6280 T-11335
NREAD

AUG 16 1985

Mr. Charles E. Rundgren
Water Supply Branch
Division of Health Services
North Carolina Department of
Human Resources
Post Office Box 2091
Raleigh, North Carolina 27602

Dear Mr. Rundgren:

Enclosed are the Radiological analyses conducted in 1984 for all eight water treatment plants aboard Marine Corps Base (MCB), Camp Lejeune. The final results were received 1 August 1985.

The sampling was done by personnel in the Water Quality Control Laboratory (WQC Lab), State Identification Number 37807, located in the Natural Resources and Environmental Affairs Division (NREAD), under the Assistant Chief of Staff, Facilities, MCB, Camp Lejeune, North Carolina. The analysis was performed by Grainger Laboratories, Incorporated of Raleigh, North Carolina. NREAD averaged the quarterly analysis provided by Grainger Laboratories for all eight drinking water systems aboard this installation which is contained in enclosure (1). Enclosure (2) contains each quarters' analysis on required Radiological Reporting Forms.

Enclosure (3) contains second quarter data for all systems as originally received from Grainger Laboratories, Incorporated. NREAD transferred this data to the required forms in enclosure (2). Enclosure (4) contains Radium 226 and Radium 228 data from the fourth quarter analysis of Marine Corps Air Station, New River. This data was also transferred to enclosure (2) by NREAD.

Any questions regarding this matter should be forwarded to Ms. Elizabeth Betz, Supervisory Chemist, NREAD, telephone (919) 451-5977.

Sincerely,

R. A. TIEBOUT
Colonel, U. S. Marine Corps
Assistant Chief of Staff, Facilities
By direction of the Commanding General

Encl: (1) Radiological Analysis Table
(2) Radiological Reporting Forms
(3) Grainger ltr of 13 Sept 1984
(4) Grainger ltr of 29 July 1985

Blind copy to:
BMO (Attn: UtilDir)

Copy to:
LANTDIV (Code 114)

Writer: E. Betz, NREAD, 5977
Typist: A. Blackstock, 13 August 1985

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO

6280/5
NREAD

Mr. Charles E. Rundgren
Water Supply Branch
Division of Health Services
North Carolina Department of
Human Resources
Post Office Box 2091
Raleigh, North Carolina 27602

Dear Mr. Rundgren:

1 Enclosed are the Radiological analyses conducted in 1984 for all eight water treatment plants aboard Marine Corps Base, Camp Lejeune. The final results were received 1 August 1985.

2 The sampling was done by personnel in the Water Quality Control Laboratory (WQC Lab), State Identification Number 37807, located in the Natural Resources and Environmental Affairs Division (NREAD) under the Assistant Chief of Staff, Facilities. The analysis was performed by Grainger Laboratories, Incorporated ~~located in~~ MCB Camp Lejeune NC of Raleigh, North Carolina.

Quarterly samples were analyzed and then averaged. Enclosure (1) provides a summary of the Radiological data for all eight drinking water systems aboard this installation. Enclosure (2) contains each quarters' analysis. The system information and collection data were provided by the WQC Lab. Grainger provided analysis data. Please note that results for Rifle Range water supply for the second quarter and the Radium 226 and Radium 228 results for Marine Corps Air Station, New River water supply system for the fourth quarter are provided in memorandum form.

4 Any Questions regarding this matter should be forwarded to Ms. Elizabeth Betz, Supervisory Chemist, NREAD, telephone (919) 451-5977.

Sincerely,

R. A. TIEBOUT
Colonel, U. S. Marine Corps
Assistant Chief of Staff, Facilities
By direction of the Commanding General

Encl: (1) Radiological Analysis Table
(2) Radiological Reporting Forms
(3) Grainger ltr 13 Sept 84
Copy to: (4) " " 29 July 85
LANTDIV (Code 114)

2 cont

Provided by G L

NREAD averaged the Quarterly analysis for all 8 drinking water systems aboard this installation which is contained in Encl (1). Encl (2) contain each quarter's analysis on required Radiological Reporting Forms.

Please note the results for the ~~third~~ Second Quarter data for all systems were not provided on the Radiological Reporting forms by Grainger Lab Inc. However NREAD transferred the data on Encl (2). Data provided by Grainger Lab Inc for MCAS New River ~~for the~~ fourth Quarter for Radium 226 and Radium 228 is ~~submitted~~ transferred to the required State Form.

3 ENCLOSURE (3) IS ~~PROVIDED~~ ~~BECAUSE~~ CONTAINS SECOND QUARTER DATA FOR ALL SYSTEMS AS ORIGINAL RECEIVED FROM GRAINGER LAB INC. NREAD TRANSFERRED THIS DATA TO THE REQUIRED FORMS IN ENCL (2). ENCLOSURE (4) CONTAINS RADIUM 226 + RADIUM 228 DATA FROM THE FOURTH QUARTER ANALYSIS OF MCAS NEW RIVER. THIS DATA WAS ALSO TRANSFERRED TO ENCL (2) BY NREAD.

11335
NREAD

Mr. Charles E. Rundgren
Water Supply Branch
Division of Health Services
North Carolina Department of
Human Resources
Post Office Box 2091
Raleigh, North Carolina 27602

Dear Mr. Rundgren:

Enclosed are the Radiological Analyses conducted in 1984 for all eight water treatment plants aboard Marine Corps Base, Camp Lejeune. The final results were received 1 August 1985.

The sampling was done by personnel in the Water Quality Control Laboratory (WQC Lab), state identification number 37807, located in the Natural Resources and Environmental Affairs Division (NREAD), under the Assistant Chief of Staff, Facilities. The analysis was performed by Grainger Laboratories, Incorporated located in Raleigh, North Carolina.

Quarterly samples were analyzed and then averaged. Enclosure (1) provides a summary of the radiological data for all eight drinking water systems aboard this installation. Enclosure (2) contains each quarters' analysis on the required Radiological Reporting Form (RR Form). The system information and collection data was filled out the WQC Lab. Grainger provide most analysis data on these forms. The RR Forms for the second quarter were not provided by Grainger, so Grainger's report is also included in the enclosure. The Radium 226 and Radium 228 for the fourth quarter were provided in a separate letter so it is also included in the enclosure.

RADIOLOGICAL REPORTING

Questions regarding this matter should be forwarded to Ms. E. Betz, Supervisory Chemist, NREAD, telephone (919) 451-5977.

Sincerely,

R. A. TIEBOUT
Colonel, U. S. Marine Corps
Assistant Chief of Staff, Facilities
By direction of the Commanding General

Encls: (1) Radiological Analysis Table
(2) Radiological Reporting Forms

Copy to:
LANTDIV (Code 114)

Blind copy to:
BMO (Attn: UtilDir)

Writer: E. Betz, NREAD, 5977 Supv Chem
Typist: A. Blackstock, 12 August 1985

RADIOLOGICAL ANALYSIS
MARINE CORPS BASE, CAMP LEJEUNE

				1984 ANNUAL AVERAGE	
SYSTEM	ID #	GROSS ALPHA	GROSS BETA	RADIUM 226	RADIUM 228
Hadnot Point	04-67-041	<1.0	3.3	NA	NA
MCAS-New River	04-67-042	<1.0	10.3	<0.6	<0.4
Holcomb Blvd	04-67-043	<1.0	2.4	NA	NA
Tarawa Terrace	04-67-044	<1.0	2.7	NA	NA
Camp Johnson	04-67-045	<1.0	<1.0	NA	NA
Rifle Range	04-67-046	<1.0	1.5	NA	NA
Courthouse Bay	04-67-047	<1.0	2.0	NA	NA
Onslow Beach	04-67-048	<1.0	1.3	NA	NA

(ENCLOSURE 1)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/7/0/0/ Analyzing Lab I.D. | 04 - 67 - 041 Water Supply I.D. No.

Name of PWS: HADNOT POINT | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL | Source of Water: (X) Ground ( ) Surface

Address: ATTN: NREA, MARINE CORPS BASE

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	4/12/84				
First Quarter		3/30/84	0915	BLDG 65	BETZ (WQCL)
Second Quarter					
Third Quarter					
Fourth Quarter					

Date Analyzed: 5/14/84 | Date Reported: 5/15/84

Lab Sample No.: GLI 84-0509-3A-3 | Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	2.7	± 2.3	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER LABORATORI

RADIOLOGICAL ANALYSIS

0/9 T.C. — 1/2/1/7/0/0 Analyzing Lab I.D. — 0 4 - 67 - 042 Water Supply I.D. No.

Name of PWS: MCAS - NEW RIVER — County: ONSLOW

Address: MARINE CORPS BASE — Telephone #:

CAMP LEJEUNE, NC Zip 28542 — Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE — Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	4/12/84				
First Quarter		3/27/84	1047	BLDG G-770	HUNEYCUTT
Second Quarter					
Third Quarter					
Fourth Quarter					

Date Analyzed: 6/08/84-6/14/84 — Date Reported: 6/18/84

Lab Sample No.: GLI #84-10510-7A-#1 — Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	10.4	± 3.4	1.0
Radium 226	4020	417	< 0.6	± -	0.6
Radium 228	4030	418	1.4	± 0.4	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/7/0/0/ Analyzing Lab I.D.

04 - 67 - 043 Water Supply I.D. No.

Name of PWS: HOLCOMB BLVD

County: ONSLOW

Address: MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Telephone #:

Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC Zip28542

Source of Water: (X) Ground ( ) Surface

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	4/12/84				
First Quarter		3/27/84	1136	BLDG 4022	HONEYCUTT
Second Quarter					
Third Quarter					
Fourth Quarter					

Date Analyzed: 5/14/84 Date Reported: 5/15/84

Lab Sample No.: GLI 84-10509-1A-1 Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	1.5	± 1.0	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/7/0/0/ Analyzing Lab I.D.

04 - 67 - 044 Water Supply I.D. No.

Name of PWS: TARAWA TERRACE

County: ONSLOW

Address: MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Telephone #:

Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Source of Water: (X) Ground ( ) Surface

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	4/12/84				
First Quarter		3/27/84	1125	BLDG TT-44	HUNEYCUTT
Second Quarter					
Third Quarter					
Fourth Quarter					

Date Analyzed: 5/14/84 Date Reported: 5/15/84

Lab Sample No.: GLI-84-10509-2A-2 Reported by: [signature]

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	2.9	± 2.5	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/0/0/ Analyzing Lab I.D. | 04 - 67 - 045 Water Supply I.D. No.

Name of PWS: CAMP JOHNSON | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE | Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	4/12/84				
First Quarter		3/27/84	1110	BLDG M-231	HONEYCUTT
Second Quarter					
Third Quarter					
Fourth Quarter					

Date Analyzed: 5/14/84 | Date Reported: 5/15/84

Lab Sample No.: GLI #84-10510-8A-2 | Reported by: [signature]

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	< 1.0	± -	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/7/0/0/ Analyzing Lab I.D. 04 - 67 - 046 Water Supply I.D. No.

Name of PWS: RIFLE RANGE County: ONSLOW

Address: MARINE CORPS BASE Telephone #:

CAMP LEJEUNE, NC Zip 28542 Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	4/12/84				
First Quarter		3/30/84	1400	BLDG RR-10	HONEYCUTT
Second Quarter					
Third Quarter					
Fourth Quarter					

Date Analyzed: 5/14/84 Date Reported: 5/15/84

Lab Sample No.: GLI 84-10508-6A-3 Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	1.8	± 1.5	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/7/0/0/ Analyzing Lab I.D. | 0 4 - 67 - 047 Water Supply I.D. No.

Name of PWS: COURTHOUSE BAY | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE | Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	4/12/84				
First Quarter		3/30/84	1340	BLDG BB-7	HUNEYCUTT
Second Quarter					
Third Quarter					
Fourth Quarter					

Date Analyzed: 5/14/84 | Date Reported: 5/15/84

Lab Sample No.: GLI 84-10508-5A-2 | Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	2.3	± 2.0	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/7/0/0/ Analyzing Lab I.D. 04 - 67 - 048 Water Supply I.D. No.

Name of PWS: ONSLOW BEACH County: ONSLOW

Address: MARINE CORPS BASE Telephone #:

CAMP LEJEUNE, NC Zip 28542 Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	4/12/84				
First Quarter		3/30/84	1315	BY BLDG BA 197 CAMPSITE SPIGOT	HUNEYCUTT
Second Quarter					
Third Quarter					
Fourth Quarter					

Date Analyzed: 5/14/84 Date Reported: 5/15/84

Lab Sample No.: GLI 84-10508-4A-1 Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	< 1.0	± -	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/1/0/0/ Analyzing Lab I.D. | 0 4 - 67 - 041 Water Supply I.D. No.

Name of PWS: HADNOT POINT | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE | Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	7/6/84				
First Quarter					
Second Quarter		6/27/84	1500	BLDG 65	HUNEYCUTT
Third Quarter					
Fourth Quarter					

Date Analyzed: SEE GLI LTR 9-13-84 | Date Reported:

Lab Sample No.: ~~#9A+9B~~ 11A+B | Reported by: SEE GLI LTR 9-13-84

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	<1.4	±	1.0
Gross Beta	4100	401	4.0	±	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/7/0/0/1 Analyzing Lab I.D. | 0 4 - 67 - 042 Water Supply I.D. No.

Name of PWS: MCAS - NEW RIVER | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL | Source of Water: (X) Ground ( ) Surface

Address: ATTN: NREA, MARINE CORPS BASE

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	7/6/84				
First Quarter					
Second Quarter		6/27/84	1220	BLDG G-770	HUNEYCUTT
Third Quarter					
Fourth Quarter					

Date Analyzed: SEE GLI LTR 9-13-84 | Date Reported:

Lab Sample No.: 15A+B | Reported by: SEE GLI LTR 9-13-84

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	<1.0	±	1.0
Gross Beta	4100	401	7.7	±	1.0
Radium 226	4020	417	<0.6	±	0.6
Radium 228	4030	418	<0.4	±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. | 12/1/7/0/0/ Analyzing Lab I.D. | 0 4 - 67 - 043 Water Supply I.D. No.

Name of PWS: HOLCOMB BLVD

County: ONSLOW

Address: MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Telephone #:

Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Source of Water: (X) Ground ( ) Surface

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	7/6/84				
First Quarter					
Second Quarter		6/27/84	0900	BLDG 4022	HUNEYCUTT
Third Quarter					
Fourth Quarter					

Date Analyzed: SEE GLI LTR 9-13-84

Date Reported:

Lab Sample No.: 9A + B

Reported by: SEE GLI LTR 9-13-84

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	<1.0	±	1.0
Gross Beta	4100	401	1.5	±	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. | /2/1/7/0/0/ Analyzing Lab I.D. | 0 4 - 67 - 044 Water Supply I.D. No.

Name of PWS: TARAWA TERRACE | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUENE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL | Source of Water: (X) Ground ( ) Surface

Address: ATTN: NREA, MARINE CORPS BASE

CAMP LEJEUENE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	7/6/84				
First Quarter					
Second Quarter		6/27/84	0922	BLDG TT-44	HONEYCUTT
Third Quarter					
Fourth Quarter					

Date Analyzed: SEE GLI LTR 9-13-84 | Date Reported:

Lab Sample No.: 10A+B | Reported by: SEE GLI LTR 9-13-84

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	<1.0	±	1.0
Gross Beta	4100	401	<1.0	±	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/7/0/0/1 Analyzing Lab I.D. | 0 4 - 67 - 045 Water Supply I.D. No.

Name of PWS: CAMP JOHNSON

County: ONSLOW

Address: MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Telephone #:

Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Source of Water: (X) Ground ( ) Surface

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	7/6/84				
First Quarter					
Second Quarter		6/27/84	0940	BLDG M-231	HUNEYCUTT
Third Quarter					
Fourth Quarter					

Date Analyzed: SEE GLI LTR 9-13-84

Date Reported:

Lab Sample No.: 16 A+B

Reported by: SEE GLI LTR 9-13-84

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	<1.0	±	1.0
Gross Beta	4100	401	<1.0	±	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/7/0/9 Analyzing Lab I.D. | 0 4 - 67 - 046 Water Supply I.D. No.

Name of PWS: RIFLE RANGE

County: ONSLOW

Address: MARINE CORPS BASE

Telephone #:

CAMP LEJEUNE, NC Zip 28542

Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Source of Water: (X) Ground ( ) Surface

Address: ATTN: NREA, MARINE CORPS BASE

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	7/6/84				
First Quarter					
Second Quarter		6/27/84	1340	BLDG RR-10	HUNEYCUTT
Third Quarter					
Fourth Quarter					

Date Analyzed: SEE GLI LTR 9-13-84

Date Reported:

Lab Sample No.: 14 A+B

Reported by: SEE GLI LTR 9-13-84

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	<1.0	±	1.0
Gross Beta	4100	401	1.4	±	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. | 12/1/7/0/0/1 Analyzing Lab I.D. | 0 4 - 67 - 047 Water Supply I.D. No.

Name of PWS: COURTHOUSE BAY | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE | Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	7/6/84				
First Quarter					
Second Quarter		6/27/84	1405	BLDG BB-7	HONEYCUTT
Third Quarter					
Fourth Quarter					

Date Analyzed: SEE GLI LTR 9-13-84 | Date Reported:

Lab Sample No.: 13A+B | Reported by: SEE GLI LTR 9-13-84

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	<1.0	±	1.0
Gross Beta	4100	401	2.8	±	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. | 12171010 Analyzing Lab I.D. | 04 - 67 - 048 Water Supply I.D. No.

Name of PWS: ONSLOW BEACH
County: ONSLOW

Address: MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542
Telephone #:

Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Source of Water: (X) Ground ( ) Surface

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	7/6/84				
First Quarter					
Second Quarter		6/27/84	1418	BESIDE BA 197 CAMPSITE SPIGOT	HUNEYCUTT
Third Quarter					
Fourth Quarter					

Date Analyzed: SEE GLI LTR 9-13-84
Date Reported:
Lab Sample No.: 12 A+B
Reported by: SEE GLI LTR 9-13-84

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	<1.0	±	1.0
Gross Beta	4100	401	2.7	±	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER LABORATORIES

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/7/0/0/ Analyzing Lab I.D. 0 4 - 67 - 041 Water Supply I.D. No.

Name of PWS: HADNOT POINT County: ONSLOW

Address: MARINE CORPS BASE Telephone #:

CAMP LEJEUNE, NC Zip 28542 Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	10/31/84				
First Quarter					
Second Quarter					
Third Quarter		9/21/84	0830	BLDG 65	HUNEYCUTT
Fourth Quarter					

Date Analyzed: 11/12/84 Date Reported: 12/11/84

Lab Sample No.: 85-1190-19 Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	4.1	± 2.9	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/7/0/0 Analyzing Lab I.D. | 0 4 - 67 - 042 Water Supply I.D. No.

Name of PWS: MCAS - NEW RIVER | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE | Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	10/25/84				
First Quarter					
Second Quarter					
Third Quarter		9/21/84	0945	BLDG G-770	HUNEYCUTT
Fourth Quarter					

Date Analyzed: 11/02/84 | Date Reported: 11/30/84

Lab Sample No.: 84-12021-23 | Reported by: Don A Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	8.7	± 3.3	1.0
Radium 226	4020	417	< 0.6	± -	0.6
Radium 228	4030	418	< 0.4	± -	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER LABORATORIES

RADIOLOGICAL ANALYSIS

0/9 T.C. | 1/2/1/7/0/0/ Analyzing Lab I.D. | 0 4 - 67 - 043 Water Supply I.D. No.

Name of PWS: HOLCOMB BLVD | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE | Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	10/25/84				
First Quarter					
Second Quarter					
Third Quarter		9/21/84	0857	BLDG 4022	HONEYCUTT
Fourth Quarter					

Date Analyzed: 11/12/84 | Date Reported: 12/11/84

Lab Sample No.: 85-1190-17 | Reported by: Ron Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results		Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	±	-	1.0
Gross Beta	4100	401	3.6	±	2.8	1.0
Radium 226	4020	417		±		0.6
Radium 228	4030	418		±		0.4
Total Uranium	4006			±		
Strontium 89	4172			±		
Strontium 90	4174			±		
Tritium	4102			±		
Cesium 134	4270			±		
Iodine 131	4264			±		
Other				±		

(ENCLOSURE 2)

GRAINGER LABORATORIES

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/7/0/0/ Analyzing Lab I.D.

0 4 - 67 - 044 Water Supply I.D. No.

Name of PWS: TARAWA TERRACE

County: ONSLOW

Address: MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Telephone #:

Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Source of Water: (X) Ground ( ) Surface

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	10/31/84				
First Quarter					
Second Quarter					
Third Quarter		9/21/84	0905	BLDG TT-44	HUNEYCUTT
Fourth Quarter					

Date Analyzed: 11/12/84

Date Reported: 12/11/84

Lab Sample No.: 85-1190-18

Reported by: [signature]

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results		Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	±	-	1.0
Gross Beta	4100	401	4.2	±	2.9	1.0
Radium 226	4020	417		±		0.6
Radium 228	4030	418		±		0.4
Total Uranium	4006			±		
Strontium 89	4172			±		
Strontium 90	4174			±		
Tritium	4102			±		
Cesium 134	4270			±		
Iodine 131	4264			±		
Other				±		

(ENCLOSURE 2)

GRAINGER LABORATORIES

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/7/0/0/ Analyzing Lab I.D.

0 4 - 67 - 045 Water Supply I.D. No.

Name of PWS: CAMP JOHNSON

County: ONSLOW

Address: MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Telephone #:

Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC Zip 28542

Source of Water: (X) Ground ( ) Surface

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	10/25/84				
First Quarter					
Second Quarter					
Third Quarter		9/21/84	0924	BLDG M-231	HUNEYCUTT
Fourth Quarter					

Date Analyzed: 11/02/84

Date Reported: 11/30/84

Lab Sample No.: 84-12021-24

Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	1.5	± 0.9	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER

RADIOLOGICAL ANALYSIS

0/9 T.C. | /2/1/7/0/0/ Analyzing Lab I.D. | 0 4 - 67 - 046 Water Supply I.D. No.

Name of PWS: RIFLE RANGE | County: ONSLOW

Address: MARINE CORPS BASE | Telephone #:

CAMP LEJEUNE, NC Zip 28542 | Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE | Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	10/25/84				
First Quarter					
Second Quarter					
Third Quarter		9/21/84	1135	BLDG RR-10	HUNEYCUTT
Fourth Quarter					

Date Analyzed: 11/02/84 | Date Reported: 11/30/84

Lab Sample No.: 84-12021-22 | Reported by: [signature]

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	< 1.0	± -	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/7/0/0/ Analyzing Lab I.D. 04 - 67 - 047 Water Supply I.D. No.

Name of PWS: COURTHOUSE BAY County: ONSLOW

Address: MARINE CORPS BASE Telephone #:

CAMP LEJEUNE, NC Zip 28542 Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	10/25/84				
First Quarter					
Second Quarter					
Third Quarter		9/21/84	1312	BLDG BB-7	HUNEYCUTT
Fourth Quarter					

Date Analyzed: 11/02/84 Date Reported: 11/30/84

Lab Sample No.: 84-12021-21 Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results	Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	± -	1.0
Gross Beta	4100	401	1.1	± 0.7	1.0
Radium 226	4020	417		±	0.6
Radium 228	4030	418		±	0.4
Total Uranium	4006			±	
Strontium 89	4172			±	
Strontium 90	4174			±	
Tritium	4102			±	
Cesium 134	4270			±	
Iodine 131	4264			±	
Other				±	

(ENCLOSURE 2)

GRAINGER LABORATORIES

RADIOLOGICAL ANALYSIS

0/9 T.C. /2/1/1/0/0/ Analyzing Lab I.D. 0 4 - 67 - 048 Water Supply I.D. No.

Name of PWS: ONSLOW BEACH County: ONSLOW

Address: MARINE CORPS BASE Telephone #:

CAMP LEJEUNE, NC Zip 28542 Type of Water: ( ) Raw (X) Treated

Report to: COMMANDING GENERAL

Address: ATTN: NREA, MARINE CORPS BASE Source of Water: (X) Ground ( ) Surface

CAMP LEJEUNE, NC Zip 28542

Type of Sample: (X) D-Regular ( ) C-Check ( ) S-Special ( ) E-Composite

COLLECTION DATA

	Date Received	Date Sample	Time	Sample Location	Collected By
Single Sample	10/25/84				
First Quarter					
Second Quarter					
Third Quarter		9/21/84	1343	BESIDE BLD 197 CAMPSITE SPIGOT	HUNEYCUTT
Fourth Quarter					

Date Analyzed: 11/02/84 Date Reported: 11/30/84

Lab Sample No.: 84-12021-20 Reported by: Don Smith

McCoy & McCoy, Inc.

ANALYTICAL VALUES (pCi/liter)

	MSIS Contaminant Code	MSIS Method Code	Results		Counting Error	Detection Limit
Gross Alpha	4000	401	< 1.0	±	-	1.0
Gross Beta	4100	401	1.3	±	0.8	1.0
Radium 226	4020	417		±		0.6
Radium 228	4030	418		±		0.4
Total Uranium	4006			±		
Strontium 89	4172			±		
Strontium 90	4174			±		
Tritium	4102			±		
Cesium 134	4270			±		
Iodine 131	4264			±		
Other				±		

(ENCLOSURE 2)

GRAINGER LABORATORIES, INC.
5500 Commercial Avenue
Raleigh, NC 27612
TEL. 919-787-3061

Site #3

WATER SYSTEM ID# 04 - 67 - 041

SYSTEM NAME: HADNOT POINT

ADDRESS: MARINE CORPS BASE

CAMP LEJEUNE, NC ZIP 28542

COUNTY: ONSLOW

REPORT TO: COMMANDING GENERAL

ADDRESS: ATTN: NREA, MARINE CORPS BASE

CAMP LEJEUNE, NC ZIP 28542

TELEPHONE: ( )

TYPE OF WATER: ( ) RAW (x) TREATED

SOURCE OF WATER: (X) GROUND ( ) SURFACE

SAMPLE INFORMATION

TYPE OF SAMPLE: (x) D-REGULAR ( ) C-CHECK ( ) S-SPECIAL ( ) E-COMPOSITE

	DATE RECEIVED	DATE SAMPLE	TIME	SAMPLE LOCATION	COLLECTED BY
SINGLE SAMPLE	4-5-85				
FIRST QUARTER					
SECOND QUARTER					
THIRD QUARTER					
FOURTH QUARTER		12/27/84	1440	BLDG 65	HUNEYCUTT

FOR LABORATORY USE ONLY

ANALYTICAL VALUES (pCi/liter)

	MSIS CONTAMINANT CODE	MSIS METHOD CODE	RESULTS	COUNTING ERROR	DETECTION LIMITS
GROSS ALPHA	4000	401	1.2	± 0.8	1.0
GROSS BETA	4100	401	2.5	± 0.7	1.0
RADIUM 226	4020			±	
RADIUM 228	4030			±	
TOTAL URANIUM	4006			±	
STRONTIUM 89	4172			±	
STRONTIUM 90	4174			±	
TRITIUM	4102			±	
CESIUM 134	4270			±	
IODINE 131	4264			±	
OTHER				±	

DATE ANALYZED 4-30-85

LAB SAMPLE # 85-3238-003

REMARKS:

DATE REPORTED 5-31-85

REPORTED BY Paul Brafford

ANALYZING LAB I.D. 0/9 21200

T.C.

(ENCLOSURE 2)

GRAINGER LABORATORIES, INC.
5500 Commercial Avenue
Raleigh, NC 27612
TEL. 919-787-3061

Site #7

WATER SYSTEM ID# 0 4 - 6 7 - 0 4 2

TYPE OF WATER: ( ) RAW (X) TREATED

SYSTEM NAME: MCAS - NEW RIVER

ADDRESS: MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

SOURCE OF WATER: (X) GROUND ( ) SURFACE

COUNTY: ONSLOW

REPORT TO: COMMANDING GENERAL

ADDRESS: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

TELEPHONE: ( )

SAMPLE INFORMATION

TYPE OF SAMPLE: (X) D-REGULAR ( ) C-CHECK ( ) S-SPECIAL ( ) E-COMPOSITE

	DATE RECEIVED	DATE SAMPLE	TIME	SAMPLE LOCATION	COLLECTED BY
SINGLE SAMPLE	4-5-85				
FIRST QUARTER					
SECOND QUARTER					
THIRD QUARTER					
FOURTH QUARTER		12/28/84	1030	BLDG G-770	HONEYCUTT

FOR LABORATORY USE ONLY

ANALYTICAL VALUES (pCi/liter)

	MSIS CONTAMINANT CODE	MSIS METHOD CODE	RESULTS	COUNTING ERROR	DETECTION LIMITS
GROSS ALPHA	4000	401	<1.0	± —	1.0
GROSS BETA	4100	401	14.4	± 3.1	1.0
* RADIUM 226	4020	417	<0.6	±	0.6
* RADIUM 228	4030	418	0.43	±	0.4
TOTAL URANIUM	4006			±	
STRONTIUM 89	4172			±	
STRONTIUM 90	4174			±	
TRITIUM	4102			±	
CESIUM 134	4270			±	
IODINE 131	4264			±	
OTHER				±	

DATE ANALYZED 4-30-85

DATE REPORTED 5-31-85

LAB SAMPLE # 85-3238-007

REPORTED BY Paul Bradford

REMARKS: * SEE GLI LTR 29 JUL 85

ANALYZING LAB I.D. 0/9 2 1 7 0 0

T.C.

(ENCLOSURE 2)

RADIOLOGICAL ANALYSIS

GRAINGER LABORATORIES, I
5500 Commercial Avenue
Raleigh, NC 27612
TEL. 919-787-3061

Site #1

WATER SYSTEM ID# 04 - 67 - 043

SYSTEM NAME: HOLCOMB BLVD

ADDRESS: MARINE CORPS BASE

CAMP LEJEUNE, NC ZIP 28542

COUNTY: ONSLOW

REPORT TO: COMMANDING GENERAL

ADDRESS: ATTN: NREA, MARINE CORPS BASE

CAMP LEJEUNE, NC ZIP 28542

TELEPHONE: ( )

TYPE OF WATER: ( ) RAW (X) TREATED

SOURCE OF WATER: (X) GROUND ( ) SURFACE

SAMPLE INFORMATION

TYPE OF SAMPLE: (X) D-REGULAR ( ) C-CHECK ( ) S-SPECIAL ( ) E-COMPOSITE

	DATE RECEIVED	DATE SAMPLE	TIME	SAMPLE LOCATION	COLLECTED BY
SINGLE SAMPLE	4-5-85				
FIRST QUARTER					
SECOND QUARTER					
THIRD QUARTER					
FOURTH QUARTER		12/27/84	1326	BLDG 4022	HUNEYCUTT

FOR LABORATORY USE ONLY

ANALYTICAL VALUES (pCi/liter)

	MSIS CONTAMINANT CODE	MSIS METHOD CODE	RESULTS	COUNTING ERROR	DETECTION LIMITS
GROSS ALPHA	4000	401	1.2	± 0.8	1.0
GROSS BETA	4100	401	3.0	± 1.0	1.0
RADIUM 226	4020			±	
RADIUM 228	4030			±	
TOTAL URANIUM	4006			±	
STRONTIUM 89	4172			±	
STRONTIUM 90	4174			±	
TRITIUM	4102			±	
CESIUM 134	4270			±	
IODINE 131	4264			±	
OTHER				±	

DATE ANALYZED 4-30-85

LAB SAMPLE # 85-3238-001

REMARKS:

DATE REPORTED 5-31-85

REPORTED BY Paul Brafford

ANALYZING LAB I.D. 0/9 21700

T.C.

(ENCLOSURE 2)

GRAINGER LABORATORIES, INC.
5500 Commercial Avenue
Raleigh, NC 27612
TEL. 919-787-3061

Site #2

WATER SYSTEM ID# 0 4 - 6 7 - 0 4 4

SYSTEM NAME: TARAWA TERRACE

ADDRESS: MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

COUNTY: ONSLOW

REPORT TO: COMMANDING GENERAL

ADDRESS: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

TELEPHONE: ( )

TYPE OF WATER: ( ) RAW (X) TREATED

SOURCE OF WATER: (X) GROUND ( ) SURFACE

SAMPLE INFORMATION

TYPE OF SAMPLE: (x) D-REGULAR ( ) C-CHECK ( ) S-SPECIAL ( ) E-COMPOSITE

	DATE RECEIVED	DATE SAMPLE	TIME	SAMPLE LOCATION	COLLECTED BY
SINGLE SAMPLE	4-5-85				
FIRST QUARTER					
SECOND QUARTER					
THIRD QUARTER					
FOURTH QUARTER		12/27/84	1352	BLDG TT-44	HUNEYCUTT

FOR LABORATORY USE ONLY

ANALYTICAL VALUES (pCi/liter)

	MSIS CONTAMINANT CODE	MSIS METHOD CODE	RESULTS	COUNTING ERROR	DETECTION LIMITS
GROSS ALPHA	4000	401	< 1.0	± —	1.0
GROSS BETA	4100	401	3.6	± 1.2	1.0
RADIUM 226	4020			±	
RADIUM 228	4030			±	
TOTAL URANIUM	4006			±	
STRONTIUM 89	4172			±	
STRONTIUM 90	4174			±	
TRITIUM	4102			±	
CESIUM 134	4270			±	
IODINE 131	4264			±	
OTHER				±	

DATE ANALYZED 4-30-85

LAB SAMPLE # 85-3238-002

REMARKS:

DATE REPORTED 5-31-85

REPORTED BY Paul Bufford

ANALYZING LAB I.D. 0/9 2 1 7 0 0

T.C.

(ENCLOSURE 2)

GRAINGER LABORATORIES, INC.
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Raleigh, NC 27612
TEL. 919-787-3061

Site #8

WATER SYSTEM ID# 0 4 - 6 7 - 0 4 5

SYSTEM NAME: CAMP JOHNSON

ADDRESS: MARINE CORPS BASE

CAMP LEJEUNE, NC ZIP 28542

COUNTY: ONSLOW

REPORT TO: COMMANDING GENERAL

ADDRESS: ATTN: NREA, MARINE CORPS BASE

CAMP LEJEUNE, NC ZIP 28542

TELEPHONE: ( )

TYPE OF WATER: ( ) RAW (X) TREATED

SOURCE OF WATER: (X) GROUND ( ) SURFACE

SAMPLE INFORMATION

TYPE OF SAMPLE: (X) D-REGULAR ( ) C-CHECK ( ) S-SPECIAL ( ) E-COMPOSITE

	DATE RECEIVED	DATE SAMPLE	TIME	SAMPLE LOCATION	COLLECTED BY
SINGLE SAMPLE	4-5-85				
FIRST QUARTER					
SECOND QUARTER					
THIRD QUARTER					
FOURTH QUARTER		12/27/84	1409	BLDG M-231	HUNEYCUTT

FOR LABORATORY USE ONLY

ANALYTICAL VALUES (pCi/liter)

	MSIS CONTAMINANT CODE	MSIS METHOD CODE	RESULTS	COUNTING ERROR	DETECTION LIMITS
GROSS ALPHA	4000	401	<1.0	± —	1.0
GROSS BETA	4100	401	<1.0	± —	1.0
RADIUM 226	4020			±	
RADIUM 228	4030			±	
TOTAL URANIUM	4006			±	
STRONTIUM 89	4172			±	
STRONTIUM 90	4174			±	
TRITIUM	4102			±	
CESIUM 134	4270			±	
IODINE 131	4264			±	
OTHER				±	

DATE ANALYZED 4-30-85

DATE REPORTED 5-31-85

LAB SAMPLE # 85-3238-008

REPORTED BY Paul Bufford

REMARKS:

ANALYZING LAB I.D. 0/9 2 1 7 0 0

T.C.

(ENCLOSURE 2)

GRAINGER LABORATORIES, INC.
5500 Commercial Avenue
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TEL. 919-787-3061

Site #6

WATER SYSTEM ID# 0 4 - 6 7 - 0 4 6

SYSTEM NAME: RIFLE RANGE

ADDRESS: MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

COUNTY: ONSLOW

REPORT TO: COMMANDING GENERAL

ADDRESS: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

TELEPHONE: ( )

TYPE OF WATER: ( ) RAW (X) TREATED

SOURCE OF WATER: (X) GROUND ( ) SURFACE

SAMPLE INFORMATION

TYPE OF SAMPLE: (X) D-REGULAR ( ) C-CHECK ( ) S-SPECIAL ( ) E-COMPOSITE

	DATE RECEIVED	DATE SAMPLE	TIME	SAMPLE LOCATION	COLLECTED BY
SINGLE SAMPLE	4-5-85				
FIRST QUARTER					
SECOND QUARTER					
THIRD QUARTER					
FOURTH QUARTER		12/28/84	0950	BLDG RR-10	HUNEYCUTT

FOR LABORATORY USE ONLY

ANALYTICAL VALUES (pCi/liter)

	MSIS CONTAMINANT CODE	MSIS METHOD CODE	RESULTS	COUNTING ERROR	DETECTION LIMITS
GROSS ALPHA	4000	401	<1.0	± —	1.0
GROSS BETA	4100	401	2.9	± 1.7	1.0
RADIUM 226	4020			±	
RADIUM 228	4030			±	
TOTAL URANIUM	4006			±	
STRONTIUM 89	4172			±	
STRONTIUM 90	4174			±	
TRITIUM	4102			±	
CESIUM 134	4270			±	
IODINE 131	4264			±	
OTHER				±	

DATE ANALYZED 4-30-85

LAB SAMPLE # 85-3238-006

REMARKS:

DATE REPORTED 5-31-85

REPORTED BY Paul Bradford

ANALYZING LAB I.D. 0/9 2 1 7 0 0

T.C.

(ENCLOSURE 2)

GRAINGER LABORATORIES, INC.
5500 Commercial Avenue
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TEL. 919-787-3061

Site #5

WATER SYSTEM ID# 0 4 - 6 7 - 0 4 7

TYPE OF WATER: ( ) RAW (X) TREATED

SYSTEM NAME: COURTHOUSE BAY

ADDRESS: MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

SOURCE OF WATER: (X) GROUND ( ) SURFACE

COUNTY: ONSLOW

REPORT TO: COMMANDING GENERAL

ADDRESS: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

TELEPHONE: ( )

SAMPLE INFORMATION

TYPE OF SAMPLE: (X) D-REGULAR ( ) C-CHECK ( ) S-SPECIAL ( ) E-COMPOSITE

	DATE RECEIVED	DATE SAMPLE	TIME	SAMPLE LOCATION	COLLECTED BY
SINGLE SAMPLE	4-5-85				
FIRST QUARTER					
SECOND QUARTER					
THIRD QUARTER					
FOURTH QUARTER		12/28/84	0925	BLDG BB-7	HONEYCUTT

FOR LABORATORY USE ONLY

ANALYTICAL VALUES (pCi/liter)

	MSIS CONTAMINANT CODE	MSIS METHOD CODE	RESULTS	COUNTING ERROR	DETECTION LIMITS
GROSS ALPHA	4000	401	<1.0	± —	1.0
GROSS BETA	4100	401	1.6	± 0.9	1.0
RADIUM 226	4020			±	
RADIUM 228	4030			±	
TOTAL URANIUM	4006			±	
STRONTIUM 89	4172			±	
STRONTIUM 90	4174			±	
TRITIUM	4102			±	
CESIUM 134	4270			±	
IODINE 131	4264			±	
OTHER				±	

DATE ANALYZED 4-30-85

DATE REPORTED 5-31-85

LAB SAMPLE # 85-3238-005

REPORTED BY Paul Bradford

REMARKS:

ANALYZING LAB I.D. 0/9 2 1 7 0 0

T.C. (ENCLOSURE 2)

GRAINGER LABORATORIES, INC.
5500 Commercial Avenue
Raleigh, NC 27612
TEL. 919-787-3061

Site #4

WATER SYSTEM ID# 04 - 67 - 048

SYSTEM NAME: ONSLOW BEACH

ADDRESS: MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

COUNTY: ONSLOW

REPORT TO: COMMANDING GENERAL

ADDRESS: ATTN: NREA, MARINE CORPS BASE
CAMP LEJEUNE, NC ZIP 28542

TELEPHONE: ( )

TYPE OF WATER: ( ) RAW (x) TREATED

SOURCE OF WATER: (x) GROUND ( ) SURFACE

SAMPLE INFORMATION

TYPE OF SAMPLE: (x) D-REGULAR ( ) C-CHECK ( ) S-SPECIAL ( ) E-COMPOSITE

	DATE RECEIVED	DATE SAMPLE	TIME	SAMPLE LOCATION	COLLECTED BY
SINGLE SAMPLE	4-5-85				
FIRST QUARTER					
SECOND QUARTER					
THIRD QUARTER					
FOURTH QUARTER		12/28/84	0910	BLDG SBA-107	HUNEYCUTT

FOR LABORATORY USE ONLY

ANALYTICAL VALUES (pCi/liter)

	MSIS CONTAMINANT CODE	MSIS METHOD CODE	RESULTS	COUNTING ERROR	DETECTION LIMITS
GROSS ALPHA	4000	401	<1.0	± —	1.0
GROSS BETA	4100	401	1.2	± 0.8	1.0
RADIUM 226	4020			±	
RADIUM 228	4030			±	
TOTAL URANIUM	4006			±	
STRONTIUM 89	4172			±	
STRONTIUM 90	4174			±	
TRITIUM	4102			±	
CESIUM 134	4270			±	
IODINE 131	4264			±	
OTHER				±	

DATE ANALYZED 4-30-85

LAB SAMPLE # 85-3238-004

REMARKS:

DATE REPORTED 5-31-85

REPORTED BY Paul Bufford

ANALYZING LAB I.D. 0/9 2 1 7 0 0

T.C. (ENCLOSURE 2)

RADIONUCLIDE SAMPLING

4TH QUARTER

SAMPLE #	BLDG #	SYSTEM	DATE	TIME	COLLECTOR(S)
25A+B	4022	HB	12/27/84	1326	H:B
SITE 1	(FIRE STATION)				
26A+B	TT-44	TT	12/27/84	1352	H:B
SITE 2	(COMMUNITY BLDG)				
27A+B	65	HP	12/27/84 ~~[illegible]~~	1440	H+B
SITE 3	(SEWAGE LAB)				
28A+B	SBA-107 Sewage Plant ~~CAMPSITE~~	OB	12/28/84 ~~12/29/84~~	0910 ~~[illegible]~~	Hunnicutt, Barbee
SITE 4	(BESIDE BA 197 THM SITE)				
29A+B	BB-7	CHB	12/28/84	0925	H:B
SITE 5	(MESS HALL)				
30A+B	RR-10	RR	12/28/84	0950	H:B
SITE 6	(EXCHANGE)				
31A+B	G-770	MCAS	12/28/84	1030	H+B
SITE 7	(DISPENSARY)				
32A+B	M-231	CJ	12/27/84	1409	H:B
SITE 8	(BOQ)				

RCVD
26 JUNE

GLI
Grainger Laboratories Incorporated
Analytical and Consulting Chemists

DATE 6/18/85
GLI# 0853238

Quality Control Lab,USMCB
Att:Elizabeth Betz,Supvsr
NREAD, Building 1103
Camp Lejeune,NC 28542

SUBJECT:ANALYSIS OF SAMPLES RECEIVED 4/05/85.

REFERENCE: PO NUMBER M67001-84-M-5159

RESULTS

SAMPLE NUMBER: 0853238-001
IDENTIFIER: SITE #1

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	1.2	1.0	MSIS MC 401
TOTAL BETA RADIATION	pCi/L	3.0	1.0	MSIS MC 401

SAMPLE NUMBER: 0853238-002
IDENTIFIER: SITE #2

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	MSIS MC 401
TOTAL BETA RADIATION	pCi/L	3.6	1.0	MSIS MC 401

SAMPLE NUMBER: 0853238-003
IDENTIFIER: SITE #3

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	1.2	1.0	MSIS MC 401
TOTAL BETA RADIATION	pCi/L	2.5	1.0	MSIS MC 401

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SAMPLE NUMBER: 0853238-004
IDENTIFIER: SITE #4

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	MSIS MC 401
TOTAL BETA RADIATION	pCi/L	1.2	1.0	MSIS MC 401

SAMPLE NUMBER: 0853238-005
IDENTIFIER: SITE #5

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	MSIS MC 401
TOTAL BETA RADIATION	pCi/L	1.6	1.0	MSIS MC 401

SAMPLE NUMBER: 0853238-006
IDENTIFIER: SITE #6

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	MSIS MC 401
TOTAL BETA RADIATION	pCi/L	2.9	1.0	MSIS MC 401

SAMPLE NUMBER: 0853238-007
IDENTIFIER: SITE #7

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	MSIS MC 401
TOTAL BETA RADIATION	pCi/L	14.4	1.0	MSIS MC 401

SAMPLE NUMBER: 0853238-008
IDENTIFIER: SITE #8

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	MSIS MC 401
TOTAL BETA RADIATION	pCi/L	BDL	1.0	MSIS MC 401

BDL: Below detection limit

APPROVED BY Robert W. Harris (WWB)
LABORATORY SUPERVISOR

W. Paul Bedford
GENERAL LABORATORY MANAGER

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT OUR CUSTOMER SERVICE DEPARTMENT AT 787-3061.

GLI

Grainger Laboratories Incorporated

Analytical and Consulting Chemists

July 29, 1985
GLI #0853238

Quality Control Lab, USMCB
Attention: Elizabeth Betz, Supervisor
NREAD, Building 1103
Camp Lejeune, NC 28542

Subject: Analysis of Samples Received 04/05/85

Sample Identification: PO Number M67001-84-M-5159

0853238-007
Site #7

RESULTS

PARAMETER	RESULT	DETECT LIMIT	METHOD
Radium 226, pCi/Liter	< 0.6	0.6	MSIS MC 417
Radium 228, pCi/Liter	0.43	0.4	MSIS MC 418

W. Paul Brafford

W. Paul Brafford
General Laboratory Manager

WPB/km

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(ENCLOSURE 2)

	HP	MCAS	HB	TT	CJ	RR	CHD	OB
GROSS ALPHA (<5 pCi/l)								
1ST ~~3-27-84~~ 3/84	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2ND	<1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
3RD	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4TH	1.2	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0
TOTAL	4.6	<4.0	4.2	<4.0	<4.0	<4.0	<4.0	<4.0
AVERAGE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
GROSS BETA (<50 pCi/l)								
1ST	2.7	10.4	1.5	2.9	<1.0	1.8	2.3	<1.0
2ND	4.0	7.7	1.5	<1.0	<1.0	1.4	2.8	2.7
3RD	4.1	8.7	3.6	4.2	4.5	<1.0	1.1	1.3
4TH	2.5	14.4	3.0	3.6	<1.0	2.9	1.6	1.2
TOTAL	13.3	41.2	9.6	10.7	1.5	6.1	7.8	5.2
AVERAGE	3.3	10.3	2.4	2.7	<1.0	1.5	2.0	1.3
RADIUM 226 (<3 pCi/l)								
1ST		<0.6						
2ND		<0.6						
3RD		<0.6						
4TH		<0.6						
TOTAL		0						
AVERAGE		<0.6						
RADIUM 228 (5 pCi/l)								
1ST		1.4						
2ND		<0.4						
3RD		<0.4						
4TH		<0.43						
TOTAL		<0.4						
AVERAGE								

RADIONUCLIDE SAMPLING

3RD QUARTER

SAMPLE #	BLDG #	SYSTEM	DATE	TIME	COLLECTOR(S)
17 A+B	4022 (FIRE STATION)	HB	9/21/84	0857	H & B
18 A+B	TT-44 (COMMUNITY BLDG)	TT	9/21/84	0905	H & B
19 A+B	6 (SEWAGE LAB)	HP	9/21/84	0830	H & B
20 A+B	CAMPSITE (BESIDE BA 197 THM SITE)	OB'	9/21/84	1343	H & B
21 A+B	BB-7 (MESS HALL)	CHB'	9/21/84	1312	H & B
22 A+B	RR-10 (EXCHANGE)	RR	9/21/84	1135	H & B
23 A+B	G-770 (DISPENSARY)	MCAS	9/21/84	0945	H & B
24 A+B	M-231 (BOQ)	CJ	9/21/84	0924	H & B

GLI

Grainger Laboratories Incorporated

Analytical and Consulting Chemists

DATE 12/19/84
GLI# 0851190

Quality Control Lab,USMCB
Att:Elizabeth Betz,Supvsr
NREAD, Building 1103
Camp Lejeune,NC 28542

SUBJECT:ANALYSIS OF SAMPLES RECEIVED 10/25/84.

REFERENCE: PO NUMBER M67001-84-M-5159

RESULTS

SAMPLE NUMBER: 0851190-001
IDENTIFIER: 17 A&B

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	SM703
TOTAL BETA RADIATION	pCi/L	3.6	1.0	SM703

SAMPLE NUMBER: 0851190-002
IDENTIFIER: 18 A&B

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	SM703
TOTAL BETA RADIATION	pCi/L	4.2	1.0	SM703

SAMPLE NUMBER: 0851190-003
IDENTIFIER: 19 A&B

PARAMETER	UNIT OF MEASURE	RESULT	DETECT LIMIT	METHOD
TOTAL ALPHA RADIATION	pCi/L	BDL	1.0	SM703
TOTAL BETA RADIATION	pCi/L	4.1	1.0	SM703

BDL: BELOW DETECTION LIMIT

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GLI

Grainger Laboratories Incorporated

Analytical and Consulting Chemists

DATE 12/19/84
GLI# 0851190

APPROVED BY Robert W. Harris
LABORATORY SUPERVISOR

James Wheeler
GENERAL LABORATORY MANAGER

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT OUR CUSTOMER SERVICE REPRESENTATIVE, ANITA STUTTS.

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GLI

Grainger Laboratories Incorporated

Analytical and Consulting Chemists

5500 Commercial Avenue
Raleigh, NC 27612
(919) 787-3061

1040 Greenfield Street
Wilmington, NC 28402
(919) 763-9793

December 13, 1984
GLI #84-12021

Camp Lejeune
QC Lab NREAD, Bldg. 1103
Camp Lejeune, NC 28542

Attention: Elizabeth Betz

Subject: Analysis of Samples Received 9-28-84

Reference: Purchase Order # M67001-84-M-5159
Identification of Samples:

1. 20A and B
2. 21A and B
3. 22A and B
4. 23A and B
5. 24A and B

RESULTS

	1	2	3	4	5
Gross Alpha, pCi/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Gross Beta, pCi/L	1.3	1.1	< 1.0	8.7	1.5
Radium 226, pCi/L	-	-	-	< 0.6	-
Radium 228, pCi/L	-	-	-	< 0.4	-

W. Paul Brafford
General Laboratory Manager

WPF/km

RADIONUCLIDE SAMPLING

2ND QUARTER

SAMPLE #	BLDG #	SYSTEM	DATE	TIME	COLLECTOR
9 A+B	4022 (MIDWAY PARK FIRE STATION)	HOLCOMB BLVD	6/27/84	0900	Hunegnett Barber
10 A+B	TT-44 (COMMUNITY BLDG)	TARAWA TERRACE	6/27/84	0922	
11 A+B	65 (SEWAGE LAB)	HADNOT POINT	6/27/84	1500	
12 A+B	CAMPSITE (BESIDE BA 197 THM SITE)	ONSLOW BEACH	6/27/84	1418	
13 A+B	BB-7 (MESS HALL)	COURTHOUSE BAY	6/27/84	1405	
14 A+B	RR-10 (EXCHANGE)	RIFLE RANGE	6/27/84	1340	
15 A+B	G-770 (DISPENSARY)	MCAS	6/27/84	1220	
16 A+B	M-231 (BOQ)	CAMP JOHNSON	6/27/84	0940	

Grainger Laboratories Incorporated

Analytical and Consulting Chemists

5500 Commercial Avenue
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(919) 787-3061

1040 Greenfield Street
Wilmington, NC 28402
(919) 763-9793

September 13, 1984
84-11360

Quality Control Lab, NREAD
Facilities, MCB
Camp Lejeune, NC 28542

Attention: Ms. Elizabeth Betz

Subject: Analyses of Samples Received 7-6-84

Sample Identification: Purchase Order M67001-84-M-5159

1. Sample #9A & 9B
2. Sample #10A & 10B
3. Sample #11A & 11B
4. Sample #12A & 12B
5. Sample #13A & 13B
6. Sample #14A & 14B
7. Sample #15A & 15B
8. Sample #16A & 16B

RESULTS

See results on attached page.

W. Paul Brafford
Laboratory Manager

WPB:sb

(ENCLOSURE 2)

(ENCLOSURE 2)

RESULTS

	1	2	3	4	5	6	7	8
Gross Alpha, pCi/l	<1.0	<1.0	<1.4	<1.0	<1.0	<1.0	<1.0	<1.0
Gross Beta, pCi/l	1.5	<1.0	4.0	2.7	2.8	1.4	7.7	<1.0
Radium 226, pCi/l	-	-	-	-	-	-	<0.6	-
Radium 228, pCi/l	-	-	-	-	-	-	<0.4	-

RADIONUCLIDE SYSTEM

1ST QUARTER

SAMPLE #	BLDG #	SYSTEM	DATE	TIME	COLLECTOR
1 A+B	4022 (M.P FIRE STATION)	HOLCOMB BLVD	3/27/84	1136	Huneycutt
2 A+B	TT-44 (COMMUNITY BLDG)	TARAWA TERRACE	3/27/84	1125	Huneycutt
3 A+B	65 (Q.C. LAB)	HADNOT POINT	3/30/84	0915	EO Betz
4 A+B	~~BA-115~~ camp site ~~Beach~~ BA197 (TTB site) (OFFICER'S ~~BA~~VILION) Samuel	ONSLOW BEACH	3/30/84	1315	Huneycutt
5 A+B	BB-7 (MESS HALL)	COURTHOUSE BAY	3/30/84	1340	Huneycutt
6 A+B	RR-10 (EXCHANGE)	RIFLE RANGE	3/30/84 ~~1400~~	1400	Huneycutt
7 A+B	G-770 (DISPENSARY)	~~MARINE~~ MCAS ~~CAMP GEIGER~~	3/27/84	1047	Huneycutt
8 A+B	M-231 (BOQ)	CAMP ~~MON~~ JOHNSON	3/27/84	1110	Huneycutt

RADIONUCLIDE SAMPLING
INFORMATION

1st Quarter

Send To: Grainger Laboratories
5500 Commercial Avenue
Raleigh, NC 27612

Sample #	System	Time	Date
1 A&B	HB	1136	27 Mar 84
2 A&B	TT	1125	27 Mar 84
3 A&B	HP	0915	30 Mar 84

Purchase Order: M67001-84-M-5159

Point of Contact: Elizabeth A. Betz
Water Quality Control Lab
NREAD, Facilities, MCB
Camp Lejeune, NC 28542
(919) 451-5977

RADIONUCLIDE SAMPLING
INFORMATION

1st Quarter

Send To: Grainger Laboratories
5500 Commercial Avenue
Raleigh, NC 27612

Sample #	System	Time	Date
4 A&B	OB		30 Mar 84
5 A&B	CHB		30 Mar 84
6 A&B	RR		30 Mar 84

Purchase Order: M67001-84-M-5159

Point of Contact: Elizabeth A. Betz
Water Quality Control Lab
NREAD, Facilities, MCB
Camp Lejeune, NC 28542
(919) 451-5977

RADIONUCLIDE SAMPLING
INFORMATION

1st Quarter

Send To: Grainger Laboratories
5500 Commercial Avenue
Raleigh, NC 27612

Sample #	System	Time	Date
7 A&B	MCAS	1047	27 Mar 84
8 A&B	CJ	1110	27 Mar 84

Purchase Order: M67001-84-M-5159

Point of Contact: Elizabeth A. Betz
Water Quality Control Lab
NREAD, Facilities, MCB
Camp Lejeune, NC 28542
(919) 451-5977

GLI

Grainger Laboratories Incorporated

Analytical and Consulting Chemists

5500 Commercial Avenue
Raleigh, NC 27612
(919) 787-3061

1040 Greenfield Street
Wilmington, NC 28402
(919) 763-9793

May 22, 1984
84-10509

Quality Control Lab, NREAD
Facilities, MCB
Camp Lejeune, NC 28542

Attention: Elizabeth A. Betz

Subject: Analyses of Samples Received 4-9-84

Sample Identification: Purchase Order No. M67001-84-M-5159

1. #1A + B, System HB, Time 11:36, Date 3-27-84
2. #2A + B, System TT, Time 11:25, Date 3-27-84
3. #3A + B, System HP, Time 09:15, Date 3-30-84

RESULTS

	1	2	3	Detection Limit
Gross Alpha, pCi/liter	<1.0	<1.0	<1.0	1.0
Gross Beta, pCi/liter	1.5 ± 1.0	2.9 ± 2.5	2.7 ± 2.3	1.0

W. Paul Brafford

W. Paul Brafford
General Laboratory Manager

WPB:pph

Customer #92400

GLI

Grainger Laboratories Incorporated

Analytical and Consulting Chemists

5500 Commercial Avenue
Raleigh, NC 27612
(919) 787-3061

1040 Greenfield Street
Wilmington, NC 28402
(919) 763-9793

May 22, 1984
84-10508

Water Quality Control Lab, NREAD
Facilities, MCB
Camp Lejeune, NC 28542

Attention: Elizabeth Betz

Subject: Analyses of Samples Received 4-9-84

Sample Identification: Purchase Order No. M67001-84-M-5159

1. #4A + B, System OB, Time 13:15, Date 3-30-84
2. #5A + B, System CHB, Time 13:40, Date 3-30-84
3. #6A + B, System RR, Time 14:00, Date 3-30-84

RESULTS

	1	2	3	Detection Limit
Gross Alpha, pCi/liter	<1.0	<1.0	<1.0	1.0
Gross Beta, pCi/liter	<1.0	2.3 ± 2.0	1.8 ± 1.5	1.0

W. Paul Brafford

W. Paul Brafford
General Laboratory Manager

WPB:pph

Customer #92400

GLI

Grainger Laboratories Incorporated

Analytical and Consulting Chemists

5500 Commercial Avenue
Raleigh, NC 27612
(919) 787-3061

1040 Greenfield Street
Wilmington, NC 28402
(919) 763-9793

July 10, 1984
84-10510

Water Quality Control Lab,
NREAD, Facilities, MCB
Camp Lejeune, NC 28542

Attention: Ms. Elizabeth Betz

Subject: Analyses of Samples Received 4/9/84

Sample Identification: Purchase Order No. M67001-84-M-5159

1. Sample #7A & B
2. Sample #8A & B

RESULTS

	1	2
Gross Alpha, pCi/liter	<1.0	<1.0
Gross Beta, pCi/liter	10.4	<1.0
Radium 226, pCi/liter	<0.6	-
Radium 228, pCi/liter	1.4	-

W. Paul Brafford

W. Paul Brafford
General Laboratory Manager

WPB:ss

Customer #92400

MAIN/EAB/mac
6280/7
4 May 1981

Mr. John Nantz
Water Supply Branch
Division of Health Services
North Carolina Department of Human Resources
Post Office Box 2092
Raleigh, North Carolina 27602

Dear Mr. Nantz:

Enclosed are copies of the results of the Radionuclide and Inorganic Chemical Analysis on the eight water treatment plant systems aboard Camp Lejeune Marine Corps Base. The Radionuclide sampling was conducted by the Water Quality Control Laboratory, Natural Resources and Environmental Affairs Division, Base Maintenance Department, from September 1979 through June 1980.

The samples were collected once every three months for a year, as required by the Safe Drinking Water Act. At the end of the sampling year the samples were sent to the Laboratory at the U. S. Army Environmental Hygiene Agency, Aberdeen Proving Ground, Maryland, for composite and analysis, as had been arranged by the Atlantic Division of the Naval Facilities Engineering Command, Norfolk, Virginia.

The Inorganic Chemical Analysis, for all parameters required by the Safe Drinking Water Act, except nitrates, was conducted in August 1979 by Jennings Laboratories, Incorporated, of Virginia Beach, Virginia. The nitrate analysis was conducted by the Water Quality Control Laboratory, Base Maintenance Department, Camp Lejeune, North Carolina, in September 1979.

Below is a table relating the sample identificatinn number, for the radionuclide and inorganic chemical results, to the name of the water treatment plant serving each system.

Sample Identification Number	Water Treatment Plant
1	Holcomb Boulevard
2	Tarawa Terrace
3	Hadnot Point
4	Onslow Beach
5	Courthouse Bay
6	Rifle Range
7	New River
8	Montford Point

MAIN/EAB/mac
6280/7

If additional information is needed regarding these results, please contact Ms. Elizabeth Betz, Supervisory Chemist, Water Quality Control Laboratory, Natural Resources and Environmental Affairs Division, Base Maintenance Department, telephone (919) 451-5977.

Sincerely,

Encl

BCC:
LANTDIV, NAVFACENGCOM

EAB Copy

Results of Analyzing Drinking Water Samples

Sample Identification	RCB Lab No.	Picocurie per Liter ±2 Standard Deviations Gross Beta	Gross Alpha	Tritium
1	W722	1.8 ± 1.0	1.5 ± 1.1	< 451
2	W723	3.3 ± 1.0	1.3 ± 1.0	< 451
3	W724	2.7 ± 0.9	3.0 ± 1.2	< 451
4	W725	1.9 ± 0.9	< 1.3	< 451
5	W726	< 1.3	1.6 ± 1.3	< 451
6	W727	< 1.3	< 1.3	< 451
7	W728	6.0 ± 1.3	< 1.6	< 451
8	W729	< 1.6	< 1.6	< 451

[redacted]

Inorganic Chemical Analysis Results

Parameter	Unit	Sample Identification 1	2	3	4	5	6	7	8
Arsenic	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Cadmium	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	mg/l	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Lead	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mercury	mg/l	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Selenium	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoride	mg/l	1.05	0.71	1.01	0.42	0.34	0.34	1.07	0.47
Nitrate	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	0.05

ENCLOSURE

OPNAV 5216/144 (REV. 6-70)
S/N 0107-LF-778-8099

DDS

DEPARTMENT OF THE NAVY

Memorandum

DATE: 20 October 1980

FROM: Ms. Betz, Chemist

TO: Mr. Sharpe, Ecologist

SUBJ: Letter from U. S. Army Environmental Hygiene Agency of 24 Sept 1980

Encl: Letter from U.S. Army Environmental Hygiene Agency of 24 Sept 1980

1. The letter encloses the results of the Radionuclide Analysis of our eight potable water systems.

2. The analysis was arranged through Lant Div (Contact Point-Wallace Carter). We collected the samples, one sample from each system for each quarter for a year. The samples were collected as follows:

Sample	System	Bldg	Location	Dates
1	Holcomb Blvd.	4022	Midway Park Fire Station	10 Sep 79, 14 Dec 79, 10 Mar 80, 13 Jun 80
2	Tarawa Terr.	TT-44	Community Bldg.	10 Sep 79, 14 Dec 79, 10 Mar 80, 13 Jun 80
3	Hadnot Point	65	Quality Control Lab.	10 Sep 79, 14 Dec 79, 14 Mar 80, 13 Jun 80
4	Onslow Beach	BA-115	Officer's Pavilion	10 Sep 79, 14 Dec 79, 14 Mar 80, 13 Jun 80
6	Rifle Range	RR-10	Exchange	10 Sep 79, 14 Dec 79, 14 Mar 80, 13 Jun 80
7	Camp Geiger	G-770	Dispensary	10 Sep 79, 14 Dec 79, 10 Mar 80, 13 Jun 80
8	Montford Point	M-231	BOQ	10 Sep 79, 14 Dec 79, 10 Mar 80, 13 Jun 80
5	Courthouse Bay	BB-7	Mess Hall	10 Sep 79, 14 Dec 79, 14 Mar 80, 13 Jun 80

Sample points were selected by Lant Div. On 7 August 1980, the samples were sent directly to U. S. Army Environmental Hygiene Agency for analysis, as directed by Lant Div. The quarterly samples were to be composited by the Army's Lab and run as one sample from each system.

3. The limits are, According to the S. D. W. A., as follows:

Gross Beta	50 pCi/1	pCi/1=Picocurie per liter
Gross Alpha	15 pCi/1	
Tritium	20,000 pCi/1	

Comparing the results with the limits shows that we are well under the limits.

4. Monitoring is only required every four years, with sampling done the fourth year. Therefore we will not be required to sample again until September 1983.

5. I would like to have a copy of the letter and results to keep on file in the lab. Mr. Hatcher and Mr. Price would probably be interested in the results.

EaB

DEPARTMENT OF THE ARMY Mr. Swatski/gll/584-2619/2637
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY
ABERDEEN PROVING GROUND, MARYLAND 21010

HSE-LR-R

29 SEP 1980

SUBJECT: Results of Analyzing NIPDWR Samples

Commander
Quality Control Lab
NREA Div., Base Maintenance Dept.
MCB Camp Lejeune, NC 28542

1. Reference:

a. Title 40, Code of Federal Regulations (CFR), 1979 ed., Part 141, National Interim Primary Drinking Water Regulations (NIPDWR).

b. Ltr, 1122C/WMK, Naval Facilities Engineering Command, 11 Jun 79, subject: Radionuclide for Potable Water.

c. Memo, Camp Lejeune, 6 Aug 80, subject: Radionuclide Analysis for Potable Water.

2. Results of analyzing NIPDWR samples for gross beta, gross alpha, and tritium are attached as Inclosure 1.

3. These results are below the screening tests for radioactivity in drinking water (ref para 1a).

FOR THE COMMANDER:

JOHN F. MAZUR
MAJ, MSC
Director, Laboratory Services

1 Incl
as

CF:
NAVFACENGCOMHQ, ATTN: Code 1122C

To Lab
HW

Results of Analyzing Drinking Water Samples

Sample Identification	RCB Lab No.	Picocurie per Liter ±2 Standard Deviations Gross Beta	Gross Alpha	Tritium
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OPNAV 5216/144 (REV. 6-70)
S/N 0107-LF-778-8099

DEPARTMENT OF THE NAVY

Memorandum

DATE: 20 October 1980

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TO: Mr. Sharpe, Ecologist

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Encl: Letter from U.S. Army Environmental Hygiene Agency

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20 October 1980

Mr. Bates, Chemist

Mr. Shaver, Biologist

Letter from U. S. Army Environmental Hygiene Agency

Encl: Letter from U.S. Army Environmental Hygiene Agency

1. The letter encloses the results of the Radionuclide Analysis of our eight potable water systems.

2. The analysis was arranged through Lant Div (Contact Robin-Wallace Carter). We collected the samples, one sample from each system for each quarter for a year. The samples were collected as follows:

Sample	System	Bldg	Location	Dates
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3	Hadnot Point	65	Quality Control Lab.	10 Sep 79, 14 Dec 79, 14 Mar 80, 13 Jun 80
4	Onslow Beach	BA-115	Officer's Pavilion	10 Sep 79, 14 Dec 79, 14 Mar 80, 13 Jun 80
5	Rifle Range	RR-10	Exchange	10 Sep 79, 14 Dec 79, 14 Mar 80, 13 Jun 80
6	Camp Geiger	G-270	Dispensary	10 Sep 79, 14 Dec 79, 10 Mar 80, 13 Jun 80
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OPNAV 5216/144 (REV. 6-70)
S/N 0107-LF-778-8097

DEPARTMENT OF THE NAVY

Memorandum

DATE: 6 August 1980

FROM: Quality Control Lab., NREA Div., Base Maintenance Dept., MCB Camp Lejeune, NC

TO: US Army Environmental Hygiene Agency, ABERDEEN PROVING Attn: HSE-LA

SUBJ: Radionuclide Analysis for Potable Water

ENCL: (1) Potable Water Samples-32 total

These samples are from the eight potable water systems aboard MCB Camp Lejeune. There are four samples from each system, one for each quarter, to be composited and analyzed for radionuclide content in accord~~ing~~ANCE with the Safe Drinking Water Act.

ONE IN EACH BOX

6 BOXES 5 OF 6 EACH, 1 OF 2 EACH = 32

6 August 1980

Quality Control Lab., WRA Div., Base Maintenance Dept., MCB Camp Lejeune, NC

US Army Environmental Hygiene Agency, Attn: HSE-LA

Radionuclide Analysis for Potable Water

ENCL: (1) Potable Water Samples-32 total

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ROUTINE REPLY, ENDORSEMENT, TRANSMITTAL OR INFORMATION SHEET
NAVEXOS-3989 (Rev. 12-62) 0104 901 49

DATE: 20 MAY 1980

FROM: Commander, Atlantic Division, Naval Facilities Engineering Command

FILE NUMBER:

SUBJECT: Radionuclide analysis for potable water

REFERENCE: (a) P.L. 93-523, Safe Drinking Water Act

TO: Miss Elizabeth Betz
Water Quality Laboratory
Natural Resources and Environmental Affairs Division
Base Maintenance Department
Camp Lejeune, NC 28542

ENCLOSURE: (1) Radionuclide sampling bottles - 8 total

This form may be used in a window envelope.

VIA

_____ Endorsement on

[X] FORWARDED [ ] RETURNED [ ] FOLLOW-UP [ ] REQUEST [ ] ADVISE [ ] SUBMIT

X	MESSAGE	X	MESSAGE	X	MESSAGE
X	FOR APPROPRIATE ACTION		SUBJECT DOCUMENT(S) WAS/WERE FORWARDED TO YOUR OFFICE _____ AS A MATTER UNDER YOUR JURISDICTION.		CERTIFY ENCLOSURE _____ AS TO RECEIPT AND ACCEPTANCE OF MATERIAL AND FORWARD TO _____
	FOR INFORMATION OR CERTIFICATION AND/OR FILE.		SUBJECT DOCUMENTS WAS/WERE APPROVED _____ AND FORWARDED TO YOU.		_____ COPIES OF SUBJECT CHANGE ORDER AMENDMENT OR MODIFICATION
	[ ] APPROVED [ ] DISAPPROVED		_____ COPY(IES) OF THIS CORRESPONDENCE WITH YOUR REPLY.		CHANGE NOTICE TO THE SUPPLIER
	APPROVAL [ ] IS [ ] IS NOT RECOMMENDED		ENCLOSURE(S) _____ IS/ARE FORWARDED AS REQUESTED BY REFERENCE _____		_____ COPIES OF APPLICABLE PLANS AND/OR SPECIFICATIONS.
	CONCURRING IN RECOMMENDATIONS MADE IN THE BASIC CORRESPONDENCE.		ENCLOSURE(S) IS/ARE RETURNED FOR CORRECTION AS INDICATED.		FOR PLAN ACTION AS INDICATED
	COMMENTS AND/OR RECOMMENDATIONS.		CORRECTED ENCLOSURE(S) AS REQUESTED		CLASSIFICATIONS OF DEFECTS FOR SUBJECT ITEMS
	MAILING LIST ACTION		SUBJECT PERSON'S ATTENTION SHOULD BE INVITED TO THIS MATTER		CONFIRMATION THAT INSPECTION OR SOURCE INSPECTION IS NOT REQUIRED
	FOR ASSIGNMENT OF BUREAU FILE NUMBER(S)		SUBJECT PERSON(S) REPORTED TO THIS COMMAND _____		INSPECTION UNDER THE SUBJECT SUBCONTRACT IS NOT REQUIRED
	ON A LOAN BASIS RETURN BY _____		SUBJECT PERSON(S) COMPLETED HIS/THEIR DUTY AND WAS/WERE DETACHED FROM THIS COMMAND _____		_____ COPIES OF SUBJECT PURCHASE DOCUMENT. IF SOURCE INSPECTION OR PROGRESSING IS REQUIRED
	SIGN ORIGINAL RECEIPT AND RETURN TO THIS OFFICE.		NAME AND LOCATION OF SUPPLIER OF SUBJECT ITEMS.		STATUS OF MATERIAL ON SUBJECT PURCHASE DOCUMENT
	SUBJECT FILES, WHICH ARE LOCATED IN BOX NO. _____ SHIPMENT NO. _____		SUBCONTRACT NUMBER FOR SUBJECT ITEM		CLEARANCE AS INDICATED IN BASIC CORRESPONDENCE VERIFIED. NO REPLY UNLESS NEGATIVE.
	REPLY TO THE ABOVE REFERENCE(S) BY _____		SUBJECT PURCHASE DOCUMENT HAS BEEN REQUESTED AND WILL BE FORWARDED WHEN RECEIVED.		VERIFICATION OF NEED-TO-KNOW FOR VISIT PERSONNEL CLEARANCES VERIFIED.
	_____ COPY(IES) OF REFERENCE DESCRIBED ABOVE WAS/WERE NOT RECEIVED.		ENDORSEMENT _____ OF SUBJECT SUBCONTRACT IS BEING DELAYED PENDING RECEIPT OF BASIC PURCHASE DOCUMENT.		
	SUBJECT DOCUMENT(S) WAS/WERE FORWARDED TO _____		APPROPRIATION SYMBOL SUBHEAD AND CHARGEABLE ACTIVITY		
	SUBJECT DOCUMENT(S) IS/ARE WAS/WERE RETURNED FOR _____		WHETHER SUBJECT ITEMS ARE TO BE COMMERCIALLY SHIPPED OR AT GOVERNMENT EXPENSE		
			A CERTIFICATE IN LIEU OF SUBJECT BILL OF LADING WHICH HAS BEEN LOST.		SEE REMARKS ON THE REVERSE SIDE.

COPY TO

SIGNATURE: Wallace Carter

ROUTING AND TRANSMITTAL SLIP

Date 19 May 80

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1.		
2.		
3.		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

Re: Naval activities requiring radionuclide analysis for potable water. Return address for label attached. Questions may be addressed to Mr. Jones C, RBCD - USAEHA; 301-671-2619.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
USAEHA - ARQAD	Phone No. 3269

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

☆ GPO : 1977 O - 241-530 (3450)

ROUTINE REPLY, ENDORSEMENT, TRANSMITTAL OR INFORMATION SHEET
NAVEXOS-3989 (Rev. 12-62) 0104 901 4901

DATE: 20 MAY 1980

FROM: Commander, Atlantic Division, Naval Facilities Engineering Command

FILE NUMBER:

SUBJECT: Radionuclide analysis for potable water

REFERENCE: (a) P.L. 93-523, Safe Drinking Water Act

TO: Miss Elizabeth Betz
Water Quality Laboratory
Natural Resources and Environmental Affairs Division
Base Maintenance Department
Camp Lejeune, NC 28542

ENCLOSURE: (1) Radionuclide sampling bottles - 8 total

This form may be used in a window envelope.

VIA

____ Endorsement on

[X] FORWARDED [ ] RETURNED [ ] FOLLOW-UP [ ] REQUEST [ ] ADVISE [ ] SUBMIT

X	MESSAGE	X	MESSAGE	X	MESSAGE
X	FOR APPROPRIATE ACTION		SUBJECT DOCUMENT(S) WAS/WERE FORWARDED TO YOUR OFFICE ____ AS A MATTER UNDER YOUR JURISDICTION.		CERTIFY ENCLOSURE ____ AS TO RECEIPT AND ACCEPTANCE OF MATERIAL AND FORWARD TO ____
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	APPROVAL [ ] IS [ ] IS NOT RECOMMENDED		ENCLOSURE(S) ____ IS/ARE FORWARDED AS REQUESTED BY REFERENCE ____		____ COPIES OF APPLICABLE PLANS AND/OR SPECIFICATIONS.
	CONCURRING IN RECOMMENDATIONS MADE IN THE BASIC CORRESPONDENCE.		ENCLOSURE(S) IS/ARE RETURNED FOR CORRECTION AS INDICATED.		FOR PLAN ACTION AS INDICATED
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	MAILING LIST ACTION		SUBJECT PERSON'S ATTENTION SHOULD BE INVITED TO THIS MATTER		CONFIRMATION THAT INSPECTION OR SOURCE INSPECTION IS NOT REQUIRED
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	ON A LOAN BASIS RETURN BY ____		SUBJECT PERSON(S) COMPLETED HIS/THEIR DUTY AND WAS/WERE DETACHED FROM THIS COMMAND ____		____ COPIES OF SUBJECT PURCHASE DOCUMENT. IF SOURCE INSPECTION OR PROGRESSING IS REQUIRED
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	____ COPY(IES) OF REFERENCE DESCRIBED ABOVE WAS/WERE NOT RECEIVED.		ENDORSEMENT ____ OF SUBJECT SUBCONTRACT IS BEING DELAYED PENDING RECEIPT OF BASIC PURCHASE DOCUMENT.		
	SUBJECT DOCUMENT(S) WAS/WERE FORWARDED TO ____		APPROPRIATION SYMBOL SUBHEAD AND CHARGEABLE ACTIVITY		
	SUBJECT DOCUMENT(S) IS/ARE WAS/WERE RETURNED FOR ____		WHETHER SUBJECT ITEMS ARE TO BE COMMERCIALLY SHIPPED OR AT GOVERNMENT EXPENSE		
			A CERTIFICATE IN LIEU OF SUBJECT BILL OF LADING WHICH HAS BEEN LOST.		SEE REMARKS ON THE REVERSE SIDE.

COPY TO

SIGNATURE: Wallace Carter

☆ U.S. GOVERNMENT PRINTING OFFICE: 1969-393-710/S-199

D-26306

ROUTING AND TRANSMITTAL SLIP

Date 19 May 80

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1.		
2.		
3.		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

Re: Naval Activities Requiring radionuclide analysis for potable water. Return address, for label, attached. Questions may be addressed to Mr. Jones, C, RBCD - USAEHA.

301-671-2619

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
USAEHA-AROAD	Phone No. 3269

5041-102

U.S. G.P.O. 1979-285-092

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

FALL QUARTER '79
RADIONUCLEIDE SAMPLES

SAMPLE #	DIST SYSTM	BLDG #	TIME	10 SEPT, '79 ANDREW LUKE
1	HOLC. BLVD	4022	1115AM	MID PARK FIRE STA.
2	TT	TT-44	1145AM	COMMUNITY BLDG
3	HADNOT PT	65	1130PM	QC LAB
4	ONS BEACH	BA-115	1330PM	OFFICER'S PAVILION
5	C'HOUSE BAY	BB-7	1400PM	MESSHALL
6	R RANGE	RR-10	1420PM	EXCHANGE
7	CAMP GEIGER	G-770	1450PM	DISPENSARY
8	MONTFORD POINT	M-231	1510PM	BOQ

WINTER QUARTER '79

				14 DEC 79 ANDREW LUKE
1	HOLC BLVD	4022	0905AM	MID PK FIRE STA
2	TT	TT-44	0925AM	COMM. BLDG
3	HAD PT.	65	1200N	QC LAB
4	ONS BEACH	BA-101	1130	EXCHANGE SNACKBAR
5	C'HOUSE BAY	BB-7	1115	MESS HALL
6	R RANGE	RR-10	1040AM	EXCHANGE
7	CAMP GEIGER	G-770	1005AM	DISPENSARY
8	MONTFORD POINT	M-231	0940AM	BOQ

SPRING QUARTER '80

14 MAR 80 and 10 MAR 80 LUKE + BETZ

1	HOLC BLVD	4022	0945AM	MID PK. FIRE STA
2	TT	TT-44	1000AM	COMM. BLDG
3	HAD. PT	65	3/14/80 0945AM	Q.C. LAB
4	ONS BEACH	BA-101	3/14/80 1020AM	EXCHANGE SNACKBAR
5	C'HOUSE BAY	BB-7	3/14/80 1040AM	MESS HALL
6	R. RANGE	RR-10	3/14/80 1100AM	EXCHANGE
7	CAMP GEIGER	G-770	1120AM	DISPENSARY
8	MONTFORD POINT	M-231	1020AM	BOQ

SUMMER QUARTER, 1980
13 JUNE 80
ANDREW LUKE

SAMPLE #	DIST. SYSTEM	BLDG #	TIME	
1	HB	4022	1200 N	MID PARK FIRE STA
2	TT	TT-44	1210 PM	COMM BLDG
3	HP	65		QC LAB
4	OB	BA-101	1335 PM	EXCH SNACK BAR
5	CHB	BB-7	1350 PM	MESS HALL
6	RR	RR-10	1420	EXCHANGE
7	CC	G-770	1510	DISPENSARY
8	MP (CJ)	M-231	1550	BOQ

RADIOACTIVITY - RESULTS 11335