

Saari, Christopher A - DNR

From: Saari, Christopher A - DNR
Sent: Thursday, September 21, 2017 9:19 AM
To: 'Erica Klingfus'; Soyer, Jenna A - DNR
Cc: Jeff Anderson; tdenterprises_2000@msn.com
Subject: RE: TSSA Part B Form - South Shore C-Store

Thanks Erica. I have requested that someone in our Rhinelander office send me the old closed LUST file that was located at this property. Once I get the file I will compare the recent tank closure results with the residual contamination levels that might have remained when the old case closed. If it looks like this is a "new" release, I will be contacting the property owners about their responsibilities to investigate and clean up the release.

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Chris Saari
Phone: (715) 685-2920
Christopher.Saari@Wi.gov

From: Erica Klingfus [mailto:eklingfus@msa-ps.com]
Sent: Wednesday, September 20, 2017 4:18 PM
To: Saari, Christopher A - DNR <Christopher.Saari@wisconsin.gov>; Soyer, Jenna A - DNR <Jenna.Soyer@wisconsin.gov>
Cc: Jeff Anderson <jkanderson@msa-ps.com>; tdenterprises_2000@msn.com
Subject: TSSA Part B Form - South Shore C-Store

Chris and Jenna,

Please see attached the TSSA Part B form filled out for the South Shore C-Store tank removal in Herbster, WI. Also attached are figures and laboratory analytical results from soil samples collected at the site. A release notification form was submitted earlier today as well using the submittal button on the form.

Let me know if you have any questions or require any additional information.

Thank you,

Erica Klingfus



Erica Klingfus | Environmental Scientist

MSA Professional Services, Inc.

+1 (218) 499-3171



Saari, Christopher A - DNR

From: Erica Klingfus <eklingfus@msa-ps.com>
Sent: Thursday, September 21, 2017 7:29 AM
To: Saari, Christopher A - DNR; Soyer, Jenna A - DNR
Cc: Jeff Anderson; tdenterprises_2000@msn.com
Subject: RE: TSSA Part B Form - South Shore C-Store
Attachments: 18764001 Photo Log.pdf

I had forgotten to attach the required photos – here are the photos of groundwater within the tank basin.

From: Erica Klingfus
Sent: Wednesday, September 20, 2017 4:18 PM
To: Saari, Christopher A - DNR; 'jenna.soyer@wisconsin.gov'
Cc: Jeff Anderson; 'tdenterprises_2000@msn.com'
Subject: TSSA Part B Form - South Shore C-Store

Chris and Jenna,

Please see attached the TSSA Part B form filled out for the South Shore C-Store tank removal in Herbster, WI. Also attached are figures and laboratory analytical results from soil samples collected at the site. A release notification form was submitted earlier today as well using the submittal button on the form.

Let me know if you have any questions or require any additional information.

Thank you,

Erica Klingfus



Erica Klingfus | Environmental Scientist

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Part B – To be completed by environmental professional

Submit original Part B to the WDNR along with a copy of Part A

I. TANK-SYSTEM SITE ASSESSMENT (TSSA)

Site Name: South Shore C-Store

Address: 14770 State Highway B, Herbster, WI 54844

Note: Site name and address must match with Part A Section 1.

To determine if a TSSA is required, see SPS 310 and section II part B of ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS.

If a TSSA is required, then follow the procedures detailed in ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS.

1. Site Information

a. Has there been a previously documented release at this site? Y N

If yes, provide the PECFA # _____, or DNR BRRT's # 03-04-00353
02-04-562836

b. Number of active tanks¹ at facility prior to completion of current services USTs 2 ASTs 0

(NOTE 1: Do not include previously closed systems or system components.)

c. Excavation/trench dimensions (in feet). (Photos must be provided.)

EXCAVATION/TRENCH #	LENGTH	WIDTH	DEPTH
TANK BASIN	27' 27'	18'	8'
Pipe Trench	18'	5'	4'

2. Visual Excavation/Trench Inspection (Photos must be provided for "Yes" responses, except item b.)

Do any of the following conditions exist in or about the excavation(s)?

a. Stained soils: Y N b. Petroleum odor: Y N c. Water in excavation/trench: Y N

d. Free product in the excavation/trench: Y N e. Sheen or free product on water: Y N

3. Geology/Hydrogeology

a. Depth to groundwater ~7' feet b. Indicate type of geology² Native clay, fill (widespread), sand
(Note 2: Use these symbols individually or in combination as appropriate: C = Clay, SLT = Silt, S = Sand, Gr = Gravel)

4. Receptors

a. Water supply well(s) within 250 feet of the facility? Y N If yes, specify Neighboring properties serviced by private

b. Surface water(s) within 1000 feet of the facility? Y N If yes, specify Lake Superior 1/2 mi NW wells

5. Sampling

a. Follow the procedures detailed in ASSESSMENT AND REPORTING OF SUSPECTED AND OBVIOUS RELEASES FROM UNDERGROUND AND ABOVEGROUND STORAGE TANK SYSTEMS.

b. Complete Tables 1 and 2 as appropriate. (Attach chain-of-custody and laboratory analytical reports.)

c. Attach a detailed map of site features and sample locations.

J. NOTE RELEVANT OBSERVATIONS, SPECIFIC PROBLEMS OR CONCERNS BELOW

Tanks, sumps, & spill buckets appeared to be in good condition upon removal. 1 double compartment tank held gasoline/diesel, 1 single compartment tank held gasoline. Unable to dig to native clay on all sides/all due to sandy road base/fill (would have caused slough/collapse w/ add'l digging).

TABLE 1 SOIL FIELD SCREENING & GRO/DRO LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	Sample Location & Soil/Geologic Description	Sample Collection Method				Depth Below Tank/Piping (feet)	Field Screening Result (ppm)
		Grab	Shelby Tube	Direct Push	Split Spoon		
S-1	S-N side W sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	sidewalk, ~4'	4.0
S-2	C S side W sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	29.3
S-3	S W side S sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	1406
S-4	S Middle S sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	10.9
S-5	S E side S sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	58.4
S-6	C S side E sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	0.2
S-7	S N side E sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	0.3
S-8	S E side N sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	0.4
S-9	S Middle N sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	3.1
S-10	S W side N sidewalk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	1.8
B-1	S W side above WT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1' above WT (6')	1727
B-2	S SW side above WT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	1059
B-3	S SE side above WT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	208.4
B-4	S E side above WT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	0.3

TABLE 2 SOIL LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	BENZENE	TOLUENE	ETHYLBENZENE	MTBE	TRIMETHYL - BENZENES (TOTAL)	XYLENES (TOTAL)	NAPHTHALENE	CHLORINATED SOLVENTS
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
S-1	<29.4	<29.4	<29.4	<58.8	<117.6	<88.2	<29.4	NA
S-2	<34.3	<34.3	<34.3	71.6	116	91.0	<34.3	NA
S-3	28.7	594	425	101	7,730	5,710	304	NA
S-4	<29.1	<29.1	<29.1	<58.1	67.6	<87.2	<29.1	NA
S-5	<30	<300	<30	60.3	<120.2	<90.1	<300	NA
S-6	<33.5	<335	<33.5	<67.1	<134.2	<100.6	<335	NA
S-7	<30.7	<307	<30.7	<61.4	<122.8	<92.1	<307	NA
S-8	<30.2	<302	<30.2	<60.3	<120.6	<90.5	<302	NA
S-9	<26.3	<263	<26.3	<52.5	<105.0	<78.8	<263	NA
S-10	<26.1	<261	<26.1	<52.3	<104.6	<78.4	<261	NA
B-1	159	800	1850	<124	96,800	61,700	3,910	NA
B-2	<62.8	<628	<62.8	<126	2,164	872	<628	NA
B-3	<38.3	<383	402	106	10,440	1,515	<383	NA
B-4	<28.8	<288	<28.8	63.4	<115.4	<86.5	<288	NA

K. TANK-SYSTEM SITE ASSESSMENT INFORMATION

As a tank-system site assessor certified under Wis. Admin. Code section SPS 305.83, it is my opinion that there is no indication of a release of a regulated substance to the environment.

Sampling at the site indicates there has been a release to the environment. Pursuant to Wis. Admin. Code section SPS 310.585 (2) (a) and Wis. Stats. section 292.11 (2) (a), the owner or operator or contractor performing work under chapter SPS 310 shall immediately report any release of a regulated substance to the Wisconsin Department of Natural Resources. Failure to do so may result in forfeitures of a minimum of \$10 and a maximum of \$5000 for each violation under Wis. Stats. section 101.09 (5). Each day of continued violation and each tank are treated as separate offenses.

Erica Klingfus
Tank-System Site Assessor Name (print)

[Signature]
Tank-System Site Assessor Signature

467913
Certification Number #

(218) 499-3171
Tank-System Site Assessor Telephone Number

9/18/2017
Date Signed

MSA Professional Services, Inc.
Company Name

TABLE 1 SOIL FIELD SCREENING & GRO/DRO LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	Sample Location & Soil/Geologic Description	Sample Collection Method				Depth Below Tank/Piping (feet)	Field Screening Result (ppm)
		Grab	Shelby Tube	Direct Push	Split Spoon		
B-5	S NW side above WT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1' above WT (6')	1.4
B-6	S NE side above WT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	0.6
P-1	S Pipe trench near tanks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1' below pipe	0.4
D-1	S W dispenser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1' below sump	0.4 1.1
D-2	S Middle dispenser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	0.4 24.4
D-3	S E dispenser	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	" "	0.4
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

TABLE 2 SOIL LABORATORY ANALYTICAL RESULTS-FOR PETROLEUM PRODUCTS

Sample ID #	BENZENE	TOLUENE	ETHYLBENZENE	MTBE	TRIMETHYL - BENZENES (TOTAL)	XYLENES (TOTAL)	NAPHTHALENE	CHLORINATED SOLVENTS
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
B-5	<26.2	<26.2	<26.2	6.6	<105.0	<78.7	<26.2	NA
B-6	<26.1	<26.1	<26.1	52.6	<104.2	<78.2	<26.1	NA
P-1	<26.3	<26.3	<26.3	60.5	<105.4	<79.0	<26.3	NA
D-1	<30.2	<30.2	<30.2	67.8	<121.0	<90.7	<30.2	NA
D-2	<30.8	<30.8	<30.8	461.7	<122.4	<92.5	695	NA
D-3	<30.7	<30.7	<30.7	76	<122.0	<92.2	<30.7	NA

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- As a tank-system site assessor certified under Wis. Admin. Code section SPS 305.83, it is my opinion that there is no indication of a release of a regulated substance to the environment.
- Sampling at the site indicates there has been a release to the environment. Pursuant to Wis. Admin. Code section SPS 310.585 (2) (a) and Wis. Stats. section 292.11 (2) (a), the owner or operator or contractor performing work under chapter SPS 310 shall immediately report any release of a regulated substance to the Wisconsin Department of Natural Resources. Failure to do so may result in forfeitures of a minimum of \$10 and a maximum of \$5000 for each violation under Wis. Stats. section 101.09 (5). Each day of continued violation and each tank are treated as separate offenses.

Erica Klingful
Tank-System Site Assessor Name (print)

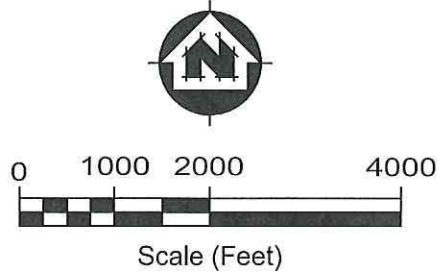
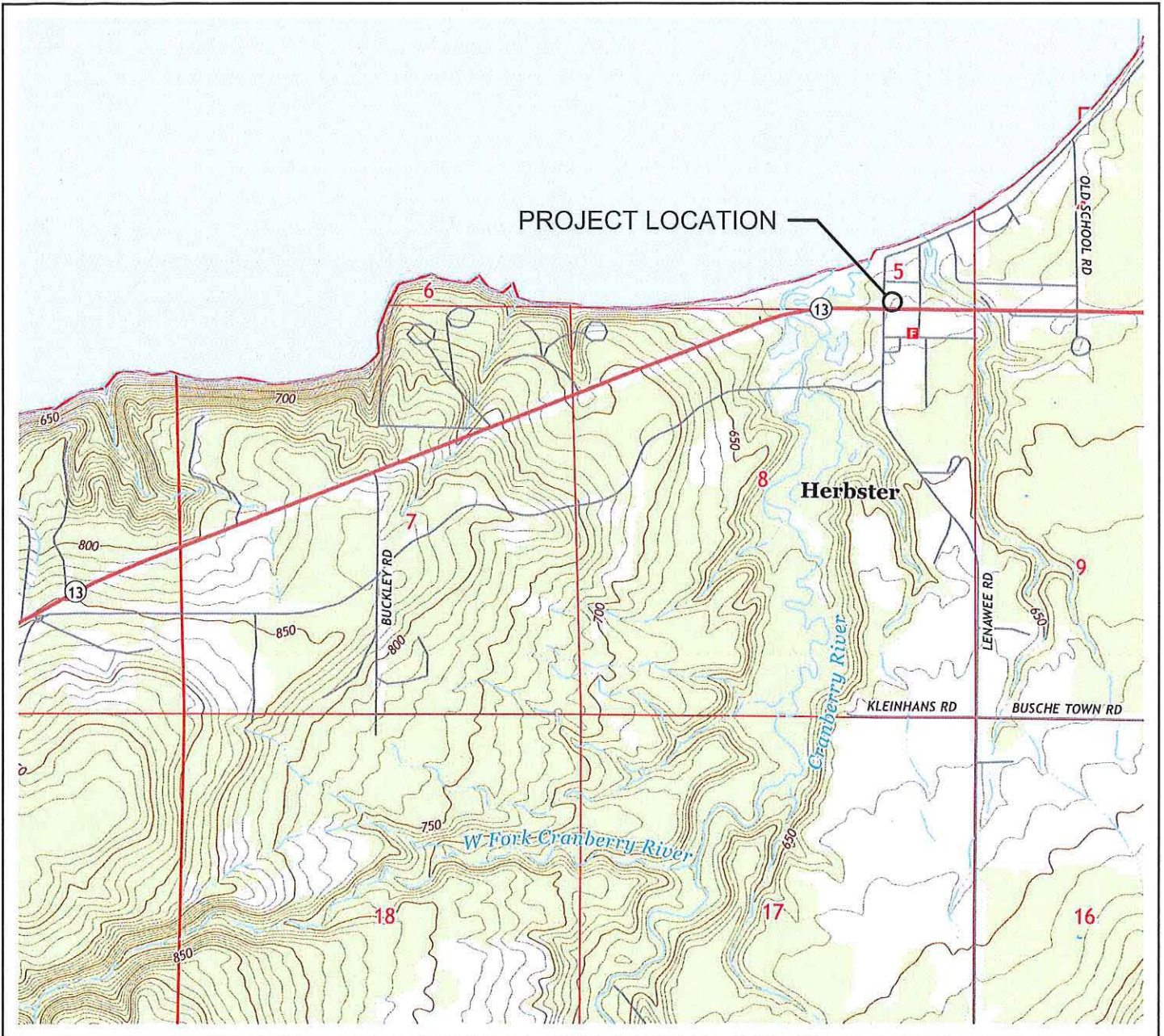
[Signature]
Tank-System Site Assessor Signature

467913
Certification Number #

(218) 499-3171
Tank-System Site Assessor Telephone Number

9/18/2017
Date Signed

MSA Professional Services, Inc.
Company Name



Herbster, WI Quadrangle
 Wisconsin - Bayfield County
 7.5 Minute Series (Topographic)
 Contour Interval 10 Feet
 2015



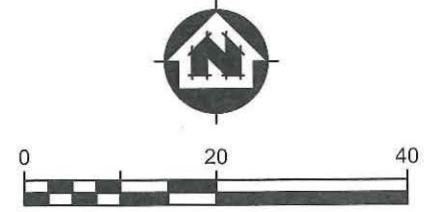
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 332 W Superior Street #600 Duluth, MN 55802
 (218) 722-3915 (800) 777-7380
 WWW.MSA-PS.COM
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Figure 1
 Site Location Map

SOUTH SHORE C-STORE
 14770 STATE HIGHWAY 13
 HERBSTER, WISCONSIN

FILE NO.
 18764001
 SHEET
 F1

File Name: P:\18764001\18764001\Figures\18764001_Figures.dwg



LEGEND

- B-1 ● TANK SAMPLE LOCATION
- D-1 ◻ DISPENSER LOCATION
- S-1 ● SIDEWALL SAMPLE LOCATION

Figure 2
Site Plan View

SOUTH SHORE C-STORE
14770 STATE HIGHWAY 13
HERBSTER, WISCONSIN



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DRAWN BY JAS	DATE 9/7/2017	SHEET NO. F2
CHECKED BY EAK	SCALE 1" = 20'	FILE NO. 18764001

September 14, 2017

MSA Professional Services

Sample Delivery Group: L933217
Samples Received: 08/31/2017
Project Number: 18764001
Description: South Shore C-Store

Report To: Erica Klingfus
332 W. Superior Street, Suite 600
Duluth, MN 55802

Entire Report Reviewed By:












John Hawkins
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



S-1 L933217-01 Solid

Collected by
Erica Klingfus
Collected date/time
08/30/17 09:00
Received date/time
08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:00	09/03/17 16:10	ACG

S-2 L933217-02 Solid

Collected by
Erica Klingfus
Collected date/time
08/30/17 09:04
Received date/time
08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:04	09/03/17 16:34	ACG

S-3 L933217-03 Solid

Collected by
Erica Klingfus
Collected date/time
08/30/17 09:06
Received date/time
08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:06	09/03/17 16:57	ACG

S-4 L933217-04 Solid

Collected by
Erica Klingfus
Collected date/time
08/30/17 09:10
Received date/time
08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:10	09/03/17 17:21	ACG

S-5 L933217-05 Solid

Collected by
Erica Klingfus
Collected date/time
08/30/17 09:14
Received date/time
08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:14	09/03/17 17:44	ACG

S-6 L933217-06 Solid

Collected by
Erica Klingfus
Collected date/time
08/30/17 09:16
Received date/time
08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:16	09/03/17 18:08	ACG

S-7 L933217-07 Solid

Collected by
Erica Klingfus
Collected date/time
08/30/17 09:20
Received date/time
08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50.5	08/30/17 09:20	09/03/17 18:32	ACG

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



S-8 L933217-08 Solid
 Collected by Erica Klingfus
 Collected date/time 08/30/17 09:22
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:22	09/03/17 18:55	ACG

S-9 L933217-09 Solid
 Collected by Erica Klingfus
 Collected date/time 08/30/17 09:24
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:24	09/03/17 19:19	ACG

S-10 L933217-10 Solid
 Collected by Erica Klingfus
 Collected date/time 08/30/17 09:26
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017279	1	09/06/17 16:01	09/06/17 16:20	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:26	09/03/17 19:42	ACG

B-1 L933217-11 Solid
 Collected by Erica Klingfus
 Collected date/time 08/30/17 09:02
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B	WG1015989	100	08/30/17 09:02	09/03/17 20:06	ACG
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	1000	08/30/17 09:02	09/07/17 14:55	LRL

B-2 L933217-12 Solid
 Collected by Erica Klingfus
 Collected date/time 08/30/17 09:08
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	100	08/30/17 09:08	09/07/17 15:18	LRL

B-3 L933217-13 Solid
 Collected by Erica Klingfus
 Collected date/time 08/30/17 09:12
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B	WG1015989	62	08/30/17 09:12	09/03/17 20:53	ACG
Volatile Organic Compounds (GC) by Method WI(95) GRO	WG1015989	310	08/30/17 09:12	09/07/17 15:42	LRL

B-4 L933217-14 Solid
 Collected by Erica Klingfus
 Collected date/time 08/30/17 09:18
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:18	09/03/17 21:16	ACG

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



B-5 L933217-15 Solid

	Collected by Erica Klingfus	Collected date/time 08/30/17 09:28	Received date/time 08/31/17 08:45
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1
Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:28	09/03/17 21:40	ACG

2
Tc

3
Ss

B-6 L933217-16 Solid

	Collected by Erica Klingfus	Collected date/time 08/30/17 09:30	Received date/time 08/31/17 08:45
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4
Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 09:30	09/03/17 22:04	ACG

5
Sr

6
Qc

P-1 L933217-17 Solid

	Collected by Erica Klingfus	Collected date/time 08/30/17 10:00	Received date/time 08/31/17 08:45
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7
Gl

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 10:00	09/03/17 22:27	ACG

8
Al

9
Sc

D-1 L933217-18 Solid

	Collected by Erica Klingfus	Collected date/time 08/30/17 10:36	Received date/time 08/31/17 08:45
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Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 10:36	09/03/17 22:51	ACG

D-2 L933217-19 Solid

	Collected by Erica Klingfus	Collected date/time 08/30/17 10:38	Received date/time 08/31/17 08:45
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Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 10:38	09/03/17 23:14	ACG

D-3 L933217-20 Solid

	Collected by Erica Klingfus	Collected date/time 08/30/17 10:40	Received date/time 08/31/17 08:45
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Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017280	1	09/07/17 09:31	09/07/17 09:45	MLW
Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO	WG1015989	50	08/30/17 10:40	09/03/17 23:38	ACG



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

John Hawkins
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.1		1	09/06/2017 16:20	<u>WG1017279</u>

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	ND		0.0294	50	09/03/2017 16:10	<u>WG1015989</u>
Toluene	ND		0.294	50	09/03/2017 16:10	<u>WG1015989</u>
Ethylbenzene	ND		0.0294	50	09/03/2017 16:10	<u>WG1015989</u>
m&p-Xylene	ND		0.0588	50	09/03/2017 16:10	<u>WG1015989</u>
o-Xylene	ND		0.0294	50	09/03/2017 16:10	<u>WG1015989</u>
Methyl tert-butyl ether	ND		0.0588	50	09/03/2017 16:10	<u>WG1015989</u>
Naphthalene	ND		0.294	50	09/03/2017 16:10	<u>WG1015989</u>
1,3,5-Trimethylbenzene	ND		0.0588	50	09/03/2017 16:10	<u>WG1015989</u>
1,2,4-Trimethylbenzene	ND		0.0588	50	09/03/2017 16:10	<u>WG1015989</u>
TPH (GC/FID) Low Fraction	ND		5.88	50	09/03/2017 16:10	<u>WG1015989</u>
(S) o,a,a-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 16:10	<u>WG1015989</u>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:04

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	72.8		1	09/06/2017 16:20	WG1017279

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	ND		0.0343	50	09/03/2017 16:34	WG1015989
Toluene	ND		0.343	50	09/03/2017 16:34	WG1015989
Ethylbenzene	ND		0.0343	50	09/03/2017 16:34	WG1015989
m&p-Xylene	0.0910	<u>B</u>	0.0687	50	09/03/2017 16:34	WG1015989
o-Xylene	ND		0.0343	50	09/03/2017 16:34	WG1015989
Methyl tert-butyl ether	0.0716		0.0687	50	09/03/2017 16:34	WG1015989
Naphthalene	ND		0.343	50	09/03/2017 16:34	WG1015989
1,3,5-Trimethylbenzene	ND		0.0687	50	09/03/2017 16:34	WG1015989
1,2,4-Trimethylbenzene	0.116		0.0687	50	09/03/2017 16:34	WG1015989
TPH (GC/FID) Low Fraction	ND		6.87	50	09/03/2017 16:34	WG1015989
(S) o,o,a-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 16:34	WG1015989

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:06

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	09/06/2017 16:20	<u>WG1017279</u>

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	0.0287	<u>B</u>	0.0268	50	09/03/2017 16:57	<u>WG1015989</u>
Toluene	0.594		0.268	50	09/03/2017 16:57	<u>WG1015989</u>
Ethylbenzene	0.425		0.0268	50	09/03/2017 16:57	<u>WG1015989</u>
m&p-Xylene	3.77		0.0537	50	09/03/2017 16:57	<u>WG1015989</u>
o-Xylene	1.94		0.0268	50	09/03/2017 16:57	<u>WG1015989</u>
Methyl tert-butyl ether	0.101		0.0537	50	09/03/2017 16:57	<u>WG1015989</u>
Naphthalene	0.304		0.268	50	09/03/2017 16:57	<u>WG1015989</u>
1,3,5-Trimethylbenzene	1.87		0.0537	50	09/03/2017 16:57	<u>WG1015989</u>
1,2,4-Trimethylbenzene	5.86		0.0537	50	09/03/2017 16:57	<u>WG1015989</u>
TPH (GC/FID) Low Fraction	90.2		5.37	50	09/03/2017 16:57	<u>WG1015989</u>
(S) <i>o,o</i> -Trifluorotoluene(PID)	106		80.0-200		09/03/2017 16:57	<u>WG1015989</u>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:10

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.0		1	09/06/2017 16:20	WG1017279

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Benzene	ND		0.0291	50	09/03/2017 17:21	WG1015989
Toluene	ND		0.291	50	09/03/2017 17:21	WG1015989
Ethylbenzene	ND		0.0291	50	09/03/2017 17:21	WG1015989
m&p-Xylene	ND		0.0581	50	09/03/2017 17:21	WG1015989
o-Xylene	ND		0.0291	50	09/03/2017 17:21	WG1015989
Methyl tert-butyl ether	ND		0.0581	50	09/03/2017 17:21	WG1015989
Naphthalene	ND		0.291	50	09/03/2017 17:21	WG1015989
1,3,5-Trimethylbenzene	ND		0.0581	50	09/03/2017 17:21	WG1015989
1,2,4-Trimethylbenzene	0.0676		0.0581	50	09/03/2017 17:21	WG1015989
TPH (GC/FID) Low Fraction	ND		5.81	50	09/03/2017 17:21	WG1015989
(S) <i>o,o</i> -Trifluorotoluene(PID)	102		80.0-200		09/03/2017 17:21	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:14

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.3		1	09/06/2017 16:20	WG1017279

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	ND		0.0300	50	09/03/2017 17:44	WG1015989
Toluene	ND		0.300	50	09/03/2017 17:44	WG1015989
Ethylbenzene	ND		0.0300	50	09/03/2017 17:44	WG1015989
m&p-Xylene	ND		0.0601	50	09/03/2017 17:44	WG1015989
o-Xylene	ND		0.0300	50	09/03/2017 17:44	WG1015989
Methyl tert-butyl ether	0.0603		0.0601	50	09/03/2017 17:44	WG1015989
Naphthalene	ND		0.300	50	09/03/2017 17:44	WG1015989
1,3,5-Trimethylbenzene	ND		0.0601	50	09/03/2017 17:44	WG1015989
1,2,4-Trimethylbenzene	ND		0.0601	50	09/03/2017 17:44	WG1015989
TPH (GC/FID) Low Fraction	ND		6.01	50	09/03/2017 17:44	WG1015989
(S) o,o,a-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 17:44	WG1015989

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:16

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	74.6		1	09/06/2017 16:20	WG1017279

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Benzene	ND		0.0335	50	09/03/2017 18:08	WG1015989
Toluene	ND		0.335	50	09/03/2017 18:08	WG1015989
Ethylbenzene	ND		0.0335	50	09/03/2017 18:08	WG1015989
m&p-Xylene	ND		0.0671	50	09/03/2017 18:08	WG1015989
o-Xylene	ND		0.0335	50	09/03/2017 18:08	WG1015989
Methyl tert-butyl ether	ND		0.0671	50	09/03/2017 18:08	WG1015989
Naphthalene	ND		0.335	50	09/03/2017 18:08	WG1015989
1,3,5-Trimethylbenzene	ND		0.0671	50	09/03/2017 18:08	WG1015989
1,2,4-Trimethylbenzene	ND		0.0671	50	09/03/2017 18:08	WG1015989
TPH (GC/FID) Low Fraction	ND		6.71	50	09/03/2017 18:08	WG1015989
(S) <i>o,o,a</i> -Trifluorotoluene(PID)	102		80.0-200		09/03/2017 18:08	WG1015989

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:20

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.2		1	09/06/2017 16:20	<u>WG1017279</u>

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.0307	50.5	09/03/2017 18:32	<u>WG1015989</u>
Toluene	ND		0.307	50.5	09/03/2017 18:32	<u>WG1015989</u>
Ethylbenzene	ND		0.0307	50.5	09/03/2017 18:32	<u>WG1015989</u>
m&p-Xylene	ND		0.0614	50.5	09/03/2017 18:32	<u>WG1015989</u>
o-Xylene	ND		0.0307	50.5	09/03/2017 18:32	<u>WG1015989</u>
Methyl tert-butyl ether	ND		0.0614	50.5	09/03/2017 18:32	<u>WG1015989</u>
Naphthalene	ND		0.307	50.5	09/03/2017 18:32	<u>WG1015989</u>
1,3,5-Trimethylbenzene	ND		0.0614	50.5	09/03/2017 18:32	<u>WG1015989</u>
1,2,4-Trimethylbenzene	ND		0.0614	50.5	09/03/2017 18:32	<u>WG1015989</u>
TPH (GC/FID) Low Fraction	ND		6.14	50.5	09/03/2017 18:32	<u>WG1015989</u>
(S) o,o,a-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 18:32	<u>WG1015989</u>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:22

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	09/06/2017 16:20	WG1017279

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	ND		0.0302	50	09/03/2017 18:55	WG1015989
Toluene	ND		0.302	50	09/03/2017 18:55	WG1015989
Ethylbenzene	ND		0.0302	50	09/03/2017 18:55	WG1015989
m&p-Xylene	ND		0.0603	50	09/03/2017 18:55	WG1015989
o-Xylene	ND		0.0302	50	09/03/2017 18:55	WG1015989
Methyl tert-butyl ether	ND		0.0603	50	09/03/2017 18:55	WG1015989
Naphthalene	ND		0.302	50	09/03/2017 18:55	WG1015989
1,3,5-Trimethylbenzene	ND		0.0603	50	09/03/2017 18:55	WG1015989
1,2,4-Trimethylbenzene	ND		0.0603	50	09/03/2017 18:55	WG1015989
TPH (GC/FID) Low Fraction	ND		6.03	50	09/03/2017 18:55	WG1015989
(S) o,o,o-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 18:55	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:24

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.2		1	09/06/2017 16:20	<u>WG1017279</u>

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Benzene	ND		0.0263	50	09/03/2017 19:19	<u>WG1015989</u>
Toluene	ND		0.263	50	09/03/2017 19:19	<u>WG1015989</u>
Ethylbenzene	ND		0.0263	50	09/03/2017 19:19	<u>WG1015989</u>
m&p-Xylene	ND		0.0525	50	09/03/2017 19:19	<u>WG1015989</u>
o-Xylene	ND		0.0263	50	09/03/2017 19:19	<u>WG1015989</u>
Methyl tert-butyl ether	ND		0.0525	50	09/03/2017 19:19	<u>WG1015989</u>
Naphthalene	ND		0.263	50	09/03/2017 19:19	<u>WG1015989</u>
1,3,5-Trimethylbenzene	ND		0.0525	50	09/03/2017 19:19	<u>WG1015989</u>
1,2,4-Trimethylbenzene	ND		0.0525	50	09/03/2017 19:19	<u>WG1015989</u>
TPH (GC/FID) Low Fraction	ND		5.25	50	09/03/2017 19:19	<u>WG1015989</u>
(S) o,o,a-Trifluorotoluene(PID)	103		80.0-200		09/03/2017 19:19	<u>WG1015989</u>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:26

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.7		1	09/06/2017 16:20	<u>WG1017279</u>

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Benzene	ND		0.0261	50	09/03/2017 19:42	<u>WG1015989</u>
Toluene	ND		0.261	50	09/03/2017 19:42	<u>WG1015989</u>
Ethylbenzene	ND		0.0261	50	09/03/2017 19:42	<u>WG1015989</u>
m&p-Xylene	ND		0.0523	50	09/03/2017 19:42	<u>WG1015989</u>
o-Xylene	ND		0.0261	50	09/03/2017 19:42	<u>WG1015989</u>
Methyl tert-butyl ether	ND		0.0523	50	09/03/2017 19:42	<u>WG1015989</u>
Naphthalene	ND		0.261	50	09/03/2017 19:42	<u>WG1015989</u>
1,3,5-Trimethylbenzene	ND		0.0523	50	09/03/2017 19:42	<u>WG1015989</u>
1,2,4-Trimethylbenzene	ND		0.0523	50	09/03/2017 19:42	<u>WG1015989</u>
TPH (GC/FID) Low Fraction	ND		5.23	50	09/03/2017 19:42	<u>WG1015989</u>
(S) o, o, o-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 19:42	<u>WG1015989</u>

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:02

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.4		1	09/07/2017 09:45	WG1017280

¹ Cp

² Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	0.153		0.0622	100	09/03/2017 20:06	WG1015989
Toluene	0.800		0.622	100	09/03/2017 20:06	WG1015989
Ethylbenzene	1.85		0.0622	100	09/03/2017 20:06	WG1015989
m&p-Xylene	38.0		0.124	100	09/03/2017 20:06	WG1015989
o-Xylene	23.7		0.0622	100	09/03/2017 20:06	WG1015989
Methyl tert-butyl ether	ND		0.124	100	09/03/2017 20:06	WG1015989
Naphthalene	3.91		0.622	100	09/03/2017 20:06	WG1015989
1,3,5-Trimethylbenzene	18.5		0.124	100	09/03/2017 20:06	WG1015989
1,2,4-Trimethylbenzene	78.3		1.24	1000	09/07/2017 14:55	WG1015989
TPH (GC/FID) Low Fraction	1150		124	1000	09/07/2017 14:55	WG1015989
(S) o,a,a-Trifluorotoluene(PID)	117		80.0-200		09/03/2017 20:06	WG1015989
(S) o,a,a-Trifluorotoluene(PID)	104		80.0-200		09/07/2017 14:55	WG1015989

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Collected date/time: 08/30/17 09:08

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.7		1	09/07/2017 09:45	WG1017280

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	ND		0.0628	100	09/07/2017 15:18	WG1015989
Toluene	ND		0.628	100	09/07/2017 15:18	WG1015989
Ethylbenzene	ND		0.0628	100	09/07/2017 15:18	WG1015989
m&p-Xylene	0.457		0.126	100	09/07/2017 15:18	WG1015989
o-Xylene	0.415		0.0628	100	09/07/2017 15:18	WG1015989
Methyl tert-butyl ether	ND		0.126	100	09/07/2017 15:18	WG1015989
Naphthalene	ND		0.628	100	09/07/2017 15:18	WG1015989
1,3,5-Trimethylbenzene	0.584		0.126	100	09/07/2017 15:18	WG1015989
1,2,4-Trimethylbenzene	1.58		0.126	100	09/07/2017 15:18	WG1015989
TPH (GC/FID) Low Fraction	16.7		12.6	100	09/07/2017 15:18	WG1015989
(S) o, a, a-Trifluorotoluene(PID)	103		80.0-200		09/07/2017 15:18	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.9		1	09/07/2017 09:45	<u>WG1017280</u>

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.0383	62	09/03/2017 20:53	<u>WG1015989</u>
Toluene	ND		0.383	62	09/03/2017 20:53	<u>WG1015989</u>
Ethylbenzene	0.402		0.0383	62	09/03/2017 20:53	<u>WG1015989</u>
m&p-Xylene	1.06		0.0766	62	09/03/2017 20:53	<u>WG1015989</u>
o-Xylene	0.455		0.0383	62	09/03/2017 20:53	<u>WG1015989</u>
Methyl tert-butyl ether	0.106		0.0766	62	09/03/2017 20:53	<u>WG1015989</u>
Naphthalene	ND		0.383	62	09/03/2017 20:53	<u>WG1015989</u>
1,3,5-Trimethylbenzene	5.82		0.0766	62	09/03/2017 20:53	<u>WG1015989</u>
1,2,4-Trimethylbenzene	4.62		0.0766	62	09/03/2017 20:53	<u>WG1015989</u>
TPH (GC/FID) Low Fraction	329		38.3	310	09/07/2017 15:42	<u>WG1015989</u>
(S) o,o,o-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 20:53	<u>WG1015989</u>
(S) o,o,o-Trifluorotoluene(PID)	102		80.0-200		09/07/2017 15:42	<u>WG1015989</u>

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 09:18

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.7		1	09/07/2017 09:45	WG1017280

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.0288	50	09/03/2017 21:16	WG1015989
Toluene	ND		0.288	50	09/03/2017 21:16	WG1015989
Ethylbenzene	ND		0.0288	50	09/03/2017 21:16	WG1015989
m&p-Xylene	ND		0.0577	50	09/03/2017 21:16	WG1015989
o-Xylene	ND		0.0288	50	09/03/2017 21:16	WG1015989
Methyl tert-butyl ether	0.0634		0.0577	50	09/03/2017 21:16	WG1015989
Naphthalene	ND		0.288	50	09/03/2017 21:16	WG1015989
1,3,5-Trimethylbenzene	ND		0.0577	50	09/03/2017 21:16	WG1015989
1,2,4-Trimethylbenzene	ND		0.0577	50	09/03/2017 21:16	WG1015989
TPH (GC/FID) Low Fraction	ND		5.77	50	09/03/2017 21:16	WG1015989
(S) a,a,a-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 21:16	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.2		1	09/07/2017 09:45	WG1017280

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.0262	50	09/03/2017 21:40	WG1015989
Toluene	ND		0.262	50	09/03/2017 21:40	WG1015989
Ethylbenzene	ND		0.0262	50	09/03/2017 21:40	WG1015989
m&p-Xylene	ND		0.0525	50	09/03/2017 21:40	WG1015989
o-Xylene	ND		0.0262	50	09/03/2017 21:40	WG1015989
Methyl tert-butyl ether	0.0660		0.0525	50	09/03/2017 21:40	WG1015989
Naphthalene	ND		0.262	50	09/03/2017 21:40	WG1015989
1,3,5-Trimethylbenzene	ND		0.0525	50	09/03/2017 21:40	WG1015989
1,2,4-Trimethylbenzene	ND		0.0525	50	09/03/2017 21:40	WG1015989
TPH (GC/FID) Low Fraction	ND		5.25	50	09/03/2017 21:40	WG1015989
(S) o,o,a-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 21:40	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:30

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.0		1	09/07/2017 09:45	WG1017280

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.0261	50	09/03/2017 22:04	WG1015989
Toluene	ND		0.261	50	09/03/2017 22:04	WG1015989
Ethylbenzene	ND		0.0261	50	09/03/2017 22:04	WG1015989
m&p-Xylene	ND		0.0521	50	09/03/2017 22:04	WG1015989
o-Xylene	ND		0.0261	50	09/03/2017 22:04	WG1015989
Methyl tert-butyl ether	0.0526		0.0521	50	09/03/2017 22:04	WG1015989
Naphthalene	ND		0.261	50	09/03/2017 22:04	WG1015989
1,3,5-Trimethylbenzene	ND		0.0521	50	09/03/2017 22:04	WG1015989
1,2,4-Trimethylbenzene	ND		0.0521	50	09/03/2017 22:04	WG1015989
TPH (GC/FID) Low Fraction	ND		5.21	50	09/03/2017 22:04	WG1015989
(S) a,a,a-Trifluorotoluene(PID)	102		80.0-200		09/03/2017 22:04	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 10:00

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.9		1	09/07/2017 09:45	WG1017280

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.0263	50	09/03/2017 22:27	WG1015989
Toluene	ND		0.263	50	09/03/2017 22:27	WG1015989
Ethylbenzene	ND		0.0263	50	09/03/2017 22:27	WG1015989
m&p-Xylene	ND		0.0527	50	09/03/2017 22:27	WG1015989
o-Xylene	ND		0.0263	50	09/03/2017 22:27	WG1015989
Methyl tert-butyl ether	0.0605		0.0527	50	09/03/2017 22:27	WG1015989
Naphthalene	ND		0.263	50	09/03/2017 22:27	WG1015989
1,3,5-Trimethylbenzene	ND		0.0527	50	09/03/2017 22:27	WG1015989
1,2,4-Trimethylbenzene	ND		0.0527	50	09/03/2017 22:27	WG1015989
TPH (GC/FID) Low Fraction	ND		5.27	50	09/03/2017 22:27	WG1015989
(S) <i>o,o,o</i> -Trifluorotoluene(PID)	102		80.0-200		09/03/2017 22:27	WG1015989

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 10:36

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.7		1	09/07/2017 09:45	WG1017280

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	ND		0.0302	50	09/03/2017 22:51	WG1015989
Toluene	ND		0.302	50	09/03/2017 22:51	WG1015989
Ethylbenzene	ND		0.0302	50	09/03/2017 22:51	WG1015989
m&p-Xylene	ND		0.0605	50	09/03/2017 22:51	WG1015989
o-Xylene	ND		0.0302	50	09/03/2017 22:51	WG1015989
Methyl tert-butyl ether	0.0678		0.0605	50	09/03/2017 22:51	WG1015989
Naphthalene	ND		0.302	50	09/03/2017 22:51	WG1015989
1,3,5-Trimethylbenzene	ND		0.0605	50	09/03/2017 22:51	WG1015989
1,2,4-Trimethylbenzene	ND		0.0605	50	09/03/2017 22:51	WG1015989
TPH (GC/FID) Low Fraction	ND		6.05	50	09/03/2017 22:51	WG1015989
(S) a, a, a-Trifluorotoluene (PID)	102		80.0-200		09/03/2017 22:51	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 10:38

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.0		1	09/07/2017 09:45	WG1017280

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.0308	50	09/03/2017 23:14	WG1015989
Toluene	ND		0.308	50	09/03/2017 23:14	WG1015989
Ethylbenzene	ND		0.0308	50	09/03/2017 23:14	WG1015989
m&p-Xylene	ND		0.0617	50	09/03/2017 23:14	WG1015989
o-Xylene	ND		0.0308	50	09/03/2017 23:14	WG1015989
Methyl tert-butyl ether	ND		0.0617	50	09/03/2017 23:14	WG1015989
Naphthalene	0.695		0.308	50	09/03/2017 23:14	WG1015989
1,3,5-Trimethylbenzene	ND		0.0617	50	09/03/2017 23:14	WG1015989
1,2,4-Trimethylbenzene	ND		0.0617	50	09/03/2017 23:14	WG1015989
TPH (GC/FID) Low Fraction	34.3		6.17	50	09/03/2017 23:14	WG1015989
(S) <i>o,o,o</i> -Trifluorotoluene(PID)	102		80.0-200		09/03/2017 23:14	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 10:40

L933217

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.3		1	09/07/2017 09:45	WG1017280

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis date / time	Batch
Benzene	ND		0.0307	50	09/03/2017 23:38	WG1015989
Toluene	ND		0.307	50	09/03/2017 23:38	WG1015989
Ethylbenzene	ND		0.0307	50	09/03/2017 23:38	WG1015989
m&p-Xylene	ND		0.0615	50	09/03/2017 23:38	WG1015989
o-Xylene	ND		0.0307	50	09/03/2017 23:38	WG1015989
Methyl tert-butyl ether	0.0760		0.0615	50	09/03/2017 23:38	WG1015989
Naphthalene	ND		0.307	50	09/03/2017 23:38	WG1015989
1,3,5-Trimethylbenzene	ND		0.0615	50	09/03/2017 23:38	WG1015989
1,2,4-Trimethylbenzene	ND		0.0615	50	09/03/2017 23:38	WG1015989
TPH (GC/FID) Low Fraction	ND		6.15	50	09/03/2017 23:38	WG1015989
(S) o,o,a-Trifluorotoluene(PID)	101		80.0-200		09/03/2017 23:38	WG1015989

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

WG1017279

QUALITY CONTROL SUMMARY

ONE LAB. NATIONWIDE



Total Solids by Method 2540 G-2011

L933217-01,02,03,04,05,06,07,08,09,10

Method Blank (MB)

(MB) R3247464-1 09/06/17 16:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000900			

1 Cp

2 Tc

3 Ss

L933217-03 Original Sample (OS) • Duplicate (DUP)

(OS) L933217-03 09/06/17 16:20 • (DUP) R3247464-3 09/06/17 16:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	93.1	91.8	1	1.45		5

4 Cn

5 Sr

Laboratory Control Sample (LCS)

(LCS) R3247464-2 09/06/17 16:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

6 Qc

7 GI

8 Al

9 Sc



Total Solids by Method 2540 G-2011

L933217-11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3247777-1 09/07/17 09:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.00140			

1 Cp

2 Tc

3 Ss

L933217-11 Original Sample (OS) • Duplicate (DUP)

(OS) L933217-11 09/07/17 09:45 • (DUP) R3247777-3 09/07/17 09:45

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	80.4	80.2	1	0.332		5

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R3247777-2 09/07/17 09:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method 8021B/WI(95) GRO L933217-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3247549-3 09/03/17 13:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	0.0000931	J	0.0000880	0.000500
Toluene	U		0.000161	0.00500
Ethylbenzene	U		0.0000910	0.000500
m&p-Xylene	0.000215	J	0.000154	0.00100
o-Xylene	U		0.0000960	0.000500
Methyl tert-butyl ether	U		0.000160	0.00100
Naphthalene	U		0.00104	0.00500
1,3,5-Trimethylbenzene	U		0.0000820	0.00100
1,2,4-Trimethylbenzene	0.000114	J	0.000107	0.00100
TPH (GC/FID) Low Fraction	U		0.010	0.100
(S) a,a,a-Trifluorotoluene(PID)	100			80.0-200

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247549-1 09/03/17 12:38 • (LCSD) R3247549-8 09/04/17 00:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0500	0.0462	0.0478	92.4	95.7	80.0-120			3.50	20
Toluene	0.0500	0.0472	0.0494	94.5	98.7	80.0-120			4.40	20
Ethylbenzene	0.0500	0.0481	0.0501	96.3	100	80.0-120			3.94	20
m&p-Xylene	0.100	0.103	0.107	103	107	80.0-120			3.67	20
o-Xylene	0.0500	0.0484	0.0506	96.8	101	80.0-120			4.37	20
Methyl tert-butyl ether	0.0500	0.0478	0.0485	95.7	97.0	80.0-120			1.35	20
Naphthalene	0.0500	0.0505	0.0485	101	97.1	80.0-120			3.95	20
1,3,5-Trimethylbenzene	0.0500	0.0500	0.0520	100	104	80.0-120			3.86	20
1,2,4-Trimethylbenzene	0.0500	0.0486	0.0501	97.1	100	80.0-120			3.16	20
(S) a,a,a-Trifluorotoluene(PID)				92.6	99.3	80.0-200				

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247549-2 09/03/17 12:38 • (LCSD) R3247549-9 09/04/17 00:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	0.550	0.526	0.507	95.6	92.3	80.0-120			3.55	20
(S) a,a,a-Trifluorotoluene(PID)				92.6	99.3	80.0-200				



Volatile Organic Compounds (GC) by Method 8021B/WI(95) GROL933217-01,02,03,04,05,06,07,08,09,10,11,12,13,14,15,16,17,18,19,20

L933217-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L933217-01 09/03/17 16:10 • (MS) R3247549-4 09/04/17 00:01 • (MSD) R3247549-6 09/04/17 00:25

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0588	ND	2.35	2.33	79.8	79.3	50	32.0-137			0.710	39
Toluene	0.0588	ND	3.56	2.52	121	85.8	50	20.0-142			34.1	42
Ethylbenzene	0.0588	ND	2.61	2.51	88.7	85.5	50	10.0-150			3.64	44
m&p-Xylene	0.118	ND	5.57	5.43	94.8	92.5	50	14.0-141			2.51	44
o-Xylene	0.0588	ND	2.68	2.60	91.1	88.4	50	10.0-157			2.94	44
Methyl tert-butyl ether	0.0588	ND	2.38	2.37	80.9	80.6	50	24.0-151			0.430	37
Naphthalene	0.0588	ND	2.40	2.45	81.9	83.3	50	80.0-120			1.71	20
1,3,5-Trimethylbenzene	0.0588	ND	2.57	2.60	87.5	88.5	50	80.0-120			1.05	20
1,2,4-Trimethylbenzene	0.0588	ND	2.77	2.65	94.0	89.8	50	80.0-120			4.51	20
(S) a,a,a-Trifluorotoluene(PID)					101	99.3		80.0-200				

Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L933217-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L933217-01 09/03/17 16:10 • (MS) R3247549-5 09/04/17 00:01 • (MSD) R3247549-7 09/04/17 00:25

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	0.646	ND	36.1	29.9	112	92.5	50	80.0-120			18.7	20
(S) a,a,a-Trifluorotoluene(PID)					101	99.3		80.0-200				



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

ACCREDITATIONS & LOCATIONS

ONE LAB. NATIONWIDE.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey-NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio-VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

Third Party & Federal Accreditations

A2LA - ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA - ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ¹⁴ Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



¹ Cp

² Tc

³ Ss

⁴ Cn


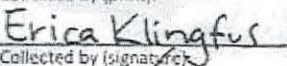
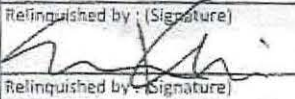
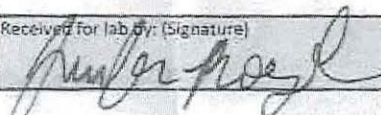
⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MSA Professional Services 332 W. Superior Street, Suite 600 Duluth, MN 55802		Billing Information: MSA Professionals 332 W. Superior St, Ste. 600 Duluth, MN 55802		Pres Chk		Analysis / Container / Preservative										Chain of Custody Page <u> </u> of <u> </u>	
Report to: Erica Klingfus		Email To: eklingfus@msa-ps.com														 ESC LABOR SCIENCES A Subsidiary of <i>PerkinElmer</i>	
Project Description: South Shore C-Store		City/State Collected: Hubster, WI														12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-8888 Phone: 800-767-5659 Fax: 615-758-5859	
Phone: 218-722-3915 Fax: 218-722-4548		Client Project # 18764001		Lab Project # MSAPRODMN-18764001												L# 933217	
Collected by (print): Erica Klingfus		Site/Facility ID #		P.O. #												H010	
Collected by (signature): 		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #												Acctnum: MSAPRODMN Template: T127274 Prelogin: P615224 TSR: 341 - John Hawkins PB: CM 8-28-17	
Immediately Packed on Ice <input type="checkbox"/> N <input checked="" type="checkbox"/> Y		Date Results Needed		No. of Cntrs												Shipped Via: FedEX Ground	
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	PVOCGRO	60miAmb	MeOH/Syr	TS	4ozClr	NoPres	Remarks		Sample # (Lab only)		
S-1	GRAB	SS	4'	8/30/17	900	2	X	X							-01		
S-2		SS	4'		904	2	X	X							-02		
S-3		SS	4'		906	2	X	X							-03		
S-4		SS	4'		910	2	X	X							-04		
S-5		SS	4'		914	2	X	X							-05		
S-6		SS	4'		916	2	X	X							-06		
S-7		SS	4'		920	2	X	X							-07		
S-8		SS	4'		922	2	X	X							-08		
S-9		SS	4'		924	2	X	X							-09		
S-10		SS	4'		926	2	X	X							-10		
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks: TWO COOLERS * * *		Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # 7384 4206 2351		pH _____ Temp _____ Flow _____ Other _____		Sample Receipt Checklist: Coc Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Coc Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N IF Applicable VDA Zero Headpace: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N							
Relinquished by: (Signature) 		Date: 8/30/17 Time: 1600		Received by: (Signature)		Trip Blank Received: Yes/No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No HCL/MeOH TBR		Temp: 1.3 °C 50		Bottles Received: 40		If preservation required by Login: Date/Time					
Relinquished by: (Signature)		Date: _____ Time: _____		Received for lab by: (Signature) 		Date: 8-31-17 Time: 8:45		Hold:		Condition: NCF / BX							

MSA Professional Services

332 W. Superior Street, Suite 600
Duluth, MN 55802

Billing information:
MSA Professionals
332 W. Superior St, Ste. 600
Duluth, MN 55802

Report to:
Erica Klingfus

Email To: eklingfus@msa-ps.com

Project Description: **South Shore C-Store**

City/State Collected: **Herbster, WI**

Phone: 218-722-3915
Fax: 218-722-4548

Client Project #
18764001

Lab Project #
MSAPRODMN-18764001

Collected by (print):
Erica Klingfus

Site/Facility ID: #

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST Be Notified)

Quote #

___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Date Results Needed

Immediately
Packed on ice N Y X

Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page of



A-B-S-C-I-E-N-C-E
a subsidiary of *[Logo]*

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-9899
Fax: 615-758-5899



L# **933217**

Table #

Account: **MSAPRODMN**

Template: **T127274**

Prelogin: **P615224**

TSR: **341 - John Hawkins**

PR: **Am 8-28-17**

Shipped Via: **FedEx Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PVOCGRO 60m(Amb/MeOH)/Syr	TS 4ozClr-NoPres								Remarks	Sample # (Lab only)	
B-1	Grab	SS	6'	8/30/17	902	2	X	X										-1
B-2		SS	6'		908	2	X	X										-12
B-3		SS	6'		912	2	X	X										-13
B-4		SS	6'		918	2	X	X										-14
B-5		SS	6'		928	2	X	X										-15
B-6		SS	6'		930	2	X	X										-16
P-1		SS	3'		1000	2	X	X										-17
D-1		SS	2'		1036	2	X	X										-18
D-2		SS	2'		1038	2	X	X										-19
D-3		SS	2'		1040	2	X	X										-20

- * Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Waste Water
DW - Drinking Water
OT - Other

Remarks:
TWO COOLERS * * *

Samples returned via:
 UPS FedEx Courier

Tracking # **7372 1963 2778**

Sample Receipt Checklist:

DOC Seal Present/Intact:	<input checked="" type="checkbox"/>	30
DOC Signed/Accurate:	<input checked="" type="checkbox"/>	30
Bottles arrive intact:	<input checked="" type="checkbox"/>	30
Correct bottles used:	<input checked="" type="checkbox"/>	30
Sufficient volume sent:	<input checked="" type="checkbox"/>	30
VQA Zero Headpace:	<input checked="" type="checkbox"/>	30
Preservation Correct/Checked:	<input checked="" type="checkbox"/>	30

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature) <i>[Signature]</i>	Date: 8/30/17	Time: 1600	Received by: (Signature) <i>[Signature]</i>	Trip Blank Received: Yes/ <input checked="" type="checkbox"/> No	HEL/MeOH TBR.
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 12 °C	Bottles Received: 40
Relinquished by: (Signature)	Date:	Time:	Received for lab use: (Signature) <i>[Signature]</i>	Date: 8-21-17	Time: 8:45

If preservation required by Login: Date/Time

Hold: _____ Condition: **NCF / OK**

Environmental Remediation

Northland Gas and Supplies Site

C111 STH 13, Town of Clover, Herbster, Bayfield County, Wisconsin
Advent Project No. 96958.02

February 1995

Prepared for
Mr. Bill Green

A D V E N T

ENVIRONMENTAL SERVICES, INC.

EXECUTIVE SUMMARY

Advent Environmental Services, Inc. completed a soil remediation for the Northland Gas and Supplies site (formerly known as Jim's Union 76) at C111 State Highway (STH) 13, town of Clover, unincorporated village of Herbster, Bayfield County, Wisconsin.

Advent coordinated the excavation, thermal treatment, and backfilling of 3,800 tons of petroleum-contaminated soil identified by the underground storage tank (UST) closure completed by Northwest Petroleum of Brule, Inc. in July 1992 and subsequent environmental investigations completed by Advent in September 1992 and June 1993. Advent also removed two petroleum USTs encountered during the remediation activities, which occurred between September 26 and September 30, 1994.

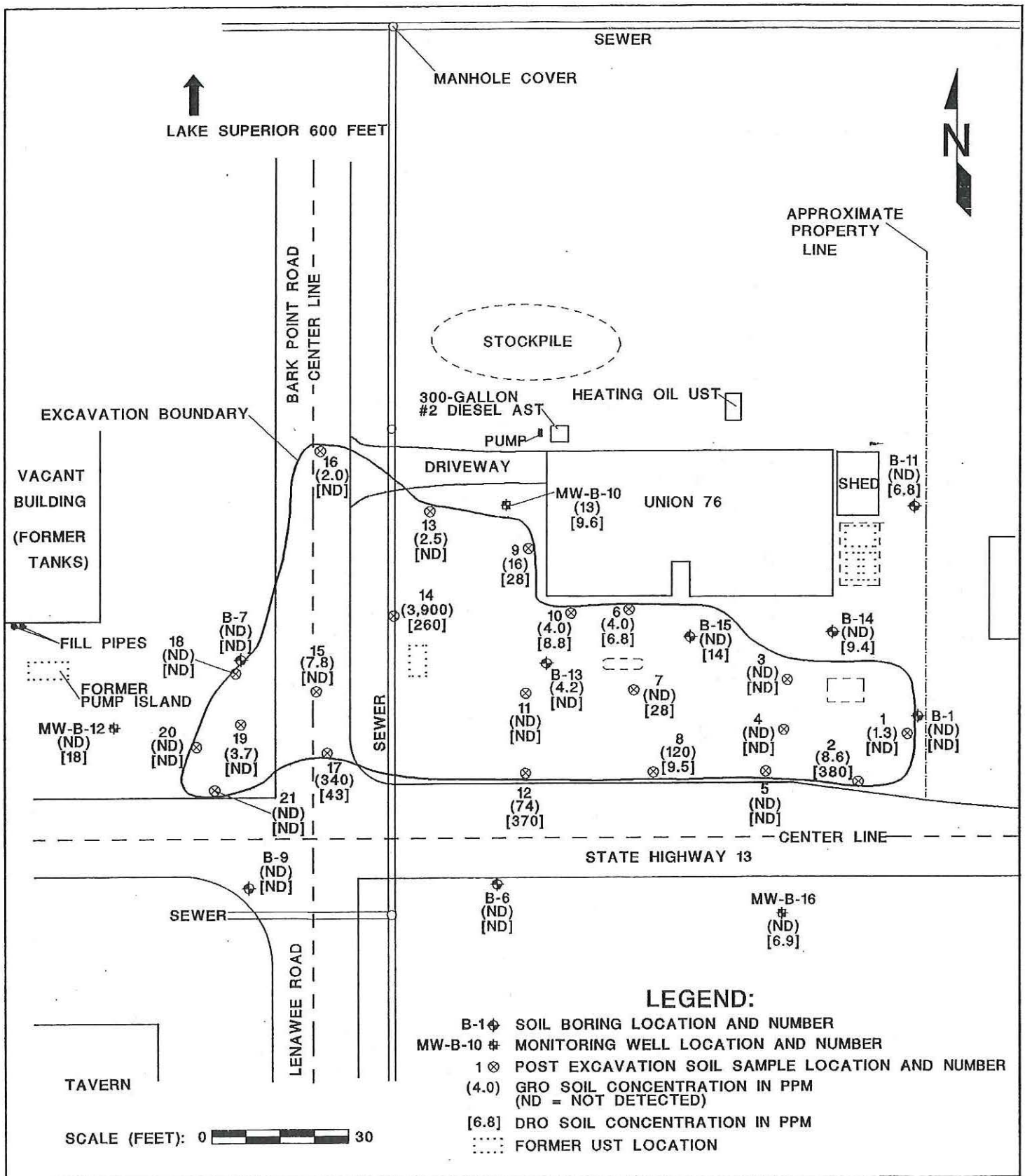
The soil was thermally treated and incorporated into asphalt by Lakehead Blacktop and Materials of Superior, Inc., in Superior, Wisconsin. Uncontaminated clay similar to the type of red clay removed was transported from a pit near the Superior asphalt plant, and from land owned by the Town of Clover and used as backfill.

Chemical analyses of soil samples collected from the walls and floor of the excavation indicate that the accessible petroleum-impacted soil has been removed from the site. Soils contaminated with gasoline range organics (GROs), diesel range organics (DROs), and volatile organic compounds (VOCs) at concentrations that exceed the Wisconsin Department of Natural Resources (WDNR) interim case closeout limits remain in two inaccessible locations: under STH 13 and in groundwater-saturated backfill of a sanitary sewer trench that intersects the site.

Benzene concentrations above the 5.5 parts per billion (ppb) case closeout standard were detected in many of the post-excavation samples collected from the floor and walls of the excavation. However, pre-excavation and post-excavation soil sampling indicates benzene concentrations have been reduced from a pre-excavation average of 83,000 ppb to a post-excavation average of 78 ppb in the accessible soils. Also, borings completed during the previous site investigations demonstrate the remaining benzene-impacted soil is localized to the perimeter of the excavation.

Groundwater was encountered in the excavation at a depth of approximately 10 feet. This is consistent with the depth to groundwater identified in three groundwater monitoring wells at the site. Petroleum contaminants have been detected in the groundwater wells, but none of the contaminants are present at concentrations above the PAL.

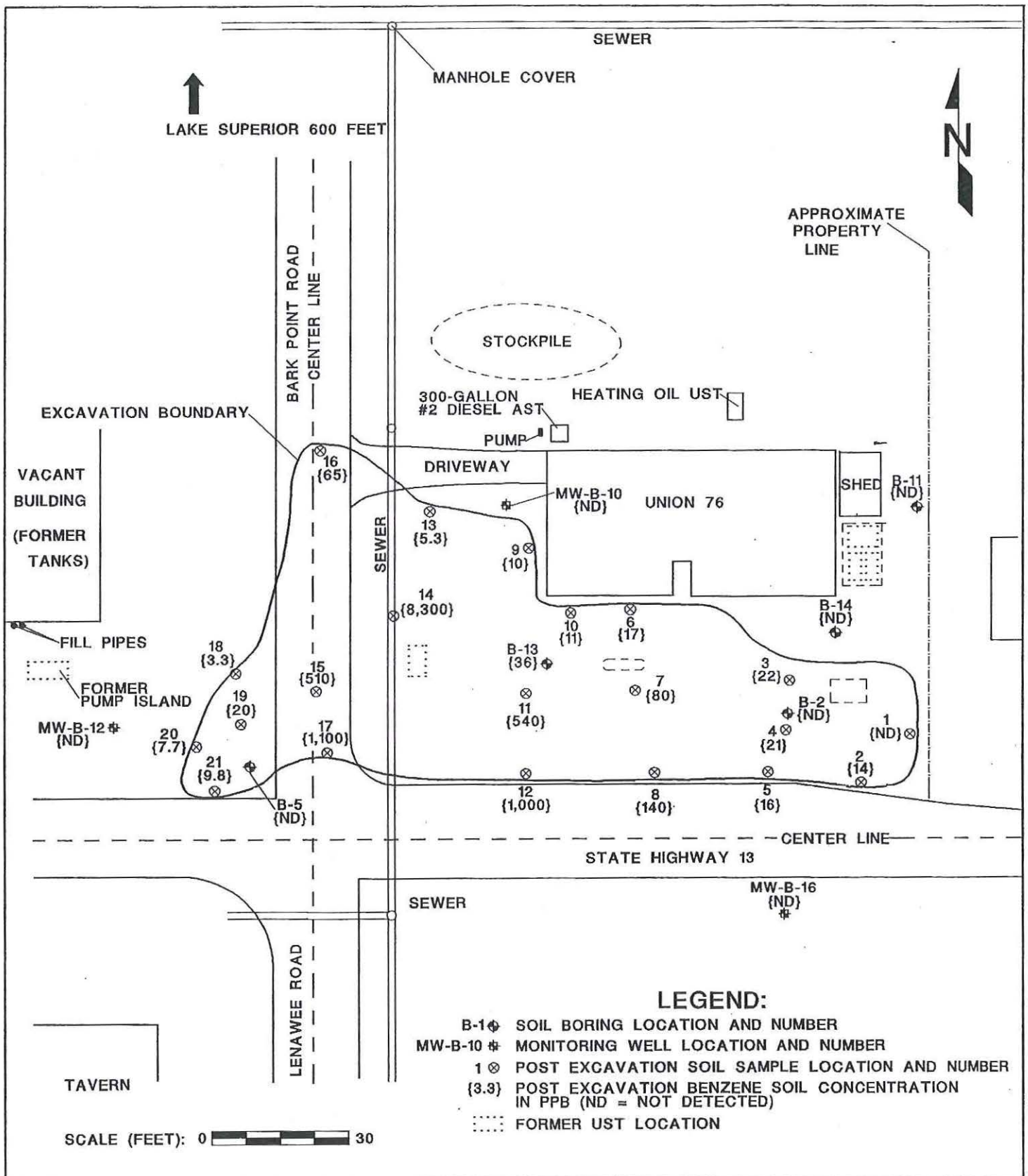
We recommend no additional soil remediation activity for this site. However, soil vapor probes should be installed to evaluate and monitor potentially hazardous vapor migration in the impacted sewer trench. The soil vapor monitoring can be conducted concurrently with groundwater monitoring activities. We further recommend installing additional groundwater monitoring wells, previously requested by the WDNR, to further investigate the potential petroleum impact to groundwater and verify groundwater flow direction. After installation, all monitoring wells on site should be sampled quarterly for a year to monitor the effects of soil remediation activities and evaluate the significance of groundwater contaminant levels. Results of quarterly sampling will determine if additional groundwater remediation or well abandonment is warranted.



**FIGURE 3 POST EXCAVATION GRO/DRO
SOIL CONCENTRATIONS
NORTHLAND GAS SITE
HERBSTER, WISCONSIN**

A D V E N T

ENVIRONMENTAL SERVICES, INC.
DATE: 1/20/95
DRAWING # 96958G



**FIGURE 4 POST EXCAVATION BENZENE SOIL CONCENTRATIONS
NORTHLAND GAS SITE
HERBSTER, WISCONSIN**

A D V E N T

ENVIRONMENTAL SERVICES, INC.
DATE: 1/20/95
DRAWING # 96958H

**TABLE 2
RESULTS OF CHEMICAL ANALYSES OF POST EXCAVATION SOIL SAMPLES
NORTHLAND GAS**

Sample ID	Date Collected	Depth (feet)	GRO (ppm)	DRO (ppm)	PID (Instrument Units)	VOCs ¹ (ppb)							
						Benzene	Ethylbenzene	MTBE	Toluene	1,2,4 TMB	1,3,5 TMB	Xylenes	1,2-DCA
1	9/26/94	10.5	1.3	ND	0	ND	ND	ND	ND	ND	ND	ND	ND
2	9/26/94	9	8.6	380	3	14	28	ND	21	58	180	46	ND
3	9/26/94	8	ND	ND	0	22	32	ND	51	33	ND	46	ND
4	9/26/94	10.5	ND	ND	0	21	ND	ND	27	ND	ND	ND	ND
5	9/26/94	8	ND	ND	1	16	ND	ND	39	ND	ND	ND	ND
6	9/27/94	9	4.0	6.8	1	17	72	ND	19	85	78	70	ND
7	9/27/94	10	ND	28	0	80	ND	ND	31	ND	ND	32	ND
8	9/27/94	8	120	9.5	100	140	1,400	ND	2,100	5,600	1,700	6,400	ND
9	9/27/94	5	16	28	15	10	13	ND	22	96	85	48	ND
10	9/27/94	7	4.0	8.8	12	11	23	ND	11	14	ND	25	ND
11	9/27/94	10.5	ND	ND	2	540	11	ND	34	ND	ND	26	ND
12	9/27/94	6	74	370	100	1,000	8,100	ND	7,200	34,000	13,000	43,000	ND
13	9/28/94	7	2.5	ND	1	5.3	ND	ND	16	ND	ND	ND	ND
14	9/28/94	10	3,900	260	140 ⁺	8,300	49,000	ND	110,000	150,000	45,000	250,000	ND
15	9/29/94	9	7.8	ND	5	510	340	ND	280	73	23	990	ND
16	9/28/94	6	2.0	ND	2	65	8.3	ND	18	ND	ND	46	ND
17	9/29/94	6	340	43.0	150	1,100	4,100	ND	3,800	14,000	4,400	17,000	ND
18	9/29/94	6	ND	ND	0	3.3	7.3	ND	23	ND	ND	22	ND
19	9/29/94	8	3.7	ND	1	20	82	ND	28	300	89	570	ND
20	9/29/94	7	ND	ND	0	7.7	ND	ND	13	ND	ND	ND	ND
21	9/29/94	7	ND	ND	0	9.8	ND	ND	ND	ND	ND	ND	ND
MeOH Blank	9/27/94	---	ND	---	---	---	---	---	---	---	---	---	---
MeOH Blank	9/29/94	---	ND	---	---	---	---	---	---	---	---	---	---
<i>Case Closeout Limits</i>		---	100	100	---	5.5	2,900	---	1,500	---	---	4,100	4.9

1 For a complete list of VOCs analyzed and the laboratory detection limits, see appendix
 ND Not Detected
 --- Not Applicable
 Shading indicates those concentrations that exceed applicable case closeout standards.



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott Walker, Governor
Kurt A. Thiede, Interim Secretary

Ashland Service Center
2501 Golf Course Road
Ashland, Wisconsin 54806
Telephone 715-685-2900
FAX 715-685-2909

September 25, 2017

MS JANINE HAHN
85780 SMITH DR
HERBSTER WI 54844

Subject: Reported Contamination at the South Shore C-Store
14770 State Highway 13, Herbster, Wisconsin
DNR BRRTS Activity #03-04-580236

Dear Ms. Hahn:

On September 20, 2017, Erica Klingfus of MSA Professional Services notified the Department of Natural Resources (DNR) that petroleum contamination had been detected at the site described above. The contamination was detected in soil samples collected during the removal of two underground storage tanks at the site on August 30, 2017.

Based on the information that has been submitted to the DNR regarding this site, we believe you are responsible for investigating and restoring the environment at the above-described site under Wisconsin Statutes § 292.11, known as the hazardous substances spill law.

This letter describes the legal responsibilities of a person who is responsible under Wis. Stats. § 292.11, explains what you need to do to investigate and clean up the contamination, and provides you with information about cleanups, environmental consultants, possible financial assistance, and working cooperatively with the DNR.

Legal Responsibilities:

Your legal responsibilities are defined both in statute and in administrative codes. The hazardous substances spill law, Wis. Stats. § 292.11 (3), states:

- **RESPONSIBILITY.** A person who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands, or waters of the state.

Wisconsin Administrative Code §§ NR 700 through NR 754 establish requirements for emergency and interim actions, public information, site investigations, design and operation of remedial action systems, and case closure. Wis. Adm. Code § NR 140 establishes groundwater standards for contaminants that reach groundwater.

Steps to Take:

The longer contamination is left in the environment, the farther it can spread and the more it may cost to clean up. Quick action may lessen damage to your property and neighboring properties and reduce your costs in investigating and cleaning up the contamination. To ensure that your cleanup complies with Wisconsin's laws and administrative codes, you should hire a professional environmental consultant who understands what needs to be done. The following information provides the timeframes and required steps to take. Unless otherwise approved by DNR in writing you must complete the work by the timeframes specified.

1. Within the next **30 days**, by October 25, 2017, you should submit written verification (such as a letter from the consultant) that you have hired an environmental consultant. If you do not take action within this time frame, the DNR may initiate enforcement action against you.
2. Within **60 days**, by November 24, 2017, you must submit a work plan for completing the investigation. The work plan must comply with the requirements in the NR 700 Wis. Adm. Code rule series and should adhere to current DNR technical guidance documents.
3. You must initiate the site investigation within 90 days of submitting the site investigation work plan. You may proceed with the field investigation upon DNR notification to proceed. If the DNR has not responded within 30 days from submittal of the work plan, you are required to proceed with the field investigation. If a fee for DNR review has been submitted, the field investigation must begin within 60 days after receiving DNR approval.
4. Within 60 days after completion of the field investigation and receipt of the laboratory data, you must submit a Site Investigation Report to the DNR.
5. Within 60 days after submitting the Site Investigation Report, you must submit a remedial actions options report (RAOR). The RAOR shall include an evaluation of Green and Sustainable Remediation opportunities as required by Wis. Adm. Code § NR 722.09 (2m).

Sites where discharges to the environment have been reported are entered into the Bureau for Remediation and Redevelopment Tracking System ("BRRTS"), a version of which appears on the DNR's internet site. You may view the information related to your site at any time (<http://dnr.wi.gov/botw/SetUpBasicSearchForm.do>) and use the feedback system to alert us to any errors in the data.

If you want a formal written response from the department on a specific submittal, please be aware that a review fee is required in accordance with Wis. Adm. Code § NR 749. If a fee is not submitted with your reports, you must complete the site investigation and cleanup to maintain your compliance with the spills law and Wis. Adm. Code §§ NR 700 through NR 754. **The timeframes specified above are required by rule, so do not delay the investigation of your site.** We have provided detailed technical guidance to environmental consultants. Your consultant is expected to know our technical procedures and administrative rules and should be able to answer your questions on meeting cleanup requirements.

All correspondence regarding this site should be sent to me at the address in the letterhead on page 1. Unless otherwise directed, submit one paper copy and one electronic copy of plans and reports as required under Wis. Adm. Code § NR 700.11 (3g). To speed processing, correspondence should reference the BRRTS number shown at the top of this letter.

Site Investigation and Vapor Pathway Analysis

As you develop the site investigation work plan, we want to remind you to include an assessment of the vapor intrusion pathway. Wis. Adm. Code § NR 716 outlines the requirements for investigation of contamination in the environment. Specifically, § NR 716.11(3) (a) requires that the field investigation determine the “nature, degree and extent, both areal and vertical, of the hazardous substances or environmental pollution in all affected media”. In addition, §§ NR 716.11(5) (g) and (h) contains the specific requirements for evaluating the presence of vapors in the sub-surface as well as in indoor air.

You will need to include documentation with the Site Investigation Report that explains how the assessment was done. If the vapor pathway is being ruled out, then the report needs to provide the appropriate justification for reaching this conclusion. If the pathway cannot be ruled out, then investigation and, if appropriate, remedial action must be taken to address the risk presented prior to submitting the site for closure. The DNR has developed guidance to help responsible parties and their consultants comply with the requirements described above. The guidance includes a detailed explanation of how to assess the vapor intrusion pathway and provides criteria which identify when an investigation is necessary. The guidance is available at: <http://dnr.wi.gov/files/PDF/pubs/rr/RR800.pdf>.

Additional Information for Site Owners:

We encourage you to visit our website at <http://dnr.wi.gov/topic/Brownfields/>, where you can find information on selecting a consultant, financial assistance and understanding the cleanup process. You will also find information there about liability clarification letters, post-cleanup liability and more.

Information on selecting a consultant and a list of consultants is enclosed.

If you have any questions concerning this letter or the project in general, please do not hesitate to write or call me at 715-685-2920. I can also be reached by e-mail at Christopher.Saari@Wisconsin.gov.

Thank you for your cooperation.

Sincerely,



Christopher A. Saari
Hydrogeologist

attach. Selecting a Consultant – RR-502 <http://dnr.wi.gov/files/PDF/pubs/rr/RR502.pdf>

Environmental Services Contractor List – RR-024 <http://dnr.wi.gov/files/PDF/pubs/rr/RR024.pdf>

Saari, Christopher A - DNR

From: Erica Klingfus <eklingfus@msa-ps.com>
Sent: Thursday, September 21, 2017 7:29 AM
To: Saari, Christopher A - DNR; Soyer, Jenna A - DNR
Cc: Jeff Anderson; tdenterprises_2000@msn.com
Subject: RE: TSSA Part B Form - South Shore C-Store
Attachments: 18764001 Photo Log.pdf

I had forgotten to attach the required photos – here are the photos of groundwater within the tank basin.

From: Erica Klingfus
Sent: Wednesday, September 20, 2017 4:18 PM
To: Saari, Christopher A - DNR; 'jenna.soyer@wisconsin.gov'
Cc: Jeff Anderson; 'tdenterprises_2000@msn.com'
Subject: TSSA Part B Form - South Shore C-Store

Chris and Jenna,

Please see attached the TSSA Part B form filled out for the South Shore C-Store tank removal in Herbster, WI. Also attached are figures and laboratory analytical results from soil samples collected at the site. A release notification form was submitted earlier today as well using the submittal button on the form.

Let me know if you have any questions or require any additional information.

Thank you,

Erica Klingfus



Erica Klingfus | Environmental Scientist

MSA Professional Services, Inc.

+1 (218) 499-3171



Emergency Discharges / Spills should be reported via the 24-Hour Hotline: 1-800-943-0003

**BRRTS
Duplicate**

Notice: Hazardous substance discharges must be reported immediately according to s. 292.11 Wis. Stats. Non-emergency hazardous substance discharges may be reported by telefaxing or e-mailing a completed report to the Department, or calling or visiting a Department office in person. If you choose to notify the Department by telefax or by email, you should use this form to be sure that all necessary information is included. However, use of this form is not mandatory. Under s. 292.99, Wis. Stats., the penalty for violating the reporting requirements of ch. 292 Wis. Stats., shall be no less than \$10 nor more than \$5000 for each violation. Each day of continued violation is a separate offense. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than program administration. However, information submitted on this form may also be made available to requesters under Wisconsin's Open Records Law (ss. 19.31 – 19.39, Wis. Stats.).

Confirmatory laboratory data should be included with this form, to assist the DNR in processing this Hazardous Substance Release Notification.

Complete this form. **TYPE or PRINT LEGIBLY.** NOTIFY appropriate DNR region (see next page) **IMMEDIATELY** upon discovery of a potential release from (check one):

- Underground Petroleum Storage Tank System (additional information may be required for Item 6 below)
- Aboveground Petroleum Storage Tank System
- Dry Cleaner Facility
- Other - Describe: _____

ATTN DNR: **R & R Program Associate**

Date DNR Notified: **09/20/2017**

1. Discharge Reported By

Name Erica Klingfus	Firm MSA Professional Services	Phone Number (include area code) (218) 499-3171
Mailing Address 332 W. Superior St., Ste. 600	Email eklingfus@msa-ps.com	

2. Site Information

Name of site at which discharge occurred. Include local name of site/business, not responsible party name, unless a residence/vacant property.

South Shore C-Store

Location: Include street address, not PO Box. If no street address, describe as precisely as possible, i.e., 1/4 mile NW of CTHs 60 & 123 on E side of CTH 60.

14770 State Highway 13

Municipality: (City, Village, Township) Specify municipality in which the site is located, not mailing address/city.

Herbster

County Bayfield	Legal Description: SE ¼ of SE ¼ Section 5, Town 50 N, Range 07 <input type="radio"/> E <input checked="" type="radio"/> W	WTM: X 423682 Y 707366
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3. Responsible Party (RP) and/or RP Representative

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

A local governmental unit claiming an exemption from state Spill Law and Solid Waste Management responsibilities for the discharge being reported, per Wis. Stat. §§ 292.11(9)(e) and 292.23, should: 1) check this box; 2) review [DNR publication RR-055](#); and 3) provide documentation to DNR that demonstrates compliance with the statutory requirements of the liability exemptions. Local governmental units may also request a fee-based liability clarification letter from DNR by using [DNR Form 4400-237](#).

Contact Person Name (if different) Janine Hahn	Phone Number	Email		
Mailing Address 85780 Smith Drive	City Herbster	State WI	ZIP Code 54844	

Responsible Party Name: Business or owner name that is responsible for cleanup. If more than one, list all. Attach additional pages as necessary.

Contact Person Name (if different)	Phone Number	Email		
Mailing Address	City	State	ZIP Code	

(continued)

Notification For Hazardous Substance Discharge (Non-Emergency Only)

4. Hazardous Substance Information

Identify hazardous substance discharged (check all that apply):

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> VOCs
<input type="checkbox"/> PCE
<input type="checkbox"/> TCE
<input type="checkbox"/> Other Chlorinated
<input checked="" type="checkbox"/> Diesel
<input type="checkbox"/> Fuel Oil
<input checked="" type="checkbox"/> Gasoline
<input type="checkbox"/> Hydraulic Oil
<input type="checkbox"/> Jet Fuel | (VOCs continued)
<input type="checkbox"/> Mineral Oil
<input type="checkbox"/> Waste Oil
<input type="checkbox"/> Petroleum-Unknown Type
<input type="checkbox"/> PAHs
<input type="checkbox"/> PCBs
<input type="checkbox"/> Cyanide
<input type="checkbox"/> Leachate
<input type="checkbox"/> Manure | <input type="checkbox"/> Metals
<input type="checkbox"/> Arsenic
<input type="checkbox"/> Chromium
<input type="checkbox"/> Lead
<input type="checkbox"/> Other: _____
<input type="checkbox"/> Pesticides: _____
<input type="checkbox"/> Fertilizer: _____
<input type="checkbox"/> RCRA Hazardous Waste: _____
<input type="checkbox"/> Other: _____
<input type="checkbox"/> Unknown |
|--|---|---|

5. Impacts to the Environment Information

Enter "K" for known/confirmed or "P" for potential for all that apply.

- | | | |
|--|---|--|
| <input type="checkbox"/> Air Contamination | <input type="checkbox"/> Fire Explosion Threat | <input checked="" type="checkbox"/> Soil Contamination |
| <input type="checkbox"/> Co-mingled (Petroleum & Non-Petroleum) Contamination in Fractured Bedrock | <input type="checkbox"/> Free Product | <input type="checkbox"/> Soil Gas Contamination |
| <input type="checkbox"/> Contamination Within 1 Meter of Bedrock | <input checked="" type="checkbox"/> Groundwater Contamination | <input type="checkbox"/> Sub-slab Vapor Contamination |
| <input type="checkbox"/> Contaminated Private Well | <input type="checkbox"/> Off-Site Contamination | <input type="checkbox"/> Surface Water Contamination |
| <input type="checkbox"/> Contaminated Public Well | <input type="checkbox"/> Sanitary Sewer Contamination | <input type="checkbox"/> Within 100 ft of Private Well |
| <input type="checkbox"/> Contamination in Right of Way | <input type="checkbox"/> Storm Sewer Contamination | <input type="checkbox"/> Within 1000 ft of Public Well |
| | <input type="checkbox"/> Sediment Contamination | |
| | Other (specify): _____ | |

Contamination was discovered as a result of:

- Tank closure assessment
 Site assessment
 Other - Describe: _____
 Date Date Date

Lab results: Lab results will be faxed upon receipt Lab results are attached

Additional Comments: Include a brief description of immediate actions taken to halt the release and contain or cleanup hazardous substances that have been discharged.
 The tanks were pumped and removed from the tank basin. The tank basin was backfilled with fill material brought on site.

6. Federal Energy Act Requirements (Section 9002(d) of the Solid Waste Disposal Act (SWDA))

	Source	Cause
For all confirmed releases from USTs occurring after 9/30/2007 please provide the following information:	<input type="checkbox"/> Tank <input type="checkbox"/> Piping <input type="checkbox"/> Dispenser <input type="checkbox"/> Submersible Turbine Pump <input type="checkbox"/> Delivery Problem	<input type="checkbox"/> Spill <input type="checkbox"/> Overfill <input type="checkbox"/> Corrosion <input type="checkbox"/> Physical or Mechanical Damage <input type="checkbox"/> Installation Problem <input type="checkbox"/> Other (does not fit any of above)
<input type="checkbox"/> Does not apply.	<input checked="" type="checkbox"/> Other (specify): _____	<input checked="" type="checkbox"/> Unknown

Contact information to report non-emergency releases in DNR's five regions are as follows:

- Northeast Region (FAX: 920-662-5413); Attention -- R&R Program Associate: DNRRRNER@wisconsin.gov**
 Brown, Calumet, Door, Fond du Lac (except City of Waupun - see South Central Region), Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Waushara, Winnebago counties
- Northern Region (FAX: 715-623-6773); Attention -- R&R Program Associate: DNRRRNOR@wisconsin.gov**
 Ashland, Barron, Bayfield, Burnett, Douglas, Forest, Florence, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn counties
- South Central Region (FAX: 608-273-5610); Attention -- R&R Program Associate: DNRRRSCR@wisconsin.gov**
 Columbia, Dane, Dodge, Fond du Lac (City of Waupun only), Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk, Walworth counties
- Southeast Region (FAX: 414-263-8550); Attention -- R&R Program Associate: DNRRRSER@wisconsin.gov**
 Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha counties

Notification For Hazardous Substance Discharge (Non-Emergency Only)

Erica Klingfus MSA Professional Services

Form 4400-225 (R 06/17)

Page 3 of 3

West Central Region (FAX: 715-839-6076); Attention -- R&R Program Associate: DNRRRWCR@wisconsin.gov

Adams, Buffalo, Chippewa, Clark, Crawford, Dunn, Eau Claire, Jackson, Juneau, LaCrosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood counties

PHOTOGRAPHIC LOG

South Shore C-Store

14770 State Highway 13, Herbster, WI 54844

MSA Project No. 18764001



View of tank basin and C-Store Laundromat building facing northwest.



View of tank basin facing west.



View of groundwater filling excavation.



View of C-Store buildings and dispensers facing northwest.