

#### SITE-SPECIFIC SAMPLING AND ANALYSIS PLAN SANDIES DRY CLEANERS AND LAUNDRY SITE RV GROUNDWATER MONITORING

#### **Project Information**

TDD No.: TO-01-11-08-0020	TDD	) Type: Removal Act	ion	Analytical TDD No.: TO-01-11-08-0020		
Site Name: Sandies Dry Cleane and Laundry RV	ndies Dry Cleaners RV City/County: Littl		Chute/	Outagamie	State: WI	
OTIE Project Mgr.: Andrew Plier		EPA Pro Coordir	oject Mgr.: Ramon N nator (OSC)	Aendoza, On Scene		
Site Lead: 🛛 🖾 US EPA		□State		PRP	Other	

#### History

#### Site Description:

The former Sandies Dry Cleaner facility (SDC), vacant since 2006, is located at 513 Grand Ave in Little Chute, WI, about 30 minutes south of Green Bay in Outagamie County. SDC is located among a mixture of residential and commercial properties. Past facility operations and practices let to soil contamination and groundwater contamination with dry cleaning related chemicals. Historical investigations conducted by the Wisconsin Department of Natural Resources (WDNR), Wisconsin Department of Health Services (WIDHS), and the United States Environmental Protection Agency (EPA) concluded that the site is contaminated with chemicals common to the dry cleaning process; perchloroethylene/trichloroethylene (PCE/TCE).

#### Site Background:

Dave Linskens, the potential responsible party (PRP) for SDC, hired Terracon Consultants Inc. to conduct a Phase II Investigation. A soil sample collected at one foot below the former dry cleaning machine indicated PCE concentration of 125 parts per million (ppm). A second soil sample collected from three feet below ground surface (bgs) in the alley behind SDC indicated a PCE concentration of 4.5 ppm.

In February, 2011, the WIDHS conducted indoor air sampling at the source site and adjacent interconnected buildings (shared brick walls). WIDHS documented the presence of PCE in the unoccupied apartment above the SDC facility and in all three levels of the adjacent property, known as Weenies Still (a tavern immediately north of SDC). PCE was above the residential (0.6 ppb by volume) and commercial (3.1 ppb by volume) indoor air standards. The PCE levels of the owner-occupied residence above Weenies Still measured ten times higher than the residential indoor air. PCE in indoor air samples collected from the Bakery Outlet (Immediately south of SDC) were above residential standards, but below commercial standards. The WDNR requested EPA assistance to conduct a Removal Assessment and Removal Action at SDC.

In March 2011, the Superfund Technical Assessment and Response Team (START), contractor to the EPA, conducted indoor air sampling by collecting 6 summa canister air samples from SDC and premises located to the north and south of SDC. A 24-hour summa canister air sample was collected from each location. One sample was collected from the unoccupied second floor apartment at Sandies Dry Cleaners (513 Grand Ave); one sample from the first floor of the adjacent Weenies Tavern, (515 Grand Ave); one sample from the occupied second floor apartment above Weenies

Tavern; one sample from the basement of Weenies Tavern near an adjoining wall to the dry cleaners; one sample from the basement of the adjacent Bakers Outlet, (505 Grand Ave); one sample from the occupied second floor apartment south of the Bakers Outlet, above American Family Insurance, (505 Grand Ave). Sample results indicated PCE contamination in all samples except from the apartment above American Family Insurance (505 Grand Ave). PCE results indicated 31ppbv in SDC, 3.6 – 5 ppbv in Weenies Tavern and 0.78 ppbv in the Bakers Outlet.

In April 2011, START collected subsurface soil samples through installation of borings at the site and in the parcel behind the site. Analytical results confirmed an on-site PCE source in the soil of the former dry cleaner machinery room.

In September, 2011, USEPA initiated a removal action. Removal action included excavating and backfilling identified hot spots within the target area. Additionally, subslab ventilation systems were installed in the dry cleaning room at SDC, in the basement of Weenies Tavern, and in the crawl space under SDC to exhaust additional soil gas. After the removal action was completed, the EPA's ERRS contractor installed 3 monitoring wells in the parcel of land behind the site (Figure 1). These wells were installed to evaluate the groundwater quality and monitor the contaminants on a quarterly or on an as needed basis. The ground water monitoring is scheduled to begin in the second week of December, 2011 and may occur on a quarterly basis thereafter.

#### Sampling

#### Summary:

This SAP discusses sampling protocols and procedures and the sample results. This SAP also addresses follow-up sampling that would occur periodically based on these sample results. As part of the monitoring requirements, three on-site monitoring wells were sampled in December 2011. The sampling procedures discussed below were used during the December 2011 sampling and will be used for all subsequent sampling at this site. QA/QC samples include trip blank and duplicate samples and will be collected along with regular samples. Appendix A includes a site sample location map and pictures of the respective wells. Appendix B includes State of Wisconsin DNR forms 4400-89 and 4400-113A which detail the well construction.

#### Well Development:

Prior to sampling, all wells were developed according to the WDNR Groundwater Monitoring Well Requirements (NR 141.21). This process included using a surge block and submersible pump to conduct, at minimum, thirty minutes of surging and purging each well. This was followed by continuously pumping until the wells produced sediment free water. OTIE developed the wells in early December 2011 and was able to obtain sediment free water from each well during this procedure. See Table 2 for a complete overview of the well development results.

#### **Collection and Handling Procedures:**

Each round of monitoring well sampling will include the collection of:

- 1. Three groundwater samples from the permanent groundwater wells behind SDC
- 2. One duplicate sample.
- 3. One trip blank

All groundwater samples were collected in accordance with the EPA Low Flow (Minimal Drawdown) Ground-Water Sampling Procedures and section four of OTIE's SOP (OTIE008F). Prior to sampling, a Heron Dipper-T water level meter was used for checking groundwater depths. A peristaltic pump or

other such pumping equipment was used to purge each monitoring well. A Horiba U-52 or similar water quality meter was used to monitor the water quality parameters for stabilization prior to sample collection.

The following Guidelines/procedures dictate monitoring well sampling:

- 1. Prepare the sample site
- 2. Decontaminate all equipment prior to its use in accordance with OTIE's Decontamination Procedures (OTIE011A)
- 3. Record depth to the water surface and to the bottom of the well using a water level meter
- 4. Lower dedicated sampling tube to the middle of the screened interval of the well
- 5. Using a low flow pump, begin pumping water at a rate of 0.1-0.5 L/Min
- 6. Record water quality readings, at a minimum, once every well volume until the parameters stabilize for three consecutive readings. Stabilization parameters include;
  - a. pH: +/- 0.1 pH unit
  - b. Temperature: +/- 10%
  - c. Specific conductance: +/- 3%
  - d. ORP: +/- 10mV
  - e. DO: +/- 10%
  - f. Turbidity: Target of 10NTU's or less for metal samples and 50 NTU's or less for organic samples
- 7. Collect, containerize, preserve, and handle the sample in accordance with EPA guidelines and additional procedures suggested by the supplying laboratory for collecting and preserving samples
- 8. Collect a duplicate water sample from one of the monitoring wells and also prepare a trip blank. These samples will be handled and kept in the same environmental conditions as the other monitoring well samples.
- 9. Record all findings and take photo documentation of the site

On 12/13/2011 OTIE conducted the initial groundwater sampling for three wells at the SDC site; SDC-MW-1, SDC-MW-2, and SDC-MW-3 (see appendix A). SDC-MW-1 is located approximately 15.5 feet south of SDC and 9.0 feet east of Weenies detached garage. The initial water surface was 5.56 feet below the well cap. The water quality parameters stabilized after 25 minutes. Approximately 2.5 gallons were pumped from this location during the sampling procedure. SDC-MW-2 is located approximately 29.0 feet south of SDC and 30.0 feet east of Weenies detached garage. The initial water surface was 5.64 feet below the well cap. The water quality parameters stabilized after 55 minutes. Approximately 5 gallons were pumped from this location during the sampling procedure. SDC-MW-3 is located approximately 8.30 feet south of the Bakery and 6.80 feet east of the southwest corner of the Bakery. The initial water surface was 5.67 feet below the well cap. The water quality parameters stabilized after 45 minutes. Approximately 4 gallons were pumped from this location during the sampling procedure.

All samples were analyzed for VOC's. Sample bottle requirements, analytical methods, and preservatives are listed in Table 1. Sample results can be found in Table 3. The expected turn-around time for each sample was Standard Turnaround Time.

#### Sample Analysis:

The initial round of sampling was conducted on 12/13/2011. Table 3 displays a summary of the December 2011 sample results. All samples, including one trip blank and one duplicate sample, were

analyzed for VOCs. The bolded numbers in Table 2 indicate results above the reporting limit, hence, are considered accurate by the labs testing procedures. Numbers that are not above the reporting limit (not bolded) are considered estimates by the reporting laboratory. Numbers that are highlighted are considered above the state and/or federal limits.

We can see from table 2 that SDC-MW-1 had no detected contaminants. SDC-MW-2 had trace amounts of acetone, dichloroethene, and trichloroethene, but was slightly above the state and federal limits for tetrachloroethene. SDC-MW-3 had trace amounts of dichloroethene, but was 62 times and almost 4 times above state and federal limits for tetra- and trichloroethene respectively. SDC-MW-3 had a duplicate sample taken that confirmed similar results. Further quarterly sampling is recommended to monitor the target site for contaminant release.

Table 1 Sampling Requirements Sandies Dry Cleaners and Laundry Site RV											
Matrix <sup>1</sup>	Parameter/Method <sup>2</sup>	Volume and Container <sup>2</sup>	ume and No. of Investigative ntainer <sup>2</sup> Samples		No. of Quality Control (QC) Samples <sup>3</sup>					Total No. of Samples (Investigative + OC)	Total No. of sample containers
				IVIS	IVISD	or Split	Blank	Blank	Blank	+ QC)	
Water	voc's/ SW-846: 8015B, 8021B, 8260B	40 ml Vials/3	3			1			1	4	12

Notes:

- 1 Matrix includes water.
- 2 Refer to Table 2-2 of the START Region 5 QAPP for required sample volumes, containers, preservation techniques and holding times. VOC bottles are pre-preserved with HCL
- 3 Refer to the Field Quality Control Requirements of the START Region 5 QAPP.

Table 2 Groundwater Monitoring Analytical Results for VOC's Sandies Dry Cleaner & Laundry-RV Little Chute, WI																		
Well ID				Initia	al Meas	surements	5						Original	Purge				
	Depth To Water Depth To Bottom Surface (ft) of Well (ft) Wa		Vell Volume (gal) Wa		Water To Be Purged (gal)		Purge Time (Mins)		Number of Cycles		Gallons Retrieved							
SDC-MW-1	4.6	50	19	.90		2.50			7.50		120		5		120 5			5
SDC-MW-2	5.3	32	19	.75		2.35			7.05 120		0	5			6			
SDC-MW-3	5.6	50	19	.82		2.32			6.96	120 5		120		5		5		
						Su	urge and	Purge Cy	cle									
Well ID		Fi	rst Purge				Seco	ond Purge				Thi	ird Purge			Total Gallons Retrieved		
	Recharge Time (Min)	Purge Time (Mins)	Gallons Pumped	Water Clear (Y/N)	Well Dry (Y/N)	Recharge Time (Min)	Second Purge Time (Min)	Gallons Pumped	Water Clear (Y/N)	Well Dry (Y/N)	Recharge Time (Min)	Third Purge Time (Min)	Gallons Pumped	Water Clear (Y/N)	Well Dry (Y/N)			
SDC-MW-1	90	30	5	N	Y	60	10	4	N	Y	30	5	1	Y	Y	10		
SDC-MW-2 SDC-MW-3	75 25	45 40	8 9	Y N	Y Y	20 20	5 2	2	Y Y	Y Y	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	10 10		

#### Note

Well ID Monitoring well identification number

ft Feet

Min Minutes

gal Gallons

N/A Not applicable

Table 3 Groundwater Monitoring Analytical Results December 2011 Sandies Dry Cleaner & Laundry Site RV Little Chute, WI							
Analyte	Action Leve	els ( µg/L)	Results ( µg/L)				
VOCs	EPA (Federal) MCL	WDNR 809 (State) MCL	SDC-MW-1	SCD-MW-2	SDC-MW-3		
Acetone	*12,000	*9,000	0.0	6.9	0.0		
cis-1,2- Dichloroethene	70.0	70.0	0.0	3.7	4.6		
Tetrachloroethene	5.0	5.0	0.0	<mark>8.0</mark>	<mark>310.0</mark>		
Trichloroethene	5.0	5.0	0.0	1.4	<mark>19.0</mark>		

#### Notes:

VOCs	Volatile organic compounds
1005	Volutile of guille compound.

μg/L - micrograms per liter

SDC-MW - Monitoring Well identification

- 8.0 Bolded highlighted results indicate exceedences of federal and/or state maximum contaminant level (MCL) drinking water standards
- \* Acetone has no federal or state listed MCL values. In this table, NR 140 ES for acetone was used as the state standard and the EPA RSL for tap water was used as the federal standard

Samples were analyzed for all VOCs. Table 3 includes the sample results of only detected analytes

Analyses was conducted by Mircobac Laboratories, Merrillville, Indiana under START TDD No: TO-01-11-08-0020 and contract EP-S5-10-10

APPENDIX A Groundwater Well Location Map and Site Pictures



## Sample Location Photos







APPENDIX B WDNR Monitoring Well Construction Forms

State al Wisconsia Department of Natural Resources <u>Route to:</u> V	Vatershed/Wastewater	Waste Management	MONITORING WELL CONSTRUC Form 4400-113A Rev. 7-98	CTION
Recility/Project Name	temediation/Redevelopment	Other 🔊 u Stept	N17_11 N1	
Sandies DCRI - Latter	fr Di		SOL - M W -	
Facility License Permit or Monitoring No.	Local Grid Origin [] (estimat	ed: $\Box$ ) or Well certion Z	Wis Unique Well No. IDNR Well IT	No
There is a second of the secon	1 at 44 ° 1 la ' 759N"	$= 88^{\circ}/8^{\circ}/972.5$	VIZ350	2 MO.
Facility ID			Date Well Installed	<u> </u>
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Type of Well	Section Location of Waste/Sour	ce	<u>m m d d v v</u> Well Installed By: Name (first last) a	<u>v v</u> and Rirm
Well Code 24 PM	<u>NW 1/4 of Sec.</u> 1/4 of Sec. 7	<u>-1, T. 2</u> N. R. 185 0	Chattla in De Va	cht
Distance from Wastel   Enf Stdg	Location of Well Relative to Wa	aste/Source Gov. Lot Number	- marina yu	<u>.u</u> u
Source & Annly	L Dogradient s 21	Sidegradient	Contind Saurce	
	2 C Downgradient n L	Not Known		
A. Protective pipe, top clevation2		1. Cap and lock:	AL ISI L	1 110
B. Well casing, top elevation _73	<u>5</u> ft. MSL	2. Hoacdve dove		8:
	5.7 0 1/07	a. Instate diameter	u	_O_//12
C. Land surface elevation _ 1 -	L MSL	o. Longui.	Steel 5	 A 0.4
D. Surface seal, bottom ft. M	SLor ft.	C. Matchat	Other	ייט <b>צ</b>
12. USCS classification of soil near scree		d Additional m	ntection?	 71 No
	sw 🗆 sp 🖂 🔪 🕅	If you decori	her Litter	4
			Denti-ite F	<b>7</b> 30
Bedrock		3. Surface scal:		
13. Sieve analysis performed?	Yes 🗆 No			
14. Drilling method used Re	uary □.50   88	4 Material hotnes	Uner L	→ <u>%</u> ₽
Hollow Stem A		4. Mathai Detwee	Bentonite	30
Tionew Sum A	ther		Other [	
			Outer L	7 33
15. Drilling fluid used: Water 0 2	Air 🗆 01	5. Annular space	eal: a Grandia/Chipped Bentonice	сі 35 Сі 35
Drilling Mud 🗆 0 3	None 2 99	bLos/ga	mud weight Bentonite-said stury	
		cLos/ga	mud weight Benionite sharry	
16. Drilling additives used?	Yes 🗹 No	d % Denu	<sup>3</sup> - 1	L 20
		C	Tremie	
Describe	🗱	f, How installe	d: Tremie numped	
17. Source of water (attach analysis, if rec	quired):	888	Gravity	
		6 Bentonite seal:	a. Bentouite granules	EQ. U8 □ 33
	📓	$\sim$ 5 Denionate seal.	$M_{3/8}$ in $\Box 1/2$ in Bantonita china	П 30
- F Bentruite seal ton	SLor	B. C1/4 m.	AS/6 IIL 1/2 III. Bentointe cirips	<u> </u>
			(J)Ki	
F. Fine sand, top fr. M	SLor 3 ft X	7. Fine sand mate	rial: Manufacturer, product name & m	iesh size
		<b>H</b> / 1 40	160 Badger	
G. Filter pack, top fr. M	SL or 3.5 ft	h Volume ad	R & 5 0 63	
		8. Filter pack ma	erial: Manufacturer, product name & r	mesh size
H. Screen joint, top	ISL or 5_ ft.	N 201	un Badaer	3333
• • • • • • • • • • • • • • • • • • • •		b Volume ad	$fid 5 fi^3$	<b>22</b> 722
I. Well bottom fr. M	ISL or _ 40_ft、   清	9. Well casing:	Flush threaded PVC schedule 40	23
			Flush threaded PVC schedule 80	□ 24
J. Filter pack, bottom ft. M	(SL or 20.5 ft - 1		Other	
-		10. Screen materi		_
K. Borchole, bottom	ISL or _20.5 ft.	B. Screen typ	Factory cut	AST 11
3			Continuous slot	01
L. Borehole, diameter $\frac{8}{2}$ in.			Other	
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M. O.D. well casingin		c. Slot size:	0	<u>0/0in</u> .
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			Other	r 🗖 🚟
I hereby certify that the information on th	is form is true and correct to the	best of my knowledge.		
Signature	Firm	<b>`</b>		
1 × lm	$\swarrow$ I OT	IE-11.S.EPA	Contractor	
	<del></del>			

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR affice and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent

State of Wisconsin Department of Natural Resources

#### MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater	Waste Management
Remediation/Redevelopment	Other JUSEPA
Facility/Project Name 513 Grand Ave County Name	Well Name
Sandies DCEL-Little Chute Outag	amieSDC-MW-1
Facility License, Permit of Monitoring Number County Code	Wis. Unique Well Number DNR Well ID Number
1. Can this well be purged dry? 🗹 Yes 🗆 No	LL Depth to Water
2. Well development method	(from ton of 460 c 0 c c
surged with bailer and bailed	(non top of $a_{-}$ $ c_{-}$ $c_{-}$ $c_{-$
surged with bailer and pumped	
surged with block and bailed surged with block and pumped 62	Date $b.\frac{i2}{m}\frac{0.5}{201}\frac{0.5}{201}\frac{0.5}{201}\frac{0.5}{2011}$
surged with block, bailed and pumped 70 compressed air 20 bailed only 70	Time $c. \downarrow 0: 00 \square p.m. \downarrow 7: 00 \square p.m.$
	12 Sediment in well inches inches
pumped slowly	bottom
Other	13. Water clarity Clear T 10 Clear M 20
3. Time spent developing well 420 435 min.	Turbid 1 5 Turbid 2 5 (Describe) (Describe)
4. Depth of well (from top of well casisng) ft.	
5. Inside diameter of well $2 \cdot \frac{2}{2} \cdot \frac{2}{2} \cdot \frac{2}{2}$ in.	
6. Volume of water in filter pack and well casing2, 5 gal.	
7. Volume of water removed from well $\underline{1} \stackrel{i}{\simeq} \underline{2} \stackrel{i}{\simeq} \underline{2} \stackrel{j}{=} \underline{2}$ gal.	Fill in if drilling fluids were used and well is at solid waste facility:
8. Volume of water added (if any) gal.	14. Total suspended mg/l mg/l mg/l
9. Source of water added $N/A$	15. COD mg/l mg/l
10. Analysis performed on water added?	16. Well developed by: Name (first, last) and Firm First Name: Andrew Last Name: Plier

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party First DOVE Last LINSKENS	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm:	Signature: A
Street: 1687 Princeton PI#5	Print Name: Andrew I Plier
City/State/Zip: Green Bay, WI 54302	Firm: OTIE-US EPA Contractor

NOTE: See instructions for more information including a list of county codes and well type codes.

Remeabilition/Redevelopment:       Other ESUSC // Note that the subscription of the section of Weat Source (Markow)       Condition of Water Source (Markow)       Source (Marko	State of Wisconsin Department of Natural Resources	Route to: Watershed/Wastew	ater	Waste Manage	ment	MONITORING WEL	L CONSTRUCTION
Participation		Remediation/Reden	clopment (	Other 🖾 🕚	SEPA	Form 4400-113A	RCV, 7-98
Leaking Licence, Permit a Monitoring Vol       I call Grid Origin       Call H <sup>++</sup> I (e <sup>-</sup> , T55 M <sup>+</sup> Long, 33 · 1 S <sup>+</sup> 9 G <sup>+</sup> M <sup>2</sup> M <sup>2</sup> , M <sup>2</sup> H (a - 2 S) L         Feeling ID       St. Plane       N. N.       f. E. St(N)         Type of Well       Stellane       N. N.       f. E. St(N)         Distance from Waste/       Stellane       N. N.       f. E. St(N)         Distance from Waste/       End Side       No. In the Waster/Source       No. N. N.       f. E. St(N)         Distance from Waste/       End Side       Stellane from Waster/Source       No. N. N.       f. Stellane from Waster/Source       No. None Stellane from Waster/Source       Stellane from Waster/Source       f. N. N.       f. Stellane from Waster/Source       Stellane from Source	Facility/Project Name 5 Sandies DCP	36 Horard Are Local Grid Locati	on of Well		n DE.	Well Name	N - 7
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Distance from Waste/ R Dista	Type of Well Well Code 24	1 en NW 14 of SE	- 1/4 of Sec. 2	.T. <u>24</u> N	.R. 18	Well Installed By: No Chat Ha	me (first, last) and Firm
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D. Surface seal, bottomft. MSL orft.	C. Land surface elevation	<u>732</u> fl MSL		1	). Length:		[.ft.
12. USCS classification of soil near screen: $QP = GM = GC = GW = SW = SP = SG = SG = SG = SG = SG = SG = SG$	D. Surface seal, bottom	ft. MSL or ft.			2. Material:		Steel 🛛 04 Other 🖬 🚿
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	12. USCS classification of s	oil near screen:	Sec. 1	- REALERS	d. Additional pr	otection?	I Yes 17 No
Bedrock $\Box$ 3. Surface scal:       Betronice $\Box$ 13. Sieve analysis performed?       Yes $\Box$ No       Other $\Box$ 14. Drilling method used:       Rotary $\Box$ 50         Hollow Stem Auger $\Box$ 41       Other $\Box$ Other $\Box$ Betronite $\Box$ 3         St. Drilling fuid used:       Water $\Box$ 02       Air $\Box$ 01         Drilling fuid used:       Water $\Box$ 02       Air $\Box$ 01         Drilling dud $\Box$ 03       None $\Xi$ 99       S. Amular space scal:       a. Granular/Chipod Bentonite $\Box$ 3         15. Drilling additives used?       Yes $\Xi$ No       S. Amular space scal:       a. Granular/Chipod Bentonite $\Box$ 3         16. Drilling additives used?       Yes $\Xi$ No       S. Amular space scal:       a. Granular/Chipod Bentonite $\Box$ 3         16. Drilling additives used?       Yes $\Xi$ No       S. Amular space scal:       a. Granular/Chipod Bentonite $\Box$ 3         17. Source of water (attach analysis, if required):       Tremic $\Box$ Tremic $\Box$ Tremic $\Box$ 18. Fitne sand, top       f. MSL or	GP GM GM GC GC GM GC GC GM GC GC GM GC	GWD SWD SPD MHD CLD CHD			If yes, describ	)e:	
13. Steve analysis performed?       Yes       No       Other       Other         14. Drilling method used:       Rotary $0.50$ Bentonite & 3         14. Drilling method used:       Rotary $0.1$ Bentonite & 3         15. Drilling fluid used:       Water $\Box 0.2$ Air $\Box 0.1$ Bentonite & 3         15. Drilling duid $\Box 0.3$ None $\noteff 9.9$ S. Amular space seal:       a. Graular(Chipped Bentonite $eff 3$ 16. Drilling additives used?       Yes       Yes       Yo         17. Source of water (attach analysis, if required):       Tremie pumped       0         17. Source of water (attach analysis, if required):       Tremie pumped       0         17. Source of water (attach analysis, if required):       Tremie pumped       0         18. Entonite seal, top       ft. MSL or	Bedrock			3.9	Surface scal:		Concrete 201
A Drilling method used:Kotay (D, 30Hollow Stem Luce:6 Material between well casing and protective ppe:OtherHollow Stem Luce:Other15. Drilling fluid used:Water [] 0.2Air:0.1Drilling fluid used:Water [] 0.2Air:0.1Dist Drilling fluid used:Water [] 0.2Dist Drilling fluid used:Termine pumped [] 0.2Dist Drilling fluid used:Termine	13. Sieve analysis performed						Other 🛛 🎆
Other $\Box$ Other $\Box$ Other $\Box$ 15. Drilling fluid used: Water $\Box$ 0 2Air $\Box$ 0 1Drilling fluid used: Water $\Box$ 0 2Air $\Box$ 0 1Drilling fluid used: Water $\Box$ 0 2Air $\Box$ 0 1Drilling fluid used: Water $\Box$ 0 2Air $\Box$ 0 1Drilling fluid used: Water $\Box$ 0 2Air $\Box$ 0 1Drilling fluid used: Water $\Box$ 0 2Air $\Box$ 0 1Drilling fluid used: Water $\Box$ 0 2Air $\Box$ 0 1DescribeIPice series17. Source of water (attach analysis, if required):Termie pumped $\Box$ 17. Source of water (attach analysis, if required):Termie pumped $\Box$ 17. Source of water (attach analysis, if required):Termie pumped $\Box$ 17. Source of water (attach analysis, if required):Termie pumped $\Box$ 17. Source of water (attach analysis, if required):Termie pumped $\Box$ 17. Source of water (attach analysis, if required):Termie pumped $\Box$ 18. Entonite seal, topft. MSL or	14. Drilling method used: He	bllow Stem Auger 12 4 1		ov: 4.∶ ₩	Material betwee	n well casing and prote	Bentonite 2 30
15. Drilling fuid used: Water $\square 0 2$ Air $\square 0 1$ Drilling fuid used: Water $\square 0 2$ Air $\square 0 1$ Drilling fuid $\square 0 3$ Nome $\blacksquare 9 9$ 16. Drilling additives used? $\square$ Yes $\square$ No Describe		Other					Other 🛛 🎾
Interpret of the start of	15 Drilling finid used: Wa			5.	Annular space s	eal: a. Granular/Chi	pped Bentonite Z 33
16. Drilling additives used? $\Box$ Yes $\Box$ No         17. Source of water (attach analysis, if required): $\Box$ How installed:       Tremie $\Box$ Of the above f.         17. Source of water (attach analysis, if required): $\Box$ Describe $\Box$ How installed: $Tremie \Box$ Of the above f.         17. Source of water (attach analysis, if required): $\Box$ Describe	Drilling M	$[ud \square 03 Nome \square 99]$		<u>ь</u>	Lbs/gal	mud weight Benton	uite-sandi slurry□ 35
No. Example control used:       If its ig its         In the product of the state is in the product of the state is in the product of the product is in theproduct is in theproduct is in the product	16 Drilling additives need?	Ver NIA		622 C. 833 d.	% Bento	mite Bentonit	E-cement grout [] 5 (
DescribeIn the second state of the secon	to bring will to med			е.	F	t <sup>o</sup> volume added for an	iy of the above
17. Source of water (attach analysis, if required):       Gravity E         17. Source of water (attach analysis, if required):       Gravity E         17. Source of water (attach analysis, if required):       a. Bentomite seal:       a. Bentomite granules         17. Source of water (attach analysis, if required):       b. $\Box 1/4$ in $\Box 1/2$ in $\Box $	Describe			f.	How installe	d: T	remie pumped []. 0:
6. Bentonite seal:       a. Bentonite granules       3         E. Bentonite seal:       a. Bentonite seal:       a. Bentonite seal:       c. Bentonite seal:       a. Bentonite seal:       c.	17. Source of water (auach	analysis, if required):					Gravity K 01
E. Bentomite seal, topft MSL orft. F. Fine sand, topft. MSL orS_ft. G. Filter pack, topft. MSL orS_ft. H. Screen joint, topft. MSL orS_ft. I. Well bottomft. MSL orS_ft. I. Well bottomft. MSL orO_ft. J. Filter pack, bottomft. MSL orO_ft. I. Filter pack, bottomft. MSL orO_ft. I. Borehole, diameter§ in. M. O.D. well casingSinin. N. ID. well casing $2 \cdot 0 \cdot 3$ in. I. Hereby certify that the information on this form is true and correct to the best of my knowledge. E. Bentomite seal, topft. MSL orSin Filter pack, bottomft. MSL orO I. Borehole, diameter§ in. I. Borehole, diameterSin M. O.D. well casing $2 \cdot 0 \cdot 3$ in. I. Borehole, casing $2 \cdot 0 \cdot 3$ in. I. Backfill material (below filter pack): None $\frac{1}{10}$				6. 	Bentonite seal:	a. Ben $\pi_{1/2}$ in $\Gamma_{1/2}$ in	tonite granules  33 Bantonite ching  33
F. Fine sand, top       ft. MSL or	E. Bentomite seal, top	ft. MSL or[_1	t,		<u>c</u>		Other
G. Filter pack, top       ft-MSL or $3 \cdot 5 \cdot 6$ a. $40 \mid 60 \mid 50 \cdot 20 \cdot 20 \cdot 20 \cdot 20 \cdot 20 \cdot 5 \cdot 6$ H. Screen joint, top       ft. MSL or $5 \cdot 6 \cdot 6$ b. Volume added $\frac{\& 5}{6} \cdot 6 \cdot$	F. Fine sand, top	fLMSLor <u>3_</u> f	t	7.	Fine sand mate	rial: Manufacturer, pr	oduct name & mesh siz
H. Screen joint, top ft. MSL or 5_ft. I. Well boutom ft. MSL or 20 ft. I. Well boutom ft. MSL or 20 ft. I. Filter pack, bottom ft. MSL or 20 5_ft. I. Filter pack, bottom ft. MSL or 20 5_ft. I. Borehole, bottom ft. MSL or 20 5_ft. I. Borehole, diameter 8 in. M. O.D. well casing 231 in. N. I.D. well casing $2 \cdot 0 \cdot 3$ in. I. Hereby certify that the information on this form is true and correct to the best of my knowledge. Example: 100000000000000000000000000000	G. Filternack: ton	ft_MSL or 3.5			a90	160 padge	<u></u>
H. Screen joint, top ft. MSL or		<u> </u>		,8.	Filter pack mat	erial: Manufacturer, p	roduct name & mesh si
I. Well bottom       ft. MSL or $20$ ft.       9. Well casing:       Flush threaded PVC schedule 40 $\square$ I. Filter pack, bottom       ft. MSL or $20.5$ ft.       9. Well casing:       Flush threaded PVC schedule 80 $\square$ I. Filter pack, bottom       ft. MSL or $20.5$ ft.       9. Well casing:       Flush threaded PVC schedule 80 $\square$ K. Borehole, bottom       ft. MSL or $20.5$ ft.       9. Well casing:       PVC         L. Borehole, diameter       ft. MSL or $20.5$ ft.       a. Screen material:       PVC         M. O.D. well casing $2.37$ in.       0. Manufacturer $John Son$ 0. $0.011$ N. ID. well casing $2.03$ in.       11. Backfill material (below filter pack):       None $\mathbb{P}$ I hereby certify that the information on this form is true and correct to the best of my knowledge.       0ther       0ther	H. Screen joint, top	it. MSL or2	ft.		a 20/0	40 Badger	<u></u>
I. Filter pack, bottom       ft. MSL or $20.5$ ft.       Plush threaded PVC schedule 80 $\Box$ K. Borchole, bottom       ft. MSL or $20.5$ ft.       0ther $\Box$ I. Borchole, bottom       ft. MSL or $20.5$ ft.       a. Screen material: $PVC$ I. Borchole, bottom       ft. MSL or $20.5$ ft.       a. Screen material: $PVC$ I. Borchole, diameter       ft. MSL or $20.5$ ft.       a. Screen material: $PVC$ I. Borchole, diameter       ft. MSL or $20.5$ ft.       b. Manufacturer $\sqrt{0.000}$ M. O.D. well casing $2.37$ in.       0. 011         N. I.D. well casing $2.03$ in.       11. Backfill material (below filter pack): None $T$ I. Hereby certify that the information on this form is true and correct to the best of my knowledge.       Other $\Box$	I. Well boutom	ft. MSL or20	ft.	9	. Well casing:	Flush threaded PV	C schedule 40 🔲 2
K. Borchole, bottom	I. Filter pack, bottom	fr. MSL or 20.5	n			Plush threaded PV	_ Other 🛛 🚆
L Borehole, diameter $-\frac{8}{100}$ in. M. O.D. well casing $-\frac{2}{3}$ in. N. I.D. well casing $2 \cdot \frac{9}{2}$ in. I. Borehole, diameter $-\frac{1}{100}$ in. N. I.D. well casing $2 \cdot \frac{9}{2}$ in. I. Backfill material (below filter pack): I.	K. Borchole, bottom	1LMSL or 20.5	fts	10	. Screen materia	al: <u>PVC</u>	Eactory cut M 1
L. Borehole, diameter $6$ in. M. O.D. well casing $-2.37$ in. N. I.D. well casing $2.03$ in. N. I.D. well casing $2.03$ in. I. Backfill material (below filter pack): I. Backfill material (b		2			a. ocreanyja	а <b>.</b> 1	Continuous slot 🔲 0
M. O.D. well casing       2.37 in.         N. I.D. well casing       2.03 in.         I. Backfill material (below filter pack):       0.01.         I. Backfill material (below filter pack):       None If         Intereby certify that the information on this form is true and correct to the best of my knowledge.       0.01.	L. Borehole, diameter	$\frac{9}{10}$ in.			h Manufant	- Johnson	Other 🗆 👔
N. I.D. well casing $2 \pm \frac{0}{2}$ in. I.I. Backfill material (below filter pack): I hereby certify that the information on this form is true and correct to the best of my knowledge.	M. O.D. well casing	<u>2.37</u> in.			c. Slot size:		0.010
I hereby certify that the information on this form is true and correct to the best of my knowledge.	N. I.D. well casing	2 <u>.</u> 23 in.		11	a. Slotted len	gun: rial (below filter pack):	
	I hereby certify that the info	mation on this form is true and	d correct to the h	est of my know	wicdec.		Other []
	Signature		Firm				

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR affice and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin Department of Natural Resources

#### MONITORING WELL DEVELOPMENT' Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater	Waste Management
Remediation/Redevelopment	Other VI USEPA
Facility/Project Name 513 Grand Ave County Name	Well Name
Sandies DCEL Little Church Outar	agmie Spc-MIN-2
Facility License, Permit or Monitoring Number County Code	Wis. Unique Well Number DNR Well ID Number
	<u>VV351</u>
1. Can this well be purged dry? 🛛 Yes 🔲 No	Before Development After Development
	11. Depth to Water
2. Well development method	(from top of $a_{-} \underline{5}, \underline{3}, \underline{2}$ ft. $\underline{0}, \underline{0}, \underline{0}$ ft.
surged with baller and bailed [4]	well casing)
surged with black and builted	
surged with block and pumped	Date b.12/05/2011 (2/05/2011
surged with block, bailed and pumped [] 70	mm dd y y y y mm dd y y y y
compressed air	Time all 15 Dam 124.05 Dam.
bailed only	
pumped only	12. Sediment in well inches
pumped slowly	bottom
Other	13. Water clarity Clear 10 Clear 20
2 177	Turbid 1 5 Turbid 2 5
3. Time spent developing well	(Describe) (Describe)
4. Depth of well (from top of well casisng) $-19.8$ ft.	
5 Inside diameter of well 2 0 0 1	
$\frac{-\underline{L}}{\underline{C}} = \underline{C} = \underline{C}$ in.	
6. Volume of water in filter pack and well	
casing Z 4 pal	
	Fill in if drilling fluids were used and well is at solid waste facility.
7. Volume of water removed from well $1000$ gal.	
0.11.1	14. Total suspended mg/l
8. Volume of water added (if any) gal.	solids
9. Source of water added N/A	15 COD
	mg/l
	16. Well developed by: Name (first, last) and Firm
10. Analysis performed on water added?  Yes No	First Name: Andrew Last Name: Plie
(11 yos, attach 160015)	

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party First Last Van Gheem Name: Van Gheem Facility/Firm:	I hereby certify that the above information is true and correct to the best of my knowledge. Signature:
street: 108 West Main St.	Print Name: Andrew J Plier
City/State/Zip: Little Chute, WI 54140	Firm: OTIE - U.S. EPA Contractor

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin Department of Natural Resource: <u>Route to:</u> Watershed/Wastewater	Waste Management MONITORING WELL CONSTRUCTION
Remediation/Redevelopme	nt Other Other OSEPA
Facility/Project Name 53 Grand Local Grid Location of W Sandies DCBLL Hught	$f_{L} = \frac{1}{N} $ $f_{L} = \frac{1}{N} $ $f_{L} = \frac{1}{N} $ $Well Name $ $SD(-MW - 3)$
Facility License, Permit or Monitoring No. Local Grid Origin [] (e	stimated: ) or Well Location Z Wis. Unique Well No. DNR Well ID No.
Facility ID St. Plane	fL N, fL E. S/C/N
Time of Well	e/Source $m m d d v v v y$
Well Code 2 4 / 2W Location of Well Relative	Sec. 21. T. 21 N. R. 18 BW Wein Installed By: Name (inst, last) and Philip Chat Have Decht
Distance from Waste/ Enf. Stds. u Upgradient Sourceft. Apply S d Downeradient	s D Sidegradient Ground Sauce
A. Protective pipe, top elevation7.3.2.0_ fL MSL	1. Cap and lock?
B. Well casing, top elevation7315 ft MSL	a. Inside diameter:
C. Land surface elevation $-7.32$ ft MSL	b. Length:
D. Surface seal, bottom ft. MSL or ft.	C. Material: Steel 10 04
12. USCS classification of soil near screen:	d. Additional protection?
	If yes, describe:
Bedrock	3. Surface scal: Bentonite $\Box$ 30
13. Sieve analysis performed?	Other 🗆 🦉
14. Drilling method used: Rotary D 5 0	4. Material between well casing and protective pipe:
	S American and a Granular/Chinned Bentonite Z 33
15. Drilling fluid used: Water 0 0 2 Air 0 0 1	b Lbs/gal mud weight Bentonite-sand slurry 35
Dralling Mud 🗆 0 3 None 🗹 99	cLbs/gal mud weight Bentonite slarry [] 31
16. Drilling additives used? 🛛 Yes 🖾 No	d% Bentonite Bentonite-cement grout LJ 50 eFt <sup>3</sup> volume added for any of the above
Describe	f. How installed: Tremie 0 1
17. Source of water (attach analysis, if required):	Tremie pumped $\square_{02}$
	6. Bentonite seal: a. Bentonite granules [] 33
	b. 11/4 in. 3/8 in. 11/2 in. Bentonite chips 32
E. Bentonite seal, topft. MSL or1_it.	c Other 🗆 🐩
F. Fine sund, topft. MSL or3_ft.	7. Fine sand material: Manufacturer. product name & mesh size
G. Filter pack, topft. MSL or 3.5_ft.	b, Volume added <u>\$5</u> ft <sup>3</sup>
H. Screen joint, top ft. MSL or ft.	8. Filter pack material: Manufacturer, product name & mesh size
t Well horrow ft MSL or 20 fts	b. Volume added $5$ ft <sup>3</sup>
	9. Well casing: Flosh threaded PVC schedule 40 [25] Flush threaded PVC schedule 80 [24]
J. Filter pack, bottom ft. MSL or _dU ft.	Other D
K. Borchole, battam ft. MSL or _20' 5 ft.	a. Screen type: Factory cut A 11
L. Borehole, diameter 8 in.	Continuous siot  01 01 01
M. O.D. well casing $233$ in.	b. Manufacturer Johnson 0.0/0in.
7.07	d. Slotted length:
N. I.D. well casing $\ell = \frac{\sqrt{2}}{2}$ in.	11. Backfill material (below filter pack): None 14 14
I hereby certify that the information on this form is true and correc	t to the best of my knowledge.
Signature Firm	DET DECRA CONTRACT
( Francis (	T = -1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR affice and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

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State of Wisconsin Department of Natural Resources

#### MONITORING WELL DEVELOPMENT Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater	Waste Management
Remediation/Redevelopment	Other OSEPA
Facility/Project Name Sandies DC & L-Lith Chure Out of Facility License, Permit or Monitoring Number County Code C	Well Name 5DC - MW - 3 Wis. Unique Well Number VV352
1. Can this well be purged dry? Yes D No	Before Development After Development
<ul> <li>2. Well development method</li> <li>surged with bailer and bailed  <ul> <li>4 1</li> <li>surged with bailer and pumped</li> <li>6 1</li> <li>surged with block and bailed</li> <li>4 2</li> </ul> </li> </ul>	(from top of a _ 5.60 ft 0.00 ft. well casing) Date $b_{1,2}/25/221112/25/2211$
surged with block and pumped 2 62 surged with block, bailed and pumped 2 70 compressed air 2 0 bailed only 1 0 pumped only 5 1	m m d d y y y y m m d d y y y y Time $c. \underline{O1}: \underline{OO} \square a.m.$ 12. Sediment in well inches inches
pumped slowly     50       Other     1       3. Time spent developing well     2	bottom 13. Water clarity Clear 10 Clear 20 Turbid 15 Turbid 25 (Describe) (Describe)
4. Depth of well (from top of well casisng) _19. & ft.	
5. Inside diameter of well $-2 \cdot 2 \cdot 2$ in.	
6. Volume of water in filter pack and well casing2 3 gal.	Fill in if drilling fluids were used and well is at solid waste facility:
7. Volume of water removed from well $\underline{j}$ $\underline{O}$ , $\underline{O}$ gal.	
8. Volume of water added (if any) gal.	14. Total suspended mg/l mg/l mg/l
9. Source of water added <u>N/A</u>	15. COD mg/l mg/l
10. Analysis performed on water added?	16. Well developed by: Name (first, last) and Firm First Name: Andrew Last Name: Plien Firm: OT 15

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party First Last Name: Roty Last Name: Youn Gheem	I hereby certify that the above information is true and correct to the best of my knowledge.
Facility/Firm:	Signature:
Street: 100 West Indin St.	Print Name: Andrew J Plier.
City/State/Zip: Little Chute, WI	Firm: OTIE - U.S EPA CONTRACTOR
NOTE: See instructions for more information including a list of	f county codes and well type codes.

State of Wisconsin Department of Natural Resources

#### GROUNDWATER MONITORING WELL INFORMATION FORM Chapter 281 and 289, Wis. Stats. Form 4400-89 Rev. 7-98 Rev. 7-98

	Facility	name Nobi e	s D	(SEL	Fac	oluty	y ID Number	Licens	e Pern	nit or	Monitori	ng No. Date	161	11	Cont	ted By (Name a	nd Firm) - A - O	TIE					
	WI		DNR		E	Dir.	'	Well (	Casing		Eleva	tions	Refe	rence		Depths	<u> </u>	T					
	Unique Weli No	Well Name	Well ID Number	Well Location	<u>N</u> E	W	Date Established	Diam.	Туре	Wel	op of Casing	Ground Surface		Site Datum	Screen Top	Initial Groundwater	Well Depth	Screen Length	Well Type	Well Status	Enf. Stds.	Grad- ient	Distance to Waste
١	1 V 350	SPC- MW-		44:16.759 88°1 8.973	'N	W	11/16/11	2	9	7	31.5	732	1		5	jD	20	15	<u> </u> Ju ev	'A	$\checkmark$	S	15.5
V	v 351	SDC- MW-Z		44.96.753' 88°18.969'	N	W	11/16/11	2	P	7	31.5	732	$\checkmark$	ł	j)	8	20	15	26/au	A	/	S	29
$\checkmark$	/ 352	NW3		44.º16.749' 88º18.968'	N	¥	11/16/11	μ	P	-7	31.5	732	~		5	Ŷ	20	15	ial ew	A	1	S	35
	_																						
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		Northerr Central	oruniare I	System	L	i	<u>14 ° 14 '</u>	<u>5°</u>	}_"	Long	<u>88</u> .	18 97	<u>13</u> "	or									_
		Southern	1		S	. Pla	me	ft.	N			_ft.E, S/C/	'N Zoi	<sup>ne</sup>									

Completion of this form is mandatory under s. NR 507.14 and NR 110.25 Wis. Adm. Code. Failure to file this form may result in forfeiture of not less than \$10 nor more than \$5,000 for each day of violation. Personally identifiable information provided is intended to be used by the Department for the purposes related to be used by the Department for the purposes related to be waste management program.

APPENDIX C Quality Control

#### **Field Quality Control Requirements**

Field QC samples will be collected and analyzed as necessary to assess the quality of data generated from sampling activities. These samples may include trip blanks, field blanks, equipment rinsate blanks, field duplicates, field split samples, MS samples, MSD samples, and matrix duplicate samples. Field QC measurements may include field replicate measurements and checks of instrument responses against QC standards.

Trip blanks are used to assess the potential for sample contamination during handling, shipment, and storage. Trip blanks are sample bottles filled by the analytical laboratory with organic-free water. The trip blanks are sealed and transported to the field; kept with empty sample bottles and then with the investigative samples throughout the field effort; and returned to the laboratory for analysis with the investigative samples. Trip blanks are never opened in the field. One trip blank is usually included within every shipping cooler of liquid samples to be analyzed for VOCs.

Field blanks are samples of the same or similar matrix as the actual investigative samples that are exposed to the sampling environment or equipment at the time of sampling. They are used to assess contamination resulting from ambient conditions. Field blanks are required for liquid matrices. For aqueous samples, field blanks consist of analyte-free water such as degasified organic-free water for VOC analysis, HPLC water for SVOC analysis, and de-ionized or de-mineralized water for inorganic analyses. Field blanks are generally not required for solid matrices but may be collected on a case-by-case basis. Typically, one field blank is collected for every 10 or fewer liquid investigative samples. Equipment rinsate blanks are collected when sampling equipment is used. These blanks assess the cleanliness of sampling equipment and the effectiveness of equipment decontamination. Equipment that contact sample media. Equipment rinsate blanks are collected after sampling equipment has been decontaminated but prior to being reused for sampling. Equipment rinsate blanks are typically collected for each type of decontaminated sampling equipment.

Field duplicate samples are independent samples collected as close as possible in space and time to the original investigative sample. Immediately following collection of the original sample, the field duplicate sample is collected using the same collection method. Care should be taken to collect the field duplicate sample as close to the location of the original sample as possible. Field duplicate samples can measure how sampling and field procedures influence the precision of an environmental measurement. They can also provide information on the heterogeneity of a sampling location. Typically, field duplicates are collected at a frequency of one for every 10 investigative samples of the same matrix type. Field split samples are usually a set of two or more samples taken from a larger homogenized sample. The larger sample is usually collected from a single sampling location, but can also be a composite sample. Field split samples can be sent to two or more laboratories and are used to provide comparison data between the laboratories. Regulatory agencies involved in a project may request that field split samples be collected to monitor how closely laboratories are meeting project-specific QA objectives. MS/MSD samples are typically collected for analysis by organic methods, and also often for analysis by inorganic methods. Solid MS/MSDs usually require no extra volume. Each liquid MS/MSD sample is a single sample, usually collected from a single sampling location at triple the normal sample volume. MS and matrix duplicate samples are typically collected for inorganic analysis. The MS sample and matrix duplicate sample are each a single sample, usually collected from a single location at double the normal sample volume. In the laboratory, MS/MSD samples and MS samples are spiked with known amounts of analytes. Matrix duplicate samples are not spiked. Analytical results of MS/MSDs are used to measure the precision and accuracy of the laboratory organic (or inorganic) analytical program and MSs are used to measure the accuracy of the inorganic analytical program. Matrix duplicate samples are used to

measure the precision of the inorganic analytical program. Each of these QC samples is typically collected and analyzed at a frequency of one for every 20 investigative samples per matrix. QC checks for field measurements will consist primarily of initial and continuing calibration checks of field equipment. When applicable, QC check standards independent of the calibration standards will be used to check equipment performance. For example, when checking the accuracy of field equipment such as pH meters, a standard buffer solution independent of the calibration standards may be used. Precision of field measurements will usually be checked by taking replicate measurements. To the extent possible, OTIE will use USEPA-approved field methods. If approved methods are not available, OTIE SOPs will be referenced in the project-specific QAPP. The types and frequencies of field QC measurements and the QC limits for these measurements will be specified in the project-specific QAPP.

# TABLE C-1 Required Sample Volumes, Containers, Preservation Techniques, and Holding Time

Matrix	Parameter	Analytical Method <sup>a</sup>	Volume and Container	Preservation Techniques	Holding Time <sup>b</sup> (Extraction/Analysis)
Water	Volatile organic compounds (VOC)	SW-846: 8015B, 8021B, 8260B CLP: OLC03.2, OLM04.3, SOM01.1	Three 40-mL glass vials with Teflon <sup>®</sup> -lined septum	To pH # 2 with hydrochloric acid; sodium thiosulfate if residual chlorine; store at 4ºC	NA <sup>c</sup> /14 days

Notes:

mL = Milliliter

<sup>a</sup> Analytical methods listed are from either SW-846 (Test Methods for Evaluating Solid Waste) or CLP (Contract Laboratory Program) Statements of Work.

<sup>b</sup> Holding time is measured from the time of sample collection to the time of sample extraction and analysis.

<sup>c</sup>NA = Not applicable



**CIE** Oneida Total Integrated Enterprises

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#### MEMORANDUM

Date:	December 22, 2011
То:	Naren Babu, Project Manager, OTIE Superfund Technical Assessment and Response Team (START) for Region 5
Prepared by:	Renea Anglin, START chemist for Region 4
QA/QC Concurrence by:	Russell Henderson, START Senior Chemist for Region 4
Subject:	Data Validation for Sandies DC&L Removal Little Chute, WI
	Project TDD No.
	Laboratory: Microbac 250 W 84 <sup>th</sup> Dr, Merrillville, IN Sample Delivery Group (SDG): 11L0574

#### **1.0 INTRODUCTION**

The START chemist for Region 4 validated analytical data for 2 samples, 1 duplicate sample and 1 Trip Blank for volatile organic compounds (VOCs). Samples were collected at the Sandies DC&L Removal on December 13, 2011. The samples were analyzed under SDG 11L0574 by Microbac of Merrillville, Indiana using U.S. Environmental Protection Agency (U.S. EPA) methods 8260B.

Laboratory data was validated using guidelines set forth in the U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic (EPA 540-R-08-01, June 2008) and Inorganic Data Review (EPA 540-R-10-011, January 2010) and applicable methodologies. The purpose of the chemical data quality evaluation process is to assess the usability of data for the project decision-making process.

Organic data validation consisted of a review of the following QC audits:

- Chain of custody and sample receipt forms review
- Sample preservation and holding time
- Blank results
- Surrogate recoveries
- Matrix spike and Matrix Spike Duplicate (MS/MSD) recovery results
- Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD) recovery results

Data Validation for Sandies DC&L Removal Site Project TDD No. TO-01-11-08-0020 Page 2

Section 2.0 of this memorandum discusses the results of organic data validation. Section 3.0 presents an overall assessment of the data. The attachment to this memorandum contains the laboratory reporting forms as well as START's handwritten data qualifications where warranted.

## 2.0 ORGANIC DATA VALIDATION RESULTS

The results of START's organic data validation are summarized below by QC audit reviewed. The data qualifiers listed below were applied to sample analytical results where warranted (see attachment):

- J The analyte was detected. The reported concentration was considered estimated.
- U The analyte was not detected.
- UJ The analyte was not detected. The reporting limit was considered estimated.

After the START project staff received the data package, it was inventoried for completeness and then reviewed according to matrix-specific protocols and data quality objectives established for the project.

### 2.1 WATER SAMPLES BY METHOD 8260B

#### 2.1.1 SAMPLE HANDLING

Chain of custody documentation and sample receipt forms were reviewed to ensure requested analyses were performed and that samples arrived at the laboratory intact. The sample were collected on December 13, 2011 and received at the laboratory on December 14, 2011.

No discrepancies were noted.

#### 2.1.2 SAMPLE PRESERVATION AND HOLDING TIME

Samples were analyzed within holding time criteria.

No discrepancies were noted.

#### 2.1.3 BLANK RESULTS

The purpose of laboratory (or field) blank analysis is to determine the existence and magnitude of contamination resulting from laboratory (or field) activities. A laboratory method blank sample (B022846-BLK1) was run with this SDG.

No discrepancies were noted.

#### 2.1.4 SURROGATE RECOVERIES

Laboratory performance on individual samples is established by means of fortifying each sample with surrogate compounds (System Monitoring Compounds). Surrogate spike compounds included Dibromofluoromethane, Toluene-d8, 4-Bromofluorobenzene and 1,2-Dichloroethane-d4.

No discrepancies were noted.

Data Validation for Sandies DC&L Removal Site Project TDD No. TO-01-11-08-0020 Page 3

#### 2.1.5 MS/MSD RECOVERY RESULTS

Data for MS/MSDs are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis.

An MS/MSD was not requested with this SDG.

#### 2.1.6 LCS and LCSD RECOVERY RESULTS

Data for the LCS and LCSD is generated to provide information on the accuracy of the analytical method and on the laboratory performance. The LCS and LCSD are fortified with the full list of VOC compounds and analyzed with each batch of samples. The LCS and LCSD accuracy performance is measured by percent recovery.

The LCS and LCSD run with the samples were within limits for percent recoveries.

#### 2.1.7 FIELD DUPLICATES

Data for field duplicates were collected and analyzed for chemical constituents to measure the cumulative uncertainty (i.e., precision) of the sample collection, splitting, handling, storage, preparation and analysis operations, as well as natural sample heterogeneity that is not eliminated through simple mixing in the field. Field duplicates are two samples prepared by mixing a volume of sample and splitting it into two separate sample containers that are labeled as individual field samples.

Sample SDC-MW-3 had a duplicate collected (SDC-MW-3D) for VOC. No deficiencies were noted.

#### 2.1.8 GENERAL LABORATORY OBSERVATIONS

Samples SDC-MW-3 and SDC-MW-3Dwere diluted due to the abundance of target analytes. The diluted value for tetrachloroethene only was reported, all other values are from the non-diluted run.

#### 3.0 OVERALL ASSESSMENT OF DATA

The analytical results meet the data quality objectives defined by the applicable method and validation guidance documentation. The analytical data is usable and acceptable as reported by the laboratory.

### ATTACHMENT

## SUMMARY OF ANALYTICAL RESULTS

#### AND

## CHAIN-OF-CUSTODY



Date: Tuesday, December 20, 2011

Client: Client Project:	Oneida Total Integra	ted Enterpr	ises						
Client Samnle ID:	SDC-MW-2						Work O	dor/ID:	111.0574-01
Sample Description	000-11111-2						Sample	4.	12/13/2011 10:55
Matrix:	Aqueous						Receive	d:	12/14/2011 9:30
Analyses		ΔΤ	Result	MDI	RI	Qual	Linits	DE	Analyzed
			Method: SV	N-846 8260F	2	quui	0.110	Ana	alvst iln
Volatile Organic Com	pounds		metriod. Of	1-040 02001	,		f	Prep Date/T	ime:12/16/2011 08:37
1,1,1,2-Tetrachloroel	hane	A	ND	1.1	10		µg/L	1	12/16/2011 12:00
1,1,1-Trichloroethane	3	Α	ND	0.90	5.0		µg/L	1	12/16/2011 12:00
1,1,2,2-Tetrachloroet	hane	Α	ND	1.4	5.0	a ya filo ny ya tana kasarta yi tana ka 1950	µg/L	1	12/16/2011 12:00
1,1,2-Trichloroethane	9	A	ND	0.90	5.0	and descent of the conduction	µg/L	1	12/16/2011 12:00
1,1-Dichloroethane		A	ND	0.80	5.0		µg/L	1	12/16/2011 12:00
1,1-Dichloroethene		Α	ND	1.7	5.0	a an der Monare er en eine Konte	µg/L	1	12/16/2011 12:00
1,2-Dichloroethane		Α	ND	1.2	5.0		µg/L	1	12/16/2011 12:00
1,2-Dichloropropane		Α	ND	1.0	5.0		µg/L	1	12/16/2011 12:00
2-Butanone		Α	ND	3.6	10		µg/L	1	12/16/2011 12:00
2-Hexanone		Α	ND	2.4	10	an a	µg/L	1	12/16/2011 12:00
4-Methyl-2-Pentanon	e	Α	ND	1.7	10		µg/L	1	12/16/2011 12:00
Acetone		A	6.9	5.8	50	J	µg/L	1	12/16/2011 12:00
Acrolein	eren gan har erandyaan eranaan erana erana aan erana erana araba arabaa	Α	ND	16	100		µg/L	1	12/16/2011 12:00
Acrylonitrile		Α	ND	13	100		µg/L	1	12/16/2011 12:00
Benzene		Α	ND	0.80	5.0	an terde ditae an terde di de di da d	µg/L	1	12/16/2011 12:00
Bromodichlorometha	ne	Α	ND	0.70	5.0	an alba ayya sun tepanya s	µg/L	1	12/16/2011 12:00
Bromoform		Α	ND	0.80	5.0		µg/L	1	12/16/2011 12:00
Bromomethane		Α	ND	1.8	10		µg/L	1	12/16/2011 12:00
Carbon Disulfide		Α	ND	1.7	10	n den en gerennen fingt	µg/L	1	12/16/2011 12:00
Carbon tetrachloride		Α	ND	1.7	5.0		µg/L	1	12/16/2011 12:00
Chlorobenzene		A	ND	0.80	5.0	Stewart (Construction Construction)	µg/L	1	12/16/2011 12:00
Chloroethane		А	ND	2.3	10	a an air an	µg/L	1	12/16/2011 12:00
Chloroform		A	ND	0.90	5,0	n berezen er en	µg/L	1	12/16/2011 12:00
Chloromethane	terminen all methods and the state of the st	A	ND	1.0	10	ana ayo yaraa ya amadaraay	µg/L	1	12/16/2011 12:00
cis-1.2-Dichloroether	e	A	3.7	0.80	5.0		µg/L	1	12/16/2011 12:00
cis-1.3-Dichloroprope	ne	A	ND	0.80	5.0	1999 (2009) 1999 (2009) 1999 (2009)	ug/L	1	12/16/2011 12:00
Dibromochlorometha	ne	A	ND	0.80	5.0	tet na get ha e net e trades agretadas	µg/L	1	12/16/2011 12:00
Ethvlbenzene		Α	ND	0.90	5.0	han kura tainata a anaga	µg/L	1	12/16/2011 12:00
m.p-Xylene		A	ND	1.7	5.0	na an an an ann an t-t-an agus ta ga	µg/L	1	12/16/2011 12:00
Methylene chloride		A	ND	3.1	10	etterti attespan onnen förde	µg/L	1	12/16/2011 12:00
Methvi-t-Butvi Ether	ana ara-ara-ara-ara-ara-ara-ara-ara-ara-ar	Α	ND	0.80	5.0	à na tao tao tao tao tao tao tao tao tao ta	ua/L	1	12/16/2011 12:00
o-Xvlene		A	ND	0.90	5.0	12 Julio 2001 em ét a estere	ua/L	1	12/16/2011 12:00
Styrene	ander den Stand von anderen er van en 1990 en en en men en en anderen den en e	A	ND	0.70	5.0		ua/L	1	12/16/2011 12:00
Tetrachloroethene		Α	8.0	1.3	5.0	e na del del del de cardon (referet a	ua/L	1	12/16/2011 12:00
Toluene		Α	ND	0.90	5.0	lan a na mga agus an bhailteann	ua/L	1	12/16/2011 12:00
trans-1.2-Dichloroeth	ene	Α	ND	1.1	5.0	94467 - 310 - 510 96946	µg/L	1	12/16/2011 12:00
trans-1 3-Dichloropro	nene	A	ND	0.70	5.0	araana biyoo ahayaa ahaa	ua/L	1	12/16/2011 12:00
Trichloroethene	F	A	1.4	0.90	5.0		jua/L	1	12/16/2011 12:00
Trichlorofluoromethar	16	A	, <b></b>	1.1	10		µa/L	1	12/16/2011 12:00
Vinvl Acetate	• <del></del>	A	ND	1.5	10	a per sa ang na ang nang pa	µa/L	1	12/16/2011 12:00
Vinvl chloride	a a construction and a state of the state of	Δ	 ND	 ^0 ^	י. ה כ		. <u></u> uo/l	1	12/16/2011 12:00

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Date: Tuesday, December 20, 2011

Client: Client Project:	Oneida Total Integrate 2010101-7903	d Enterpr	ises						
Client Sample ID: Sample Description:	SDC-MW-2		Work Order/ID: Sampled:		11L0574-01 12/13/2011 10:55				
Matrix:	Aqueous						Receive	d:	12/14/2011 9:30
Analyses		AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: SV	N-846 8260	в		**********	Ana	ilyst: <b>jin</b>
Volatile Organic Com	pounds						F	Prep Date/T	ime:12/16/2011 08:37
Total 1,2-Dichloroethe	ene	M	3.7	0.80	5.0	J	µg/L	1	12/16/2011 12:00
Total Xylenes		М	ND	0.90	5.0		µg/L	1	12/16/2011 12:00
Surr: 1,2-Dichloroeth	ane-d4	S	110.00		74.5-132		%REC	1	12/16/2011 12:00
Surr: 4-Bromofluorol	benzene	S	97.30	ann ana tait gir gantagan	80-120	en en este dessener	%REC	1	12/16/2011 12:00
Surr: Dibromofluoror	nethane	S	103.00		80-120		%REC	1	12/16/2011 12:00
Surr: Toluene-d8		S	99.20	and a second and a second s	80-120		%REC	1	12/16/2011 12:00

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#### Tuesday, December 20, 2011 Date:

Client:	Oneida Total Integrat	ed Enterpris	ses						
Client Project:	2010101-7903								
Client Sample ID:	SDC-MW-3						Work O	rder/ID:	11L0574-02
Sample Description:							Sample	d:	12/13/2011 12:20
Matrix:	Aqueous						Receive	d:	12/14/2011 9:30
Analyses		АТ	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: SI	N-846 8260E	3			Ana	alyst:jin
Volatile Organic Con	npounds	an an an an an an an grup an		ter bie dalamatika na dan sang banan ng			F	Prep Date/T	ime:12/16/2011 08:37
1,1,1,2-Tetrachloroe	thane	A	ND	1.1	10	Le colorenzi el colorenzare com	µg/L	1	12/16/2011 12:30
1,1,1-Trichloroethan	e	A	ND	0.90	5.0	Second device on propertic diplocation	µg/L	1	12/16/2011 12:30
1,1,2,2-Tetrachloroe	thane	A	ND	1.4	5.0	ore contributed colors.	µg/L	1	12/16/2011 12:30
1,1,2-Trichloroethan	8	A	ND	0.90	5.0		µg/L	1	12/16/2011 12:30
1,1-Dichloroethane	e 111 ka da 15 11 ka jambada hadan Ajagis taku Malaka (Maji) ja Cana Mila anaman Ajara Jakata mara at	A	ND	0.80	5.0		µg/L	1	12/16/2011 12:30
1,1-Dichloroethene		A	ND	1.7	5.0	han and the design of the section of the	µg/L	1	12/16/2011 12:30
1,2-Dichloroethane		A	ND	1.2	5.0	and the first of the state of the	µg/L	1	12/16/2011 12:30
1,2-Dichloropropane		A	ND	1.0	5.0	anter anter anter a started	µg/L	1	12/16/2011 12:30
2-Butanone		A	ND	3.6	10		µg/L	1	12/16/2011 12:30
2-Hexanone		A	ND	2.4	10		µg/L	1	12/16/2011 12:30
4-Methyl-2-Pentanor	16	A	ND	1.7	10		µg/L	1	12/16/2011 12:30
Acetone		A	ND	5.8	50		µg/L	1	12/16/2011 12:30
Acrolein		А	ND	16	100		µg/L	1	12/16/2011 12:30
Acrylonitrile		А	ND	13	100		µg/L	1	12/16/2011 12:30
Benzene		А	ND	0.80	5.0		µg/L	1	12/16/2011 12:30
Bromodichlorometha	ne	А	ND	0.70	5.0		µg/L	1	12/16/2011 12:30
Bromoform		A	ND	0.80	5.0		µg/L	1	12/16/2011 12:30
Bromomethane		Α	ND	1.8	10		µg/L	1	12/16/2011 12:30
Carbon Disulfide		A	ND	1.7	10		µg/L	1	12/16/2011 12:30
Carbon tetrachloride		А	ND	1.7	5.0		µg/L	1	12/16/2011 12:30
Chlorobenzene		Α	ND	0.80	5.0		µg/L	1	12/16/2011 12:30
Chloroethane		A	ND	2.3	10	ana na ana ang ang ang ang ang ang ang a	µg/L	1	12/16/2011 12:30
Chloroform		A	ND	0.90	5.0	ar-ni-sisarineubeet	µg/L	1	12/16/2011 12:30
Chloromethane		A	ND	1.0	10	****************	µg/L	1	12/16/2011 12:30
cis-1,2-Dichloroether	10	A	4.6	0.80	5.0	J	µg/L	1	12/16/2011 12:30
cis-1,3-Dichloroprope	ene	A	ND	0.80	5.0		µg/L	1	12/16/2011 12:30
Dibromochlorometha	ne	A	ND	0.80	5.0		µg/L	1	12/16/2011 12:30
Ethylbenzene		A	ND	0.90	5,0	eritari) ana ana ana siladar	µg/L	1	12/16/2011 12:30
m,p-Xylene		Α	ND	1.7	5.0	r nev a transfordation and performance	µg/L	1	12/16/2011 12:30
Methviene chloride		Α	ND	3.1	10	andressen an eige en soch eider	µg/L	1	12/16/2011 12:30
Methyl-t-Butyl Ether	n ber medisindersterfenste sin eindens einen sicher eine mitter einen besteren der einen sosten im einen der ei	A	ND	0.80	5.0	in al a là air i thig bha d'anna bh	µg/L	1	12/16/2011 12:30
o-Xvlene		A	ND	0.90	5.0	an a	ua/L	1	12/16/2011 12:30
Styrene	րիսուցի ավիրություններությունը կոուց կորտը տեղերի հայտերինում է ոչ է որ դերում է ոչ է դերջուց է ուս է որ է դեր	A	ND	0.70	5.0	in a fan de ser en fan de de de de de de ser ander	ua/L	1	12/16/2011 12:30
Tetrachloroethene		A	310	13	50	ide is de superioristations	ua/L	10	12/16/2011 14:28
Toluene		A	ND	0.90	5.0	thir eil i-statis Philippin Anni	ua/L	1	12/16/2011 12:30
trans-1 2-Dichloroeth	ene	A	ND	1.1	5.0	no Gregorian againm dar téri	ua/L	1	12/16/2011 12:30
trans-1.3-Dichloropro	pene	A	ND ND	0.70	5.0	da da se de la completa de la compl	ua/L	1	12/16/2011 12:30
Trichloroethene		A	19	0.90	5.0	****	ua/L	1	12/16/2011 12:30
Trichlorofluoromethe	ገድ በ	A	- •	1 1	10	an a charlen a charlen a chuir an tha an	rø~ ua/l	1	12/16/2011 12:30
Vinvl Acetate	· · · · · · · · · · · · · · · · · · ·	A	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1.1 1.5	10	terre and an adding to on	rə′- uo/l	1	12/16/2011 12:30
Vinyl oblogido				00 A	20	n of colorfiders (also decode	-o		12/16/2014 12:30

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JE 5



Date: Tuesday, December 20, 2011

Client: Client Project:	Oneida Total Integrated 2010101-7903	d Enterpr	ises								
Client Sample ID: Sample Description:	SDC-MW-3						Work O	rder/ID:	11L0574-02		
Matrix:	Aqueous	ous Received: 12/14/2011									
Analyses		AT	Result	MDL	RL	Qual	Units	DF	Analyzed		
			Method: SI	N-846 8260	в			Ana	ilyst:jln		
Volatile Organic Comp	pounds						F	Prep Date/T	ime:12/16/2011 08:37		
Total 1,2-Dichloroethe	ne	М	4.6	0.80	5.0	J	µg/L	1	12/16/2011 12:30		
Total Xylenes		M	ND	0.90	5.0		µg/L	1	12/16/2011 12:30		
Surr: 1,2-Dichloroeth	ane-d4	S	109.00		74.5-132	e en	%REC	1	12/16/2011 12:30		
Surr: 4-Bromofluorob	enzene	S	101.00		80-120		%REC	1	12/16/2011 12:30		
Surr: Dibromofluoron	nethane	S	105.00	n na sana na sana sa	80-120		%REC	1	12/16/2011 12:30		
Surr: Toluene-d8		S	103.00		80-120		%REC	1	12/16/2011 12:30		

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Tuesday, December 20, 2011 Date:

Client:	Oneida Total Integrat	ed Enterpris	ses						
Client Project:	2010101-7903								
Client Sample ID:	SDC-MW-3D						Work O	rder/ID:	11L0574-03
Sample Description:							Sample	d:	12/13/2011 12:45
Matrix:	Aqueous						Receive	ed:	12/14/2011 9:30
Analyses		AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: SV	V-846 8260E	3			Ana	alystijin
Volatile Organic Com	pounds							Prep Date/T	ime: 12/16/2011 08:37
1,1,1,2-Tetrachloroeth	nane	A	ND	1.1	10		µg/L	1	12/16/2011 12:59
1,1,1-Trichloroethane		A	ND	0.90	5,0		µg/L	1	12/16/2011 12:59
1,1,2,2-Tetrachloroeth	nane	A	ND	1.4	5.0	na ( ) a ( a ( ) a	µg/L	1	12/16/2011 12:59
1,1,2-Trichloroethane		Α	ND	0.90	5.0	n tana sa kabutan kabuta (10 mili) kabuta (10	µg/L	1	12/16/2011 12:59
1,1-Dichloroethane		A	ND	0.80	5.0		µg/L	1	12/16/2011 12:59
1,1-Dichloroethene		A	ND	1.7	5.0	in de la de la dela de la dela dela dela d	µg/L	1	12/16/2011 12:59
1,2-Dichloroethane		A	ND	1.2	5.0		µg/L	1	12/16/2011 12:59
1,2-Dichloropropane		Α	ND	1.0	5.0		µg/L	1	12/16/2011 12:59
2-Butanone		Α	ND	3.6	10		µg/L	1	12/16/2011 12:59
2-Hexanone		Α	ND	2.4	10	talan in secola talahada di	µg/L	1	12/16/2011 12:59
4-Methyl-2-Pentanone	3	Α	ND	1.7	10	ennedon (2007, da) elos leçmeleğ	µg/L	1	12/16/2011 12:59
Acetone		Α	ND	5.8	50	n 19-1 Alash na 2010 - 20-10 Alash 1	µg/L	1	12/16/2011 12:59
Acrolein	na dan bahar ya hanan ka ka ka mana ka ka ya ka ka ka ya ya ka ka ka ya ya ka ka mana ka ka mana ka ka mana ma	A	ND	16	100	standarðuð den en skille fast bild	µg/L	1	12/16/2011 12:59
Acrylonitrile	1986 (1977) 1977 Marshall Manuard (1979) Canada California and advanced of small states of factors of	Α	ND	13	100		µg/L	1	12/16/2011 12:59
Benzene		Α	ND	0.80	5.0	inter an stadio glimati na tapat ang pakan	µg/L	1	12/16/2011 12:59
Bromodichloromethar	)e	Α	ND	0.70	5.0		µg/L	1	12/16/2011 12:59
Bromoform		Α	ND	0.80	5.0	in character could be charactered	µg/L	1	12/16/2011 12:59
Bromomethane		Α	ND	1.8	10	1999) 1994 (Jan 1994) John Nobel (Stationed Stationed Statio	µg/L	1	12/16/2011 12:59
Carbon Disulfide		Α	ND	1.7	10		µg/L	1	12/16/2011 12:59
Carbon tetrachloride	yana yangang ng mang na pang ng tao taon ng mpang taon tao ng mpang tao ng tao ng tao ng tao ng tao ng tao ng t	Α	ND	1.7	5.0	a daga sa ta ang ang ang ang ang ang ang ang ang an	µg/L	1	12/16/2011 12:59
Chlorobenzene		A	ND	0.80	5.0		µg/L	1	12/16/2011 12:59
Chloroethane		A	ND	2.3	10		µg/L	1	12/16/2011 12:59
Chloroform		Α	ND	0.90	5.0	e l'add digeradal a dalla i ball e denor d	µg/L	1	12/16/2011 12:59
Chloromethane		Α	ND	1.0	10		ug/L	1	12/16/2011 12:59
cis-1.2-Dichloroethen	2	Α	4.5	0.80	5.0		µg/L	1	12/16/2011 12:59
cis-1 3-Dichloroprope	ne	A	ND	0.80	5.0	*****	ua/L	1	12/16/2011 12:59
Dibromochloromethar	10	Α	ND	0.80	5.0	al eta de a desta de la constituía de la constituía de	ua/L	1	12/16/2011 12:59
Ethylbenzene		Α	ND	0.90	5.0		ua/L	1	12/16/2011 12:59
m n-Xvlene		Α	ND	1.7	5.0		ua/L	1	12/16/2011 12:59
Methylene chloride	المستريقين والمراجع والمتعارية بمناقبه المنامية منافعتهم والمتعارية والمعارية والمعارية والمعارية وا	A	ND	3.1	10		ua/L	1	12/16/2011 12:59
Methyl-t-Butyl Ether		A	ND	0.80	5.0	entista (assis), i encoraçoi d	г <del>о</del>	1	12/16/2011 12:59
	նու դեսորեկ ուղավերջինվում հեղել է է 12 հետ հետև կուլ ծել նուն է հերևել է ենտես հետև նուն։	A	 ND	0.90	5.0		ца/I	1	12/16/2011 12:59
Styrene		Δ	ND	0.00	5.0		ug/l	1	12/16/2011 12:59
Tetrachloroethene		Δ	810	13	50		uo/l	10	12/16/2011 14:57
Toluene		Δ	<u>νν</u>	0.90	50		uo/L	1	12/16/2011 12:59
trans_1 2_Dicbloroethe		A		1 1	5.0		г <u>э</u> ua/L	1	12/16/2011 12:59
trans-13-Dichloropror		Δ		0 70	5.0		rð' -	1	12/16/2011 12:59
Trichloroethene		Δ	19	0.70 n 90	5.0		rə'~ un/l	1	12/16/2011 12:59
Trichlorofluoromethon	۵	Δ	.∼ ∧∧	1 1	10	contract of the test of the second second second	rə'∽ µa/l	1	12/16/2011 12:59
		Δ	NU	1.1 1 K	10		rə′∽ uo/l	1	12/16/2011 12:59
				1.5	vi 0.0	19 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -	ry' -	4	12/16/2011 12:00

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AH 12-22-11



Date: Tuesday, December 20, 2011

Client: Client Project:	Oneida Total Integrate	ed Enterpr	ses						
Client Sample ID: Sample Description:	SDC-MW-3D		Work O Sample	rder/ID: d:	11L0574-03 12/13/2011 12:45 12/14/2011 9:30				
Matrix: Analyses	Aqueous	АТ	Result	MDL	RL	Qual	Units	DF	Analyzed
Volatile Organic Com	aounde		Method: SI	N-846 8260	B			Ana Prep Date/T	alyst:jin ime:12/16/2011 08:37
Total 1.2-Dichloroethe	ne	М	4.5	0.80	5.0	J	µg/L	1	12/16/2011 12:59
Total Xylenes		М	ND	0.90	5.0		µg/L	1	12/16/2011 12:59
Surr: 1,2-Dichloroeth	ane-d4	S	108.00		74.5-132		%REC	1	12/16/2011 12:59
Surr: 4-Bromofluorot	enzene	S	98.70		80-120		%REC	1	12/16/2011 12:59
Surr: Dibromofluoron	nethane	S	103.00		80-120		%REC	1	12/16/2011 12:59
Surr: Toluene-d8		S	102.00		80-120		%REC	1	12/16/2011 12:59

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MA2-22-11



Date: Tuesday, December 20, 2011

2010101-7903 SDC-MW-1								
SDC-MW-1								
						Work O	rder/ID:	11L0574-04
						Sample	d:	12/13/2011 13:50
Aqueous						Receive	d:	12/14/2011 9:30
	AT	Result	MDL	RL	Qual	Units	DF	Analyzed
·· ·		Method: SI	V-846 8260E	3			Ana	ılyst:jin
ounds						I	Prep Date/T	ime:12/16/2011 08:37
ane	A	ND	1.1	10		µg/L	1	12/16/2011 13:29
	A	ND	0.90	5.0		µg/L	1	12/16/2011 13:29
ane	A	ND	1.4	5.0		µg/L	1	12/16/2011 13:29
	A	ND	0.90	5.0		µg/L	1	12/16/2011 13:29
	A	ND	0.80	5.0		µg/L	1	12/16/2011 13:29
	А	ND	1.7	5.0		µg/L	1	12/16/2011 13:29
	Α	ND	1.2	5.0		µg/L	1	12/16/2011 13:29
	А	ND	1.0	5.0		µg/L	1	12/16/2011 13:29
	A	ND	3.6	10		µg/L	1	12/16/2011 13:29
	Α	ND	2.4	10		µg/L	1	12/16/2011 13:29
	Α	ND	1.7	10		µg/L	1	12/16/2011 13:29
	Α	ND	5,8	50		µg/L	1	12/16/2011 13:29
	A	ND	16	100		µg/L	1	12/16/2011 13:29
	Α	ND	13	100	an an an an a' sui dhuidh sù bhir	µg/L	1	12/16/2011 13:29
	Α	ND	0.80	5.0		µg/L	1	12/16/2011 13:29
3	Α	ND	0.70	5.0	h dana hadara da aba taka	µg/L	1	12/16/2011 13:29
allo blok pomonett och som til sole torrek, dete som er over, g	А	ND	0.80	5.0	200299-00-00-00-00-00	µg/L	1	12/16/2011 13:29
	A	ND	1.8	10		µg/L	1	12/16/2011 13:29
	Α	ND	1.7	10	e na honna na tanya patrapatra	µg/L	1	12/16/2011 13:29
	Α	ND	1.7	5.0		µg/L	1	12/16/2011 13:29
	Α	ND	0.80	5.0	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	µg/L	1	12/16/2011 13:29
1999 - 1999 - N. J. J. B. B. 1997 - B. BARLET BARLET - B. H. BARLET BARLET - B. B	Α	ND	2.3	10	i na nanana sa sa ta naharatasi i	µg/L	1	12/16/2011 13:29
	Α	ND	0.90	5.0	an ana ang san	µg/L	1	12/16/2011 13:29
	Α	ND	1.0	10	NA A S ASAN ANY A ANOLY	µg/L	1	12/16/2011 13:29
	Α	ND	0.80	5.0	ana mangang pangang pa	µg/L	1	12/16/2011 13:29
e	Α	ND	0.80	5.0	yn a felinaanda y Kango	µg/L	1	12/16/2011 13:29
<b>;</b>	Α	ND	0.80	5.0		µg/L	1	12/16/2011 13:29
	A	ND	0.90	5,0	nerona este de la constance	µg/L	1	12/16/2011 13:29
	Α	ND	1.7	5.0	hara arang panaraharan (1995)	μg/L	1	12/16/2011 13:29
	Α	ND	3.1	10	tanto a departa da facence	µg/L	1	12/16/2011 13:29
	Α	ND	0.80	5.0	ant blende pe och de nythoritet	ug/L	1	12/16/2011 13:29
, 1000000 (1, A) <sup>20</sup> (1, 1), and an address of a specific straining and any approximately a specific straining and a spec	Α	ND	0.90	5.0	a a e a contra e e contra de la c	ua/L	1	12/16/2011 13:29
	Α	ND	0.70	5.0	ander administra dan terpaj	ua/L	1	12/16/2011 13:29
an a second a submit of submit of a bin of shares a submit of a	A	ND	1.3	5.0	ene seur leur arriter and	ua/L	1	12/16/2011 13:29
an airs a tha bhatha ta a a a bha ann a a ta tha th' a d a th'fhar a fachacha bhada tha air	А	ND	0.90	5.0	en en an litan egan arean estaban j	ua/L	1	12/16/2011 13:29
۹۵ ۱۵	A	ND	1.1	5.0	ter ann antaraiche an aite an ann	-9 - ua/L	1	12/16/2011 13:29
••• •ne	A	 ND	0.70	5.0	ar ann a chuidhe ann bhlineann	ua/L	1	12/16/2011 13:29
·····	A	 תא	0.90	5.0	and ware direct in the Park	ua/L	1	12/16/2011 13:29
	A	<b>.</b> NN	1.1	10	an ay antara gine new an an ang ang ag	ua/L	1	12/16/2011 13:29
	A	עיי עא	1.5	10		ua/L	1	12/16/2011 13:29
	Δ	ND ND	0 QA	 20		-9'- 110/l	1	12/16/2011 13:29
	Aqueous	Aqueous         AT           ounds         A           ane         A           A         A           ane         A           A	Aqueous         AT       Result         Method: SV         ounds         ane       A       MD         A       MD	Aqueous         AT         Result         MDL           Method: SW-846 8260E           Ounds           ane         A         ND         1.1           A         ND         0.90           ane         A         ND         0.90           A         ND         1.1           A         ND         1.1	Aqueous         AT         Result         MDL         RL           Method: SW-846 8260B           ane         A         ND         0.90         5.0           A         ND         1.1         5.0           A         ND         1.1         5.0           A         ND         1.0         5.0           A         ND         1.1         10           A         ND         1.1         10           A         ND         1.3         100           A         ND         1.3         100           A         ND         1.1         10           A         ND         1.1         10           A         ND <td>Aqueous         AT         Result         MDL         RL         Qual           Method: SW-846 82600           ane         A         ND         1.1         10           A         ND         0.80         5.0        </td> <td>Aqueous         Aduity         MDL         RL         Qual         Units           Method: SW-846 8260B         Units           ounds           ane         A         ND         0.90         5.0         µg/L           ane         A         ND         0.90         5.0         µg/L           ane         A         ND         0.90         5.0         µg/L           A         ND         0.90         5.0         µg/L           A         ND         0.90         5.0         µg/L           A         ND         1.1         5.0         µg/L           A         ND         1.2         5.0         µg/L           A         ND         1.2         5.0         µg/L           A         ND         1.6         1.0         µg/L           A         ND         5.8         50         µg/L           A         ND         1.6         100         µg/L           A         ND         1.8         100         µg/L           A         ND         1.7         10         µg/L           A         ND         0.80         <t< td=""><td>Aqueous         AT         Result         MDL         RL         Qual         Units         DF           Method: SW-846 8200B         Prep Date/T           ounds         Prep Date/T           ane         A         ND         1.1         10         µg/L         1           ane         A         ND         0.90         5.0         µg/L         1           ane         A         ND         0.90         5.0         µg/L         1           A         ND         1.7         5.0         µg/L         1           A         ND         1.6         100         µg/L         1           A         ND         1.6         100         µg/L         1           A         ND         1.8         10         µg/L         1           A         ND         0.80         5.0         µg/L         1</td></t<></td>	Aqueous         AT         Result         MDL         RL         Qual           Method: SW-846 82600           ane         A         ND         1.1         10           A         ND         0.80         5.0	Aqueous         Aduity         MDL         RL         Qual         Units           Method: SW-846 8260B         Units           ounds           ane         A         ND         0.90         5.0         µg/L           ane         A         ND         0.90         5.0         µg/L           ane         A         ND         0.90         5.0         µg/L           A         ND         0.90         5.0         µg/L           A         ND         0.90         5.0         µg/L           A         ND         1.1         5.0         µg/L           A         ND         1.2         5.0         µg/L           A         ND         1.2         5.0         µg/L           A         ND         1.6         1.0         µg/L           A         ND         5.8         50         µg/L           A         ND         1.6         100         µg/L           A         ND         1.8         100         µg/L           A         ND         1.7         10         µg/L           A         ND         0.80 <t< td=""><td>Aqueous         AT         Result         MDL         RL         Qual         Units         DF           Method: SW-846 8200B         Prep Date/T           ounds         Prep Date/T           ane         A         ND         1.1         10         µg/L         1           ane         A         ND         0.90         5.0         µg/L         1           ane         A         ND         0.90         5.0         µg/L         1           A         ND         1.7         5.0         µg/L         1           A         ND         1.6         100         µg/L         1           A         ND         1.6         100         µg/L         1           A         ND         1.8         10         µg/L         1           A         ND         0.80         5.0         µg/L         1</td></t<>	Aqueous         AT         Result         MDL         RL         Qual         Units         DF           Method: SW-846 8200B         Prep Date/T           ounds         Prep Date/T           ane         A         ND         1.1         10         µg/L         1           ane         A         ND         0.90         5.0         µg/L         1           ane         A         ND         0.90         5.0         µg/L         1           A         ND         1.7         5.0         µg/L         1           A         ND         1.6         100         µg/L         1           A         ND         1.6         100         µg/L         1           A         ND         1.8         10         µg/L         1           A         ND         0.80         5.0         µg/L         1

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MA 12-22-11



Date: Tuesday, December 20, 2011

Client: Client Project:	Oneida Total Integrate 2010101-7903	ed Enterpr	ises						
Client Sample ID:	SDC-MW-1						Work O	rder/ID:	11L0574-04
Matrix:	Aqueous						Sample Receive	d: <u>d:</u>	12/13/2011 13:50
Analyses		AT	Result	MDL	RL	Qual	Units	DF	Analyzed
			Method: SI	N-846 8260	в			Ana	alyst:jin
Volatile Organic Com	pounds						f	Prep Date/T	ime:12/16/2011 08:37
Total 1,2-Dichloroethe	ene	M /		0.80	5.0		µg/L	1	12/16/2011 13:29
Total Xylenes		М	ND	0.90	5.0		µg/L	1	12/16/2011 13:29
Surr: 1,2-Dichloroeth	nane-d4	S	113.00		74.5-132		%REC	1	12/16/2011 13:29
Surr: 4-Bromofluorol	benzene	S	99.40		80-120		%REC	1	12/16/2011 13:29
Surr: Dibromofluoror	nethane	S	104.00		80-120		%REC	1	12/16/2011 13:29
Surr: Toluene-d8		S	103.00		80-120		%REC	1	12/16/2011 13:29

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M. 2.22-11



Date: Tuesday, December 20, 2011

Client:	Oneida Total Integra	ated Enterpris	ses													
Client Project:	2010101-7903															
Client Sample ID:	Trip Blank						Work O	rder/ID:	11L0	)574-05						
Sample Description:							Sample	d:	12/13/2011 0:00							
Matrix:	Aqueous						Receive	d:	12/14/201	1 9:30						
Analyses		AT	Result	MDL	RL.	Qual	Units	DF	Analyze	d						
••••••••••••••••••••••••••••••••••••••		Method: SW-846 8260B Analyst:jin														
Volatile Organic Con	npounds		ala anti-anti-anti-anti-anti-anti-anti-anti-	a transformation to the state of an internet of			<b> </b> 	Prep Date/T	ime:12/16/2011	08:37						
1,1,1,2-Tetrachloroe	thane	A	ND	1.1	10	talman mataniaa talaa hala m	µg/L	1	12/16/2011 1	13:58						
1,1,1-Trichloroethan	B	A	ND	0.90	5.0	an dalam saya ang sana sa	hð\r	1	12/16/2011 1	13:58						
1,1,2,2-Tetrachloroe	thane	A	ND	1.4	5.0	terdadan kasara tera adalah situ	Hg/L	1	12/16/2011 1	13:58						
1,1,2-Trichloroethan	<b>3</b>	A	ND	0.90	5.0	lan di salamiya kuto na farihi (anga	Hg/L	1	12/16/2011 1	13:58						
1,1-Dichloroethane		A	ND	0.80	5.0	an a	H8/L	1	12/16/2011 1	13:58						
1,1-Dichloroethene		A	ND	1.7	5.0	glan an dishi si manan kanan si yangang kat	µg/L	1	12/16/2011 1	13:58						
1,2-Dichloroethane	1997) (Second States of the Second States of the Second States of the Second States of the Second States of the	A	ND	1.2	5.0	na (normalizzation) e destruction e destruction destruction destruction destruction destruction destruction des	µg/L	1	12/16/2011 1	13:58						
1,2-Dichloropropane		A	ND	1.0	5.0	araa ahaa maa bada inta dha	µg/L	1	12/16/2011 1	13:58						
2-Butanone	ada a fa cala chara a cantar a sa fafara yang camanang sa	A	ND	3.6	10	hayan halasa in waada	µg/L	1	12/16/2011 1	13:58						
2-Hexanone		A	ND	2.4	10	maalaaladii talibaalaysi	µg/L	1	12/16/2011 1	13:58						
4-Methyl-2-Pentanor	10	A	ND	1.7	10	nan analar salara isa	µg/L	1	12/16/2011 1	3:58						
Acetone		A	ND	5.8	50		µg/L	1	12/16/2011 1	3:58						
Acrolein		A	ND	16	100		µg/L	1	12/16/2011 1	3:58						
Acrylonitrile		A	ND	13	100	n d hooren hegenergenn edagana	µg/L	1	12/16/2011 1	13:58						
Benzene		A	ND	0.80	5.0		µg/L	1	12/16/2011 1	13:58						
Bromodichlorometha	ne	A	ND	0.70	5.0	nanona esta das terta acost	µg/L	1	12/16/2011 1	13:58						
Bromoform		A	ND	0.80	5.0	Status and a the product of the	µg/L	1	12/16/2011 1	13:58						
Bromomethane		A	ND	1.8	10	lborówcie woracana	µg/L	1	12/16/2011 1	13:58						
Carbon Disulfide		A	ND	1.7	10		µg/L	1	12/16/2011 1	3:58						
Carbon tetrachloride		A	ND	1.7	5.0		µg/L	1	12/16/2011 1	3:58						
Chlorobenzene		Α	ND	0.80	5.0		µg/L	1	12/16/2011 1	3:58						
Chloroethane	" A second	A	ND	2.3	10		µg/L	1	12/16/2011 1	3:58						
Chloroform		A	ND	0.90	5.0		µg/L	1	12/16/2011 1	3:58						
Chloromethane		A	ND	1.0	10		µg/L	1	12/16/2011 1	3:58						
cis-1,2-Dichloroether	1e	Α	ND	0.80	5.0		µg/L	1	12/16/2011 1	13:58						
cis-1,3-Dichloroprope	ene	А	ND	0.80	5.0		µg/L	1	12/16/2011 1	3:58						
Dibromochlorometha	ne	Α	ND	0.80	5.0		µg/L	1	12/16/2011 1	3:58						
Ethylbenzene		A	ND	0.90	5.0		µg/L	1	12/16/2011 1	3:58						
m,p-Xylene	ranne genne ogener typen og genom i til menne ser er helder om en henne for en er helder i de fore er er er he	A	ND	1.7	5.0	indd alle feddar felafr aller ffa	µg/L	1	12/16/2011 1	3:58						
Methylene chloride		A	ND	3.1	10	ana pang Kanang Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabu	µg/L	1	12/16/2011 1	3:58						
Methyl-t-Butyl Ether		A	ND	0.80	5.0	der beschelten men forb	µg/L	1	12/16/2011 1	3:58						
o-Xylene		Α	ND	0.90	5.0		µg/L	1	12/16/2011 1	3:58						
Styrene		A	ND	0.70	5.0		µg/L	1	12/16/2011 1	3:58						
Tetrachloroethene		A	ND	1.3	5.0		µg/L	1	12/16/2011 1	3:58						
Toluene	նու ու հանձեր է առանձեր կարնելի է նախագահությունը հանձեր հանձառանձեր ու չի է ու տանձա գետառաներ առն	Α	ND	0.90	5.0	hand marked for the lateral shade	µg/L	1	12/16/2011 1	3:58						
trans-1.2-Dichloroeth	ene	A	ND	1.1	5.0	an a general magnation of the state of the state	µg/L	1	12/16/2011 1	3:58						
trans-1,3-Dichloropro	pene	A	ND	0.70	5.0	a includentation activity	µg/L	1	12/16/2011 1	3:58						
Trichloroethene		A	ND	0.90	5.0	54000000000000000000000000000000000000	µg/L	1	12/16/2011 1	3:58						
Trichlorofluorometha		A	ND	1.1	10		µg/L	1	12/16/2011 1	3:58						
Vinvl Acetate		Α	ND	1.5	10	والمراجع والمعاولة معالم محاولة المحاولة المحاولة المحاولة المحاولة المحاولة المحاولة المحاولة المحاولة المحاو	μg/L	1	12/16/2011 1	3:58						
Vinvl chloride		A	ND	0.90	2.0	Losta Collos mararl	µa/L	1	12/16/2011 1	3:58						

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Date: Tuesday, December 20, 2011

Client: Client Project:	Oneida Total Integrat 2010101-7903	ed Enterpr	ises								
Client Sample ID:	Trip Blank						Work O	der/ID:	11L0574-05		
Sample Description:							Sample	<b>1</b> :	12/13/2011 0:00		
Matrix:	Aqueous						Receive	d:	12/14/2011 9:30		
Analyses		AT	Result	MDL	RL	Qual	Units	DF	Analyzed		
			Method: SI	N-846 8260	Analyst: <b>jin</b>						
Volatile Organic Com	pounds						F	Prep Date/T	ime:12/16/2011 08:37		
Total 1,2-Dichloroeth	ene	М	ND	0.80	5.0		µg/L	1	12/16/2011 13:58		
Total Xylenes		М	ND	0.90	5.0		µg/L	1	12/16/2011 13:58		
Surr: 1,2-Dichloroet	hane-d4	S	108.00		74.5-132		%REC	1	12/16/2011 13:58		
Surr: 4-Bromofluoro	benzene	S	96.90	n transformer and an and a second second	80-120		%REC	1	12/16/2011 13:58		
Surr: Dibromofluoro	methane	S	103.00	ten en terrer in en en gebanden e	80-120		%REC	1	12/16/2011 13:58		
Surr: Toluene-d8		S	102.00		80-120		%REC	1	12/16/2011 13:58		

250 West 84th Drive, Merrillville, IN 46410 TEL.800.536.8379 TEL.219.769.8378 FAX.219.769.1664

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Aft 12-22-11

ble temperature upon receipt in degrees C =	j. behrens @ er lle. com			sible Hazard Identification [] Hazardous			Frip Blanks		SDC - MH - 1			Sor - M - 7	Client Sample ID	<ul> <li>Matrix Types: Soil/Solid (S), Sludge, Oi</li> <li>Preservative Types: (1) HNO3, (2) H2SO4, (3)</li> </ul>	d Report via [] Mail [] Telephone [] Fa	pled by (PRINT) Andrew Plice	phone # 414- 25 4- 5192	bot Andrew Plier	, State, Zip M. I wanker with 53226	ress 103 3 N. May Rur Rd Sitte	nt Name Oneida Total Integrited Ente	
	2			X Non-F					٤ \	٢t	, <	٤	Matrix*	il, Wipe, i) HCI, (4	vx (fax #)					200	- pmise	
		<u> </u>	Re	lazardo		_		·····	<u>^   &gt;</u>	< >	(   ·	×	Grab	Drinkin I) NaOł					P	5	P	F. Te
		Q		] suc	 				_			_	Filtered	g Wate H, (5) Z		Sam	)Agency	omplian	#	ocation	oject	l: 219- lx: 219-
sned By (sign:	shed by (sign	Andre	shed By (signa	] Radioactive			12/13	11	51/21	1213	12(12)	15	Date Collected	r (DW), Ground inc Acetate, (6		oler Signature	/Program	ce Monitoring?	- 575	Little C	Sandies 1	769-8378 -769-1664
ature)		+ Plier	ature)					1020	1250	12.20	000	500	Time Collected	dwater (GW), S Methanol, (7)	(	AS >		' [] Yes(1) []	75	hute, u	XEL Ren	
Date/Ti	Date/Ti	4	Date/Ti	Sample	 		1,	`	<u>ז מ</u>	\$ l	,   L	ا د <i>ر</i>	No. of Containers	Surface ) Sodiur				No		2	20	Tel: 31: Fax: 31
me	me	3/11 1700	me	e Disposition				n cc	HCC	Hcr	FF		Analyses	m Bisulfate, (8)	√fe-ma				[] RUS	Ny Fout		7-872-1375 7-872-1379
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Devide	ceived		ceived	ose as				-+	+	· ->	4	4	Voc	ater (W Thiosul	ss) 0	Sam	eeded by		y lab)	orking d	round 1	
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Date/Time	Date/Time		Date/Time	Irchive		4	6.5	64	0 %	04	0		For Lab Use Only	ved		- 4825		[] Level IV CLP-like	[] Level III CLP-like	WLevel II	Report Type	