State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Landfill #5	02813	157005530	4/14 - 4/21/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [x] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [x] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.
Joel Janssen	5/23/16	
Signature	Date	

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 2813
Landfill #5
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities.

Total dinitrotoluenes (DNT) exceeded the Enforcement Standard (ES) in ELM-8901 (216), ELM-8907 (220), ELM-8908 (221), and ELN-1502A (533).

Total DNT exceeded the Preventive Action Limit (PAL) in ELN-1001B (460) and ELN-1003B (468). 2,4-DNT exceeded the PAL in ELM-8908 (221). 2,6-DNT exceeded the PAL in ELM-8901 (216), ELM-8907 (220), and ELM-8908 (221).

Sulfate exceeded the ES in ELN-8203A (210) and ELN-8203B (211). Sulfate exceeded the PAL in ELM-9110 (229).

1,1,2-Trichloroethane exceeded the PAL in ELN-8203A (210), ELN-8203B (211), and ELN-8203C (212).

Tetrahydrofuran exceeded the PAL in ELN-8203B (211).

Volatile organic compounds (VOCs) analysis was performed by CT Laboratories (CT Lab) using method EPA 8260C.

DNT analysis was also performed by CT Lab using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

Sulfate analyses were performed by CT Lab using method SW 846 9056A.

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

GROUNDWATER MONITORING EXCEEDANCE REPORT

April 2016 Report Date: 5/19/2016

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
1,1,2-Trichloroethane	2813	210	ELN-8203A	4/18/2016	1	0.9	ug/l	0.5	5
Sulfate	2813	210	ELN-8203A	4/18/2016	1	770	mg/l	125	250
1,1,2-Trichloroethane	2813	211	ELN-8203B	4/18/2016	1	0.88	ug/l	0.5	5
Sulfate	2813	211	ELN-8203B	4/18/2016	1	900	mg/l	125	250
Tetrahydrofuran	2813	211	ELN-8203B	4/18/2016	1	20	ug/l	10	50
1,1,2-Trichloroethane	2813	212	ELN-8203C	4/18/2016	1	0.67	ug/l	0.5	5
2,6-Dinitrotoluene	2813	216	ELM-8901	4/21/2016	1	0.028	ug/l	0.005	0.05
2,6-Dinitrotoluene	2813	216	ELM-8901	4/21/2016	2	0.033	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	216	ELM-8901	4/21/2016	1	1.498	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	216	ELM-8901	4/21/2016	2	1.593	ug/l	0.005	0.05
2,6-Dinitrotoluene	2813	220	ELM-8907	4/18/2016	1	0.014	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	220	ELM-8907	4/18/2016	1	0.408	ug/l	0.005	0.05
2,4-Dinitrotoluene	2813	221	ELM-8908	4/18/2016	1	0.021	ug/l	0.005	0.05
2,6-Dinitrotoluene	2813	221	ELM-8908	4/18/2016	1	0.025	ug/l	0.005	0.05
2,6-Dinitrotoluene	2813	221	ELM-8908	4/18/2016	2	0.026	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	221	ELM-8908	4/18/2016	1	2.256	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	221	ELM-8908	4/18/2016	2	2.216	ug/l	0.005	0.05
Sulfate	2813	229	ELM-9110	4/18/2016	1	140	mg/l	125	250
Total Dinitrotoluenes	2813	460	ELN-1001B	4/19/2016	1	0.018	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	468	ELN-1003B	4/20/2016	1	0.043	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	468	ELN-1003B	4/20/2016	2	0.044	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	533	ELN-1502A	4/19/2016	1	0.14	ug/l	0.005	0.05
Total Dinitrotoluenes	2813	533	ELN-1502A	4/19/2016	2	0.13	ug/l	0.005	0.05

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 2813 Report Date: 5/23/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1,2-Trichloroethane	210	ELN-8203A	4/18/2016	1	0.9	0.015	0.1	ug/l	0.5	5
1,1-Dichloroethane	210	ELN-8203A	4/18/2016	1	0.044	0.021	0.1	ug/l	85	850
1,2-Dichloropropane	210	ELN-8203A	4/18/2016	1	0.38	0.012	0.1	ug/l	0.5	5
cis-1,2-Dichloroethene	210	ELN-8203A	4/18/2016	1	0.046	0.022	0.1	ug/l	7	70
Dichlorofluoromethane	210	ELN-8203A	4/18/2016	1	0.029	0.025	0.1	ug/l		
Ethyl ether	210	ELN-8203A	4/18/2016	1	0.4	0.028	0.1	ug/l	100	1000
Sulfate	210	ELN-8203A	4/18/2016	1	770	26	100	mg/l	125	250
Tetrahydrofuran	210	ELN-8203A	4/18/2016	1	1.1	0.3	2	ug/l	10	50
1,1,1-Trichloroethane	211	ELN-8203B	4/18/2016	1	0.073	0.009	0.1	ug/l	40	200
1,1,2-Trichloroethane	211	ELN-8203B	4/18/2016	1	0.88	0.015	0.1	ug/l	0.5	5
1,1-Dichloroethane	211	ELN-8203B	4/18/2016	1	0.025	0.021	0.1	ug/l	85	850
1,2-Dichloroethane	211	ELN-8203B	4/18/2016	1	0.052	0.015	0.1	ug/l	0.5	5
1,2-Dichloropropane	211	ELN-8203B	4/18/2016	1	0.39	0.012	0.1	ug/l	0.5	5
Dichlorofluoromethane	211	ELN-8203B	4/18/2016	1	0.026	0.025	0.1	ug/l		
Ethyl ether	211	ELN-8203B	4/18/2016	1	0.32	0.028	0.1	ug/l	100	1000
Sulfate	211	ELN-8203B	4/18/2016	1	900	26	100	mg/l	125	250
Tetrahydrofuran	211	ELN-8203B	4/18/2016	1	20	0.3	2	ug/l	10	50
1,1,1-Trichloroethane	212	ELN-8203C	4/18/2016	1	0.015	0.009	0.1	ug/l	40	200
1,1,2-Trichloroethane	212	ELN-8203C	4/18/2016	1	0.67	0.015	0.1	ug/l	0.5	5
1,2-Dichloropropane	212	ELN-8203C	4/18/2016	1	0.095	0.012	0.1	ug/l	0.5	5
Sulfate	212	ELN-8203C	4/18/2016	1	55	6.5	25	mg/l	125	250
Trichlorofluoromethane	212	ELN-8203C	4/18/2016	1	0.031	0.022	0.2	ug/l	698	3490
1,1,1-Trichloroethane	216	ELM-8901	4/21/2016	1	1.3	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	216	ELM-8901	4/21/2016	2	1.2	0.009	0.1	ug/l	40	200
1,1,2-Trichloroethane	216	ELM-8901	4/21/2016	2	0.058	0.015	0.1	ug/l	0.5	5
1,1,2-Trichloroethane	216	ELM-8901	4/21/2016	1	0.061	0.015	0.1	ug/l	0.5	5
1,1-Dichloroethene	216	ELM-8901	4/21/2016	2	0.047	0.04	0.1	ug/l	0.7	7
1,1-Dichloroethene	216	ELM-8901	4/21/2016	1	0.054	0.04	0.1	ug/l	0.7	7
1,2-Dichlorobenzene	216	ELM-8901	4/21/2016	1	0.038	0.025	0.1	ug/l	60	600
1,2-Dichlorobenzene	216	ELM-8901	4/21/2016	2	0.048	0.025	0.1	ug/l	60	600
2,3-Dinitrotoluene	216	ELM-8901	4/21/2016	2	0.49	0.0062	0.031	ug/l		
2,3-Dinitrotoluene	216	ELM-8901	4/21/2016	1	0.46	0.0061	0.031	ug/l		
2,6-Dinitrotoluene	216	ELM-8901	4/21/2016	1	0.028	0.0041	0.031	ug/l	0.005	0.05
2,6-Dinitrotoluene	216	ELM-8901	4/21/2016	2	0.033	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	216	ELM-8901	4/21/2016	2	0.85	0.0041	0.031	ug/l		
3,4-Dinitrotoluene	216	ELM-8901	4/21/2016	1	0.8	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	216	ELM-8901	4/21/2016	2	0.22	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	216	ELM-8901	4/21/2016	1	0.21	0.0041	0.031	ug/l		
Sulfate	216	ELM-8901	4/21/2016	2	78	5.2	20	mg/l	125	250
Sulfate	216	ELM-8901	4/21/2016	1	78	5.2	20	mg/l	125	250
Total Dinitrotoluenes	216	ELM-8901	4/21/2016	1	1.498	0.0082	0.031	ug/l	0.005	0.05
Total Dinitrotoluenes	216	ELM-8901	4/21/2016	2	1.593	0.0082	0.031	ug/l	0.005	0.05
1,1,1-Trichloroethane	220	ELM-8907	4/18/2016	1	0.12	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	220	ELM-8907	4/18/2016	1	0.11	0.0063	0.032	ug/l		
2,6-Dinitrotoluene	220	ELM-8907	4/18/2016	1	0.014	0.0042	0.032	ug/l	0.005	0.05
3,4-Dinitrotoluene	220	ELM-8907	4/18/2016	1	0.24	0.0042	0.032	ug/l		
3,5-Dinitrotoluene	220	ELM-8907	4/18/2016	1	0.044	0.0042	0.032	ug/l		
Sulfate	220	ELM-8907	4/18/2016	1	19	1.3	5	mg/l	125	250

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
Total Dinitrotoluenes	220	ELM-8907	4/18/2016	1	0.408	0.0084	0.032	ug/l	0.005	0.05
1,1,1-Trichloroethane	221	ELM-8908	4/18/2016	1	0.13	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	221	ELM-8908	4/18/2016	2	0.14	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	221	ELM-8908	4/18/2016	1	0.79	0.0061	0.031	ug/l		
2,3-Dinitrotoluene	221	ELM-8908	4/18/2016	2	0.79	0.0061	0.031	ug/l		
2,4-Dinitrotoluene	221	ELM-8908	4/18/2016	1	0.021	0.0082	0.031	ug/l	0.005	0.05
2,6-Dinitrotoluene	221	ELM-8908	4/18/2016	1	0.025	0.0041	0.031	ug/l	0.005	0.05
2,6-Dinitrotoluene	221	ELM-8908	4/18/2016	2	0.026	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	221	ELM-8908	4/18/2016	1	1.2	0.0041	0.031	ug/l		
3,4-Dinitrotoluene	221	ELM-8908	4/18/2016	2	1.2	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	221	ELM-8908	4/18/2016	2	0.2	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	221	ELM-8908	4/18/2016	1	0.22	0.0041	0.031	ug/l		
Sulfate	221	ELM-8908	4/18/2016	2	19	1.3	5	mg/l	125	250
Sulfate	221	ELM-8908	4/18/2016	1	19	1.3	5	mg/l	125	250
Total Dinitrotoluenes	221	ELM-8908	4/18/2016	1	2.256	0.0082	0.031	ug/l	0.005	0.05
Total Dinitrotoluenes	221	ELM-8908	4/18/2016	2	2.216	0.0082	0.031	ug/l	0.005	0.05
1,1,1-Trichloroethane	222	ELM-8909	4/14/2016	1	0.79	0.009	0.1	ug/l	40	200
1,1,2-Trichloroethane	222	ELM-8909	4/14/2016	1	0.053	0.015	0.1	ug/l	0.5	5
Sulfate	222	ELM-8909	4/14/2016	1	12	1.3	5	mg/l	125	250
Sulfate	224	ELN-8902B	4/21/2016	1	18	1.3	5	mg/l	125	250
1,1,1-Trichloroethane	225	ELN-8904A	4/18/2016	1	0.049	0.009	0.1	ug/l	40	200
Sulfate	225	ELN-8904A	4/18/2016	1	22	2.6	10	mg/l	125	250
Tetrachloroethene	225	ELN-8904A	4/18/2016	1	0.1	0.01	0.1	ug/l	0.5	5
Sulfate	226	ELN-8904B	4/18/2016	1	20	1.3	5	mg/l	125	250
1,1,2-Trichloroethane	227	ELN-9107A	4/18/2016	1	0.17	0.015	0.1	ug/l	0.5	5
Sulfate	227	ELN-9107A	4/18/2016	1	36	1.3	5	mg/l	125	250
1,1,1-Trichloroethane	228	ELN-9107B	4/18/2016	1	0.034	0.009	0.1	ug/l	40	200
1,1,2-Trichloroethane	228	ELN-9107B	4/18/2016	1	0.24	0.015	0.1	ug/l	0.5	5
Sulfate	228	ELN-9107B	4/18/2016	1	40	1.3	5	mg/l	125	250
1,1,1-Trichloroethane	229	ELM-9110	4/18/2016	1	0.065	0.009	0.1	ug/l	40	200
cis-1,2-Dichloroethene	229	ELM-9110	4/18/2016	1	0.025	0.022	0.1	ug/l	7	70
Ethyl ether	229	ELM-9110	4/18/2016	1	0.17	0.028	0.1	ug/l	100	1000
Sulfate	229	ELM-9110	4/18/2016	1	140	6.5	25	mg/l	125	250
Tetrachloroethene	229	ELM-9110	4/18/2016	1	0.1	0.01	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	231	ELN-9402AR	4/21/2016	1	0.077	0.009	0.1	ug/l	40	200
Sulfate	231	ELN-9402AR	4/21/2016	1	15	1.3	5	mg/l	125	250
1,1,1-Trichloroethane	236	S1134R	4/18/2016	1	0.025	0.009	0.1	ug/l	40	200
1,1,2-Trichloroethane	236	S1134R	4/18/2016	1	0.094	0.015	0.1	ug/l	0.5	5
1,2-Dichlorobenzene	236	S1134R	4/18/2016	1	0.051	0.025	0.1	ug/l	60	600
Sulfate	236	S1134R	4/18/2016	1	57	13	50	mg/l	125	250
1,1,1-Trichloroethane	460	ELN-1001B	4/19/2016	1	0.14	0.009	0.1	ug/l	40	200
2,5-Dinitrotoluene	460	ELN-1001B	4/19/2016	1	0.018	0.0031	0.031	ug/l		
Total Dinitrotoluenes	460	ELN-1001B	4/19/2016	1	0.018	0.0082	0.031	ug/l	0.005	0.05
1,1,1-Trichloroethane	461	ELN-1001C	4/19/2016	1	0.09	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	464	ELN-1002B	4/20/2016	1	0.045	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	465	ELN-1002C	4/20/2016	1	0.032	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	468	ELN-1003B	4/20/2016	1	0.053	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	468	ELN-1003B	4/20/2016	2	0.049	0.009	0.1	ug/l	40	200
3,4-Dinitrotoluene	468	ELN-1003B	4/20/2016	2	0.044	0.0042	0.032	ug/l		
3,4-Dinitrotoluene	468	ELN-1003B	4/20/2016	1	0.043	0.004	0.03	ug/l		
Total Dinitrotoluenes	468	ELN-1003B	4/20/2016	1	0.043	0.0081	0.03	ug/l	0.005	0.05
Total Dinitrotoluenes	468	ELN-1003B	4/20/2016	2	0.044	0.0084	0.032	ug/l	0.005	0.05
1,1,1-Trichloroethane	469	ELN-1003C	4/20/2016	1	0.052	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	533	ELN-1502A	4/19/2016	1	0.096	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	533	ELN-1502A	4/19/2016	2	0.082	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	533	ELN-1502A	4/19/2016	1	0.047	0.0062	0.031	ug/l		
2,3-Dinitrotoluene	533	ELN-1502A	4/19/2016	2	0.046	0.0061	0.031	ug/l		

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
3,4-Dinitrotoluene	533	ELN-1502A	4/19/2016	1	0.089	0.0041	0.031	ug/l		
3,4-Dinitrotoluene	533	ELN-1502A	4/19/2016	2	0.086	0.0041	0.031	ug/l		
Total Dinitrotoluenes	533	ELN-1502A	4/19/2016	2	0.13	0.0082	0.031	ug/l	0.005	0.05
Total Dinitrotoluenes	533	ELN-1502A	4/19/2016	1	0.14	0.0082	0.031	ug/l	0.005	0.05
1,1,1-Trichloroethane	534	ELN-1502C	4/19/2016	1	0.39	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	535	ELN-1503A	4/20/2016	1	0.03	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	537	ELN-1504B	4/20/2016	1	0.023	0.009	0.1	ug/l	40	200

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Propellant Burning Grounds	02814	157005420	4/5 - 4/25/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [X] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [X] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Joel Janssen 5/23/16

Signature Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 2814
Propellant Burning Grounds
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities.

2,4-Dinitrotoluene (DNT), 2,6-DNT, and total DNT exceeded the Enforcement Standards (ES) in PBM-0001 (367), PBM-0002 (368), PBM-0006 (372), PBM-0008 (374), PBN-8202B (614), PBN-8202C (615), and PBN-1401B (783). 2,4-DNT and total DNT exceeded the ES in PBN-8202A (613). 2,6-DNT and total DNT exceeded the ES in PBN-1401A (782). Total DNT exceeded the ES in PBN-8205A (622), PBN-8205B (623), PBN-8205C (624), PBN-9304C (686), and PBN-1401C (784).

2,4-DNT exceeded the Preventive Action Limit (PAL) in PBN-8205A (622), PBN-8205B (623), PBN-8912B (655), and PBN-1401A (782). 2,6-DNT exceeded the PAL in PBN-8205A (622) and PBN-9304C (686). Total DNT exceeded the PAL in PBN-8912B (655), PBN-9112C (665), and PBN-8902BR (795).

Carbon tetrachloride exceeded the ES in PBN-8205A (622), PBN-9304C (686), PBN-9903B (693), and PBN-9903C (694). Carbon tetrachloride exceeded the PAL in 15 wells.

Ethyl ether exceeded the ES in PBN-9304D (687) and the PAL in PBN-1001C (595), PBN-9903D (695), and PBN-1404D (793). Ethyl ether has been routinely detected in all four wells.

Trichloroethylene exceeded the ES in PBN-9304C (686) and the PAL in 12 wells.

Chloroform exceeded the PAL in 10 wells.

Nitrate plus nitrite exceeded the PAL in three wells.

Volatile organic compounds (VOCs) analysis was performed by CT Laboratories (CT Lab) using method EPA 8260C.

DNT analysis was also performed by CT Lab using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

Nitrate plus nitrite analyses were performed by CT Lab using method EPA 353.2.

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

GROUNDWATER MONITORING EXCEEDANCE REPORT

April 2016 Report Date: 5/19/2016

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
2,4-Dinitrotoluene	2814	367	PBM-0001	4/13/2016	1	0.19	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	367	PBM-0001	4/13/2016	1	0.12	ug/l	0.005	0.05
Nitrate + Nitrite-N	2814	367	PBM-0001	4/13/2016	1	4	mg/l	2	10
Total Dinitrotoluenes	2814	367	PBM-0001	4/13/2016	1	0.964	ug/l	0.005	0.05
2,4-Dinitrotoluene	2814	368	PBM-0002	4/13/2016	1	0.29	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	368	PBM-0002	4/13/2016	1	0.11	ug/l	0.005	0.05
Nitrate + Nitrite-N	2814	368	PBM-0002	4/13/2016	1	3.7	mg/l	2	10
Total Dinitrotoluenes	2814	368	PBM-0002	4/13/2016	1	1.7	ug/l	0.005	0.05
Trichloroethene	2814	368	PBM-0002	4/13/2016	1	0.64	ug/l	0.5	5
2,4-Dinitrotoluene	2814	372	PBM-0006	4/13/2016	1	0.27	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	372	PBM-0006	4/13/2016	1	0.088	ug/l	0.005	0.05
Nitrate + Nitrite-N	2814	372	PBM-0006	4/13/2016	1	3.4	mg/l	2	10
Total Dinitrotoluenes	2814	372	PBM-0006	4/13/2016	1	1.523	ug/l	0.005	0.05
Trichloroethene	2814	372	PBM-0006	4/13/2016	1	0.6	ug/l	0.5	5
2,4-Dinitrotoluene	2814	374	PBM-0008	4/13/2016	1	0.38	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	374	PBM-0008	4/13/2016	1	0.15	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	374	PBM-0008	4/13/2016	1	2.168	ug/l	0.005	0.05
Trichloroethene	2814	374	PBM-0008	4/13/2016	1	0.62	ug/l	0.5	5
Carbon tetrachloride	2814	595	PBN-1001C	4/6/2016	1	1.1	ug/l	0.5	5
Chloroform	2814	595	PBN-1001C	4/6/2016	1	2.9	ug/l	0.6	6
Ethyl ether	2814	595	PBN-1001C	4/6/2016	1	370	ug/l	100	1000
2,4-Dinitrotoluene	2814	613	PBN-8202A	4/13/2016	1	0.19	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	613	PBN-8202A	4/13/2016	1	4.567	ug/l	0.005	0.05
Trichloroethene	2814	613	PBN-8202A	4/13/2016	1	0.57	ug/l	0.5	5
2,4-Dinitrotoluene	2814	614	PBN-8202B	4/14/2016	1	0.17	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	614	PBN-8202B	4/14/2016	1	0.09	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	614	PBN-8202B	4/14/2016	1	1.763	ug/l	0.005	0.05
Trichloroethene	2814	614	PBN-8202B	4/14/2016	1	0.59	ug/l	0.5	5
2,4-Dinitrotoluene	2814	615	PBN-8202C	4/14/2016	1	0.15	ug/l	0.005	0.05
2,4-Dinitrotoluene	2814	615	PBN-8202C	4/14/2016	2	0.14	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	615	PBN-8202C	4/14/2016	1	0.093	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	615	PBN-8202C	4/14/2016	2	0.094	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	615	PBN-8202C	4/14/2016	1	0.797	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	615	PBN-8202C	4/14/2016	2	0.827	ug/l	0.005	0.05
Trichloroethene	2814	615	PBN-8202C	4/14/2016	1	0.53	ug/l	0.5	5
Trichloroethene	2814	615	PBN-8202C	4/14/2016	2	0.51	ug/l	0.5	5
2,4-Dinitrotoluene	2814	622	PBN-8205A	4/13/2016	1	0.035	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	622	PBN-8205A	4/13/2016	1	0.029	ug/l	0.005	0.05
Carbon tetrachloride	2814	622	PBN-8205A	4/13/2016	1	5.1	ug/l	0.5	5
Total Dinitrotoluenes	2814	622	PBN-8205A	4/13/2016	1	0.786	ug/l	0.005	0.05
Trichloroethene	2814	622	PBN-8205A	4/13/2016	1	1.3	ug/l	0.5	5
2,4-Dinitrotoluene	2814	623	PBN-8205B	4/13/2016	1	0.036	ug/l	0.005	0.05
2,4-Dinitrotoluene	2814	623	PBN-8205B	4/13/2016	2	0.037	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	623	PBN-8205B	4/13/2016	1	0.876	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	623	PBN-8205B	4/13/2016	2	0.917	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	624	PBN-8205C	4/13/2016	1	0.178	ug/l	0.005	0.05
Carbon tetrachloride	2814	632	PBN-8502A	4/12/2016	1	4.1	ug/l	0.5	5
Chloroform	2814	632	PBN-8502A	4/12/2016	1	2.2	ug/l	0.6	6

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
Trichloroethene	2814	632	PBN-8502A	4/12/2016	1	1.6	ug/l	0.5	5
Carbon tetrachloride	2814	633	PBN-8503A	4/12/2016	1	1.8	ug/l	0.5	5
Carbon tetrachloride	2814	645	PBN-8902C	4/12/2016	1	1.5	ug/l	0.5	5
Trichloroethene	2814	645	PBN-8902C	4/12/2016	1	1.1	ug/l	0.5	5
2,4-Dinitrotoluene	2814	655	PBN-8912B	4/14/2016	1	0.025	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	655	PBN-8912B	4/14/2016	1	0.025	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	665	PBN-9112C	4/14/2016	1	0.015	ug/l	0.005	0.05
Carbon tetrachloride	2814	668	PBN-9301B	4/12/2016	1	1.5	ug/l	0.5	5
Carbon tetrachloride	2814	669	PBN-9301C	4/12/2016	1	1.2	ug/l	0.5	5
Chloroform	2814	669	PBN-9301C	4/12/2016	1	0.76	ug/l	0.6	6
Carbon tetrachloride	2814	673	PBN-9303B	4/6/2016	1	1.7	ug/l	0.5	5
Carbon tetrachloride	2814	674	PBN-9303C	4/6/2016	1	2.7	ug/l	0.5	5
Chloroform	2814	674	PBN-9303C	4/6/2016	1	1.2	ug/l	0.6	6
2,6-Dinitrotoluene	2814	686	PBN-9304C	4/5/2016	1	0.037	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	686	PBN-9304C	4/5/2016	2	0.024	ug/l	0.005	0.05
Carbon tetrachloride	2814	686	PBN-9304C	4/5/2016	1	6.3	ug/l	0.5	5
Carbon tetrachloride	2814	686	PBN-9304C	4/5/2016	2	6.3	ug/l	0.5	5
Chloroform	2814	686	PBN-9304C	4/5/2016	1	1.2	ug/l	0.6	6
Chloroform	2814	686	PBN-9304C	4/5/2016	2	1.2	ug/l	0.6	6
Total Dinitrotoluenes	2814	686	PBN-9304C	4/5/2016	1	0.329	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	686	PBN-9304C	4/5/2016	2	0.273	ug/l	0.005	0.05
Trichloroethene	2814	686	PBN-9304C	4/5/2016	1	7.3	ug/l	0.5	5
Trichloroethene	2814	686	PBN-9304C	4/5/2016	2	7	ug/l	0.5	5
Ethyl ether	2814	687	PBN-9304D	4/5/2016	1	4900	ug/l	100	1000
Carbon tetrachloride	2814	692	PBN-9903A	4/6/2016	1	1	ug/l	0.5	5
Carbon tetrachloride	2814	693	PBN-9903B	4/6/2016	1	5	ug/l	0.5	5
Carbon tetrachloride	2814	694	PBN-9903C	4/6/2016	1	12	ug/l	0.5	5
Chloroform	2814	694	PBN-9903C	4/6/2016	1	0.69	ug/l	0.6	6
Trichloroethene	2814	694	PBN-9903C	4/6/2016	1	1.2	ug/l	0.5	5
Ethyl ether	2814	695	PBN-9903D	4/6/2016	1	610	ug/l	100	1000
Carbon tetrachloride	2814	770	PBN-1302A	4/11/2016	1	1.8	ug/l	0.5	5
Carbon tetrachloride	2814	771	PBN-1302B	4/7/2016	1	2	ug/l	0.5	5
Carbon tetrachloride	2814	771	PBN-1302B	4/7/2016	2	2.1	ug/l	0.5	5
Carbon tetrachloride	2814	772	PBN-1302C	4/11/2016	1	4.7	ug/l	0.5	5
Chloroform	2814	772	PBN-1302C	4/11/2016	1	1.5	ug/l	0.6	6
2,4-Dinitrotoluene	2814	782	PBN-1401A	4/11/2016	1	0.035	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	782	PBN-1401A	4/11/2016	1	0.073	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	782	PBN-1401A	4/11/2016	1	0.719	ug/l	0.005	0.05
2,4-Dinitrotoluene	2814	783	PBN-1401B	4/11/2016	1	0.062	ug/l	0.005	0.05
2,6-Dinitrotoluene	2814	783	PBN-1401B	4/11/2016	1	0.1	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	783	PBN-1401B	4/11/2016	1	0.62	ug/l	0.005	0.05
Total Dinitrotoluenes	2814	784	PBN-1401C	4/11/2016	1	0.089	ug/l	0.005	0.05
Carbon tetrachloride	2814	791	PBN-1404B	4/11/2016	1	2.1	ug/l	0.5	5
Chloroform	2814	791	PBN-1404B	4/11/2016	1	1.6	ug/l	0.6	6
Trichloroethene	2814	791	PBN-1404B	4/11/2016	1	0.51	ug/l	0.5	5
Carbon tetrachloride	2814	792	PBN-1404C	4/11/2016	1	0.59	ug/l	0.5	5
Chloroform	2814	792	PBN-1404C	4/11/2016	1	0.63	ug/l	0.6	6
Ethyl ether	2814	793	PBN-1404D	4/11/2016	1	150	ug/l	100	1000
Carbon tetrachloride	2814	795	PBN-8902BR	4/12/2016	1	1.7	ug/l	0.5	5
Carbon tetrachloride	2814	795	PBN-8902BR	4/12/2016	2	1.5	ug/l	0.5	5
Chloroform	2814	795	PBN-8902BR	4/12/2016	1	0.7	ug/l	0.6	6
Chloroform	2814	795	PBN-8902BR	4/12/2016	2	0.64	ug/l	0.6	6
Total Dinitrotoluenes	2814	795	PBN-8902BR	4/12/2016	2	0.016	ug/l	0.005	0.05
Trichloroethene	2814	795	PBN-8902BR	4/12/2016	1	1.3	ug/l	0.5	5
Trichloroethene	2814	795	PBN-8902BR	4/12/2016	2	1.2	ug/l	0.5	5

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 2814 Report Date: 5/19/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1,1-Trichloroethane	367	PBM-0001	4/13/2016	1	0.028	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	367	PBM-0001	4/13/2016	1	0.43	0.0062	0.031	ug/l		
2,4-Dinitrotoluene	367	PBM-0001	4/13/2016	1	0.19	0.0082	0.031	ug/l	0.005	0.05
2,6-Dinitrotoluene	367	PBM-0001	4/13/2016	1	0.12	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	367	PBM-0001	4/13/2016	1	0.15	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	367	PBM-0001	4/13/2016	1	0.074	0.0041	0.031	ug/l		
Carbon tetrachloride	367	PBM-0001	4/13/2016	1	0.29	0.018	0.1	ug/l	0.5	5
Chloroform	367	PBM-0001	4/13/2016	1	0.066	0.01	0.1	ug/l	0.6	6
Nitrate + Nitrite-N	367	PBM-0001	4/13/2016	1	4	0.08	0.3	mg/l	2	10
Total Dinitrotoluenes	367	PBM-0001	4/13/2016	1	0.964	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	367	PBM-0001	4/13/2016	1	0.47	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	368	PBM-0002	4/13/2016	1	0.019	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	368	PBM-0002	4/13/2016	1	0.66	0.0061	0.031	ug/l		
2,4-Dinitrotoluene	368	PBM-0002	4/13/2016	1	0.29	0.0082	0.031	ug/l	0.005	0.05
2,5-Dinitrotoluene	368	PBM-0002	4/13/2016	1	0.12	0.0031	0.031	ug/l		
2,6-Dinitrotoluene	368	PBM-0002	4/13/2016	1	0.11	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	368	PBM-0002	4/13/2016	1	0.37	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	368	PBM-0002	4/13/2016	1	0.15	0.0041	0.031	ug/l		
Carbon tetrachloride	368	PBM-0002	4/13/2016	1	0.42	0.018	0.1	ug/l	0.5	5
Chloroform	368	PBM-0002	4/13/2016	1	0.059	0.01	0.1	ug/l	0.6	6
Nitrate + Nitrite-N	368	PBM-0002	4/13/2016	1	3.7	0.08	0.3	mg/l	2	10
Total Dinitrotoluenes	368	PBM-0002	4/13/2016	1	1.7	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	368	PBM-0002	4/13/2016	1	0.64	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	372	PBM-0006	4/13/2016	1	0.03	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	372	PBM-0006	4/13/2016	1	0.55	0.0063	0.031	ug/l		
2,4-Dinitrotoluene	372	PBM-0006	4/13/2016	1	0.27	0.0083	0.031	ug/l	0.005	0.05
2,5-Dinitrotoluene	372	PBM-0006	4/13/2016	1	0.045	0.0031	0.031	ug/l		
2,6-Dinitrotoluene	372	PBM-0006	4/13/2016	1	0.088	0.0042	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	372	PBM-0006	4/13/2016	1	0.44	0.0042	0.031	ug/l		
3,5-Dinitrotoluene	372	PBM-0006	4/13/2016	1	0.13	0.0042	0.031	ug/l		
Carbon tetrachloride	372	PBM-0006	4/13/2016	1	0.32	0.018	0.1	ug/l	0.5	5
Chloroform	372	PBM-0006	4/13/2016	1	0.052	0.01	0.1	ug/l	0.6	6
Nitrate + Nitrite-N	372	PBM-0006	4/13/2016	1	3.4	0.08	0.3	mg/l	2	10
Total Dinitrotoluenes	372	PBM-0006	4/13/2016	1	1.523	0.0083	0.031	ug/l	0.005	0.05
Trichloroethene	372	PBM-0006	4/13/2016	1	0.6	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	374	PBM-0008	4/13/2016	1	0.034	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	374	PBM-0008	4/13/2016	1	0.82	0.0062	0.031	ug/l		
2,4-Dinitrotoluene	374	PBM-0008	4/13/2016	1	0.38	0.0082	0.031	ug/l	0.005	0.05
2,5-Dinitrotoluene	374	PBM-0008	4/13/2016	1	0.078	0.0031	0.031	ug/l		
2,6-Dinitrotoluene	374	PBM-0008	4/13/2016	1	0.15	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	374	PBM-0008	4/13/2016	1	0.53	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	374	PBM-0008	4/13/2016	1	0.21	0.0041	0.031	ug/l		
Carbon tetrachloride	374	PBM-0008	4/13/2016	1	0.31	0.018	0.1	ug/l	0.5	5
Chloroform	374	PBM-0008	4/13/2016	1	0.058	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	374	PBM-0008	4/13/2016	1	2.168	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	374	PBM-0008	4/13/2016	1	0.62	0.02	0.1	ug/l	0.5	5
Carbon tetrachloride	595	PBN-1001C	4/6/2016	1	1.1	0.9	5	ug/l	0.5	5
Chloroform	595	PBN-1001C	4/6/2016	1	2.9	0.5	5	ug/l	0.6	6

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
Ethyl ether	595	PBN-1001C	4/6/2016	1	370	1.4	5	ug/l	100	1000
1,1,1-Trichloroethane	613	PBN-8202A	4/13/2016	1	0.022	0.009	0.1	ug/l	40	200
1,2,4-Trimethylbenzene	613	PBN-8202A	4/13/2016	1	0.042	0.029	0.1	ug/l	96	480
2,3-Dinitrotoluene	613	PBN-8202A	4/13/2016	1	3.2	0.033	0.17	ug/l		
2,4-Dinitrotoluene	613	PBN-8202A	4/13/2016	1	0.19	0.0089	0.033	ug/l	0.005	0.05
2,5-Dinitrotoluene	613	PBN-8202A	4/13/2016	1	0.047	0.0033	0.033	ug/l		
3,4-Dinitrotoluene	613	PBN-8202A	4/13/2016	1	0.57	0.0044	0.033	ug/l		
3,5-Dinitrotoluene	613	PBN-8202A	4/13/2016	1	0.56	0.0044	0.033	ug/l		
Carbon tetrachloride	613	PBN-8202A	4/13/2016	1	0.35	0.018	0.1	ug/l	0.5	5
Chloroform	613	PBN-8202A	4/13/2016	1	0.052	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	613	PBN-8202A	4/13/2016	1	4.567	0.0089	0.033	ug/l	0.005	0.05
Trichloroethene	613	PBN-8202A	4/13/2016	1	0.57	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	614	PBN-8202B	4/14/2016	1	0.028	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	614	PBN-8202B	4/14/2016	1	0.88	0.0061	0.031	ug/l		
2,4-Dinitrotoluene	614	PBN-8202B	4/14/2016	1	0.17	0.0082	0.031	ug/l	0.005	0.05
2,5-Dinitrotoluene	614	PBN-8202B	4/14/2016	1	0.033	0.0031	0.031	ug/l		
2,6-Dinitrotoluene	614	PBN-8202B	4/14/2016	1	0.09	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	614	PBN-8202B	4/14/2016	1	0.43	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	614	PBN-8202B	4/14/2016	1	0.16	0.0041	0.031	ug/l		
Carbon tetrachloride	614	PBN-8202B	4/14/2016	1	0.37	0.018	0.1	ug/l	0.5	5
Chloroform	614	PBN-8202B	4/14/2016	1	0.07	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	614	PBN-8202B	4/14/2016	1	1.763	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	614	PBN-8202B	4/14/2016	1	0.59	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	615	PBN-8202C	4/14/2016	2	0.029	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	615	PBN-8202C	4/14/2016	1	0.025	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	615	PBN-8202C	4/14/2016	1	0.36	0.0061	0.031	ug/l		
2,3-Dinitrotoluene	615	PBN-8202C	4/14/2016	2	0.38	0.0063	0.032	ug/l		
2,4-Dinitrotoluene	615	PBN-8202C	4/14/2016	1	0.15	0.0082	0.031	ug/l	0.005	0.05
2,4-Dinitrotoluene	615	PBN-8202C	4/14/2016	2	0.14	0.0084	0.032	ug/l	0.005	0.05
2,5-Dinitrotoluene	615	PBN-8202C	4/14/2016	1	0.015	0.0031	0.031	ug/l		
2,5-Dinitrotoluene	615	PBN-8202C	4/14/2016	2	0.016	0.0032	0.032	ug/l		
2,6-Dinitrotoluene	615	PBN-8202C	4/14/2016	2	0.094	0.0042	0.032	ug/l	0.005	0.05
2,6-Dinitrotoluene	615	PBN-8202C	4/14/2016	1	0.093	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	615	PBN-8202C	4/14/2016	1	0.11	0.0041	0.031	ug/l		
3,4-Dinitrotoluene	615	PBN-8202C	4/14/2016	2	0.12	0.0042	0.032	ug/l		
3,5-Dinitrotoluene	615	PBN-8202C	4/14/2016	2	0.077	0.0042	0.032	ug/l		
3,5-Dinitrotoluene	615	PBN-8202C	4/14/2016	1	0.069	0.0041	0.031	ug/l		
Carbon tetrachloride	615	PBN-8202C	4/14/2016	2	0.27	0.018	0.1	ug/l	0.5	5
Carbon tetrachloride	615	PBN-8202C	4/14/2016	1	0.29	0.018	0.1	ug/l	0.5	5
Chloroform	615	PBN-8202C	4/14/2016	1	0.083	0.01	0.1	ug/l	0.6	6
Chloroform	615	PBN-8202C	4/14/2016	2	0.08	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	615	PBN-8202C	4/14/2016	1	0.797	0.0082	0.031	ug/l	0.005	0.05
Total Dinitrotoluenes	615	PBN-8202C	4/14/2016	2	0.827	0.0084	0.032	ug/l	0.005	0.05
Trichloroethene	615	PBN-8202C	4/14/2016	1	0.53	0.02	0.1	ug/l	0.5	5
Trichloroethene	615	PBN-8202C	4/14/2016	2	0.51	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	622	PBN-8205A	4/13/2016	1	0.69	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	622	PBN-8205A	4/13/2016	1	0.45	0.0063	0.032	ug/l		
2,4-Dinitrotoluene	622	PBN-8205A	4/13/2016	1	0.035	0.0084	0.032	ug/l	0.005	0.05
2,6-Dinitrotoluene	622	PBN-8205A	4/13/2016	1	0.029	0.0042	0.032	ug/l	0.005	0.05
3,4-Dinitrotoluene	622	PBN-8205A	4/13/2016	1	0.21	0.0042	0.032	ug/l		
3,5-Dinitrotoluene	622	PBN-8205A	4/13/2016	1	0.062	0.0042	0.032	ug/l		
Carbon tetrachloride	622	PBN-8205A	4/13/2016	1	5.1	0.018	0.1	ug/l	0.5	5
Chloroform	622	PBN-8205A	4/13/2016	1	0.26	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	622	PBN-8205A	4/13/2016	1	0.786	0.0084	0.032	ug/l	0.005	0.05
Trichloroethene	622	PBN-8205A	4/13/2016	1	1.3	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	623	PBN-8205B	4/13/2016	1	0.12	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	623	PBN-8205B	4/13/2016	2	0.11	0.009	0.1	ug/l	40	200

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1-Dichloroethane	623	PBN-8205B	4/13/2016	1	0.03	0.021	0.1	ug/l	85	850
1,1-Dichloroethane	623	PBN-8205B	4/13/2016	2	0.025	0.021	0.1	ug/l	85	850
2,3-Dinitrotoluene	623	PBN-8205B	4/13/2016	2	0.44	0.0063	0.032	ug/l		
2,3-Dinitrotoluene	623	PBN-8205B	4/13/2016	1	0.42	0.0063	0.032	ug/l		
2,4-Dinitrotoluene	623	PBN-8205B	4/13/2016	2	0.037	0.0084	0.032	ug/l	0.005	0.05
2,4-Dinitrotoluene	623	PBN-8205B	4/13/2016	1	0.036	0.0084	0.032	ug/l	0.005	0.05
3,4-Dinitrotoluene	623	PBN-8205B	4/13/2016	1	0.26	0.0042	0.032	ug/l		
3,4-Dinitrotoluene	623	PBN-8205B	4/13/2016	2	0.27	0.0042	0.032	ug/l		
3,5-Dinitrotoluene	623	PBN-8205B	4/13/2016	1	0.16	0.0042	0.032	ug/l		
3,5-Dinitrotoluene	623	PBN-8205B	4/13/2016	2	0.17	0.0042	0.032	ug/l		
Carbon tetrachloride	623	PBN-8205B	4/13/2016	2	0.13	0.018	0.1	ug/l	0.5	5
Carbon tetrachloride	623	PBN-8205B	4/13/2016	1	0.12	0.018	0.1	ug/l	0.5	5
Chloroform	623	PBN-8205B	4/13/2016	2	0.24	0.01	0.1	ug/l	0.6	6
Chloroform	623	PBN-8205B	4/13/2016	1	0.24	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	623	PBN-8205B	4/13/2016	2	0.917	0.0084	0.032	ug/l	0.005	0.05
Total Dinitrotoluenes	623	PBN-8205B	4/13/2016	1	0.876	0.0084	0.032	ug/l	0.005	0.05
Trichloroethene	623	PBN-8205B	4/13/2016	2	0.23	0.02	0.1	ug/l	0.5	5
Trichloroethene	623	PBN-8205B	4/13/2016	1	0.24	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	624	PBN-8205C	4/13/2016	1	0.079	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	624	PBN-8205C	4/13/2016	1	0.092	0.0061	0.031	ug/l		
2,5-Dinitrotoluene	624	PBN-8205C	4/13/2016	1	0.086	0.0031	0.031	ug/l		
Carbon tetrachloride	624	PBN-8205C	4/13/2016	1	0.045	0.018	0.1	ug/l	0.5	5
Chloroform	624	PBN-8205C	4/13/2016	1	0.13	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	624	PBN-8205C	4/13/2016	1	0.178	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	624	PBN-8205C	4/13/2016	1	0.29	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	632	PBN-8502A	4/12/2016	1	0.54	0.009	0.1	ug/l	40	200
1,1-Dichloroethane	632	PBN-8502A	4/12/2016	1	0.36	0.021	0.1	ug/l	85	850
Carbon tetrachloride	632	PBN-8502A	4/12/2016	1	4.1	0.018	0.1	ug/l	0.5	5
Chloroform	632	PBN-8502A	4/12/2016	1	2.2	0.01	0.1	ug/l	0.6	6
Trichloroethene	632	PBN-8502A	4/12/2016	1	1.6	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	633	PBN-8503A	4/12/2016	1	0.15	0.009	0.1	ug/l	40	200
Carbon tetrachloride	633	PBN-8503A	4/12/2016	1	1.8	0.018	0.1	ug/l	0.5	5
Chloroform	633	PBN-8503A	4/12/2016	1	0.036	0.01	0.1	ug/l	0.6	6
Trichloroethene	633	PBN-8503A	4/12/2016	1	0.057	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	645	PBN-8902C	4/12/2016	1	0.088	0.009	0.1	ug/l	40	200
Carbon tetrachloride	645	PBN-8902C	4/12/2016	1	1.5	0.018	0.1	ug/l	0.5	5
Chloroform	645	PBN-8902C	4/12/2016	1	0.51	0.01	0.1	ug/l	0.6	6
Trichloroethene	645	PBN-8902C	4/12/2016	1	1.1	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	646	PBN-8903B	4/12/2016	1	0.016	0.009	0.1	ug/l	40	200
Carbon tetrachloride	646	PBN-8903B	4/12/2016	1	0.17	0.018	0.1	ug/l	0.5	5
Chloroform	646	PBN-8903B	4/12/2016	1	0.035	0.01	0.1	ug/l	0.6	6
Carbon tetrachloride	647	PBN-8903C	4/12/2016	1	0.025	0.018	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	655	PBN-8912B	4/14/2016	1	0.024	0.009	0.1	ug/l	40	200
2,4-Dinitrotoluene	655	PBN-8912B	4/14/2016	1	0.025	0.008	0.03	ug/l	0.005	0.05
Carbon tetrachloride	655	PBN-8912B	4/14/2016	1	0.38	0.018	0.1	ug/l	0.5	5
Chloroform	655	PBN-8912B	4/14/2016	1	0.17	0.01	0.1	ug/l	0.6	6
Tetrachloroethene	655	PBN-8912B	4/14/2016	1	0.063	0.01	0.1	ug/l	0.5	5
Total Dinitrotoluenes	655	PBN-8912B	4/14/2016	1	0.025	0.008	0.03	ug/l	0.005	0.05
Trichloroethene	655	PBN-8912B	4/14/2016	1	0.43	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	665	PBN-9112C	4/14/2016	1	0.037	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	665	PBN-9112C	4/14/2016	1	0.015	0.0061	0.031	ug/l		
Carbon tetrachloride	665	PBN-9112C	4/14/2016	1	0.18	0.018	0.1	ug/l	0.5	5
Chloroform	665	PBN-9112C	4/14/2016	1	0.23	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	665	PBN-9112C	4/14/2016	1	0.015	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	665	PBN-9112C	4/14/2016	1	0.21	0.02	0.1	ug/l	0.5	5
1,1-Dichloroethane	666	PBN-9112D	4/14/2016	1	0.049	0.021	0.1	ug/l	85	850
1,1,1-Trichloroethane	668	PBN-9301B	4/12/2016	1	0.44	0.009	0.1	ug/l	40	200

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
Carbon tetrachloride	668	PBN-9301B	4/12/2016	1	1.5	0.018	0.1	ug/l	0.5	5
Chloroform	668	PBN-9301B	4/12/2016	1	0.47	0.01	0.1	ug/l	0.6	6
Trichloroethene	668	PBN-9301B	4/12/2016	1	0.11	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	669	PBN-9301C	4/12/2016	1	0.98	0.009	0.1	ug/l	40	200
1,1-Dichloroethene	669	PBN-9301C	4/12/2016	1	0.072	0.04	0.1	ug/l	0.7	7
Carbon tetrachloride	669	PBN-9301C	4/12/2016	1	1.2	0.018	0.1	ug/l	0.5	5
Chloroform	669	PBN-9301C	4/12/2016	1	0.76	0.01	0.1	ug/l	0.6	6
Ethyl ether	669	PBN-9301C	4/12/2016	1	0.045	0.028	0.1	ug/l	100	1000
Trichloroethene	669	PBN-9301C	4/12/2016	1	0.36	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	673	PBN-9303B	4/6/2016	1	0.87	0.009	0.1	ug/l	40	200
1,1-Dichloroethene	673	PBN-9303B	4/6/2016	1	0.11	0.04	0.1	ug/l	0.7	7
Carbon tetrachloride	673	PBN-9303B	4/6/2016	1	1.7	0.018	0.1	ug/l	0.5	5
Chloroform	673	PBN-9303B	4/6/2016	1	0.42	0.01	0.1	ug/l	0.6	6
Trichloroethene	673	PBN-9303B	4/6/2016	1	0.18	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	674	PBN-9303C	4/6/2016	1	0.68	0.009	0.1	ug/l	40	200
1,1-Dichloroethene	674	PBN-9303C	4/6/2016	1	0.045	0.04	0.1	ug/l	0.7	7
Carbon tetrachloride	674	PBN-9303C	4/6/2016	1	2.7	0.018	0.1	ug/l	0.5	5
Chloroform	674	PBN-9303C	4/6/2016	1	1.2	0.01	0.1	ug/l	0.6	6
1,1-Dichloroethane	675	PBN-9303D	4/6/2016	1	0.28	0.021	0.1	ug/l	85	850
1,1,1-Trichloroethane	686	PBN-9304C	4/5/2016	1	0.72	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	686	PBN-9304C	4/5/2016	2	0.71	0.009	0.1	ug/l	40	200
1,1-Dichloroethene	686	PBN-9304C	4/5/2016	2	0.096	0.04	0.1	ug/l	0.7	7
1,1-Dichloroethene	686	PBN-9304C	4/5/2016	1	0.11	0.04	0.1	ug/l	0.7	7
1,2-Dichloroethane	686	PBN-9304C	4/5/2016	2	0.056	0.015	0.1	ug/l	0.5	5
1,2-Dichloroethane	686	PBN-9304C	4/5/2016	1	0.056	0.015	0.1	ug/l	0.5	5
2,3-Dinitrotoluene	686	PBN-9304C	4/5/2016	2	0.14	0.0062	0.031	ug/l		
2,3-Dinitrotoluene	686	PBN-9304C	4/5/2016	1	0.17	0.0062	0.031	ug/l		
2,6-Dinitrotoluene	686	PBN-9304C	4/5/2016	2	0.024	0.0041	0.031	ug/l	0.005	0.05
2,6-Dinitrotoluene	686	PBN-9304C	4/5/2016	1	0.037	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	686	PBN-9304C	4/5/2016	1	0.07	0.0041	0.031	ug/l		
3,4-Dinitrotoluene	686	PBN-9304C	4/5/2016	2	0.064	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	686	PBN-9304C	4/5/2016	1	0.052	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	686	PBN-9304C	4/5/2016	2	0.045	0.0041	0.031	ug/l		
Carbon tetrachloride	686	PBN-9304C	4/5/2016	1	6.3	0.018	0.1	ug/l	0.5	5
Carbon tetrachloride	686	PBN-9304C	4/5/2016	2	6.3	0.018	0.1	ug/l	0.5	5
Chloroform	686	PBN-9304C	4/5/2016	1	1.2	0.01	0.1	ug/l	0.6	6
Chloroform	686	PBN-9304C	4/5/2016	2	1.2	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	686	PBN-9304C	4/5/2016	1	0.329	0.0082	0.031	ug/l	0.005	0.05
Total Dinitrotoluenes	686	PBN-9304C	4/5/2016	2	0.273	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	686	PBN-9304C	4/5/2016	2	7	0.02	0.1	ug/l	0.5	5
Trichloroethene	686	PBN-9304C	4/5/2016	1	7.3	0.02	0.1	ug/l	0.5	5
Ethyl ether	687	PBN-9304D	4/5/2016	1	4900	28	100	ug/l	100	1000
1,1-Dichloroethane	691	PBN-9902D	4/5/2016	1	0.023	0.021	0.1	ug/l	85	850
Ethyl ether	691	PBN-9902D	4/5/2016	1	4.1	0.028	0.1	ug/l	100	1000
1,1,1-Trichloroethane	692	PBN-9903A	4/6/2016	1	0.045	0.009	0.1	ug/l	40	200
Carbon tetrachloride	692	PBN-9903A	4/6/2016	1	1	0.018	0.1	ug/l	0.5	5
Chloroform	692	PBN-9903A	4/6/2016	1	0.067	0.01	0.1	ug/l	0.6	6
Trichloroethene	692	PBN-9903A	4/6/2016	1	0.21	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	693	PBN-9903B	4/6/2016	1	0.32	0.009	0.1	ug/l	40	200
Carbon tetrachloride	693	PBN-9903B	4/6/2016	1	5	0.018	0.1	ug/l	0.5	5
Chloroform	693	PBN-9903B	4/6/2016	1	0.32	0.01	0.1	ug/l	0.6	6
Trichloroethene	693	PBN-9903B	4/6/2016	1	0.23	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	694	PBN-9903C	4/6/2016	1	0.16	0.009	0.1	ug/l	40	200
Carbon tetrachloride	694	PBN-9903C	4/6/2016	1	12	0.018	0.1	ug/l	0.5	5
Chloroform	694	PBN-9903C	4/6/2016	1	0.69	0.01	0.1	ug/l	0.6	6
Trichloroethene	694	PBN-9903C	4/6/2016	1	1.2	0.02	0.1	ug/l	0.5	5
Ethyl ether	695	PBN-9903D	4/6/2016	1	610	2.8	10	ug/l	100	1000

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1,1-Trichloroethane	770	PBN-1302A	4/11/2016	1	0.47	0.009	0.1	ug/l	40	200
Carbon tetrachloride	770	PBN-1302A	4/11/2016	1	1.8	0.018	0.1	ug/l	0.5	5
Chloroform	770	PBN-1302A	4/11/2016	1	0.37	0.01	0.1	ug/l	0.6	6
Trichloroethene	770	PBN-1302A	4/11/2016	1	0.025	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	771	PBN-1302B	4/7/2016	1	0.76	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	771	PBN-1302B	4/7/2016	2	0.74	0.009	0.1	ug/l	40	200
1,1-Dichloroethene	771	PBN-1302B	4/7/2016	2	0.059	0.04	0.1	ug/l	0.7	7
1,1-Dichloroethene	771	PBN-1302B	4/7/2016	1	0.055	0.04	0.1	ug/l	0.7	7
Carbon tetrachloride	771	PBN-1302B	4/7/2016	2	2.1	0.018	0.1	ug/l	0.5	5
Carbon tetrachloride	771	PBN-1302B	4/7/2016	1	2	0.018	0.1	ug/l	0.5	5
Chloroform	771	PBN-1302B	4/7/2016	2	0.53	0.01	0.1	ug/l	0.6	6
Chloroform	771	PBN-1302B	4/7/2016	1	0.51	0.01	0.1	ug/l	0.6	6
Trichloroethene	771	PBN-1302B	4/7/2016	1	0.064	0.02	0.1	ug/l	0.5	5
Trichloroethene	771	PBN-1302B	4/7/2016	2	0.067	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	772	PBN-1302C	4/11/2016	1	0.3	0.009	0.1	ug/l	40	200
Carbon tetrachloride	772	PBN-1302C	4/11/2016	1	4.7	0.018	0.1	ug/l	0.5	5
Chloroform	772	PBN-1302C	4/11/2016	1	1.5	0.01	0.1	ug/l	0.6	6
1,1,1-Trichloroethane	774	PBN-1303A	4/7/2016	1	0.25	0.009	0.1	ug/l	40	200
Carbon tetrachloride	774	PBN-1303A	4/7/2016	1	0.38	0.018	0.1	ug/l	0.5	5
Chloroform	774	PBN-1303A	4/7/2016	1	0.18	0.01	0.1	ug/l	0.6	6
1,1,1-Trichloroethane	775	PBN-1303B	4/7/2016	1	0.25	0.009	0.1	ug/l	40	200
Carbon tetrachloride	775	PBN-1303B	4/7/2016	1	0.42	0.018	0.1	ug/l	0.5	5
Chloroform	775	PBN-1303B	4/7/2016	1	0.2	0.01	0.1	ug/l	0.6	6
1,1,1-Trichloroethane	776	PBN-1303C	4/7/2016	1	0.28	0.009	0.1	ug/l	40	200
Carbon tetrachloride	776	PBN-1303C	4/7/2016	1	0.44	0.018	0.1	ug/l	0.5	5
Chloroform	776	PBN-1303C	4/7/2016	1	0.24	0.01	0.1	ug/l	0.6	6
1,1-Dichloroethane	777	PBN-1303D	4/7/2016	1	0.081	0.021	0.1	ug/l	85	850
1,1,1-Trichloroethane	778	PBN-1304A	4/7/2016	1	0.065	0.009	0.1	ug/l	40	200
Carbon tetrachloride	778	PBN-1304A	4/7/2016	1	0.13	0.018	0.1	ug/l	0.5	5
Chloroform	778	PBN-1304A	4/7/2016	1	0.19	0.01	0.1	ug/l	0.6	6
1,1,1-Trichloroethane	779	PBN-1304B	4/7/2016	1	0.071	0.009	0.1	ug/l	40	200
Carbon tetrachloride	779	PBN-1304B	4/7/2016	1	0.09	0.018	0.1	ug/l	0.5	5
Chloroform	779	PBN-1304B	4/7/2016	1	0.19	0.01	0.1	ug/l	0.6	6
1,1,1-Trichloroethane	780	PBN-1304C	4/7/2016	1	0.11	0.009	0.1	ug/l	40	200
Carbon tetrachloride	780	PBN-1304C	4/7/2016	1	0.19	0.018	0.1	ug/l	0.5	5
Chloroform	780	PBN-1304C	4/7/2016	1	0.21	0.01	0.1	ug/l	0.6	6
1,1-Dichloroethane	781	PBN-1304D	4/7/2016	1	0.031	0.021	0.1	ug/l	85	850
1,1,1-Trichloroethane	782	PBN-1401A	4/11/2016	1	0.065	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	782	PBN-1401A	4/11/2016	1	0.33	0.0061	0.031	ug/l		
2,4-Dinitrotoluene	782	PBN-1401A	4/11/2016	1	0.035	0.0082	0.031	ug/l	0.005	0.05
2,5-Dintrotoluene	782	PBN-1401A	4/11/2016	1	0.047	0.0031	0.031	ug/l		
2,6-Dinitrotoluene	782	PBN-1401A	4/11/2016	1	0.073	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	782	PBN-1401A	4/11/2016	1	0.16	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	782	PBN-1401A	4/11/2016	1	0.074	0.0041	0.031	ug/l		
Carbon tetrachloride	782	PBN-1401A	4/11/2016	1	0.15	0.018	0.1	ug/l	0.5	5
Chloroform	782	PBN-1401A	4/11/2016	1	0.11	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	782	PBN-1401A	4/11/2016	1	0.719	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	782	PBN-1401A	4/11/2016	1	0.21	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	783	PBN-1401B	4/11/2016	1	0.063	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	783	PBN-1401B	4/11/2016	1	0.24	0.0061	0.031	ug/l		
2,4-Dinitrotoluene	783	PBN-1401B	4/11/2016	1	0.062	0.0082	0.031	ug/l	0.005	0.05
2,5-Dintrotoluene	783	PBN-1401B	4/11/2016	1	0.033	0.0031	0.031	ug/l		
2,6-Dinitrotoluene	783	PBN-1401B	4/11/2016	1	0.1	0.0041	0.031	ug/l	0.005	0.05
3,4-Dinitrotoluene	783	PBN-1401B	4/11/2016	1	0.13	0.0041	0.031	ug/l		
3,5-Dinitrotoluene	783	PBN-1401B	4/11/2016	1	0.052	0.0041	0.031	ug/l		
Carbon tetrachloride	783	PBN-1401B	4/11/2016	1	0.063	0.018	0.1	ug/l	0.5	5
Chloroform	783	PBN-1401B	4/11/2016	1	0.1	0.01	0.1	ug/l	0.6	6

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
Total Dinitrotoluenes	783	PBN-1401B	4/11/2016	1	0.62	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	783	PBN-1401B	4/11/2016	1	0.12	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	784	PBN-1401C	4/11/2016	1	0.047	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	784	PBN-1401C	4/11/2016	1	0.042	0.006	0.03	ug/l		
3,4-Dinitrotoluene	784	PBN-1401C	4/11/2016	1	0.047	0.004	0.03	ug/l		
Carbon tetrachloride	784	PBN-1401C	4/11/2016	1	0.056	0.018	0.1	ug/l	0.5	5
Chloroform	784	PBN-1401C	4/11/2016	1	0.14	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	784	PBN-1401C	4/11/2016	1	0.089	0.008	0.03	ug/l	0.005	0.05
1,1,1-Trichloroethane	791	PBN-1404B	4/11/2016	1	0.2	0.009	0.1	ug/l	40	200
1,1-Dichloroethane	791	PBN-1404B	4/11/2016	1	0.026	0.021	0.1	ug/l	85	850
Carbon tetrachloride	791	PBN-1404B	4/11/2016	1	2.1	0.018	0.1	ug/l	0.5	5
Chloroform	791	PBN-1404B	4/11/2016	1	1.6	0.01	0.1	ug/l	0.6	6
Ethyl ether	791	PBN-1404B	4/11/2016	1	0.23	0.028	0.1	ug/l	100	1000
Trichloroethene	791	PBN-1404B	4/11/2016	1	0.51	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	792	PBN-1404C	4/11/2016	1	0.26	0.009	0.1	ug/l	40	200
Carbon tetrachloride	792	PBN-1404C	4/11/2016	1	0.59	0.018	0.1	ug/l	0.5	5
Chloroform	792	PBN-1404C	4/11/2016	1	0.63	0.01	0.1	ug/l	0.6	6
Trichloroethene	792	PBN-1404C	4/11/2016	1	0.1	0.02	0.1	ug/l	0.5	5
1,1-Dichloroethane	793	PBN-1404D	4/11/2016	1	0.42	0.021	0.1	ug/l	85	850
Ethyl ether	793	PBN-1404D	4/11/2016	1	150	0.56	2	ug/l	100	1000
1,1,1-Trichloroethane	795	PBN-8902BR	4/12/2016	1	0.1	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	795	PBN-8902BR	4/12/2016	2	0.1	0.009	0.1	ug/l	40	200
2,5-Dinitrotoluene	795	PBN-8902BR	4/12/2016	2	0.016	0.0032	0.032	ug/l		
Carbon tetrachloride	795	PBN-8902BR	4/12/2016	2	1.5	0.018	0.1	ug/l	0.5	5
Carbon tetrachloride	795	PBN-8902BR	4/12/2016	1	1.7	0.018	0.1	ug/l	0.5	5
Chloroform	795	PBN-8902BR	4/12/2016	2	0.64	0.01	0.1	ug/l	0.6	6
Chloroform	795	PBN-8902BR	4/12/2016	1	0.7	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	795	PBN-8902BR	4/12/2016	2	0.016	0.0084	0.032	ug/l	0.005	0.05
Trichloroethene	795	PBN-8902BR	4/12/2016	2	1.2	0.02	0.1	ug/l	0.5	5
Trichloroethene	795	PBN-8902BR	4/12/2016	1	1.3	0.02	0.1	ug/l	0.5	5

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Deterrent Burning Grounds	03037	157065260	4/14 - 4/21/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [x] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [x] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Joel Janssen 5/23/16

Signature Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 3037
Deterrent Burning Grounds
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities.

2,6-Dinitrotoluene (DNT) exceeded the Enforcement Standard (ES) in DBM-8201 (301). Total DNT exceeded the ES in DBM-8201 (301), DBM-8202 (302), DBN-1001B (472), and DBN-1002C (476).

2,4-DNT exceeded the Preventive Action Limit (PAL) in DBM-8201 (301). 2,6-DNT exceeded the PAL in DBN-1002C (476).

Volatile organic compounds (VOCs) analysis was performed by CT Laboratories (CT Lab) using method EPA 8260C.

DNT analysis was also performed by CT Lab using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

Sulfate analyses were performed by CT Lab using method SW 846 9056A.

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

GROUNDWATER MONITORING EXCEEDANCE REPORT

April 2016 Report Date: 5/19/2016

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
2,4-Dinitrotoluene	3037	301	DBM-8201	4/21/2016	1	0.032	ug/l	0.005	0.05
2,6-Dinitrotoluene	3037	301	DBM-8201	4/21/2016	1	0.18	ug/l	0.005	0.05
Total Dinitrotoluenes	3037	301	DBM-8201	4/21/2016	1	5.652	ug/l	0.005	0.05
Total Dinitrotoluenes	3037	302	DBM-8202	4/21/2016	1	0.199	ug/l	0.005	0.05
Total Dinitrotoluenes	3037	472	DBN-1001B	4/21/2016	1	0.54	ug/l	0.005	0.05
2,6-Dinitrotoluene	3037	476	DBN-1002C	4/18/2016	1	0.021	ug/l	0.005	0.05
Total Dinitrotoluenes	3037	476	DBN-1002C	4/18/2016	1	1.104	ug/l	0.005	0.05

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 3037 Report Date: 5/19/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1,1-Trichloroethane	301	DBM-8201	4/21/2016	1	0.27	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	301	DBM-8201	4/21/2016	1	3.9	0.012	0.061	ug/l		
2,4-Dinitrotoluene	301	DBM-8201	4/21/2016	1	0.032	0.0081	0.03	ug/l	0.005	0.05
2,6-Dinitrotoluene	301	DBM-8201	4/21/2016	1	0.18	0.004	0.03	ug/l	0.005	0.05
3,4-Dinitrotoluene	301	DBM-8201	4/21/2016	1	0.44	0.004	0.03	ug/l		
3,5-Dinitrotoluene	301	DBM-8201	4/21/2016	1	1.1	0.004	0.03	ug/l		
Chloroform	301	DBM-8201	4/21/2016	1	0.075	0.01	0.1	ug/l	0.6	6
Sulfate	301	DBM-8201	4/21/2016	1	21	1.3	5	mg/l	125	250
Total Dinitrotoluenes	301	DBM-8201	4/21/2016	1	5.652	0.0081	0.03	ug/l	0.005	0.05
1,1,1-Trichloroethane	302	DBM-8202	4/21/2016	1	0.88	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	302	DBM-8202	4/21/2016	1	0.093	0.0061	0.03	ug/l		
3,4-Dinitrotoluene	302	DBM-8202	4/21/2016	1	0.03	0.004	0.03	ug/l		
3,5-Dinitrotoluene	302	DBM-8202	4/21/2016	1	0.076	0.004	0.03	ug/l		
Sulfate	302	DBM-8202	4/21/2016	1	15	1.3	5	mg/l	125	250
Total Dinitrotoluenes	302	DBM-8202	4/21/2016	1	0.199	0.0081	0.03	ug/l	0.005	0.05
1,1,1-Trichloroethane	306	DBM-8903	4/14/2016	1	0.024	0.009	0.1	ug/l	40	200
Chloroform	316	DBN-9501C	4/14/2016	1	0.047	0.01	0.1	ug/l	0.6	6
1,1,1-Trichloroethane	472	DBN-1001B	4/21/2016	1	1.7	0.009	0.1	ug/l	40	200
2,3-Dinitrotoluene	472	DBN-1001B	4/21/2016	1	0.16	0.0062	0.031	ug/l		
3,4-Dinitrotoluene	472	DBN-1001B	4/21/2016	1	0.38	0.0041	0.031	ug/l		
Total Dinitrotoluenes	472	DBN-1001B	4/21/2016	1	0.54	0.0082	0.031	ug/l	0.005	0.05
1,1,1-Trichloroethane	473	DBN-1001C	4/21/2016	1	0.072	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	476	DBN-1002C	4/18/2016	1	0.42	0.009	0.1	ug/l	40	200
1,1,2-Trichloroethane	476	DBN-1002C	4/18/2016	1	0.037	0.015	0.1	ug/l	0.5	5
2,3-Dinitrotoluene	476	DBN-1002C	4/18/2016	1	0.27	0.0061	0.03	ug/l		
2,6-Dinitrotoluene	476	DBN-1002C	4/18/2016	1	0.021	0.004	0.03	ug/l	0.005	0.05
3,4-Dinitrotoluene	476	DBN-1002C	4/18/2016	1	0.78	0.004	0.03	ug/l		
3,5-Dinitrotoluene	476	DBN-1002C	4/18/2016	1	0.033	0.004	0.03	ug/l		
Sulfate	476	DBN-1002C	4/18/2016	1	38	1.3	5	mg/l	125	250
Total Dinitrotoluenes	476	DBN-1002C	4/18/2016	1	1.104	0.0081	0.03	ug/l	0.005	0.05
Sulfate	477	DBN-1002E	4/21/2016	1	18	1.3	5	mg/l	125	250

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Southeast Boundary	03038	157005530	4/19/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [X] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [X] No. No groundwater standards or explosive gas limits were exceeded.
- [ ] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Signature Joel Janssen Date 5/23/16

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (Initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 3038
Southeast Boundary
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities.

Only one well, S1121 (755), was sampled during this sampling period. No compounds were detected in S1121.

Volatile organic compounds (VOCs) analysis was performed by CT Laboratories (CT Lab) using method EPA 8260C.

Dinitrotoluene (DNT) analysis was also performed by CT Lab using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Off-Site Plume Wells	03485 & 03493	157005530	4/5 - 4/11/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [x] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [x] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Signature: Joel Janssen Date: 5/23/16

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 3485 & 3493
Off-Site Plume Wells
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities.

2,6-Dinitrotoluene (DNT) and total DNT exceeded the Enforcement Standard (ES) in PBN-9101C (561).

Carbon tetrachloride exceeded the ES in PBN-9101C (561), SWN-9103D (573), and PBM-9001D (981) and the Preventive Action Limit (PAL) in SWN-9103B (571), SWN-9103C (572), SWN-9104C (575), and SWN-9104D (576).

Chloroform exceeded the PAL in three wells.

Trichloroethylene exceeded the ES in PBN-9101C (561) and the PAL in SWN-9103D (573) and PBM-9001D (981).

Volatile organic compounds (VOCs) analysis was performed by CT Laboratories (CT Lab) using method EPA 8260C.

DNT analysis was also performed by CT Lab using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

GROUNDWATER MONITORING EXCEEDANCE REPORT

April 2016 Report Date: 5/19/2016

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
Carbon tetrachloride	3485	981	PBM-9001D	4/5/2016	1	15	ug/l	0.5	5
Chloroform	3485	981	PBM-9001D	4/5/2016	1	1.8	ug/l	0.6	6
Trichloroethene	3485	981	PBM-9001D	4/5/2016	1	4.1	ug/l	0.5	5

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 3485 Report Date: 5/19/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1,1-Trichloroethane	981	PBM-9001D	4/5/2016	1	0.056	0.009	0.1	ug/l	40	200
Carbon tetrachloride	981	PBM-9001D	4/5/2016	1	15	0.018	0.1	ug/l	0.5	5
Chloroform	981	PBM-9001D	4/5/2016	1	1.8	0.01	0.1	ug/l	0.6	6
Trichloroethene	981	PBM-9001D	4/5/2016	1	4.1	0.02	0.1	ug/l	0.5	5

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

GROUNDWATER MONITORING EXCEEDANCE REPORT

April 2016 Report Date: 5/19/2016

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
2,6-Dinitrotoluene	3493	561	PBN-9101C	4/5/2016	1	0.053	ug/l	0.005	0.05
Carbon tetrachloride	3493	561	PBN-9101C	4/5/2016	1	17	ug/l	0.5	5
Chloroform	3493	561	PBN-9101C	4/5/2016	1	2.6	ug/l	0.6	6
Total Dinitrotoluenes	3493	561	PBN-9101C	4/5/2016	1	0.069	ug/l	0.005	0.05
Trichloroethene	3493	561	PBN-9101C	4/5/2016	1	7.5	ug/l	0.5	5
Carbon tetrachloride	3493	571	SWN-9103B	4/11/2016	1	3	ug/l	0.5	5
Carbon tetrachloride	3493	572	SWN-9103C	4/11/2016	1	1.1	ug/l	0.5	5
Carbon tetrachloride	3493	572	SWN-9103C	4/11/2016	2	1.2	ug/l	0.5	5
Carbon tetrachloride	3493	573	SWN-9103D	4/11/2016	1	9.7	ug/l	0.5	5
Chloroform	3493	573	SWN-9103D	4/11/2016	1	1.2	ug/l	0.6	6
Trichloroethene	3493	573	SWN-9103D	4/11/2016	1	3.9	ug/l	0.5	5
Carbon tetrachloride	3493	575	SWN-9104C	4/11/2016	1	3.2	ug/l	0.5	5
Carbon tetrachloride	3493	576	SWN-9104D	4/11/2016	1	1.1	ug/l	0.5	5

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 3493 Report Date: 5/19/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1,1-Trichloroethane	561	PBN-9101C	4/5/2016	1	0.45	0.009	0.1	ug/l	40	200
1,1-Dichloroethene	561	PBN-9101C	4/5/2016	1	0.083	0.04	0.1	ug/l	0.7	7
2,3-Dinitrotoluene	561	PBN-9101C	4/5/2016	1	0.016	0.0061	0.031	ug/l		
2,6-Dinitrotoluene	561	PBN-9101C	4/5/2016	1	0.053	0.0041	0.031	ug/l	0.005	0.05
Carbon tetrachloride	561	PBN-9101C	4/5/2016	1	17	0.09	0.5	ug/l	0.5	5
Chloroform	561	PBN-9101C	4/5/2016	1	2.6	0.01	0.1	ug/l	0.6	6
Total Dinitrotoluenes	561	PBN-9101C	4/5/2016	1	0.069	0.0082	0.031	ug/l	0.005	0.05
Trichloroethene	561	PBN-9101C	4/5/2016	1	7.5	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	571	SWN-9103B	4/11/2016	1	0.066	0.009	0.1	ug/l	40	200
Carbon tetrachloride	571	SWN-9103B	4/11/2016	1	3	0.018	0.1	ug/l	0.5	5
Chloroform	571	SWN-9103B	4/11/2016	1	0.36	0.01	0.1	ug/l	0.6	6
Trichloroethene	571	SWN-9103B	4/11/2016	1	0.28	0.02	0.1	ug/l	0.5	5
Carbon tetrachloride	572	SWN-9103C	4/11/2016	2	1.2	0.018	0.1	ug/l	0.5	5
Carbon tetrachloride	572	SWN-9103C	4/11/2016	1	1.1	0.018	0.1	ug/l	0.5	5
Chloroform	572	SWN-9103C	4/11/2016	2	0.44	0.01	0.1	ug/l	0.6	6
Chloroform	572	SWN-9103C	4/11/2016	1	0.48	0.01	0.1	ug/l	0.6	6
Trichloroethene	572	SWN-9103C	4/11/2016	1	0.067	0.02	0.1	ug/l	0.5	5
Trichloroethene	572	SWN-9103C	4/11/2016	2	0.068	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	573	SWN-9103D	4/11/2016	1	0.044	0.009	0.1	ug/l	40	200
Carbon tetrachloride	573	SWN-9103D	4/11/2016	1	9.7	0.018	0.1	ug/l	0.5	5
Chloroform	573	SWN-9103D	4/11/2016	1	1.2	0.01	0.1	ug/l	0.6	6
Trichloroethene	573	SWN-9103D	4/11/2016	1	3.9	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	575	SWN-9104C	4/11/2016	1	0.045	0.009	0.1	ug/l	40	200
Carbon tetrachloride	575	SWN-9104C	4/11/2016	1	3.2	0.018	0.1	ug/l	0.5	5
Chloroform	575	SWN-9104C	4/11/2016	1	0.58	0.01	0.1	ug/l	0.6	6
1,1,1-Trichloroethane	576	SWN-9104D	4/11/2016	1	0.016	0.009	0.1	ug/l	40	200
Carbon tetrachloride	576	SWN-9104D	4/11/2016	1	1.1	0.018	0.1	ug/l	0.5	5
Chloroform	576	SWN-9104D	4/11/2016	1	0.59	0.01	0.1	ug/l	0.6	6

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Nitroglycerine Pond/Rocket Paste Area	03487	157005530	4/4/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [x] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [x] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Joel Janssen 5/23/16

Signature Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 3487
Nitroglycerine Pond/Rocket Paste Area
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities. Four (4) wells were sampled to assist with determining the degree and lateral extent of dinitrotoluene (DNT) in the Nitrocellulose Production Area Plume. This plume is located near the former DNT Screen House.

2,4-DNT and total DNT exceeded the Preventive Action Limit (PAL) in RIM-1002 (478).

DNT analysis was performed by CT Laboratories using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

GROUNDWATER MONITORING EXCEEDANCE REPORT

April 2016 Report Date: 5/19/2016

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
2,4-Dinitrotoluene	3487	478	RIM-1002	4/4/2016	1	0.034	ug/l	0.005	0.05
Total Dinitrotoluenes	3487	478	RIM-1002	4/4/2016	1	0.034	ug/l	0.005	0.05

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 3487 Report Date: 5/19/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
2,4-Dinitrotoluene	478	RIM-1002	4/4/2016	1	0.034	0.0082	0.031	ug/l	0.005	0.05
Total Dinitrotoluenes	478	RIM-1002	4/4/2016	1	0.034	0.0082	0.031	ug/l	0.005	0.05

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Off-Site Residential Wells	03497	157005530	4/20/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [ ] Groundwater monitoring data from monitoring wells
- [x] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [x] No. No groundwater standards or explosive gas limits were exceeded.
- [ ] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Signature: Joel Janssen Date: 5/23/16

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 3497
Off-Site Residential Wells
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities. Two residential wells were sampled during this round.

No compounds were detected above a Preventive Action Limit (PAL).

Volatile organic compounds (VOCs) analysis was performed by CT Laboratories (CT Lab) using method EPA 8260C.

Dinitrotoluene (DNT) analysis was also performed by CT Lab using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 3497 Report Date: 5/19/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1,1-Trichloroethane	163	Purcell-Dan	4/20/2016	1	0.087	0.009	0.1	ug/l	40	200

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Settling Ponds	03499	157005530	4/5 - 4/6/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [x] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [x] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Joel Janssen 5/23/16

Signature Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 3499
Settling Ponds
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities. Contamination from the Propellant Burning Ground largely impacts groundwater quality in wells associated with this license.

Carbon tetrachloride exceeded the Enforcement Standard (ES) in SPN-8904C (721) and the Preventive Action Limit (PAL) in SPN-8903B (718), SPN-8903C (719), and SPN-8904B (720).

Ethyl ether exceeded the PAL in SPN-9104D (726).

Trichloroethylene exceeded the PAL in SPN-8903B (718) and SPN-8904C (721).

Volatile organic compounds (VOCs) analysis was performed by CT Laboratories (CT Lab) using method EPA 8260C.

Dinitrotoluene (DNT) analysis was also performed by CT Lab using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

GROUNDWATER MONITORING EXCEEDANCE REPORT

April 2016 Report Date: 5/19/2016

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
Carbon tetrachloride	3499	718	SPN-8903B	4/5/2016	1	0.53	ug/l	0.5	5
Trichloroethene	3499	718	SPN-8903B	4/5/2016	1	0.74	ug/l	0.5	5
Carbon tetrachloride	3499	719	SPN-8903C	4/5/2016	1	0.62	ug/l	0.5	5
Carbon tetrachloride	3499	720	SPN-8904B	4/6/2016	1	4.7	ug/l	0.5	5
Carbon tetrachloride	3499	721	SPN-8904C	4/6/2016	1	7.5	ug/l	0.5	5
Carbon tetrachloride	3499	721	SPN-8904C	4/6/2016	2	9	ug/l	0.5	5
Trichloroethene	3499	721	SPN-8904C	4/6/2016	1	0.73	ug/l	0.5	5
Trichloroethene	3499	721	SPN-8904C	4/6/2016	2	0.89	ug/l	0.5	5
Ethyl ether	3499	726	SPN-9104D	4/6/2016	1	930	ug/l	100	1000

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 3499 Report Date: 5/19/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
1,1,1-Trichloroethane	709	S1147	4/5/2016	1	0.023	0.009	0.1	ug/l	40	200
Carbon tetrachloride	709	S1147	4/5/2016	1	0.053	0.018	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	718	SPN-8903B	4/5/2016	1	1.1	0.009	0.1	ug/l	40	200
1,1-Dichloroethene	718	SPN-8903B	4/5/2016	1	0.11	0.04	0.1	ug/l	0.7	7
Carbon tetrachloride	718	SPN-8903B	4/5/2016	1	0.53	0.018	0.1	ug/l	0.5	5
Chloroform	718	SPN-8903B	4/5/2016	1	0.049	0.01	0.1	ug/l	0.6	6
Trichloroethene	718	SPN-8903B	4/5/2016	1	0.74	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	719	SPN-8903C	4/5/2016	1	0.28	0.009	0.1	ug/l	40	200
1,1-Dichloroethene	719	SPN-8903C	4/5/2016	1	0.051	0.04	0.1	ug/l	0.7	7
Carbon tetrachloride	719	SPN-8903C	4/5/2016	1	0.62	0.018	0.1	ug/l	0.5	5
Chloroform	719	SPN-8903C	4/5/2016	1	0.057	0.01	0.1	ug/l	0.6	6
Trichloroethene	719	SPN-8903C	4/5/2016	1	0.11	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	720	SPN-8904B	4/6/2016	1	0.24	0.009	0.1	ug/l	40	200
Carbon tetrachloride	720	SPN-8904B	4/6/2016	1	4.7	0.018	0.1	ug/l	0.5	5
Chloroform	720	SPN-8904B	4/6/2016	1	0.29	0.01	0.1	ug/l	0.6	6
Trichloroethene	720	SPN-8904B	4/6/2016	1	0.44	0.02	0.1	ug/l	0.5	5
1,1,1-Trichloroethane	721	SPN-8904C	4/6/2016	1	0.14	0.009	0.1	ug/l	40	200
1,1,1-Trichloroethane	721	SPN-8904C	4/6/2016	2	0.16	0.009	0.1	ug/l	40	200
Carbon tetrachloride	721	SPN-8904C	4/6/2016	1	7.5	0.018	0.1	ug/l	0.5	5
Carbon tetrachloride	721	SPN-8904C	4/6/2016	2	9	0.018	0.1	ug/l	0.5	5
Chloroform	721	SPN-8904C	4/6/2016	1	0.34	0.01	0.1	ug/l	0.6	6
Chloroform	721	SPN-8904C	4/6/2016	2	0.39	0.01	0.1	ug/l	0.6	6
Trichloroethene	721	SPN-8904C	4/6/2016	2	0.89	0.02	0.1	ug/l	0.5	5
Trichloroethene	721	SPN-8904C	4/6/2016	1	0.73	0.02	0.1	ug/l	0.5	5
Ethyl ether	725	SPN-9103D	4/5/2016	1	0.044	0.028	0.1	ug/l	100	1000
Ethyl ether	726	SPN-9104D	4/6/2016	1	930	14	50	ug/l	100	1000

State of Wisconsin
Department of Natural Resources

Environmental Monitoring Data Certification

Form 4400-231(R 1/04)

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The Department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- **Prepare one form for each license or monitoring ID.**
- **Please type or print legibly.**
- Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- Attach a notification of any gas values that attain or exceed explosive gas levels.
- Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
  Bureau of Waste Management
  Wisconsin Department of Natural Resources
  101 South Webster Street
  Madison WI 53707-7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

SpecPro Professional Services - Badger Army Ammunition Plant

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Joel Janssen Phone: (608) 438-1110

E-mail: Joel.Janssen@SpecProSvcs.com

Facility name:	License # / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
BAAP - Southeast Area	04330	157005530	4/4/16

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

April 2016

Type of Data Submitted (Check all that apply)

- [x] Groundwater monitoring data from monitoring wells
- [ ] Groundwater monitoring data from private water supply wells
- [ ] Leachate monitoring data
- [ ] Gas monitoring data
- [ ] Air monitoring data
- [ ] Other (specify)

Notification attached?

- [ ] No. No groundwater standards or explosive gas limits were exceeded.
- [x] Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- [ ] Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards.

Joel Janssen	Project Manager	(608) 438-1110
Facility Representative Name (Print)	Title	(Area Code) Telephone No.

Joel Janssen 5/23/16

Signature Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- [ ] **Found uploading problems on** _____ **Initials**
- [ ] **Notified contact of problems on** _____ **Uploaded data successfully on** _____

EDD format(s): [ ] **Diskette** [ ] **CD (initial submittal and follow-up)** [ ] **E-mail (follow-up only)** [ ] **Other**

Case Narrative
Groundwater Monitoring
License Number 4330
Southeast Area
April 2016
Badger Army Ammunition Plant

Groundwater is currently being monitored by the facility because of past production activities.

Chloroform exceeded the Preventive Action Limit (PAL) in SEN-0501B (581), SEN-0501D (582), and SEN-0503D (587).

Volatile organic compounds (VOCs) analysis was performed by CT Laboratories (CT Lab) using method EPA 8260C.

Dinitrotoluene (DNT) analysis was also performed by CT Lab using method SW 8270D SIM. The following DNT isomers were reported: 2,3-DNT, 2,4-DNT, 2,5-DNT, 2,6-DNT, 3,4-DNT, and 3,5-DNT.

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

GROUNDWATER MONITORING EXCEEDANCE REPORT

April 2016 Report Date: 5/19/2016

Parameter Name	Lic No.	Well No.	Well Name	Date	Dup	Result	Units	PAL	ES
Chloroform	4330	581	SEN-0501B	4/4/2016	1	1.1	ug/l	0.6	6
Chloroform	4330	581	SEN-0501B	4/4/2016	2	1.1	ug/l	0.6	6
Chloroform	4330	582	SEN-0501D	4/4/2016	1	1.3	ug/l	0.6	6
Chloroform	4330	587	SEN-0503D	4/4/2016	1	0.91	ug/l	0.6	6

SpecPro Professional Services, LLC

Badger Army Ammunition Plant

April 2016 GROUNDWATER MONITORING ALL HITS REPORT

License No: 4330 Report Date: 5/19/2016

Parameter Name	Well	Well Name	Date	Dup	Result	LOD	LOQ	Units	PAL	ES
Benzene	580	SEN-0501A	4/4/2016	1	0.0088	0.008	0.1	ug/l	0.5	5
Carbon tetrachloride	581	SEN-0501B	4/4/2016	2	0.11	0.018	0.1	ug/l	0.5	5
Carbon tetrachloride	581	SEN-0501B	4/4/2016	1	0.11	0.018	0.1	ug/l	0.5	5
Chloroform	581	SEN-0501B	4/4/2016	2	1.1	0.01	0.1	ug/l	0.6	6
Chloroform	581	SEN-0501B	4/4/2016	1	1.1	0.01	0.1	ug/l	0.6	6
Carbon tetrachloride	582	SEN-0501D	4/4/2016	1	0.08	0.018	0.1	ug/l	0.5	5
Chloroform	582	SEN-0501D	4/4/2016	1	1.3	0.01	0.1	ug/l	0.6	6
Carbon tetrachloride	584	SEN-0502D	4/4/2016	1	0.05	0.018	0.1	ug/l	0.5	5
Chloroform	584	SEN-0502D	4/4/2016	1	0.53	0.01	0.1	ug/l	0.6	6
Carbon tetrachloride	585	SEN-0503A	4/4/2016	1	0.024	0.018	0.1	ug/l	0.5	5
Chloroform	585	SEN-0503A	4/4/2016	1	0.12	0.01	0.1	ug/l	0.6	6
Carbon tetrachloride	586	SEN-0503B	4/4/2016	1	0.046	0.018	0.1	ug/l	0.5	5
Chloroform	586	SEN-0503B	4/4/2016	1	0.29	0.01	0.1	ug/l	0.6	6
Carbon tetrachloride	587	SEN-0503D	4/4/2016	1	0.052	0.018	0.1	ug/l	0.5	5
Chloroform	587	SEN-0503D	4/4/2016	1	0.91	0.01	0.1	ug/l	0.6	6