

N61165.AR.005251
CNC CHARLESTON
5090.3a

REQUEST FOR NO FURTHER ACTION (NFA) FOR ZONE I BUILDINGS NS-2 AND NS-3
CNC CHARLESTON SC
03/13/2003
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

CH2M-Jones, LLC

13 March 2003

RECEIVED

MAR 17 2003

Water Monitoring, Assessment &
Protection Division

SCDHEC
Attn: Michael Bishop
Groundwater Quality Section
Bureau of Water
2600 Bull Street
Columbia, SC 29201

Re: UST Zone I/ Buildings NS2 (SCDHEC No: 17595), and NS3 (SCDHEC No: 00961)

Mr. Bishop:

The December 21, 2002 DPT groundwater results for UST sites NS2 and NS3 had results of total metals above the RBSLs and dissolved metals below the RBSLs. Because of the high levels of total metals found in the DPT samples, SCDHEC recommended that a monitoring well be installed at the worst case, "source" location and sampled for total metals in order to provide a more representative measurement of metals in groundwater.

Monitoring well UN2GW001 was installed on February 18, 2003 and sampled on March 6, 2003. The newly installed well was sampled for total metals to represent groundwater at both NS2 and NS3 as recommended by SCDHEC. The results from that sampling event indicate the measured metals are below the RBSLs. CH2M-Jones, LLC requests a No Further Action (NFA) for NS2 and NS3.

If you have any questions or comments please contact me at 843-740-2780.

Sincerely,

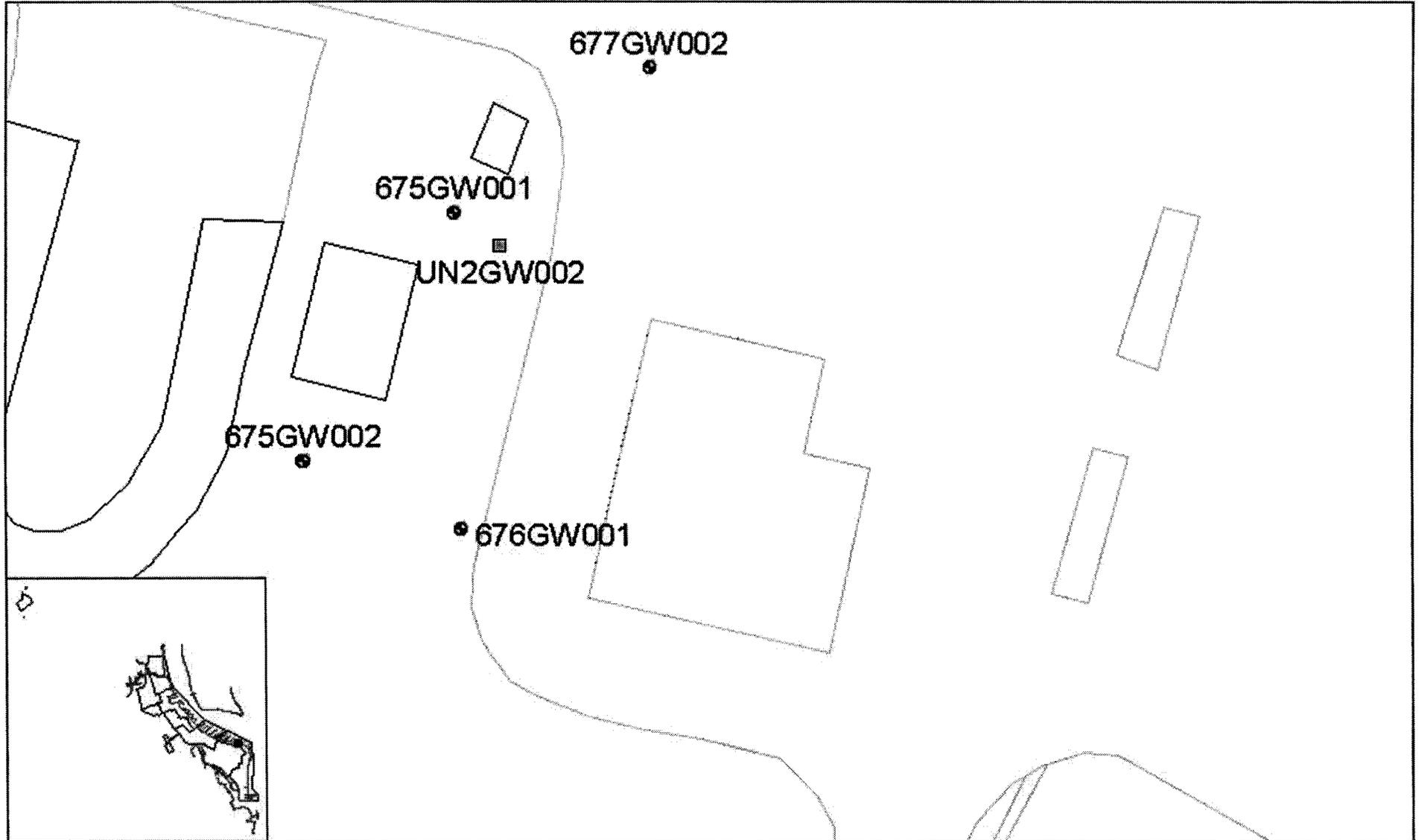


Brian R. Crawford, REM
CH2M-Jones, LLC

Attachments: 1. Well logs
2. Well installation map

Cc: Gabriel Magwood, NAVFACENGCOM Southern Division
Gary Foster, CH2M-Jones, LLC

NOTE: Original figure created in color



- ⊙ Abandoned
- Active
- Newly Installed Well
- ⋯ Fence
- Roads - Lines
- Pavement
- Sidewalk
- Buildings

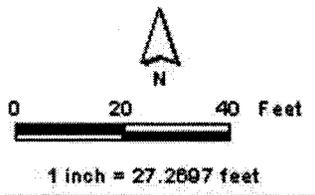


Figure 1
UST NS2
MW Locations
Charleston Naval Complex

Certificate of Analysis

Company: CH2M Hill
 Address: 3011 S.W. Williston Road
 Gainesville, Florida 32614

Report Date: March 13, 2003

Contact: Mr. Herb Kelly
 Project: Charleston Naval Shipyard-Level 2 QA

Page 1 of 2

Client Sample ID: UN2GW001N2 Project: CH2M00303
 Sample ID: 76060001 Client ID: CH2M006
 Matrix: Ground Water
 Collect Date: 06-MAR-03 10:00
 Receive Date: 06-MAR-03
 Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA											
<i>7470 Cold Vapor Hg Liquid</i>											
Mercury	U	ND	0.0472	0.200	ug/L	1	NOR1	03/12/03	1149	238455	1
Metals Analysis-ICP											
<i>EPA 6010B/3005 RCRA Metals except Hg</i>											
Arsenic	J	5.78	2.24	10.0	ug/L	1	RMJ	03/10/03	1747	238242	2
Barium	J	51.2	0.222	200	ug/L	1					
Cadmium	U	ND	0.313	5.00	ug/L	1					
Chromium	J	3.34	0.503	10.0	ug/L	1					
Lead	J	5.92	1.72	5.00	ug/L	1					
Selenium	J	47.1	2.81	5.00	ug/L	1					
Silver	J	2.24	0.835	10.0	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-TRACE SW846 3005A	CWS1	03/07/03	1530	238241
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	KHN	03/11/03	1500	238455

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 7470A	
2	SW846 3005/6010B	

Notes:

The Qualifiers in this report are defined as follows:

- < Actual result is less than amount reported
- > Actual result is greater than amount reported
- B Analyte found in the sample as well as the associated blank.
- BD Flag for results below the MDC or a flag for low tracer recovery.
- E Concentration exceeds instrument calibration range
- H Holding time exceeded
- J Indicates an estimated value. The result was greater than the detection limit, but less than the reporting limit.
- P The response between the confirmation column and the primary column is >40%D
- U Indicates the compound was analyzed for but not detected above the detection limit
- UI Uncertain identification for gamma spectroscopy.
- X Lab-specific qualifier - must be fully described in case narrative and data summary package

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Page 1 of 2

Client Sample ID: UN2EW001N2
 Sample ID: 76060002
 Matrix: Water
 Collect Date: 06-MAR-03 10:20
 Receive Date: 06-MAR-03
 Collector: Client

Project: CH2M00303
 Client ID: CH2M006

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA											
<i>7470 Cold Vapor Hg Liquid</i>											
Mercury	U	ND	0.0472	0.200	ug/l.	1	NOR1	03/12/03	1151	238456	1
Metals Analysis-ICP											
<i>EPA 6010B/3005 RCRA Metals except Hg</i>											
Arsenic	U	ND	2.24	10.0	ug/L	1	RM1	03/10/03	1808	238242	2
Barium	U	ND	0.222	200	ug/L	1					
Cadmium	U	ND	0.513	5.00	ug/L	1					
Chromium	J	0.689	0.503	10.0	ug/L	1					
Lead	U	ND	1.72	5.00	ug/L	1					
Scandium	U	ND	2.81	5.00	ug/L	1					
Silver	U	ND	0.835	10.0	ug/L	1					

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-TRACE SW846 3005A	CWS1	03/07/03	1530	238241
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	KHN	03/11/03	1500	238455

The following Analytical Methods were performed

Method	Description	Analyst Comments
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2	SW846 3005/6010B	

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- Y QC Samples were not spiked with this compound.

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Client Sample ID: UN2GW001N2
Sample ID: 76060001

Project: CH2M00303
Client ID: CH2M006

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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Y QC Samples were not spiked with this compound

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Laura Sluss.

Reviewed by _____

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Page 2 of 2

Client Sample ID: UN2EW001N2
Sample ID: 76060002

Project: CH2M00303
Client ID: CH2M006

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
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The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with General Engineering Laboratories, LLC standard operating procedures. Please direct any questions to your Project Manager, Laura Sluss.

Reviewed by