

Betsy - please Review  
and MAKE Comments  
in writing ASAP.

DDS

NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS DIVISION  
BASE MAINTENANCE DEPARTMENT  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542

11 May 81

From: Director, NREA Division

To: BMO

Subj: Attached Lab Report

1.

Was received this A.M. A  
copy has been sent to NREAD  
lab for review.

*J. Williams*

Danny,

Send to Lab for comments  
BMO has original pdw

CLW

000003713

# Memorandum

DATE: 12 May 1981

FROM Ms. E. Betz, Water Quality Control Lab., NREAD, BMaintDept

TO Mr. D. Sharpe, Ecologist, NREAD, BMaintDept

SUBJ Suspected Chemical Dump, Rifle Range Area; analyses of groundwater and surface water at

REF (a) LANTNAVFACENCOM ltr 114:JGW 6280 of 8 May 1981  
(b) LANTNAVFACENCOM ltr 114:JGW 6280 of 18 Mar 1981  
(c) FONECON LANTNAVFACENCOM (Mr. J. Wallmeyer)/MCB Camp Lejeune (Ms. E. Betz) during the week of 16 Mar 1981

1. The sample of 30 Mar 1981 and of 10 Apr 1981 had several differences in their collection that could be causes of the varying readings shown in Reference (a).

2. The primary differences were the sample containers and their preparation. The samples of 30 Mar 1981 were taken in old acid bottles. The bottles had been washed as closely to the recommended procedure in Reference (b). During Reference (c) Jerry Wallmeyer had transmitted the procedure and said to do the best possible. I stated the Lab had no Hexane and therefore would omit that rinse.

3. The samples of 10 April 1981 were taken in new Mason jars. Again the bottles had been washed as closely to the recommended procedure, and again omitting the Hexane rinse, but also omitting the chloroform rinse, at Wallace Eake's (NEESA) recommendation.

4. The chloroform rinse, since chloroform vapors were present at collection, could have caused the high levels of chloroform, obviously, and of carbon tetrachloride and methylene chloride, since they are possible contaminants of chloroform. *(Note: See also at similar depth, lack of water in wells, plus long since previous sampling (2415). The water in well may have had higher concentration on 31 March.)*

5. Another attributing factor to the low levels in the second sampling could have been due to the poor condition of the pump used to collect the test well samples. The pump was not working properly. It was losing suction, during the 10 Apr 1981 sampling. For the 30 Mar 1981 sampling, we allowed the flow from the pump and well to flow out for about five minutes after the water level was up, before the sample was collected. This was to insure the sample was from the well and not the pipe or from the pump priming water. Due to the bad pump during the 10 Apr 1981 sampling the water was not allowed to run that long for fear the pump would give out thus the sample might have had priming (distilled) water in it. However this would not effect the pool samples since they were not pumped. *(Note: DPS) I am more concerned about the adequacy of the monitoring well construction + design.*

6. Finally, the weather around 30 Mar 1981 was wet, as opposed to the dry weather around 10 Apr 1981. *(Note: DPS) more importantly, The absence of rain between two samples and the rainwater tables*

7. My recommendation is recollect the samples after the lab receives some Hexane (Docu # 1086-W003). Also purchase a new pump to collect the test wells with so the flow can run for awhile to be sure to get only the water from the wells in the samples. And if funds are available collect two samples from one well, one in a container with chloroform and without Hexane and one with Hexane.

*Elizabeth A. Betz*

Samples collected: 4-10-81

<u>Building #</u> <u>Sample #</u>	<u>Time</u>	<u>Collector</u>	<u>Comment</u>
RR 47	1220	Betz	Well for RR WTP, raw water
RR 45	1230	Betz	Well for RR WTP, raw water
RR 97	1235	Betz	Well for RR WTP, raw water
RR 85	1245	Betz	RR WTP finished water tap @ sink
1	1340	Betz	Test well 15 @ old chemical dump
2	1355	Betz	Test well 16 @ old chemical dump
3	1450	Wallmeyer	Pool of water below dump behind test well 16
4	1500	Wallmeyer	Rad pool of water passed dump (Ens. Kalisch's pool)
5	1420	Sharpe	Pool of water w/old barrel in it @ old chemical dump (inland)
6	1435	Sharpe	Stream bed below & behind old chemical dump 100 yds S, SE of test well 17
7	1510	Wallmeyer	Tidal marsh @ end of road passed old chemical dump
8	1530	Wallmeyer	River btwn mouth of stream & Everett Creek (right fork of TLZ Owl Road) Map coordinate 786279 on CamLej training map

CLW

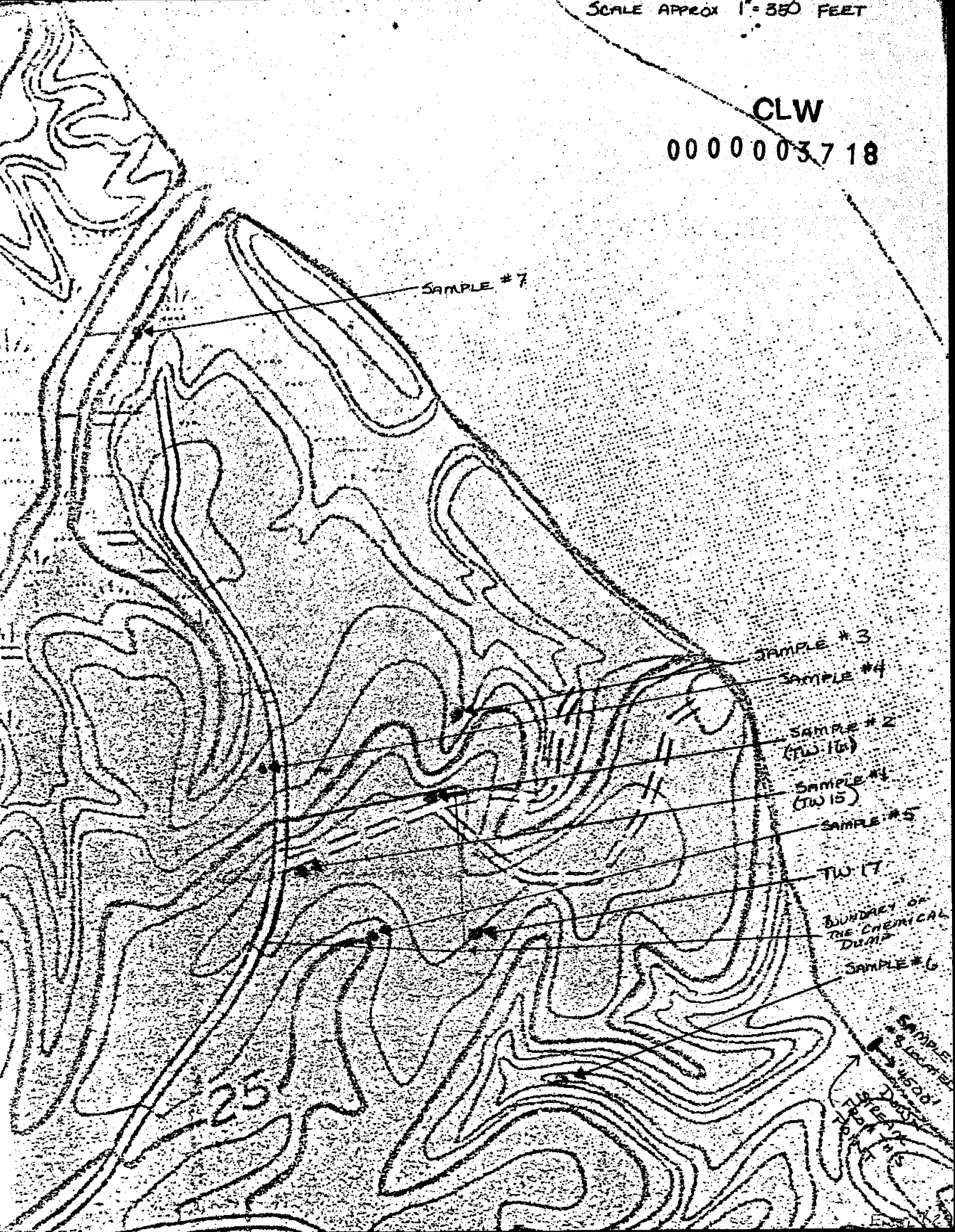
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ENCL (1)

SCALE APPROX 1" = 350 FEET

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SAMPLE #7

SAMPLE #3

SAMPLE #4

SAMPLE #2  
(TW 16)

SAMPLE #1  
(TW 15)

SAMPLE #5

TW 17

BOUNDARY OF  
THE CHEMICAL  
DUMP

SAMPLE #6

SAMPLE #2  
(TW 16)

SAMPLE #1  
(TW 15)

TW 17

25

25