N00164.AR.000516
NSWC CRANE
5090.3a

Brent Thomas J CNIN

From: Brent Thomas J CNIN
Sent: Monday, March 06, 2000 3:26 PM
To: Peter Ramanauskas (E-mail); Allen Debus (E-mail)
Cc: Bill Gates (E-mail); Mark Francis (E-mail)
Subject: PII GW RFI FOR SWMU 30 (LANDFARM)

Pete/Al:

In accordance with the final, approved Work Plan for the Phase II GW RFI @ SWMU 30 (Landfarm) dtd August 1999, TtNUS completed the first two rounds of monitoring. Based on an evaluation of the data from these first two rounds, NSWC Crane requests that VOCs and explosives be dropped from future rounds of monitoring. All parameters for these two analytical fractions were non-detectable in all wells for both monitoring rounds.

Attached is an Excel spreadsheet that includes all of the current data for the VOC and explosives fractions, data validation qualifiers, and risk-based target levels. The appropriate decision logic from the approved Work Plan has also been updated and attached for your review. As required by the Work Plan, all other parameters (metals, etc.) listed will be analyzed throughout the remaining three rounds of sampling.

I realize that this is somewhat short notice, but TtNUS needs a response by March 17, 2000, as the next round of sampling is scheduled in early May. Appropriate contracting documents, sampling bottleware, and analytical requirements cannot be finalized until the U.S. EPA's makes a decision on this request. If you have any questions, please feel free to call myself or Bill Gates and we will link in TtNUS.

Thanks,
Tom

EPA - Excerpt from Work Plan.d...

SWMU 30 VOCs and Energetics .x...

Excerpts relating to VOCs and energetics from the Final "Work Plan for Phase II Ground Water RCRA Facility Investigation SWMU 30 – August 1999" pages 1-13 and 1-14. Modifications to the text to bring it up to date are provided in bold italicized font.

1.4 SAMPLING PLAN RATIONALE

The objective of this ground water sampling program is to obtain representative samples from the shallow ground water regime at the Landfarm. To accomplish this objective, five quarterly ground water sampling rounds will be performed for the seven on-site ground water monitoring wells. The results of the ground water sampling program will be used to determine the possible presence and extent of ground water contamination associated with application of sludge at the Landfarm. These ground water samples are to be collected at quarter-year intervals over approximately 1 year. The rationale for collecting quarterly samples is to examine the variability of the analytical data versus time and seasonal changes.

The first round of sampling ***was conducted October 12 – 14, 1999 and the second round was conducted January 12 – 14, 2000. . . .*** Subsequent rounds 3,4,and 5 ***are scheduled to*** be conducted in May, August, and November of 2000, respectively.

The ground water samples ***were*** analyzed for a list of parameters associated with ***sludge*** application operations. These parameters include ***a*** modified list of Appendix IX volatile organic compounds (VOCs), ***... and*** explosives... Specific analytes are presented in Table 1-2 of the QAPP. ... The rationale for using this parameter list is based on generator knowledge provided by Crane personnel.

Samples for the first two sampling rounds will be analyzed for the aforementioned list of parameters. The data from these initial two sampling rounds will be used to preliminarily characterize the upgradient and downgradient ground water and will allow TtNUS to develop a list of potential contaminants of concern for this site. The results will provide a basis for focusing the subsequent three sampling rounds on the list of potential contaminants of concern. The subsequent focused list will be based on a subset of the above parameter list. The scientific basis for determining the analysis subset will be as follows:

IF:	THEN:	ACTION:
The compound was not detected during the first and second sampling rounds.	No further analysis is recommended for this compound.	Remove compound from future sampling list.
...		
...		
...		

... Because metals are the primary contaminants of concern associated with this SWMU, analyses for the metals listed will be conducted for all 5 rounds, even if nondetectable values are obtained in the first 2 rounds.

Crane SWMU 30 (Landfarm)
Summary of VOC and Energetic Results for Ground Water Monitoring Rounds #1 and #2
[October 1999 and January 2000]

nsample	030-GW-001-01	030-GW-001-01-D	030-GW-001-02	030-GW-002-01	030-GW-002-02	030-GW-003-01	030-GW-003-02	030-GW-004-01	030-GW-004-02	
sample	030-GW-001-01	DUP-GW-001-01	030-GW-001-02	030-GW-002-01	030-GW-002-02	030-GW-003-01	030-GW-003-02	030-GW-004-01	030-GW-004-02	
sample_dat	10/13/99	10/12/99	1/13/00	10/12/99	1/13/00	10/13/99	1/14/00	10/13/99	1/12/00	Risked
qc_type	NM	NM	NM	NM	NM	NM	NM	NM	NM	Based
sacode	DUP	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	Target
matrix	GW	GW	GW	GW	GW	GW	GW	GW	GW	Level
validated	Y	Y	Y	Y	Y	Y	Y	Y	Y	(ug/L)
background	UPGRADIENT	UPGRADIENT	UPGRADIENT	UPGRADIENT	UPGRADIENT	UPGRADIENT	UPGRADIENT	DOWNGRADIENT	DOWNGRADIENT	
dups		030-GW-001-01								
Volatile Organics (ug/L)										
1,1,1,2-TETRACHLOROETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	5
1,1,1-TRICHLOROETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	200
1,1,2,2-TETRACHLOROETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	5
1,1,2-TRICHLOROETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	5
1,1-DICHLOROETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	810
1,1-DICHLOROETHENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	5
1,2,3-TRICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.0016
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1
1,2-DIBROMOETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	1
1,2-DICHLOROETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	1
1,2-DICHLOROPROPANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16
2-BUTANONE	10 UR	10 UR	5 UR	10 UR	5 UR	10 UR	5 UR	10 UR	5 UR	1900
2-HEXANONE	10 UR	10 UR	5 UR	10 UR	5 UR	10 UR	5 UR	10 UR	5 UR	*
4-METHYL-2-PENTANONE	10 UR	10 UR	5 UR	10 UR	5 UR	10 UR	5 UR	10 UR	5 UR	160
ACETONE	10 UR	10 UR	5 UR	10 UR	5 UR	10 UR	5 UR	10 UR	5 UR	610
ACROLEIN	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	4
ACRYLONITRILE	3 UR	3 UR	5 UR	3 UR	5 UR	3 UR	5 UR	3 U	5 UR	3.7
ALLYL CHLORIDE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1800
BENZENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	5
BROMODICHLOROMETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	100
BROMOFORM	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	8.5
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	8.7
CARBON DISULFIDE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	1000
CARBON TETRACHLORIDE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.17
CHLOROBENZENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	39
CHLOROETHANE	0.5 UJ	0.5 UJ	1 U	0.5 UJ	1 U	0.5 UJ	1 U	0.5 UJ	1 U	8600
CHLOROFORM	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.16
CHLOROMETHANE	0.5 UJ	0.5 UJ	1 U	0.5 UJ	1 U	0.5 UJ	1 U	0.5 UJ	1 U	1.5
CHLOROPRENE	3 U	3 U	10 UJ	3 U	10 UJ	3 U	10 UJ	3 U	10 UJ	14
CIS-1,3-DICHLOROPROPENE	0.3 U	0.3 U	1 U	0.3 U	1 U	0.3 U	1 U	0.3 U	1 U	*
DIBROMOCHLOROMETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	1
DIBROMOMETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	370
DICHLORODIFLUOROMETHANE	0.5 U	0.5 U	1 UJ	0.5 U	1 UJ	0.5 U	1 UJ	0.5 U	1 UJ	390
ETHYL METHACRYLATE	1 U	1 U	10 U	1 U	10 U	1 U	10 U	1 U	10 U	550
ETHYLBENZENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	700
METHACRYLONITRILE	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1
METHYL METHACRYLATE	2 UR	2 UR	10 UR	2 UR	10 UR	2 UR	10 UR	2 UR	10 UR	1400
METHYLENE CHLORIDE	3 U	3 U	1 U	3 U	1 U	3 U	1 U	3 U	1 U	4.3
STYRENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	100
TETRACHLOROETHENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	1.1
TOLUENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	720
TRANS-1,2-DICHLOROETHENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	100
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5
TRANS-1,4-DICHLORO-2-BUTENE	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10
TRICHLOROETHENE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	1.6
TRICHLOROFLUOROMETHANE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	1300
VINYL ACETATE	0.5 U	0.5 U	10 UJ	0.5 U	10 UJ	0.5 U	10 UJ	0.5 U	10 UJ	410
VINYL CHLORIDE	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	1 U	2
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1400

* Risk-based target level is not provided, because human health risk-based criteria are not available for this chemical.

Crane SWMU ndfarm)
Summary of VOC and Energetic Results for Ground Water Monitoring Rounds #1 and #2
[October 1999 and January 2000]

mxsample	030-GW-001-01	030-GW-001-01-D	030-GW-001-02	030-GW-002-01	030-GW-002-02	030-GW-003-01	030-GW-003-02	030-GW-004-01	030-GW-004-02	
sample	030-GW-001-01	DUP-GW-001-01	030-GW-001-02	030-GW-002-01	030-GW-002-02	030-GW-003-01	030-GW-003-02	030-GW-004-01	030-GW-004-02	
sample_dat	10/13/99	10/12/99	1/13/00	10/12/99	1/13/00	10/13/99	1/14/00	10/13/99	1/12/00	Risked
qc_type	NM	NM	NM	NM	NM	NM	NM	NM	NM	Based
sacode	DUP	DUP	DUP	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	Target
matrix	GW	GW	GW	GW	GW	GW	GW	GW	GW	Level
validated	Y	Y	Y	Y	Y	Y	Y	Y	Y	(ug/L)
background	UPGRADIENT	UPGRADIENT	UPGRADIENT	UPGRADIENT	UPGRADIENT	UPGRADIENT	UPGRADIENT	DOWNGRADIENT	DOWNGRADIENT	
dups		030-GW-001-01								
Energetics (ug/L)										
1,3,5-TRINITROBENZENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	1100
1,3-DINITROBENZENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	3.7
2,4,6-TRINITROTOLUENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 UJ	1.4 U	1.4 U	2.2
2,4-DINITROTOLUENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	73
2,6-DINITROTOLUENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	37
2-AMINO-4,6-DINITROTOLUENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	*
2-NITROTOLUENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	370
3-NITROTOLUENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	370
4-AMINO-2,6-DINITROTOLUENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	*
4-NITROTOLUENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	370
HMX	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 UJ	1.4 U	1.4 U	1800
NITROBENZENE	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	3.4
RDX	0.26 U	1.3 U	1.3 U	0.68 U	1.5 U	1.1 U	1.8 U	1.3 U	1.3 U	0.61
TETRYL	0.27 U	1.4 U	1.4 U	0.73 U	1.6 U	1.2 U	1.9 U	1.4 U	1.4 U	370

* Risk-based target level is not provided, because human health risk-based criteria are not available for this chemical.

Crane SWMU 30 (Landfarm)
Summary of VOC and Energetic Results for Ground Water Monitoring Rounds #1 and #2
[October 1999 and January 2000]

nsample	030-GW-005-01	030-GW-005-02	030-GW-006-01	030-GW-006-02	030-GW-006-02-D	030-GW-007-01	030-GW-007-02	
sample	030-GW-005-01	030-GW-005-02	030-GW-006-01	030-GW-006-02	DUP-GW-001-02	030-GW-007-01	030-GW-007-02	
sample_dat	10/14/99	1/12/00	10/14/99	1/14/00	1/14/00	10/12/99	1/13/00	Risked
qc_type	NM	NM	NM	NM	NM	NM	NM	Based
sacode	NORMAL	NORMAL	NORMAL	DUP	DUP	NORMAL	NORMAL	Target
matrix	GW	GW	GW	GW	GW	GW	GW	Level
validated	Y	Y	Y	Y	Y	Y	Y	(ug/L)
background	DOWNGRADIENT	DOWNGRADIENT	DOWNGRADIENT	UPGRADIENT	UPGRADIENT	DOWNGRADIENT	DOWNGRADIENT	
dups					030-GW-006-02			
Volatile Organics (ug/L)								
1,1,1,2-TETRACHLOROETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	5
1,1,1-TRICHLOROETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	200
1,1,2,2-TETRACHLOROETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	5
1,1,2-TRICHLOROETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	5
1,1-DICHLOROETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	810
1,1-DICHLOROETHENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	5
1,2,3-TRICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.0016
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1
1,2-DIBROMOETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	1
1,2-DICHLOROETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	1
1,2-DICHLOROPROPANE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.16
2-BUTANONE	10 UR	5 UR	10 UR	5 UR	5 UR	10 UR	5 UR	1900
2-HEXANONE	10 UR	5 UR	10 UR	5 UR	5 UR	10 UR	5 UR	*
4-METHYL-2-PENTANONE	10 UR	5 UR	10 UR	5 UR	5 UR	10 UR	5 UR	160
ACETONE	10 UR	5 UR	10 UR	5 UR	5 UR	10 UR	5 UR	610
ACROLEIN	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	4
ACRYLONITRILE	3 U	5 UR	3 U	5 UR	5 UR	3 U	5 UR	3.7
ALLYL CHLORIDE	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1800
BENZENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	5
BROMODICHLOROMETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	100
BROMOFORM	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	8.5
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	8.7
CARBON DISULFIDE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	1000
CARBON TETRACHLORIDE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.17
CHLOROBENZENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	39
CHLOROETHANE	0.5 UJ	1 U	0.5 UJ	1 U	1 U	0.5 UJ	1 U	8600
CHLOROFORM	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.16
CHLOROMETHANE	0.5 UJ	1 U	0.5 UJ	1 U	1 U	0.5 UJ	1 U	1.5
CHLOROPRENE	3 U	10 UJ	3 U	10 UJ	10 UJ	3 U	10 UJ	14
CIS-1,3-DICHLOROPROPENE	0.3 U	1 U	0.3 U	1 U	1 U	0.3 U	1 U	*
DIBROMOCHLOROMETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	1
DIBROMOMETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	370
DICHLORODIFLUOROMETHANE	0.5 U	1 UJ	0.5 U	1 U	1 U	0.5 U	1 U	390
ETHYL METHACRYLATE	1 U	10 U	1 U	10 U	10 U	1 U	10 U	550
ETHYLBENZENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	700
METHACRYLONITRILE	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1
METHYL METHACRYLATE	2 UR	10 UR	2 UR	10 UR	10 UR	2 UR	10 UR	1400
METHYLENE CHLORIDE	3 U	1 U	3 U	1 U	1 U	3 U	1 U	4.3
STYRENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	100
TETRACHLOROETHENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	1.1
TOLUENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	720
TRANS-1,2-DICHLOROETHENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	100
TRANS-1,3-DICHLOROPROPENE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5
TRANS-1,4-DICHLORO-2-BUTENE	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10 UR	10
TRICHLOROETHENE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	1.6
TRICHLOROFLUOROMETHANE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	1300
VINYL ACETATE	0.5 U	10 UJ	0.5 U	10 UJ	10 UJ	0.5 U	10 UJ	410
VINYL CHLORIDE	0.5 U	1 U	0.5 U	1 U	1 U	0.5 U	1 U	2
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1400

* Risk-based target level is not provided, because human health risk-based criteria are not available for this chemical.

Crane SWMU indfarm)
Summary of VOC and Energetic Results for Ground Water Monitoring Rounds #1 and #2
[October 1999 and January 2000]

nsample	030-GW-005-01	030-GW-005-02	030-GW-006-01	030-GW-006-02	030-GW-006-02-D	030-GW-007-01	030-GW-007-02	
sample	030-GW-005-01	030-GW-005-02	030-GW-006-01	030-GW-006-02	DUP-GW-001-02	030-GW-007-01	030-GW-007-02	
sample_dat	10/14/99	1/12/00	10/14/99	1/14/00	1/14/00	10/12/99	1/13/00	Risked
qc_type	NM	NM	NM	NM	NM	NM	NM	Based
sacode	NORMAL	NORMAL	NORMAL	DUP	DUP	NORMAL	NORMAL	Target
matrix	GW	GW	GW	GW	GW	GW	GW	Level
validated	Y	Y	Y	Y	Y	Y	Y	(ug/L)
background	DOWNGRADIENT	DOWNGRADIENT	DOWNGRADIENT	UPGRADIENT	UPGRADIENT	DOWNGRADIENT	DOWNGRADIENT	
dups					030-GW-006-02			
Energetics (ug/L)								
1,3,5-TRINITROBENZENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	1100
1,3-DINITROBENZENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	3.7
2,4,6-TRINITROTOLUENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	2.2
2,4-DINITROTOLUENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	73
2,6-DINITROTOLUENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	37
2-AMINO-4,6-DINITROTOLUENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	*
2-NITROTOLUENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	370
3-NITROTOLUENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	370
4-AMINO-2,6-DINITROTOLUENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	*
4-NITROTOLUENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	370
HMX	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	1800
NITROBENZENE	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	3.4
RDX	0.78 U	0.9 U	0.94 U	1.2 U	0.9 U	1.2 U	1.3 U	0.61
TETRYL	0.83 U	1 U	1 U	1.3 U	1 U	1.2 U	1.4 U	370

* Risk-based target level is not provided, because human health risk-based criteria are not available for this chemical.