



KERR-MCGEE NUCLEAR CORPORATION

KERR-MCGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

December 12, 1978

(NRC PUBLIC DOCUMENT ROOM)

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

W. T. Crow, Section Leader
Uranium Fuel Fabrication Section
Fuel Processing & Fabrication Branch
Division of Fuel Cycle & Material Safety
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Docket 40-8027

Dear Mr. Crow:

Pursuant to your request that we furnish analytical data to justify our amendment request of March 10, 1978, to reduce sampling frequency at specified monitoring locations, the attached data is presented for your review. Please note that monitor well M-3 was inadvertently included in the request for reduced frequency; therefore, only 26 sampling locations are included in the attachment.

As two years previous results were requested, analytical data for calendar years 1976 and 1977 are tabulated for most sampling locations. However, analysis for eleven of the locations, which represent newer monitoring wells, did not begin until 1977; therefore, for those locations data for 1977 and 1978 through the third quarter are listed.

In evaluating the data prior to our original request, criteria such as contaminant levels, variations and trends were considered. Possible "outlier" values (i.e. gross alpha on #2301 and gross beta on #2313) were also taken into consideration. Several of the monitor wells are usually dry; this, too was taken into account.

Analytical results for all of the monitoring locations are closely and frequently evaluated with sampling frequency increased at the discretion of the environmental staff and facility personnel. For example, in the past monitor wells have had their sampling frequency increased from monthly to weekly based upon evaluation of analytical results. This same philosophy holds true for those locations which we request be reduced to quarterly or semi-annual sampling.

11413

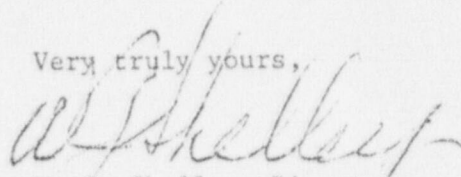
7812280178

W. T. Crow
U.S. Nuclear Regulatory Commission

Page Two

Should you desire additional information, please let us know.

Very truly yours,

A handwritten signature in dark ink, appearing to read "W. J. Shelley", is written over the typed name and title.

W. J. Shelley, Director
Regulation and Control
Kerr-McGee Nuclear Corporation

WJS:ml

encl

Sampling Point 2203

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.4	0.4	13.	<18.	< 7.	
Feb	0.6	0.7	13.	<18.	< 7.	
Mar	0.8	0.3	< 8.	<17.	< 7.	< 0.03
Apr	0.5	0.3	< 9.	<16.	7.	
May	0.2	0.3	< 9.	<16.	14.	
Jun	0.2	0.3	< 8.	<16.	< 7.	0.03
Jul	0.2	0.3	13.	<16.	20.	
Aug	0.4	1.2	< 8.	16.	7.	
Sept	0.5	0.3	< 8.	37.	18.	0.14
Oct	0.3	0.5	< 9.	<18.	7.	1.0
Nov	0.2	0.3	< 9.	<17.	7.	
Dec	0.2	0.5	< 9.	<17.	< 7.	
1977 - Jan	<0.1	0.5	< 9.	<17.	10.	
Feb	0.3	0.7	<10.	<18.	12.	
Mar	0.1	0.6	14.	<19.	9.	0.06
Apr	<0.1	0.3	<10.	<18.	8.	
May	0.3	0.1	<10.	<18.	< 7.	
Jun	0.2	0.4	15.	<18.	11.	0.04
Jul	0.2	0.3	<10.	<18.	< 7.	
Aug	0.2	1.0	13.	<18.	13.	
Sept	0.5	0.3	<10.	<18.	9.	0.03
Oct	0.3	0.3	<10.	<18.	< 7.	
Nov	0.6	0.2	<10.	<18.	< 7.	
Dec	0.9	0.3	10.	<18.	14.	0.12
Avg.	0.35	0.43	10.3	18.2	9.5	0.18
Max.	0.9	1.2	15.	37.	20.	1.0
Min.	<0.1	0.1	< 8.	<16.	< 7.	<0.03

Sampling Point 2204

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.4	0.3	37.	<18.	< 7.	
Feb	0.8	0.6	23.	<18.	< 7.	
Mar	0.5	0.3	< 8.	<17.	< 7.	<0.03
Apr	0.6	0.3	< 9.	<16.	< 7.	
May	0.2	0.3	< 9.	<16.	15.	
Jun	0.3	0.3	< 8.	<16.	12.	0.09
Jul	0.2	0.2	< 8.	<16.	13.	
Aug	0.4	0.9	< 8.	11.	< 7.	
Sept	0.3	<0.2	< 8.	19.	9.	2.1
Oct	0.3	0.5	< 9.	<18.	< 7.	0.16
Nov	0.3	0.2	< 9.	<17.	9.	
Dec	0.2	0.4	< 9.	<17.	12.	
1977 - Jan	<0.1	0.8	< 9.	<17.	7.	
Feb	0.2	0.5	<10.	<18.	< 7.	
Mar	0.2	0.6	<10.	<19.	< 7.	0.07
Apr	<0.1	0.3	<10.	<18.	< 7.	
May	0.4	0.1	<10.	<18.	< 7.	
Jun	0.3	0.4	14.	<18.	8.	0.06
Jul	0.2	0.7	<10.	<18.	12.	
Aug	0.3	0.2	<10.	<18.	16.	
Sept	0.4	0.3	<10.	<18.	19.	0.04
Oct	0.4	0.6	<10.	<18.	< 7.	
Nov	0.2	0.2	<10.	<18.	8.	
Dec	1.4	0.4	21.	<18.	12.	0.08
Avg.	0.36	0.40	11.6	17.3	9.5	0.33
Max.	1.4	0.9	37.	19.	19.	2.1
Min.	<0.1	<0.2	< 8.	11.	< 7.	<0.03

Sampling Point 2205

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	1.9	0.3	9.	<18.	< 7.	
Feb	4.5	1.3	13.	<18.	< 7.	
Mar	1.8	0.2	9.	<17.	15.	<0.04
Apr	1.4	0.2	< 9.	39.	< 7.	
May	0.4	0.2	< 9.	<16.	< 7.	
Jun	0.8	0.2	< 8.	<16.	< 7.	1.4
Jul	2.3	0.2	< 8.	<16.	< 7.	
Aug	1.0	0.9	< 8.	17.	9.	
Sept	1.4	<0.2	8.	<16.	15.	0.07
Oct	1.2	0.2	< 9.	<18.	8.	0.03
Nov	0.4	0.2	< 9.	<17.	< 7.	
Dec	0.7	0.4	< 9.	17.	< 7.	
1977 - Jan						
Feb						
Mar	0.4	0.6	<10.	21.	< 7.	0.05
Apr						
May						
Jun	0.4	0.4	11.	<18.	< 7.	0.05
Jul	0.6	0.5	<10.	<18.	< 7.	
Aug						
Sept	0.6	0.3	27.	<18.	< 7.	0.07
Oct						
Nov						
Dec	1.5	0.3	29.	<18.	< 7.	<0.01
Avg.	1.2	0.39	11.5	18.7	8.1	0.22
Max.	4.5	1.3	29.	39.	15.	1.4
Min.	0.4	<0.2	< 8.	<16.	< 7.	<0.01

Sampling Point 2206

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	1.0	0.6	10.	25.	< 7.	
Feb	2.3	0.3	14.	<18.	< 7.	
Mar	0.2	0.3	< 8.	12.	< 7.	0.33
Apr	0.2	0.3	< 9.	21.	< 7.	
May	0.2	0.4	< 9.	<16.	11.	
Jun	0.8	0.2	< 8.	<16.	< 7.	0.05
Jul	0.1	0.2	< 8.	<16.	< 7.	
Aug	0.2	1.3	< 8.	23.	< 7.	
Sept	0.5	<0.2	< 8.	<16.	< 7.	0.14
Oct	0.3	0.2	< 9.	<18.	< 7.	0.06
Nov	0.2	0.2	< 9.	84.	7.	
Dec	0.2	0.3	< 9.	<17.	< 7.	
1977 - Jan						
Feb						
Mar	1.8	0.7	36.	38.	7.	0.07
Apr	0.6	0.5	15.	<18.	7.	0.06
May	0.1	1.4	<10.	<18.	< 7.	
Jun						
Jul						
Aug						
Sept	0.1	0.7	<10.	<18.	< 7.	0.01
Oct						
Nov						
Dec	1.0	0.4	10.	<18.	< 7.	0.02
Avg.	0.58	0.48	11.2	23.1	7.2	0.09
Max.	2.3	1.4	36.	84.	11.	0.33
Min.	0.1	<0.2	< 8.	12.	< 7.	0.01

Sampling Point 2208

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.2	0.2	17.	<18.	< 7.	
Feb	0.4	0.2	14.	<18.	< 7.	
Mar	0.3	<0.2	< 8.	<17.	< 7.	<0.03
Apr	0.3	0.3	< 9.	32.	< 7.	
May	0.4	0.3	< 9.	<16.	17.	
Jun	<0.1	0.2	11.	<16.	10.	0.05
Jul	0.1	<0.2	< 8.	<16.	< 7.	
Aug	0.2	0.8	< 8.	18.	< 7.	
Sept	0.2	<0.2	< 8.	<16.	< 7.	0.21
Oct	0.1	<0.2	< 9.	<18.	7.	0.07
Nov	0.1	<0.2	< 9.	<17.	< 7.	
Dec	<0.1	0.5	< 9.	<17.	17.	
1977 - Jan						
Feb						
Mar	0.1	0.6	<10.	< 19.	9.	0.03
Apr						
May						
Jun	0.2	0.3	15.	<18.	< 7.	0.01
Jul	0.4	0.3	<10.	<18.	< 7.	
Aug						
Sept	0.2	0.4	33.	<18.	62.	0.01
Oct						
Nov						
Dec	0.3	0.2	<10.	<18.	< 7.	0.01
Avg.	0.22	0.31	11.6	18.2	11.7	0.05
Max.	0.4	0.8	33.	32.	62.	0.21
Min.	<0.1	<0.2	< 8.	<16.	< 7.	0.01

Sampling Point 2209

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>ug/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.1	0.3	22.	18.	< 7.	
Feb	0.9	0.3	18.	< 18.	< 7.	
Mar	0.1	< 0.2	< 8.	< 23.	< 7.	< 0.03
Apr	0.2	0.2	< 9.	16.	< 7.	
May	0.1	0.2	< 9.	< 16.	15.	
Jun	< 0.1	0.3	< 8.	< 16.	15.	0.05
Jul	0.1	0.2	10.	19.	< 7.	
Aug	0.2	0.9	< 8.	24.	8.	
Sept	0.1	< 0.2	< 8.	18.	8.	0.04
Oct	0.2	< 0.2	< 9.	26.	< 7.	0.04
Nov	0.1	< 0.2	< 9.	< 17.	< 7.	
Dec	0.1	0.5	< 9.	< 17.	8.	
1977 - Jan						
Feb						
Mar	0.2	0.3	17.	47.	< 7.	0.02
Apr						
May						
Jun	0.2	0.3	3±.	< 18.	< 7.	0.10
Jul	0.2	0.3	< 10.	< 18.	< 7.	
Aug						
Sept	0.1	0.4	< 10.	< 18.	16.	0.09
Oct						
Nov						
Dec	0.4	0.2	< 10.	< 18.	7.	0.04
Avg.	0.20	0.31	12.1	20.4	8.6	0.05
Max.	0.9	0.9	31.	47.	16.	0.10
Min.	< 0.1	< 0.2	< 8.	< 16.	< 7.	0.02

Sampling Point 2210

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.2	0.2	9.	<18.	< 7.	
Feb	0.3	0.6	13.	<18.	< 7.	
Mar	0.2	0.2	< 8.	<17.	< 7.	< 0.03
Apr	0.2	0.2	< 9.	<16.	< 7.	
May	0.1	0.3	< 9.	<16.	22.	
Jun	<0.1	0.2	< 8.	<16.	< 7.	0.03
Jul	0.1	0.2	< 8.	26.	< 7.	
Aug	0.4	0.8	< 8.	25.	< 7.	
Sept	0.2	<0.2	< 8.	<16.	11.	2.6
Oct	0.1	<0.2	< 9.	<18.	< 7.	0.24
Nov	0.1	<0.2	< 9.	<17.	< 7.	
Dec	0.1	0.4	< 9.	<17.	7.	
1977 - Jan						
Feb						
Mar	0.2	0.4	<10.	<19.	8.	0.03
Apr						
May						
Jun	0.1	0.3	<10.	<18.	< 7.	0.02
Jul	0.1	0.5	<10.	< 18.	< 7.	
Aug						
Sept	<0.1	0.2	<10.	<18.	<7.	0.05
Oct						
Nov						
Dec	0.3	0.1	<10.	<18.	<7.	0.02
Avg.	0.17	0.31	9.2	18.3	8.2	0.38
Max.	0.4	0.8	13.	26.	22.	2.6
Min.	<0.1	0.1	< 8.	<16.	< 7.	0.02

Sampling Point 2301

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	7.5	0.8	24.	24.	23.	
Feb	9.5	0.9	26.	< 18.	33.	
Mar	9.0	0.7	< 8.	< 17.	33.	0.91
Apr	7.8	0.9	< 9.	< 16.	36.	
May	5.8	1.6	< 9.	< 16.	26.	
Jun	5.0	0.7	13.	< 16.	41.	0.07
Jul	0.3	0.9	32.	< 16.	67.	
Aug	0.2	1.3	14.	< 15.	29.	
Sept	1.7	1.8	18.	37.	19.	0.27
Oct	1.4	1.5	< 9.	< 18.	19.	0.18
Nov	0.6	1.5	< 9.	< 17.	34.	
Dec	4.0	2.0	< 9.	< 17.	22.	
1977 - Jan	5.6	2.0	< 9.	< 17.	16.	
Feb	6.8	2.0	21.	< 18.	16.	
Mar	2.6	2.2	54.	< 18.	14.	0.01
Apr	1.2	1.8	50.	20.	17.	
May	0.5	1.1	31.	< 18.	23.	
Jun	0.3	1.0	< 10.	< 18.	20.	0.01
Jul	1.0	1.4	17.	< 18.	86.	
Aug	0.2	4.4	440.	< 18.	33.	
Sept	-----DRY-----					
Oct	-----DRY-----					
Nov	-----DRY-----					
Dec	-----DRY-----					
Avg.	3.6	1.5	40.6	18.6	30.4	0.24
Max.	9.5	2.2	440.	37.	86.	0.91
Min.	0.2	0.7	< 8.	< 15.	14.	0.01

Sampling Point 2307

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.3	3.0	230.	54.	28.	
Feb	0.4	2.0	158.	< 18.	221.	
Mar	0.3	2.4	182.	113.	269.	<0.03
Apr	0.4	2.4	107.	36.	155.	
May	0.3	1.6	84.	87.	198.	
Jun	0.2	2.2	82.	43.	104.	<0.02
Jul	0.2	2.0	93.	< 16.	97.	
Aug	0.2	1.9	120.	50.	183.	
Sept	0.2	2.0	91.	41.	10.	<0.02
Oct	0.4	1.9	80.	< 18.	154.	0.01
Nov	0.3	2.1	89.	35.	89.	
Dec	1.2	0.7	27.	26.	56.	
1977 - Jan						
Feb						
Mar	0.3	1.9	35.	45.	16.	0.05
Apr						
May						
Jun	0.3	1.4	83.	< 18.	26.	0.01
Jul	0.3	1.5	32.	< 18.	39.	
Aug						
Sept	0.3	1.4	36.	< 18.	40.	0.05
Oct						
Nov						
Dec	0.3	1.8	60.	< 18.	69.	0.08
Avg.	0.35	1.9	93.5	38.5	103.2	0.03
Max.	1.2	3.0	230.	113.	269.	0.08
Min.	0.2	0.7	27.	< 16.	10.	0.01

Sampling Point 2310

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	16.5	1.5	22.	<18.	9.	
Feb	31.	0.8	9.	<18.	25.	
Mar	22.	0.5	< 8.	<17.	< 7.	< 0.03
Apr	21.	0.4	< 9.	<16.	7.	
May	5.0	0.8	< 9.	<16.	9.	
Jun	1.0	0.4	< 8.	<16.	< 7.	0.11
Jul	0.2	0.5	< 8.	<16.	< 7.	
Aug	1.7	2.1	9.	19.	8.	
Sept	15.	0.2	9.	27.	8.	4.9
Oct						
Nov	0.4	0.6	-	-	< 7.	
Dec	1.2	2.1	-	-	13.	

1977 - Jan

Feb

Mar

Apr

0.5

0.6

204.

27.

34.

May

-----DRY-----

Jun

0.6

2.8

230.

<18.

< 7.

0.3

Jul

-----DRY-----

Aug

-----DRY-----

Sept

-----DRY-----

Oct

-----DRY-----

Nov

-----DRY-----

Dec

-----DRY-----

Avg.

8.9

1.0

47.7

18.9

11.4

1.3

Max.

31.

2.8

230.

27.

34.

4.9

Min.

0.2

0.2

<8.

<16.

< 7.

<0.03

Sampling Point 2311

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	1.1	1.0	17.	<18.	8.	
Feb	5.5	0.4	< 9.	<18.	15.	
Mar	3.0	0.3	< 8.	22.	13.	<0.03
Apr	3.4	<0.2	< 9.	<16.	< 7.	
May	2.2	0.5	< 9.	<16.	18.	
Jun	0.8	0.5	12.	<16.	< 7.	0.06
Jul	0.1	0.2	8.	<16.	34.	
Aug	0.2	0.9	< 8.	24.	9.	
Sept	0.3	0.2	< 8.	<16.	7.	0.82
Oct	2.7	0.2	11.	<18.	10.	0.34
Nov	0.3	0.3	< 9.	<17.	< 7.	
Dec	4.7	0.4	< 9.	<17.	< 7.	
1977 - Jan	1.9	0.5	37.	<17.	< 7.	
Feb	2.3	2.0	11.	<18.	< 7.	
Mar						
Apr	-----DRY-----					
May	-----DRY-----					
Jun	-----DRY-----					
Jul	-----DRY-----					
Aug	-----DRY-----					
Sept	-----DRY-----					
Oct	-----DRY-----					
Nov	-----DRY-----					
Dec	-----DRY-----					
Avg.	2.0	0.54	11.8	17.8	11.1	0.31
Max.	5.5	2.0	37.	24.	34.	0.82
Min.	0.1	<0.2	< 8.	<16.	< 7.	<0.03

Sampling Point 2313

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.4	0.4	26.	685.	19.	
Feb	13.	0.6	< 9.	< 18.	16.	
Mar	0.6	0.3	< 8.	25.	10.	< 0.03
Apr	0.5	0.2	< 9.	< 16.	< 7.	
May	0.4	0.5	< 9.	< 16.	13.	
Jun	0.5	0.2	< 8.	< 16.	13.	0.08
Jul	0.2	0.2	< 8.	< 16.	< 7.	
Aug	0.2	0.2	< 8.	22.	10.	
Sept	1.2	0.3	< 8.	27.	13.	0.15
Oct	2.7	0.3	< 9.	< 18.	< 7.	0.01
Nov	0.4	0.4	< 9.	< 17.	10.	
Dec	2.3	0.3	< 9.	< 17.	17.	
1977 - Jan	6.1	0.9	< 9.	< 17.	23.	
Feb	1.3	0.5	12.	< 18.	10.	
Mar						
Apr	33.	4.0	< 10.	< 18.	8.	
May	4.3	0.3	< 10.	< 18.	7.	
Jun	-----DRY-----					
Jul	-----DRY-----					
Aug	-----DRY-----					
Sept	-----DRY-----					
Oct	-----DRY-----					
Nov	-----DRY-----					
Dec	-----DRY-----					
Avg.	4.2	0.60	10.1	60.2	11.9	0.07
Max.	33.	4.0	26.	685.	23.	0.15
Min.	0.2	0.2	< 9.	< 16.	< 7.	0.01

Sampling Point 2316

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>Ci/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.7	1.0	14.	<18.	7.	
Feb	0.6	1.2	<9.	<18.	<7.	
Mar	0.6	0.3	<8.	<17.	10.	0.06
Apr	0.5	0.3	<9.	<16.	12.	
May	0.5	0.5	<9.	<16.	14.	
Jun	0.2	1.2	<8.	<16.	12.	0.08
Jul	0.7	0.4	10.	<16.	9.	
Aug	0.6	0.3	10.	38.	<7.	
Sept	0.5	0.3	<8.	19.	<7.	0.05
Oct	0.8	0.4	<9.	<18.	9.	0.09
Nov	0.7	0.4	10.	<17.	10.	
Dec	0.4	0.5	<9.	19.	11.	
1977 - Jan	1.0	0.4	12.	<17.	11.	
Feb	0.5	0.4	<10.	<18.	11.	
Mar	0.6	0.5	27.	<19.	7.	0.13
Apr	0.7	0.5	<10.	<18.	24.	
May	0.8	0.1	<10.	<18.	9.	
Jun	0.9	0.5	15.	<18.	7.	0.01
Jul	0.6	0.4	<10.	<18.	11.	
Aug	2.2	0.7	126.	<18.	30.	
Sept	0.9	0.3	68.	<18.	26.	0.09
Oct	0.6	0.3	<10.	<18.	18.	
Nov	0.5	0.3	<10.	<18.	14.	
Dec	0.3	0.4	37.	<18.	30.	0.05
Avg.	0.68	0.48	19.1	18.5	13.0	0.07
Max.	2.2	1.2	126.	38.	30.	0.13
Min.	0.2	0.1	<8.	<16.	<7.	0.01

Sampling Point 2319

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	0.9	0.4	28.	<18.	15.	
Feb	0.4	0.8	16.	<18.	29.	
Mar	0.9	0.5	18.	<17.	27.	0.10
Apr	0.4	0.4	9.	<16.	21.	
May	0.5	0.5	9.	20.	41.	
Jun	1.4	0.4	17.	<16.	25.	0.08
Jul	0.1	0.4	19.	<16.	59.	
Aug	0.1	0.3	14.	22.	24.	
Sept	0.4	0.5	15.	24.	26.	0.07
Oct	0.7	0.4	27.	<18.	51.	0.01
Nov	0.7	0.4	30.	<17.	37.	
Dec	0.8	0.5	27.	<17.	37.	
1977 - Jan	15.	0.5	19.	<17.	29.	
Feb	10.5	0.4	11.	<18.	17.	
Mar						
Apr	-----	-----	DRY	-----	-----	-----
May	-----	-----	DRY	-----	-----	-----
Jun	-----	-----	DRY	-----	-----	-----
Jul	-----	-----	DRY	-----	-----	-----
Aug	-----	-----	DRY	-----	-----	-----
Sept	-----	-----	DRY	-----	-----	-----
Oct	-----	-----	DRY	-----	-----	-----
Nov	-----	-----	DRY	-----	-----	-----
Dec	-----	-----	DRY	-----	-----	-----
Avg.	2.3	0.46	18.5	18.1	31.3	0.06
Max.	15.	0.8	30.	24.	59.	0.10
Min.	0.1	0.3	9.	<16.	15.	0.01

Sampling Point 2320

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1976 - Jan	23.	1.0	14.	< 18.	8.	
Feb	17.	0.8	< 9.	< 18.	< 7.	
Mar	22.	0.3	< 8.	< 17.	7.	0.10
Apr	22.	0.2	< 9.	< 16.	9.	
May	18.	0.3	< 9.	< 16.	13.	
Jun	20.	0.2	< 8.	< 16.	< 7.	0.05
Jul	24.	0.3	< 8.	< 16.	7.	
Aug	19.	0.2	< 8.	19.	< 7.	
Sept	14.	< 0.2	< 8.	< 16.	< 7.	0.09
Oct	18.	0.2	< 9.	< 18.	< 7.	0.03
Nov	17.	0.3	< 9.	< 17.	9.	
Dec	-	-	< 9.	19.	-	
1977 - Jan						
Feb						
Mar	24.	0.4	< 10.	< 19.	8.	0.02
Apr						
May						
Jun	24.	0.4	14.	< 18.	< 7.	0.05
Jul						
Aug						
Sept	6.2	0.2	26.	< 18.	< 7.	0.09
Oct						
Nov						
Dec	3.	0.3	< 10.	< 18.	< 7.	0.10
Avg.	18.1	0.35	10.5	17.4	8.4	0.07
Max.	24.	1.0	26.	19.	13.	0.10
Min.	3.	< 0.2	< 8.	< 16.	< 7.	0.02

Sampling Point M - 1

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>ug/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	1.0				10.	
Feb	0.8				12.	
Mar	8.2				15.	
Apr	-----		Dry	-----		
May	-----		Dry	-----		
Jun	-----		Dry	-----		
Jul	-----		Dry	-----		
Aug	-----		Dry	-----		
Sept	-----		Dry	-----		
Oct	-----		Dry	-----		
Nov	-----		Dry	-----		
Dec	-----		Dry	-----		
1978 - Jan	-----		Dry	-----		
Feb	-----		Dry	-----		
Mar	24.	0.3	<10.	<18.	<7.	0.06
Apr	10.	0.2	<10.	<18.	<7.	
May	12.	0.3	<10.	<18.	12.	
Jun	10.				35.	
Jul						
Aug						
Sept	51.				<7.	
Oct						
Nov						
Dec						
Avg.	14.6	0.27	<10.	<18.	13.1	-----
Max.	51.	0.3	<10.	<18.	35.	-----
Min.	0.8	0.2	<10.	<18.	<7.	-----

Sampling Point M - 2

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	4.8				15.	
Feb	0.2				46.	
Mar	8.2				11.	
Apr	5.4	0.6	<10.	<18.	16.	
May	4.0	0.1	15.	<18.	10.	
Jun	4.6	0.3	21.	<18.	12.	0.11
Jul	27.	1.1	<10.	<18.	13.	
Aug	15.3	0.4	11.	<18.	17.	
Sept	10.	0.3	12.	<18.	20.	0.09
Oct	-----		Dry	-----		
Nov	-----		Dry	-----		
Dec	10.2	0.3	21.	<18.	35.	0.05
1978 - Jan	-----		Dry	-----		
Feb	8.8	0.9	<10.	<18.	16.	
Mar	11.	0.3	<10.	<18.	7.	0.05
Apr	7.	0.3	11.	<18.	<7.	
May	10.6	0.6	<10.	<18.	17.	
Jun	9.0		-		26.	
Jul						
Aug						
Sept	12.8				16.	
Oct						
Nov						
Dec						
Avg.	9.3	0.47	12.8	<18.	17.8	0.08
Max.	27.	1.1	21.	<18.	46.	0.11
Min.	0.2	0.1	<10.	<18.	< 7.	0.05

Sampling Point M - 4

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	2.0				21.	
Feb	2.6				15.	
Mar	0.8				<7.	
Apr	1.4	1.0	28.	<18.	43.	
May	0.7	0.1	13.	<18.	14.	
Jun	1.9	1.2	13.	<18.	<7.	0.03
Jul	0.2	0.3	<10.	<18.	<7.	
Aug	1.9	1.6	<10.	<18.	<7.	
Sept	0.3	0.3	<10.	<18.	18.	0.06
Oct	-----		Dry	-----		
Nov	-----		Dry	-----		
Dec	-----		Dry	-----		
1978 - Jan	-----		Dry	-----		
Feb	6.4	0.3	<10.	<18.	<7.	
Mar	7.6	0.2	<10.	<18.	20.	0.03
Apr	3.6	0.3	<10.	<18.	<7.	
May	1.0	0.3	<10.	<18.	7.	
Jun	0.2		-		17.	
Jul						
Aug						
Sept	2.0				7.	
Oct						
Nov						
Dec						
Avg.	2.2	0.56	12.4	<18.	13.6	0.04
Max.	7.6	1.6	28.	<18.	43.	0.06
Min.	0.2	0.1	10.	<18.	<7.	0.03

Sampling Point M - 5

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>pCi/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	0.8					
Feb	0.6					
Mar	0.5					
Apr	0.4					
May	0.6				<7.	
Jun	1.1				<7.	
Jul	2.7				<7.	
Aug	1.8				<7.	
Sept	1.2				7.	
Oct	1.0				<7.	
Nov	1.3				13.	
Dec	0.1				<7.	
1978 - Jan	-----		Dry	-----		
Feb	0.2				<7.	
Mar	5.1				11.	
Apr	1.5				<7.	
May	0.6				<7.	
Jun	1.1				11.	
Jul						
Aug						
Sept	0.8				29.	
Oct						
Nov						
Dec						
Avg.	1.2				9.3 29.	
Max.	5.1					
Min.	0.1				<7.	

Sampling Point M - 6

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	1.1				9.	
Feb	0.2				16.	
Mar	0.2				7.	
Apr	0.1				11.	
May	1.3				12.	
Jun	0.6				<7.	
Jul	0.8				15.	
Aug	1.0				16.	
Sept	0.2				7.	
Oct	0.3				27.	
Nov	0.2				8.	
Dec	0.1				<7.	
1978 - Jan	17.6				24.	
Feb	3.2				13.	
Mar	1.6				8.	
Apr	0.6				7.	
May	1.6				<7.	
Jun	0.4				9.	
Jul						
Aug						
Sept	1.2				8.	
Oct						
Nov						
Dec						
Avg.	1.6				11.5	
Max.	17.6				27.	
Min.	0.1				<7.	

Sampling Point M - 7

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	-----	-----	Dry	-----	-----	-----
Feb	-----	-----	Dry	-----	-----	-----
Mar	1.4	-----			<7.	
Apr	<0.1	-----			<7.	
May	-----	-----	Dry	-----	-----	-----
Jun	-----	-----	Dry	-----	-----	-----
Jul	-----	-----	Dry	-----	-----	-----
Aug	-----	-----	Dry	-----	-----	-----
Sep	-----	-----	Dry	-----	-----	-----
Oct	-----	-----	Dry	-----	-----	-----
Nov	-----	-----	Dry	-----	-----	-----
Dec	-----	-----	Dry	-----	-----	-----
1978 - Jan	-----	-----	Dry	-----	-----	-----
Feb	-----	-----	Dry	-----	-----	-----
Mar	-----	-----	Dry	-----	-----	-----
Apr	-----	-----	Dry	-----	-----	-----
May	-----	-----	Dry	-----	-----	-----
Jun	-----	-----	Dry	-----	-----	-----
Jul	-----	-----	-	-----	-----	-----
Aug	-----	-----		-----	-----	-----
Sept	-----	-----	Dry	-----	-----	-----
Oct	-----	-----		-----	-----	-----
Nov	-----	-----		-----	-----	-----
Dec	-----	-----		-----	-----	-----
Avg.	0.75				<7.	
Max.	1.4				<7.	
Min.	<0.1				<7.	

Sampling Point M-8

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	-----		Dry	-----		
Feb	-----		Dry	-----		
Mar	0.2				23.	
Apr	0.1				18.	
May	0.4				<7.	
Jun	0.6				<7.	
Jul	0.4				<7.	
Aug	0.6				16.	
Sept	0.6				<7.	
Oct	-----		Dry	-----		
Nov	-----		Dry	-----		
Dec	-----		Dry	-----		
1978 - Jan	-----		Dry	-----		
Feb	-----		Dry	-----		
Mar	0.2				<7.	
Apr	0.3				9.	
May	0.6		-		<7.	
Jun	0.4				14.	
Jul						
Aug						
Sept	-----		Dry	-----		
Oct						
Nov						
Dec						
Av ₆ .	0.34				9.4	
Max.	0.6				23.	
Min.	0.1				<7.	

Sampling Point M-9

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	0.6				< 7.	
Feb	0.8				< 7.	
Mar	0.9				< 7.	
Apr	0.6				< 7.	
May	0.3				15.	
Jun	0.3				13.	
Jul	1.7				< 7.	
Aug	0.2				26.	
Sept	-----		Dry	-----		
Oct	-----		Dry	-----		
Nov	-----		Dry	-----		
Dec	-----		Dry	-----		
1978 - Jan	-----		Dry	-----		
Feb	-----		Dry	-----		
Mar	4.4				< 8.	
Apr	2.4				< 7.	
May	1.2		=		< 7.	
Jun	0.3				17.	
Jul						
Aug						
Sept	-----		Dry	-----		
Oct						
Nov						
Dec						
Avg.	1.1				10.7	
Max.	4.4				26.	
Min.	0.2				< 7.	

Sampling Point M-10

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>ug/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	2.6				< 7.	
Feb	1.8				10.	
Mar	0.6				< 7.	
Apr	< 0.1				8.	
May	0.2				10.	
Jun	0.1				15.	
Jul	0.5				< 7.	
Aug	1.1				< 7.	
Sept	0.4				< 7.	
Oct	-----		Dry	-----		
Nov	-----		Dry	-----		
Dec	-----		Dry	-----		
1978 - Jan	-----		Dry	-----		
Feb	5.4				16.	
Mar	2.6				17.	
Apr	1.0				< 7.	
May	0.6				< 7.	
Jun	0.2				13.	
Jul						
Aug						
Sept	=====		Dry	-----		
Oct						
Nov						
Dec						
Avg.	1.2				9.8	
Max.	5.4				17.	
Min.	< 0.1				< 7.	

Sampling Point ED-6

	<u>NO₃ (N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Cross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan						
Feb						
Mar						
Apr	-----		Dry	-----		
May	-----		Dry	-----		
Jun	-----		Dry	-----		
Jul	-----		Dry	-----		
Aug	-----		Dry	-----		
Sept	-----		Dry	-----		
Oct	-----		Dry	-----		
Nov	-----		Dry	-----		
Dec	-----		Dry	-----		
1978 - Jan	-----		Dry	-----		
Feb	-----		Dry	-----		
Mar	-----		Dry	-----		
Apr						
May			=			
Jun	-----		Dry	-----		
Jul						
Aug						
Sept	-----		Dry	-----		
Oct						
Nov						
Dec						
Avg.						
Max.						
Min.						

Sampling Point ED-8

	<u>NO₃(N)</u> <u>mg/l</u>	<u>Fluoride</u> <u>mg/l</u>	<u>Gross α</u> <u>pCi/l</u>	<u>Gross β</u> <u>pCi/l</u>	<u>Uranium</u> <u>μg/l</u>	<u>Ra-226</u> <u>pCi/l</u>
1977 - Jan	0.9	1.9	27.	<17.	32.	
Feb	0.9	1.6	24.	<18.	13.	
Mar	1.7	1.2	21.	<19.	17.	0.08
Apr	2.2	1.2	<16.	<18.	14.	
May	3.3	0.5	20.	<18.	26.	
Jun	4.8	1.2	25.	<18.	22.	< 0.01
Jul	-----		Dry	-----		
Aug	4.0	1.1	16.	<18.	13.	
Sept	3.7	1.4	109.	<18.	7.	0.08
Oct	2.2	0.9	23.	<18.	18.	
Nov	1.8	1.1	16.	<18.	17.	
Dec	1.4	1.1	28.	<18.	26.	0.07
1978 - Jan	1.5	0.8	29.	<18.	17.	
Feb	1.4	1.0	30.	<18.	22.	
Mar	1.6	0.9	14.	<18.	20.	0.11
Apr	2.1	0.7	21.	<18.	--	
May	2.8	0.2	16.	<18.	15.	
Jun	3.0	0.9	<10.	<18.	18.	0.25
Jul						
Aug						
Sept						
Oct						
Nov						
Dec						
Avg.	2.3	1.0	26.2	<18.	18.8	0.10
Max.	4.8	1.9	109.	<19.	32.	0.25
Min.	0.9	0.2	< 10.	<17.	7.	<0.01