

01010

61



**GROUNDWATER MONITORING
ANALYTICAL RESULTS FOR THE SECOND QUARTER 1993
OB GROUNDS, SENECA ARMY DEPOT**

**PREPARED FOR:
U.S. Army Corps of Engineers
Hunstville, Alabama**

PREPARED BY:

**Engineering-Science, Inc.
Boston, Massachusetts**

July 1993
D#10

ENGINEERING-SCIENCE, INC.

Prudential Center • Boston, Massachusetts 02199 • (617) 859-2000 • Fax: (617) 859-2043

July 14, 1993
770454-01005

Mr. Kevin Healy
U.S. Army Corps of Engineers,
Huntsville Division
ATTN: CEHND-ED-CS
P.O. Box 1600
Huntsville, AL 35807-4301

SUBJECT: Second Quarter Groundwater Monitoring Report for 1993,
OB Grounds, Seneca Army Depot, Romulus, New York

Dear Mr. Healy:

Enclosed is the Second Quarter Groundwater Monitoring Report for 1993. The analytical results are comprised of one major group, indicator parameters (Section 1). The last sample delivery group was received from the laboratory on June 14, 1993. Generally, the results of the second quarter 1993 analyses are consistent with historical results.

Please do not hesitate to call me if you have any questions.

Sincerely,

ENGINEERING-SCIENCE, INC.



Michael Duchesneau
Project Manager

MD/at/D#10

Enclosure

**GROUNDWATER MONITORING
ANALYTICAL RESULTS FOR THE SECOND QUARTER 1993
OB GROUNDS, SENECA ARMY DEPOT**

**PREPARED FOR:
U.S. Army Corps of Engineers
Hunstville, Alabama**

PREPARED BY:

**Engineering-Science, Inc.
Boston, Massachusetts**

**July 1993
D#10**

TABLE OF CONTENTS

1.0 Indicator Parameters

Section 1.0

Indicator Parameters

**OB GROUNDS SECOND QUARTER 1993 MONITORING
INDICATOR ANALYSIS RESULTS**

WK3	MATRIX	WATER	WATER	WATER
SITE	OB	OB	OB	OB
DATE SAMPL'D	04/29/93	04/29/93	04/29/93	05/05/93
ES ID	MW-1	MW-2	MW-3	MW-5
LAB ID	*	*	*	*
UNITS				
METER				
mg/L	3	1	3	3
mg/L	190	41	110	100
umhos/cm	750	530	770	680
units	7.07	7.30	7.10	7.27
mg/L as N	0.86	0.05 U	0.05 U	7.12
ite	1	1 U	2	5.1
Carbon	0.02 U	0.02 U	0.02 U	0.78
Halides				1 U
				0.03

Notes:

(1) * The Lab ID is different for each parameter

**OB GROUNDS SECOND QUARTER 1993 MONITORING
INDICATOR ANALYSIS RESULTS**

.WK3	MATRIX	WATER	WATER	WATER	WATER
SITE	OB	OB	OB	OB	OB
DATE SAMPL'D	05/05/93	05/05/93	05/05/93	05/04/93	05/06/93
ES ID	MW-6	MW-100(+)	MW-9	MW-10	MW-12
LAB ID	*	*	*	*	*
UNITS					
METER					
mg/L	25	23	3	9	12
mg/L	660	710	180	240	160
umhos/cm	1600	1600	750	910	82
ductance	units	6.98	7.03	7.30	7.10
Nitrite	mg/L as N	0.82	0.82	6.2	7.17
Carbon	mg/L	1	1 U	0.05	7.42
Halides	mg/L	0.02 U	0.02 U	1 U	0.57
			2	1 U	1 U
			0.02 U	0.02 U	0.02 U

Notes:

- (1) * The Lab ID is different for each parameter
- (2) (+) Duplicate of MW-8

**OB GROUNDS SECOND QUARTER 1993 MONITORING
INDICATOR ANALYSIS RESULTS**

.WK3	MATRIX	WATER			WATER			WATER		
		SITE	OB	OB	OB	OB	OB	OB	OB	OB
	DATE SAMPL'D	05/06/93	05/06/93	05/04/93	05/07/93	05/07/93	05/07/93	MW - 18	MW - 18	MW - 18
	ES ID	MW - 14	MW - 15	MW - 16	*	*	*	*	*	*
	LAB ID	*	*	*	*	*	*	*	*	*
	UNITS									
METER	mg/L	23	7	3	2	7	11	500	500	500
	mg/L	27	32	180	44	110	110			
	umhos/cm	1200	1400	740	450	660	660			
Conductance	units	7.06	7.04	7.46	7.51	7.20	7.20			
	mg/L as N	19	3.1	0.13	0.14	0.16	0.16			
	mg/L	1	2	2	1 U	1 U	1 U			
nitrite	mg/L	0.02 U								
Carbon	mg/L									
Halides	mg/L									

Notes:

(1) * The Lab ID is different for each parameter

WATER	WATER	WATER
OB	OB	OB
05/05/93	05/07/93	05/07/93
MW - 19	MW - 18	MW - 18

WATER	WATER	WATER
OB	OB	OB
05/05/93	05/07/93	05/07/93
MW - 19	MW - 18	MW - 18

**OB GROUNDS SECOND QUARTER 1993 MONITORING
INDICATOR ANALYSIS RESULTS**

.WK3	MATRIX	WATER			WATER			WATER			
		SITE	OB	OB	OB	ES ID	05/04/93	05/06/93	05/07/93	MW ID	*
DATE SAMPL'D	05/04/93	05/06/93	05/06/93	05/06/93	05/07/93	05/07/93	MW-24	MW-25	MW-26	MW-27	*
LAB ID	*	*	*	*	*	*	*	*	*	*	*
UNITS											
METER											
mg/L	3	19	35	3	2	13					
mg/L	120	180	200	39	9	73					
umhos/cm	620	860	1200	530	4400	830					
ductance	units	7.61	7.44	7.22	7.23	7.26					
Trite	mg/L as N	0.13	0.34	13	0.05 U	0.09	0.05 U				
c Carbon	mg/L	3	1	1 U	2	16					
c Halides	mg/L	0.02 U	0.02 U	0.04	0.02 U	0.02 U					

Notes:

(1) * The Lab ID is different for each parameter

**OB GROUNDS SECOND QUARTER 1993 MONITORING
INDICATOR ANALYSIS RESULTS**

MATERIAL	SITE	WATER			WATER			WATER		
		OB	OB	OB	OB	OB	OB	OB	OB	OB
DATE SAMPL'D	05/08/93	05/08/93	05/06/93	05/06/93	05/06/93	05/06/93	05/06/93	05/06/93	05/06/93	05/06/93
ES ID	MW-29	MW-101(-)	MW-30							
LAB ID	*	*	*	*	*	*	*	*	*	*
UNITS										
mg/L	4	4	25	25	4	25	25	25	25	2
mg/L	99	99	250	200	230	200	200	200	200	82
umhos/cm	700	700	980	980	910	980	980	980	980	610
units	7.16	7.27	7.00	7.01	7.23	7.00	7.01	7.01	7.01	7.24
mg/L as N	2.3	2.4	0.68	0.66	3.6	0.68	0.66	0.66	0.66	0.05
mg/L	2	1	2	2	1	2	2	2	2	1
c Carbon	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
c Halides										

Notes:

- (1) * The Lab ID is different for each parameter
- (2) (-) Duplicate of MW-29
- (3) (=) Duplicate of MW-30

**OB GROUNDS SECOND QUARTER 1993 MONITORING
INDICATOR ANALYSIS RESULTS**

WK3	MATRIX	WATER	WATER	WATER
SITE	OB	OB	OB	OB
DATE SAMPL'D	04/29/93	05/05/93	05/08/93	05/06/93
ES ID	MW-35	MW-8(R)	MW-29(R)	MW-30(R)
LAB ID	*	*	*	*
UNITS				
METER				
mg/L	2	1 U	1 U	1 U
mg/L	36	1 U	1 U	1 U
umhos/cm	550	2.2	2.4	2.1
units	7.32	6.22	6.18	6.06
ductance				
mg/L as N	0.18	0.05 U	0.05 U	0.05 U
mg/L	1 U	1 U	1 U	1 U
site	0.02 U	0.02	0.02 U	0.02 U
Carbon				
Halides				

Notes:

(1) * The Lab ID is different for each parameter