ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
NWTPHg by GC/FID
Page 1 of 1

Sample ID: MB-090105
METHOD BLANK

Lab Sample ID: MB-090105
LIMS ID: 05-15095
Matrix: Soil
Data Release Authorized:
Reported: 09/02/05

QC Report No: IM19-Landau Associates, Inc.
Project: Port of Anacortes
529012
Date Sampled: NA
Date Received: NA

Date Analyzed: 09/01/05 17:12
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 0.10 g
Percent Moisture: NA

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	12	< 12 U	
108-88-3	Toluene	25	< 25 U	
100-41-4	Ethylbenzene	25	< 25 U	
	m,p-Xylene	50	< 50 U	
95-47-6	o-Xylene	25	< 25 U	
	Gasoline Range Hydrocarbons	5.0	< 5.0 U	GAS ID ---

BETX Surrogate Recovery

Trifluorotoluene	108%
Bromobenzene	102%

Gasoline Surrogate Recovery

Trifluorotoluene	106%
Bromobenzene	97.2%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
NWTPHg by GC/FID
Page 1 of 1

Sample ID: SP-1
SAMPLE

Lab Sample ID: IM19A
LIMS ID: 05-15095
Matrix: Soil
Data Release Authorized:
Reported: 09/02/05

QC Report No: IM19-Landau Associates, Inc.
Project: Port of Anacortes
529012
Date Sampled: 08/31/05
Date Received: 08/31/05

Date Analyzed: 09/01/05 19:49
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 0.080 g-dry-wt
Percent Moisture: 8.8%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	16	< 16 U	
108-88-3	Toluene	31	< 31 U	
100-41-4	Ethylbenzene	31	< 31 U	
	m,p-Xylene	62	< 62 U	
95-47-6	o-Xylene	31	< 31 U	
				GAS ID
	Gasoline Range Hydrocarbons	6.2	< 6.2 U	---

BETX Surrogate Recovery

Trifluorotoluene	104%
Bromobenzene	103%

Gasoline Surrogate Recovery

Trifluorotoluene	110%
Bromobenzene	107%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
NWTPHg by GC/FID
Page 1 of 1

Sample ID: SP-2
SAMPLE

Lab Sample ID: IM19B
LIMS ID: 05-15096
Matrix: Soil
Data Release Authorized:
Reported: 09/02/05

QC Report No: IM19-Landau Associates, Inc.
Project: Port of Anacortes
529012
Date Sampled: 08/31/05
Date Received: 08/31/05

Date Analyzed: 09/01/05 20:16
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 0.072 g-dry-wt
Percent Moisture: 12.7%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	17	< 17 U	
108-88-3	Toluene	35	< 35 U	
100-41-4	Ethylbenzene	35	< 35 U	
	m,p-Xylene	70	< 70 U	
95-47-6	o-Xylene	35	< 35 U	
	Gasoline Range Hydrocarbons	7.0	< 7.0 U	GAS ID ---

BETX Surrogate Recovery

Trifluorotoluene	103%
Bromobenzene	103%

Gasoline Surrogate Recovery

Trifluorotoluene	110%
Bromobenzene	108%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: SP-3**
NWTPHg by GC/FID **SAMPLE**

Lab Sample ID: IM19C
LIMS ID: 05-15097
Matrix: Soil
Data Release Authorized:
Reported: 09/02/05

QC Report No: IM19-Landau Associates, Inc.
Project: Port of Anacortes
529012
Date Sampled: 08/31/05
Date Received: 08/31/05

Date Analyzed: 09/01/05 20:42
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 0.081 g-dry-wt
Percent Moisture: 8.3%

CAS Number	Analyte	RL	Result	GAS ID
71-43-2	Benzene	15	< 15 U	
108-88-3	Toluene	31	< 31 U	
100-41-4	Ethylbenzene	31	< 31 U	
	m,p-Xylene	62	< 62 U	
95-47-6	o-Xylene	31	< 31 U	
	Gasoline Range Hydrocarbons	6.2	< 6.2 U	---

BETX Surrogate Recovery

Trifluorotoluene	101%
Bromobenzene	102%

Gasoline Surrogate Recovery

Trifluorotoluene	105%
Bromobenzene	105%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
NWTPHg by GC/FID
Page 1 of 1

Sample ID: SP-4
SAMPLE

Lab Sample ID: IM19D
LIMS ID: 05-15098
Matrix: Soil
Data Release Authorized:
Reported: 09/02/05

QC Report No: IM19-Landau Associates, Inc.
Project: Port of Anacortes
529012
Date Sampled: 08/31/05
Date Received: 08/31/05

Date Analyzed: 09/01/05 22:27
Instrument/Analyst: PID1/PKC

Purge Volume: 5.0 mL
Sample Amount: 0.079 g-dry-wt
Percent Moisture: 8.9%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	16	< 16 U	
108-88-3	Toluene	32	< 32 U	
100-41-4	Ethylbenzene	32	< 32 U	
	m,p-Xylene	63	< 63 U	
95-47-6	o-Xylene	32	< 32 U	
	Gasoline Range Hydrocarbons	6.3	< 6.3 U	GAS ID ---

BETX Surrogate Recovery

Trifluorotoluene	101%
Bromobenzene	103%

Gasoline Surrogate Recovery

Trifluorotoluene	108%
Bromobenzene	106%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: SP-1**
Page 1 of 1 **MS/MSD**

Lab Sample ID: IM19A
LIMS ID: 05-15095
Matrix: Soil
Data Release Authorized:
Reported: 09/02/05

QC Report No: IM19-Landau Associates, Inc.
Project: Port of Anacortes
529012
Date Sampled: 08/31/05
Date Received: 08/31/05

Instrument/Analyst MS: PID1/PKC
MSD: PID1/PKC
Date Analyzed MS: 09/01/05 22:54
MSD: 09/01/05 23:20

Sample Amount MS: 0.080 g-dry-wt
MSD: 0.080 g-dry-wt
Moisture: 8.8%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Benzene	< 15.6 U	390	478	81.6%	410	474	86.5%	5.0%
Toluene	< 31.2 U	1840	2210	83.3%	1910	2190	87.2%	3.7%
Ethylbenzene	< 31.2 U	553	702	78.8%	562	696	80.7%	1.6%
m,p-Xylene	< 62.3 U	2160	2720	79.4%	2210	2690	82.2%	2.3%
o-Xylene	< 31.2 U	855	1000	85.5%	879	995	88.3%	2.8%

Results reported in µg/kg (ppb).
RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	MS	MSD
Trifluorotoluene	101%	103%
Bromobenzene	103%	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHg - Toluene to Naphthalene
Page 1 of 1

Sample ID: SP-1
MS/MSD

Lab Sample ID: IM19A
LIMS ID: 05-15095
Matrix: Soil
Data Release Authorized:
Reported: 09/02/05

QC Report No: IM19-Landau Associates, Inc.
Project: Port of Anacortes
529012
Date Sampled: 08/31/05
Date Received: 08/31/05

Instrument/Analyst MS: PID1/PKC
MSD: PID1/PKC
Date Analyzed MS: 09/01/05 22:54
MSD: 09/01/05 23:20

Sample Amount MS: 0.080 g-dry-wt
MSD: 0.080 g-dry-wt
Moisture: 8.8%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Gasoline Range Hydrocarbons	< 6.2 U	51.4	62.9	81.7%	50.0	62.3	80.3%	2.8%

Results reported in mg/kg (ppm).
RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	MS	MSD
Trifluorotoluene	110%	111%
Bromobenzene	106%	106%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: LCS-090105**
 LCS/LCSD

Lab Sample ID: LCS-090105 QC Report No: IM19-Landau Associates, Inc.
LIMS ID: 05-15095 Project: Port of Anacortes
Matrix: Soil 529012
Data Release Authorized: Date Sampled: NA
Reported: 09/02/05 Date Received: NA

Instrument/Analyst LCS: PID1/PKC Sample Amount LCS: 0.10 g
LCSD: PID1/PKC LCSD: 0.10 g
Date Analyzed LCS: 09/01/05 17:38
LCSD: 09/01/05 18:04

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	384	380	101%	378	380	99.5%	1.6%
Toluene	1750	1760	99.4%	1740	1760	98.9%	0.6%
Ethylbenzene	510	558	91.4%	510	558	91.4%	0.0%
m,p-Xylene	2000	2160	92.6%	1990	2160	92.1%	0.5%
o-Xylene	785	798	98.4%	790	798	99.0%	0.6%

Results reported in µg/kg (ppb).
RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	102%	99.9%
Bromobenzene	100%	98.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHg - Toluene to Naphthalene
Page 1 of 1

Sample ID: LCS-090105
LCS/LCSD

Lab Sample ID: LCS-090105
LIMS ID: 05-15095
Matrix: Soil
Data Release Authorized:
Reported: 09/02/05

QC Report No: IM19-Landau Associates, Inc.
Project: Port of Anacortes
529012
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: PID1/PKC
LCSD: PID1/PKC
Date Analyzed LCS: 09/01/05 17:38
LCSD: 09/01/05 18:04

Sample Amount LCS: 0.10 g
LCSD: 0.10 g

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	48.6	50.0	97.2%	45.7	50.0	91.4%	6.2%

Results reported in mg/kg (ppm).
RPD calculated using sample concentrations per SW846.

Gasoline Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	109%	105%
Bromobenzene	101%	98.0%

ANALYTICAL RESOURCES INCORPORATED

SOIL BETX SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Soil

QC Report No: IM19

LIMS ID	Lab ID	Client ID	TFT	BB	TOT OUT
05-15095MB	090105MB	Method Blank	108%	102%	0
05-15095LC	090105LC	Lab Control	102%	100%	0
05-15095LCD	090105LCD	LCDuplicate	100%	98%	0
05-15095	IM19A	SP-1	104%	103%	0
05-15095	IM19A-MS	SP-1	101%	103%	0
05-15095	IM19A-MSD	SP-1	103%	104%	0
05-15096	IM19B	SP-2	103%	103%	0
05-15097	IM19C	SP-3	101%	102%	0
05-15098	IM19D	SP-4	101%	103%	0

	MB/LCS QC LIMITS	SAMPLE QC LIMITS
(TFT) = Trifluorotoluene	(83-131)	(57-150)
(BB) = Bromobenzene	(87-118)	(56-156)

Limits Updated - 12/01/99

* Values outside of advisory QC limits

D System Monitoring Compound diluted out

FORM-II BETX

ANALYTICAL RESOURCES INCORPORATED

SOIL TPHg SYSTEM MONITORING COMPOUND SUMMARY

Matrix: Soil

QC Report No: IM19

LIMS ID	Lab ID	Client ID	TFT	BB	TOT OUT
05-15095MB	090105MBS	Method Blank	106%	97%	0
05-15095LC	090105LCS	Lab Control	109%	101%	0
05-15095LCD	090105LCDS	LCDuplicate	105%	98%	0
05-15095	IM19A	SP-1	110%	107%	0
05-15095	IM19A-MS	SP-1	110%	106%	0
05-15095	IM19A-MSD	SP-1	111%	106%	0
05-15096	IM19B	SP-2	110%	108%	0
05-15097	IM19C	SP-3	105%	105%	0
05-15098	IM19D	SP-4	108%	106%	0

	MB/LCS QC LIMITS	SAMPLE QC LIMITS
(TFT) = Trifluorotoluene	(80-128)	(55-165)
(BB) = Bromobenzene	(80-123)	(48-169)

Limits Updated - 01/18/05

\# Column to be used to flag recovery values

D System Monitoring Compound diluted out

FORM-II TPHg