

# GRAINGER LABORATORIES

INCORPORATED

## ANALYTICAL AND CONSULTING CHEMISTS

709 West Johnson Street

Raleigh, North Carolina 27603

(919) 828-3360

### ANALYTICAL LABORATORY

Environment Analysis  
Construction Materials  
Identification of Unknowns  
Agriculture  
Fuels  
Textiles  
Chemicals  
Hazardous Waste

February 6, 1983  
83-6113

Commanding General  
Marine Corps Base  
Camp Lejeune, N.C. 28542

Attention: AC/S Facilities

Subject: Analyses of Samples Received 1/31/83

Sample Identification: Purchase Order No. M67001-82-M-5084

1. 312 A *	7. 318 A & 318 B
2. 313 A & 313 B	8. 319 A & 319 B
3. 314 A & 314 B	9. 320 A & 320 B
4. 315 A & 315 B	10. 321 A & 321 B
5. 316 A & 316 B	11. 322 A & 322 B
6. 317 A & 317 B	

\* 312 B broken in Transit

### RESULTS

<u>Sample</u>	<u>Chloroform</u>	<u>Bromodichloro- methane</u>	<u>Chlorodibromo- methane</u>	<u>Bromoform</u>	<u>Total Trihalo- methane</u>
1	2	8	15	22	47
2	4	14	41	69	128
3	3	15	44	54	116
4	4	15	40	48	107
5	4	14	33	46	97
6	36	14	4	<1	54
7	31	13	3	<1	47
8	37	14	5	<1	56
9	38	16	4	<1	58
10	34	13	3	<1	50
11	2	6	8	8	24

NOTE: All results reported in micrograms per liter.  
Analysis completed 2-4-83.

*Bruce A. Babson*

Bruce A. Babson  
Chemist

CLW

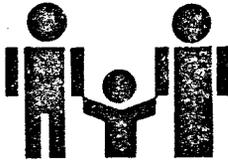
000005442

BAB/ab  
Customer #92400  
cc: Elizabeth Betz



To Down  
Bill.

11350



Ronald H. Levine, M.D., M.P.H.  
STATE HEALTH DIRECTOR

DIVISION OF HEALTH SERVICES  
P.O. Box 2091  
Raleigh, N.C. 27602-2091

December 10, 1982

CLW

000005443

Commanding General  
United States Marine Corps  
Marine Corps Base  
Camp Lejeune, NC 28542  
Attn: Asst. Chief of Staff-Facilities

Re: Groundwater monitoring at Camp Lejeune Landfill - Permit #67-03

Dear Sir:

As noted on the approved operational plan of July 20, 1982, four groundwater monitoring wells were to be installed around the site. Condition number 9 of the permit stated that Camp Lejeune would be responsible for sampling and analyses of the wells. I will outline the parameters to be analyzed and sampling procedures below:

The following parameters are to be sampled and analyzed at least annually:

- |                        |          |                       |           |
|------------------------|----------|-----------------------|-----------|
| Arsenic                | Lead     | Nitrate               | Color     |
| Barium                 | Mercury  | Fluoride              | Iron      |
| Cadmium                | Selenium | Chloride              | Manganese |
| Chromium               | Silver   | Copper                | Sulfate   |
| pH                     |          | Total Organic Carbon  |           |
| Total Dissolved Solids |          | Total Organic Halogen |           |
| Zinc                   |          | Water Elevation       |           |
| Conductivity           |          |                       |           |

Prior to collecting the samples, water elevations should be measured and recorded. The well should then be purged at least 2-3 volumes of the well casing. This is to assure fresh groundwater is being collected. Samples may then be drawn using a PVC bailer and collected in clean plastic containers. Water collected for the total organic halogen analysis should be collected in glass containers which have been properly cleaned.

Between wells the bailer should be thoroughly rinsed in tap water. An even better method of preventing cross-contamination is to use a separate bailer for each well which can then be cleaned back in the lab. This option is at your discretion.

Samples should be iced and transported to the lab for analysis. A chain of custody is not required, unless you feel it is needed for your records.

Samples should be collected and analyzed during the month of April each year and a copy of the results submitted to me as they become available.