Amadi, Eric A - DNR

From:	Amadi, Eric A - DNR
Sent:	Friday, June 07, 2013 2:59 PM
To:	'Julie A. Zimdars'
Cc:	Brunette, Margaret M - DNR; Mike Kellogg (mkellogg@connell-lp.com); khuibregtse@environcorp.com
Subject:	RE: Notification of Borrow Source - Former Wabash Alloys Facility; BRRTS #: 02-41-553761 & 06-41-560068

Tracking:

Recipient	Delivery
'Julie A. Zimdars'	
Brunette, Margaret M - DNR	Delivered: 06/07/2013 3:00 PM
Mike Kellogg (mkellogg@connell-lp.com)	
khuibregtse@environcorp.com	

Hi Julie,

I have looked at your request to use a soil borrow source for fill at the subject property. About 500 cubic yards will be used at the subject site to fill smaller pits within the building footprint and not as cap material. One soil sample was taken from the fill and analyzed for VOCs, Metals, PCBs and PAHs. Results met regulatory levels for non-industrial DC RCLs. Observations of soil conditions within the pit prior to backfilling and borrow source information will be provided in the SI report.

To complete my review for concurrence to use the soil borrow source as fill material at the subject site, please submit the source borrow information (dimensions of the borrow, soil boring logs & locations of the borings; and analytical for the borings).

As a heads up, we may also ask you to re-excavate the backfilling, if "hot spots" are encountered and documented in the SI report (since soil conditions prior to backfilling will be evaluated when we receive the SI report).

I hope this helps. Let me know if you have questions. Thanks.

Eric

From: Julie A. Zimdars [mailto:jzimdars@naturalrt.com]
Sent: Friday, June 07, 2013 9:17 AM
To: Amadi, Eric A - DNR
Cc: Brunette, Margaret M - DNR; Mike Kellogg (mkellogg@connell-lp.com); khuibregtse@environcorp.com
Subject: Notification of Borrow Source - former Wabash Alloys facility

Hi Eric – As indicated in the attached letter, we are notifying the department of our intention to use the soil for borrow source fill material at the former Wabash Alloys facility.

We greatly appreciate you timely review of this soil data and please let me know as soon as possible if you have any concerns.

Thanks, Julie

Julie A. Zimdars, PE
Senior Engineer
Natural Resource Technology, Inc
234 W. Florida Street, Fifth Floor

Milwaukee, Wisconsin 53204
414.837.3564 direct | 262.719.4507 cell
414.837.3607 main phone | 414.837.3608 fax
jzimdars@naturalrt.com \ www.naturalrt.com – ***WE HAVE MOVED! Please note the new address and phone numbers!***

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NATURAL RESOURCE TECHNOLOGY
ENVIRONMENTAL CONSULTANTS

234 FLORIDA STREET, 5TH FLOOR
MILWAUKEE, WI 53204
(P) 414.837.3607
(F) 414.837.3608

Mr. Eric Amadi (via Email) June 7, 2013
Wisconsin Department of Natural Resources (2095)
2300 North Martin Luther King Drive
Milwaukee, WI 53212

RE: Notification of Soil Borrow Source Fill Material Use
Former Wabash Alloys Facility
9100 South Fifth Avenue, Oak Creek, Wisconsin 53154
WDNR BRRTS Activity # 02-41-553761 & # 06-41-560068

Dear Eric:

We are notifying the Department of our intention to use a soil borrow source for fill material at the former Wabash Alloys facility. The soil data from the Southridge –Walmart parking lot borrow source is attached and demonstrates the material to be below non-industrial direct contact and groundwater pathway RCLs, with the caveat that the arsenic is below the WDNR background concentration of 8 mg/kg. We are providing this notification considering that the property is in the VPLE program and the fact that the site investigation is currently underway. The volume of the source is only approximately 500 cubic yards and will be used to fill smaller pits within building footprint, and is not being used as cap material. Following collection of a soil sample at the base of the pits, we are intending to backfill with this material. Observations of the soil conditions within the pit prior to backfilling will be noted. The borrow source information will be provided in the SI report as well.

If you have any issues/concerns with the borrow source, please let me know as soon as possible as the contractor is intending to use the soil as fill material early next week.

Please do not hesitate to contact me at 414.837.3564 should you have any questions.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Julie A. Zimdars, PE
Senior Engineer

Attachments: Table 1 – Borrow Source Analytical Table
Laboratory Analytical Report – Sample Fill 01

C: Mr. Mike Kellogg, Connell Limited Partnership (email)
Ms. Kathryn Huibregtse, Environ (email)
Ms. Margaret Brunette, WDNR-SER (email)

[Correspondence/Agency/Connell-Wabash Borrow Source Notif 130607]

Table 1. Borrow Source Analytical Table
Former Wabash Alloys Facility - Connell Aluminum Properties
Oak Creek, Wisconsin
BRRTS #02-41-553761

					VOCs [7]					Metals								PCBs							
Sample ID	Sample Location	Source Provider	Sample Date	Sample Time	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene total mg/kg	Total BETX mg/kg	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Chromium mg/kg	Lead mg/kg	Selenium mg/kg	Silver mg/kg	Mercury mg/kg	Archlor 1016 mg/kg	Archlor 1221 mg/kg	Archlor 1232 mg/kg	Archlor 1242 mg/kg	Archlor 1248 mg/kg	Archlor 1254 mg/kg	Archlor 1260 mg/kg	Total PCBs mg/kg
Groundwater Pathway RCLs					*0.005*	*1.11*	*1.57*	*3.94*	*NE*	*0.584*	*164.8*	*0.752*	*360.000*	*27*	*0.52*	*0.8497*	*0.208*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*NE*	*0.0094*
Non-Industrial Direct Contact RCLs					**1.49**	**618**	**7.47**	**258**	**NE**	**0.39**	**15,300**	**70.2**	**120,000** [6]	**400**	**391**	**391**	**3.13**	**3.93**	**0.159**	**0.159**	**0.222**	**0.222**	**0.222**	**0.222**	**0.222**
FILL 01	Walmart Parking Lot, South Ridge, 76th Street	Fischer	5/15/13	1230	<0.015	<0.015	<0.015	<0.031	<0.031	**4.8** [5]	23.8	0.22	11.3	6.0	<0.57	<0.2	0.0024	<0.0083	<0.0071	<0.0079	<0.0049	<0.0060	<0.0048	<0.0027	<0.0027

					PAHs																	
Sample ID	Sample Location	Source Provider	Sample Date	Sample Time	Acenaphthene mg/kg	Acenaphthylene mg/kg	Anthracene mg/kg	Benzo(a)anthracene mg/kg	Benzo(b)fluoranthene mg/kg	Benzo(k)fluoranthene mg/kg	Benzo(a)pyrene mg/kg	Benzo (e) pyrene mg/kg	Benzo(ghi)perylene mg/kg	Chrysene mg/kg	Dibenzo(a,h)anthracene mg/kg	Fluoranthene mg/kg	Fluorene mg/kg	Indeno(1,2,3-cd)pyrene mg/kg	Naphthalene mg/kg	Phenanthrene mg/kg	Pyrene mg/kg	Total PAHs mg/kg
Groundwater Pathway RCLs					*NE*	*NE*	*197*	*NE*	*0.48*	*NE*	*0.47*	*NE*	*NE*	*0.15*	*NE*	*88.8*	*14.8*	*NE*	*0.66*	*NE*	*54.5*	*NE*
Non-Industrial Direct Contact RCLs					**3,440**	**NE**	**17,200**	**0.148**	**0.148**	**1.48**	**0.0148**	**NE**	**NE**	**14.8**	**0.0148**	**2,290**	**2,290**	**0.148**	**5.15**	**NE**	**1,720**	**NE**
FILL 01	Walmart Parking Lot, South Ridge, 76th Street	Fischer	5/15/13	1230	<0.011	<0.011	<0.011	<0.011	0.011	<0.015	<0.015	<0.011	<0.015	<0.011	<0.011	0.014	<0.011	<0.011	<0.011	<0.011	0.012	0.037

[DB: RJG 6/3/13; CB JAZ 6/3/13]

Notes:
1) Concentrations in italics are above the Groundwater Pathway RCLs
2) Concentrations in bold are above the Non-Industrial Direct Contact RCLs
3) < - Parameter was not detected above the indicated detection limit.
4) NE - not established.
5) Arsenic concentration is below the WDNR's background concentration of 8 mg/kg.
6) Chromium III was used for the Direct Contact RCL.
7) The full list of VOCs (Method 8260) was analyzed but only BTEX is shown. All VOC results for *Fill 01* were non-detectable.

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29 May 2013

Jody Barbeau
Natural Resource Technology Inc
23713 West Paul Road, Unit D
Pewaukee, WI 53072

RE: Former Wabash Alloys (Connell) - Oak Creek, WI

Enclosed are the analytical results for the samples received by the laboratory on 05/21/2013.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. These results are in compliance with the 2009 NELAC Standards and the appropriate agencies listed below, unless otherwise noted in the case narrative. This analytical report should be reproduced in its entirety.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jessica Esser
Project Manager

Certification List			Expires
ILEPA	Illinois Secondary NELAP Accreditation	200062	04/30/2014
KDHE	Kansas Secondary NELAP Accreditation	E-10384	04/30/2014
LELAP	Louisiana Primary NELAP Accreditation	04165	06/30/2013
NJDEP	New Jersey Secondary NELAP Accreditation	WI004	06/30/2013
WDNR	Wisconsin Certification under NR 149	113289110	08/31/2013

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Fill 01	A132109-01	Soil	05/15/2013	05/21/2013

The E1 footnote on sample A132109-01 indicates that there were quality control sample exceedances for bromomethane and chloroethane. Bromomethane and chloroethane failed initial calibration criteria, had erratic continuing calibration verification (CCV) recoveries and/or had poor recoveries in matrix spike/matrix spike duplicate samples. These compounds often exhibit poor quality control results for soil samples with methanol preservation.

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Fill 01

A132109-01 (Soil)

Date Sampled
05/15/2013 12:30

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
ECCS									
Polychlorinated Biphenyls by EPA Method 8082						**Preparation Batch:A305082**			
PCB-1016	ND	0.0083	0.056	mg/kg dry	1	05/22/2013	05/22/2013 20:37	EPA 8082A	
PCB-1221	ND	0.0071	0.056	mg/kg dry	1	05/22/2013	05/22/2013 20:37	EPA 8082A	
PCB-1232	ND	0.0079	0.056	mg/kg dry	1	05/22/2013	05/22/2013 20:37	EPA 8082A	
PCB-1242	ND	0.0049	0.056	mg/kg dry	1	05/22/2013	05/22/2013 20:37	EPA 8082A	
PCB-1248	ND	0.0060	0.056	mg/kg dry	1	05/22/2013	05/22/2013 20:37	EPA 8082A	
PCB-1254	ND	0.0049	0.056	mg/kg dry	1	05/22/2013	05/22/2013 20:37	EPA 8082A	
PCB-1260	ND	0.0027	0.056	mg/kg dry	1	05/22/2013	05/22/2013 20:37	EPA 8082A	
Total PCBs	ND	0.0027	0.056	mg/kg dry	1	05/22/2013	05/22/2013 20:37	EPA 8082A	
Surrogate: Decachlorobiphenyl			*91.8 %*	*59.1-127*		*05/22/2013*	*05/22/2013 20:37*	*EPA 8082A*	
Surrogate: Tetrachloro-meta-xylene			*103 %*	*77.4-119*		*05/22/2013*	*05/22/2013 20:37*	*EPA 8082A*	
Volatile Organic Compounds by Method 8260 - Purge and Trap						**Preparation Batch:A305077**			
Acetone	ND		610	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Benzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Bromobenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Bromochloromethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Bromodichloromethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Bromoform	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Bromomethane	ND		150	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	E1
2-Butanone	ND		610	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
n-Butyl Benzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
sec-Butyl Benzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
tert-Butylbenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Carbon disulfide	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Carbon tetrachloride	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Chlorobenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Chloroethane	ND		150	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	E1
Chloroform	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Chloromethane	ND		31	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
2-Chlorotoluene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
4-Chlorotoluene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2-Dibromo-3-chloropropane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Dibromochloromethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2-Dibromoethane (EDB)	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Dibromomethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2-Dichlorobenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,4-Dichlorobenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,3-Dichlorobenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Dichlorodifluoromethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Fill 01

A132109-01 (Soil)

Date Sampled
05/15/2013 12:30

ECCS

Volatile Organic Compounds by Method 8260 - Purge and Trap — **Preparation Batch:A305077**

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
1,1-Dichloroethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2-Dichloroethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
trans-1,2-Dichloroethene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
cis-1,2-Dichloroethene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,1-Dichloroethene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
2,2-Dichloropropane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2-Dichloropropane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,3-Dichloropropane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
cis-1,3-Dichloropropene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
trans-1,3-Dichloropropene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,1-Dichloropropene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Diisopropyl Ether	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Ethylbenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Hexachlorobutadiene	ND		61	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
n-Hexane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
2-Hexanone	ND		610	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Isopropylbenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
p-Isopropyltoluene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Methylene chloride	ND		61	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
4-Methyl-2-pentanone	ND		610	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Methyl t-Butyl Ether	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Naphthalene	ND		150	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
n-Propyl Benzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Styrene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,1,1,2-Tetrachloroethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,1,2,2-Tetrachloroethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Tetrachloroethene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Tetrahydrofuran	ND		310	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Toluene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2,3-Trichlorobenzene	ND		61	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2,4-Trichlorobenzene	ND		61	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,1,1-Trichloroethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,1,2-Trichloroethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Trichloroethene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Trichlorofluoromethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2,3-Trichloropropane	ND		31	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,1,2-Trichlorotrifluoroethane	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,3,5-Trimethylbenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
1,2,4-Trimethylbenzene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Fill 01

A132109-01 (Soil)

Date Sampled
05/15/2013 12:30

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
ECCS									
Volatile Organic Compounds by Method 8260 - Purge and Trap						**Preparation Batch:A305077**			
Vinyl chloride	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
m,p-Xylene	ND		31	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
o-Xylene	ND		15	ug/kg dry	1	05/21/2013	05/22/2013 07:29	EPA 8260B	
Surrogate: Dibromofluoromethane			*105 %*	*80.4-125*		*05/21/2013*	*05/22/2013 07:29*	*EPA 8260B*	
Surrogate: Toluene-d8			*100 %*	*94.1-107*		*05/21/2013*	*05/22/2013 07:29*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene			*98.1 %*	*90.3-110*		*05/21/2013*	*05/22/2013 07:29*	*EPA 8260B*	
Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring						**Preparation Batch:A305092**			
Acenaphthene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Acenaphthylene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Anthracene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Benzo (a) anthracene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Benzo (a) pyrene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Benzo (b) fluoranthene	**11**		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Benzo (e) pyrene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Benzo (g,h,i) perylene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Benzo (k) fluoranthene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Chrysene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Dibenz (a,h) anthracene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Fluoranthene	**14**		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Fluorene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Indeno (1,2,3-cd) pyrene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Naphthalene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Phenanthrene	ND		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Pyrene	**12**		11	ug/kg dry	1	05/28/2013	05/28/2013 21:54	EPA 8270	
Surrogate: p-Terphenyl-d14			*92.8 %*	*70.6-127*		*05/28/2013*	*05/28/2013 21:54*	*EPA 8270*	
Classical Chemistry Parameters						**Preparation Batch:A305081**			
% Solids	**89.1**		0.00	% by Weight	1	05/22/2013	05/23/2013 09:42	SM 2540B	
Pace Analytical									
ASTM D2974-87						**Preparation Batch:PMST 8487**			
Percent Moisture	**9.8**	0.10	0.10	% dry	1	05/28/2013	05/28/2013 14:07	ASTM D2974-87	
EPA 6010						**Preparation Batch:MPRP 8524**			
Arsenic	**4.8**	0.52	1.9	mg/kg dry	1	05/23/2013	05/23/2013 19:04	EPA 6010	
Barium	**23.8**	0.083	0.48	mg/kg dry	1	05/23/2013	05/23/2013 19:04	EPA 6010	
Cadmium	**0.22**	0.049	0.48	mg/kg dry	1	05/23/2013	05/23/2013 19:04	EPA 6010	J

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Fill 01

A132109-01 (Soil)

Date Sampled
05/15/2013 12:30

Pace Analytical

Analyte	Result	Limit of Detection	Limit of Quantitation	Units	Dilution	Prepared	Analyzed	Method	Qualifiers
EPA 6010						**Preparation Batch:MPRP 8524**			
Chromium	**11.3**	0.12	0.48	mg/kg dry	1	05/23/2013	05/23/2013 19:04	EPA 6010	
Lead	**6.0**	0.28	0.96	mg/kg dry	1	05/23/2013	05/23/2013 19:04	EPA 6010	
Selenium	ND	0.57	1.9	mg/kg dry	1	05/23/2013	05/23/2013 19:04	EPA 6010	
Silver	ND	0.20	0.96	mg/kg dry	1	05/23/2013	05/23/2013 19:04	EPA 6010	
EPA 7471						**Preparation Batch:MERP 3664**			
Mercury	**0.0024**	0.0021	0.0043	mg/kg dry	1	05/23/2013	05/23/2013 13:58	EPA 7471	J

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Polychlorinated Biphenyls by EPA Method 8082 - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305082 - EPA 3570										
Blank (A305082-BLK1)				Prepared: 05/22/2013 Analyzed: 05/22/2013 19:48						
PCB-1016	ND	0.050	mg/kg wet							
PCB-1221	ND	0.050	mg/kg wet							
PCB-1232	ND	0.050	mg/kg wet							
PCB-1242	ND	0.050	mg/kg wet							
PCB-1248	ND	0.050	mg/kg wet							
PCB-1254	ND	0.050	mg/kg wet							
PCB-1260	ND	0.050	mg/kg wet							
Total PCBs	ND	0.050	mg/kg wet							
Surrogate: Decachlorobiphenyl	*0.112*		*mg/kg wet*	*0.1200*		*93.2*	*59.1-127*			
Surrogate: Tetrachloro-meta-xylene	*0.123*		*mg/kg wet*	*0.1200*		*103*	*77.4-119*			
LCS (A305082-BS1)				Prepared: 05/22/2013 Analyzed: 05/22/2013 20:12						
PCB-1242	2.03	0.050	mg/kg wet	2.000		101	82.7-118			
Surrogate: Decachlorobiphenyl	*0.115*		*mg/kg wet*	*0.1200*		*95.6*	*59.1-127*			
Surrogate: Tetrachloro-meta-xylene	*0.125*		*mg/kg wet*	*0.1200*		*104*	*77.4-119*			
Matrix Spike (A305082-MS1)	**Source: A132109-01**			Prepared: 05/22/2013 Analyzed: 05/22/2013 21:02						
PCB-1242	2.35	0.056	mg/kg dry	2.245	ND	105	61.9-148			
Surrogate: Decachlorobiphenyl	*0.129*		*mg/kg dry*	*0.1347*		*95.7*	*59.1-127*			
Surrogate: Tetrachloro-meta-xylene	*0.143*		*mg/kg dry*	*0.1347*		*106*	*77.4-119*			
Matrix Spike Dup (A305082-MSD1)	**Source: A132109-01**			Prepared: 05/22/2013 Analyzed: 05/22/2013 21:26						
PCB-1242	2.12	0.056	mg/kg dry	2.245	ND	94.5	61.9-148	10.2	20	
Surrogate: Decachlorobiphenyl	*0.116*		*mg/kg dry*	*0.1347*		*86.4*	*59.1-127*			
Surrogate: Tetrachloro-meta-xylene	*0.131*		*mg/kg dry*	*0.1347*		*97.5*	*77.4-119*			

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Volatile Organic Compounds by Method 8260 - Purge and Trap - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305077 - EPA 5030B										
Blank (A305077-BLK1)			Prepared: 05/21/2013 Analyzed: 05/22/2013 05:43							
Acetone	ND	1000	ug/kg wet							
Benzene	ND	25	ug/kg wet							
Bromobenzene	ND	25	ug/kg wet							
Bromochloromethane	ND	25	ug/kg wet							
Bromodichloromethane	ND	25	ug/kg wet							
Bromoform	ND	25	ug/kg wet							
Bromomethane	ND	250	ug/kg wet							EI
2-Butanone	ND	1000	ug/kg wet							
n-Butyl Benzene	ND	25	ug/kg wet							
sec-Butyl Benzene	ND	25	ug/kg wet							
tert-Butylbenzene	ND	25	ug/kg wet							
Carbon disulfide	ND	25	ug/kg wet							
Carbon tetrachloride	ND	25	ug/kg wet							
Chlorobenzene	ND	25	ug/kg wet							
Chloroethane	ND	250	ug/kg wet							EI
Chloroform	ND	25	ug/kg wet							
Chloromethane	ND	50	ug/kg wet							
2-Chlorotoluene	ND	25	ug/kg wet							
4-Chlorotoluene	ND	25	ug/kg wet							
1,2-Dibromo-3-chloropropane	ND	25	ug/kg wet							
Dibromochloromethane	ND	25	ug/kg wet							
1,2-Dibromoethane (EDB)	ND	25	ug/kg wet							
Dibromomethane	ND	25	ug/kg wet							
1,2-Dichlorobenzene	ND	25	ug/kg wet							
1,4-Dichlorobenzene	ND	25	ug/kg wet							
1,3-Dichlorobenzene	ND	25	ug/kg wet							
Dichlorodifluoromethane	ND	25	ug/kg wet							
1,1-Dichloroethane	ND	25	ug/kg wet							
1,2-Dichloroethane	ND	25	ug/kg wet							
trans-1,2-Dichloroethene	ND	25	ug/kg wet							
cis-1,2-Dichloroethene	ND	25	ug/kg wet							
1,1-Dichloroethene	ND	25	ug/kg wet							
2,2-Dichloropropane	ND	25	ug/kg wet							
1,2-Dichloropropane	ND	25	ug/kg wet							
1,3-Dichloropropane	ND	25	ug/kg wet							
cis-1,3-Dichloropropene	ND	25	ug/kg wet							
trans-1,3-Dichloropropene	ND	25	ug/kg wet							
1,1-Dichloropropene	ND	25	ug/kg wet							
Diisopropyl Ether	ND	25	ug/kg wet							
Ethylbenzene	ND	25	ug/kg wet							
Hexachlorobutadiene	ND	100	ug/kg wet							
n-Hexane	ND	25	ug/kg wet							
2-Hexanone	ND	1000	ug/kg wet							
Isopropylbenzene	ND	25	ug/kg wet							

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Volatile Organic Compounds by Method 8260 - Purge and Trap - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305077 - EPA 5030B										
Blank (A305077-BLK1)				Prepared: 05/21/2013 Analyzed: 05/22/2013 05:43						
p-Isopropyltoluene	ND	25	ug/kg wet							
Methylene chloride	ND	100	ug/kg wet							
4-Methyl-2-pentanone	ND	1000	ug/kg wet							
Methyl t-Butyl Ether	ND	25	ug/kg wet							
Naphthalene	ND	250	ug/kg wet							
n-Propyl Benzene	ND	25	ug/kg wet							
Styrene	ND	25	ug/kg wet							
1,1,1,2-Tetrachloroethane	ND	25	ug/kg wet							
1,1,2,2-Tetrachloroethane	ND	25	ug/kg wet							
Tetrachloroethene	ND	25	ug/kg wet							
Tetrahydrofuran	ND	500	ug/kg wet							
Toluene	ND	25	ug/kg wet							
1,2,3-Trichlorobenzene	ND	100	ug/kg wet							
1,2,4-Trichlorobenzene	ND	100	ug/kg wet							
1,1,1-Trichloroethane	ND	25	ug/kg wet							
1,1,2-Trichloroethane	ND	25	ug/kg wet							
Trichloroethene	ND	25	ug/kg wet							
Trichlorofluoromethane	ND	25	ug/kg wet							
1,2,3-Trichloropropane	ND	50	ug/kg wet							
1,1,2-Trichlorotrifluoroethane	ND	25	ug/kg wet							
1,3,5-Trimethylbenzene	ND	25	ug/kg wet							
1,2,4-Trimethylbenzene	ND	25	ug/kg wet							
Vinyl chloride	ND	25	ug/kg wet							
m,p-Xylene	ND	50	ug/kg wet							
o-Xylene	ND	25	ug/kg wet							
Surrogate: Dibromofluoromethane	*24.5*		*ug/L*	*25.00*		*98.0*	*80.4-125*			
Surrogate: Toluene-d8	*24.9*		*ug/L*	*25.00*		*99.6*	*94.1-107*			
Surrogate: 4-Bromofluorobenzene	*24.5*		*ug/L*	*25.00*		*98.0*	*90.3-110*			
LCS (A305077-BS1)				Prepared: 05/21/2013 Analyzed: 05/22/2013 06:10						
Acetone	53.2		ug/L	50.00		106	46.4-160			
Benzene	5.31		ug/L	5.000		106	73.7-133			
Bromobenzene	5.33		ug/L	5.000		107	89-114			
Bromochloromethane	5.63		ug/L	5.000		113	77.3-135			
Bromodichloromethane	4.73		ug/L	5.000		94.6	71.9-126			
Bromoform	4.58		ug/L	5.000		91.6	58-129			
Bromomethane	6.66		ug/L	5.000		133	16.5-194			EI
2-Butanone	51.7		ug/L	50.00		103	70-131			
n-Butyl Benzene	5.21		ug/L	5.000		104	87.8-125			
sec-Butyl Benzene	5.36		ug/L	5.000		107	86.5-124			
tert-Butylbenzene	5.23		ug/L	5.000		105	86-122			
Carbon disulfide	4.94		ug/L	5.000		98.8	77.6-122			
Carbon tetrachloride	4.78		ug/L	5.000		95.6	79.7-115			
Chlorobenzene	5.22		ug/L	5.000		104	91.8-114			

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Volatile Organic Compounds by Method 8260 - Purge and Trap - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305077 - EPA 5030B										
LCS (A305077-BS1)			Prepared: 05/21/2013 Analyzed: 05/22/2013 06:10							
Chloroethane	3.29		ug/L	5.000		65.8	30.5-198			E1
Chloroform	5.03		ug/L	5.000		101	78.1-130			
Chloromethane	4.35		ug/L	5.000		87.0	71.8-123			
2-Chlorotoluene	5.25		ug/L	5.000		105	94.9-114			
4-Chlorotoluene	5.12		ug/L	5.000		102	85.1-122			
1,2-Dibromo-3-chloropropane	5.19		ug/L	5.000		104	55.1-136			
Dibromochloromethane	4.54		ug/L	5.000		90.8	70.4-124			
1,2-Dibromoethane (EDB)	5.28		ug/L	5.000		106	83.4-125			
Dibromomethane	5.46		ug/L	5.000		109	79.6-124			
1,2-Dichlorobenzene	5.46		ug/L	5.000		109	93.3-115			
1,4-Dichlorobenzene	5.16		ug/L	5.000		103	83.4-121			
1,3-Dichlorobenzene	5.25		ug/L	5.000		105	92.6-115			
Dichlorodifluoromethane	4.87		ug/L	5.000		97.4	73.4-130			
1,1-Dichloroethane	5.27		ug/L	5.000		105	81.6-129			
1,2-Dichloroethane	5.22		ug/L	5.000		104	67.8-139			
trans-1,2-Dichloroethene	5.21		ug/L	5.000		104	85.2-123			
cis-1,2-Dichloroethene	5.41		ug/L	5.000		108	86-121			
1,1-Dichloroethene	4.90		ug/L	5.000		98.0	78.2-118			
2,2-Dichloropropane	4.15		ug/L	5.000		83.0	60.6-131			
1,2-Dichloropropane	5.21		ug/L	5.000		104	84.5-117			
1,3-Dichloropropane	5.31		ug/L	5.000		106	84.6-119			
cis-1,3-Dichloropropene	5.06		ug/L	5.000		101	77.3-124			
trans-1,3-Dichloropropene	4.76		ug/L	5.000		95.2	71.7-127			
1,1-Dichloropropene	5.18		ug/L	5.000		104	78.3-134			
Diisopropyl Ether	5.84		ug/L	5.000		117	81.8-124			
Ethylbenzene	5.21		ug/L	5.000		104	87.8-122			
Hexachlorobutadiene	5.12		ug/L	5.000		102	82.4-120			
n-Hexane	4.99		ug/L	5.000		99.8	77.5-125			
2-Hexanone	51.5		ug/L	50.00		103	73.5-126			
Isopropylbenzene	5.09		ug/L	5.000		102	88.7-122			
p-Isopropyltoluene	5.32		ug/L	5.000		106	89.1-124			
Methylene chloride	5.18		ug/L	5.000		104	70.6-131			
4-Methyl-2-pentanone	51.6		ug/L	50.00		103	75.5-127			
Methyl t-Butyl Ether	5.72		ug/L	5.000		114	75-131			
Naphthalene	5.06		ug/L	5.000		101	69.8-117			
n-Propyl Benzene	5.24		ug/L	5.000		105	80.7-127			
Styrene	5.15		ug/L	5.000		103	89.3-115			
1,1,1,2-Tetrachloroethane	5.10		ug/L	5.000		102	86.8-113			
1,1,2,2-Tetrachloroethane	5.12		ug/L	5.000		102	79.1-125			
Tetrachloroethene	5.06		ug/L	5.000		101	78.3-123			
Tetrahydrofuran	28.4		ug/L	25.00		114	62.7-143			
Toluene	5.11		ug/L	5.000		102	76.3-120			
1,2,3-Trichlorobenzene	4.89		ug/L	5.000		97.8	83-121			
1,2,4-Trichlorobenzene	5.16		ug/L	5.000		103	86.3-117			

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Volatile Organic Compounds by Method 8260 - Purge and Trap - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305077 - EPA 5030B										
LCS (A305077-BS1)			Prepared: 05/21/2013 Analyzed: 05/22/2013 06:10							
1,1,1-Trichloroethane	5.23		ug/L	5.000		105	84.6-121			
1,1,2-Trichloroethane	5.15		ug/L	5.000		103	83.4-120			
Trichloroethene	5.50		ug/L	5.000		110	85.4-117			
Trichlorofluoromethane	4.89		ug/L	5.000		97.8	48.3-162			
1,2,3-Trichloropropane	5.25		ug/L	5.000		105	74.3-125			
1,1,2-Trichlorotrifluoroethane	5.16		ug/L	5.000		103	75.6-132			
1,3,5-Trimethylbenzene	5.20		ug/L	5.000		104	88-122			
1,2,4-Trimethylbenzene	5.22		ug/L	5.000		104	83.2-122			
Vinyl chloride	4.63		ug/L	5.000		92.6	73.2-134			
m,p-Xylene	10.4		ug/L	10.00		104	89.8-118			
o-Xylene	4.93		ug/L	5.000		98.6	89.1-117			
Surrogate: Dibromofluoromethane	*25.3*		*ug/L*	*25.00*		*101*	*80.4-125*			
Surrogate: Toluene-d8	*25.3*		*ug/L*	*25.00*		*101*	*94.1-107*			
Surrogate: 4-Bromofluorobenzene	*24.7*		*ug/L*	*25.00*		*98.9*	*90.3-110*			
Matrix Spike (A305077-MS1)	**Source: A132109-01**		Prepared: 05/21/2013 Analyzed: 05/22/2013 06:36							
Acetone	53.6		ug/L	50.00	ND	107	45.8-164			
Benzene	5.39		ug/L	5.000	ND	108	73.7-131			
Bromobenzene	5.40		ug/L	5.000	ND	108	85.2-120			
Bromochloromethane	5.84		ug/L	5.000	ND	117	74.1-139			
Bromodichloromethane	4.56		ug/L	5.000	0.170	87.8	73.5-124			
Bromoform	4.71		ug/L	5.000	ND	94.2	61.1-131			
Bromomethane	9.93		ug/L	5.000	ND	199	9.3-190			E1
2-Butanone	52.0		ug/L	50.00	ND	104	66.8-143			
n-Butyl Benzene	5.01		ug/L	5.000	ND	100	76.8-132			
sec-Butyl Benzene	5.22		ug/L	5.000	ND	104	94.1-120			
tert-Butylbenzene	5.11		ug/L	5.000	ND	102	82.7-129			
Carbon disulfide	5.51		ug/L	5.000	ND	110	81.1-120			
Carbon tetrachloride	4.86		ug/L	5.000	ND	97.2	71.6-131			
Chlorobenzene	5.18		ug/L	5.000	ND	104	86.9-121			
Chloroethane	4.77		ug/L	5.000	ND	95.4	6-181			E1
Chloroform	4.97		ug/L	5.000	0.130	96.8	65.2-143			
Chloromethane	4.52		ug/L	5.000	ND	90.4	47.1-146			
2-Chlorotoluene	5.29		ug/L	5.000	ND	106	84.7-126			
4-Chlorotoluene	5.24		ug/L	5.000	ND	105	85.8-123			
1,2-Dibromo-3-chloropropane	5.27		ug/L	5.000	ND	105	55.4-148			
Dibromochloromethane	4.78		ug/L	5.000	ND	95.6	69.9-126			
1,2-Dibromoethane (EDB)	5.32		ug/L	5.000	ND	106	78.2-133			
Dibromomethane	5.53		ug/L	5.000	ND	111	85.5-122			
1,2-Dichlorobenzene	5.35		ug/L	5.000	ND	107	85.1-124			
1,4-Dichlorobenzene	5.25		ug/L	5.000	ND	105	79.7-122			
1,3-Dichlorobenzene	5.27		ug/L	5.000	ND	105	83.5-124			
Dichlorodifluoromethane	4.83		ug/L	5.000	ND	96.6	68.8-126			
1,1-Dichloroethane	5.50		ug/L	5.000	ND	110	68.5-145			

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Volatile Organic Compounds by Method 8260 - Purge and Trap - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305077 - EPA 5030B										
Matrix Spike (A305077-MS1)	**Source: A132109-01**		Prepared: 05/21/2013 Analyzed: 05/22/2013 06:36							
1,2-Dichloroethane	5.24		ug/L	5.000	ND	105	67.8-140			
trans-1,2-Dichloroethene	5.25		ug/L	5.000	ND	105	80.4-131			
cis-1,2-Dichloroethene	5.65		ug/L	5.000	ND	113	78.2-132			
1,1-Dichloroethene	5.11		ug/L	5.000	ND	102	67.9-130			
2,2-Dichloropropane	4.23		ug/L	5.000	ND	84.6	59.4-124			
1,2-Dichloropropane	5.13		ug/L	5.000	ND	103	80.9-123			
1,3-Dichloropropane	5.41		ug/L	5.000	ND	108	84.6-123			
cis-1,3-Dichloropropene	4.96		ug/L	5.000	ND	99.2	74-131			
trans-1,3-Dichloropropene	4.64		ug/L	5.000	ND	92.8	67-137			
1,1-Dichloropropene	5.55		ug/L	5.000	ND	111	82.4-131			
Diisopropyl Ether	5.63		ug/L	5.000	ND	113	76.6-134			
Ethylbenzene	5.18		ug/L	5.000	ND	104	86.8-120			
Hexachlorobutadiene	5.01		ug/L	5.000	ND	100	67.8-135			
n-Hexane	5.27		ug/L	5.000	ND	105	69.5-128			
2-Hexanone	52.3		ug/L	50.00	ND	105	71.6-134			
Isopropylbenzene	5.08		ug/L	5.000	ND	102	83.8-128			
p-Isopropyltoluene	5.18		ug/L	5.000	ND	104	81.1-131			
Methylene chloride	5.17		ug/L	5.000	0.220	99.0	70.3-133			
4-Methyl-2-pentanone	53.6		ug/L	50.00	ND	107	80.7-125			
Methyl t-Butyl Ether	5.59		ug/L	5.000	ND	112	70.7-136			
Naphthalene	5.34		ug/L	5.000	ND	107	57.6-136			
n-Propyl Benzene	5.18		ug/L	5.000	ND	104	88.5-123			
Styrene	5.20		ug/L	5.000	ND	104	79.7-128			
1,1,1,2-Tetrachloroethane	5.15		ug/L	5.000	ND	103	77.8-127			
1,1,2,2-Tetrachloroethane	5.41		ug/L	5.000	ND	108	76.6-135			
Tetrachloroethene	4.83		ug/L	5.000	ND	96.6	75.6-123			
Tetrahydrofuran	28.2		ug/L	25.00	ND	113	70.1-147			
Toluene	5.11		ug/L	5.000	ND	102	76.3-118			
1,2,3-Trichlorobenzene	5.10		ug/L	5.000	ND	102	73.1-130			
1,2,4-Trichlorobenzene	5.14		ug/L	5.000	ND	103	72-131			
1,1,1-Trichloroethane	5.16		ug/L	5.000	ND	103	83-127			
1,1,2-Trichloroethane	5.10		ug/L	5.000	ND	102	79.1-130			
Trichloroethene	5.00		ug/L	5.000	ND	100	77.3-127			
Trichlorofluoromethane	5.13		ug/L	5.000	ND	103	43.5-176			
1,2,3-Trichloropropane	5.16		ug/L	5.000	ND	103	73.7-131			
1,1,2-Trichlorotrifluoroethane	5.28		ug/L	5.000	ND	106	58.2-143			
1,3,5-Trimethylbenzene	5.19		ug/L	5.000	ND	104	90.4-120			
1,2,4-Trimethylbenzene	5.31		ug/L	5.000	ND	106	84.3-121			
Vinyl chloride	5.03		ug/L	5.000	ND	101	62.7-141			
m,p-Xylene	10.3		ug/L	10.00	ND	103	87.9-119			
o-Xylene	5.00		ug/L	5.000	ND	100	81.2-124			
Surrogate: Dibromofluoromethane	*26.2*		*ug/L*	*25.00*		*105*	*80.4-125*			
Surrogate: Toluene-d8	*25.0*		*ug/L*	*25.00*		*100*	*94.1-107*			
Surrogate: 4-Bromofluorobenzene	*24.8*		*ug/L*	*25.00*		*99.2*	*90.3-110*			

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Volatile Organic Compounds by Method 8260 - Purge and Trap - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305077 - EPA 5030B										
Matrix Spike Dup (A305077-MSD1)	**Source: A132109-01**		Prepared: 05/21/2013 Analyzed: 05/22/2013 07:03							
Acetone	53.7		ug/L	50.00	ND	107	45.8-164	0.0559	20	
Benzene	5.41		ug/L	5.000	ND	108	73.7-131	0.370	20	
Bromobenzene	5.32		ug/L	5.000	ND	106	85.2-120	1.49	20	
Bromochloromethane	5.79		ug/L	5.000	ND	116	74.1-139	0.860	20	
Bromodichloromethane	4.71		ug/L	5.000	0.170	90.8	73.5-124	3.36	20	
Bromoform	4.74		ug/L	5.000	ND	94.8	61.1-131	0.635	20	
Bromomethane	4.81		ug/L	5.000	ND	96.2	9.3-190	69.5	20	E1
2-Butanone	55.2		ug/L	50.00	ND	110	66.8-143	5.97	20	
n-Butyl Benzene	5.07		ug/L	5.000	ND	101	76.8-132	1.19	20	
sec-Butyl Benzene	5.24		ug/L	5.000	ND	105	94.1-120	0.382	20	
tert-Butylbenzene	5.15		ug/L	5.000	ND	103	82.7-129	0.780	20	
Carbon disulfide	5.35		ug/L	5.000	ND	107	81.1-120	2.95	20	
Carbon tetrachloride	4.70		ug/L	5.000	ND	94.0	71.6-131	3.35	20	
Chlorobenzene	5.18		ug/L	5.000	ND	104	86.9-121	0.00	20	
Chloroethane	7.77		ug/L	5.000	ND	155	6-181	47.8	20	E1
Chloroform	5.12		ug/L	5.000	0.130	99.8	65.2-143	3.05	20	
Chloromethane	5.57		ug/L	5.000	ND	111	47.1-146	20.8	20	X
2-Chlorotoluene	5.22		ug/L	5.000	ND	104	84.7-126	1.33	20	
4-Chlorotoluene	5.11		ug/L	5.000	ND	102	85.8-123	2.51	20	
1,2-Dibromo-3-chloropropane	5.58		ug/L	5.000	ND	112	55.4-148	5.71	20	
Dibromochloromethane	4.68		ug/L	5.000	ND	93.6	69.9-126	2.11	20	
1,2-Dibromoethane (EDB)	5.31		ug/L	5.000	ND	106	78.2-133	0.188	20	
Dibromomethane	5.32		ug/L	5.000	ND	106	85.5-122	3.87	20	
1,2-Dichlorobenzene	5.11		ug/L	5.000	ND	102	85.1-124	4.59	20	
1,4-Dichlorobenzene	5.08		ug/L	5.000	ND	102	79.7-122	3.29	20	
1,3-Dichlorobenzene	5.17		ug/L	5.000	ND	103	83.5-124	1.92	20	
Dichlorodifluoromethane	4.67		ug/L	5.000	ND	93.4	68.8-126	3.37	20	
1,1-Dichloroethane	5.49		ug/L	5.000	ND	110	68.5-145	0.182	20	
1,2-Dichloroethane	5.61		ug/L	5.000	ND	112	67.8-140	6.82	20	
trans-1,2-Dichloroethene	5.30		ug/L	5.000	ND	106	80.4-131	0.948	20	
cis-1,2-Dichloroethene	5.70		ug/L	5.000	ND	114	78.2-132	0.881	20	
1,1-Dichloroethene	4.99		ug/L	5.000	ND	99.8	67.9-130	2.38	20	
2,2-Dichloropropane	4.24		ug/L	5.000	ND	84.8	59.4-124	0.236	20	
1,2-Dichloropropane	4.92		ug/L	5.000	ND	98.4	80.9-123	4.18	20	
1,3-Dichloropropane	5.27		ug/L	5.000	ND	105	84.6-123	2.62	20	
cis-1,3-Dichloropropene	4.84		ug/L	5.000	ND	96.8	74-131	2.45	20	
trans-1,3-Dichloropropene	4.79		ug/L	5.000	ND	95.8	67-137	3.18	20	
1,1-Dichloropropene	5.62		ug/L	5.000	ND	112	82.4-131	1.25	20	
Diisopropyl Ether	5.48		ug/L	5.000	ND	110	76.6-134	2.70	20	
Ethylbenzene	5.18		ug/L	5.000	ND	104	86.8-120	0.00	20	
Hexachlorobutadiene	5.02		ug/L	5.000	ND	100	67.8-135	0.199	20	
n-Hexane	4.90		ug/L	5.000	ND	98.0	69.5-128	7.28	20	
2-Hexanone	54.3		ug/L	50.00	ND	109	71.6-134	3.81	20	
Isopropylbenzene	5.08		ug/L	5.000	ND	102	83.8-128	0.00	20	

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Volatile Organic Compounds by Method 8260 - Purge and Trap - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305077 - EPA 5030B										
Matrix Spike Dup (A305077-MSD1)	**Source: A132109-01**		Prepared: 05/21/2013 Analyzed: 05/22/2013 07:03							
p-Isopropyltoluene	5.08		ug/L	5.000	ND	102	81.1-131	1.95	20	
Methylene chloride	5.33		ug/L	5.000	0.220	102	70.3-133	3.18	20	
4-Methyl-2-pentanone	54.4		ug/L	50.00	ND	109	80.7-125	1.52	20	
Methyl t-Butyl Ether	5.58		ug/L	5.000	ND	112	70.7-136	0.179	20	
Naphthalene	5.75		ug/L	5.000	ND	115	57.6-136	7.39	20	
n-Propyl Benzene	5.10		ug/L	5.000	ND	102	88.5-123	1.56	20	
Styrene	5.20		ug/L	5.000	ND	104	79.7-128	0.00	20	
1,1,1,2-Tetrachloroethane	5.14		ug/L	5.000	ND	103	77.8-127	0.194	20	
1,1,2,2-Tetrachloroethane	5.02		ug/L	5.000	ND	100	76.6-135	7.48	20	
Tetrachloroethene	5.01		ug/L	5.000	ND	100	75.6-123	3.66	20	
Tetrahydrofuran	28.0		ug/L	25.00	ND	112	70.1-147	0.640	20	
Toluene	5.18		ug/L	5.000	ND	104	76.3-118	1.36	20	
1,2,3-Trichlorobenzene	5.19		ug/L	5.000	ND	104	73.1-130	1.75	20	
1,2,4-Trichlorobenzene	5.03		ug/L	5.000	ND	101	72-131	2.16	20	
1,1,1-Trichloroethane	5.12		ug/L	5.000	ND	102	83-127	0.778	20	
1,1,2-Trichloroethane	5.28		ug/L	5.000	ND	106	79.1-130	3.47	20	
Trichloroethene	5.31		ug/L	5.000	ND	106	77.3-127	6.01	20	
Trichlorofluoromethane	5.35		ug/L	5.000	ND	107	43.5-176	4.20	20	
1,2,3-Trichloropropane	5.22		ug/L	5.000	ND	104	73.7-131	1.16	20	
1,1,2-Trichlorotrifluoroethane	4.90		ug/L	5.000	ND	98.0	58.2-143	7.47	20	
1,3,5-Trimethylbenzene	5.24		ug/L	5.000	ND	105	90.4-120	0.959	20	
1,2,4-Trimethylbenzene	5.21		ug/L	5.000	ND	104	84.3-121	1.90	20	
Vinyl chloride	5.11		ug/L	5.000	ND	102	62.7-141	1.58	20	
m,p-Xylene	10.2		ug/L	10.00	ND	102	87.9-119	1.07	20	
o-Xylene	4.99		ug/L	5.000	ND	99.8	81.2-124	0.200	20	
Surrogate: Dibromofluoromethane	*26.0*		*ug/L*	*25.00*		*104*	*80.4-125*			
Surrogate: Toluene-d8	*25.3*		*ug/L*	*25.00*		*101*	*94.1-107*			
Surrogate: 4-Bromofluorobenzene	*24.6*		*ug/L*	*25.00*		*98.5*	*90.3-110*			

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305092 - EPA 3570										
Blank (A305092-BLK1)				Prepared: 05/28/2013 Analyzed: 05/28/2013 20:46						
Acenaphthene	ND	10	ug/kg wet							
Acenaphthylene	ND	10	ug/kg wet							
Anthracene	ND	10	ug/kg wet							
Benzo (a) anthracene	ND	10	ug/kg wet							
Benzo (a) pyrene	ND	10	ug/kg wet							
Benzo (b) fluoranthene	ND	10	ug/kg wet							
Benzo (e) pyrene	ND	10	ug/kg wet							
Benzo (g,h,i) perylene	ND	10	ug/kg wet							
Benzo (k) fluoranthene	ND	10	ug/kg wet							
Chrysene	ND	10	ug/kg wet							
Dibenz (a,h) anthracene	ND	10	ug/kg wet							
Fluoranthene	ND	10	ug/kg wet							
Fluorene	ND	10	ug/kg wet							
Indeno (1,2,3-cd) pyrene	ND	10	ug/kg wet							
Naphthalene	ND	10	ug/kg wet							
Phenanthrene	ND	10	ug/kg wet							
Pyrene	ND	10	ug/kg wet							
Surrogate: p-Terphenyl-d14	*473*		*ug/kg wet*	*500.0*		*94.5*	*70.6-127*			
LCS (A305092-BS1)				Prepared: 05/28/2013 Analyzed: 05/28/2013 21:20						
Acenaphthene	371	10	ug/kg wet	400.0		92.6	79.1-117			
Acenaphthylene	390	10	ug/kg wet	400.0		97.4	73.6-121			
Anthracene	379	10	ug/kg wet	400.0		94.7	68.3-122			
Benzo (a) anthracene	383	10	ug/kg wet	400.0		95.7	65.5-127			
Benzo (a) pyrene	377	10	ug/kg wet	400.0		94.2	61.3-130			
Benzo (b) fluoranthene	377	10	ug/kg wet	400.0		94.3	69.2-127			
Benzo (e) pyrene	362	10	ug/kg wet	400.0		90.5	71.3-118			
Benzo (g,h,i) perylene	361	10	ug/kg wet	400.0		90.2	67.4-123			
Benzo (k) fluoranthene	402	10	ug/kg wet	400.0		100	70.9-125			
Chrysene	380	10	ug/kg wet	400.0		94.9	72-121			
Dibenz (a,h) anthracene	360	10	ug/kg wet	400.0		90.1	58-128			
Fluoranthene	378	10	ug/kg wet	400.0		94.5	66.9-127			
Fluorene	385	10	ug/kg wet	400.0		96.2	76.2-116			
Indeno (1,2,3-cd) pyrene	358	10	ug/kg wet	400.0		89.4	59.3-129			
Naphthalene	381	10	ug/kg wet	400.0		95.4	76.2-119			
Phenanthrene	371	10	ug/kg wet	400.0		92.9	73.5-118			
Pyrene	384	10	ug/kg wet	400.0		96.0	66.2-127			
Surrogate: p-Terphenyl-d14	*470*		*ug/kg wet*	*500.0*		*94.0*	*70.6-127*			

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Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Polynuclear Aromatic Compounds by GC/MS with Selected Ion Monitoring - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305092 - EPA 3570										
Matrix Spike (A305092-MS1)	**Source: A132109-01**		Prepared: 05/28/2013 Analyzed: 05/28/2013 23:01							
Acenaphthene	402	11	ug/kg dry	449.1	ND	89.5	69.5-126			
Acenaphthylene	409	11	ug/kg dry	449.1	ND	91.1	45.4-153			
Anthracene	403	11	ug/kg dry	449.1	ND	89.7	51-140			
Benzo (a) anthracene	419	11	ug/kg dry	449.1	4.02	92.4	10.6-193			
Benzo (a) pyrene	426	11	ug/kg dry	449.1	10.2	92.5	11.4-183			
Benzo (b) fluoranthene	436	11	ug/kg dry	449.1	10.6	94.8	28.1-174			
Benzo (e) pyrene	396	11	ug/kg dry	449.1	8.17	86.4	21.4-170			
Benzo (g,h,i) perylene	411	11	ug/kg dry	449.1	8.71	89.5	33.7-181			
Benzo (k) fluoranthene	431	11	ug/kg dry	449.1	8.82	94.0	29.6-163			
Chrysene	410	11	ug/kg dry	449.1	8.35	89.4	12.2-188			
Dibenz (a,h) anthracene	409	11	ug/kg dry	449.1	5.93	89.7	42-151			
Fluoranthene	409	11	ug/kg dry	449.1	14.1	87.9	37.3-155			
Fluorene	408	11	ug/kg dry	449.1	ND	90.9	66.2-127			
Indeno (1,2,3-cd) pyrene	412	11	ug/kg dry	449.1	9.68	89.6	29.2-165			
Naphthalene	418	11	ug/kg dry	449.1	8.08	91.2	67.2-126			
Phenanthrene	398	11	ug/kg dry	449.1	5.91	87.2	50.9-140			
Pyrene	397	11	ug/kg dry	449.1	11.5	85.9	20.2-167			
Surrogate: p-Terphenyl-d14	*509*		*ug/kg dry*	*561.3*		*90.8*	*70.6-127*			
Matrix Spike Dup (A305092-MSD1)	**Source: A132109-01**		Prepared: 05/28/2013 Analyzed: 05/28/2013 23:35							
Acenaphthene	410	11	ug/kg dry	449.1	ND	91.2	69.5-126	1.90	20	
Acenaphthylene	422	11	ug/kg dry	449.1	ND	94.1	45.4-153	3.23	20	
Anthracene	407	11	ug/kg dry	449.1	ND	90.6	51-140	1.00	20	
Benzo (a) anthracene	426	11	ug/kg dry	449.1	4.02	94.0	10.6-193	1.72	20	
Benzo (a) pyrene	429	11	ug/kg dry	449.1	10.2	93.3	11.4-183	0.840	20	
Benzo (b) fluoranthene	415	11	ug/kg dry	449.1	10.6	90.2	28.1-174	4.99	20	
Benzo (e) pyrene	403	11	ug/kg dry	449.1	8.17	87.9	21.4-170	1.69	20	
Benzo (g,h,i) perylene	409	11	ug/kg dry	449.1	8.71	89.1	33.7-181	0.476	20	
Benzo (k) fluoranthene	455	11	ug/kg dry	449.1	8.82	99.4	29.6-163	5.61	20	
Chrysene	413	11	ug/kg dry	449.1	8.35	90.2	12.2-188	0.880	20	
Dibenz (a,h) anthracene	414	11	ug/kg dry	449.1	5.93	91.0	42-151	1.38	20	
Fluoranthene	411	11	ug/kg dry	449.1	14.1	88.3	37.3-155	0.454	20	
Fluorene	429	11	ug/kg dry	449.1	ND	95.5	66.2-127	4.93	20	
Indeno (1,2,3-cd) pyrene	414	11	ug/kg dry	449.1	9.68	90.1	29.2-165	0.557	20	
Naphthalene	430	11	ug/kg dry	449.1	8.08	94.0	67.2-126	3.07	20	
Phenanthrene	412	11	ug/kg dry	449.1	5.91	90.4	50.9-140	3.58	20	
Pyrene	415	11	ug/kg dry	449.1	11.5	89.8	20.2-167	4.48	20	
Surrogate: p-Terphenyl-d14	*500*		*ug/kg dry*	*561.3*		*89.0*	*70.6-127*			

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Natural Resource Technology Inc	Project: Former Wabash Alloys (Connell) - Oak Creek, WI	
23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Classical Chemistry Parameters - Quality Control

ECCS

Analyte	Result	Limit of Quantitation	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch A305081 - % Solids										
Duplicate (A305081-DUP1)	**Source: A132111-04**		Prepared: 05/22/2013 Analyzed: 05/23/2013 09:42							
% Solids	81.7	0.00	% by Weight		81.2			0.556	20	

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23713 West Paul Road, Unit D	Project Number: 2095	**Reported:**
Pewaukee WI, 53072	Project Manager: Jody Barbeau	05/29/2013

Notes and Definitions

X	Precision for the matrix spike duplicate, laboratory control sample duplicate or lab duplicate was outside of control limits.
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
E1	Estimated value because of quality control sample exceedances.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis. If the word 'dry' does not appear after the units, results are reported on an as-is basis.
RPD	Relative Percent Difference

Environmental Chemistry Consulting Services, Inc.
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COC# 052113-98

Lab Work Order #: A132109

Mail Report To:	Jody Barbeau
Company:	NRT
Address:	23713 W. Paul Rd , Unit D
	Pewaukee, WI 53072
E-mail Address:	jbarbeau@naturalrt.com
Invoice To:	Tracy Summit (tsummit@naturalrt.com)
Company:	NRT
Address:	same

Project Number: 2095
Project Name: Former Wabash Alloys - Connell property
Project Location: Oak Creek, WI
Turn Around (check one): ☐ Normal ☒ 5 BDs ☐ 3 BDs ☐ 2 BDs ☐ 24 hrs
If Rush, Report Due Date: 1 Week
Sampled By (Print): Ricky J Guenther Jr.

Preservation Codes / Analyses Requested

Sample Description	Collection Date	Collection Time	Matrix	Total # of Containers	PCBs method 8082	VOCs	PAHs	RCRA Metals			Comments	Lab ID	Lab Receipt Time
Fill 01	5/15/13	1230	S	5	☒	☒	☒	☒	☐	☐	Sample was kept frozen	01	
			S		☐	☐	☐	☐	☐	☐			
			S		☐	☐	☐	☐	☐	☐			
			S		☐	☐	☐	☐	☐	☐			
			S		☐	☐	☐	☐	☐	☐			
			S		☐	☐	☐	☐	☐	☐			
			S		☐	☐	☐	☐	☐	☐			
			S		☐	☐	☐	☐	☐	☐			
			S		☐	☐	☐	☐	☐	☐			
			S		☐	☐	☐	☐	☐	☐			

Preservation Codes
A=None B=HCL C=H_2SO_4
D=HNO_3 E=EnCore F=Methanol
G=NaOH O=Other (Indicate)

Matrix Codes
A=Air S=Soil W=Water O=Other

Rush TAT Multipliers
5 Business Days = 1.5x
3 Business Days = 2x
2 Business Days = 2.25x
24 Hours = 2.5x
must be pre-arranged

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
[signature]	5/21/13		[signature]	5-21-13	1045

Custody Seal: ☐ Present ☐ Absent ☐ Intact ☐ Not Intact
Seal #s:
Shipped Via: Walk-In
Receipt Temp: On ice
Temp Blank: ☐ Y ☐ N

Download this form at www.eccsmobilelab.com
WHITE - REPORT COPY YELLOW - LABORATORY COPY PINK - SAMPLER/SUBMITTER Rev. 5/11

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 29, 2013

Jessica Esser
ECCS
2525 Advance Road
Madison, WI 53718

RE: Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

Dear Jessica Esser:
Enclosed are the analytical results for sample(s) received by the laboratory on May 22, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dan Milewsky

dan.milewsky@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 11888
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
US Dept of Agriculture #: S-76505
Wisconsin Certification #: 405132750

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SAMPLE SUMMARY

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4078277001	A132109-01	Solid	05/15/13 12:30	05/22/13 09:20

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SAMPLE ANALYTE COUNT

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4078277001	**A132109-01**	EPA 6010	DLB	7
		EPA 7471	CMS	1
		ASTM D2974-87	SKW	1

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ANALYTICAL RESULTS

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

Sample: A132109-01 **Lab ID: 4078277001** Collected: 05/15/13 12:30 Received: 05/22/13 09:20 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	**4.8**	mg/kg	1.9	0.52	1	05/23/13 11:25	05/23/13 19:04	7440-38-2	
Barium	**23.8**	mg/kg	0.48	0.083	1	05/23/13 11:25	05/23/13 19:04	7440-39-3	
Cadmium	**0.22J**	mg/kg	0.48	0.049	1	05/23/13 11:25	05/23/13 19:04	7440-43-9	
Chromium	**11.3**	mg/kg	0.48	0.12	1	05/23/13 11:25	05/23/13 19:04	7440-47-3	
Lead	**6.0**	mg/kg	0.96	0.28	1	05/23/13 11:25	05/23/13 19:04	7439-92-1	
Selenium	**<0.57**	mg/kg	1.9	0.57	1	05/23/13 11:25	05/23/13 19:04	7782-49-2	
Silver	**<0.20**	mg/kg	0.96	0.20	1	05/23/13 11:25	05/23/13 19:04	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.0024J**	mg/kg	0.0043	0.0021	1	05/23/13 10:28	05/23/13 13:58	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**9.8**	%	0.10	0.10	1		05/28/13 14:07		

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QUALITY CONTROL DATA

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

QC Batch: MERP/3664
QC Batch Method: EPA 7471
Analysis Method: EPA 7471
Analysis Description: 7471 Mercury
Associated Lab Samples: 4078277001

METHOD BLANK: 795119 Matrix: Solid
Associated Lab Samples: 4078277001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.0022	0.0045	05/23/13 13:25	

LABORATORY CONTROL SAMPLE: 795120

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.17	0.16	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 795121 795122

Parameter	Units	4078137007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.45	.22	.21	0.73	0.68	130	108	85-115	7	20	M0

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

QC Batch: MPRP/8524
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 4078277001

METHOD BLANK: 795229 Matrix: Solid
Associated Lab Samples: 4078277001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<0.54	2.0	05/23/13 18:07	
Barium	mg/kg	<0.087	0.50	05/23/13 18:07	
Cadmium	mg/kg	<0.051	0.50	05/23/13 18:07	
Chromium	mg/kg	<0.13	0.50	05/23/13 18:07	
Lead	mg/kg	<0.29	1.0	05/23/13 18:07	
Selenium	mg/kg	<0.59	2.0	05/23/13 18:07	
Silver	mg/kg	<0.21	1.0	05/23/13 18:07	

LABORATORY CONTROL SAMPLE: 795230

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	49.6	99	80-120	
Barium	mg/kg	50	47.8	96	80-120	
Cadmium	mg/kg	50	49.5	99	80-120	
Chromium	mg/kg	50	49.9	100	80-120	
Lead	mg/kg	50	51.6	103	80-120	
Selenium	mg/kg	50	49.0	98	80-120	
Silver	mg/kg	25	23.7	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 795231 795232

Parameter	Units	4078124001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	13.3	49.8	49.8	59.5	58.3	93	90	75-125	2	20	
Barium	mg/kg	142	49.8	49.8	180	164	76	44	75-125	9	20	M0
Cadmium	mg/kg	0.85	49.8	49.8	47.1	48.0	93	95	75-125	2	20	
Chromium	mg/kg	12.0	49.8	49.8	58.3	57.2	93	91	75-125	2	20	
Lead	mg/kg	687	49.8	49.8	322	291	-734	-795	75-125	10	20	P6
Selenium	mg/kg	1.3J	49.8	49.8	45.9	47.4	90	92	75-125	3	20	
Silver	mg/kg	<0.21	24.9	24.9	22.4	23.1	90	92	75-125	3	20	

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QUALITY CONTROL DATA

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

QC Batch: PMST/8487
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 4078277001

SAMPLE DUPLICATE: 797989

Parameter	Units	4078448001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.0	7.1	1	10	

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QUALIFIERS

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: A132109 FORMER WABASH ALLOYS
Pace Project No.: 4078277

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4078277001	**A132109-01**	EPA 3050	MPRP/8524	EPA 6010	ICP/7567
4078277001	**A132109-01**	EPA 7471	MERP/3664	EPA 7471	MERC/4558
4078277001	**A132109-01**	ASTM D2974-87	PMST/8487		

SUBCONTRACT ORDER

ECCS

A132109

JBK

478277

SENDING LABORATORY:

ECCS
2525 Advance Road
Madison, WI 53718
Phone: 608.221.8700
Fax: 608,221,4889
Project Manager: Jessica Esser

RECEIVING LABORATORY:

Pace Analytical
1241 Bellevue Street, Suite 9
Green Bay, WI 54302
Phone :(920) 469-2436
Fax: (920) 469-8827

Turn around Time: ____ Normal X Rush — 4 day TAT Due 05-29-13

Project Name: Former Wabash Alloys (Connell) - Oak Creek, WI

	Laboratory ID	Comments
Lab ID: A132109-01 Soil	Sampled: 05/15/2013 12:30	
RCRA Metals		1-4ozpA
Containers Supplied:		
03_4oz WM Amber Glass		

Jessica Esser 05-21-13 1700
Released By Date Received By Date

Dunham 5/22/13 0920 EqHelvey Pace GB 5/22/13 0920
Released By Date Received By Date

Pace Analytical Services
1241 Bellevue Street, S
Green Bay, WI

Pace Analytical™

Sample Condition Upon Receipt

Client Name: ECCS Project # 4078277

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other Dunham

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used SR47 Type of Ice: Wet Blue Dry (None) ☐ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 19 /Corr: 19 Biological Tissue is Frozen: ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Person examining contents:
Date: 5/22/13
Initials: EMH

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

			Comments:
Chain of Custody Present:	☑Yes	☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes	☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☑No ☐N/A	6.
Rush Turn Around Time Requested:	☑Yes	☐No ☐N/A	7.
Sufficient Volume:	☑Yes	☐No ☐N/A	8.
Correct Containers Used:	☑Yes	☐No ☐N/A	9.
-Pace Containers Used:	☐Yes	☑No ☐N/A	
-Pace IR Containers Used:	☐Yes	☐No ☑N/A	
Containers Intact:	☑Yes	☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No ☑N/A	11.
Sample Labels match COC:	☑Yes	☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S			
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes	☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes	☐No ☑N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐Yes	☐No	Initial when completed / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes	☐No ☑N/A	14.
Trip Blank Present:	☐Yes	☐No ☑N/A	15.
Trip Blank Custody Seals Present	☐Yes	☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: Date: 5/22/13