

**ESE**

**ENVIRONMENTAL SCIENCE  
AND ENGINEERING, INC.**

7/16/84-3429  
July 16, 1984

ESE No. 84 222 200

Mr. J.G. Wallmeyer  
Engineer In Charge  
Department of the Navy  
Atlantic Division, Code 1143  
Naval Facilities, Engineering Command  
Bldg. N23, Gilbert Street  
Norfolk, Virginia 23511

RE: Contract No. N62470-83-C-6106, Confirmation Study,  
Marine Corps Base, Camp Lejeune, North Carolina

Dear Gerry:

Attached is the monthly progress report for the period of June 16,  
1984, through July 15, 1984.

Please do not hesitate to call me if you have any questions regarding  
this progress report.

Sincerely,



Russell V. Bowen, P.E.  
Project Manager

RVB/njb

attachment

cc: B.N. McMaster

MONTHLY PROGRESS REPORT

PERIOD 6/16/84 THROUGH 7/15/84

MARINE CORPS BASE, CAMP LEJEUNE,  
NORTH CAROLINA, CONFIRMATION STUDY

WORK ACCOMPLISHED

1. Completed installation, development, and surveying of all ground water monitoring wells.
2. Collected ground water samples from 36 of 75 wells to be sampled (Sites 1,2,9,21,22,24,28,30,73, and 74), and shipped samples to ESE's laboratory in Gainesville, Florida.

PROBLEMS ENCOUNTERED

1. The ESE Field Geologist discovered that one batch of filter sand being used by the well drilling subcontractor, STS, Inc., to install ground water monitoring wells was slightly contaminated with gasoline. An investigation of the use of this filter sand indicated that 5 previously installed monitoring wells (Wells 1,2, and 3 at Site 68, Well 1 at Site 41, and Well 1 at Site 36) were potentially contaminated with this filter sand. Subsequently, each of the 5 potentially contaminated wells was pumped to flush any contamination out of the filter sand, and a new well was installed in the vicinity of each of the 5 potentially contaminated wells at no cost to NAVFACENGCOM.
2. A two week delay in the project schedule is anticipated because of problems associated with the breakdown and availability of equipment, and the installation of 5 additional wells as described above. Consequently, the field investigation is now scheduled for completion on August 4, 1984.

PERCENTAGE OF WORK COMPLETED

Project is approximately 50 percent complete.

PLANS FOR FOLLOWING MONTH

Complete collection of ground water, surface water, soil, sediment and fish tissue samples, and ship samples to ESE laboratory in Gainesville, Florida for analysis.

10-2-83  
10/2/83

CONFIRMATION OF ANY CLARIFICATIONS OR TECHNICAL GUIDANCE

1. ESE will sample and analyze ground water samples collected from the 5 potentially contaminated monitoring wells identified above and from each of the 5 wells installed in the vicinity of the 5 potentially contaminated wells. Samples will be collected at the beginning and at the end of the Verification Step sampling program, and the analytical results will be used to determine if the potentially contaminated filter sand or past waste disposal operations are the cause of any detected contamination. Following initial sampling of the 5 potentially contaminated wells, each well will be pumped during subsequent Verification Step sampling events to flush any remaining contamination from the filter sand.
2. Relative to the onsite investigation of Site 45, Campbell Street Fuel Farm, ESE will focus on the two known underground fuel leak areas on the Marine Corps Air Field (Rapid Refueling Area and unpaved area southwest of Rapid Refueling Area) in conducting the soil boring investigation. The underground fuel leaks in these two areas are documented in the report entitled "Leaked Fuel Inventory, Direct Fueling Pipeline, Marine Corps Naval Air Station, Camp Lejeune, North Carolina" Soil and Material Engineers, Inc., December 7, 1983.

The objective of the soil boring investigation is to estimate the configuration and outer limits of the leaked fuel layer floating on the surface of the shallow ground water in the two areas identified above. A total of 30 soil borings will be drilled in the unpaved areas of the air field. However, if it is determined during the course of the investigation that all 30 soil borings are not required to delineate the fuel leak in the two subject areas, ESE will drill the remaining borings along the fuel pipeline between the air field and the Campbell Street Fuel Farm to investigate those areas previously identified by Soil & Material Engineers, Inc. as having underground fuel contamination.