

**WORK ORDER Summary****Evergreen Analytical, Inc.****08-5822****Rpt To:** Ray Gorka**Email To:** rgorka@kpk.com

8/11/2008 4:54:45 PM

K.P.Kauffman

1675 Broadway, Suite 2800

Denver, CO 80202

(303) 825-4822

**Client Project ID:** 2-26**QC Level:** Level I**Comments**

Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Test Code	Test Name	Hold	MS	Date Due	Hold Time
08-5822-01A	1 North Wall	Soil	8/11/08 1006	8/11/08	418.1_S	418.1: Total Recoverable Petroleum Hydrocarbons	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08
08-5822-02A	2 South Wall	Soil	8/11/08 1016	8/11/08	418.1_S	418.1: Total Recoverable Petroleum Hydrocarbons	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08
08-5822-03A	3 East Wall	Soil	8/11/08 1019	8/11/08	418.1_S	418.1: Total Recoverable Petroleum Hydrocarbons	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08
08-5822-04A	4 West Wall	Soil	8/11/08 1029	8/11/08	418.1_S	418.1: Total Recoverable Petroleum Hydrocarbons	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08
08-5822-05A	5 Bottom of Hole	Soil	8/11/08 1031	8/11/08	418.1_S	418.1: Total Recoverable Petroleum Hydrocarbons	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08
08-5822-06A	6 Composite	Soil	8/11/08 1045	8/11/08	6010_D *	6010: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	2/07/09
08-5822-06A	6 Composite	Soil	8/11/08 1045	8/11/08	COND_S	Specific Conductance @ 25°C	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08
08-5822-06A	6 Composite	Soil	8/11/08 1045	8/11/08	PH_S	9045C: pH	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	8/12/08
08-5822-06A	6 Composite	Soil	8/11/08 1045	8/11/08	SAR_S	Sodium Adsorption Ratio, Soil Leachate	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	2/07/09
08-5822-07A	7 Buried Pit NW	Soil	8/11/08 1129	8/11/08	418.1_S	418.1: Total Recoverable Petroleum Hydrocarbons	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08
08-5822-08A	8 Buried Pit E Wall	Soil	8/11/08 1133	8/11/08	418.1_S	418.1: Total Recoverable Petroleum Hydrocarbons	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08
08-5822-09A	9 Buried Pit SW	Soil	8/11/08 1145	8/11/08	418.1_S	418.1: Total Recoverable Petroleum Hydrocarbons	<input type="checkbox"/>	<input type="checkbox"/>	8/15/08	9/08/08



**Lab Order:** 08-5822

**Client Project ID** 2-26

**CASE NARRATIVE**

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**SAMPLE RECEIVING**

Sample(s) were hand delivered to the laboratory by the client.

Custody seals were not present.

The temperature of the sample(s) upon arrival was 0.3 °C.

Sample(s) were received in good condition, in the proper container, and within holding times. NJO

**QUALITY ASSURANCE (QA)**

Analyses performed on samples in this work order by EAL meet the requirements of the EAL Quality Assurance Program unless otherwise explained. Analyses of RCRA samples meet the requirements of NELAC and Utah Rule R444-14 unless otherwise explained. TP

**CLIENT SERVICES**

There are no anomalies to report. EKH

**GENERAL CHEMISTRY**

There are no anomalies to report. MM

**OIL AND GREASE/TRPH ANALYSIS**

Method 418.1\_S: There are no anomalies to report. JT

**METALS ANALYSIS**

There are no anomalies to report. TP

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# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Project ID 2-26  
Date Received: 8/11/08

Lab Order: 08-5822  
Date Prepared: 8/12/08  
Units: mg/Kg

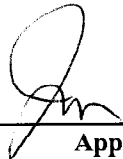
## Total Recoverable Petroleum Hydrocarbons TRPH

Method: E418.1

Prep Method:

Lab ID	Client ID	Matrix	Date Collected	Date Analyzed	Results	LQL	DF
08-5822-01A	1 North Wall	Soil	8/11/08	8/13/08	76	5.0	0.9967
08-5822-02A	2 South Wall	Soil	8/11/08	8/13/08	14	5.0	0.9983
08-5822-03A	3 East Wall	Soil	8/11/08	8/13/08	81	5.0	0.9993
08-5822-04A	4 West Wall	Soil	8/11/08	8/13/08	320	25	4.9801
08-5822-05A	5 Bottom of Hole	Soil	8/11/08	8/13/08	24	5.0	0.9967
08-5822-07A	7 Buried Pit NW	Soil	8/11/08	8/13/08	39	5.0	0.997
08-5822-08A	8 Buried Pit E Wall	Soil	8/11/08	8/13/08	69	5.0	0.9997
08-5822-09A	9 Buried Pit SW	Soil	8/11/08	8/13/08	U	5.0	0.997

  
Analyst

  
Approved

**Qualifiers:** B - Analyte detected in the associated Method Blank, value not subtracted from result  
E - Extrapolated value. Value exceeds calibration range  
H - Sample analysis exceeded analytical holding time  
J - Indicates an estimated value when the compound is detected, but is below the LQL  
S - Spike Recovery outside accepted limits  
U - Compound analyzed for but not detected  
X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** DF - Dilution Factor  
PF - Prep Factor  
LQL - Lower Quantitation Limit

Print Date: 8/13/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: 6 Composite  
Client Project ID: 2-26  
Date Collected: 8/11/08  
Date Received: 8/11/08

Lab Work Order: 08-5822  
Lab Sample ID: 08-5822-06  
Sample Matrix: Soil

## DISSOLVED METALS

Method: SW6010B

Prep Method: E200.7/SW3010A

Date Prepared: 8/12/08  
Date Analyzed: 8/14/08

Lab File ID: 081308Dy  
Method Blank: MB-16344

Dilution Factor: 1  
Lab Fraction ID: 08-5822-06A

Analytes	CAS Number	Result	LQL	Units
Calcium	7440-70-2	230	1.9	mg/L
Magnesium	7439-95-4	17	0.75	mg/L
Sodium	7440-23-5	3500	2.0	mg/L

## SODIUM ADSORPTION RATIO, SOIL

Method: USDA

Prep Method:

Date Prepared: 8/12/08  
Date Analyzed: 8/14/08

Dilution Factor: 1  
Lab Fraction ID: 08-5822-06A

Analytes	CAS Number	Result	LQL	Units
Sodium-Adsorption-Ratio		60	0.10	ratio



Analyst



Approved

**Qualifiers:** D - Analyte detected in the associated Method Blank, value not subtracted from result  
E - Extrapolated value. Value exceeds calibration range  
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S - Spike Recovery outside accepted limits  
U - Compound analyzed for but not detected  
X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** NA - Not Applicable  
LQL - Lower Quantitation Limit  
Surr - Surrogate

Print Date: 8/15/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862

(303) 425-6021

Client Sample ID: 6 Composite  
 Client Project ID: 2-26  
 Date Collected: 8/11/08 1045  
 Date Received: 8/11/08

Lab Work Order: 08-5822  
 Lab Sample ID: 08-5822-06  
 Sample Matrix: Soil

## SPECIFIC CONDUCTANCE @ 25°C

Method: Dept of Ag.

Prep Method:

Comments: Method: US Dept. of Ag, Handbook #60, p89

Date Prepared: 8/12/08

Lab File ID: 52

Dilution Factor: 1

Date Analyzed: 8/14/08

Lab Fraction ID: 08-5822-06A

Analytes	CAS Number	Result	LQL	Units
Specific Conductance		14500	1.00	µmhos/cm

## PH

Method: SW9045C

Prep Method:

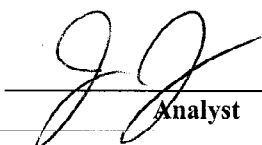
Date Prepared: 8/12/08

Dilution Factor: 1

Date Analyzed: 8/12/08 0850

Lab Fraction ID: 08-5822-06A

Analytes	CAS Number	Result	LQL	Units
pH		9.26	1.00	pH Units

  
 Analyst

  
 Approved

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 H - Sample analysis exceeded analytical holding time  
 J - Indicates an estimated value when the compound is detected, but is below the LQL  
 S - Spike Recovery outside accepted limits  
 U - Compound analyzed for but not detected  
 X - See case narrative  
 \* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** NA - Not Applicable  
 LQL - Lower Quantitation Limit  
 Surr - Surrogate

Print Date: 8/14/2008

## **QUALITY ASSURANCE REPORTS**

**METHOD BLANKS (MB)**

**LABORATORY CONTROL SPIKES (LCS)**

**MATRIX SPIKES (MS/MSD)\***

**DUPLICATES (DUP)\***

\* **For Metals or Wet Chemistry analyses: only included if requested.**

Evergreen Analytical, Inc.

Date: 13-Aug-08

Work Order: 08-5822  
 Client Project ID: 2-26

## ANALYTICAL QC SUMMARY REPORT

TestCode: 418.1\_S

Sample ID: LCS	SampType: LCS	TestCode: 418.1_S	Run ID: FTIR_080813A	Prep Date: 8/12/2008	Units: mg/Kg
	Batch ID: R41244	TestNo: E418.1	FileID: 48	Analysis Date: 8/13/2008	SeqNo: 725016
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
TRPH	56.92	5.0	56.7	0	100 70 130 0 0
Sample ID: 08-5822-01A-DUP	SampType: DUP	TestCode: 418.1_S	Run ID: FTIR_080813A	Prep Date: 8/12/2008	Units: mg/Kg
Client ID: 1 North Wall	Batch ID: R41244	TestNo: E418.1	FileID: 51	Analysis Date: 8/13/2008	SeqNo: 725018
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
TRPH	87.05	5.0	0	0	0 0 0 75.87 13.7 40

## Qualifiers:

U - Not detected at or above the Reporting Limit  
 J - Analyte detected below quantitation limits  
 S - Spike Recovery outside acceptance limits  
 E - Extrapolated value, value exceeds calibration range.

R - RPD outside acceptance limits  
 B - Analyte detected in the associated Method Blank  
 H - Prep or analytical holding time exceeded  
 X - See case narrative



Evergreen Analytical, Inc.

Date: 15-Aug-08

Work Order: 08-5822  
 Client Project ID: 2-26

## ANALYTICAL QC SUMMARY REPORT

BatchID: 16344

Sample ID: MB-16344	Sample Type: MBLK	TestCode: 200.7_T	Run ID: ICP-OPTIMA 5300 DV_080814A	Prep Date: 8/12/2008	Units: mg/L
	Batch ID: 16344	TestNo: E200.7, Rev.	FileID: 081308Dy	Analysis Date: 8/14/2008	SeqNo: 725961
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Calcium	0	0.387			
Magnesium	0	0.150			
Sodium	0	0.400			

Sample ID: LCS-16344	Sample Type: LCS	TestCode: 200.7_T	Run ID: ICP-OPTIMA 5300 DV_080814A	Prep Date: 8/12/2008	Units: mg/L
	Batch ID: 16344	TestNo: E200.7, Rev.	FileID: 081308Dy	Analysis Date: 8/14/2008	SeqNo: 725962
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Calcium	10.68	0.387	10	0	107 74 120 0 0
Magnesium	10.46	0.150	10	0	105 76.7 120 0 0
Sodium	10.39	0.400	10	0	104 80 120 0 0

## Qualifiers:

U - Not detected at or above the Reporting Limit  
 J - Analyte detected below quantitation limits  
 S - Spike Recovery outside acceptance limits  
 E - Extrapolated value, value exceeds calibration range  
 R - RPD outside acceptance limits  
 B - Analyte detected in the associated Method Blank  
 H - Prep or analytical holding time exceeded  
 X - See case narrative

Evergreen Analytical, Inc.

Date: 14-Aug-08

Work Order: 08-5822  
 Client Project ID: 2-26

## ANALYTICAL QC SUMMARY REPORT

TestCode: COND\_S

Sample ID	LCS	Sample Type: LCS	TestCode: COND_S	Run ID: COND_080814B	Prep Date: 8/14/2008	Units: µmhos/cm
		Batch ID: R41277	TestNo: Dept of Ag.	FileID: 51	Analysis Date: 8/14/2008	SeqNo: 725619
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Specific Conductance	9900	1.00	9934	0	99.7	90 110 0 0

## Qualifiers:

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 J - Analyte detected below quantitation limits  
 S - Spike Recovery outside acceptance limits  
 E - Extrapolated value, value exceeds calibration range.  
 R - RPD outside acceptance limits  
 B - Analyte detected in the associated Method Blank  
 H - Prep or analytical holding time exceeded  
 X - See case narrative

Work Order: 08-5822  
Client Project ID: 2-26

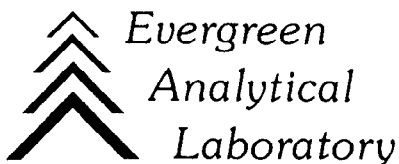
## ANALYTICAL QC SUMMARY REPORT

TestCode: PH\_S

Sample ID	LCS-R41212		SampleType:	LCS		TestCode:	PH_S		Run ID:	PH_080812A		Prep Date:	8/12/2008		Units:	pH Units	
	Batch ID:		R41212		TestNo:		SW9045C		FileID:			Analysis Date:		8/12/2008		SeqNo: 724191	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual						
pH	8	1.00	8	0	100	99.3	100.7	0	0								

## Qualifiers:

U - Not detected at or above the Reporting Limit  
 J - Analyte detected below quantitation limits  
 S - Spike Recovery outside acceptance limits  
 E - Extrapolated value, value exceeds calibration range.  
 R - RPD outside acceptance limits  
 B - Analyte detected in the associated Method Blank  
 H - Prep or analytical holding time exceeded  
 X - See case narrative



August 15, 2008

Ray Gorka  
K.P.Kauffman  
1675 Broadway, Suite 2800  
Denver, CO 80202

Lab Work Order: 08-5822  
Client Project ID: 2-26

Dear Ray Gorka:

Enclosed are the analytical results for the samples shown in the Laboratory Work Order Summary. The invoice is included with this report or has been mailed to another party as indicated on the chain of custody.

The enclosed data for testing performed at Evergreen Analytical Laboratory (EAL) have been reviewed for quality assurance. A case narrative is included to describe any anomalies associated with the samples or data.

EAL will dispose of all samples one month from the date of this letter. If you want samples returned, please advise us by mail or fax as soon as possible.

A copy of this project report and supporting data will be retained for a period of five years unless we are otherwise advised by you. A document retrieval charge will apply.

Thank you for using the services of Evergreen Analytical. If you have any questions concerning the analytical data, please contact me. Please direct other questions to Client Services.

Sincerely,

A handwritten signature in cursive script that reads "Carl Smits".

Kaprie Hollman/Carl Smits  
Quality Assurance  
khollman@evergreenanalytical.com