates listed below:

9/3 Churchrock (White well)	2/18
9/10 Churchrock (Windmill)	3/17
9/17 Tsayatch	6/16
10/15 Manuelito	9/15
11/19 Lupton	12/17
12/17 Houck	
1/4 Sanders	

4. Radionuclide samples will be collected in 4 liter containers and preserved with 6 ml concentrated nitric acid per container.

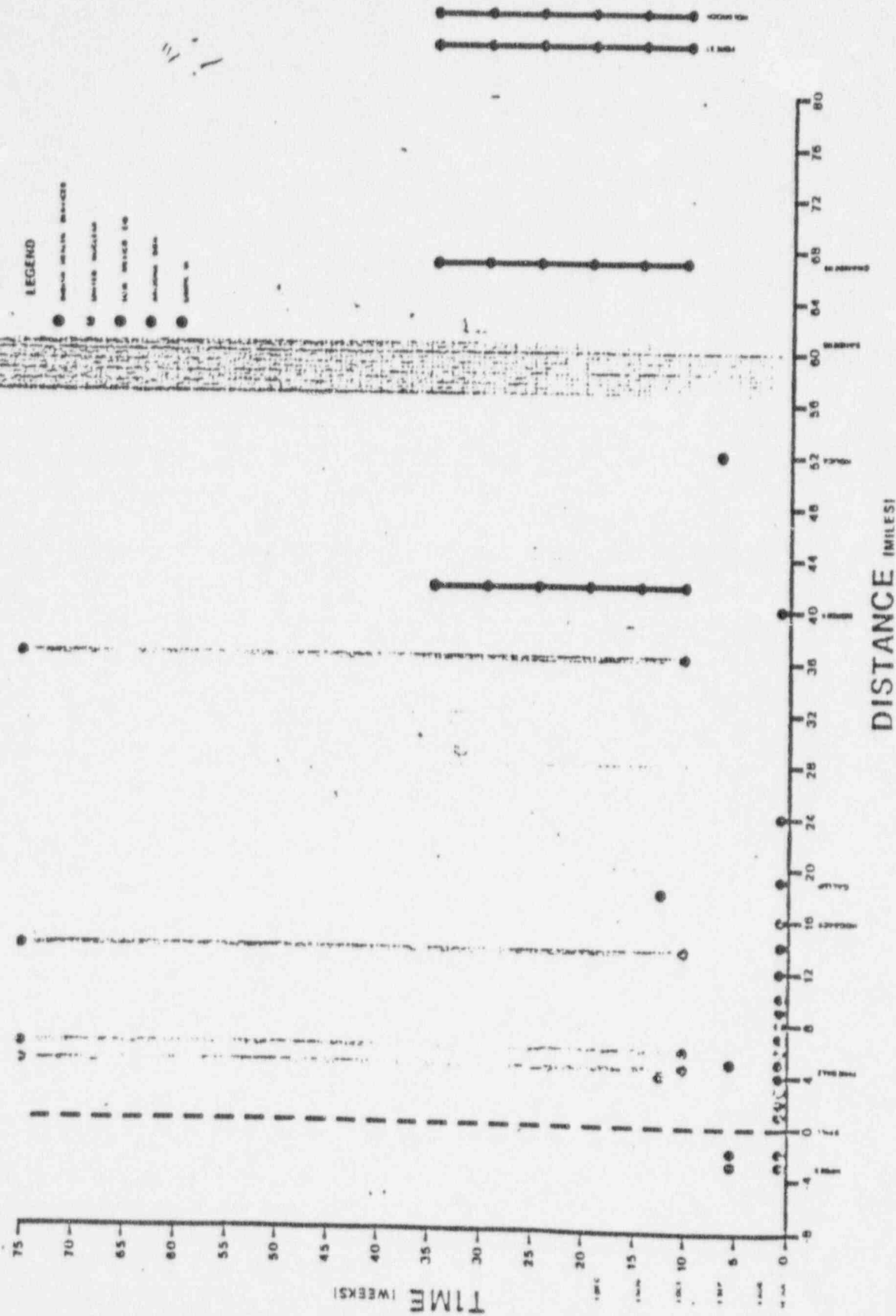
5. Sample identification: EPA form 9; distribution: tsn - IHS/ADHS; the remaining copies are to be attached to the sample containers.

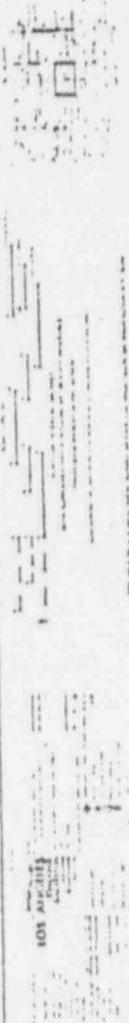
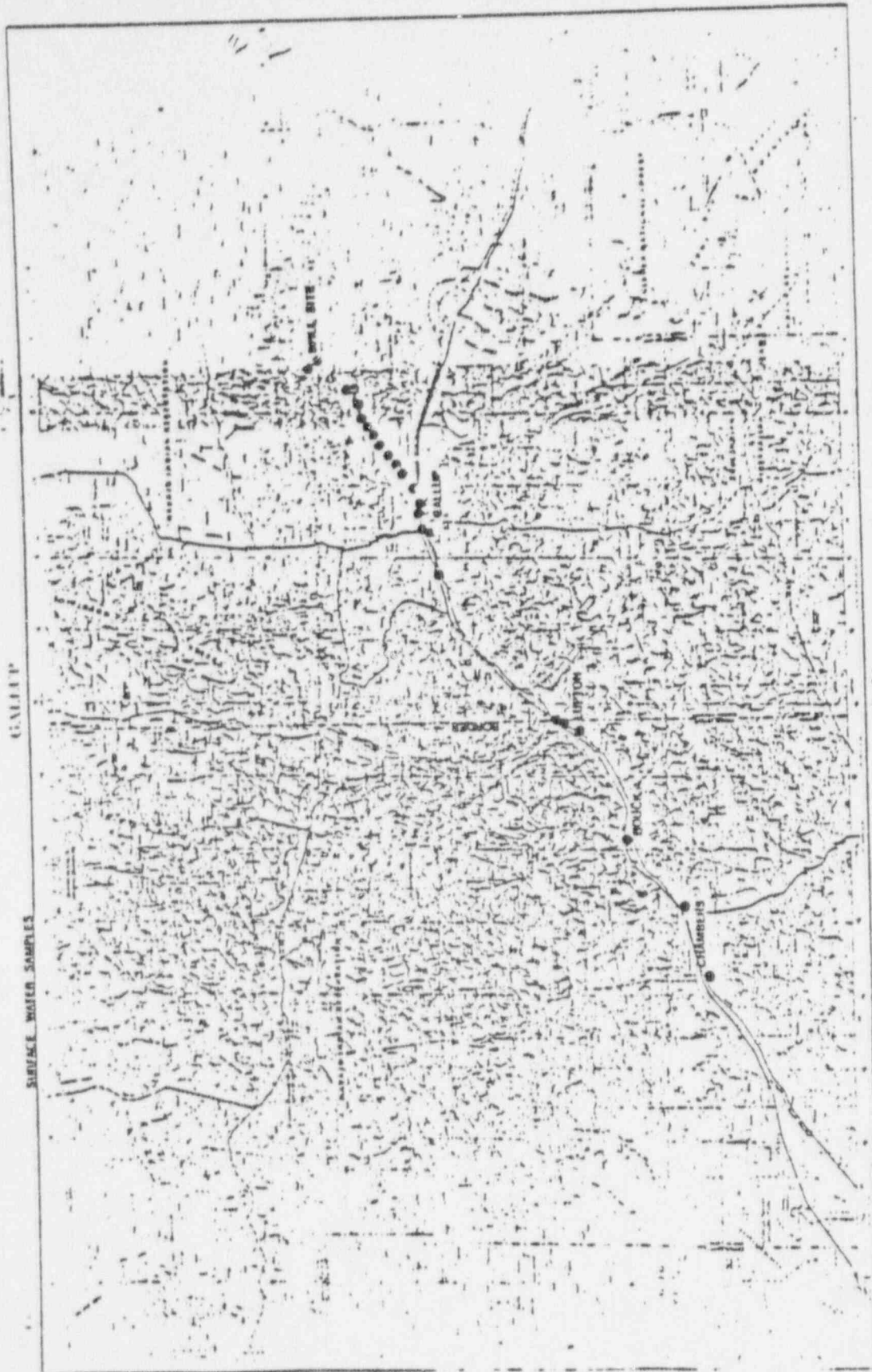
6. IHS samples should be mailed to USEPA Region IX, 215 Fremont St., San Francisco, CA, 94105 attn: Vera Moritz (S-3-2)

ADHS samples will be sent directly to LFE Environmental Analysis Laboratories, 2030 Wright Ave., Richmond, CA 94804

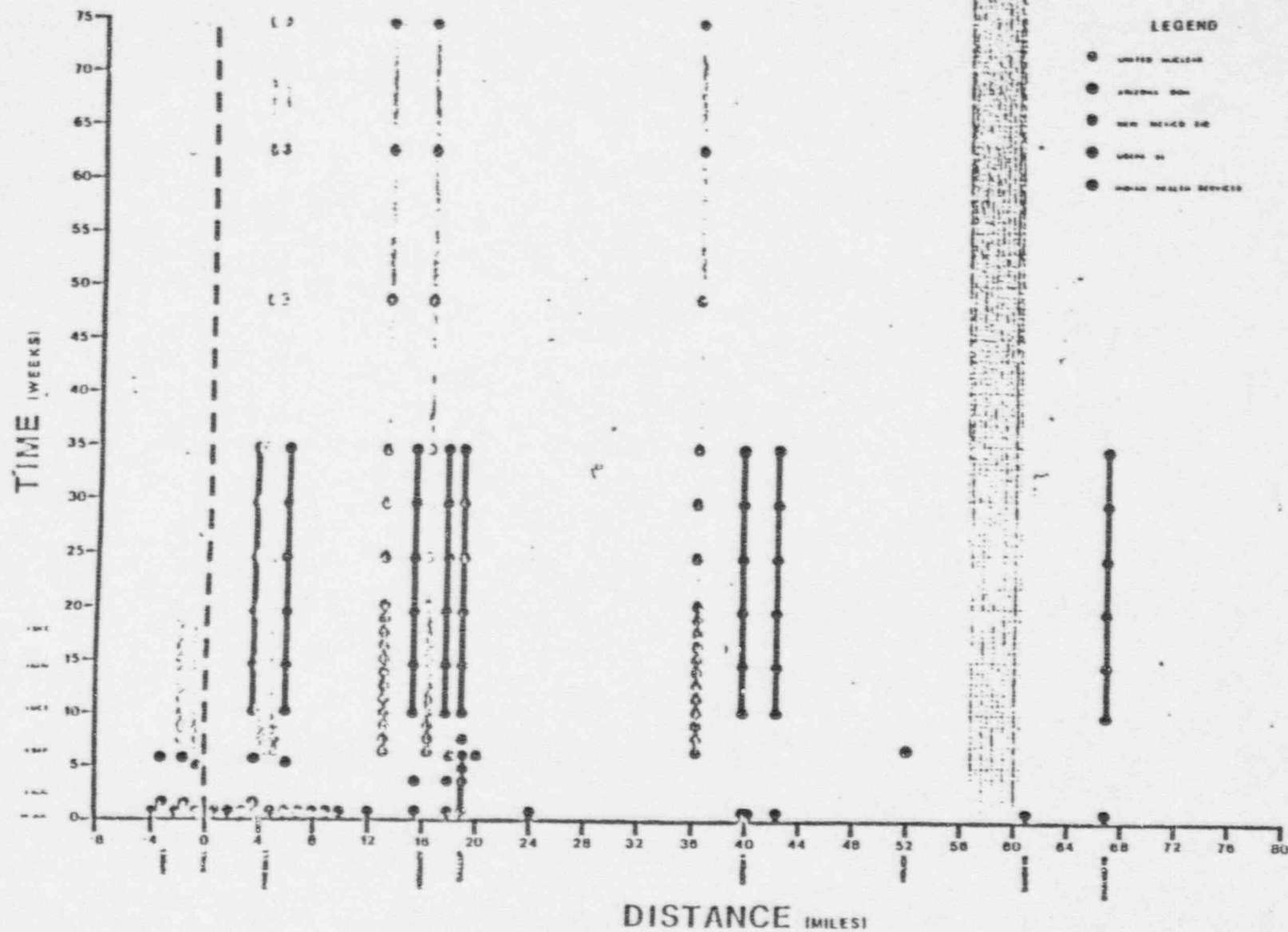
7. Duplicate samples delivered to LFE for quality control will be combined and filtered through 0.45 μ glass fiber filter. Four liters will be retained by LFE for complete analyses. Two liters will be delivered to California Department of Health Services, Berkeley, California for inorganic and metal analyses, and pH. The remaining two liters will be forwarded to EPA Office of Radiation Programs, Las Vegas Field Facility, Las Vegas, Nevada for Radionuclide analyses.

SEDIMENT SAMPLES

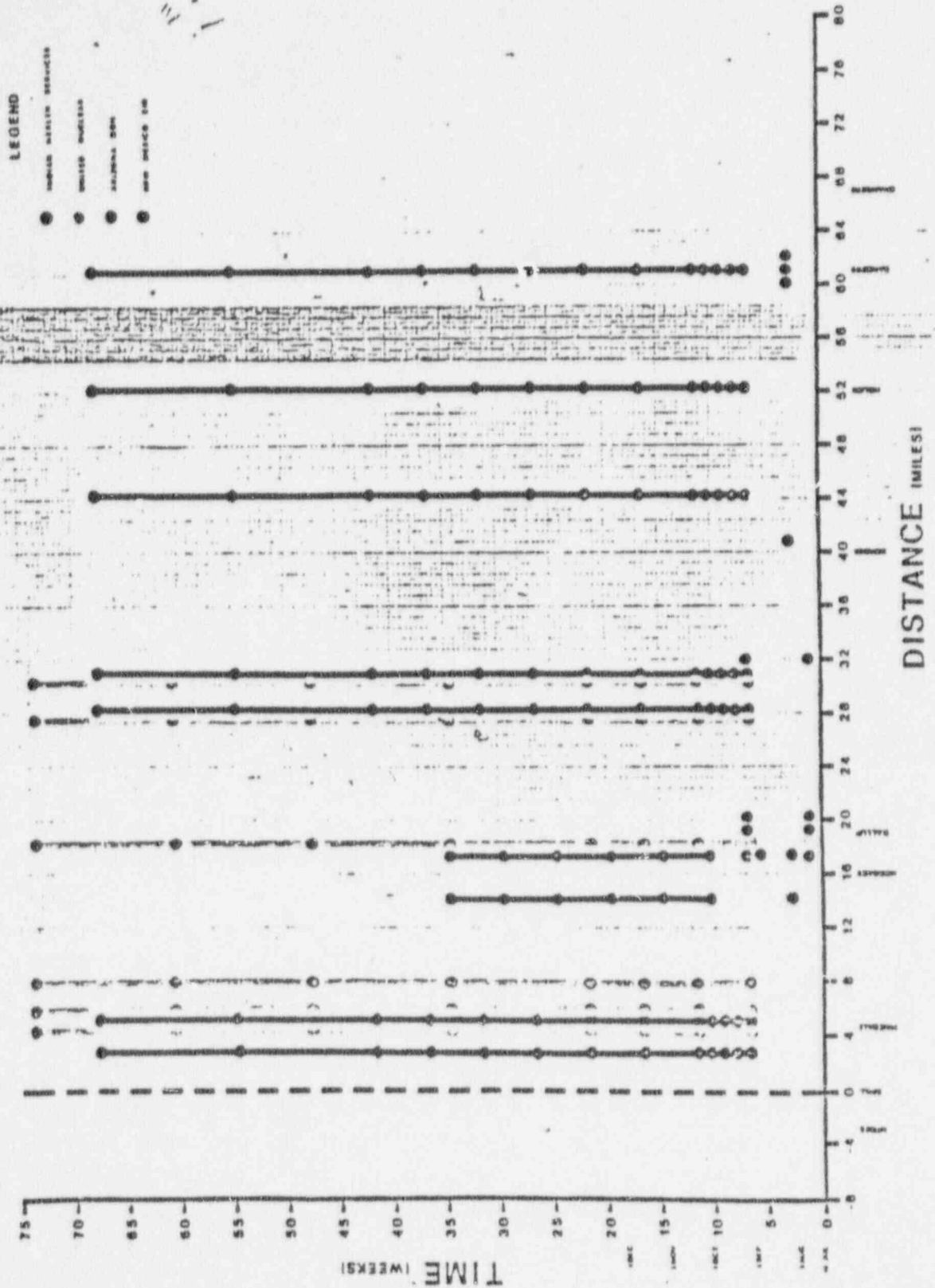




SURFACE WATER SAMPLES



WELL SAMPLES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Environmental Protection Agency
Region IX
215 Fremont St.
San Francisco, Ca. 94106

TSC 13

Ed Jeffery
Water Supply Branch
EPA, Region VI
First International Building
1201 Elm Street
Dallas, Texas 75270

OCT 18 1979

Dear Mr. Jeffery:

Pursuant to our meeting in Las Vegas on September 14, 1979, we have prepared the attached list of constituents which "may" be present in the tailings spill from United Nuclear Corporation. This list is based upon a comparison of the monitoring programs being conducted by the various agencies identified on the attachment.

After reviewing these programs, we have decided to analyze samples collected in Arizona and on the Navajo Reservation for all constituents thought to be of possible concern. Only the initial sample of each location will be analyzed in this manner. Subsequent samples will be analyzed for chloride, sulfate, and gross alpha which we consider to be suitable "indicator" constituents. Partially analyzed samples will be saved for further, complete analysis if the need arises.

In order to provide for consistency in our monitoring programs, you may want to follow similar procedures in New Mexico.

Sincerely yours,

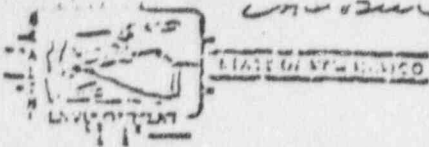
Original signed by:
Robert C. Wills

cc: Terry L. Stumph
Chief, Water Branch
Surveillance and Analysis Section

Attachment

PARAMETER	EPA-G (IHS) GW	ADHS Flagship SW	ADHS Flagship SED	UNC GW	UNC SW	UNC SED	EPA-G GW	EPA-G SW	EPA-G SED	M.M. ETD GL	M.M. ETD SW	M.M. ETD SED
ALUMINUM												
ANTIMONY												
ARSENIC												
BARIUM												
BERYLLIUM												
BROMINE												
CADMIUM												
CALCIUM												
CHROMIUM												
COBALT												
COPPER												
CYANIDE												
FLUORIDE												
IRON												
LEAD												
MAGNESIUM												
MANGANESE												
MERCURY												
NIOBOLYBDEUM												
NICKEL												
POTASSIUM												
SELENIUM												
SODIUM												
SILVER												
Vanadium												
ZINC												
AMMONIA (N)												
BICARBONATES												
CHLORIDES												
NITRATES (N)												
NITRITES (N)												
SULFATES												
GROSS K												
GROSS P												
LEAD 210												
POLONIUM 210												
RADIUM 226												
RADIUM 228												
RADIUM 230												
RADIUM 232												
RADIUM 234												
RADIUM 238												
THORON												
THORON												
THORON												

These parameters must be analyzed because of HHS, jurisdiction of same by IHS and ADHS.



MEMORANDUM

DATE: September 13, 1979

TO: Michael Burkhardt, Director
Health Services Division

FROM: Richard Hoffman, MD *RH*

SUBJECT: Testing of Livestock specimens from the Church Rock area

All testing of livestock specimens for radiation exposure as a result of the UNC tailings pond dam breach is being done at the Environmental Protection Agency Laboratory in Las Vegas, Nevada. Mr. Dick Douglas, (FTS 595-2969, ext 291) is supervising these tests. Results of the tests will be reported to Mr. Don Payne of the Indian Health Service.

Animals collected and slaughtered on the basis of their possible exposure to the radiation tailings include the following:

- 2 cows
- 4 sheep
- 1 goat

In addition to these animals, 1 cow and 1 sheep were submitted for testing as controls for comparison with the exposed animals. Muscle, liver, kidney, and bone tissue specimens on all animals except for 1 exposed goat and 1 exposed sheep (no kidney tissue was submitted from these animals) will be tested for the presence of radionuclides of the following elements: thorium, uranium, radium, lead, and polonium.

Specimens are tested in batches of 8; there are a total of 45 specimens. Results will be forthcoming intermittently over the next 2-3 months. It is expected that the first results will be known in approximately 3 weeks, i.e. the first or second week in October.