

NREAD/EAB

Charles E. Rundgren, Head  
Water Supply Branch  
Division of Health Services  
P. O. Box 2091  
Raleigh, NC 28602-2091

Dear Mr. Rundgren:

Enclosed are tables of results of Inorganic Chemical and Corrosivity analysis conducted in the past year, for all eight water treatment plants aboard Marine Corps Base, Camp Lejeune, as required by the Safe Drinking Water Act. Also enclosed is a table showing the construction materials used in our distribution systems.

The laboratory analysis was run by Grainger Laboratories, Inc in Raleigh, NC. The field analysis (temperature and pH) was run by personnel in the Quality Control Laboratory located in the Natural Resources and Environmental Affairs Division, Assistant Chief of Staff Facilities. Ms. Elizabeth Beta, Supervisory Chemist, Quality Control Laboratory, telephone (919)451-5977 is the point of contact in this matter.

Encl

Copy to:  
LANEDIV(COde 114)  
BMD, Util Dir  
Supvy Chem

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INORGANIC CHEMICAL RESULTS (mg/l) FOR SERIAL NO. 04-67-041 thru 048

<u>Parameter</u>	<u>Method</u>	<u>Containment Code</u>								
			<u>041</u>	<u>042</u>	<u>043</u>	<u>044</u>	<u>045</u>	<u>046</u>	<u>047</u>	<u>048</u>
Arsenic	123	1005	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Barium	101	1010	0.01	0.04	0.03	0.01	0.04	0.04	0.01	0.01
Cadmium	101	1015	0.0011	0.0005	0.0005	0.0005	0.0005	0.0005	0.0011	0.0005
Chromium	101	1020	0.003	0.003	0.003	0.003	0.017	0.004	0.003	0.003
Fluoride	107	1025	0.994	0.24	0.856	1.00	0.139	0.126	0.109	0.146
Lead	101	1030	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Mercury	103	1035	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nitrate (N)	109	1040	0.17	0.05	0.11	0.05	0.05	0.05	0.11	0.05
Selenium	123	1045	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Silver	101	1050	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Iron	101	1028	0.045	0.338	0.037	0.020	0.673	0.544	0.536	0.556
Manganese	101	1032	0.002	0.004	0.002	0.006	0.015	0.030	0.011	0.025
Sodium	101	1052	20.7	79.8	24.4	19.8	81.9	88.7	81.5	66.4

All Samples Collected (Except Sodium): 29 September 1982

Sodium Samples Collected: 3 September 1982

All Results Run by Grainger Laboratories (ID# 37709)

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## CORROSIVITY RESULTS FOR SERIAL NO. 04-67-041 thru 048

<u>PARAMETER</u>	<u>METHOD</u>	<u>CONTAMINANT CODE</u>	<u>041</u>	<u>042</u>	<u>043</u>	<u>044</u>	<u>045</u>	<u>046</u>	<u>047</u>	<u>048</u>
pH	135	1925	8.8	7.6	8.2	8.2	7.1	8.0	7.9	7.1
Temperature °C	130	1996	20.0	20.0	19.0	20.0	20.0	23.0	21.0	21.0
Total Alkalinity As CaCO <sub>3</sub> mg/l	142	1927	51.9	136	82.3	76.4	166	151	164	155
Total Filterable Residue mg/l	139	1930	106	320	10	152	126	230	246	140
Calcium As CaCO <sub>3</sub> mg/l	101	1919	40.9	48.0	56.1	101	41.9	44.3	50.0	111
Stability Index (Langelier)	140	1910	0.25	-0.59	0.03	0.19	-0.95	0.06	-0.12	-0.54

All samples collected: 3 September 1982

pH & temperature run by Quality Control Laboratory (ID #37807)

The rest of the results run by Grainger Lab (ID #37709)

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CONSTRUCTION MATERIALS SYSTEM SERIAL NO. 04-67-041 thru 048 (See Note 1)

<u>MATERIAL</u>	<u>041</u>	<u>042</u>	<u>043</u>	<u>044</u>	<u>045</u>	<u>046</u>	<u>047</u>	<u>048</u>
Lead from piping, solder, caulking, interior lining of distribution mains, alloys and home plumbing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Copper from piping and alloys, service lines and home plumbing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Galvanized piping, service lines and home plumbing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ferrous piping materials such as cast iron and steel	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Asbestos cement pipe	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vinyl lined asbestos cement pipe	No	No	No	No	No	No	No	No
Coal tar lined pipes and tanks	No	No	No	No	No	No	No	No
Other: PVC	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes

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Information obtained from:  
Water Treatment Section,  
 Utilities Branch  
 and  
 Outside Plumbing Section,  
 General Trades,  
 Maintenance & Repair Branch,  
 Base Maintenance Division

INORGANIC CHEMICAL RESULTS *(mg/l) for*

Results mg/l

Serial No. 04-67-0414-048

Parameter	Method	Contaminant		Results mg/l							
		Code		041	042	043	044	045	046	047	048
Arsenic	123	1005		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Barium	101	1010		0.01	0.04	0.03	0.01	0.04	0.04	0.01	0.01
Cadmium	101	1015		0.0011	0.0005	0.0005	0.0005	0.0005	0.0007	0.0011	0.0005
Chromium	101	1020		0.003	0.003	0.003	0.003	0.017	0.004	0.003	0.003
Fluoride	107	1025		0.994	0.24	0.856	1.00	0.139	0.126	0.109	0.146
Lead	101	1030		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Mercury	103	1035		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Nitrate(N)	109	1040		0.17	0.05	0.11	0.05	0.05	0.05	0.11	0.05
Selenium	123	1045		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Silver	101	1050		0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001
Iron	101	1028		0.045	0.338	0.037	0.020	0.673	0.544	0.536	0.556
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<del>Sodium</del>	101	1052		20.7	79.8	24.4	19.8	81.9	88.7	81.5	66.4

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