

NM1 - 9

MONITORING REPORT

YEAR(S):

2006-2008

• ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #1	Date Reported:	10-31-08
Laboratory Number:	47908	Date Sampled:	10-28-08
Chain of Custody:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Analyzed:	10-30-08
Preservative:	Cool	Date Extracted:	10-29-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	25.3	1.0
Ethylbenzene	4.9	1.0
p,m-Xylene	341	1.2
o-Xylene	150	0.9
Total BTEX	521	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm

Analyst

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Reported:	10-31-08
Laboratory Number:	47909	Date Sampled:	10-28-08
Chain of Custody:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Analyzed:	10-30-08
Preservative:	Cool	Date Extracted:	10-29-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	30.2	1.0
Ethylbenzene	8.0	1.0
p,m-Xylene	672	1.2
o-Xylene	304	0.9
Total BTEX	1,010	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

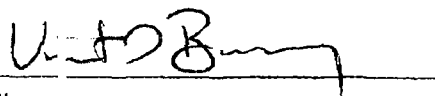
Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	10-30-BT QA/QC	Date Reported:	10-31-08
Laboratory Number:	47901	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-30-08
Condition:	N/A	Analyte:	BTEX

Calibration and Detection Limits (ug/L)	N-Cal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0 - 15%			
Benzene	4.6535E+007	4.6628E+007	0.2%	ND	0.1
Toluene	3.6522E+007	3.6595E+007	0.2%	ND	0.1
Ethylbenzene	2.7807E+007	2.7863E+007	0.2%	ND	0.1
p,m-Xylene	5.8820E+007	5.8938E+007	0.2%	ND	0.1
o-Xylene	2.6758E+007	2.6812E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	1.2	1.1	8.3%	0 - 30%	0.9
Toluene	5.7	5.8	1.8%	0 - 30%	1.0
Ethylbenzene	2.6	2.4	7.7%	0 - 30%	1.0
p,m-Xylene	5.8	6.0	3.4%	0 - 30%	1.2
o-Xylene	3.0	2.8	6.7%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spike	Sample	% Recovery	Accept Range
Benzene	1.2	50.0	50.2	98.0%	39 - 150	
Toluene	5.7	50.0	53.4	95.9%	46 - 148	
Ethylbenzene	2.6	50.0	50.6	96.2%	32 - 160	
p,m-Xylene	5.8	100	103	97.1%	46 - 148	
o-Xylene	3.0	50.0	50.0	94.3%	46 - 148	

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 47901 - 47904, 47908, 47909, 47911 - 47913, and 47920.

Analyst

Reviewer



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #1	Date Reported:	10-31-08
Laboratory Number:	47908	Date Sampled:	10-28-08
Chain of Custody No:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Extracted:	10-29-08
Preservative:	Cool	Date Analyzed:	10-30-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/ (g)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	70.0	0.2
Diesel Range (C10 - C28)	3,060	0.1
Total Petroleum Hydrocarbons	3,130	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**

Analyst

Review



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Reported:	10-31-08
Laboratory Number:	47909	Date Sampled:	10-28-08
Chain of Custody No:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Extracted:	10-29-08
Preservative:	Cool	Date Analyzed:	10-30-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	83.7	0.2
Diesel Range (C10 - C28)	3,680	0.1
Total Petroleum Hydrocarbons	3,760	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**

Analyst

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #1	Date Reported:	10-31-08
Laboratory Number:	47908	Date Sampled:	10-28-08
Chain of Custody:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Analyzed:	10-30-08
Preservative:	Cool	Date Extracted:	10-29-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	25.3	1.0
Ethylbenzene	4.9	1.0
p,m-Xylene	341	1.2
o-Xylene	150	0.9
Total BTEX	521	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Report ed:	10-31-08
Laboratory Number:	47909	Date Sample d:	10-28-08
Chain of Custody:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Analyz ed:	10-30-08
Preservative:	Cool	Date Extract ed:	10-29-08
Condition:	Intact	Analysis Re-quested:	BTEX

Parameter	Concentration (ug/Kg)	Def. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	30.2	1.0
Ethylbenzene	8.0	1.0
p,m-Xylene	672	1.2
o-Xylene	304	0.9
Total BTEX	1,010	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

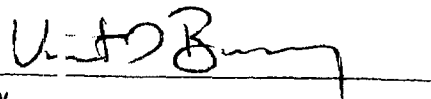
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Comments: Landfarm

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 10-30-BT QA/QC
Laboratory Number: 47901
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 10-31-08
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 10-30-08
Analysis: BTEX

Calibration and Detection Limits (ug/L)	LOA RF	LOA RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0 - 15%			
Benzene	4.6535E+007	4.6628E+007	0.2%	ND	0.1
Toluene	3.6522E+007	3.6595E+007	0.2%	ND	0.1
Ethylbenzene	2.7807E+007	2.7863E+007	0.2%	ND	0.1
p,m-Xylene	5.8820E+007	5.8938E+007	0.2%	ND	0.1
o-Xylene	2.6758E+007	2.6812E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	1.2	1.1	8.3%	0 - 30%	0.9
Toluene	5.7	5.8	1.8%	0 - 30%	1.0
Ethylbenzene	2.6	2.4	7.7%	0 - 30%	1.0
p,m-Xylene	5.8	6.0	3.4%	0 - 30%	1.2
o-Xylene	3.0	2.8	6.7%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spike	Sample	% Recovery	Accept Range
Benzene	1.2	50.0	50.2	98.0%	39 - 150	
Toluene	5.7	50.0	53.4	95.9%	46 - 148	
Ethylbenzene	2.6	50.0	50.6	96.2%	32 - 160	
p,m-Xylene	5.8	100	103	97.1%	46 - 148	
o-Xylene	3.0	50.0	50.0	94.3%	46 - 148	

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 47901 - 47904, 47908, 47909, 47911 - 47913, and 47920.

Analyst

Review



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy	Project #	98065-0007
Sample ID:	Cell #1	Date Reported:	10-31-08
Laboratory Number:	47908	Date Sampled:	10-28-08
Chain of Custody No:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Extracted:	10-29-08
Preservative:	Cool	Date Analyzed:	10-30-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/(g))	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	70.0	0.2
Diesel Range (C10 - C28)	3,050	0.1
Total Petroleum Hydrocarbons	3,130	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**

Analyst

Reviewer



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Reported:	10-31-08
Laboratory Number:	47909	Date Sampled:	10-28-08
Chain of Custody No:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Extracted:	10-29-08
Preservative:	Cool	Date Analyzed:	10-30-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/ (g)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	83.7	0.2
Diesel Range (C10 - C28)	3,680	0.1
Total Petroleum Hydrocarbons	3,760	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**

Analyst

Reviewer



EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	10-30-08 QA/QC	Date Reported:	10-31-08
Laboratory Number:	47901	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-30-08
Condition:	N/A	Analysis Requested:	TPH

	Cal Date	Cal RF	C-01 RF	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9926E+002	9.9961E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0053E+003	1.0057E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.1%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.1%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	246	98.4%	75 - 125%
Diesel Range C10 - C28	ND	250	253	101%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 47901 - 47904, 47908 - 47912, and 47920.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #1	Date Reported:	10-31-08
Laboratory Number:	47908	Date Sampled:	10-28-08
Chain of Custody:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Analyzed:	10-30-08
Preservative:	Cool	Date Extracted:	10-29-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	25.3	1.0
Ethylbenzene	4.9	1.0
p,m-Xylene	341	1.2
o-Xylene	150	0.9
Total BTEX	521	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Reported:	10-31-08
Laboratory Number:	47909	Date Sampled:	10-28-08
Chain of Custody:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Analyzed:	10-30-08
Preservative:	Cool	Date Extracted:	10-29-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	30.2	1.0
Ethylbenzene	8.0	1.0
p,m-Xylene	672	1.2
o-Xylene	304	0.9
Total BTEX	1,010	

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Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
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Comments: Landfarm

Analyst



Review



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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	10-30-BT QA/QC	Date Reported:	10-31-08
Laboratory Number:	47901	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-30-08
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	Cal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0 - 15%			
Benzene	4.6535E+007	4.6628E+007	0.2%	ND	0.1
Toluene	3.6522E+007	3.6595E+007	0.2%	ND	0.1
Ethylbenzene	2.7807E+007	2.7863E+007	0.2%	ND	0.1
p,m-Xylene	5.8820E+007	5.8938E+007	0.2%	ND	0.1
o-Xylene	2.6758E+007	2.6812E+007	0.2%	ND	0.1

Duplicate Conc (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	1.2	1.1	8.3%	0 - 30%	0.9
Toluene	5.7	5.8	1.8%	0 - 30%	1.0
Ethylbenzene	2.6	2.4	7.7%	0 - 30%	1.0
p,m-Xylene	5.8	6.0	3.4%	0 - 30%	1.2
o-Xylene	3.0	2.8	6.7%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spike	Sample	% Recovery	Accept Range
Benzene	1.2	50.0	50.2	98.0%	39 - 150	
Toluene	5.7	50.0	53.4	95.9%	46 - 148	
Ethylbenzene	2.6	50.0	50.6	96.2%	32 - 160	
p,m-Xylene	5.8	100	103	97.1%	46 - 148	
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Comments: QA/QC for Samples 47901 - 47904, 47908, 47909, 47911 - 47913, and 47920.

Analyst

Review



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy	Project #	98065-0007
Sample ID:	Cell #1	Date Reported:	10-31-08
Laboratory Number:	47908	Date Sampled:	10-28-08
Chain of Custody No:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Extracted:	10-29-08
Preservative:	Cool	Date Analyzed:	10-30-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/l (g))	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	70.0	0.2
Diesel Range (C10 - C28)	3,060	0.1
Total Petroleum Hydrocarbons	3,130	0.2

ND - Parameter not detected at the stated detection limit.

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Comments: Landfarm

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EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Reported:	10-31-08
Laboratory Number:	47909	Date Sampled:	10-28-08
Chain of Custody No:	5643	Date Received:	10-28-08
Sample Matrix:	Soil	Date Extracted:	10-29-08
Preservative:	Cool	Date Analyzed:	10-30-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	83.7	0.2
Diesel Range (C10 - C28)	3,680	0.1
Total Petroleum Hydrocarbons	3,760	0.2

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Comments: Landfarm

Analyst

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EPA Method 8015 Modified
Non halogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	10-30-08 QA/QC	Date Reported:	10-31-08
Laboratory Number:	47901	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-30-08
Condition:	N/A	Analysis Requested:	TPH

	Test Date	Test RF	QC RF	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9926E+002	9.9961E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0053E+003	1.0051E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	246	98.4%	75 - 125%
Diesel Range C10 - C28	ND	250	253	101%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 47901 - 47904, 47908 - 47912, and 47920.

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #1	Date Reported:	08-05-08
Laboratory Number:	46526	Date Sampled:	07-29-08
Chain of Custody:	4895	Date Received:	07-29-08
Sample Matrix:	Soil	Date Analyzed:	08-04-08
Preservative:	Cool	Date Extracted:	08-01-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	1.5	0.9
Toluene	8.2	1.0
Ethylbenzene	1.6	1.0
p,m-Xylene	9.7	1.2
o-Xylene	4.0	0.9
Total BTEX	25.0	

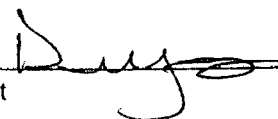
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments:


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Reported:	08-05-08
Laboratory Number:	46527	Date Sampled:	07-29-08
Chain of Custody:	4895	Date Received:	07-29-08
Sample Matrix:	Soil	Date Analyzed:	08-04-08
Preservative:	Cool	Date Extracted:	08-01-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	6.5	0.9
Toluene	20.6	1.0
Ethylbenzene	5.3	1.0
p,m-Xylene	20.2	1.2
o-Xylene	10.4	0.9
Total BTEX	63.0	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments:

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	08-04-BT QA/QC	Date Reported:	08-05-08
Laboratory Number:	46526	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-04-08
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	% Rf	Blank Conc	Detect Limit
		Accept. Range 0 - 1 %	%		
Benzene	8.6847E+007	8.7021E+007	0.2 %	ND	0.1
Toluene	6.6443E+007	6.6576E+007	0.2 %	ND	0.1
Ethylbenzene	5.2198E+007	5.2303E+007	0.2 %	ND	0.1
p,m-Xylene	1.0565E+008	1.0586E+008	0.2 %	ND	0.1
o-Xylene	4.9558E+007	4.9658E+007	0.2 %	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Rf	Accept Range	Detect Limit
			%		
Benzene	1.5	1.4	6.7 %	0 - 30%	0.9
Toluene	8.2	7.9	3.7 %	0 - 30%	1.0
Ethylbenzene	1.6	1.4	12.5 %	0 - 30%	1.0
p,m-Xylene	9.7	9.3	0.2 %	0 - 30%	1.2
o-Xylene	4.0	3.6	0.8 %	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	1.5	50.0	51.1	99.2%	39 - 150
Toluene	8.2	50.0	56.2	96.6%	46 - 148
Ethylbenzene	1.6	50.0	48.6	94.2%	32 - 160
p,m-Xylene	9.7	100	107	97.3%	46 - 148
o-Xylene	4.0	50.0	52.0	96.3%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 46526 - 46527, 46552 - 46557, and 46564 - 46565.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #	98065-0007
Sample ID:	Cell #1	Date Reported:	08-05-08
Laboratory Number:	46526	Date Sampled:	07-29-08
Chain of Custody No:	4895	Date Received:	07-29-08
Sample Matrix:	Soil	Date Extracted:	08-01-08
Preservative:	Cool	Date Analyzed:	08-04-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	43.3	0.1
Total Petroleum Hydrocarbons	43.3	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments:

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #	98065-0007
Sample ID:	Cell #2	Date Reported:	08-05-08
Laboratory Number:	46527	Date Sampled:	07-29-08
Chain of Custody No:	4895	Date Received:	07-29-08
Sample Matrix:	Soil	Date Extracted:	08-01-08
Preservative:	Cool	Date Analyzed:	08-04-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	35.8	0.1
Total Petroleum Hydrocarbons	35.8	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments:

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project:	N/A
Sample ID:	08-04-08 QA/QC	Date Reported:	08-05-08
Laboratory Number:	46526	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-04-08
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	1.0082E+003	1.0087E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0094E+003	1.0098E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	43.3	42.6	1.6%	0 - 30%

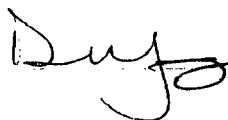
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	249	99.6%	75 - 125%
Diesel Range C10 - C28	43.3	250	295	101%	75 - 125%

ND - Parameter not detected at the stated detection limit.

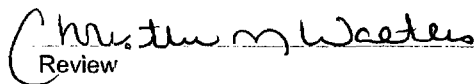
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 46526 - 46527, 46552 - 46557, and 46564 - 46565.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-01-08
Lab ID#:	46525	Date Sampled:	07-29-08
Sample Matrix:	Water	Date Received:	07-29-08
Preservative:	Cool	Date Analyzed:	07-30-08
Condition:	Intact	Chain of Custody:	4894

Parameter

Result

IGNITABILITY: **Negative**

CORROSIVITY: **Negative**

pH = 5.4

REACTIVITY: **Negative**

RCRA Hazardous Waste Criteria

Parameter

Hazardous Waste Criterion

IGNITABILITY:

Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21.
(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)

CORROSIVITY:

Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22.
(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)

REACTIVITY:

Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23.
(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference:

40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments:

Injection Well.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	07-29-08
Chain of Custody:	4894	Date Received:	07-29-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	08-06-08
Condition:	Intact	Anal ysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (ng/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0431	0.0001	200
Chloroform	0.0282	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0218	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

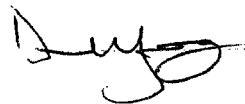
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.1%
	1,4-difluorobenzene	93.2%
	4-bromochlorobenzene	99.8%

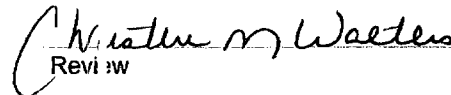
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Well.**

Analyst




Revised

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270 Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	07-29-08
Chain of Custody:	4894	Date Received:	07-29-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	08-05-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.012	5.0
Hexachloroethane	ND	0.012	3.0
Nitrobenzene	ND	0.012	2.0
Hexachlorobutadiene	ND	0.012	0.5
2,4-Dinitrotoluene	ND	0.012	0.13
HexachloroBenzene	ND	0.012	0.13

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	94.9%

References: Method 1311, Toxicity Characteristic Leaching Procedure, S/V-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, S/V-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Well.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

TCLP PHENOLS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	07-29-08
Chain of Custody:	4894	Date Received:	07-29-08
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	08-05-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	0.583	0.020	200
p,m-Cresol	0.319	0.020	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	95.7%
	2,4,6-Tribromophenol	95.3%

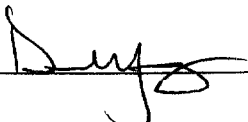
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

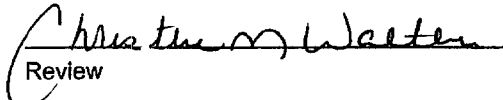
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Well**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Pump After Filter	Date Reported:	08-01-08
Laboratory Number:	46525	Date Sampled:	07-29-08
Chain of Custody:	4894	Date Received:	07-29-08
Sample Matrix:	Water	Date Analyzed:	08-01-08
Preservative:	Cool	Date Digested:	07-30-08
Condition:	Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	0.129	0.001	5.0
Barium	14.8	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.223	0.001	5.0
Lead	0.007	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.049	0.001	1.0
Silver	0.004	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Well.**

Analyst

Review

QUALITY ASSURANCE / QUALITY CONTROL
DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 08-06-TCV QA/QC
Laboratory Number: 46525
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 08-07-08
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 08-06-08
Analysis Requested: TCLP

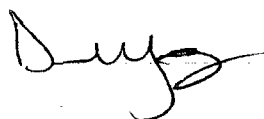
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0431	0.0451	4.7%
Chloroform	0.0001	ND	ND	0.0282	0.0274	3.1%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0218	0.0237	8.8%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0946	94.6%	26-163
1,1-Dichloroethene	0.1000	ND	0.1046	105%	43-143
2-Butanone (MEK)	0.1000	0.0431	0.1031	72.1%	47-132
Chloroform	0.1000	0.0282	0.1139	88.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0935	93.5%	43-143
Benzene	0.1000	0.0218	0.1092	89.7%	39-150
1,2-Dichloroethane	0.1000	ND	0.1065	107%	51-147
Trichloroethene	0.1000	ND	0.0936	93.6%	35-146
Tetrachloroethene	0.1000	ND	0.0875	87.5%	26-162
Chlorobenzene	0.1000	ND	0.0894	89.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0795	79.5%	42-143

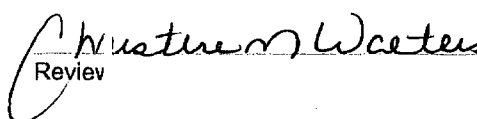
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: QA/QC for Sample 46525.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270 TCLP PHENOLS Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-05-TCA QA/QC	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-05-08
Condition:	N/A	Analysis Requested:	TCLP

Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	0.513	0.592	1.6%
p,m-Cresol	ND	ND	0.020	0.319	0.330	3.5%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for Sample 46525.

Analyst

Review

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-05-TBN QA/QC	Date Reported:	08-07-08
Laboratory Number:	46525	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-05-08
Condition:	N/A	Analysis Requested:	TCLP

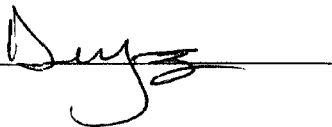
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.012	ND	ND	0.0%
Hexachloroethane	ND	ND	0.012	ND	ND	0.0%
Nitrobenzene	ND	ND	0.012	ND	ND	0.0%
Hexachlorobutadiene	ND	ND	0.012	ND	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.012	ND	ND	0.0%
Hexachlorobenzene	ND	ND	0.012	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

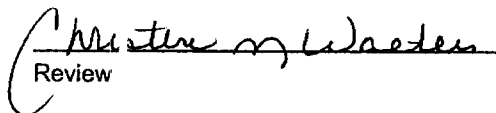
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for
Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Comments: QA/QC for Sample 46525.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	08-01-TCM QA/QC	Date Reported:	08-01-08
Laboratory Number:	46525	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	08-01-08
Condition:	N/A	Date Digested:	07-30-08

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	0.129	0.136	5.6%	0% - 30%
Barium	ND	ND	0.001	14.8	14.9	0.5%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.223	0.235	5.1%	0% - 30%
Lead	ND	ND	0.001	0.007	0.009	19.2%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.049	0.047	4.9%	0% - 30%
Silver	ND	ND	0.001	0.004	0.005	9.8%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.250	0.129	0.340	89.8%	80% - 120%
Barium	0.500	14.8	14.69	96.1%	80% - 120%
Cadmium	0.250	ND	0.200	80.0%	80% - 120%
Chromium	0.500	0.223	0.586	81.1%	80% - 120%
Lead	0.500	0.007	0.551	109%	80% - 120%
Mercury	0.100	ND	0.091	91.0%	80% - 120%
Selenium	0.100	0.049	0.134	89.8%	80% - 120%
Silver	0.100	0.004	0.092	88.1%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

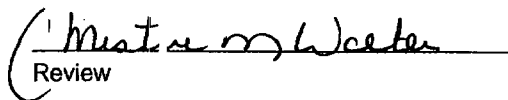
Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 46525.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-0007
Sample ID:	W. Leak Detector	Date Reported:	06-09-08
Laboratory Number:	45735	Date Sampled:	06-03-08
Chain of Custody No:	4524	Date Received:	06-03-08
Sample Matrix:	Water	Date Extracted:	06-05-08
Preservative:	Cool	Date Analyzed:	06-06-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.1

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **West Leak Detector**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Non halogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-06-TPH QA/QC	Date Reported:	06-09-08
Laboratory Number:	45735	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-06-08
Condition:	N/A	Analysis Requested:	TPH

Sample	Sample	Sample	Sample	Sample
Gasoline Range C5 - C10	1.0035E+000	1.0015E+000	0.20%	0 - 15%
Diesel Range C10 - C28	1.0056E+000	1.0036E+000	0.20%	0 - 15%

Sample	Sample	Sample
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Sample	Sample	Sample	Sample
Gasoline Range C5 - C10	ND	ND	0.1 %
Diesel Range C10 - C28	ND	ND	0.1 %

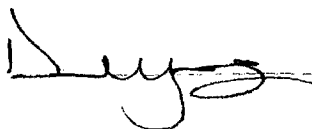
Sample	Sample	Sample	Sample	Sample
Gasoline Range C5 - C10	ND	25.0	21.4	102%
Diesel Range C10 - C28	ND	25.0	24.9	99.6%

ND - Parameter not detected at the stated detection limit.

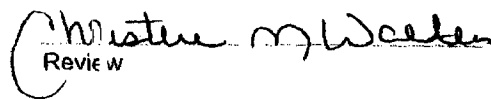
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 45735 and 45755.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	W. Leak Detector	Date Reported:	06-09-08
Chain of Custody:	4524	Date Sampled:	06-03-08
Laboratory Number:	45735	Date Received:	06-03-08
Sample Matrix:	Water	Date Analyzed:	06-06-08
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	4.7	1	0.2
Toluene	23.5	1	0.2
Ethylbenzene	2.2	1	0.2
p,m-Xylene	26.6	1	0.2
o-Xylene	7.9	1	0.1

Total BTEX 64.9

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	99 %
	1,4-difluorobenzene	99 %
	4-bromochlorobenzene	99 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: West Leak Detector.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client: N/A
Sample ID: 06-06-BT QA/QC
Laboratory Number: 45735
Sample Matrix: Water
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 06-09-08
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 06-06-08
Analysis: BTEX

Concentration (mg/L)	Accept. Range	Accept. Range	Accept. Range	Accept. Range
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Benzene	2.8640E+007	2.8726E+007	0.00%	ND	0.2
Toluene	2.3081E+007	2.3151E+007	0.00%	ND	0.2
Ethylbenzene	1.6852E+007	1.6903E+007	0.00%	ND	0.2
p,m-Xylene	3.6405E+007	3.6514E+007	0.00%	ND	0.2
o-Xylene	1.5619E+007	1.5666E+007	0.00%	ND	0.1

Duplicate Conc. (mg/L)	Sample	Duplicate	% Diff.	Accept. Limit
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Benzene	4.7	4.2	9.1%	0 - 30%
Toluene	23.5	23.4	0.5%	0 - 30%
Ethylbenzene	2.2	2.1	5.1%	0 - 30%
p,m-Xylene	26.6	26.0	2.1%	0 - 30%
o-Xylene	7.9	7.6	4.1%	0 - 30%

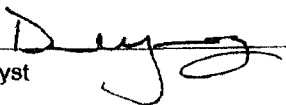
Spiked Conc. (mg/L)	Sample	Amount Spiked	Spiked	% Recovery	Accept. Limit
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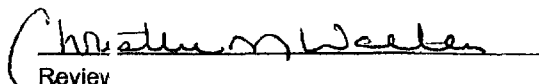
Benzene	4.7	50.0	49.6	90.7%	39 - 150
Toluene	23.5	50.0	73.4	99.9%	46 - 148
Ethylbenzene	2.2	50.0	49.1	94.1%	32 - 160
p,m-Xylene	26.6	100	116	91.9%	46 - 148
o-Xylene	7.9	50.0	55.8	96.4%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 45735 and 45755.

Analyst 

Review 

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client: Key Energy
Sample ID: W. Leak Detector
Laboratory Number: 45735
Chain of Custody: 4524
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Project #: 98065-0007
Date Reported: 06-09-08
Date Sampled: 06-03-08
Date Received: 06-03-08
Date Extracted: N/A
Date Analyzed: 06-04-08

Parameter	Analytical Result	Units		
pH	7.12	s.u.		
Conductivity @ 25° C	28,600	umhos/cm		
Total Dissolved Solids @ 180C	18,000	mg/L		
Total Dissolved Solids (Calc)	18,216	mg/L		
SAR	94.6	ratio		
Total Alkalinity as CaCO3	1,520	mg/L		
Total Hardness as CaCO3	798	mg/L		
Bicarbonate as HCO3	1,520	mg/L	24.91	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	5.5	mg/L	0.09	meq/L
Nitrite Nitrogen	0.050	mg/L	0.00	meq/L
Chloride	8,800	mg/L	248.25	meq/L
Fluoride	0.36	mg/L	0.02	meq/L
Phosphate	57.0	mg/L	1.80	meq/L
Sulfate	1,270	mg/L	26.44	meq/L
Iron	0.059	mg/L	0.00	meq/L
Calcium	255	mg/L	12.72	meq/L
Magnesium	39.3	mg/L	3.23	meq/L
Potassium	726	mg/L	18.57	meq/L
Sodium	6,140	mg/L	267.09	meq/L
Cations			301.62	meq/L
Anions			301.51	meq/L
Cation/Anion Difference			0.04%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Wastewater", 18th ed., 1992.

Comments: **West Leak Detector.**

Analyst

Review

4574

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Key Energy
Sample ID: Main Pond
Laboratory Number: 45935
Chain of Custody No: 4604
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Project # 98065-0007
Date Reported: 06-24-08
Date Sampled: 06-17-08
Date Received: 06-17-08
Date Extracted: 06-19-08
Date Analyzed: 06-19-08
Analysis Requested: 8015 TPH

Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	8.0	0.2
Diesel Range (C10 - C28)	1.8	0.1
Total Petroleum Hydrocarbons	9.8	0.1

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Main Pond.**

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	06-19-TPH QA/QC	Date Reported:	06-24-08
Laboratory Number:	45935	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-19-08
Condition:	N/A	Analysis Requested:	TPH

Parameter	Sample	Reference	Recovery	Range
Gasoline Range C5 - C10	9.8264E-001	9.8063E-001	0.20%	0 - 15%
Diesel Range C10 - C28	9.9679E-001	9.9480E-001	0.20%	0 - 15%

Parameter	Concentration	Recovery
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Parameter	Sample	Reference	Recovery	Range
Gasoline Range C5 - C10	8.0	7.7	3.1 %	0 - 30%
Diesel Range C10 - C28	1.8	1.6	11.1 %	0 - 30%

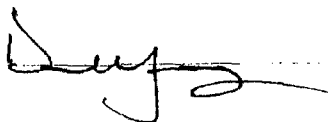
Parameter	Sample	Reference	Recovery	Range
Gasoline Range C5 - C10	8.0	250	27.6	107% 75 - 125%
Diesel Range C10 - C28	1.8	250	21.6	102% 75 - 125%

ND - Parameter not detected at the stated detection limit.

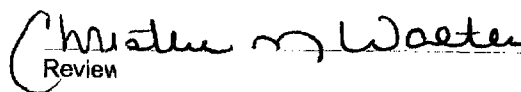
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 45935 and 45949.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Key Energy
Sample ID: Main Pond
Chain of Custody: 4604
Laboratory Number: 45935
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Project #: 98065-0007
Date Reported: 06-24-08
Date Sampled: 06-17-08
Date Received: 06-17-08
Date Analyzed: 06-19-08
Analysis Requested: BTEX

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	20.1	1	0.2
Toluene	148	1	0.2
Ethylbenzene	242	1	0.2
p,m-Xylene	680	1	0.2
o-Xylene	406	1	0.1

Total BTEX 1,500

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	97 %
	1,4-difluorobenzene	97 %
	4-bromochlorobenzene	97 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: Main Pond.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client: N/A
Sample ID: 06-19-BT QA/QC
Laboratory Number: 45935
Sample Matrix: Water
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 06-24-08
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 06-19-08
Analysis: BTEX

Calibration Conc. (ug/L)	Cal. R ²	Cal. R ²	% R ²	Sample Conc. (ug/L)	Acceptance
Detection Limit (ug/L)		Acceptance Range (%)			
Benzene	2.2023E+007	2.2089E+007	0.31%	ND	0.2
Toluene	1.8623E+007	1.8679E+007	0.31%	ND	0.2
Ethylbenzene	1.3629E+007	1.3670E+007	0.30%	ND	0.2
p,m-Xylene	3.0712E+007	3.0805E+007	0.30%	ND	0.2
o-Xylene	1.2985E+007	1.3024E+007	0.30%	ND	0.1

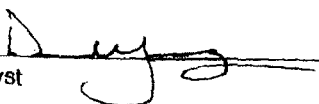
Duplicate Conc. (ug/L)	Sample	Duplicate	% Diff	Acceptance
Benzene	20.1	20.0	0.5%	0 - 30%
Toluene	148	147	0.7%	0 - 30%
Ethylbenzene	242	241	0.4%	0 - 30%
p,m-Xylene	680	677	0.4%	0 - 30%
o-Xylene	406	404	0.5%	0 - 30%

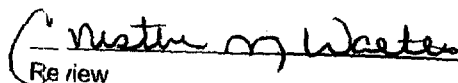
Spiked Conc. (ug/L)	Sample	Amount Spiked (ug/L)	Spiked Sample	% Recovery	Acceptance
Benzene	20.1	50.0	66.0	94.1%	39 - 150
Toluene	148	50.0	202	102%	46 - 148
Ethylbenzene	242	50.0	289	98.9%	32 - 160
p,m-Xylene	680	100	780	100%	46 - 148
o-Xylene	406	50.0	456	100%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846 USEPA December 1996.

Comments: QA/QC for Samples 45935 and 45949.

Analyst 

Review 

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client: Key Energy
Sample ID: Main Pond
Laboratory Number: 45935
Chain of Custody: 4804
Sample Matrix: Water
Preservative: Cool
Condition: Intact

Project #: 98065-0007
Date Reported: 06-25-08
Date Sampled: 06-17-08
Date Received: 06-17-08
Date Extracted: N/A
Date Analyzed: 06-18-08

Parameter	Analytical Result	Units		
pH	7.48	s.u.		
Conductivity @ 25° C	32,500	umhos/cm		
Total Dissolved Solids @ 180C	19,700	mg/L		
Total Dissolved Solids (Calc)	18,648	mg/L		
SAR	87.9	ratio		
Total Alkalinity as CaCO3	1,500	mg/L		
Total Hardness as CaCO3	1,300	mg/L		
Bicarbonate as HCO3	1,500	mg/L	24.59	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.0	mg/L	0.02	meq/L
Nitrite Nitrogen	<0.01	mg/L	0.00	meq/L
Chloride	10,000	mg/L	282.10	meq/L
Fluoride	1.73	mg/L	0.09	meq/L
Phosphate	16.5	mg/L	0.52	meq/L
Sulfate	85.5	mg/L	1.78	meq/L
Iron	3.72	mg/L	0.13	meq/L
Calcium	448	mg/L	22.36	meq/L
Magnesium	43.3	mg/L	3.56	meq/L
Potassium	1,520	mg/L	38.88	meq/L
Sodium	5,620	mg/L	244.47	meq/L
Cations			309.27	meq/L
Anions			309.09	meq/L
Cation/Anion Difference			0.06%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Main Pond.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #1	Date Reported:	04-28-08
Laboratory Number:	45141	Date Sampled:	04-23-08
Chain of Custody No:	4257	Date Received:	04-23-08
Sample Matrix:	Soil	Date Extracted:	04-24-08
Preservative:	Cool	Date Analyzed:	04-25-08
Condition:	Intact	Analysis Requested:	8015 TPH

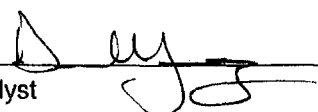
Parameter	Concentration (mg/kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

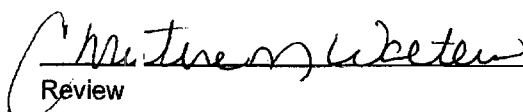
ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **#345 CR 350 Landfarm.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

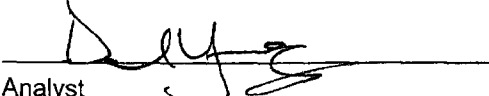
Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Reported:	04-28-08
Laboratory Number:	45142	Date Sampled:	04-23-08
Chain of Custody No:	4257	Date Received:	04-23-08
Sample Matrix:	Soil	Date Extracted:	04-24-08
Preservative:	Cool	Date Analyzed:	04-25-08
Condition:	Intact	Analysis Requested:	8015 TPH

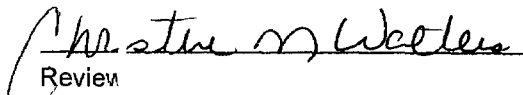
Parameter	Concentration (mg/l (g))	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: #345 CR 350 Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Non halogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-25-08 QA/QC	Date Reported:	04-28-08
Laboratory Number:	45125	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-25-08
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	1.0042E+003	1.0046E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0070E+003	1.0074E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	41.5	41.2	0.7%	0 - 30%
Diesel Range C10 - C28	62.4	62.0	0.6%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	41.5	250	280	96.6%	75 - 125%
Diesel Range C10 - C28	62.4	250	310	99.4%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 45125, 45128, 45129, 45141, 45142 and 45157 - 45161.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #1	Date Reported:	04-28-08
Laboratory Number:	45141	Date Sampled:	04-23-08
Chain of Custody:	4257	Date Received:	04-23-08
Sample Matrix:	Soil	Date Analyzed:	04-25-08
Preservative:	Cool	Date Extracted:	04-24-08
Condition:	Intact	Analy: is Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	11.8	1.0
Ethylbenzene	12.2	1.0
p,m-Xylene	26.6	1.2
o-Xylene	11.0	0.9
Total BTEX	61.6	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	96.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Method : for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: #345 CR 350 Landfarm.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Cell #2	Date Reported:	04-28-08
Laboratory Number:	45142	Date Sampled:	04-23-08
Chain of Custody:	4257	Date Received:	04-23-08
Sample Matrix:	Soil	Date Analyzed:	04-25-08
Preservative:	Cool	Date Extracted:	04-24-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	ND	1.0
Ethylbenzene	ND	1.0
p,m-Xylene	ND	1.2
o-Xylene	ND	0.9
Total BTEX	ND	

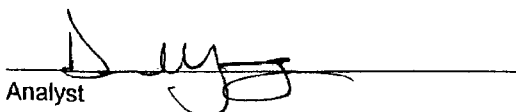
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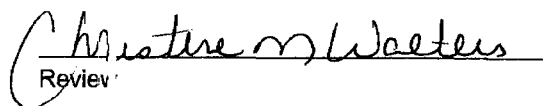
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	96.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: #345 CR 350 Landfarm.


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 04-25-BTEX QA/QC
Laboratory Number: 45125
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 04-25-08
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 04-25-08
Analyst: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0	5%		
Benzene	4.6628E+007	4.6720E+007	0.2%	ND	0.1
Toluene	3.9327E+007	3.9406E+007	0.2%	ND	0.1
Ethylbenzene	2.9941E+007	3.0001E+007	0.2%	ND	0.1
p,m-Xylene	6.1356E+007	6.1479E+007	0.2%	ND	0.1
o-Xylene	2.8703E+007	2.8761E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	49.3	49.2	0.2%	0 - 30%	0.9
Toluene	442	436	1.3%	0 - 30%	1.0
Ethylbenzene	87.1	86.9	0.2%	0 - 30%	1.0
p,m-Xylene	1,900	1,890	0.5%	0 - 30%	1.2
o-Xylene	478	477	0.2%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked	% Recovery	Accept Range
Benzene	49.3	50.0	96.2	96.9%	39 - 150
Toluene	442	50.0	491	99.8%	46 - 148
Ethylbenzene	87.1	50.0	134	97.7%	32 - 160
p,m-Xylene	1,900	100	1,980	99.0%	46 - 148
o-Xylene	478	50.0	518	98.1%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 45125, 45128, 45141, 45142 and 45157 - 45161.

Analyst

Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Lab ID#:	45140	Date Sampled:	04-23-08
Sample Matrix:	Liquid	Date Received:	04-23-08
Preservative:	Cool	Date Analyzed:	04-28-08
Condition:	Intact	Chain of Custody:	4256

Parameter	Result
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IGNITABILITY: **Negative**

CORROSIVITY: **Negative**

pH = 6.6

REACTIVITY: **Negative**

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

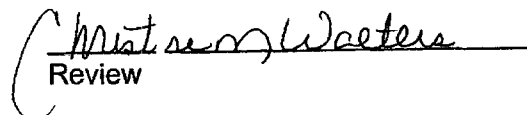
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RECEIVED OGD

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23 July 1, 1992.

Comments: **#345 CR 350.**


Analyst


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	04-23-08
Chain of Custody:	4256	Date Received:	04-23-08
Sample Matrix:	Liquid	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-30-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0158	0.0001	200
Chloroform	0.0024	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.1764	0.0001	0.5
1,2-Dichloroethane	0.0042	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

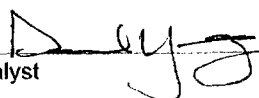
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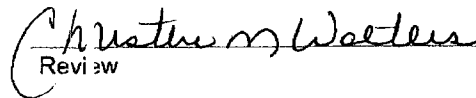
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	100.0%
	1,4-difluorobenzene	100.0%
	4-bromochlorobenzene	100.0%

References: Method 1311, Toxicity Characteristic Leaching Procedure SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: #345 CR 350.


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	04-23-08
Chain of Custody:	4256	Date Received:	04-23-08
Sample Matrix:	Liquid	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-30-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.012	5.0
Hexachloroethane	ND	0.012	3.0
Nitrobenzene	ND	0.012	2.0
Hexachlorobutadiene	ND	0.012	0.5
2,4-Dinitrotoluene	ND	0.012	0.13
HexachloroBenzene	ND	0.012	0.13

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	98.0%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

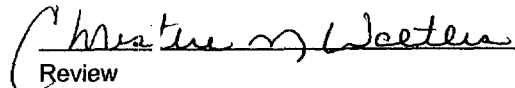
Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: #345 CR 350.

Analyst



Review



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

TCLP PHENOLS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	04-23-08
Chain of Custody:	4256	Date Received:	04-23-08
Sample Matrix:	Liquid	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-30-08
Condition:	Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	0.109	0.020	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99.0%
	2,4,6-Tribromophenol	99.0%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: #345 CR 350.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-0007
Sample ID:	Injection Well	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	04-23-08
Chain of Custody:	4256	Date Received:	04-23-08
Sample Matrix:	Liquid	Date Analyzed:	04-30-08
Preservative:	N/A	Date Digested:	04-28-08
Condition:	Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	ND	0.001	5.0
Barium	11.4	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.224	0.001	5.0
Lead	0.001	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.011	0.001	1.0
Silver	0.047	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: #345 CR 350.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

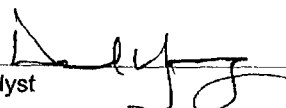
Client:	QA/QC	Project #:	N/A
Sample ID:	04-30-TCV QA/QC	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	N/A
Sample Matrix:	N/A	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-30-08
Condition:	N/A	Analysis Requested:	TCLP

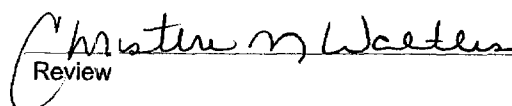
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0158	0.0152	3.7%
Chloroform	0.0001	ND	ND	0.0024	0.0023	0.0%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.1764	0.1705	3.3%
1,2-Dichloroethane	0.0001	ND	ND	0.0042	0.0042	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0800	80.0%	26-163
1,1-Dichloroethene	0.1000	ND	0.1047	105%	43-143
2-Butanone (MEK)	0.1000	0.0158	0.0944	81.5%	47-132
Chloroform	0.1000	0.0024	0.0927	90.5%	49-133
Carbon Tetrachloride	0.1000	ND	0.0839	83.9%	43-143
Benzene	0.1000	0.1764	0.1798	101%	39-150
1,2-Dichloroethane	0.1000	0.0042	0.0987	94.7%	51-147
Trichloroethene	0.1000	ND	0.0996	99.6%	35-146
Tetrachloroethene	0.1000	ND	0.0828	82.8%	26-162
Chlorobenzene	0.1000	ND	0.0901	90.1%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.1005	100.5%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: QA/QC for Sample 45140


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones Quality Assurance Report

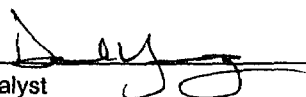
Client:	QA/QC	Project #:	N/A
Sample ID:	04-30-TBN QA/QC	Date Reported:	04-29-08
Laboratory Number:	45140	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-30-08
Condition:	N/A	Analysis Requested:	TCLP

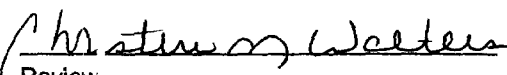
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.012	ND	ND	0.0%
Hexachloroethane	ND	ND	0.012	ND	ND	0.0%
Nitrobenzene	ND	ND	0.012	ND	ND	0.0%
Hexachlorobutadiene	ND	ND	0.012	ND	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.012	ND	ND	0.0%
HexachloroBenzene	ND	ND	0.012	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Comments: QA/QC for Sample 45140.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270 TCLP PHENOLS Quality Assurance Report

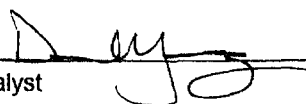
Client:	QA/QC	Project #:	N/A
Sample ID:	04-30-TCA QA/QC	Date Reported:	04-30-08
Laboratory Number:	45140	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-30-08
Condition:	N/A	Analysis Requested:	TCLP

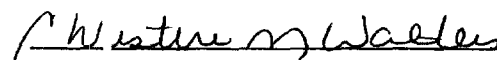
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	ND	ND	0.0%
p,m-Cresol	ND	ND	0.020	0.109	0.115	4.8%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for Sample 45140.


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311
TOXICITY CHARACTERISTIC
LEACHING PROCEDURE
TRACE METAL ANALYSIS
Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	04-21-TCM QA/QC	Date Reported:	04-29-08
Laboratory Number:	45037	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	04-21-08
Condition:	N/A	Date Extracted:	04-18-08

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	11.4	11.4	0.0%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.224	0.221	1.4%	0% - 30%
Lead	ND	ND	0.001	0.001	0.001	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.011	0.013	15.0%	0% - 30%
Silver	ND	ND	0.001	0.047	0.046	0.4%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.250	ND	0.227	90.6%	80% - 120%
Barium	0.500	11.35	11.9	100%	80% - 120%
Cadmium	0.250	ND	0.214	85.6%	80% - 120%
Chromium	0.500	0.224	0.738	102%	80% - 120%
Lead	0.500	0.001	0.501	100%	80% - 120%
Mercury	0.100	ND	0.096	96.0%	80% - 120%
Selenium	0.100	0.011	0.102	91.2%	80% - 120%
Silver	0.100	0.047	0.164	112%	80% - 120%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 45140.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #	98065-007
Sample ID:	Cell #1	Date Reported:	07-11-07
Laboratory Number:	42295	Date Sampled:	07-03-07
Chain of Custody No:	2947	Date Received:	07-03-07
Sample Matrix:	Soil	Date Extracted:	07-09-07
Preservative:	Cool	Date Analyzed:	07-11-07
Condition:	Cool & Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

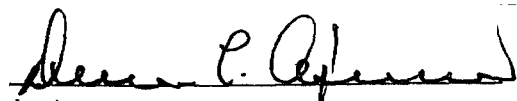
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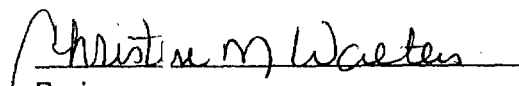
References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste
SW-846, USEPA, December 1996.

Comments: **Landfarm 345 CR 350**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

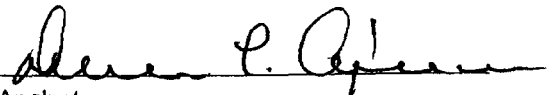
Client:	Key Energy	Project #	98065-007
Sample ID:	Cell #2	Date Reported:	07-11-07
Laboratory Number:	42296	Date Sampled:	07-03-07
Chain of Custody No:	2947	Date Received:	07-03-07
Sample Matrix:	Soil	Date Extracted:	07-09-07
Preservative:	Cool	Date Analyzed:	07-11-07
Condition:	Cool & Intact	Analysis Requested:	8015 TPH

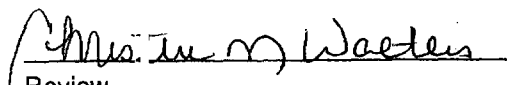
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm 345 CR 350**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-11-07 QA/QC	Date Reported:	07-11-07
Laboratory Number:	42275	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-11-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

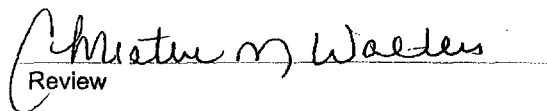
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 42275 - 42280, 42292, 42295 - 42296


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	07-11-07
Laboratory Number:	42295	Date Sampled:	07-03-07
Chain of Custody:	2947	Date Received:	07-03-07
Sample Matrix:	Soil	Date Analyzed:	07-11-07
Preservative:	Cool	Date Extracted:	07-09-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

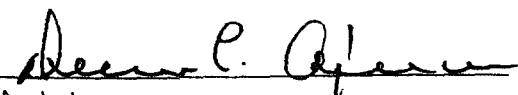
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm 345 CR 350


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #2	Date Reported:	07-11-07
Laboratory Number:	42296	Date Sampled:	07-03-07
Chain of Custody:	2947	Date Received:	07-03-07
Sample Matrix:	Soil	Date Analyzed:	07-11-07
Preservative:	Cool	Date Extracted:	07-09-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

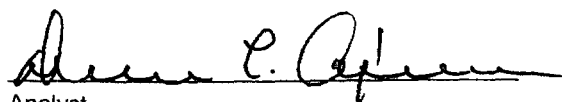
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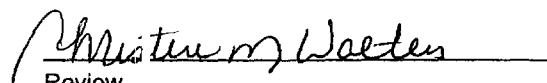
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm 345 CR 350


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Projec #:	N/A
Sample ID:	07-11-BTEX QA/QC	Date Reported:	07-11-07
Laboratory Number:	42275	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-11-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	% Diff:	Blank Conc	Detect Limit
		Accept. Range 0 - 5%			
Benzene	2.6706E+007	2.6760E+007	0.1%	ND	0.2
Toluene	2.3632E+007	2.3679E+007	0.1%	ND	0.2
Ethylbenzene	1.8239E+007	1.8276E+007	0.1%	ND	0.2
p,m-Xylene	3.9056E+007	3.9134E+007	0.1%	ND	0.2
o-Xylene	1.6925E+007	1.6959E+007	0.1%	ND	0.1

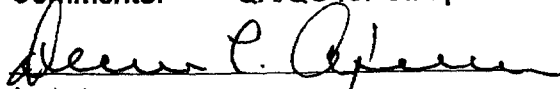
Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	ND	ND	0.0%	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.5
p,m-Xylene	ND	ND	0.0%	0 - 30%	2.2
o-Xylene	ND	ND	0.0%	0 - 30%	1.0

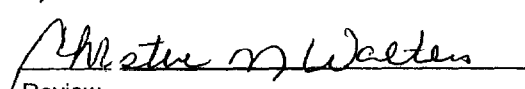
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	ND	50.0	50.0	100.0%	46 - 148
Ethylbenzene	ND	50.0	49.9	99.8%	32 - 160
p,m-Xylene	ND	100	99.9	99.9%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 42275 - 42280, 42292, 42294 - 42296


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-09-07
Lab ID#:	42297	Date Sampled:	07-03-07
Sample Matrix:	Water	Date Received:	7-03-07
Preservative:	Cool	Date Analyzed:	07-09-07
Condition:	Cool and Intact	Chain of Custody:	2946

Parameter	Result
-----------	--------

IGNITABILITY: **Negative**

CORROSIVITY: **Negative** **pH = 7.3**

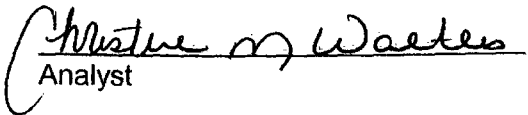
REACTIVITY: **Negative**

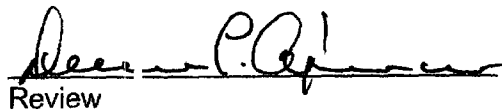
RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Injection Pump**


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-09-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-09-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0567	0.0001	200
Chloroform	0.0265	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0307	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

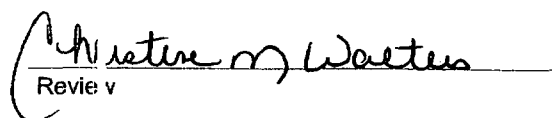
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

TCLP PHENOLS

Client:	Key Energy	Project #	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-10-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detect on Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	1.38	0.020	200
p,m-Cresol	0.649	0.020	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	99%

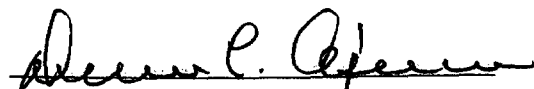
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

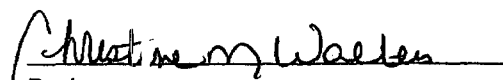
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-10-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.012	5.0
Hexachloroethane	ND	0.012	3.0
Nitrobenzene	0.220	0.012	2.0
Hexachlorobutadiene	ND	0.012	0.5
2,4-Dinitrotoluene	0.019	0.012	0.13
Hexachlorobenzene	ND	0.012	0.13

ND - Parameter not detected at the stated detection limit.

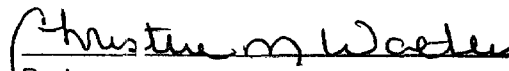
Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	97%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SV-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SV-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-05-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Analyzed:	07-05-07
Preservative:	N/A	Date Extracted:	N/A
Condition:	Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	ND	0.001	5.0
Barium	4.41	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.003	0.001	5.0
Lead	0.004	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

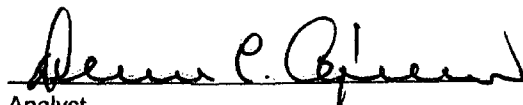
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

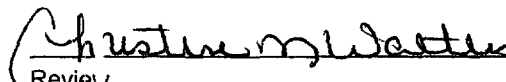
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Pump**


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 07-09-TCV QA/QC
Laboratory Number: 42297
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

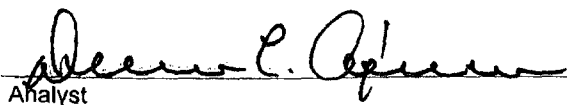
Project #: N/A
Date Reported: 07-09-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 07-09-07
Analysis Requested: TCLP

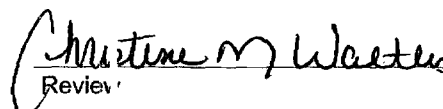
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0567	0.0565	0.3%
Chloroform	0.0001	ND	ND	0.0265	0.0264	0.4%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0307	0.0305	0.4%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	0.0567	0.1566	99.9%	47-132
Chloroform	0.1000	0.0265	0.1263	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0307	0.1305	99.8%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0998	99.8%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: QA/QC for sample 42297


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270 TCLP PHENOLS Quality Assurance Report

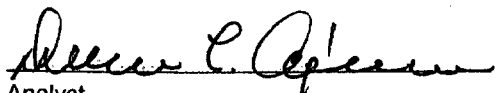
Client:	QA/QC	Project #:	N/A
Sample ID:	07-10-TCA QA/QC	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-10-07
Condition:	N/A	Analysis Requested:	TCLP

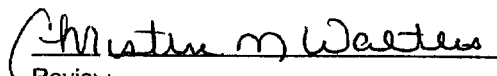
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	1.38	1.37	1.0%
p,m-Cresol	ND	ND	0.020	0.649	0.639	1.5%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 42297


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones Quality Assurance Report

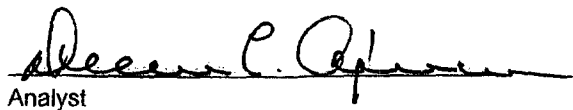
Client:	QA/QC	Project #:	N/A
Sample ID:	07-10-TBN QA/QC	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-10-07
Condition:	N/A	Analysis Requested:	TCLP

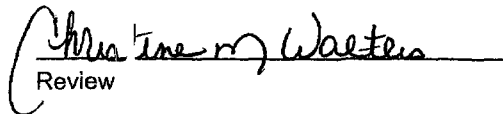
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.012	ND	ND	0.0%
Hexachloroethane	ND	ND	0.012	ND	ND	0.0%
Nitrobenzene	ND	ND	0.012	0.210	0.216	1.9%
Hexachlorobutadiene	ND	ND	0.012	ND	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.012	0.019	0.019	0.0%
Hexachlorobenzene	ND	ND	0.012	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Comments: QA/QC for sample 42297


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	07-05-TCM QA/QC	Date Reported:	07-05-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	07-05-07
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	4.41	4.39	0.5%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.003	0.003	0.0%	0% - 30%
Lead	ND	ND	0.001	0.004	0.004	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	ND	0.499	99.8%	80% - 120%
Barium	0.500	4.41	4.90	99.8%	80% - 120%
Cadmium	0.500	ND	0.499	99.8%	80% - 120%
Chromium	0.500	0.003	0.503	100.0%	80% - 120%
Lead	0.500	0.004	0.503	99.8%	80% - 120%
Mercury	0.500	ND	0.498	99.6%	80% - 120%
Selenium	0.500	ND	0.499	99.8%	80% - 120%
Silver	0.500	ND	0.498	99.6%	80% - 120%

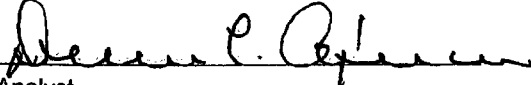
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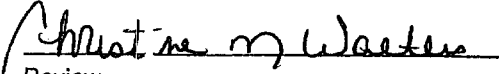
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 42297


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	07-11-07
Laboratory Number:	42295	Date Sampled:	07-03-07
Chain of Custody No:	2947	Date Received:	07-03-07
Sample Matrix:	Soil	Date Extracted:	07-09-07
Preservative:	Cool	Date Analyzed:	07-11-07
Condition:	Cool & Intact	Analysis Requested:	8015 TPH

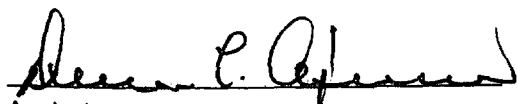
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

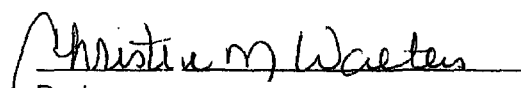
ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm 345 CR 350**

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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

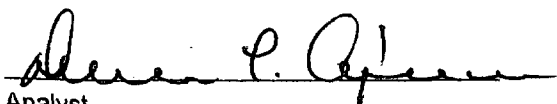
Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #2	Date Reported:	07-11-07
Laboratory Number:	42296	Date Sampled:	07-03-07
Chain of Custody No:	2947	Date Received:	07-03-07
Sample Matrix:	Soil	Date Extracted:	07-09-07
Preservative:	Cool	Date Analyzed:	07-11-07
Condition:	Cool & Intact	Analysis Requested:	8015 TPH

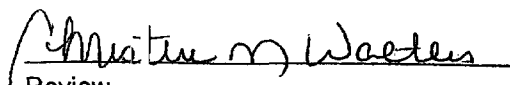
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm 345 CR 350**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project:	N/A
Sample ID:	07-11-07 QA/QC	Date Reported:	07-11-07
Laboratory Number:	42275	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-11-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

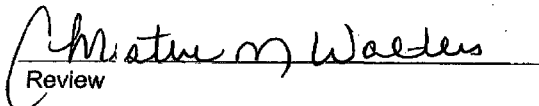
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 42275 - 42280, 42292, 42295 - 42296


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	07-11-07
Laboratory Number:	42295	Date Sampled:	07-03-07
Chain of Custody:	2947	Date Received:	07-03-07
Sample Matrix:	Soil	Date Analyzed:	07-11-07
Preservative:	Cool	Date Extracted:	07-09-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

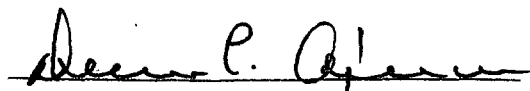
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm 345 CR 350


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #2	Date Reported:	07-11-07
Laboratory Number:	42296	Date Sampled:	07-03-07
Chain of Custody:	2947	Date Received:	07-03-07
Sample Matrix:	Soil	Date Analyzed:	07-11-07
Preservative:	Cool	Date Extracted:	07-09-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

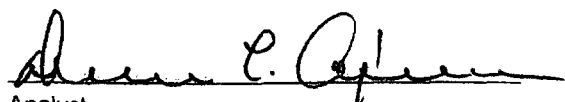
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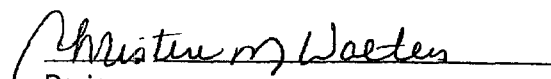
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm 345 CR 350


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project:	N/A
Sample ID:	07-11-BTEX QA/QC	Date Reported:	07-11-07
Laboratory Number:	42275	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-11-07
Condition:	N/A	Analysis	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	% Rf	Blank Conc	Detect Limit
		Accept Range 0 - 1	%		
Benzene	2.6706E+007	2.6760E+007	0.2 %	ND	0.2
Toluene	2.3632E+007	2.3679E+007	0.2 %	ND	0.2
Ethylbenzene	1.8239E+007	1.8276E+007	0.2 %	ND	0.2
p,m-Xylene	3.9056E+007	3.9134E+007	0.2 %	ND	0.2
o-Xylene	1.6925E+007	1.6959E+007	0.2 %	ND	0.1

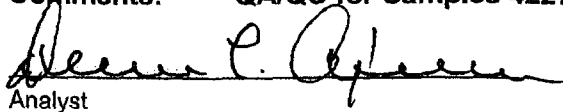
Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Rf	Accept Range	Detect Limit
Benzene	ND	ND	0.0 %	0 - 30%	1.8
Toluene	ND	ND	0.0 %	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0 %	0 - 30%	1.5
p,m-Xylene	ND	ND	0.0 %	0 - 30%	2.2
o-Xylene	ND	ND	0.0 %	0 - 30%	1.0

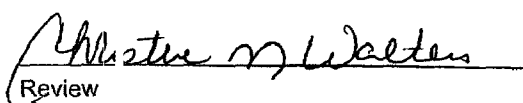
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	ND	50.0	50.0	100.0%	46 - 148
Ethylbenzene	ND	50.0	49.9	99.8%	32 - 160
p,m-Xylene	ND	100	99.9	99.9%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 42275 - 42280, 42292, 42294 - 42296


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-09-07
Lab ID#:	42297	Date Sampled:	07-03-07
Sample Matrix:	Water	Date Received:	7-03-07
Preservative:	Cool	Date Analyzed:	07-09-07
Condition:	Cool and Intact	Chain of Custody:	2946

Parameter	Result
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IGNITABILITY: Negative

CORROSIVITY: Negative pH = 7.33

REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
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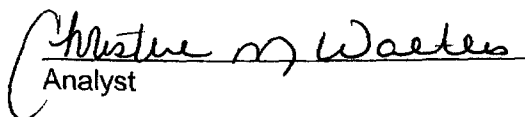
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
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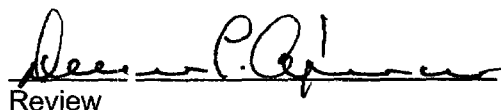
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
--------------	--

REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)
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Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-09-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-09-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0567	0.0001	200
Chloroform	0.0265	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0307	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

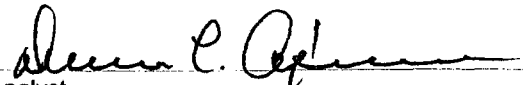
ND - Parameter not detected at the stated detection limit.

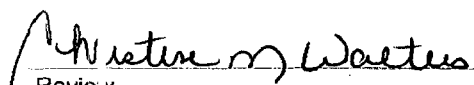
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

TCLP PHENOLS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-10-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	1.38	0.020	200
p,m-Cresol	0.649	0.020	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	99%

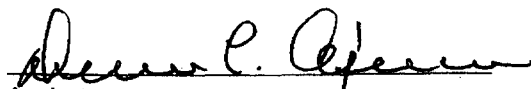
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

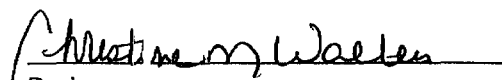
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-10-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.012	5.0
Hexachloroethane	ND	0.012	3.0
Nitrobenzene	0.220	0.012	2.0
Hexachlorobutadiene	ND	0.012	0.5
2,4-Dinitrotoluene	0.019	0.012	0.13
HexachloroBenzene	ND	0.012	0.13

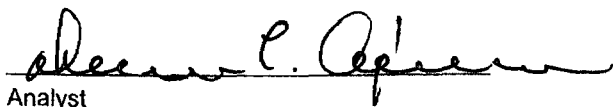
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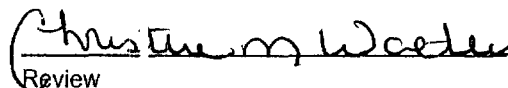
Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	97%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SV-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SV-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	07-05-07
Laboratory Number:	42297	Date Sampled:	07-03-07
Chain of Custody:	2946	Date Received:	07-03-07
Sample Matrix:	Water	Date Analyzed:	07-05-07
Preservative:	N/A	Date Extracted:	N/A
Condition:	Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	ND	0.001	5.0
Barium	4.41	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.003	0.001	5.0
Lead	0.004	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

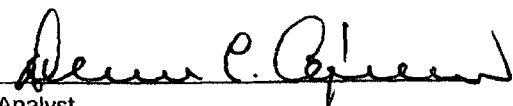
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

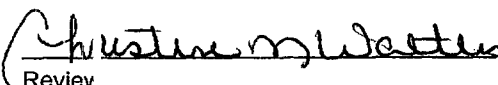
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Pump**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 07-09-TCV QA/QC
Laboratory Number: 42297
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

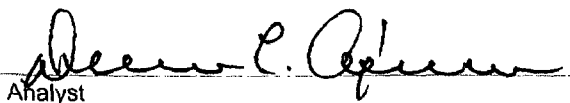
Project #: N/A
Date Reported: 07-09-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 07-09-07
Analysis Requested: TCLP

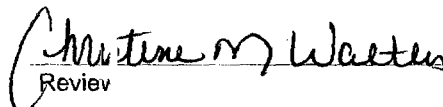
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0567	0.0565	0.3%
Chloroform	0.0001	ND	ND	0.0265	0.0264	0.4%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0307	0.0305	0.4%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	0.0567	0.0566	99.9%	47-132
Chloroform	0.1000	0.0265	0.0263	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0307	0.0305	99.8%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0998	99.8%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8260B, Determination of Volatile Organics using GC/MS

Comments: QA/QC for sample 42297


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

TCLP PHENOLS

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-10-TCA QA/QC	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-10-07
Condition:	N/A	Analysis Requested:	TCLP

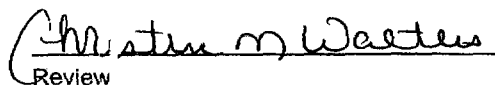
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	1.38	1.37	1.0%
p,m-Cresol	ND	ND	0.020	0.649	0.639	1.5%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 42297


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8270

Nitroaromatics and Cyclic Ketones Quality Assurance Report

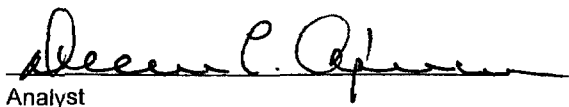
Client:	QA/QC	Project #:	N/A
Sample ID:	07-10-TBN QA/QC	Date Reported:	07-10-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-10-07
Condition:	N/A	Analysis Requested:	TCLP

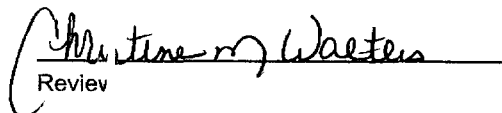
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.012	ND	ND	0.0%
Hexachloroethane	ND	ND	0.012	ND	ND	0.0%
Nitrobenzene	ND	ND	0.012	0.220	0.216	1.9%
Hexachlorobutadiene	ND	ND	0.012	ND	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.012	0.019	0.019	0.0%
HexachloroBenzene	ND	ND	0.012	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8270, Determination of Semi-Volatile Organics by Capillary Column GC/MS

Comments: QA/QC for sample 42297


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	07-05-TCM QA/QC	Date Reported:	07-05-07
Laboratory Number:	42297	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	07-05-07
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	4.41	4.39	0.5%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.003	0.003	0.0%	0% - 30%
Lead	ND	ND	0.001	0.004	0.004	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spike Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	ND	0.499	99.8%	80% - 120%
Barium	0.500	4.41	4.90	99.8%	80% - 120%
Cadmium	0.500	ND	0.499	99.8%	80% - 120%
Chromium	0.500	0.003	0.503	100.0%	80% - 120%
Lead	0.500	0.004	0.503	99.8%	80% - 120%
Mercury	0.500	ND	0.498	99.6%	80% - 120%
Selenium	0.500	ND	0.499	99.8%	80% - 120%
Silver	0.500	ND	0.498	99.6%	80% - 120%

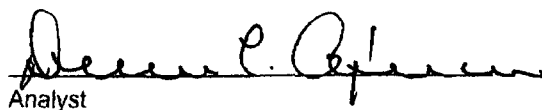
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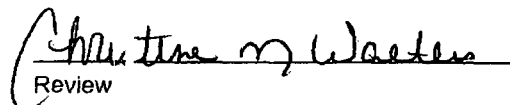
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 42297


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-23-07
Lab ID#:	41030	Date Sampled:	04-13-07
Sample Matrix:	Water	Date Received:	04-13-07
Preservative:	Cool	Date Analyzed:	04-17-07
Condition:	Cool and Intact	Chain of Custody:	2483

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative pH = 8.14

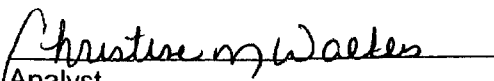
REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: Injection Pump


Analyst


Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-26-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-26-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (ng/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0288	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0169	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

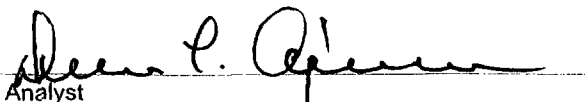
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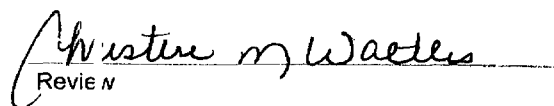
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040 PHENOLS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-24-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-24-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	0.080	0.020	200
p,m-Cresol	0.092	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	99%

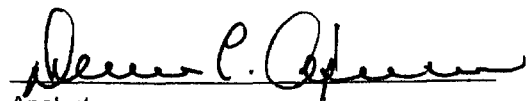
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

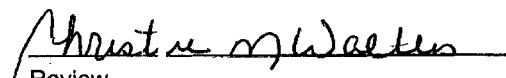
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-28-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-28-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.012	5.0
Hexachloroethane	0.019	0.012	3.0
Nitrobenzene	ND	0.012	2.0
Hexachlorobutadiene	ND	0.012	0.5
2,4-Dinitrotoluene	ND	0.012	0.13
Hexachlorobenzene	ND	0.012	0.13

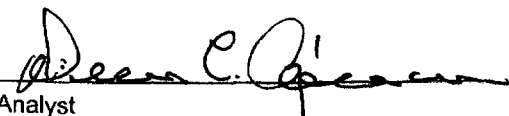
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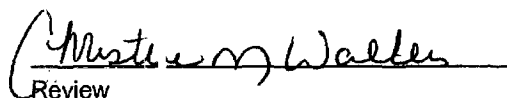
Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	97%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-23-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Analyzed:	04-23-07
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Detect Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	0.038	0.001	5.0
Barium	1.26	0.001	100
Cadmium	ND	0.001	1.0
Chromium	0.001	0.001	5.0
Lead	0.001	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.065	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

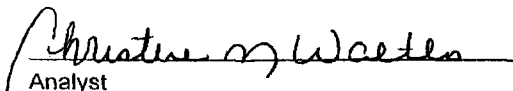
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

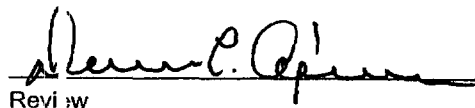
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: **Injection Pump**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 04-26-TCV QA/QC
Laboratory Number: 41002
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

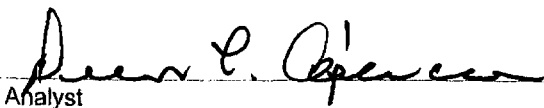
Project #: N/A
Date Reported: 04-26-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 04-26-07
Analysis Requested: TCLP

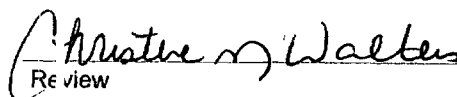
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.0195	0.0196	0.5%
Chloroform	0.0001	ND	ND	ND	ND	0.0%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0791	0.0801	1.2%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	0.0195	0.1194	99.9%	47-132
Chloroform	0.1000	ND	0.0998	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0791	0.1789	99.9%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0993	99.3%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Comments: QA/QC for samples 41002, 41030, 41032, 41159


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041

PHENOLS

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-24-TCA QA/QC	Date Reported:	04-24-07
Laboratory Number:	41092	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-24-07
Condition:	N/A	Analysis Requested:	TCLP

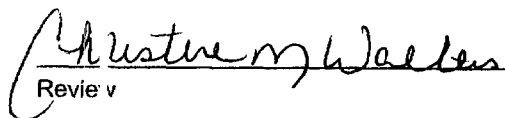
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	ND	ND	0.0%
p,m-Cresol	ND	ND	0.040	ND	ND	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for samples 41092, 41002, 41030, 41159


Analyst


Reviewer

Nitroaromatics and Cyclic Ketones Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-28-TBN QA/QC	Date Reported:	04-28-07
Laboratory Number:	41092	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-28-07
Condition:	N/A	Analysis Requested:	TCLP

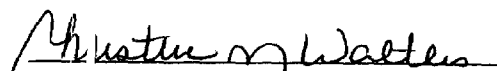
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.012	ND	ND	0.0%
Hexachloroethane	ND	ND	0.012	ND	ND	0.0%
Nitrobenzene	ND	ND	0.012	ND	ND	0.0%
Hexachlorobutadiene	ND	ND	0.012	ND	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.012	ND	ND	0.0%
HexachloroBenzene	ND	ND	0.012	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for samples 41002, 41030, 41092 41159


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	04-23-TCM QA/QC	Date Reported:	04-23-07
Laboratory Number:	41002	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	04-23-07
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	0.033	0.034	3.0%	0% - 30%
Barium	ND	ND	0.001	0.054	0.057	5.6%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Lead	ND	ND	0.001	0.002	0.002	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.073	0.075	2.7%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spike Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.033	0.531	99.6%	80% - 120%
Barium	0.500	0.054	0.551	99.5%	80% - 120%
Cadmium	0.500	ND	0.499	99.8%	80% - 120%
Chromium	0.500	ND	0.498	99.6%	80% - 120%
Lead	0.500	0.002	0.501	99.8%	80% - 120%
Mercury	0.500	ND	0.501	100.2%	80% - 120%
Selenium	0.500	0.073	0.571	99.7%	80% - 120%
Silver	0.500	ND	0.498	99.6%	80% - 120%

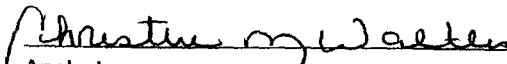
ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 41002, 41030, 41092, 41159


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #	98065-007
Sample ID:	Cell #1	Date Reported:	04-17-07
Laboratory Number:	41031	Date Sampled:	04-13-07
Chain of Custody No:	2484	Date Received:	04-13-07
Sample Matrix:	Soil	Date Extracted:	04-16-07
Preservative:	Cool	Date Analyzed:	04-17-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

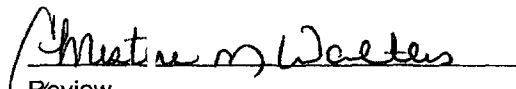
ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: 345 CR 350 Landfarm

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

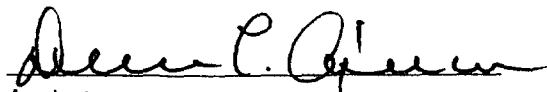
Client:	Key Energy	Project #	98065-007
Sample ID:	Cell #2	Date Reported:	04-17-07
Laboratory Number:	41032	Date Sampled:	04-13-07
Chain of Custody No:	2484	Date Received:	04-13-07
Sample Matrix:	Soil	Date Extracted:	04-16-07
Preservative:	Cool	Date Analyzed:	04-17-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

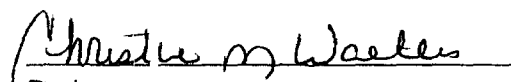
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **345 CR 350 Landfarm**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-17-07 QA/QC	Date Reported:	04-17-07
Laboratory Number:	41031	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-17-07
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	07-11-05	9.9882E+002	9.9982E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9612E+002	9.9811E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

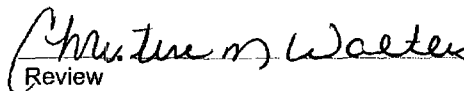
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 41031 - 41032, 41036


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	04-17-07
Laboratory Number:	41031	Date Sampled:	04-13-07
Chain of Custody:	2484	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04-17-07
Preservative:	Cool	Date Extracted:	04-16-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

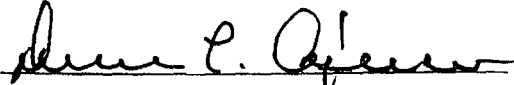
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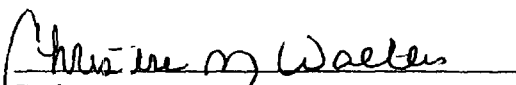
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: 345 CR 350 Landfarm


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #2	Date Reported:	04-17-07
Laboratory Number:	41032	Date Sampled:	04-13-07
Chain of Custody:	2484	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04-17-07
Preservative:	Cool	Date Extracted:	04-16-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

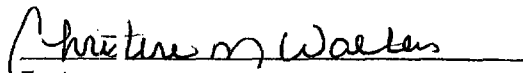
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: 345 CR 350 Landfarm


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	04-17-BTEX QA/QC	Date Reported:	04-17-07
Laboratory Number:	41031	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-17-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
	Accept Range 0 - 15%				
Benzene	4.2679E+007	4.2765E+007	0.1 %	ND	0.2
Toluene	6.0004E+007	6.0124E+007	0.1 %	ND	0.2
Ethylbenzene	2.8575E+007	2.8632E+007	0.1 %	ND	0.2
p,m-Xylene	1.1503E+008	1.1526E+008	0.1 %	ND	0.2
o-Xylene	5.3608E+007	5.3716E+007	0.1 %	ND	0.1

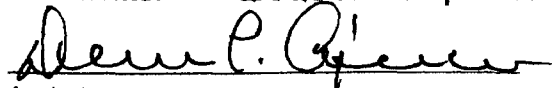
Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.1 %	0 - 30%	1.8
Toluene	ND	ND	0.1 %	0 - 30%	1.7
Ethylbenzene	ND	ND	0.1 %	0 - 30%	1.5
p,m-Xylene	ND	ND	0.1 %	0 - 30%	2.2
o-Xylene	ND	ND	0.1 %	0 - 30%	1.0

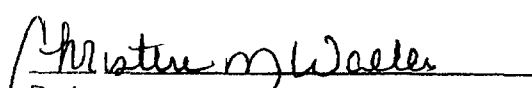
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	ND	50.0	49.9	99.8%	46 - 148
Ethylbenzene	ND	50.0	50.0	100.0%	32 - 160
p,m-Xylene	ND	100	99.9	99.9%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, US EPA December 1996.

Comments: QA/QC for Samples 41031 - 41032


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-23-07
Lab ID#:	41030	Date Sampled:	04-13-07
Sample Matrix:	Water	Date Received:	04-13-07
Preservative:	Cool	Date Analyzed:	04-17-07
Condition:	Cool and Intact	Chain of Custody:	2483

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative pH = 8.13

REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: Injection Pump

Christine M. Walker
Analyst

Debra C. O'Brien
Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-26-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-26-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0288	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0169	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

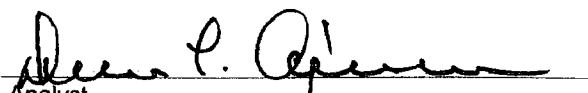
ND - Parameter not detected at the stated detection limit.

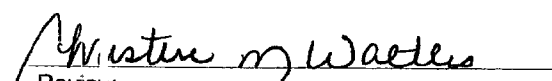
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040 PHENOLS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection Pump AF	Date Reported:	04-24-07
Laboratory Number:	41030	Date Sampled:	04-13-07
Chain of Custody:	2483	Date Received:	04-13-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-24-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	0.080	0.020	200
p,m-Cresol	0.092	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

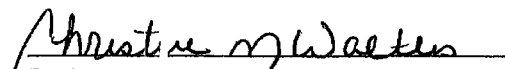
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 04-26-TCV QA/QC
Laboratory Number: 41002
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

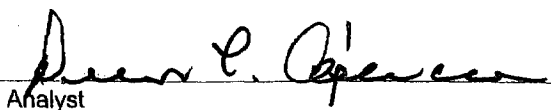
Project #: N/A
Date Reported: 04-26-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 04-26-07
Analysis Requested: TCLP

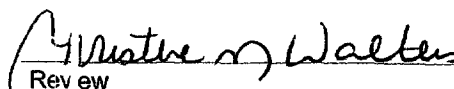
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.1195	0.0196	0.5%
Chloroform	0.0001	ND	ND	ND	ND	0.0%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.1791	0.0801	1.2%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	0.0195	0.1194	99.9%	47-132
Chloroform	0.1000	ND	0.0998	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0791	0.1789	99.9%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0993	99.3%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using PID and/or ECD Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for samples 41002, 41030, 41092, 41159


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041

PHENOLS

Quality Assurance Report

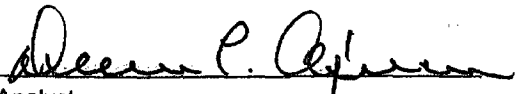
Client:	QA/QC	Project #:	N/A
Sample ID:	04-24-TCA QA/QC	Date Reported:	04-24-07
Laboratory Number:	41092	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-24-07
Condition:	N/A	Analysis Requested:	TCLP

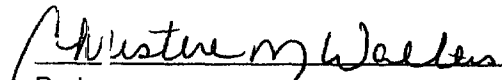
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	NI	ND	0.0%
p,m-Cresol	ND	ND	0.040	NI	ND	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	NI	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	NI	ND	0.0%
Pentachlorophenol	ND	ND	0.020	NI	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for samples 41092, 41002, 41030, 41159


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-28-TBN QA/QC	Date Reported:	04-28-07
Laboratory Number:	41092	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-28-07
Condition:	N/A	Analysis Requested:	TCLP

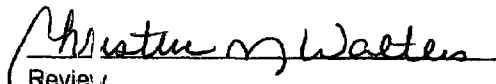
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.012	NI	ND	0.0%
Hexachloroethane	ND	ND	0.012	NI	ND	0.0%
Nitrobenzene	ND	ND	0.012	NI	ND	0.0%
Hexachlorobutadiene	ND	ND	0.012	NI	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.012	NI	ND	0.0%
HexachloroBenzene	ND	ND	0.012	NI	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for samples 41002, 41030, 41092, 41159


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	04-23-TCM QA/QC	Date Reported:	04-23-07
Laboratory Number:	41002	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	04-23-07
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	0.033	0.034	3.0%	0% - 30%
Barium	ND	ND	0.001	0.054	0.057	5.6%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Lead	ND	ND	0.001	0.002	0.002	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.073	0.075	2.7%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.033	0.531	99.6%	80% - 120%
Barium	0.500	0.054	0.551	99.5%	80% - 120%
Cadmium	0.500	ND	0.499	99.8%	80% - 120%
Chromium	0.500	ND	0.498	99.6%	80% - 120%
Lead	0.500	0.002	0.501	99.8%	80% - 120%
Mercury	0.500	ND	0.501	100.2%	80% - 120%
Selenium	0.500	0.073	0.571	99.7%	80% - 120%
Silver	0.500	ND	0.498	99.6%	80% - 120%

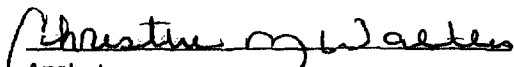
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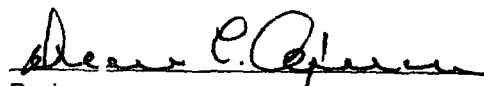
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 41002, 41030, 41092, 41159


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	01-15-07
Laboratory Number:	39713	Date Sampled:	01-11-07
Chain of Custody No:	1926	Date Received:	01-12-07
Sample Matrix:	Soil	Date Extracted:	01-12-07
Preservative:	Cool	Date Analyzed:	01-15-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

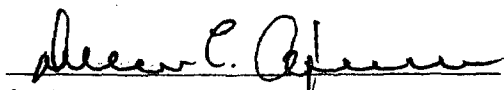
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

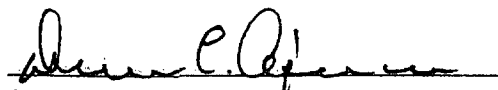
Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #2	Date Reported:	01-15-07
Laboratory Number:	39714	Date Sampled:	01-11-07
Chain of Custody No:	1926	Date Received:	01-12-07
Sample Matrix:	Soil	Date Extracted:	01-12-07
Preservative:	Cool	Date Analyzed:	01-15-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

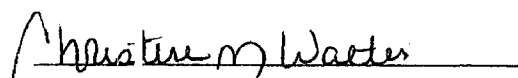
Parameter	Concentration (mg/l g)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	01-15-07 QA/QC	Date Reported:	01-15-07
Laboratory Number:	39708	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-15-07
Condition:	N/A	Analysis Requested:	TPH

	Cal Date	Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	07-11-05	9.9054E+002	9.9153E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9465E+002	9.9664E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0 %	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0 %	0 - 30%

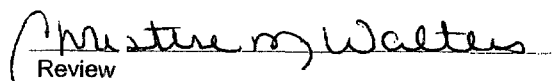
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 39708 - 39711, 39713 - 39715


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	01-15-07
Laboratory Number:	39713	Date Sampled:	01-11-07
Chain of Custody:	1926	Date Received:	01-12-07
Sample Matrix:	Soil	Date Analyzed:	01-15-07
Preservative:	Cool	Date Extracted:	01-12-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	2.2	1.5
p,m-Xylene	3.9	2.2
o-Xylene	1.7	1.0
Total BTEX	7.8	

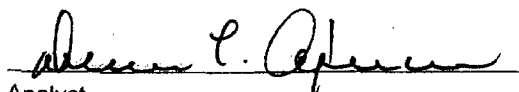
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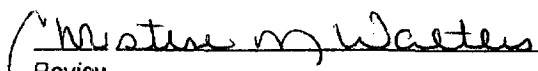
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Method for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #2	Date Reported:	01-15-07
Laboratory Number:	39714	Date Sampled:	01-11-07
Chain of Custody:	1926	Date Received:	01-12-07
Sample Matrix:	Soil	Date Analyzed:	01-15-07
Preservative:	Cool	Date Extracted:	01-12-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	1.7	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	3.5	2.2
o-Xylene	ND	1.0
Total BTEX	5.2	

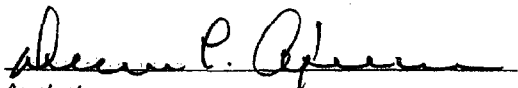
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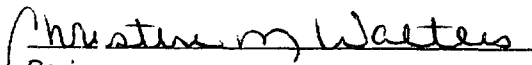
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Method: for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project:	N/A
Sample ID:	01-15-BTEX QA/QC	Date Reported:	01-15-07
Laboratory Number:	39708	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-15-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range	0 - 15%		
Benzene	3.3526E+007	3.3593E+007	0.2%	ND	0.2
Toluene	4.6586E+007	4.6679E+007	0.2%	ND	0.2
Ethylbenzene	2.2857E+007	2.2903E+007	0.2%	ND	0.2
p,m-Xylene	9.4410E+007	9.4599E+007	0.2%	ND	0.2
o-Xylene	4.1525E+007	4.1608E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.1%	0 - 30%	1.8
Toluene	3.3	3.3	0.1%	0 - 30%	1.7
Ethylbenzene	7.2	7.2	0.1%	0 - 30%	1.5
p,m-Xylene	15.9	15.8	0.1%	0 - 30%	2.2
o-Xylene	7.1	7.0	1.1%	0 - 30%	1.0

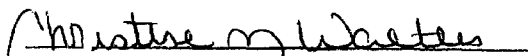
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked	Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150	
Toluene	3.3	50.0	53.2	99.8%	46 - 148	
Ethylbenzene	7.2	50.0	57.1	99.8%	32 - 160	
p,m-Xylene	15.9	100	115	99.6%	46 - 148	
o-Xylene	7.1	50.0	57.1	100.0%	46 - 148	

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 39708 - 39711, 39713 - 39714


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	01-15-07
Laboratory Number:	39713	Date Sampled:	01-11-07
Chain of Custody:	1926	Date Received:	01-12-07
Sample Matrix:	Soil	Date Analyzed:	01-15-07
Preservative:	N/A	Date Digested:	01-12-07
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.120	0.001	5.0
Barium	46.4	0.001	100
Cadmium	0.029	0.001	1.0
Chromium	0.088	0.001	5.0
Lead	0.234	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	ND	0.001	5.0

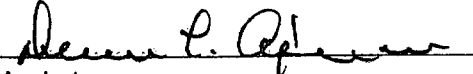
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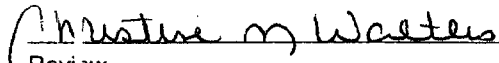
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: **Landfarm**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #2	Date Reported:	01-15-07
Laboratory Number:	39714	Date Sampled:	01-11-07
Chain of Custody:	1926	Date Received:	01-12-07
Sample Matrix:	Soil	Date Analyzed:	01-15-07
Preservative:	N/A	Date Digested:	01-12-07
Condition:	Intact	Analysis Needed:	Total Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.153	0.00	5.0
Barium	40.8	0.00	100
Cadmium	0.037	0.00	1.0
Chromium	0.110	0.00	5.0
Lead	0.270	0.00	5.0
Mercury	ND	0.00	0.2
Selenium	ND	0.00	1.0
Silver	ND	0.00	5.0

ND - Parameter not detected at the stated detection limit.

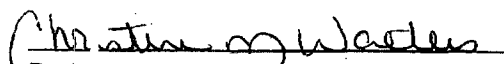
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils:
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: **Landfarm**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS Quality Control / Quality Assurance Report

Client:	QA/QC	Project #:	QA/QC
Sample ID:	01-15 TM QA/QC	Date Reported:	01-15-07
Laboratory Number:	39713	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	01-15-07
Condition:	N/A	Date Digested:	01-12-07

Blank & Duplicate Conc. (mg/Kg)	Instrument Blank (mg/Kg)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	0.120	0.123	2.5%	0% - 30%
Barium	ND	ND	0.001	46.4	46.3	0.2%	0% - 30%
Cadmium	ND	ND	0.001	0.029	0.029	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.088	0.091	3.4%	0% - 30%
Lead	ND	ND	0.001	0.234	0.238	1.7%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

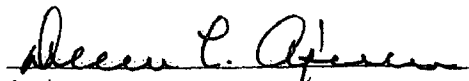
Spike Conc. (mg/Kg)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.120	0.618	99.7%	80% - 120%
Barium	0.500	46.4	46.8	99.8%	80% - 120%
Cadmium	0.500	0.029	0.528	99.8%	80% - 120%
Chromium	0.500	0.088	0.589	100.2%	80% - 120%
Lead	0.500	0.234	0.733	99.9%	80% - 120%
Mercury	0.500	ND	0.498	99.6%	80% - 120%
Selenium	0.500	ND	0.499	99.8%	80% - 120%
Silver	0.500	ND	0.500	100.0%	80% - 120%

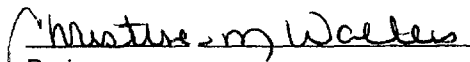
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission
Spectroscopy, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 39713 - 39714


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

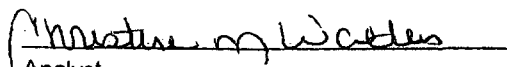
Client: Key Energy
Sample ID: Cell #1
Laboratory Number: 39713
Chain of Custody: 1926
Sample Matrix: Soil Extract
Preservative: Cool
Condition: Cool & Intact

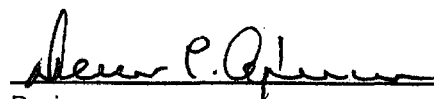
Project #: 98065-007
Date Reported: 01-15-07
Date Sampled: 01-11-07
Date Received: 01-12-07
Date Extracted: 01-14-07
Date Analyzed: 01-15-07

Parameter	Analytical Result	Units		
pH	8.06	s.u.		
Conductivity @ 25° C	489	umhos/cm		
Total Dissolved Solids @ 180C	380	mg/L		
Total Dissolved Solids (Calc)	367	mg/L		
SAR	7.1	ratio		
Total Alkalinity as CaCO ₃	28.4	mg/L		
Total Hardness as CaCO ₃	44.0	mg/L		
Bicarbonate as HCO ₃	28.4	mg/L	0.47	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.008	mg/L	0.00	meq/L
Chloride	46.4	mg/L	1.31	meq/L
Fluoride	1.43	mg/L	0.08	meq/L
Phosphate	0.30	mg/L	0.01	meq/L
Sulfate	179	mg/L	3.73	meq/L
Iron	0.004	mg/L	0.00	meq/L
Calcium	8.64	mg/L	0.43	meq/L
Magnesium	5.47	mg/L	0.45	meq/L
Potassium	0.21	mg/L	0.01	meq/L
Sodium	108	mg/L	4.70	meq/L
Cations			5.58	meq/L
Anions			5.59	meq/L
Cation/Anion Difference			0.02%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Landfarm


Analyst


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

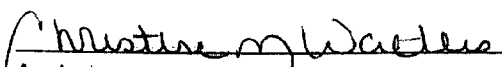
Client: Key Energy
Sample ID: Cell #2
Laboratory Number: 39714
Chain of Custody: 1926
Sample Matrix: Soil Extract
Preservative: Cool
Condition: Cool & Intact

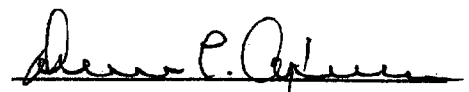
Project #: 98065-007
Date Reported: 01-15-07
Date Sampled: 01-11-07
Date Received: 01-12-07
Date Extracted: 01-14-07
Date Analyzed: 01-15-07

Parameter	Analytical Result	Units		
pH	8.39	s.u.		
Conductivity @ 25° C	495	umhos/cm		
Total Dissolved Solids @ 180C	348	mg/L		
Total Dissolved Solids (Calc)	347	mg/L		
SAR	8.8	ratio		
Total Alkalinity as CaCO3	27.2	mg/L		
Total Hardness as CaCO3	28.2	mg/L		
Bicarbonate as HCO3	27.2	mg/L	0.45	meq/L
Carbonate as CO3	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.005	mg/L	0.00	meq/L
Chloride	45.2	mg/L	1.28	meq/L
Fluoride	1.06	mg/L	0.06	meq/L
Phosphate	0.40	mg/L	0.01	meq/L
Sulfate	166	mg/L	3.46	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	8.40	mg/L	0.42	meq/L
Magnesium	1.76	mg/L	0.14	meq/L
Potassium	0.32	mg/L	0.01	meq/L
Sodium	107	mg/L	4.67	meq/L
Cations			5.24	meq/L
Anions			5.25	meq/L
Cation/Anion Difference			0.06%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Wastewater, 18th ed., 1992.

Comments: Landfarm


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

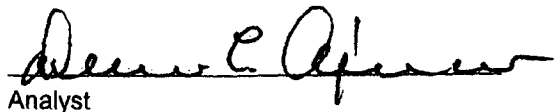
Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	04-17-07
Laboratory Number:	41031	Date Sampled:	04-13-07
Chain of Custody No:	2484	Date Received:	04-13-07
Sample Matrix:	Soil	Date Extracted:	04-16-07
Preservative:	Cool	Date Analyzed:	04-17-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

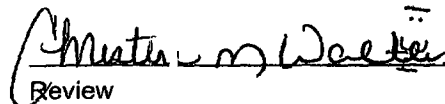
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: 345 CR 350 Landfarm


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #	98065-007
Sample ID:	Cell #2	Date Reported:	04-17-07
Laboratory Number:	41032	Date Sampled:	04-13-07
Chain of Custody No:	2484	Date Received:	04-13-07
Sample Matrix:	Soil	Date Extracted:	04-16-07
Preservative:	Cool	Date Analyzed:	04-17-07
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

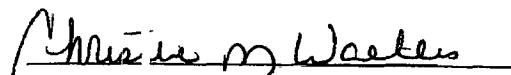
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **345 CR 350 Landfarm**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Non halogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-17-07 QA/QC	Date Reported:	04-17-07
Laboratory Number:	41031	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-17-07
Condition:	N/A	Analysis Requested:	TPH

	Cal Date	Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	07-11-05	9.9882E+002	9.9982E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9612E+002	9.9811E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Diff	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

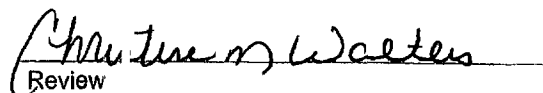
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 41031 - 41032, 41036


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #1	Date Reported:	04-17-07
Laboratory Number:	41031	Date Sampled:	04-13-07
Chain of Custody:	2484	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04-17-07
Preservative:	Cool	Date Extracted:	04-16-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

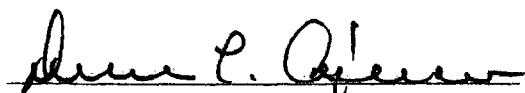
ND - Parameter not detected at the stated detection limit.

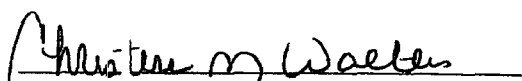
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: 345 CR 350 Landfarm


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Cell #2	Date Reported:	04-17-07
Laboratory Number:	41032	Date Sampled:	04-13-07
Chain of Custody:	2484	Date Received:	04-13-07
Sample Matrix:	Soil	Date Analyzed:	04-17-07
Preservative:	Cool	Date Extracted:	04-16-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

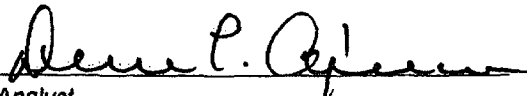
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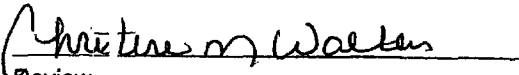
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: 345 CR 350 Landfarm


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project:	N/A
Sample ID:	04-17-BTEX QA/QC	Date Reported:	04-17-07
Laboratory Number:	41031	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-17-07
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range	0 - 1 %		
Benzene	4.2679E+007	4.2765E+007	0.2 %	ND	0.2
Toluene	6.0004E+007	6.0124E+007	0.2 %	ND	0.2
Ethylbenzene	2.8575E+007	2.8632E+007	0.2 %	ND	0.2
p,m-Xylene	1.1503E+008	1.1526E+008	0.2 %	ND	0.2
o-Xylene	5.3608E+007	5.3716E+007	0.2 %	ND	0.1

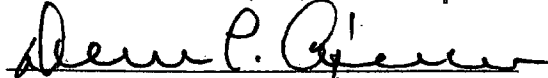
Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.0 %	0 - 30%	1.8
Toluene	ND	ND	0.0 %	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0 %	0 - 30%	1.5
p,m-Xylene	ND	ND	0.0 %	0 - 30%	2.2
o-Xylene	ND	ND	0.0 %	0 - 30%	1.0

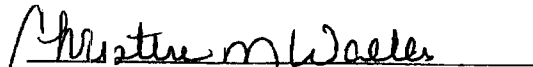
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spike 2	Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150	
Toluene	ND	50.0	49.9	99.8%	46 - 148	
Ethylbenzene	ND	50.0	50.0	100.0%	32 - 160	
p,m-Xylene	ND	100	99.9	99.9%	46 - 148	
o-Xylene	ND	50.0	49.9	99.8%	46 - 148	

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 41031 - 41032


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Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

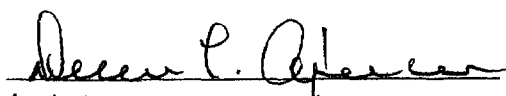
Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #1	Date Reported:	10-18-06
Laboratory Number:	38866	Date Sampled:	10-17-06
Chain of Custody No:	1599	Date Received:	10-17-06
Sample Matrix:	Soil	Date Extracted:	10-17-06
Preservative:	Cool	Date Analyzed:	10-18-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

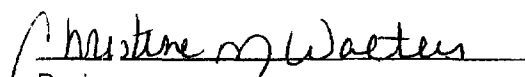
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

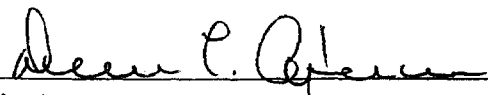
Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #2	Date Reported:	10-18-06
Laboratory Number:	38867	Date Sampled:	10-17-06
Chain of Custody No:	1599	Date Received:	10-17-06
Sample Matrix:	Soil	Date Extracted:	10-17-06
Preservative:	Cool	Date Analyzed:	10-18-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

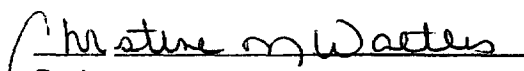
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	10-18-06 QA/QC	Date Reported:	10-18-06
Laboratory Number:	38866	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-18-06
Condition:	N/A	Analysis Requested:	TPH

	Cal Date	Cal RF	Conc	Diff	% Difference	Accept Range
Gasoline Range C5 - C10	07-11-05	1.0076E+003	1.0087E+003		0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9027E+002	9.9226E+002		0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

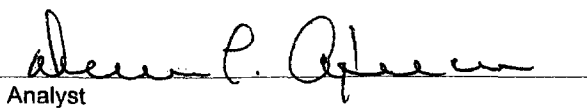
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

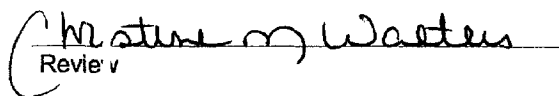
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike	Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	250		100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250		100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 38866 - 38868, 38871 - 38875


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #1	Date Reported:	10-18-06
Laboratory Number:	38866	Date Sampled:	10-17-06
Chain of Custody:	1599	Date Received:	10-17-06
Sample Matrix:	Soil	Date Analyzed:	10-18-06
Preservative:	Cool	Date Extracted:	10-17-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

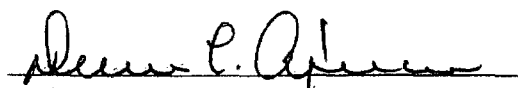
ND - Parameter not detected at the stated detection limit.

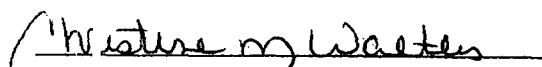
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #2	Date Reported:	10-18-06
Laboratory Number:	38867	Date Sampled:	10-17-06
Chain of Custody:	1599	Date Received:	10-17-06
Sample Matrix:	Soil	Date Analyzed:	10-18-06
Preservative:	Cool	Date Extracted:	10-17-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

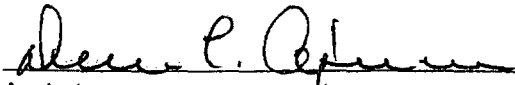
ND - Parameter not detected at the stated detection limit.

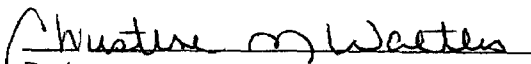
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 10-18-BTEX QA/QC
Laboratory Number: 38866
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 10-18-06
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 10-18-06
Analysis: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0 - 15%			
Benzene	4.6616E+007	4.6709E+007	0.2%	ND	0.2
Toluene	6.3380E+007	6.3507E+007	0.2%	ND	0.2
Ethylbenzene	2.7582E+007	2.7637E+007	0.2%	ND	0.2
p,m-Xylene	1.1511E+008	1.1534E+008	0.2%	ND	0.2
o-Xylene	5.1933E+007	5.2037E+007	0.2%	ND	0.1

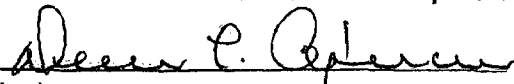
Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	ND	ND	0.0%	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.5
p,m-Xylene	ND	ND	0.0%	0 - 30%	2.2
o-Xylene	ND	ND	0.0%	0 - 30%	1.0

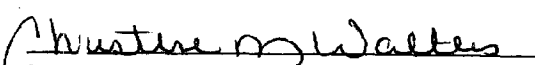
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spike	Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150	
Toluene	ND	50.0	49.9	99.8%	46 - 148	
Ethylbenzene	ND	50.0	49.9	99.8%	32 - 160	
p,m-Xylene	ND	100	99.9	99.9%	46 - 148	
o-Xylene	ND	50.0	50.0	100.0%	46 - 148	

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 38866 - 38868, 38872, 38875


Analyst


Reviewer

ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98056-004
Sample ID:	Injection AF	Date Reported:	10-19-06
Lab ID#:	38865	Date Sampled:	10-16-06
Sample Matrix:	Water	Date Received:	10-17-06
Preservative:	Cool	Date Analyzed:	10-17-06
Condition:	Cool and Intact	Chain of Custody:	1598

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative

pH = 7.21

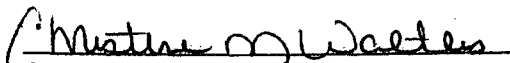
REACTIVITY: Negative

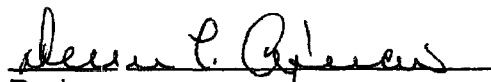
RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23 July 1, 1992.

Comments: Injection AF


Analyst


Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client: Key Energy
Sample ID: Injection AF
Laboratory Number: 38865
Chain of Custody: 1598
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

Project #: 98056-004
Date Reported: 10-19-06
Date Sampled: 10-16-06
Date Received: 10-17-06
Date Extracted: N/A
Date Analyzed: 10-19-06
Analysis Requested: TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	1.02	0.0001	200
Chloroform	0.109	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0230	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

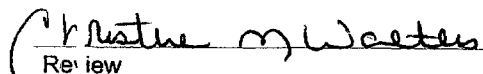
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: **Injection AF**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041 PHENOLS

Client:	Key Energy	Project #:	98056-004
Sample ID:	Injection AF	Date Reported:	10-19-06
Laboratory Number:	38865	Date Sampled:	10-16-06
Chain of Custody:	1598	Date Received:	10-17-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	10-19-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	0.373	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	100%

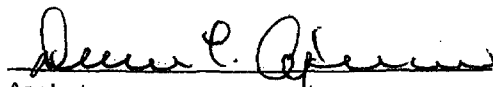
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

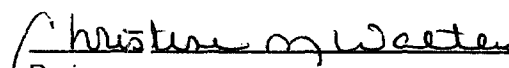
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection AF


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98056-004
Sample ID:	Injection AF	Date Reported:	10-19-06
Laboratory Number:	38865	Date Sampled:	10-16-06
Chain of Custody:	1598	Date Received:	10-17-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	10-19-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	0.151	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

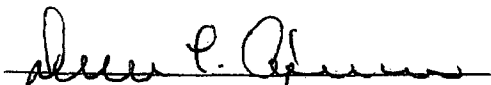
ND - Parameter not detected at the stated detection limit.

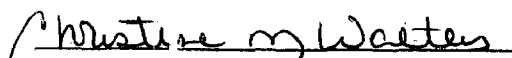
Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection AF**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 10-19-TCV QA/QC
Laboratory Number: 38865
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

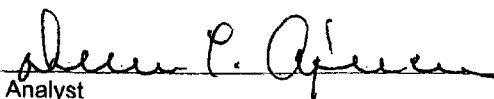
Project #: N/A
Date Reported: 10-19-06
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 10-19-06
Analysis Requested: TCLP

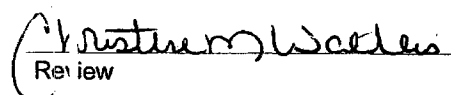
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	1.02	1.00	1.5%
Chloroform	0.0001	ND	ND	0.109	0.111	1.2%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0230	0.0238	3.3%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	1.02	1.12	100%	47-132
Chloroform	0.1000	0.109	0.209	100%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0230	0.123	100%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0993	99.3%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Comments: QA/QC for sample 38865


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041

PHENOLS

Quality Assurance Report

Client: QA/QC
Sample ID: 10-19-TCA QA/QC
Laboratory Number: 38865
Sample Matrix: 2-Propanol
Preservative: N/A
Condition: N/A

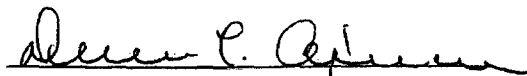
Project #: N/A
Date Reported: 10-19-06
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 10-19-06
Analysis Requested: TCLP

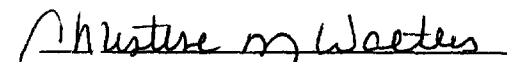
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	0.73	0.373	0.0%
p,m-Cresol	ND	ND	0.040	ND	ND	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 38865


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones Quality Assurance Report

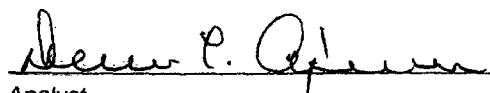
Client:	QA/QC	Project #:	N/A
Sample ID:	10-19-BTEX QA/QC	Date Reported:	10-19-06
Laboratory Number:	38865	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-19-06
Condition:	N/A	Analysis Requested:	TCLP

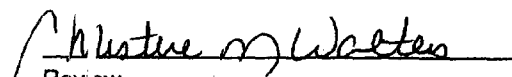
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.020	ND	ND	0.0%
Hexachloroethane	ND	ND	0.020	ND	ND	0.0%
Nitrobenzene	ND	ND	0.020	0.151	0.159	0.8%
Hexachlorobutadiene	ND	ND	0.020	ND	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.020	ND	ND	0.0%
HexachloroBenzene	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 38865


Analyst


Review

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Envirotech	Client Sample ID:	38865/Injection AF
Lab Order:	0610191	Collection Date:	10/16/2006 10:00:00 AM
Project:	Key Energy	Date Received:	10/18/2006
Lab ID:	0610191-01	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						
Mercury	ND	0.00020		mg/L	1	Analyst: MAP 10/25/2006
EPA 6010: TOTAL RECOVERABLE METALS						
Arsenic	ND	0.020		mg/L	1	Analyst: NMO 10/24/2006 10:27:22 AM
Barium	8.6	0.20		mg/L	10	10/24/2006 11:18:40 AM
Cadmium	ND	0.0020		mg/L	1	10/24/2006 10:27:22 AM
Chromium	0.088	0.0060		mg/L	1	10/24/2006 10:27:22 AM
Lead	ND	0.0050		mg/L	1	10/24/2006 10:27:22 AM
Selenium	ND	0.050		mg/L	1	10/24/2006 10:27:22 AM
Silver	ND	0.0050		mg/L	1	10/24/2006 10:27:22 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

QA/QC SUMMARY REPORT

Client: Envirotech
Project: Key Energy

Work Order: 0610191

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW7470									
Sample ID: MB-11573		MBLK			Batch ID: 11573		Analysis Date: 10/25/2006		
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-11573		LCS			Batch ID: 11573		Analysis Date: 10/25/2006		
Mercury	0.005370	mg/L	0.00020	107	80	20			
Method: SW6010A									
Sample ID: MB-11548		MBLK			Batch ID: 11548		Analysis Date: 10/24/2006 10:15:22 AM		
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Selenium	ND	mg/L	0.050						
Sample ID: LCS-11548		LCS			Batch ID: 11548		Analysis Date: 10/24/2006 10:18:27 AM		
Arsenic	0.5298	mg/L	0.020	106	80	120			
Barium	0.4892	mg/L	0.020	97.8	80	120			
Cadmium	0.4925	mg/L	0.0020	98.5	80	120			
Chromium	0.4995	mg/L	0.0060	99.5	80	120			
Lead	0.5035	mg/L	0.0050	101	80	120			
Selenium	0.4234	mg/L	0.050	84.7	80	120			

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

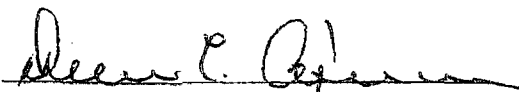
Client:	Key Energy	Project #:	98065-004
Sample ID:	Cell #1	Date Reported:	07-20-06
Laboratory Number:	37892	Date Sampled:	07-19-06
Chain of Custody No:	1221	Date Received:	07-19-06
Sample Matrix:	Soil	Date Extracted:	07-19-06
Preservative:	Cool	Date Analyzed:	07-20-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

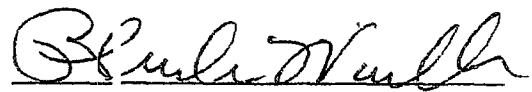
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**


Analyst


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DIFFERENTIAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

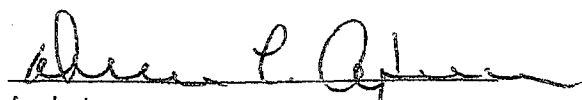
Client:	Key Energy	Project #	98065-004
Sample ID:	Cell #2	Date Reported:	07-20-06
Laboratory Number:	37893	Date Sampled:	07-19-06
Chain of Custody No:	1221	Date Received:	07-19-06
Sample Matrix:	Soil	Date Extracted:	07-19-06
Preservative:	Cool	Date Analyzed:	07-20-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

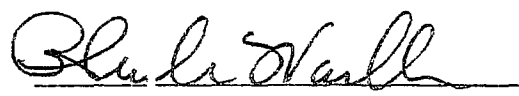
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Non halogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-20-06 QA/QC	Date Reported:	07-20-06
Laboratory Number:	37886	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-20-06
Condition:	N/A	Analysis Requested:	TPH

	Lab Date	Lab RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	07-11-05	9.9647E+002	9.9747E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9603E+002	9.9802E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

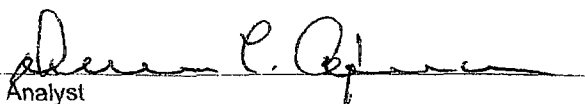
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	249	99.8%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 37886 - 37890, 37892 - 37893


Analyst


Review

ENVIROTECH LABS

Practical Solutions for a Better Tomorrow

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-004
Sample ID:	Cell #1	Date Reported:	07-20-06
Laboratory Number:	37892	Date Sampled:	07-19-06
Chain of Custody:	1221	Date Received:	07-19-06
Sample Matrix:	Soil	Date Analyzed:	07-20-06
Preservative:	Cool	Date Extracted:	07-19-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

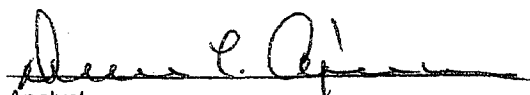
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm


Analyst


Review

ENVIROTECH LABS

TECHNICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-004
Sample ID:	Cell #2	Date Reported:	07-20-06
Laboratory Number:	37893	Date Sampled:	07-19-06
Chain of Custody:	1221	Date Received:	07-19-06
Sample Matrix:	Soil	Date Analyzed:	07-20-0606
Preservative:	Cool	Date Extracted:	07-19-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

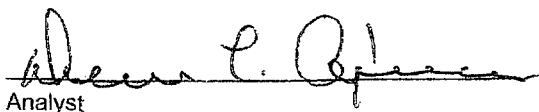
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm


Analyst


Review

ENVIROTECH LABS

ANALYTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	07-20-BTEX QA/QC	Date Reported:	07-20-06
Laboratory Number:	37889	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-20-06
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	FCal RF	C-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0 - 1 %			
Benzene	6.4374E+007	6.4503E+007	0.2 %	ND	0.2
Toluene	8.4692E+007	8.4862E+007	0.2 %	ND	0.2
Ethylbenzene	3.8484E+007	3.8561E+007	0.2 %	ND	0.2
p,m-Xylene	1.5205E+008	1.5235E+008	0.2 %	ND	0.2
o-Xylene	7.9842E+007	8.0002E+007	0.2 %	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	9.8	9.7	1.0 %	0 - 30%	1.8
Toluene	ND	ND	0.0 %	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0 %	0 - 30%	1.5
p,m-Xylene	52.7	52.6	0.2 %	0 - 30%	2.2
o-Xylene	22.4	22.3	0.4 %	0 - 30%	1.0

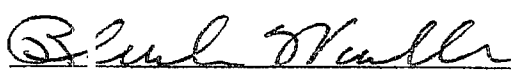
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	9.8	50.0	59.8	100.0%	39 - 150
Toluene	ND	50.0	49.9	99.8%	46 - 148
Ethylbenzene	ND	50.0	49.9	99.8%	32 - 160
p,m-Xylene	52.7	100	152	99.7%	46 - 148
o-Xylene	22.4	50.0	72.3	99.9%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Wastes, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 37889, 37892 - 37893


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #	98065-004
Sample ID:	Injection Pump	Date Reported:	07-21-06
Lab ID#:	37891	Date Sampled:	07-19-06
Sample Matrix:	Water	Date Received:	07-19-06
Preservative:	Cool	Date Analyzed:	07-20-06
Condition:	Cool and Intact	Chain of Custody:	1220

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative pH = 6.27

REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
-----------	---------------------------

IGNITABILITY: Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21.
(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)

CORROSIVITY: Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22.
(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)

REACTIVITY: Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23.
(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: Injection Pump


Analyst


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client: Key Energy
Sample ID: Injection Pump
Laboratory Number: 37891
Chain of Custody: 1220
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

Project #: 98065-004
Date Reported: 07-22-06
Date Sampled: 07-19-06
Date Received: 07-19-06
Date Extracted: N/A
Date Analyzed: 07-22-06
Analysis Requested: TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0234	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

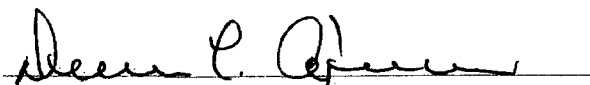
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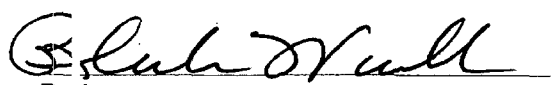
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C Section 261.24, July 1, 1992.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041 PHENOLS

Client:	Key Energy	Project #	98065-004
Sample ID:	Injection Pump	Date Reported:	07-22-06
Laboratory Number:	37891	Date Sampled:	07-19-06
Chain of Custody:	1220	Date Received:	07-19-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-22-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99.4%
	2,4,6-Tribromophenol	99.6%

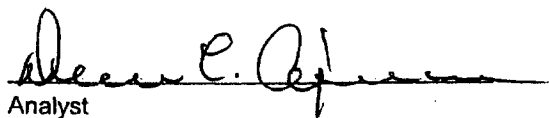
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

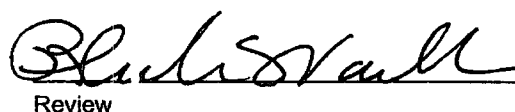
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: **Injection Pump**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-004
Sample ID:	Injection Pump	Date Reported:	07-22-06
Laboratory Number:	37891	Date Sampled:	07-19-06
Chain of Custody:	1220	Date Received:	07-19-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	07-22-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	0.064	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
Hexachlorobenzene	ND	0.020	0.13

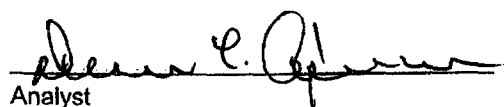
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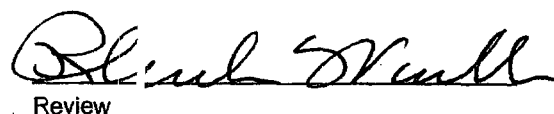
Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-004
Sample ID:	Injection Pump	Date Reported:	07-21-06
Laboratory Number:	37891	Date Sampled:	07-19-06
Chain of Custody:	1220	Date Received:	07-19-06
Sample Matrix:	Water	Date Analyzed:	07-21-06
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	0.263	0.011	5.0
Barium	25.1	0.011	100
Cadmium	ND	0.011	1.0
Chromium	ND	0.011	5.0
Lead	ND	0.011	5.0
Mercury	ND	0.011	0.2
Selenium	0.295	0.011	1.0
Silver	ND	0.011	5.0

ND - Parameter not detected at the stated detection limit.

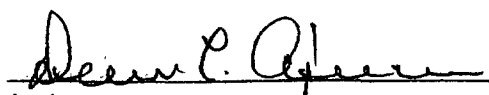
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

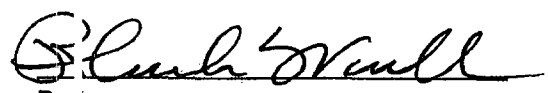
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Injection Pump


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 07-22-TCV QA/QC
Laboratory Number: 37891
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

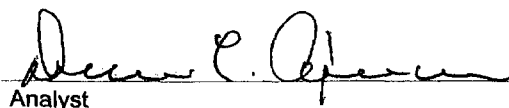
Project #: N/A
Date Reported: 07-19-06
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 07-22-06
Analysis Requested: TCLP

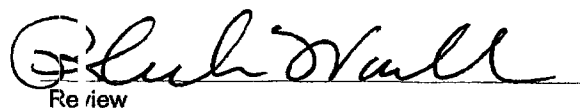
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	ND	ND	0.0%
Chloroform	0.0001	ND	ND	ND	ND	0.0%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0234	0.0235	0.6%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100.0%	43-143
2-Butanone (MEK)	0.1000	ND	0.1000	100.0%	47-132
Chloroform	0.1000	ND	0.0998	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0234	0.1233	99.9%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0993	99.3%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Comments: QA/QC for sample 37891


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041 PHENOLS Quality Assurance Report

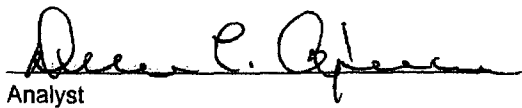
Client:	QA/QC	Project #:	N/A
Sample ID:	07-22-TCA QA/QC	Date Reported:	07-22-06
Laboratory Number:	37891	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-22-06
Condition:	N/A	Analysis Requested:	TCLP

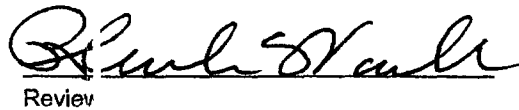
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	ND	ND	0.00%
p,m-Cresol	ND	ND	0.040	ND	ND	0.00%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.00%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.00%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.00%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 37891


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones Quality Assurance Report

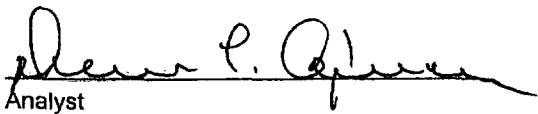
Client:	QA/QC	Project #:	N/A
Sample ID:	07-22-TBN QA/QC	Date Reported:	07-22-06
Laboratory Number:	37891	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-22-06
Condition:	N/A	Analysis Requested:	TCLP

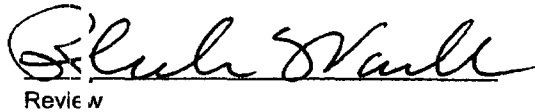
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.020	ID	ND	0.00%
Hexachloroethane	ND	ND	0.020	ID	ND	0.00%
Nitrobenzene	ND	ND	0.020	0.064	0.061	0.26%
Hexachlorobutadiene	ND	ND	0.020	ID	ND	0.00%
2,4-Dinitrotoluene	ND	ND	0.020	ID	ND	0.00%
HexachloroBenzene	ND	ND	0.020	ID	ND	0.00%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 37891


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	07-21-TCM QA/QC	Date Reported:	07-21-06
Laboratory Number:	37891	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	07-21-06
Condition:	N/A	Date Extracted:	07-20-06

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	0.263	0.268	1.9%	0% - 30%
Barium	ND	ND	0.001	25.1	25.5	1.6%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Lead	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.295	0.295	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.263	0.760	99.6%	80% - 120%
Barium	0.500	25.1	25.5	99.6%	80% - 120%
Cadmium	0.500	ND	0.498	99.6%	80% - 120%
Chromium	0.500	ND	0.50	99.8%	80% - 120%
Lead	0.500	0.502	0.498	99.6%	80% - 120%
Mercury	0.500	0.506	0.498	99.6%	80% - 120%
Selenium	0.500	0.596	0.793	99.7%	80% - 120%
Silver	0.500	0.557	0.500	100.0%	80% - 120%

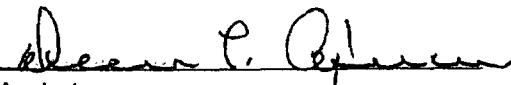
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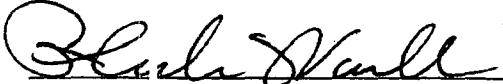
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 37891


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98065-004
Sample ID:	Cell #1	Date Reported:	07-20-06
Laboratory Number:	37892	Date Sampled:	07-19-06
Chain of Custody No:	1221	Date Received:	07-19-06
Sample Matrix:	Soil	Date Extracted:	07-19-06
Preservative:	Cool	Date Analyzed:	07-20-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

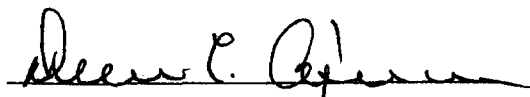
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

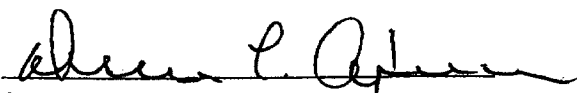
Client:	Key Energy	Project #	98065-004
Sample ID:	Cell #2	Date Reported:	07-20-06
Laboratory Number:	37893	Date Sampled:	07-19-06
Chain of Custody No:	1221	Date Received:	07-19-06
Sample Matrix:	Soil	Date Extracted:	07-19-06
Preservative:	Cool	Date Analyzed:	07-20-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

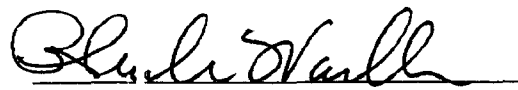
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Landfarm**


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Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Non halogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-20-06 QA/QC	Date Reported:	07-20-06
Laboratory Number:	37886	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-20-06
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RE	C-Cal RE	% Difference	Accept Range
Gasoline Range C5 - C10	07-11-05	9.9647E+002	9.9747E+002	0.10%	0 - 15%
Diesel Range C10 - C28	07-11-05	9.9603E+002	9.9802E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

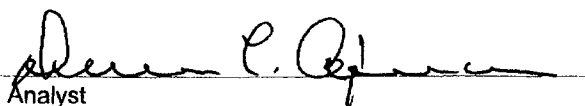
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

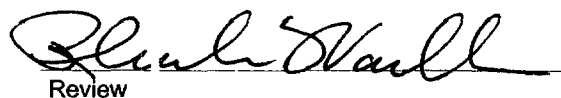
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	249	99.8%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 37886 - 37890, 37892 - 37893


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-004
Sample ID:	Cell #1	Date Reported:	07-20-06
Laboratory Number:	37892	Date Sampled:	07-19-06
Chain of Custody:	1221	Date Received:	07-19-06
Sample Matrix:	Soil	Date Analyzed:	07-20-06
Preservative:	Cool	Date Extracted:	07-19-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

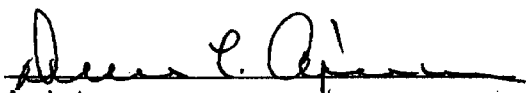
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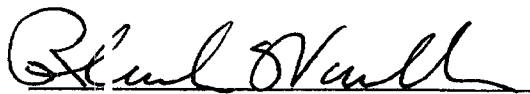
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-004
Sample ID:	Cell #2	Date Reported:	07-20-06
Laboratory Number:	37893	Date Sampled:	07-19-06
Chain of Custody:	1221	Date Received:	07-19-06
Sample Matrix:	Soil	Date Analyzed:	07-20-0606
Preservative:	Cool	Date Extracted:	07-19-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm


Analyst


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: N/A
Sample ID: 07-20-BTEX QA/QC
Laboratory Number: 37889
Sample Matrix: Soil
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 07-20-06
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 07-20-06
Analysis: BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	G-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0	5%		
Benzene	6.4374E+007	6.4503E+007	0.2%	ND	0.2
Toluene	8.4692E+007	8.4862E+007	0.2%	ND	0.2
Ethylbenzene	3.8484E+007	3.8561E+007	0.2%	ND	0.2
p,m-Xylene	1.5205E+008	1.5235E+008	0.2%	ND	0.2
o-Xylene	7.9842E+007	8.0002E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	9.8	9.7	1.0%	0 - 30%	1.8
Toluene	ND	ND	0.0%	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.5
p,m-Xylene	52.7	52.6	0.2%	0 - 30%	2.2
o-Xylene	22.4	22.3	0.4%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spike	Sample	% Recovery	Accept Range
Benzene	9.8	50.0	59.8	100.0%	39 - 150	
Toluene	ND	50.0	49.9	99.8%	46 - 148	
Ethylbenzene	ND	50.0	49.9	99.8%	32 - 160	
p,m-Xylene	52.7	100	152	99.7%	46 - 148	
o-Xylene	22.4	50.0	72.3	99.9%	46 - 148	

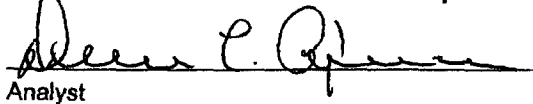
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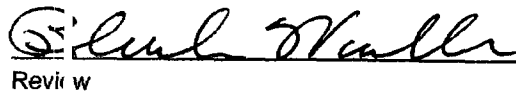
References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 37889, 37892 - 37893


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EP/ METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #1	Date Reported:	04-24-06
Laboratory Number:	36868	Date Sampled:	04-19-06
Chain of Custody No:	15829	Date Received:	04-19-06
Sample Matrix:	Soil	Date Extracted:	04-21-06
Preservative:	Cool	Date Analyzed:	04-24-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

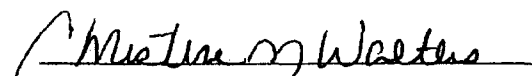
Parameter	Concentration (mg/l Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.7	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.7	0.2

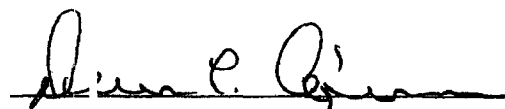
ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm Cell #1 ; Cell #2.

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

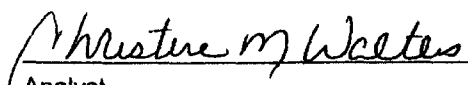
Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #2	Date Reported:	04-24-06
Laboratory Number:	36869	Date Sampled:	04-19-06
Chain of Custody No:	15829	Date Received:	04-19-06
Sample Matrix:	Soil	Date Extracted:	04-21-06
Preservative:	Cool	Date Analyzed:	04-24-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

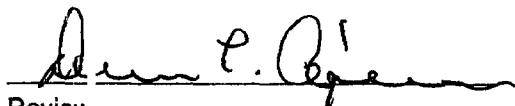
Parameter	Concentration (mg/l (g))	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.9	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1.9	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm Cell #1 ; Cell #2.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-24-06 QA/QC	Date Reported:	04-24-06
Laboratory Number:	36868	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-24-06
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	02-04-05	1.0268E+003	1.0271E+003	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	1.0411E+003	1.0431E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

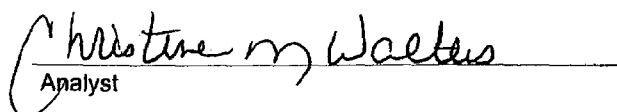
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	0.7	0.7	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

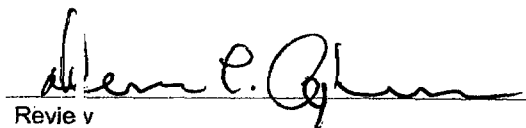
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	0.7	250	251	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 36868 - 36872 and 36891 - 36896.


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #1	Date Reported:	04-24-06
Laboratory Number:	36868	Date Sampled:	04-19-06
Chain of Custody:	15829	Date Received:	04-19-06
Sample Matrix:	Soil	Date Analyzed:	04-24-06
Preservative:	Cool	Date Extracted:	04-21-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	114	1.7
Ethylbenzene	108	1.5
p,m-Xylene	253	2.2
o-Xylene	133	1.0
Total BTEX	608	

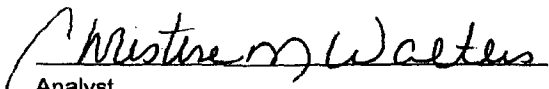
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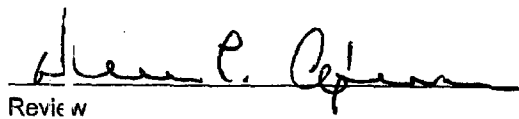
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm Cell #1; Cell #2.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #2	Date Reported:	04-24-06
Laboratory Number:	36869	Date Sampled:	04-19-06
Chain of Custody:	15829	Date Received:	04-19-06
Sample Matrix:	Soil	Date Analyzed:	04-24-06
Preservative:	Cool	Date Extracted:	04-21-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	3.0	1.8
Toluene	501	1.7
Ethylbenzene	315	1.5
p,m-Xylene	725	2.2
o-Xylene	337	1.0
Total BTEX	1,880	

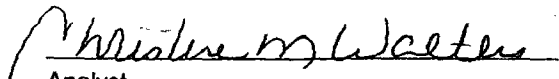
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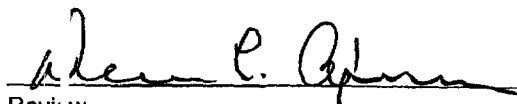
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Landfarm Cell #1; Cell #2.


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	04-24-BTEX QA/QC	Date Reported:	04-24-06
Laboratory Number:	36868	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-24-06
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	IL Cal RF	OL Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0 -	5%		
Benzene	3.1951E+006	3.2016E+006	0.1%	ND	0.2
Toluene	9.7555E+007	9.7751E+007	0.1%	ND	0.2
Ethylbenzene	5.6919E+007	5.7033E+007	0.1%	ND	0.2
p,m-Xylene	1.8307E+008	1.8343E+008	0.1%	ND	0.2
o-Xylene	9.2314E+007	9.2499E+007	0.1%	ND	0.1

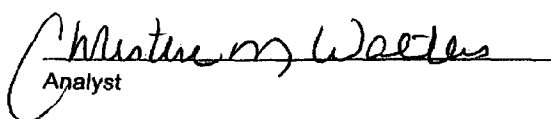
Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.1%	0 - 30%	1.8
Toluene	114	114	0.1%	0 - 30%	1.7
Ethylbenzene	108	108	0.1%	0 - 30%	1.5
p,m-Xylene	253	253	0.1%	0 - 30%	2.2
o-Xylene	133	133	0.0%	0 - 30%	1.0

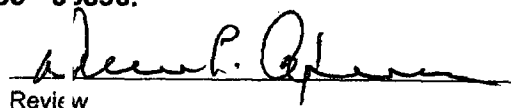
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spike	Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150	
Toluene	114	50.0	163	99.6%	46 - 148	
Ethylbenzene	108	50.0	157	99.4%	32 - 160	
p,m-Xylene	253	100	352	99.7%	46 - 148	
o-Xylene	133	50.0	182	99.4%	46 - 148	

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 36868 - 36872, 36893 - 36896.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98056-004
Sample ID:	Injection Pump B.F.	Date Reported:	04-21-06
Lab ID#:	36867	Date Sampled:	04-19-06
Sample Matrix:	Water	Date Received:	04-19-06
Preservative:	Cool	Date Analyzed:	04-20-06
Condition:	Cool and Intact	Chain of Custody:	15828

Parameter	Result
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IGNITABILITY: **Negative**

CORROSIVITY: **Negative**

pH = 7.19

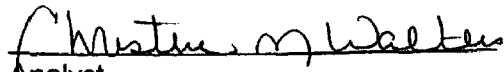
REACTIVITY: **Negative**

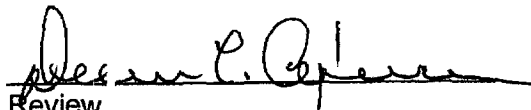
RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: **Inject Pump B.F.**


Analyst


Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client: Key Energy
Sample ID: Injection Pump B.F.
Laboratory Number: 36867
Chain of Custody: 15828
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

Project #: 98056-004
Date Reported: 04-21-06
Date Sampled: 04-19-06
Date Received: 04-19-06
Date Extracted: N/A
Date Analyzed: 04-21-06
Analysis Requested: TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.0399	0.0001	200
Chloroform	0.0114	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.030	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

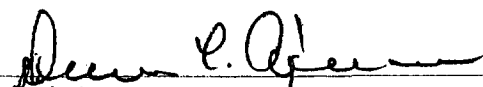
ND - Parameter not detected at the stated detection limit.

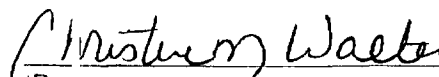
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: Inject Pump B.F.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041 PHENOLS

Client:	Key Energy	Project #	98056-004
Sample ID:	Injection Pump B.F.	Date Reported:	04-21-06
Laboratory Number:	36867	Date Sampled:	04-19-06
Chain of Custody:	15828	Date Received:	04-19-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-21-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	0.863	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichlorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99.7%
	2,4,6-Tribromophenol	99.8%

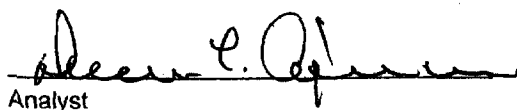
References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

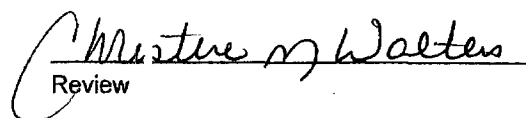
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Inject Pump B.F.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98056-004
Sample ID:	Injection Pump B.F.	Date Reported:	04-21-06
Laboratory Number:	36867	Date Sampled:	04-19-06
Chain of Custody:	15828	Date Received:	04-19-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	04-21-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	0.381	0.020	3.0
Nitrobenzene	0.034	0.020	2.0
Hexachlorobutadiene	0.024	0.020	0.5
2,4-Dinitrotoluene	0.088	0.020	0.13
HexachloroBenzene	0.050	0.020	0.13

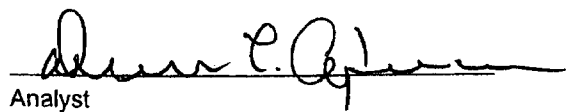
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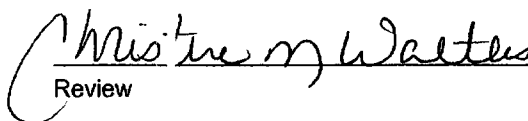
Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Inject Pump B.F.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	96056-004
Sample ID:	Injection Pump B.F.	Date Reported:	04-21-06
Laboratory Number:	36867	Date Sampled:	04-19-06
Chain of Custody:	15828	Date Received:	04-19-06
Sample Matrix:	Water	Date Analyzed:	04-21-06
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	ND	0.001	5.0
Barium	13.3	0.001	100
Cadmium	0.010	0.001	1.0
Chromium	0.244	0.001	5.0
Lead	ND	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	ND	0.001	1.0
Silver	0.002	0.001	5.0

ND - Parameter not detected at the stated detection limit.

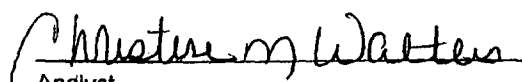
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

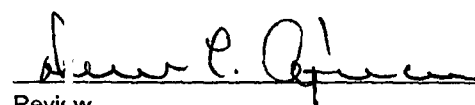
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Inject Pump B.F.


Analyst


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 04-21-TCV QA/QC
Laboratory Number: 36844
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

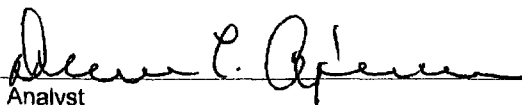
Project #: N/A
Date Reported: 04-21-06
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 04-21-06
Analysis Requested: TCLP

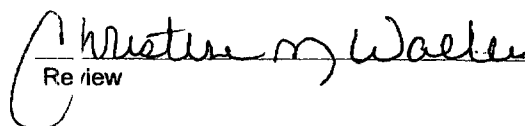
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	ND	ND	0.0%
Chloroform	0.0001	ND	ND	ND	ND	0.0%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	ND	ND	0.0%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100.0%	43-143
2-Butanone (MEK)	0.1000	ND	0.1000	100.0%	47-132
Chloroform	0.1000	ND	0.0998	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	ND	0.1000	100.0%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0993	99.3%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Comments: QA/QC for samples 36844, 36867.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041

PHENOLS

Quality Assurance Report

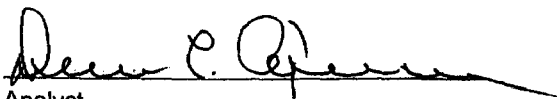
Client:	QA/QC	Project #:	N/A
Sample ID:	04-21-TCA QA/QC	Date Reported:	04-21-06
Laboratory Number:	36844	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-21-06
Condition:	N/A	Analysis Requested:	TCLP

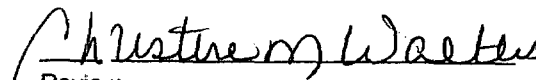
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	ND	ND	0.00%
p,m-Cresol	ND	ND	0.040	ND	ND	0.00%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.00%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.00%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.00%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for samples 36844, 36867.


Analyst


Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones Quality Assurance Report

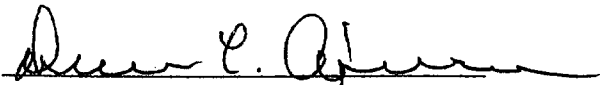
Client:	QA/QC	Project #:	N/A
Sample ID:	04-21-TBN QA/QC	Date Reported:	04-21-06
Laboratory Number:	36844	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-21-06
Condition:	N/A	Analysis Requested:	TCLP

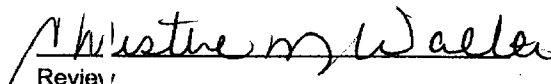
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.020	ND	ND	0.00%
Hexachloroethane	ND	ND	0.020	ND	ND	0.00%
Nitrobenzene	ND	ND	0.020	0.118	0.118	0.00%
Hexachlorobutadiene	ND	ND	0.020	ND	ND	0.00%
2,4-Dinitrotoluene	ND	ND	0.020	0.025	0.025	0.00%
HexachloroBenzene	ND	ND	0.020	ND	ND	0.00%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 36844, 36867.


Analyst


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #	N/A
Sample ID:	04-21-TCM QA/QC	Date Reported:	04-21-06
Laboratory Number:	36844	Date Sampled:	N/A
Sample Matrix:	TCLP Extract	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	04-21-06
Condition:	N/A	Date Extracted:	04-18-06

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	3.79	3.83	1.1%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Lead	ND	ND	0.001	0.013	0.013	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.062	0.061	1.6%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spike Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	ND	0.500	100.0%	80% - 120%
Barium	0.500	3.79	4.27	99.5%	80% - 120%
Cadmium	0.500	ND	0.499	99.8%	80% - 120%
Chromium	0.500	ND	0.498	99.6%	80% - 120%
Lead	0.500	0.013	0.514	100.2%	80% - 120%
Mercury	0.500	ND	0.499	99.8%	80% - 120%
Selenium	0.500	0.062	0.562	100.0%	80% - 120%
Silver	0.500	ND	0.499	99.8%	80% - 120%

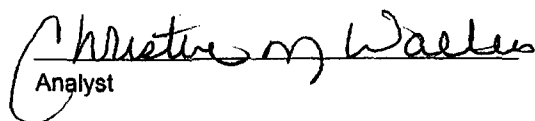
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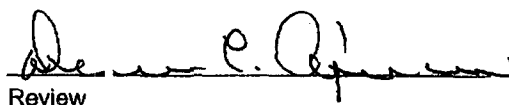
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 36844, 36867.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy	Project #:	98065-004
Sample ID:	Injection A.F.	Date Reported:	01-15-07
Lab ID#:	39712	Date Sampled:	01-12-07
Sample Matrix:	Water	Date Received:	01-12-07
Preservative:	Cool	Date Analyzed:	01-12-07
Condition:	Cool and Intact	Chain of Custody:	1925

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative pH = 8.17

REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
IGNITABILITY:	Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21. (i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)
CORROSIVITY:	Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22. (i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)
REACTIVITY:	Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: Injection Well

Christine M. Waters
Analyst

Debra L. O'Brien
Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection A.F.	Date Reported:	01-16-07
Laboratory Number:	39712	Date Sampled:	01-12-07
Chain of Custody:	1925	Date Received:	01-12-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-16-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	0.867	0.0001	200
Chloroform	0.0111	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	0.0935	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

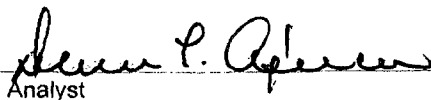
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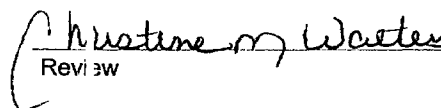
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.9%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: Injection Well


Analyst


Christine M. Waters
Revised

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041

PHENOLS

Client:	Key Energy	Project #	98065-007
Sample ID:	Injection A.F.	Date Reported:	01-16-07
Laboratory Number:	39712	Date Sampled:	01-12-07
Chain of Custody:	1925	Date Received:	01-12-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-16-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	0.152	0.02)	200
p,m-Cresol	0.081	0.04)	200
2,4,6-Trichlorophenol	ND	0.02)	2.0
2,4,5-Trichlorophenol	ND	0.02)	400
Pentachlorophenol	ND	0.02)	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	99%
	2,4,6-Tribromophenol	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

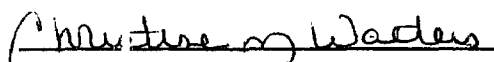
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Well


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection A.F.	Date Reported:	01-16-07
Laboratory Number:	39712	Date Sampled:	01-12-07
Chain of Custody:	1925	Date Received:	01-12-07
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-16-07
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	0.193	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

ND - Parameter not detected at the stated detection limit.

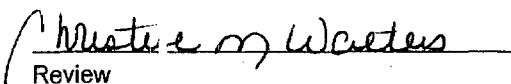
Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	99%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Well


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-007
Sample ID:	Injection A.F.	Date Reported:	01-15-07
Laboratory Number:	39712	Date Sampled:	01-12-07
Chain of Custody:	1925	Date Received:	01-12-07
Sample Matrix:	Water	Date Analyzed:	01-15-07
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	0.046	0.001	5.0
Barium	5.63	0.001	100
Cadmium	0.004	0.001	1.0
Chromium	0.027	0.001	5.0
Lead	0.003	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.261	0.001	1.0
Silver	0.002	0.001	5.0

ND - Parameter not detected at the stated detection limit.

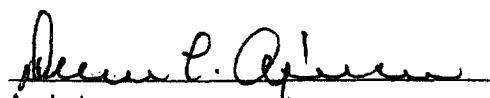
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

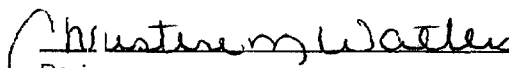
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Injection Well


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

QUALITY ASSURANCE / QUALITY CONTROL

DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8260
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 01-16-TCV QA/QC
Laboratory Number: 39712
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

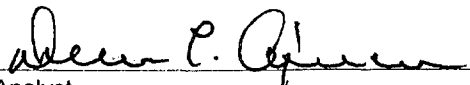
Project #: N/A
Date Reported: 01-16-07
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 01-16-07
Analysis Requested: TCLP

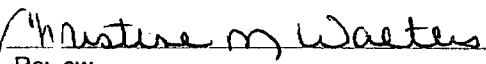
Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	0.867	0.871	0.5%
Chloroform	0.0001	ND	ND	0.0111	0.0112	1.1%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	0.0935	0.0935	0.0%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.1000	ND	0.0999	99.9%	26-163
1,1-Dichloroethene	0.1000	ND	0.1000	100%	43-143
2-Butanone (MEK)	0.1000	0.867	0.9655	99.9%	47-132
Chloroform	0.1000	0.0111	0.1109	99.8%	49-133
Carbon Tetrachloride	0.1000	ND	0.0999	99.9%	43-143
Benzene	0.1000	0.0935	0.1930	99.8%	39-150
1,2-Dichloroethane	0.1000	ND	0.0998	99.8%	51-147
Trichloroethene	0.1000	ND	0.0993	99.3%	35-146
Tetrachloroethene	0.1000	ND	0.0999	99.9%	26-162
Chlorobenzene	0.1000	ND	0.0994	99.4%	38-150
1,4-Dichlorobenzene	0.1000	ND	0.0999	99.9%	42-143

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Comments: QA/QC for sample 39712


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041

PHENOLS

Quality Assurance Report

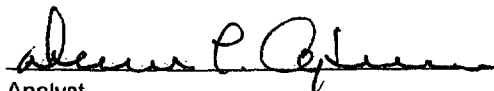
Client:	QA/QC	Project #:	N/A
Sample ID:	01-16-TCA QA/QC	Date Reported:	01-16-07
Laboratory Number:	39712	Date Sampled:	N/A
Sample Matrix:	2-Propanol	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-16-07
Condition:	N/A	Analysis Requested:	TCLP

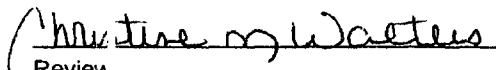
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	0.152	0.151	1.0%
p,m-Cresol	ND	ND	0.040	0.081	0.081	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 39712


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones Quality Assurance Report

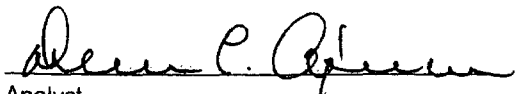
Client:	QA/QC	Project #:	N/A
Sample ID:	01-16-TBN QA/QC	Date Reported:	01-16-07
Laboratory Number:	39712	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-16-07
Condition:	N/A	Analysis Requested:	TCLP

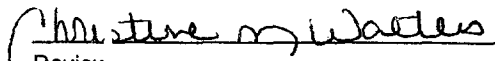
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.020	ID	ND	0.0%
Hexachloroethane	ND	ND	0.020	ID	ND	0.0%
Nitrobenzene	ND	ND	0.020	0.193	0.195	0.2%
Hexachlorobutadiene	ND	ND	0.020	ID	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.020	ID	ND	0.0%
HexachloroBenzene	ND	ND	0.020	ID	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 39712


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	01-15-TCM QA/QC	Date Reported:	01-15-07
Laboratory Number:	39712	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	01-15-07
Condition:	N/A	Date Extracted:	NA

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	0.046	0.046	0.0%	0% - 30%
Barium	ND	ND	0.001	5.63	5.66	0.5%	0% - 30%
Cadmium	ND	ND	0.001	0.004	0.004	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.027	0.028	3.7%	0% - 30%
Lead	ND	ND	0.001	0.003	0.003	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.261	0.258	1.1%	0% - 30%
Silver	ND	ND	0.001	0.002	0.002	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.046	0.548	100.4%	80% - 120%
Barium	0.500	5.63	6.11	99.7%	80% - 120%
Cadmium	0.500	0.004	0.504	100.0%	80% - 120%
Chromium	0.500	0.027	0.525	99.6%	80% - 120%
Lead	0.500	0.003	0.502	99.8%	80% - 120%
Mercury	0.500	ND	0.498	99.6%	80% - 120%
Selenium	0.500	0.261	0.760	99.9%	80% - 120%
Silver	0.500	0.002	0.501	99.8%	80% - 120%

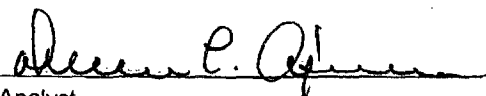
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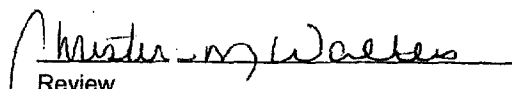
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 39712


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #1	Date Reported:	01-19-06
Laboratory Number:	35766	Date Sampled:	01-16-06
Chain of Custody No:	15380	Date Received:	01-17-06
Sample Matrix:	Soil	Date Extracted:	01-17-06
Preservative:	Cool	Date Analyzed:	01-19-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

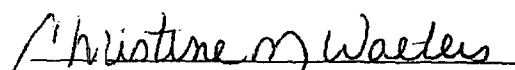
ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Cell #1; #2.

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

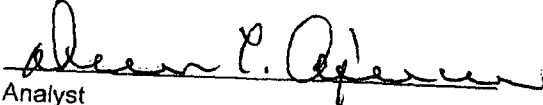
Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #2	Date Reported:	01-19-06
Laboratory Number:	35767	Date Sampled:	01-16-06
Chain of Custody No:	15380	Date Received:	01-17-06
Sample Matrix:	Soil	Date Extracted:	01-17-06
Preservative:	Cool	Date Analyzed:	01-19-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

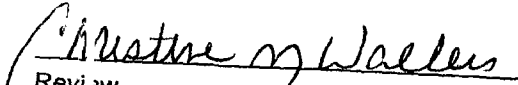
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Cell #1; #2.


Analyst


Revised

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project:	N/A
Sample ID:	01-19-06 QA/QC	Date Reported:	01-19-06
Laboratory Number:	35766	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-19-06
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	02-04-05	9.9890E+002	9.9990E+002	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	1.0011E+003	1.0031E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

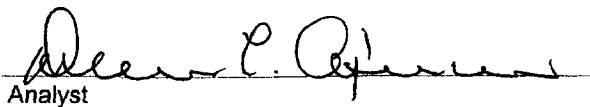
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

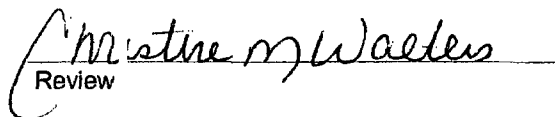
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 35766 - 35767, 35770 - 35773, 35776 - 35777.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Projec #:	98056-004
Sample ID:	Cell #1	Date Reported:	01-19-06
Laboratory Number:	35766	Date Sampled:	01-16-06
Chain of Custody:	15380	Date Received:	01-17-06
Sample Matrix:	Soil	Date Analyzed:	01-19-06
Preservative:	Cool	Date Extracted:	01-17-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

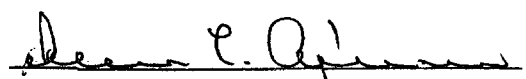
ND - Parameter not detected at the stated detection limit.

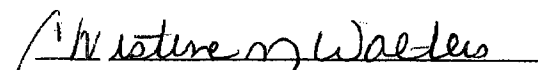
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Cell #1; #2.


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Key Energy	Project #:	98056-004
Sample ID:	Cell #2	Date Reported:	01-19-06
Laboratory Number:	35767	Date Sampled:	01-16-06
Chain of Custody:	15380	Date Received:	01-17-06
Sample Matrix:	Soil	Date Analyzed:	01-19-06
Preservative:	Cool	Date Extracted:	01-17-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

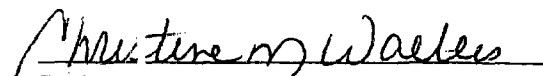
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Cell #1; #2.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	01-19-BTEX QA/QC	Date Reported:	01-19-06
Laboratory Number:	35766	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-19-06
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	O-Cal RF	% Diff	Blank Conc	Detect Limit
		Accept Range 0	5%		
Benzene	5.2469E+007	5.2574E+007	0.2%	ND	0.2
Toluene	5.2959E+007	5.3065E+007	0.2%	ND	0.2
Ethylbenzene	3.8868E+007	3.8946E+007	0.2%	ND	0.2
p,m-Xylene	7.8013E+007	7.8170E+007	0.2%	ND	0.2
o-Xylene	3.7245E+007	3.7320E+007	0.2%	ND	0.1

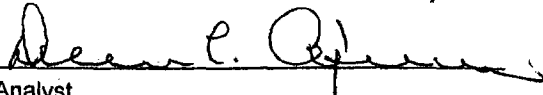
Duplicate Conc. (ug/Kg)	Sample	Duplicate	% Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	ND	ND	0.0%	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.5
p,m-Xylene	ND	ND	0.0%	0 - 30%	2.2
o-Xylene	ND	ND	0.0%	0 - 30%	1.0

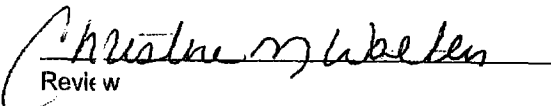
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spike	Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150	
Toluene	ND	50.0	50.0	100.0%	46 - 148	
Ethylbenzene	ND	50.0	50.0	100.0%	32 - 160	
p,m-Xylene	ND	100	99.9	99.9%	46 - 148	
o-Xylene	ND	50.0	49.9	99.8%	46 - 148	

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 35766 - 35767, 35769 - 35770, 35772 - 35773, 35776 - 35777


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

SUSPECTED HAZARDOUS WASTE ANALYSIS

Client:	Key Energy / Injection Well	Project #:	98065-004
Sample ID:	Injection Pump B.F.	Date Reported:	01-18-06
Lab ID#:	35768	Date Sampled:	01-17-06
Sample Matrix:	Water	Date Received:	01-17-06
Preservative:	Cool	Date Analyzed:	01-17-06
Condition:	Cool and Intact	Chain of Custody:	15381

Parameter	Result
-----------	--------

IGNITABILITY: Negative

CORROSIVITY: Negative

pH = 6.61

REACTIVITY: Negative

RCRA Hazardous Waste Criteria

Parameter	Hazardous Waste Criterion
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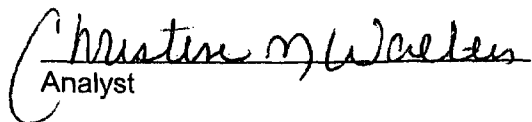
IGNITABILITY: Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21.
(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)

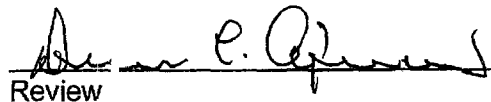
CORROSIVITY: Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22.
(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)

REACTIVITY: Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23.
(i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments: Injection Pump B.F.


Analyst


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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC / HALOGENATED VOLATILE ORGANICS

Client:	Key Energy	Project #:	98065-004
Sample ID:	Injection Pump B.F.	Date Reported:	01-20-06
Laboratory Number:	35768	Date Sampled:	01-17-06
Chain of Custody:	15381	Date Received:	01-17-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-20-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachloride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichloroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

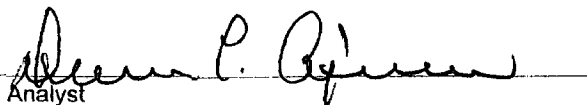
ND - Parameter not detected at the stated detection limit.

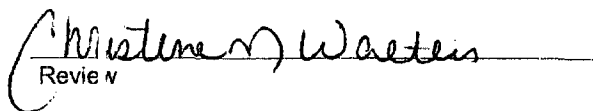
QA/QC Acceptance Criteria	Parameter	Percent Recovery
	Fluorobenzene	99.8%
	1,4-difluorobenzene	99.8%
	4-bromochlorobenzene	99.8%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments: Injection Pump B.F.


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8040

PHENOLS

Client:	Key Energy	Project #	98065-004
Sample ID:	Injection Pump B.F.	Date Reported:	01-20-06
Laboratory Number:	35768	Date Sampled:	01-17-06
Chain of Custody:	15381	Date Received:	01-17-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-20-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.010	200
p,m-Cresol	ND	0.010	200
2,4,6-Trichlorophenol	ND	0.010	2.0
2,4,5-Trichlorophenol	ND	0.010	400
Pentachlorophenol	ND	0.010	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	100%
	2,4,6-Tribromophenol	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

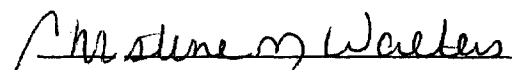
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Pump B.F.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091 Nitroaromatics and Cyclic Ketones

Client:	Key Energy	Project #:	98065-004
Sample ID:	Injection Pump B.F.	Date Reported:	01-20-06
Laboratory Number:	35768	Date Sampled:	01-17-06
Chain of Custody:	15381	Date Received:	01-17-06
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	01-20-06
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ND	0.02)	5.0
Hexachloroethane	ND	0.02)	3.0
Nitrobenzene	0.052	0.02)	2.0
Hexachlorobutadiene	ND	0.02)	0.5
2,4-Dinitrotoluene	ND	0.02)	0.13
HexachloroBenzene	ND	0.02)	0.13

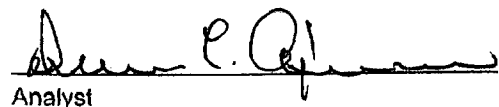
ND - Parameter not detected at the stated detection limit.

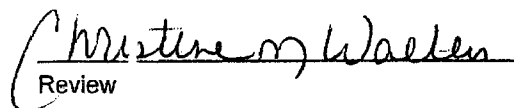
Surrogate Recoveries:	Parameter	Percent Recovery
	2-fluorobiphenyl	100%

References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846 USEPA, Sept. 1986.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments: Injection Pump B.F.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client:	Key Energy	Project #:	98065-004
Sample ID:	Injection Pump B.F.	Date Reported:	01-18-06
Laboratory Number:	35768	Date Sampled:	01-17-06
Chain of Custody:	15381	Date Received:	01-17-06
Sample Matrix:	Water	Date Analyzed:	01-18-06
Preservative:	Cool	Date Extracted:	N/A
Condition:	Cool & Intact	Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Level (mg/L)
Arsenic	ND	0.011	5.0
Barium	60.4	0.011	100
Cadmium	ND	0.011	1.0
Chromium	0.067	0.011	5.0
Lead	0.028	0.011	5.0
Mercury	ND	0.011	0.2
Selenium	ND	0.011	1.0
Silver	ND	0.011	5.0

ND - Parameter not detected at the stated detection limit.

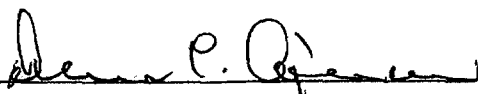
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, December 1996.

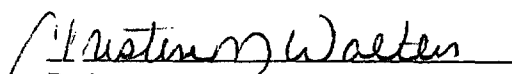
Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission SW-846, USEPA. December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Injection Pump B.F.


Analyst


Review

QUALITY ASSURANCE / QUALITY CONTROL DOCUMENTATION

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC / HALOGENATED
VOLATILE ORGANICS
Quality Assurance Report

Client: QA/QC
Sample ID: 01-20-TCV QA/QC
Laboratory Number: 35768
Sample Matrix: N/A
Preservative: N/A
Condition: N/A

Project #: N/A
Date Reported: 01-20-06
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 01-20-06
Analysis Requested: TCLP

Blanks & Duplicate Concentration (mg/L)	Detection Limit	Laboratory Blank	Method Blank	Sample Conc.	Duplicate Conc.	Percent Difference
Vinyl Chloride	0.0001	ND	ND	ND	ND	0.0%
1,1-Dichloroethene	0.0001	ND	ND	ND	ND	0.0%
2-Butanone (MEK)	0.0001	ND	ND	ND	ND	0.0%
Chloroform	0.0001	ND	ND	ND	ND	0.0%
Carbon Tetrachloride	0.0001	ND	ND	ND	ND	0.0%
Benzene	0.0001	ND	ND	ND	ND	0.0%
1,2-Dichloroethane	0.0001	ND	ND	ND	ND	0.0%
Trichloroethene	0.0003	ND	ND	ND	ND	0.0%
Tetrachloroethene	0.0005	ND	ND	ND	ND	0.0%
Chlorobenzene	0.0003	ND	ND	ND	ND	0.0%
1,4-Dichlorobenzene	0.0002	ND	ND	ND	ND	0.0%

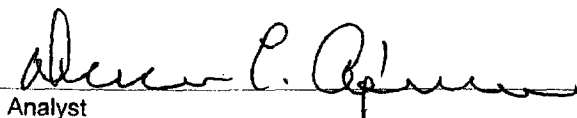
Matrix Spike Concentration (mg/L)	Amount Spiked	Sample Result	Spike Result	Percent Recovery	Acceptable Range
Vinyl Chloride	0.0500	ND	0.0499	99.8%	26-163
1,1-Dichloroethene	0.0500	ND	0.0499	99.8%	43-143
2-Butanone (MEK)	0.0500	ND	0.0581	116.2%	47-132
Chloroform	0.0500	ND	0.0500	100.0%	49-133
Carbon Tetrachloride	0.0500	ND	0.0499	99.8%	43-143
Benzene	0.0500	ND	0.0713	70.0%	39-150
1,2-Dichloroethane	0.0500	ND	0.0500	100.0%	51-147
Trichloroethene	0.0500	ND	0.0499	99.9%	35-146
Tetrachloroethene	0.0500	ND	0.0499	99.9%	26-162
Chlorobenzene	0.0500	ND	0.0500	100.0%	38-150
1,4-Dichlorobenzene	0.0500	ND	0.0497	99.3%	42-143

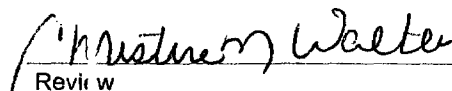
References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.
Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using
PID and/or ECD Detectors, SW-846, USEPA, December 1996.

Comments:

QA/QC for sample 35768.


Analyst


Reviewed

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8041

PHENOLS

Quality Assurance Report

Client: QA/QC
Sample ID: 01-20-TCA QA/QC
Laboratory Number: 35768
Sample Matrix: 2-Propanol
Preservative: N/A
Condition: N/A

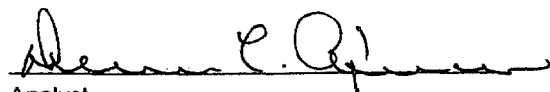
Project #: N/A
Date Reported: 01-20-06
Date Sampled: N/A
Date Received: N/A
Date Analyzed: 01-20-06
Analysis Requested: TCLP

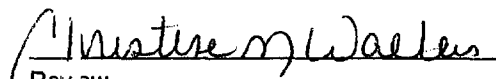
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
o-Cresol	ND	ND	0.020	ND	ND	0.0%
p,m-Cresol	ND	ND	0.040	ND	ND	0.0%
2,4,6-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
2,4,5-Trichlorophenol	ND	ND	0.020	ND	ND	0.0%
Pentachlorophenol	ND	ND	0.020	ND	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, Jul / 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Jul / 1992.
Method 8041, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 35768.


Analyst


Reviewer

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8091

Nitroaromatics and Cyclic Ketones Quality Assurance Report

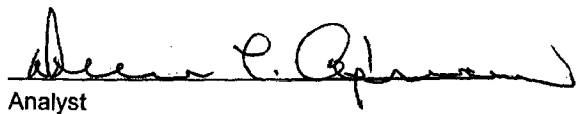
Client:	QA/QC	Project #:	N/A
Sample ID:	01-20-TBN QA/QC	Date Reported:	01-20-06
Laboratory Number:	35768	Date Sampled:	N/A
Sample Matrix:	Hexane	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	01-20-06
Condition:	N/A	Analyses Requested:	TCLP

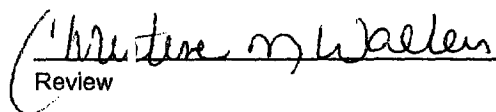
Blanks & Duplicate Conc (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	Percent Diff.
Pyridine	ND	ND	0.020	NI	ND	0.0%
Hexachloroethane	ND	ND	0.020	NI	ND	0.0%
Nitrobenzene	ND	ND	0.020	0.052	0.052	0.0%
Hexachlorobutadiene	ND	ND	0.020	NI	ND	0.0%
2,4-Dinitrotoluene	ND	ND	0.020	NI	ND	0.0%
HexachloroBenzene	ND	ND	0.020	NI	ND	0.0%

ND - Parameter not detected at the stated detection limit.

References: Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.
Method 8091, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Comments: QA/QC for sample 35768.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS Quality Assurance Report

Client:	N/A	Project #:	N/A
Sample ID:	01-18-TCM QA/QC	Date Reported:	01-18-06
Laboratory Number:	35768	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Analysis Requested:	TCLP Metals	Date Analyzed:	01-18-06
Condition:	N/A	Date Extracted:	N/A

Blank & Duplicate Conc. (mg/L)	Instrument Blank	Method Blank	Detection Limit	Sample	Duplicate	% Difference	Acceptance Range
Arsenic	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Barium	ND	ND	0.001	60.4	60.5	0.2%	0% - 30%
Cadmium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.067	0.067	0.0%	0% - 30%
Lead	ND	ND	0.001	0.028	0.028	0.0%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/L)	Spike Added	Sample	Spike Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	ND	0.499	99.8%	80% - 120%
Barium	0.500	60.4	60.9	100.0%	80% - 120%
Cadmium	0.500	ND	0.500	100.0%	80% - 120%
Chromium	0.500	0.067	0.566	99.8%	80% - 120%
Lead	0.500	0.028	0.527	99.8%	80% - 120%
Mercury	0.500	ND	0.500	100.0%	80% - 120%
Selenium	0.500	ND	0.498	99.6%	80% - 120%
Silver	0.500	ND	0.500	100.0%	80% - 120%

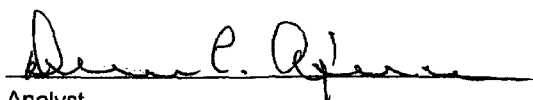
ND - Parameter not detected at the stated detection limit.

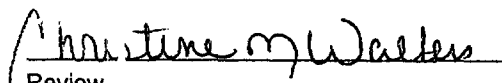
References: Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, Dec. 1996

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals,
SW-846, USEPA, December 1996.

Methods 6010B Analysis of Metals by Inductively Coupled Plasma-Atomic Emission,
SW-846, USEPA, December 1996.

Comments: QA/QC for Sample 35768.


Analyst


Review