

## Introduction

This data review covers 14 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for EPA Method 418.1. The modifications were based on EPA Method 418.1.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature. .

Blanks results are summarized in Section 111.

Field duplicates are summarized in Section \A\.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or element was analyzed for but not detected at or above the stated limit.

Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

Indicates the compound or element was analyzed for but not detected. Th sample detection limit is an estimated value.

## **1. Technical Holding Times**

All technical holding time requirements were met.

## **11. Calibration**

### **a. Initial Calibration**

All criteria for the initial calibration were met.

### **b. Calibration Verification**

Calibration verification frequency and analysis criteria were met.

## **111. Blanks**

Method blanks were reviewed for each matrix as applicable. No total recoverable petroleum hydrocarbon contaminants were found in the method -blanks.

## **IV. Accuracy and Precision Data**

### **a. Surrogate Recovery**

Not applicable to this method.

### **b. Matrix Spike/(Matrix Spike) Duplicates**

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

### **c. Laboratory Control Samples**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within validation criteria.

## **V. Sample Result Verification**

Raw data were not reviewed for this SDG.

## **VI. Overall Assessment of Data**

Data flags have been summarized at the end of this report.

## **VII. Field Duplicates**

Samples 097GO6251 and 097DO1051 were identified as field duplicates. No total recoverable petroleum hydrocarbons were detected in any of the samples.

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Data Qualification Summary - SDG K9600786

No Sample Data Qualified in this SDG

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K9600786

No Sample Data Qualified in this SDG

LDC

**Laboratory Data Consultants, Inc.  
Data Validation Report**

Project/Site Name: Salton Sea Test Base, CTO 097  
Collection Date: February 12, 1996  
LDC Report Date: April 4, 1996  
Matrix: Water  
Parameters: Total Recoverable Petroleum Hydrocarbons  
Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K9600837

Sample Identification

097GO7751  
097RO6351  
097GO7151  
097GO7651  
097GO7351  
097GO7285  
097GO7353MS  
097GO7353MSD

## **1. Technical Holding Times**

All technical holding time requirements were met.

### **11. Calibration**

#### **a. Initial Calibration**

All criteria for the initial calibration were met.

#### **b. Calibration Verification**

Calibration verification frequency and analysis criteria were met.

### **111. Blanks**

Method blanks were reviewed for each matrix as applicable. No total recoverable petroleum hydrocarbon contaminants were found in the method blanks.

## **IV. Accuracy and Precision Data**

### **a. Surrogate Recovery**

Not applicable to this method.

### **b. Matrix Spike/(Matrix Spike) Duplicates**

Matrix spike and duplicate samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within validation criteria.

### **c. Laboratory Control Samples**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries were within OC limits.

## **V. Sample Result Verification**

Raw data were not reviewed for this SDG.

## **VI. Overall Assessment of Data**

Data flags have been summarized at the end of this report.

## **VII. Field Duplicates**

No field duplicates were identified in this SDG.

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Data Qualification Summary - SDG K9600837

No Sample Data Qualified in this SDG

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K9600837

No Sample Data Qualified in this SDG

## Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for EPA Method 418.1. The modifications were based on EPA Method 418.1.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks results are summarized in Section 111.

Field duplicates are summarized in Section MI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or element was analyzed for but not detected at or above the stated limit.

Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or element was analyzed for but not detected. The sample detection limit is an estimated value.

## 1. Technical Holding Times

All technical holding time requirements were met.

## 11. Calibration

### a. Initial Calibration

All criteria for the initial calibration were met.

### b. Calibration Verification

Calibration verification frequency and analysis criteria were met.

## III. Blanks

Method blanks were reviewed for each matrix as applicable. No total recoverable petroleum hydrocarbon contaminants were found in the method blanks.

## IV. Accuracy and Precision Data

### a. Surrogate Recovery

Not applicable to this method.

### b. Matrix Spike/(Matrix Spike) Duplicates

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

### c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within validation criteria.

## V. Sample Result Verification

Raw data were not reviewed for this SDG.

## V1. Overall Assessment of Data

Data flags have been summarized at the end of this report.

## VII. Field Duplicates

Samples 097GO7951 and 097DO1 151 were identified as field duplicates. No total recoverable petroleum hydrocarbons were detected in any of the samples.



Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Data Qualification Summary - SDG  
K9600872

No Sample Data Qualified in this SDG

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Laboratory Blank Data Qualification  
Summary - SDG K9600872

No Sample Data Qualified in this SDG

LDC

Laboratory Data Consultants, Inc.  
Data Validation Report

Project/Site Name: Salton Sea Test Base, CTO 097  
Collection Date: February 14, 1996  
LDC Report Date: April 4, 1996  
Matrix: Water  
Parameters: Total Recoverable Petroleum Hydrocarbons  
Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K9600898

Sample Identification

097RO5551  
097GO5551  
097GO6786

## **1. Technical Holding Times**

All technical holding time requirements were met.

## **11. Calibration**

### **a. Initial Calibration**

All criteria for the initial calibration were met.

### **b. Calibration Verification**

Calibration verification frequency and analysis criteria were met.

## **III. Blanks**

Method blanks were reviewed for each matrix as applicable. No total recoverable petroleum hydrocarbon contaminants were found in the method blanks.

## **IV. Accuracy and Precision Data**

### **a. Surrogate Recovery**

Not applicable to this method.

### **b. Matrix Spike/(Matrix Spike) Duplicates**

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

### **c. Laboratory Control Samples**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within validation criteria.

## **V. Sample Result Verification**

Raw data were not reviewed for this SDG.

## **VI. Overall Assessment of Data**

Data flags have been summarized at the end of this report.

## **VII. Field Duplicates**

No field duplicates were identified in this SDG.

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Data Qualification Summary - SDG  
K9600898

No Sample Data Qualified in this SDG

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Laboratory Blank Data Qualification  
Summary - SDG K9600898

No Sample Data Qualified in this SDG

LDC

Laboratory Data Consultants, Inc.  
Data Validation Report

Project/Site Name: Salton Sea Test Base, CTO 097  
Collection Date: February 20, 1996  
LDC Report Date: April 4, 1996  
Matrix: Water  
Parameters: Total Recoverable Petroleum Hydrocarbons  
Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K9601003

Sample Identification  
097GO7551

1804J1 I.BC3

## **1. Technical Holding Times**

All technical holding time requirements were met.

### **[I. Calibration**

#### **a. Initial Calibration**

All criteria for the initial calibration were met.

#### **b. Calibration Verification**

Calibration verification frequency and analysis criteria were met.

### **111. Blanks**

Method blanks were reviewed for each matrix as applicable. No total recoverable petroleum hydrocarbon contaminants were found in the method blanks.

## **IV. Accuracy and Precision Data**

### **a. Surrogate Recovery**

Not applicable to this method.

### **b. Matrix Spike/(Matrix Spike) Duplicates**

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

### **c. Laboratory Control Samples**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within validation criteria.

## **V. Sample Result Verification**

Raw data were not reviewed for this SDG.

## **VI. Overall Assessment of Data**

Data flags have been summarized at the end of this report.

## **VII. Field Duplicates**

No field duplicates were identified in this SDG.

## VIII. Field Blanks

Sample 097RO7851 was identified as a rinsate. No total recoverable petroleum hydrocarbon contaminants were found in this blank.

LDC

Laboratory Data Consultants, Inc.  
Data Validation Report

Project/Site Name: Salton Sea Test Base, CTO 097  
Collection Date: February 21, 1996  
LDC Report Date: April 4, 1996  
Matrix: Water  
Parameters: Total Recoverable Petroleum Hydrocarbons  
Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K9601039

Sample Identification

097RO5451  
097GO5451  
097GO5251  
097DO1251  
097GO8251  
097BOO851  
097BOO951



## **1. Technical Holding Times**

All technical holding time requirements were met.

## **11. Calibration**

### **a. Initial Calibration**

All criteria for the initial calibration were met.

### **b. Calibration Verification**

Calibration verification frequency and analysis criteria were met.

## **III. Blanks**

Method blanks were reviewed for each matrix as applicable. No total recoverable petroleum hydrocarbon contaminants were found in the method blanks.

## **IV. Accuracy and Precision Data**

### **a. Surrogate Recovery**

Not applicable to this method.

### **b. Matrix Spike/(Matrix Spike) Duplicates**

The laboratory has indicated that there was insufficient sample volume for analysis of the matrix spike and matrix spike duplicate.

### **c. Laboratory Control Samples**

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within validation criteria.

## **V. Sample Result Verification**

Raw data were not reviewed for this SDG.

## **VI. Overall Assessment of Data**

Data flags have been summarized at the end of this report.

## **VII. Field Duplicates**

Samples 097GO5251 and 097DO1251 were identified as field duplicates. No total recoverable petroleum hydrocarbons were detected in any of the samples.

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Data Qualification Summary - SDG K9601039

No Sample Data Qualified in this SDG

Salton Sea Test Base, CTO 097

Total Recoverable Petroleum Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K9601039

No Sample Data Qualified in this SDG

## VIII. **Field Blanks**

Sample 097R05451 was identified as a rinsate. No total recoverable petroleum hydrocarbon contaminants were found in this blank.

Samples 097B00851 and 097B00951 were identified as source blanks. No total recoverable petroleum hydrocarbon contaminants were found in these blanks.

## Introduction

This data review covers 7 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for EPA Method 418.1. The modifications were based on EPA Method 418.1.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks results are summarized in Section 111.

Field duplicates are summarized in Section \A\.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or element was analyzed for but not detected at or above the stated limit.
- i Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or element was analyzed for but not detected. The sample detection limit is an estimated value.

## VIII. Field Blanks

No field blanks were identified in this SIDG.

18W1 1.BC3

## Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for EPA Method 418.1. The modifications were based on EPA Method 418. 1.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks results are summarized in Section III.

Field duplicates are summarized in Section VII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or element was analyzed for but not detected at or above the stated limit.
- i Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or element was analyzed for but not detected. The sample detection limit is an estimated value.

## VIII. Field Blanks

Sample 097RO5551 was\* identified as a rinsate. No total recoverable petroleum hydrocarbon contaminants were found in this blank.

## Introduction

This data review covers 3 **water samples listed** on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for EPA Method 418.1. The modifications were based on EPA Method 418. 1.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks results are summarized in Section 111.

Field duplicates are summarized in Section VII.

Raw data were not reviewed for this SDG. The review was based on OC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or element was analyzed for but not detected at or above the stated limit.
- i Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or element was analyzed for but not detected. The sample detection limit is an estimated value.



## VIII. Field Blanks

Sample 097RO7851 was identified as a rinsate. No total recoverable petroleum hydrocarbon contaminants were found in this blank.

## Introduction

This data review covers 6 **water samples listed** on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for EPA Method 418.1. The modifications were based on EPA Method 418. 1.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks results are summarized in Section 111.

Field duplicates are summarized in Section Mi.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

- U Indicates the compound or element was analyzed for but not detected at or above the stated limit.
- i Indicates an estimated value.
- R Quality control indicates the data is not usable.
- N Presumptive evidence of presence of the constituent.
- UJ Indicates the compound or element was analyzed for but not detected. The sample detection limit is an estimated value.

## Vill. Field Blanks

Sample 097RO6351 was identified as a rinsate. No total recoverable petroleum hydrocarbon contaminants were found in this blank.

1804D1 I.BC3

## Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for EPA Method 418.1. The modifications were based on EPA Method 418.1.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks results are summarized in Section 111.

Field duplicates are summarized in Section MI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or element was analyzed for but not detected at or above the stated limit.

Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or element was analyzed for but not detected. The sample detection limit is an estimated value.

## VIII. Field Blanks

Samples 097RO6251 and 097RO6151 were identified as rinsates. No total recoverable petroleum hydrocarbon contaminants were found in these blanks.

## Introduction

This data review covers 14 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 418.1 for Total Recoverable Petroleum Hydrocarbons (TRPH).

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for EPA Method 418.1. The modifications were based on EPA Method 418.1.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature. .

Blanks results are summarized in Section 111.

Field duplicates are summarized in Section \A\.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or element was analyzed for but not detected at or above the stated limit.

Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

Indicates the compound or element was analyzed for but not detected. Th sample detection limit is an estimated value.