



Laboratory Results Summary Table

02/09/2015

Analytes (BDL = Below Detection Limit; ND = Non Detect)

Allowable Concentration -->				Organic Compounds in Soil (mg/kg [ppm])																		Inorganics in Soil			Metals in Soil (mg/kg [ppm])													
Location	Sample Date:	Sample Matrix	Matrix Notes	500			0.17	85	100	175	1000	1000	0.22	0.22	2.2	0.022	22	0.022	1000	1000	0.22	23	1000		(<12)	(6-9)	0.39	15000	70	120000	23	3100	400	23	1600	390	390	23000
				TPH (total volatile and extractable petroleum hydrocarbons)	TPH-GRO (C6-C10) Low Fraction	TPH-DRO (C10-C36) High Fraction	Benzene	Toluene	Ethylbenzene	Xylenes - total	Acenaphthene	Anthracene	Benzo(A)anthracene	Benzo(B)fluoranthene	Benzo(K)fluoranthene	Benzo(Al)pyrene	Chrysene	Dibenzo(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3,CD)pyrene	Naphthalene	Pyrene	EC (<4 mmhos/cm or 2x background)	SAR (calculation)	pH	Arsenic	Barium - EPA Total Barium	Cadmium	Chromium (III)	Chromium (VI)	Copper	Lead (inorganic)	Mercury	Nickel (soluble salts)	Selenium	Silver	Zinc
D27	02/08/12	Pit	pit bottom center	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.16	0.6	7.7	24	2500	0.42	26	BDL	30	16	0.022	15	BDL	BDL	53
D27	02/08/12	Pit	pit bottom East	4.8	BDL	4.8	BDL	BDL	BDL	BDL																												
D27	02/08/12	Pit	pit wall North East	16	BDL	16	BDL	BDL	BDL	BDL																												
D27	02/08/12	Pit	pit bottom West	BDL	BDL	BDL	BDL	BDL	BDL	BDL																												
D27	02/08/12	Pit	pit wall South West	38	BDL	38	BDL	BDL	BDL	BDL																												



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Est. 1970

Chris Hines / Matt Kasten  
EnCana Oil & Gas Inc. - CO  
2717 County Road 215, Suite 100  
Parachute, CO 81635

## Report Summary

Friday February 17, 2012

Report Number: L559824

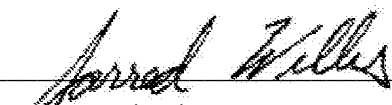
Samples Received: 02/09/12

Client Project:

Description: D27 Pit Sampling

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

  
Jayred Willis, ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,  
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,  
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,  
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,  
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,  
TX - T104704245-11-3, OK - 9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

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REPORT OF ANALYSIS

Chris Hines / Matt Kasten  
EnCana Oil & Gas Inc. - CO  
2717 County Road 215, Suite 100  
Parachute, CO 81635

February 17, 2012

Date Received : February 09, 2012  
Description : D27 Pit Sampling  
Sample ID : D27-PBC-020812 6-8 IN  
Collected By : Brennen Graff  
Collection Date : 02/08/12 10:10

ESC Sample # : L559824-01

Site ID : D27

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	02/11/12	1
Chromium, Trivalent	26.	2.0	mg/kg	Calc.	02/12/12	1
ORP	86.		mV	2580	02/12/12	1
pH	7.7		su	9045D	02/13/12	1
Sodium Adsorption Ratio	0.60			Calc.	02/13/12	1
Specific Conductance	160		umhos/cm	9050AMod	02/12/12	1
Mercury	0.022	0.020	mg/kg	7471	02/11/12	1
Arsenic	24.	5.0	mg/kg	6010B	02/12/12	5
Barium	2500	0.25	mg/kg	6010B	02/12/12	1
Cadmium	0.42	0.25	mg/kg	6010B	02/12/12	1
Chromium	26.	0.50	mg/kg	6010B	02/12/12	1
Copper	30.	1.0	mg/kg	6010B	02/12/12	1
Lead	16.	1.2	mg/kg	6010B	02/12/12	5
Nickel	15.	5.0	mg/kg	6010B	02/12/12	5
Selenium	BDL	20.	mg/kg	6010B	02/12/12	20
Silver	BDL	0.50	mg/kg	6010B	02/12/12	1
Zinc	53.	1.5	mg/kg	6010B	02/12/12	1
Benzene	BDL	0.0025	mg/kg	8021/8015	02/13/12	5
Toluene	BDL	0.025	mg/kg	8021/8015	02/13/12	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	02/13/12	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	02/13/12	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	02/13/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.4		% Rec.	8021/8015	02/13/12	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	02/13/12	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	02/10/12	1
Surrogate recovery(%)						
o-Terphenyl	76.9		% Rec.	3546/DRO	02/10/12	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit(PQL)  
L559824-01 (PH) - 7.7@16.8c



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Collection Date : 02/08/12 10:10

ESC Sample # : L559824-01

Site ID : D27

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Naphthalene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
1-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
2-Methylnaphthalene	0.0074	0.0060	mg/kg	8270C-SIM	02/15/12	1
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	02/15/12	1
Surrogate Recovery						
Nitrobenzene-d5	61.7		% Rec.	8270C-SIM	02/15/12	1
2-Fluorobiphenyl	63.0		% Rec.	8270C-SIM	02/15/12	1
p-Terphenyl-d14	65.7		% Rec.	8270C-SIM	02/15/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 02/17/12 09:20 Printed: 02/17/12 09:21  
L559824-01 (PH) - 7.7@16.8c

REPORT OF ANALYSIS

Chris Hines / Matt Kasten  
EnCana Oil & Gas Inc. - CO  
2717 County Road 215, Suite 100  
Parachute, CO 81635

February 17, 2012

Date Received : February 09, 2012  
Description : D27 Pit Sampling  
Sample ID : D27-PBE-020812 4-6 IN  
Collected By : Brennen Graff  
Collection Date : 02/08/12 10:16

ESC Sample # : L559824-02

Site ID : D27

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	02/10/12	5
Toluene	BDL	0.025	mg/kg	8021/8015	02/10/12	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	02/10/12	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	02/10/12	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	02/10/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	97.8		% Rec.	8021/8015	02/10/12	5
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021/8015	02/10/12	5
TPH (GC/FID) High Fraction	4.8	4.0	mg/kg	3546/DRO	02/10/12	1
Surrogate recovery(%)						
o-Terphenyl	73.3		% Rec.	3546/DRO	02/10/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Chris Hines / Matt Kasten  
EnCana Oil & Gas Inc. - CO  
2717 County Road 215, Suite 100  
Parachute, CO 81635

February 17, 2012

Date Received : February 09, 2012  
Description : D27 Pit Sampling  
Sample ID : D27-PWNE-020812 3-5 IN  
Collected By : Brennen Graff  
Collection Date : 02/08/12 10:22

ESC Sample # : L559824-03

Site ID : D27

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	02/10/12	5
Toluene	BDL	0.025	mg/kg	8021/8015	02/10/12	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	02/10/12	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	02/10/12	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	02/10/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	97.8		% Rec.	8021/8015	02/10/12	5
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021/8015	02/10/12	5
TPH (GC/FID) High Fraction	16.	4.0	mg/kg	3546/DRO	02/10/12	1
Surrogate recovery(%)						
o-Terphenyl	71.9		% Rec.	3546/DRO	02/10/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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2717 County Road 215, Suite 100  
Parachute, CO 81635

February 17, 2012

Date Received : February 09, 2012  
Description : D27 Pit Sampling  
Sample ID : D27-PBW-020812 4-6 IN  
Collected By : Brennen Graff  
Collection Date : 02/08/12 10:27

ESC Sample # : L559824-04

Site ID : D27

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	02/10/12	5
Toluene	BDL	0.025	mg/kg	8021/8015	02/10/12	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	02/10/12	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	02/10/12	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	02/10/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.5		% Rec.	8021/8015	02/10/12	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	02/10/12	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	02/10/12	1
Surrogate recovery(%)						
o-Terphenyl	74.1		% Rec.	3546/DRO	02/10/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 02/17/12 09:20 Printed: 02/17/12 09:21



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# REPORT OF ANALYSIS

Chris Hines / Matt Kasten  
EnCana Oil & Gas Inc. - CO  
2717 County Road 215, Suite 100  
Parachute, CO 81635

February 17, 2012

Date Received : February 09, 2012  
Description : D27 Pit Sampling  
Sample ID : D27-PWSW-020812 6-8 IN  
Collected By : Brennen Graff  
Collection Date : 02/08/12 10:32

ESC Sample # : L559824-05

Site ID : D27

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	02/10/12	5
Toluene	BDL	0.025	mg/kg	8021/8015	02/10/12	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	02/10/12	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	02/10/12	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	02/10/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	95.3		% Rec.	8021/8015	02/10/12	5
a,a,a-Trifluorotoluene(PID)	99.3		% Rec.	8021/8015	02/10/12	5
TPH (GC/FID) High Fraction	38.	4.0	mg/kg	3546/DRO	02/10/12	1
Surrogate recovery(%)						
o-Terphenyl	73.3		% Rec.	3546/DRO	02/10/12	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L559824-01	WG578040	SAMP	Selenium	R2033755	0

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed  
02/17/12 at 09:21:23

TSR Signing Reports: 358  
R5 - Desired TAT

Try not to report benzene as BDL above a 250x dilution. ONLY log soil samples under this account. Waters get logged under ENCRCO.

Sample: L559824-01 Account: ENCANACO Received: 02/09/12 09:00 Due Date: 02/16/12 00:00 RPT Date: 02/17/12 09:20

Sample: L559824-02 Account: ENCANACO Received: 02/09/12 09:00 Due Date: 02/16/12 00:00 RPT Date: 02/17/12 09:20

Sample: L559824-03 Account: ENCANACO Received: 02/09/12 09:00 Due Date: 02/16/12 00:00 RPT Date: 02/17/12 09:20

Sample: L559824-04 Account: ENCANACO Received: 02/09/12 09:00 Due Date: 02/16/12 00:00 RPT Date: 02/17/12 09:20

Sample: L559824-05 Account: ENCANACO Received: 02/09/12 09:00 Due Date: 02/16/12 00:00 RPT Date: 02/17/12 09:20



**YOUR LAB OF CHOICE**

EnCana Oil & Gas Inc. - CO  
Chris Hines / Matt Kasten  
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report  
Level II

L559824

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February 17, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/kg			WG577814	02/09/12 20:44
Ethylbenzene	< .0005	mg/kg			WG577814	02/09/12 20:44
Toluene	< .005	mg/kg			WG577814	02/09/12 20:44
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG577814	02/09/12 20:44
Total Xylene	< .0015	mg/kg			WG577814	02/09/12 20:44
a,a,a-Trifluorotoluene(FID)		% Rec.	97.09	59-128	WG577814	02/09/12 20:44
a,a,a-Trifluorotoluene(PID)		% Rec.	104.0	54-144	WG577814	02/09/12 20:44
Chromium,Hexavalent	< 2	mg/kg			WG577704	02/11/12 15:22
Mercury	< .02	mg/kg			WG578089	02/11/12 14:20
Benzene	< .0005	mg/kg			WG577982	02/10/12 20:43
Ethylbenzene	< .0005	mg/kg			WG577982	02/10/12 20:43
Toluene	< .005	mg/kg			WG577982	02/10/12 20:43
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG577982	02/10/12 20:43
Total Xylene	< .0015	mg/kg			WG577982	02/10/12 20:43
a,a,a-Trifluorotoluene(FID)		% Rec.	97.01	59-128	WG577982	02/10/12 20:43
a,a,a-Trifluorotoluene(PID)		% Rec.	102.4	54-144	WG577982	02/10/12 20:43
TPH (GC/FID) High Fraction	< 4	ppm			WG578007	02/10/12 18:02
o-Terphenyl		% Rec.	75.23	50-150	WG578007	02/10/12 18:02
Arsenic	< 1	mg/kg			WG578040	02/12/12 10:25
Barium	< .25	mg/kg			WG578040	02/12/12 10:25
Cadmium	< .25	mg/kg			WG578040	02/12/12 10:25
Chromium	< .5	mg/kg			WG578040	02/12/12 10:25
Copper	< 1	mg/kg			WG578040	02/12/12 10:25
Lead	< .25	mg/kg			WG578040	02/12/12 10:25
Nickel	< 1	mg/kg			WG578040	02/12/12 10:25
Selenium	< 1	mg/kg			WG578040	02/12/12 10:25
Silver	< .5	mg/kg			WG578040	02/12/12 10:25
Zinc	< 1.5	mg/kg			WG578040	02/12/12 10:25
Specific Conductance	2.80	umhos/cm			WG578224	02/12/12 14:35
pH	4.46	su			WG578014	02/13/12 11:08
Benzene	< .0005	mg/kg			WG578256	02/12/12 23:13
Ethylbenzene	< .0005	mg/kg			WG578256	02/12/12 23:13
Toluene	< .005	mg/kg			WG578256	02/12/12 23:13
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG578256	02/12/12 23:13
Total Xylene	< .0015	mg/kg			WG578256	02/12/12 23:13
a,a,a-Trifluorotoluene(FID)		% Rec.	97.63	59-128	WG578256	02/12/12 23:13
a,a,a-Trifluorotoluene(PID)		% Rec.	103.6	54-144	WG578256	02/12/12 23:13
1-Methylnaphthalene	< .006	mg/kg			WG577930	02/14/12 15:56
2-Chloronaphthalene	< .006	mg/kg			WG577930	02/14/12 15:56
2-Methylnaphthalene	< .006	mg/kg			WG577930	02/14/12 15:56
Acenaphthene	< .006	mg/kg			WG577930	02/14/12 15:56

\* Performance of this Analyte is outside of established criteria.

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Quality Assurance Report  
Level II

L559824

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Tax I.D. 62-0814289

Est. 1970

February 17, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Acenaphthylene	< .006	mg/kg			WG577930	02/14/12 15:56
Anthracene	< .006	mg/kg			WG577930	02/14/12 15:56
Benzo(a)anthracene	< .006	mg/kg			WG577930	02/14/12 15:56
Benzo(a)pyrene	< .006	mg/kg			WG577930	02/14/12 15:56
Benzo(b)fluoranthene	< .006	mg/kg			WG577930	02/14/12 15:56
Benzo(g,h,i)perylene	< .006	mg/kg			WG577930	02/14/12 15:56
Benzo(k)fluoranthene	< .006	mg/kg			WG577930	02/14/12 15:56
Chrysene	< .006	mg/kg			WG577930	02/14/12 15:56
Dibenz(a,h)anthracene	< .006	mg/kg			WG577930	02/14/12 15:56
Fluoranthene	< .006	mg/kg			WG577930	02/14/12 15:56
Fluorene	< .006	mg/kg			WG577930	02/14/12 15:56
Indeno(1,2,3-cd)pyrene	< .006	mg/kg			WG577930	02/14/12 15:56
Naphthalene	< .006	mg/kg			WG577930	02/14/12 15:56
Phenanthrene	< .006	mg/kg			WG577930	02/14/12 15:56
Pyrene	< .006	mg/kg			WG577930	02/14/12 15:56
2-Fluorobiphenyl		% Rec.	72.41	34-129	WG577930	02/14/12 15:56
Nitrobenzene-d5		% Rec.	75.75	14-141	WG577930	02/14/12 15:56
p-Terphenyl-d14		% Rec.	103.0	25-139	WG577930	02/14/12 15:56

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Chromium, Hexavalent	mg/kg	0	0	0	20	L559381-04	WG577704
Chromium, Hexavalent	mg/kg	64.0	64.8	0.930	20	L557463-14	WG577704
Mercury	mg/kg	1.90	1.70	11.1	20	L559891-02	WG578089
Arsenic	mg/kg	3.30	9.70	98.5*	20	L559867-04	WG578040
Barium	mg/kg	64.0	77.0	19.2	20	L559867-04	WG578040
Cadmium	mg/kg	0	0	0	20	L559867-04	WG578040
Chromium	mg/kg	21.0	18.0	14.4	20	L559867-04	WG578040
Copper	mg/kg	11.0	10.9	1.85	20	L559867-04	WG578040
Lead	mg/kg	8.00	7.80	3.15	20	L559867-04	WG578040
Nickel	mg/kg	6.40	6.26	2.83	20	L559867-04	WG578040
Selenium	mg/kg	1.40	0	NA	20	L559867-04	WG578040
Silver	mg/kg	0	0	0	20	L559867-04	WG578040
Zinc	mg/kg	34.0	36.5	8.27	20	L559867-04	WG578040
ORP	mV	160.	180.	11.8	20	L559782-01	WG578159
pH	su	8.00	8.00	0.499	1	L559266-01	WG578014
pH	su	8.90	8.90	0.448	1	L559867-06	WG578014

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/kg	.05	0.0481	96.2	76-113	WG577814
Ethylbenzene	mg/kg	.05	0.0482	96.4	78-115	WG577814
Toluene	mg/kg	.05	0.0483	96.5	76-114	WG577814
Total Xylene	mg/kg	.15	0.145	96.7	81-118	WG577814
a,a,a-Trifluorotoluene(PID)				103.5	54-144	WG577814
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.23	113.	67-135	WG577814
a,a,a-Trifluorotoluene(FID)				102.7	59-128	WG577814

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Chromium, Hexavalent	mg/kg	203	150.	73.9	50-150	WG577704
Mercury	mg/kg	3.77	4.40	117.	71.6-128	WG578089
Benzene	mg/kg	.05	0.0495	98.9	76-113	WG577982
Ethylbenzene	mg/kg	.05	0.0519	104.	78-115	WG577982
Toluene	mg/kg	.05	0.0500	100.	76-114	WG577982
Total Xylene	mg/kg	.15	0.158	105.	81-118	WG577982
a,a,a-Trifluorotoluene (PID)				101.6	54-144	WG577982
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.23	95.1	67-135	WG577982
a,a,a-Trifluorotoluene (FID)				102.1	59-128	WG577982
TPH (GC/FID) High Fraction	ppm	60	46.0	76.6	50-150	WG578007
o-Terphenyl				77.31	50-150	WG578007
Arsenic	mg/kg	92.6	83.3	90.0	82.9-117	WG578040
Barium	mg/kg	169	154.	91.1	82.8-117	WG578040
Cadmium	mg/kg	61.8	53.4	86.4	83.3-117	WG578040
Chromium	mg/kg	71.3	65.8	92.3	81.8-118	WG578040
Copper	mg/kg	81.2	75.2	92.6	83.9-116	WG578040
Lead	mg/kg	92.4	81.1	87.8	83.3-117	WG578040
Nickel	mg/kg	59.1	52.2	88.3	83.8-116	WG578040
Selenium	mg/kg	89.5	82.4	92.1	79-121	WG578040
Silver	mg/kg	34.4	29.8	86.6	66.3-134	WG578040
Zinc	mg/kg	141	122.	86.5	80.9-119	WG578040
ORP	mV	229	235.	103.	95.6-104.37	WG578159
Specific Conductance	umhos/cm	350	340.	97.1	85-115	WG578224
pH	su	7.98	8.02	101.	98-101	WG578014
Benzene	mg/kg	.05	0.0519	104.	76-113	WG578256
Ethylbenzene	mg/kg	.05	0.0534	107.	78-115	WG578256
Toluene	mg/kg	.05	0.0514	103.	76-114	WG578256
Total Xylene	mg/kg	.15	0.161	107.	81-118	WG578256
a,a,a-Trifluorotoluene (PID)				102.4	54-144	WG578256
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.31	96.6	67-135	WG578256
a,a,a-Trifluorotoluene (FID)				102.6	59-128	WG578256
1-Methylnaphthalene	mg/kg	.033	0.0253	76.8	48-113	WG577930
2-Chloronaphthalene	mg/kg	.033	0.0265	80.4	51-114	WG577930
2-Methylnaphthalene	mg/kg	.033	0.0265	80.3	44-109	WG577930
Acenaphthene	mg/kg	.033	0.0283	85.9	52-108	WG577930
Acenaphthylene	mg/kg	.033	0.0288	87.2	51-110	WG577930
Anthracene	mg/kg	.033	0.0297	90.0	58-120	WG577930
Benzo(a)anthracene	mg/kg	.033	0.0292	88.4	54-110	WG577930
Benzo(a)pyrene	mg/kg	.033	0.0303	91.8	56-118	WG577930
Benzo(b)fluoranthene	mg/kg	.033	0.0293	88.7	55-114	WG577930
Benzo(g,h,i)perylene	mg/kg	.033	0.0301	91.3	48-130	WG577930

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Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzo(k)fluoranthene	mg/kg	.033	0.0307	93.1	55-122	WG577930
Chrysene	mg/kg	.033	0.0298	90.4	57-118	WG577930
Dibenz(a,h)anthracene	mg/kg	.033	0.0294	89.0	53-122	WG577930
Fluoranthene	mg/kg	.033	0.0299	90.7	58-118	WG577930
Fluorene	mg/kg	.033	0.0283	85.8	54-109	WG577930
Indeno(1,2,3-cd)pyrene	mg/kg	.033	0.0301	91.3	51-125	WG577930
Naphthalene	mg/kg	.033	0.0250	75.9	45-105	WG577930
Phenanthrene	mg/kg	.033	0.0272	82.5	53-114	WG577930
Pyrene	mg/kg	.033	0.0302	91.5	53-121	WG577930
2-Fluorobiphenyl				81.11	34-129	WG577930
Nitrobenzene-d5				81.85	14-141	WG577930
p-Terphenyl-d14				104.8	25-139	WG577930

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/kg	0.0487	0.0481	97.0	76-113	1.38	20	WG577814
Ethylbenzene	mg/kg	0.0489	0.0482	98.0	78-115	1.47	20	WG577814
Toluene	mg/kg	0.0489	0.0483	98.0	76-114	1.39	20	WG577814
Total Xylene	mg/kg	0.147	0.145	98.0	81-118	1.04	20	WG577814
a,a,a-Trifluorotoluene(PID)				103.3	54-144			WG577814
TPH (GC/FID) Low Fraction	mg/kg	6.34	6.23	115.	67-135	1.83	20	WG577814
a,a,a-Trifluorotoluene(FID)				103.1	59-128			WG577814
Chromium, Hexavalent	mg/kg	163.	150.	80.0	50-150	8.31	20	WG577704
Benzene	mg/kg	0.0509	0.0495	102.	76-113	2.85	20	WG577982
Ethylbenzene	mg/kg	0.0532	0.0519	106.	78-115	2.43	20	WG577982
Toluene	mg/kg	0.0512	0.0500	102.	76-114	2.44	20	WG577982
Total Xylene	mg/kg	0.162	0.158	108.	81-118	2.23	20	WG577982
a,a,a-Trifluorotoluene(PID)				101.7	54-144			WG577982
TPH (GC/FID) Low Fraction	mg/kg	5.60	5.23	102.	67-135	6.87	20	WG577982
a,a,a-Trifluorotoluene(FID)				103.4	59-128			WG577982
TPH (GC/FID) High Fraction	ppm	48.1	46.0	80.0	50-150	4.49	25	WG578007
o-Terphenyl				79.44	50-150			WG578007
ORP	mV	235.	235.	103.	95.6-104.37	0	20	WG578159
Specific Conductance	umhos/	340.	340.	97.0	85-115	0	20	WG578224
pH	su	8.02	8.02	100.	98-101	0	20	WG578014
Benzene	mg/kg	0.0502	0.0519	100.	76-113	3.39	20	WG578256
Ethylbenzene	mg/kg	0.0513	0.0534	102.	78-115	4.08	20	WG578256
Toluene	mg/kg	0.0494	0.0514	99.0	76-114	3.89	20	WG578256
Total Xylene	mg/kg	0.154	0.161	103.	81-118	4.12	20	WG578256
a,a,a-Trifluorotoluene(PID)				102.0	54-144			WG578256
TPH (GC/FID) Low Fraction	mg/kg	5.42	5.31	99.0	67-135	2.11	20	WG578256
a,a,a-Trifluorotoluene(FID)				103.6	59-128			WG578256

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Analyte	Units	Laboratory Control		Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref	%Rec					
1-Methylnaphthalene	mg/kg	0.0227	0.0253	69.0		48-113	11.1	24	WG577930
2-Chloronaphthalene	mg/kg	0.0235	0.0265	71.0		51-114	12.1	24	WG577930
2-Methylnaphthalene	mg/kg	0.0236	0.0265	72.0		44-109	11.5	24	WG577930
Acenaphthene	mg/kg	0.0244	0.0283	74.0		52-108	14.9	22	WG577930
Acenaphthylene	mg/kg	0.0251	0.0288	76.0		51-110	13.7	21	WG577930
Anthracene	mg/kg	0.0270	0.0297	82.0		58-120	9.71	20	WG577930
Benzo(a)anthracene	mg/kg	0.0277	0.0292	84.0		54-110	5.38	22	WG577930
Benzo(a)pyrene	mg/kg	0.0280	0.0303	85.0		56-118	7.88	21	WG577930
Benzo(b)fluoranthene	mg/kg	0.0269	0.0293	82.0		55-114	8.24	20	WG577930
Benzo(g,h,i)perylene	mg/kg	0.0289	0.0301	88.0		48-130	4.13	20	WG577930
Benzo(k)fluoranthene	mg/kg	0.0289	0.0307	88.0		55-122	5.96	25	WG577930
Chrysene	mg/kg	0.0280	0.0298	85.0		57-118	6.44	20	WG577930
Dibenz(a,h)anthracene	mg/kg	0.0286	0.0294	86.0		53-122	2.79	20	WG577930
Fluoranthene	mg/kg	0.0270	0.0299	82.0		58-118	10.1	20	WG577930
Fluorene	mg/kg	0.0263	0.0283	80.0		54-109	7.48	20	WG577930
Indeno(1,2,3-cd)pyrene	mg/kg	0.0285	0.0301	86.0		51-125	5.65	21	WG577930
Naphthalene	mg/kg	0.0210	0.0250	64.0		45-105	17.5	24	WG577930
Phenanthrene	mg/kg	0.0248	0.0272	75.0		53-114	9.39	20	WG577930
Pyrene	mg/kg	0.0287	0.0302	87.0		53-121	5.18	20	WG577930
2-Fluorobiphenyl				67.92		34-129			WG577930
Nitrobenzene-d5				69.06		14-141			WG577930
p-Terphenyl-d14				95.19		25-139			WG577930

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/kg	0.0927	0.00610	.05	34.6	32-137	L559457-01	WG577814
Ethylbenzene	mg/kg	0.0515	0.00730	.05	17.7	10-150	L559457-01	WG577814
Toluene	mg/kg	0.0728	0	.05	29.1	20-142	L559457-01	WG577814
Total Xylene	mg/kg	0.189	0.0600	.15	17.2	16-141	L559457-01	WG577814
a,a,a-Trifluorotoluene(PID)					101.6	54-144		WG577814
TPH (GC/FID) Low Fraction	mg/kg	8.00	0	5.5	29.1*	55-109	L559520-06	WG577814
a,a,a-Trifluorotoluene(FID)					97.63	59-128		WG577814
Chromium, Hexavalent	mg/kg	2.32	0	20	11.6*	50-150	L559381-02	WG577704
Mercury	mg/kg	1.16	1.70	.025	0*	70-130	L559891-02	WG578089
Benzene	mg/kg	0.207	0	.05	83.0	32-137	L559831-05	WG577982
Ethylbenzene	mg/kg	0.212	0	.05	84.9	10-150	L559831-05	WG577982
Toluene	mg/kg	0.209	0	.05	83.8	20-142	L559831-05	WG577982
Total Xylene	mg/kg	0.648	0	.15	86.3	16-141	L559831-05	WG577982
a,a,a-Trifluorotoluene(PID)					100.3	54-144		WG577982
TPH (GC/FID) Low Fraction	mg/kg	18.9	0	5.5	68.6	55-109	L559831-05	WG577982
a,a,a-Trifluorotoluene(FID)					101.1	59-128		WG577982
TPH (GC/FID) High Fraction	ppm	42.5	0	60	70.9	50-150	L559855-01	WG578007
o-Terphenyl					75.20	50-150		WG578007
Arsenic	mg/kg	47.9	9.70	50	76.4	75-125	L559867-04	WG578040
Barium	mg/kg	120.	77.0	50	86.0	75-125	L559867-04	WG578040
Cadmium	mg/kg	42.4	0	50	84.8	75-125	L559867-04	WG578040
Chromium	mg/kg	64.4	18.0	50	92.8	75-125	L559867-04	WG578040
Copper	mg/kg	56.7	10.9	50	91.6	75-125	L559867-04	WG578040

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Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Lead	mg/kg	52.7	7.80	50	89.8	75-125	L559867-04	WG578040
Nickel	mg/kg	49.2	6.26	50	85.9	75-125	L559867-04	WG578040
Selenium	mg/kg	43.8	0	50	87.6	75-125	L559867-04	WG578040
Silver	mg/kg	42.7	0	50	85.4	75-125	L559867-04	WG578040
Zinc	mg/kg	81.7	36.5	50	90.4	75-125	L559867-04	WG578040
Benzene	mg/kg	0.232	0	.05	93.0	32-137	L559824-01	WG578256
Ethylbenzene	mg/kg	0.237	0	.05	94.7	10-150	L559824-01	WG578256
Toluene	mg/kg	0.233	0	.05	93.4	20-142	L559824-01	WG578256
Total Xylene	mg/kg	0.719	0	.15	95.8	16-141	L559824-01	WG578256
a,a,a-Trifluorotoluene(PID)	mg/kg	19.6	0	5.5	100.1	54-144	L559824-01	WG578256
TPH (GC/FID) Low Fraction					71.3	55-109		WG578256
a,a,a-Trifluorotoluene(FID)					100.6	59-128		WG578256
1-Methylnaphthalene	mg/kg	0.0220	0	.033	66.6	25-155	L559825-08	WG577930
2-Chloronaphthalene	mg/kg	0.0223	0	.033	67.7	31-153	L559825-08	WG577930
2-Methylnaphthalene	mg/kg	0.0239	0	.033	72.3	22-172	L559825-08	WG577930
Acenaphthene	mg/kg	0.0218	0	.033	66.1	43-133	L559825-08	WG577930
Acenaphthylene	mg/kg	0.0216	0	.033	65.5	42-146	L559825-08	WG577930
Anthracene	mg/kg	0.0283	0	.033	85.7	38-153	L559825-08	WG577930
Benzo(a)anthracene	mg/kg	0.0221	0	.033	67.1	31-142	L559825-08	WG577930
Benzo(a)pyrene	mg/kg	0.0228	0	.033	69.1	26-152	L559825-08	WG577930
Benzo(b)fluoranthene	mg/kg	0.0268	0	.033	81.1	10-188	L559825-08	WG577930
Benzo(g,h,i)perylene	mg/kg	0.00782	0	.033	23.7	10-176	L559825-08	WG577930
Benzo(k)fluoranthene	mg/kg	0.0247	0	.033	74.8	22-163	L559825-08	WG577930
Chrysene	mg/kg	0.0220	0	.033	66.6	26-146	L559825-08	WG577930
Dibenz(a,h)anthracene	mg/kg	0.0101	0	.033	30.5	10-160	L559825-08	WG577930
Fluoranthene	mg/kg	0.0281	0	.033	85.3	23-160	L559825-08	WG577930
Fluorene	mg/kg	0.0261	0	.033	79.2	44-143	L559825-08	WG577930
Indeno(1,2,3-cd)pyrene	mg/kg	0.00990	0	.033	30.0	10-157	L559825-08	WG577930
Naphthalene	mg/kg	0.0221	0	.033	67.1	22-156	L559825-08	WG577930
Phenanthrene	mg/kg	0.0243	0	.033	73.7	23-164	L559825-08	WG577930
Pyrene	mg/kg	0.0221	0	.033	66.8	12-170	L559825-08	WG577930
2-Fluorobiphenyl					66.82	34-129		
Nitrobenzene-d5					76.76	14-141		
p-Terphenyl-d14					70.74	25-139		

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/kg	0.0966	0.0927	36.2	32-137	4.10	39	L559457-01	WG577814
Ethylbenzene	mg/kg	0.0489	0.0515	16.6	10-150	5.24	44	L559457-01	WG577814
Toluene	mg/kg	0.0676	0.0728	27.0	20-142	7.42	42	L559457-01	WG577814
Total Xylene	mg/kg	0.174	0.189	15.2*	16-141	8.00	46	L559457-01	WG577814
a,a,a-Trifluorotoluene(PID)	mg/kg	6.98	8.00	101.6	54-144	13.6	20	L559520-06	WG577814
TPH (GC/FID) Low Fraction				25.4*	55-109				WG577814
a,a,a-Trifluorotoluene(FID)				97.07	59-128				WG577814
Chromium, Hexavalent	mg/kg	1.88	2.32	9.40*	50-150	21.0*	20	L559381-02	WG577704
Mercury	mg/kg	3.29	1.16	636.*	70-130	95.7*	20	L559891-02	WG578089
Benzene	mg/kg	0.218	0.207	87.3	32-137	5.12	39	L559831-05	WG577982
Ethylbenzene	mg/kg	0.216	0.212	86.4	10-150	1.77	44	L559831-05	WG577982

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Tax I.D. 62-0814289

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Toluene	mg/kg	0.213	0.209	85.4	20-142	1.92	42	L559831-05	WG577982
Total Xylene	mg/kg	0.657	0.648	87.6	16-141	1.40	46	L559831-05	WG577982
a,a,a-Trifluorotoluene(PID)				101.1	54-144				WG577982
TPH (GC/FID) Low Fraction	mg/kg	21.4	18.9	77.8	55-109	12.7	20	L559831-05	WG577982
a,a,a-Trifluorotoluene(FID)				100.6	59-128				WG577982
TPH (GC/FID) High Fraction	ppm	43.7	42.5	72.8	50-150	2.63	25	L559855-01	WG578007
o-Terphenyl				77.67	50-150				WG578007
Arsenic	mg/kg	45.6	47.9	71.8*	75-125	4.92	20	L559867-04	WG578040
Barium	mg/kg	124.	120.	94.0	75-125	3.28	20	L559867-04	WG578040
Cadmium	mg/kg	40.2	42.4	80.4	75-125	5.33	20	L559867-04	WG578040
Chromium	mg/kg	60.5	64.4	85.0	75-125	6.24	20	L559867-04	WG578040
Copper	mg/kg	54.3	56.7	86.8	75-125	4.32	20	L559867-04	WG578040
Lead	mg/kg	52.3	52.7	89.0	75-125	0.762	20	L559867-04	WG578040
Nickel	mg/kg	46.9	49.2	81.3	75-125	4.79	20	L559867-04	WG578040
Selenium	mg/kg	41.0	43.8	82.0	75-125	6.60	20	L559867-04	WG578040
Silver	mg/kg	40.1	42.7	80.2	75-125	6.28	20	L559867-04	WG578040
Zinc	mg/kg	82.8	81.7	92.6	75-125	1.34	20	L559867-04	WG578040
Benzene	mg/kg	0.215	0.232	85.8	32-137	7.99	39	L559824-01	WG578256
Ethylbenzene	mg/kg	0.200	0.237	80.1	10-150	16.8	44	L559824-01	WG578256
Toluene	mg/kg	0.203	0.233	81.3	20-142	13.8	42	L559824-01	WG578256
Total Xylene	mg/kg	0.606	0.719	80.8	16-141	17.1	46	L559824-01	WG578256
a,a,a-Trifluorotoluene(PID)				101.0	54-144				WG578256
TPH (GC/FID) Low Fraction	mg/kg	21.9	19.6	79.6	55-109	11.0	20	L559824-01	WG578256
a,a,a-Trifluorotoluene(FID)				101.1	59-128				WG578256
1-Methylnaphthalene	mg/kg	0.0212	0.0220	64.1	25-155	3.90	27	L559825-08	WG577930
2-Chloronaphthalene	mg/kg	0.0208	0.0223	63.1	31-153	7.04	22	L559825-08	WG577930
2-Methylnaphthalene	mg/kg	0.0221	0.0239	67.0	22-172	7.65	29	L559825-08	WG577930
Acenaphthene	mg/kg	0.0216	0.0218	65.3	43-133	1.20	26	L559825-08	WG577930
Acenaphthylene	mg/kg	0.0223	0.0216	67.6	42-146	3.05	22	L559825-08	WG577930
Anthracene	mg/kg	0.0270	0.0283	81.7	38-153	4.80	27	L559825-08	WG577930
Benzo(a)anthracene	mg/kg	0.0238	0.0221	72.2	31-142	7.38	31	L559825-08	WG577930
Benzo(a)pyrene	mg/kg	0.0233	0.0228	70.5	26-152	2.01	32	L559825-08	WG577930
Benzo(b)fluoranthene	mg/kg	0.0273	0.0268	82.7	10-188	1.94	33	L559825-08	WG577930
Benzo(g,h,i)perylene	mg/kg	0.00772	0.00782	23.4	10-176	1.29	30	L559825-08	WG577930
Benzo(k)fluoranthene	mg/kg	0.0265	0.0247	80.2	22-163	6.95	29	L559825-08	WG577930
Chrysene	mg/kg	0.0222	0.0220	67.2	26-146	0.921	30	L559825-08	WG577930
Dibenz(a,h)anthracene	mg/kg	0.0102	0.0101	30.8	10-160	1.12	39	L559825-08	WG577930
Fluoranthene	mg/kg	0.0276	0.0281	83.5	23-160	2.11	22	L559825-08	WG577930
Fluorene	mg/kg	0.0263	0.0261	79.6	44-143	0.535	23	L559825-08	WG577930
Indeno(1,2,3-cd)pyrene	mg/kg	0.00994	0.00990	30.1	10-157	0.407	40	L559825-08	WG577930
Naphthalene	mg/kg	0.0202	0.0221	61.2	22-156	9.17	27	L559825-08	WG577930
Phenanthrene	mg/kg	0.0230	0.0243	69.6	23-164	5.74	25	L559825-08	WG577930
Pyrene	mg/kg	0.0219	0.0221	66.4	12-170	0.624	24	L559825-08	WG577930
2-Fluorobiphenyl				63.38	34-129				WG577930
Nitrobenzene-d5				65.07	14-141				WG577930
p-Terphenyl-d14				70.56	25-139				WG577930

Batch number /Run number / Sample number cross reference

WG577814: R2031553: L559824-02 03

\* Performance of this Analyte is outside of established criteria.

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WG577704: R2032812: L559824-01  
WG578089: R2032892: L559824-01  
WG577982: R2033112: L559824-04 05  
WG578007: R2033512: L559824-01 02 03 04 05  
WG578040: R2033755: L559824-01  
WG578149: R2034152: L559824-01  
WG578159: R2034153: L559824-01  
WG578224: R2034192: L559824-01  
WG578014: R2034212: L559824-01  
WG578256: R2035445: L559824-01  
WG577930: R2036152: L559824-01

\* \* Calculations are performed prior to rounding of reported values.

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The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.