



22-Jul-2010

Eric Matzner  
Pastor, Behling & Wheeler, LLC  
2201 Double Creek Drive  
Suite 4004  
Round Rock, TX 78664

Tel: (512) 671-3434  
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Re: Waste Characterization

Work Order: **1007401**

Dear Eric,

ALS Laboratory Group received 1 sample on 13-Jul-2010 06:25 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Laboratory Group and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 26.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in black ink that reads "R. Kevin Given".

Electronically approved by: R. Kevin Given

R. Kevin Given  
Project Manager



Certificate No: TX: T104704231-10-3

ADDRESS 10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

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**Client:** Pastor, Behling & Wheeler, LLC  
**Project:** Waste Characterization  
**Work Order:** 1007401

**Work Order Sample Summary**

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<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1007401-01	WG-1620-V150-20100713	Water		7/13/2010 17:20	7/13/2010 18:25	<input type="checkbox"/>

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**Client:** Pastor, Behling & Wheeler, LLC  
**Project:** Waste Characterization  
**Work Order:** 1007401

**Case Narrative**

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Batch R94066, Corrosivity: Sample WG-1620-V150-20100713 was received outside of method holding time. The results and associated QC are flagged with an H as appropriate.

Client: Pastor, Behling & Wheeler, LLC

Project: Waste Characterization

Work Order: 1007401

Sample ID: WG-1620-V150-20100713

Lab ID: 1007401-01

Collection Date: 7/13/2010 05:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>LOW-LEVEL TEXAS TPH</b>			<b>TX1005</b>		Prep Date: <b>7/15/2010</b>	Analyst: <b>SE</b>
nC6 to nC12	U		0.47	mg/L	1	7/16/2010 11:45 AM
>nC12 to nC28	U		0.47	mg/L	1	7/16/2010 11:45 AM
>nC28 to nC35	U		0.47	mg/L	1	7/16/2010 11:45 AM
Total Petroleum Hydrocarbon	U		0.47	mg/L	1	7/16/2010 11:45 AM
Surr: 2-Fluorobiphenyl	111		70-130	%REC	1	7/16/2010 11:45 AM
Surr: Trifluoromethyl benzene	107		70-130	%REC	1	7/16/2010 11:45 AM
<b>BTEX</b>			<b>SW8021B</b>			Analyst: <b>KKP</b>
Benzene	U		1.0	µg/L	1	7/16/2010 02:11 AM
Toluene	U		1.0	µg/L	1	7/16/2010 02:11 AM
Ethylbenzene	<b>0.72</b>	J	<b>1.0</b>	µg/L	1	7/16/2010 02:11 AM
Xylenes, Total	<b>3.9</b>		<b>3.0</b>	µg/L	1	7/16/2010 02:11 AM
Surr: 4-Bromofluorobenzene	106		77-129	%REC	1	7/16/2010 02:11 AM
Surr: Trifluorotoluene	114		75-130	%REC	1	7/16/2010 02:11 AM
<b>TCLP SEMIVOLATILES</b>			<b>SW1311/8270</b>		Prep Date: <b>7/20/2010</b>	Analyst: <b>KMB</b>
2,4,5-Trichlorophenol	U		5.0	µg/L	1	7/20/2010 05:12 PM
2,4,6-Trichlorophenol	U		5.0	µg/L	1	7/20/2010 05:12 PM
2,4-Dinitrotoluene	U		5.0	µg/L	1	7/20/2010 05:12 PM
Cresols, Total	U		15	µg/L	1	7/20/2010 05:12 PM
Hexachlorobenzene	U		5.0	µg/L	1	7/20/2010 05:12 PM
Hexachlorobutadiene	U		5.0	µg/L	1	7/20/2010 05:12 PM
Hexachloroethane	U		5.0	µg/L	1	7/20/2010 05:12 PM
Nitrobenzene	U		5.0	µg/L	1	7/20/2010 05:12 PM
Pentachlorophenol	U		5.0	µg/L	1	7/20/2010 05:12 PM
Pyridine	U		5.0	µg/L	1	7/20/2010 05:12 PM
Surr: 2,4,6-Tribromophenol	74.2		42-124	%REC	1	7/20/2010 05:12 PM
Surr: 2-Fluorobiphenyl	60.1		48-120	%REC	1	7/20/2010 05:12 PM
Surr: 2-Fluorophenol	55.4		20-120	%REC	1	7/20/2010 05:12 PM
Surr: 4-Terphenyl-d14	75.4		51-135	%REC	1	7/20/2010 05:12 PM
Surr: Nitrobenzene-d5	66.9		41-120	%REC	1	7/20/2010 05:12 PM
Surr: Phenol-d6	67.0		20-120	%REC	1	7/20/2010 05:12 PM
<b>LOW-LEVEL SEMIVOLATILES</b>			<b>SW8270</b>		Prep Date: <b>7/20/2010</b>	Analyst: <b>LG</b>
1,2-Diphenylhydrazine	U		0.20	µg/L	1	7/21/2010 06:18 PM
2,4-Dimethylphenol	U		0.20	µg/L	1	7/21/2010 06:18 PM
2,4-Dinitrotoluene	U		0.20	µg/L	1	7/21/2010 06:18 PM
2,6-Dinitrotoluene	U		0.20	µg/L	1	7/21/2010 06:18 PM
2-Chloronaphthalene	U		0.20	µg/L	1	7/21/2010 06:18 PM
2-Methylnaphthalene	U		0.20	µg/L	1	7/21/2010 06:18 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC

Project: Waste Characterization

Work Order: 1007401

Sample ID: WG-1620-V150-20100713

Lab ID: 1007401-01

Collection Date: 7/13/2010 05:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
4,6-Dinitro-2-methylphenol	U		0.20	µg/L	1	7/21/2010 06:18 PM
4-Nitrophenol	U		1.0	µg/L	1	7/21/2010 06:18 PM
Acenaphthene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Acenaphthylene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Anthracene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Benz(a)anthracene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Benzo(a)pyrene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Bis(2-chloroethoxy)methane	U		0.20	µg/L	1	7/21/2010 06:18 PM
<b>Bis(2-ethylhexyl)phthalate</b>	<b>1.5</b>		<b>0.20</b>	<b>µg/L</b>	1	7/21/2010 06:18 PM
Chrysene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Di-n-butyl phthalate	U		0.20	µg/L	1	7/21/2010 06:18 PM
Dibenzofuran	U		0.20	µg/L	1	7/21/2010 06:18 PM
Fluoranthene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Fluorene	U		0.20	µg/L	1	7/21/2010 06:18 PM
N-Nitrosodiphenylamine	U		0.20	µg/L	1	7/21/2010 06:18 PM
Naphthalene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Nitrobenzene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Pentachlorophenol	U		0.20	µg/L	1	7/21/2010 06:18 PM
Phenanthrene	U		0.20	µg/L	1	7/21/2010 06:18 PM
<b>Phenol</b>	<b>0.17</b>	J	<b>0.20</b>	<b>µg/L</b>	1	7/21/2010 06:18 PM
Pyrene	U		0.20	µg/L	1	7/21/2010 06:18 PM
Surr: 2,4,6-Tribromophenol	65.2		34-129	%REC	1	7/21/2010 06:18 PM
Surr: 2-Fluorobiphenyl	55.6		40-125	%REC	1	7/21/2010 06:18 PM
Surr: 2-Fluorophenol	46.1		20-120	%REC	1	7/21/2010 06:18 PM
Surr: 4-Terphenyl-d14	57.4		40-135	%REC	1	7/21/2010 06:18 PM
Surr: Nitrobenzene-d5	54.3		41-120	%REC	1	7/21/2010 06:18 PM
Surr: Phenol-d6	57.0		20-120	%REC	1	7/21/2010 06:18 PM
<b>REACTIVE CYANIDE</b>			<b>SW-846</b>			Analyst: <b>HN</b>
Reactive Cyanide	U	n	40.0	mg/Kg	1	7/15/2010 12:00 PM
<b>REACTIVE SULFIDE</b>			<b>SW-846</b>			Analyst: <b>HN</b>
Reactive Sulfide	U	n	40.0	mg/Kg	1	7/15/2010 12:00 PM
<b>IGNITIBILITY</b>			<b>SW1010</b>			Analyst: <b>JLC</b>
Ignitability	> 212		50.0	°F	1	7/15/2010
<b>PH</b>			<b>SM4500H+ B</b>			Analyst: <b>JLC</b>
pH	6.57	H	0.100	pH units	1	7/15/2010

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Laboratory Group

Date: 22-Jul-10

**Client:** Pastor, Behling & Wheeler, LLC  
**Work Order:** 1007401  
**Project:** Waste Characterization

**QC BATCH REPORT**

Batch ID: **44539** Instrument ID **FID-10** Method: **TX1005**

MBLK		Sample ID: <b>FBLKW1-100715-44539</b>			Units: <b>mg/L</b>			Analysis Date: <b>7/16/2010 10:10 AM</b>		
Client ID:		Run ID: <b>FID-10_100715A</b>			SeqNo: <b>2030670</b>			Prep Date: <b>7/15/2010</b>		DF: <b>1</b>
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	U	0.50								
>nC12 to nC28	U	0.50								
>nC28 to nC35	U	0.50								
Total Petroleum Hydrocarbon	U	0.50								
<i>Surr: 2-Fluorobiphenyl</i>	2.221	0	2.5	0	88.8	70-130	0			
<i>Surr: Trifluoromethyl benzene</i>	2.167	0	2.5	0	86.7	70-130	0			

LCS		Sample ID: <b>FLCSW1-100715-44539</b>			Units: <b>mg/L</b>			Analysis Date: <b>7/16/2010 10:42 AM</b>		
Client ID:		Run ID: <b>FID-10_100715A</b>			SeqNo: <b>2030673</b>			Prep Date: <b>7/15/2010</b>		DF: <b>1</b>
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	20	0.50	25	0	80	75-125	0			
>nC12 to nC28	23.44	0.50	25	0	93.7	75-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	3.196	0	2.5	0	128	70-130	0			
<i>Surr: Trifluoromethyl benzene</i>	2.645	0	2.5	0	106	70-130	0			

LCSD		Sample ID: <b>FLCSDW1-100715-44539</b>			Units: <b>mg/L</b>			Analysis Date: <b>7/16/2010 11:13 AM</b>		
Client ID:		Run ID: <b>FID-10_100715A</b>			SeqNo: <b>2030675</b>			Prep Date: <b>7/15/2010</b>		DF: <b>1</b>
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	20.46	0.50	25	0	81.8	75-125	20	2.31	20	
>nC12 to nC28	22.96	0.50	25	0	91.9	75-125	23.44	2.04	20	
<i>Surr: 2-Fluorobiphenyl</i>	3.226	0	2.5	0	129	70-130	3.196	0.921	20	
<i>Surr: Trifluoromethyl benzene</i>	2.681	0	2.5	0	107	70-130	2.645	1.38	20	

MS		Sample ID: <b>1007401-01BMS</b>			Units: <b>mg/L</b>			Analysis Date: <b>7/16/2010 12:16 PM</b>		
Client ID: <b>WG-1620-V150-20100713</b>		Run ID: <b>FID-10_100715A</b>			SeqNo: <b>2030677</b>			Prep Date: <b>7/15/2010</b>		DF: <b>1</b>
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	18.43	0.48	24.04	0	76.7	75-125	0			
>nC12 to nC28	19.03	0.48	24.04	0	79.2	75-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	3.016	0	2.404	0	125	70-130	0			
<i>Surr: Trifluoromethyl benzene</i>	2.428	0	2.404	0	101	70-130	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Pastor, Behling & Wheeler, LLC  
**Work Order:** 1007401  
**Project:** Waste Characterization

# QC BATCH REPORT

Batch ID: **44539**      Instrument ID **FID-10**      Method: **TX1005**

MSD		Sample ID: <b>1007401-01BMSD</b>			Units: <b>mg/L</b>		Analysis Date: <b>7/16/2010 12:48 PM</b>			
Client ID: <b>WG-1620-V150-20100713</b>		Run ID: <b>FID-10_100715A</b>			SeqNo: <b>2030678</b>		Prep Date: <b>7/15/2010</b>		DF: <b>1</b>	
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
nC6 to nC12	18.77	0.49	24.37	0	77	75-125	18.43	1.81	20	
>nC12 to nC28	20.89	0.49	24.37	0	85.7	75-125	19.03	9.34	20	
<i>Surr: 2-Fluorobiphenyl</i>	2.904	0	2.437	0	119	70-130	3.016	3.8	20	
<i>Surr: Trifluoromethyl benzene</i>	2.443	0	2.437	0	100	70-130	2.428	0.63	20	

The following samples were analyzed in this batch: 1007401-01B

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Pastor, Behling & Wheeler, LLC  
**Work Order:** 1007401  
**Project:** Waste Characterization

# QC BATCH REPORT

Batch ID: **R94162**      Instrument ID **BTEX3**      Method: **SW8021B**

MBLK		Sample ID: <b>BBLKW1-071510-R94162</b>				Units: <b>µg/L</b>		Analysis Date: <b>7/15/2010 09:25 PM</b>		
Client ID:		Run ID: <b>BTEX3_100715B</b>		SeqNo: <b>2030241</b>	Prep Date:		DF: <b>1</b>			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	1.0								
Toluene	U	1.0								
Ethylbenzene	U	1.0								
Xylenes, Total	U	3.0								
<i>Surr: 4-Bromofluorobenzene</i>	31.21	1.0	30	0	104	77-129		0		
<i>Surr: Trifluorotoluene</i>	28.03	1.0	30	0	93.4	75-130		0		

LCS		Sample ID: <b>BLC SW1-071510-R94162</b>				Units: <b>µg/L</b>		Analysis Date: <b>7/15/2010 08:41 PM</b>		
Client ID:		Run ID: <b>BTEX3_100715B</b>		SeqNo: <b>2030239</b>	Prep Date:		DF: <b>1</b>			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.89	1.0	20	0	89.5	77-126		0		
Toluene	18.13	1.0	20	0	90.7	80-124		0		
Ethylbenzene	17.55	1.0	20	0	87.8	76-125		0		
Xylenes, Total	52.71	3.0	60	0	87.8	79-124		0		
<i>Surr: 4-Bromofluorobenzene</i>	31.58	1.0	30	0	105	77-129		0		
<i>Surr: Trifluorotoluene</i>	28.3	1.0	30	0	94.3	75-130		0		

MS		Sample ID: <b>1007383-04AMS</b>				Units: <b>µg/L</b>		Analysis Date: <b>7/16/2010 05:09 AM</b>		
Client ID:		Run ID: <b>BTEX3_100715B</b>		SeqNo: <b>2030263</b>	Prep Date:		DF: <b>1</b>			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.39	1.0	20	0	112	77-126		0		
Toluene	22.47	1.0	20	0.2496	111	80-124		0		
Ethylbenzene	20.72	1.0	20	0	104	76-125		0		
Xylenes, Total	63.36	3.0	60	0	106	79-124		0		
<i>Surr: 4-Bromofluorobenzene</i>	34.24	1.0	30	0	114	77-129		0		
<i>Surr: Trifluorotoluene</i>	31.74	1.0	30	0	106	75-130		0		

MSD		Sample ID: <b>1007383-04AMSD</b>				Units: <b>µg/L</b>		Analysis Date: <b>7/16/2010 05:29 AM</b>		
Client ID:		Run ID: <b>BTEX3_100715B</b>		SeqNo: <b>2030264</b>	Prep Date:		DF: <b>1</b>			
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.26	1.0	20	0	111	77-126	22.39	0.584	20	
Toluene	22.27	1.0	20	0.2496	110	80-124	22.47	0.909	20	
Ethylbenzene	20.53	1.0	20	0	103	76-125	20.72	0.897	20	
Xylenes, Total	62.66	3.0	60	0	104	79-124	63.36	1.1	20	
<i>Surr: 4-Bromofluorobenzene</i>	34.46	1.0	30	0	115	77-129	34.24	0.616	20	
<i>Surr: Trifluorotoluene</i>	31.83	1.0	30	0	106	75-130	31.74	0.271	20	

The following samples were analyzed in this batch: 1007401-01A

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.



**Client:** Pastor, Behling & Wheeler, LLC  
**Work Order:** 1007401  
**Project:** Waste Characterization

# QC BATCH REPORT

Batch ID: **44640**      Instrument ID **SV-5**      Method: **SW1311/8270**

MBLK		Sample ID: <b>SBLKT1-100720-44640</b>			Units: <b>µg/L</b>		Analysis Date: <b>7/20/2010 01:03 PM</b>			
Client ID:		Run ID: <b>SV-5_100720A</b>			SeqNo: <b>2033993</b>		Prep Date: <b>7/20/2010</b>		DF: <b>1</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
<i>Surr: 2,4,6-Tribromophenol</i>	63.37	5.0	100	0	63.4	42-124	0			
<i>Surr: 2-Fluorobiphenyl</i>	61.65	5.0	100	0	61.6	48-120	0			
<i>Surr: 2-Fluorophenol</i>	49.69	5.0	100	0	49.7	20-120	0			
<i>Surr: 4-Terphenyl-d14</i>	77.87	5.0	100	0	77.9	51-135	0			
<i>Surr: Nitrobenzene-d5</i>	66.99	5.0	100	0	67	41-120	0			
<i>Surr: Phenol-d6</i>	55.08	5.0	100	0	55.1	20-120	0			

LCS		Sample ID: <b>SLCST1-100720-44640</b>			Units: <b>µg/L</b>		Analysis Date: <b>7/20/2010 03:41 PM</b>			
Client ID:		Run ID: <b>SV-5_100720A</b>			SeqNo: <b>2033999</b>		Prep Date: <b>7/20/2010</b>		DF: <b>1</b>	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	74.95	5.0	100	0	74.9	52-115	0			
2,4,6-Trichlorophenol	73.12	5.0	100	0	73.1	53-115	0			
2,4-Dinitrotoluene	40.74	5.0	50	0	81.5	56-115	0			
Cresols, Total	214.6	15	250	0	85.9	35-115	0			
Hexachlorobenzene	36.39	5.0	50	0	72.8	54-115	0			
Hexachlorobutadiene	33.99	5.0	50	0	68	51-115	0			
Hexachloroethane	37.64	5.0	50	0	75.3	54-115	0			
Nitrobenzene	40.37	5.0	50	0	80.7	40-124	0			
Pentachlorophenol	64.6	5.0	100	0	64.6	45-125	0			
Pyridine	25.58	5.0	50	0	51.2	34-115	0			
<i>Surr: 2,4,6-Tribromophenol</i>	71.02	5.0	100	0	71	42-124	0			
<i>Surr: 2-Fluorobiphenyl</i>	70.97	5.0	100	0	71	48-120	0			
<i>Surr: 2-Fluorophenol</i>	70.58	5.0	100	0	70.6	20-120	0			
<i>Surr: 4-Terphenyl-d14</i>	79.69	5.0	100	0	79.7	51-135	0			
<i>Surr: Nitrobenzene-d5</i>	73.68	5.0	100	0	73.7	41-120	0			
<i>Surr: Phenol-d6</i>	75.88	5.0	100	0	75.9	20-120	0			

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Pastor, Behling & Wheeler, LLC  
**Work Order:** 1007401  
**Project:** Waste Characterization

# QC BATCH REPORT

Batch ID: **44640**      Instrument ID **SV-5**      Method: **SW1311/8270**

**LCSD**      Sample ID: **SLCSDT1-100720-44640**      Units: **µg/L**      Analysis Date: **7/20/2010 02:56 PM**

Client ID:      Run ID: **SV-5\_100720A**      SeqNo: **2033997**      Prep Date: **7/20/2010**      DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	73.8	5.0	100	0	73.8	52-115	74.95	1.55	25	
2,4,6-Trichlorophenol	71.09	5.0	100	0	71.1	53-115	73.12	2.82	25	
2,4-Dinitrotoluene	40.63	5.0	50	0	81.3	56-115	40.74	0.266	25	
Cresols, Total	173.5	15	250	0	69.4	35-115	214.6	21.2	25	
Hexachlorobenzene	35.31	5.0	50	0	70.6	54-115	36.39	3.01	25	
Hexachlorobutadiene	37.44	5.0	50	0	74.9	51-115	33.99	9.64	25	
Hexachloroethane	37.98	5.0	50	0	76	54-115	37.64	0.882	25	
Nitrobenzene	39.29	5.0	50	0	78.6	40-124	40.37	2.72	25	
Pentachlorophenol	54.25	5.0	100	0	54.2	45-125	64.6	17.4	25	
Pyridine	30.32	5.0	50	0	60.6	34-115	25.58	16.9	25	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>62.84</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>62.8</i>	<i>42-124</i>	<i>71.02</i>	<i>12.2</i>	<i>25</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>72.2</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>72.2</i>	<i>48-120</i>	<i>70.97</i>	<i>1.71</i>	<i>25</i>	
<i>Surr: 2-Fluorophenol</i>	<i>66.32</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>66.3</i>	<i>20-120</i>	<i>70.58</i>	<i>6.23</i>	<i>25</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>70.48</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>70.5</i>	<i>51-135</i>	<i>79.69</i>	<i>12.3</i>	<i>25</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>74.55</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>74.6</i>	<i>41-120</i>	<i>73.68</i>	<i>1.18</i>	<i>25</i>	
<i>Surr: Phenol-d6</i>	<i>65.24</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>65.2</i>	<i>20-120</i>	<i>75.88</i>	<i>15.1</i>	<i>25</i>	

The following samples were analyzed in this batch:

1007401-01E

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Pastor, Behling & Wheeler, LLC  
**Work Order:** 1007401  
**Project:** Waste Characterization

# QC BATCH REPORT

Batch ID: **44654**      Instrument ID **SV-4**      Method: **SW8270**

**MBLK**      Sample ID: **SBLKW2-100720-44654**      Units: **µg/L**      Analysis Date: **7/21/2010 04:16 PM**

Client ID:      Run ID: **SV-4\_100721A**      SeqNo: **2036006**      Prep Date: **7/20/2010**      DF: **1**

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Diphenylhydrazine	U	0.20								
2,4-Dimethylphenol	U	0.20								
2,4-Dinitrotoluene	U	0.20								
2,6-Dinitrotoluene	U	0.20								
2-Chloronaphthalene	U	0.20								
2-Methylnaphthalene	U	0.20								
4,6-Dinitro-2-methylphenol	U	0.20								
4-Nitrophenol	U	1.0								
Acenaphthene	U	0.20								
Acenaphthylene	U	0.20								
Anthracene	U	0.20								
Benz(a)anthracene	U	0.20								
Benzo(a)pyrene	U	0.20								
Bis(2-chloroethoxy)methane	U	0.20								
Bis(2-ethylhexyl)phthalate	U	0.20								
Chrysene	U	0.20								
Di-n-butyl phthalate	U	0.20								
Dibenzofuran	U	0.20								
Fluoranthene	U	0.20								
Fluorene	U	0.20								
N-Nitrosodiphenylamine	U	0.20								
Naphthalene	U	0.20								
Nitrobenzene	U	0.20								
Pentachlorophenol	U	0.20								
Phenanthrene	U	0.20								
Phenol	U	0.20								
Pyrene	U	0.20								
<i>Surr: 2,4,6-Tribromophenol</i>	3.489	0.20	5	0	69.8	34-129		0		
<i>Surr: 2-Fluorobiphenyl</i>	2.683	0.20	5	0	53.7	40-125		0		
<i>Surr: 2-Fluorophenol</i>	3.042	0.20	5	0	60.8	20-120		0		
<i>Surr: 4-Terphenyl-d14</i>	3.2	0.20	5	0	64	40-135		0		
<i>Surr: Nitrobenzene-d5</i>	3.757	0.20	5	0	75.1	41-120		0		
<i>Surr: Phenol-d6</i>	3.32	0.20	5	0	66.4	20-120		0		

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC  
 Work Order: 1007401  
 Project: Waste Characterization

# QC BATCH REPORT

Batch ID: 44654 Instrument ID SV-4 Method: SW8270

LCS Sample ID: SLCSW2-100720-44654 Units: µg/L Analysis Date: 7/21/2010 04:37 PM

Client ID: Run ID: SV-4\_100721A SeqNo: 2036007 Prep Date: 7/20/2010 DF: 1

Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2-Diphenylhydrazine	2.734	0.20	5	0	54.7	39-127	0			
2,4-Dimethylphenol	3.165	0.20	5	0	63.3	35-120	0			
2,4-Dinitrotoluene	3.788	0.20	5	0	75.8	50-122	0			
2,6-Dinitrotoluene	3.921	0.20	5	0	78.4	50-120	0			
2-Chloronaphthalene	3.744	0.20	5	0	74.9	50-120	0			
2-Methylnaphthalene	3.446	0.20	5	0	68.9	50-120	0			
4,6-Dinitro-2-methylphenol	3.313	0.20	5	0	66.3	25-121	0			
4-Nitrophenol	3.814	1.0	5	0	76.3	30-130	0			
Acenaphthene	3.082	0.20	5	0	61.6	45-120	0			
Acenaphthylene	3.362	0.20	5	0	67.2	47-120	0			
Anthracene	3.52	0.20	5	0	70.4	45-120	0			
Benz(a)anthracene	3.582	0.20	5	0	71.6	40-120	0			
Benzo(a)pyrene	3.494	0.20	5	0	69.9	45-120	0			
Bis(2-chloroethoxy)methane	3.221	0.20	5	0	64.4	45-120	0			
Bis(2-ethylhexyl)phthalate	3.916	0.20	5	0	78.3	40-139	0			
Chrysene	3.518	0.20	5	0	70.4	43-120	0			
Di-n-butyl phthalate	3.784	0.20	5	0	75.7	45-123	0			
Dibenzofuran	3.417	0.20	5	0	68.3	50-120	0			
Fluoranthene	3.832	0.20	5	0	76.6	45-125	0			
Fluorene	3.337	0.20	5	0	66.7	49-120	0			
N-Nitrosodiphenylamine	2.7	0.20	5	0	54	40-125	0			
Naphthalene	3.356	0.20	5	0	67.1	45-120	0			
Nitrobenzene	3.281	0.20	5	0	65.6	44-120	0			
Pentachlorophenol	2.059	0.20	5	0	41.2	19-121	0			
Phenanthrene	3.46	0.20	5	0	69.2	45-121	0			
Phenol	3.182	0.20	5	0	63.6	20-124	0			
Pyrene	3.469	0.20	5	0	69.4	40-130	0			
Surr: 2,4,6-Tribromophenol	3.344	0.20	5	0	66.9	34-129	0			
Surr: 2-Fluorobiphenyl	3.164	0.20	5	0	63.3	40-125	0			
Surr: 2-Fluorophenol	2.586	0.20	5	0	51.7	20-120	0			
Surr: 4-Terphenyl-d14	2.846	0.20	5	0	56.9	40-135	0			
Surr: Nitrobenzene-d5	3.138	0.20	5	0	62.8	41-120	0			
Surr: Phenol-d6	3.086	0.20	5	0	61.7	20-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC  
 Work Order: 1007401  
 Project: Waste Characterization

# QC BATCH REPORT

Batch ID: 44654 Instrument ID SV-4 Method: SW8270

LCSD	Sample ID: SLCS DW2-100720-44654	Units: µg/L					Analysis Date: 7/21/2010 04:57 PM				
Client ID:	Run ID: SV-4_100721A	SeqNo: 2036008			Prep Date: 7/20/2010		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,2-Diphenylhydrazine	2.382	0.20	5	0	47.6	39-127	2.734	13.8	20		
2,4-Dimethylphenol	3.043	0.20	5	0	60.9	35-120	3.165	3.91	20		
2,4-Dinitrotoluene	3.457	0.20	5	0	69.1	50-122	3.788	9.14	20		
2,6-Dinitrotoluene	3.636	0.20	5	0	72.7	50-120	3.921	7.56	20		
2-Chloronaphthalene	4.214	0.20	5	0	84.3	50-120	3.744	11.8	20		
2-Methylnaphthalene	3.294	0.20	5	0	65.9	50-120	3.446	4.51	20		
4,6-Dinitro-2-methylphenol	2.733	0.20	5	0	54.7	25-121	3.313	19.2	20		
4-Nitrophenol	4.294	1.0	5	0	85.9	30-130	3.814	11.8	20		
Acenaphthene	2.831	0.20	5	0	56.6	45-120	3.082	8.49	20		
Acenaphthylene	3.236	0.20	5	0	64.7	47-120	3.362	3.82	20		
Anthracene	3.347	0.20	5	0	66.9	45-120	3.52	5.02	20		
Benz(a)anthracene	3.32	0.20	5	0	66.4	40-120	3.582	7.59	20		
Benzo(a)pyrene	3.607	0.20	5	0	72.1	45-120	3.494	3.19	20		
Bis(2-chloroethoxy)methane	3.012	0.20	5	0	60.2	45-120	3.221	6.72	20		
Bis(2-ethylhexyl)phthalate	3.626	0.20	5	0	72.5	40-139	3.916	7.69	20		
Chrysene	3.276	0.20	5	0	65.5	43-120	3.518	7.13	20		
Di-n-butyl phthalate	3.654	0.20	5	0	73.1	45-123	3.784	3.49	20		
Dibenzofuran	3.153	0.20	5	0	63.1	50-120	3.417	8.05	20		
Fluoranthene	3.539	0.20	5	0	70.8	45-125	3.832	7.95	20		
Fluorene	3.709	0.20	5	0	74.2	49-120	3.337	10.6	20		
N-Nitrosodiphenylamine	2.37	0.20	5	0	47.4	40-125	2.7	13	20		
Naphthalene	3.183	0.20	5	0	63.7	45-120	3.356	5.3	20		
Nitrobenzene	3.12	0.20	5	0	62.4	44-120	3.281	5.04	20		
Pentachlorophenol	1.98	0.20	5	0	39.6	19-121	2.059	3.94	20		
Phenanthrene	3.21	0.20	5	0	64.2	45-121	3.46	7.49	20		
Phenol	2.875	0.20	5	0	57.5	20-124	3.182	10.1	20		
Pyrene	4.236	0.20	5	0	84.7	40-130	3.469	19.9	20		
Surr: 2,4,6-Tribromophenol	3.702	0.20	5	0	74	34-129	3.344	10.2	20		
Surr: 2-Fluorobiphenyl	3.482	0.20	5	0	69.6	40-125	3.164	9.56	20		
Surr: 2-Fluorophenol	2.213	0.20	5	0	44.3	20-120	2.586	15.5	20		
Surr: 4-Terphenyl-d14	3.985	0.20	5	0	79.7	40-135	2.846	33.4	20	R	
Surr: Nitrobenzene-d5	3.082	0.20	5	0	61.6	41-120	3.138	1.81	20		
Surr: Phenol-d6	2.927	0.20	5	0	58.5	20-120	3.086	5.28	20		

The following samples were analyzed in this batch:

1007401-01D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Pastor, Behling & Wheeler, LLC  
**Work Order:** 1007401  
**Project:** Waste Characterization

## QC BATCH REPORT

Batch ID: **R94066**      Instrument ID **WetChem**      Method: **SM4500H+ B**

LCS		Sample ID: <b>WLCS-071510-R94066</b>				Units: <b>pH units</b>		Analysis Date: <b>7/15/2010</b>		
Client ID:		Run ID: <b>WETCHEM_100715A</b>			SeqNo: <b>2028108</b>	Prep Date:		DF: <b>1</b>		
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.01	0.10	6	0	100	90-110		0		

DUP		Sample ID: <b>1007359-01BDUP</b>				Units: <b>pH units</b>		Analysis Date: <b>7/15/2010</b>		
Client ID:		Run ID: <b>WETCHEM_100715A</b>			SeqNo: <b>2028112</b>	Prep Date:		DF: <b>1</b>		
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.96	0.10	0	0	0	0-0	7.98	0.251	20	H

**The following samples were analyzed in this batch:**      1007401-01C

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Pastor, Behling & Wheeler, LLC  
**Work Order:** 1007401  
**Project:** Waste Characterization

## QC BATCH REPORT

Batch ID: **R94101**      Instrument ID **WetChem**      Method: **SW1010**

**LCS**      Sample ID: **WLCS-071510-R94101**      Units: °F      Analysis Date: **7/15/2010**

Client ID:      Run ID: **WETCHEM\_100715C**      SeqNo: **2028899**      Prep Date:      DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	83	50	83	0	100	80-120	0			

**DUP**      Sample ID: **1007356-01ADUP**      Units: °F      Analysis Date: **7/15/2010**

Client ID:      Run ID: **WETCHEM\_100715C**      SeqNo: **2028903**      Prep Date:      DF: **1**

Analyte	Result	ML	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability	U	50	0	0	0	0-0	0	0	25	

The following samples were analyzed in this batch:

1007401-01C

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

**Client:** Pastor, Behling & Wheeler, LLC  
**Project:** Waste Characterization  
**WorkOrder:** 1007401

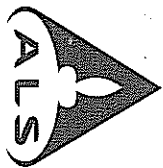
**QUALIFIERS,  
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
°F	Fahrenheit degrees
µg/L	Micrograms per Liter
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
pH units	





**ALS Laboratory Group**  
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**Chain of Custody Form**

Page 1 of 1

**ALS Laboratory Group**  
 3352 128th Ave.  
 Holland, MI 49424-9263  
 Tel: +1 616 399 6070  
 Fax: +1 616 399 6185

Customer Information				Project Information				ALS Project Manager: <u>WY</u>				ALS Work Order #: <u>1040</u>					
Purchase Order		Project Name		Waste Characterization		ALS Project Manager		Parameter/Method Request for Analysis		Company Name		Bill To Company		Invoice Attn			
Work Order		1620		Union Pacific Railroad		ALS Project Manager		Parameter/Method Request for Analysis		Pastor, Belling & Wheeler, LLC		Union Pacific Railroad		Erie Matzner			
Send Report To		Address		1400 Douglas Street Step 0750		ALS Work Order #		ALS Work Order #		Erie Matzner		1400 Douglas Street Step 0750		RCL Profile			
City/State/Zip		City/State/Zip		Omaha, NE 681790750		ALS Work Order #		ALS Work Order #		2201 Double Creek Drive		Omaha, NE 681790750		TCLP SVOC (SW-846)			
Phone		Phone				ALS Work Order #		ALS Work Order #		Suite 4004				RC1 Profile			
Fax		Fax				ALS Work Order #		ALS Work Order #		Round Rock, TX 78664				TCLP SVOC (SW-846)			
e-Mail Address		e-Mail Address				ALS Work Order #		ALS Work Order #		(512) 671-3434				TCLP SVOC (SW-846)			
		e-Mail Address				ALS Work Order #		ALS Work Order #		(512) 671-3446				TCLP SVOC (SW-846)			
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	WG-1620-V150-20100713	7-13-10	1720			10	X	X	X	X	X						
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

**Sampler(s) Please Print & Sign**  
 Relinquished by: John Borchert Date: 7-13-10 Time: 18:25  
 Received by: Hand Delivered  
 Required Turnaround Time: (Check Box)  
 1-24 HOURS  2-72 HOURS  3-96 HOURS  4-168 HOURS  5-240 HOURS  
 Results Due Date: 7/13/10 15:25  
 Relinquished by: John Borchert Date: 7-13-10 Time: 18:25  
 Received by: Hand Delivered  
 Required Turnaround Time: (Check Box)  
 1-24 HOURS  2-72 HOURS  3-96 HOURS  4-168 HOURS  5-240 HOURS  
 Results Due Date: 7/13/10 15:25

**OC Packages: (Check One Box Below)**  
 Level II Std OC  TRRP Checklist  
 Level III Std OC/RAW Data  TRRP Level IV  
 Level IV SW846/CLP  Other / EDD

**Notes:**

Logged by (Laboratory):  
 Date:  
 Time:  
 Checked by (Laboratory):  
 Date:  
 Time:

Preservative Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 6-NAHSO<sub>4</sub> 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.  
 2. Unless otherwise agreed in a formal contract, services provided by ALS Laboratory Group are expressly limited to the terms and conditions stated on the reverse.  
 3. The Chain of Custody is a legal document. All information must be completed accurately.

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Sample Receipt Checklist

Client Name: **PBW**

Date/Time Received: **13-Jul-10 18:25**

Work Order: **1007401**

Received by: **RNG**

Checklist completed by Richard Sanchez 14-Jul-10  
eSignature Date

Reviewed by: R. Kevin Given 15-Jul-10  
eSignature Date

Matrices: water

Carrier name: Client

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<input type="text" value="2.3c"/> <input type="text" value="002"/>		
Cooler(s)/Kit(s):	<input type="text" value="1608"/>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<input type="text" value="-"/>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

---

**Client:** ALS Laboratory Group  
**Project:** 1007401  
**Work Order:** 1007328

**Work Order Sample Summary**

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<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1007328-01	1007401-01F	Water		7/13/2010 17:20	7/15/2010 10:15	<input type="checkbox"/>

Client: ALS Laboratory Group  
Project: 1007401  
WorkOrder: 1007328

**QUALIFIERS,  
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram

# ALS Laboratory Group

Date: 17-Jul-10

Client: ALS Laboratory Group

Project: 1007401

Work Order: 1007328

Sample ID: 1007401-01F

Lab ID: 1007328-01

Collection Date: 7/13/2010 05:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 40.0	mg/Kg	1	Analyst: <b>EE</b> 7/15/2010 12:00 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 40.0	mg/Kg	1	Analyst: <b>EE</b> 7/15/2010 12:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

ALS Laboratory Group

Date: 17-Jul-10

Client: ALS Laboratory Group  
Work Order: 1007328  
Project: 1007401

**QC BATCH REPORT**

Batch ID: **R79137** Instrument ID **WETCHEM** Method: **SW7.3.4.2**

<b>MBLK</b>	Sample ID: <b>WBLKW1-071510-R79137</b>	Units: <b>mg/Kg</b>		Analysis Date: <b>7/15/2010 12:00 PM</b>						
Client ID:	Run ID: <b>WETCHEM_100715B</b>	SeqNo: <b>1367608</b>	Prep Date:	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide, Reactive	ND	40								

The following samples were analyzed in this batch:

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Laboratory Group  
 Work Order: 1007328  
 Project: 1007401

# QC BATCH REPORT

Batch ID: **R79138** Instrument ID **WETCHEM** Method: **SW7.3.3.2**

MBLK		Sample ID: <b>WBLKW1-071510-R79138</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/15/2010 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_100715C</b>				SeqNo: <b>1367612</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	ND	40								

LCS		Sample ID: <b>WLCSW1-071510-R79138</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/15/2010 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_100715C</b>				SeqNo: <b>1367613</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	234.9	40	250	0	94	75-125	0			

LCSD		Sample ID: <b>WLCSDW1-071510-R79138</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/15/2010 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_100715C</b>				SeqNo: <b>1367619</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	249.6	40	250	0	99.8	75-125	234.9	6.06	35	

MS		Sample ID: <b>1007328-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/15/2010 12:00 PM</b>		
Client ID: <b>1007401-01F</b>		Run ID: <b>WETCHEM_100715C</b>				SeqNo: <b>1367617</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	249.6	40	250	0	99.8	50-150	0			

MSD		Sample ID: <b>1007328-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>7/15/2010 12:00 PM</b>		
Client ID: <b>1007401-01F</b>		Run ID: <b>WETCHEM_100715C</b>				SeqNo: <b>1367618</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	234.9	40	250	0	94	50-150	249.6	6.06	35	

The following samples were analyzed in this batch:

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

1007328

# CHAIN-OF-CUSTODY RECORD

Date: 14-Jul-10  
COC ID: 9078  
Due Date: 22-Jul-10

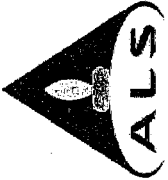
Page 1 of 1

TEL: (616) 399-6070  
FAX: (616) 399-6185

Subcontractor:  
ALS Laboratory Group  
3352 128th Ave.

Holland, MI 49424

Acct #:



Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	1007401	Project Name	1007401	A	B	C	D	E	F	G	H	I	J	Reactive Cyanide (SW-846)		
Work Order		Project Number	ALS Group USA, Corp.	B										Reactive Sulfide (SW-846)		
Company Name	ALS Group USA, Corp.	Bill To Company	Accounts Payable	C												
Send Report To	R. Kevin Given	Inv Attn	10450 Stancliff Rd, Suite 210	D												
Address	10450 Stancliff Rd, Suite 210	Address	Houston, Texas 77099-4338	E												
City/State/Zip	Houston, Texas 77099-4338	City/State/Zip	(281) 530-5656	F												
Phone	(281) 530-5656	Phone	(281) 530-5887	G												
Fax	(281) 530-5887	Fax	glenda.ramos@alsenviro.com	H												
eMail Address	kevin.given@alsenviro.com	eMail CC		I												
Sample ID	1007401-01F (WG-1620-V150-201007	Matrix	Water	J	A	B	C	D	E	F	G	H	I	J		
		Collection Date	7/13/2010 17:20		X											
		Bottle	(1) 1LPNAOHC6H8O6			X										

Comments:

Relinquished by:	Date/Time	Received by:	Date/Time	Cooler IDs	Report/QC Level
	7-14-10		7/16/10 10:15	2.6°C	



Sample Receipt Checklist

Client Name: **ALS - HOUSTON**

Date/Time Received: **15-Jul-10 10:15**

Work Order: **1007328**

Received by: **DS**

Checklist completed by Diane Shaw 15-Jul-10  
eSignature Date

Reviewed by: Ann Preston 15-Jul-10  
eSignature Date

Matrices: Water

Carrier name: FedEx

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No

Temperature(s)/Thermometer(s): 2.6 c

Cooler(s)/Kit(s):

Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted

Water - pH acceptable upon receipt? Yes  No  N/A

pH adjusted? Yes  No  N/A

pH adjusted by:

Login Notes:

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Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

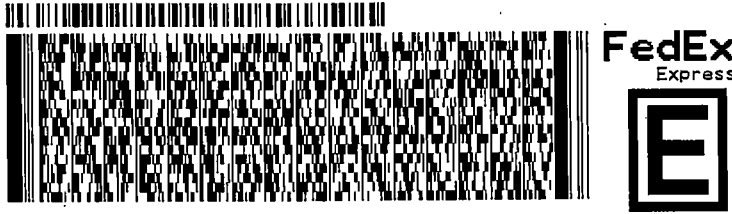
ORIGIN ID: JGQA (281) 530-5656  
SHIPPING DEPT  
ALS LABORATORY GROUP  
10450 STANCLIFF  
SUITE 210  
HOUSTON, TX 77099  
UNITED STATES US

SHIP DATE: 14JUL10  
ACTWGT: 31.4 LB  
CAD: 300130/CAFE2453

BILL SENDER

TO RECEIVING  
ALS LABORATORY  
3352 128TH AVE.

HOLLAND MI 49424  
(616) 399-6070  
REF: SUB CONTRACT



J09200811302223

TRK# 4340 2160 3676  
0201

THU - 15JUL A4  
PRIORITY OVERNIGHT

NI GRR

49424  
MI-US  
GRR

Part # 156148-434 NRIT V3 12-09

