OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY SERVICES DIVISION

Level IV DATA PACKAGE

PROJECT INFORMATION

Client:	LPD
DEQ Project Contact:	Todd Downham
Project Name:	Wilcox Refinery
DEQ Project Code(s):	SW-SE
Sample Range (SEL #s):	505872-505893, 505989-505997
Samples Received Date:	6/28/2011, 6/29/2011
Sample Delivery Group:	N/A

INCLUDED (Check all that apply)

☑	Chain of Custody (COC)- copy	Attachment A
☑	Log In Form-copy	Attachment A
☑	Calibration and QC Summary	Attachment B
☑	Analytical Data Narrative	Attachment C
☑	Sample Results- Analytical Final Reports-customer copy	Attachment D
☐	Sample Results-EDD or Other	Not Requested
☐	Raw Unreduced Data	Scanned to: Q:\LAND\CSLSD\WILCOX REFINERY

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DEPARTMENT OF ENVIRONMENTAL QUALITY

PROJECT NARRATIVE:

The documentation included in this Level IV Data packet is organized in the following manner:

- Appendix A: Chain of Custody and Sample Log In Form Copies
  - Sequential by collection date
- Appendix B: Calibration and QC Summary
  - Metals (US EPA Method 6010)
    - Calibration Ranges
    - Batch QC sorted by Sample ID
    - Batch QC sorted by Parameter
    - Legend
  - SVOC (US EPA Method 8270D)
    - QC and Calibration Summary listed by Parameter
    - Legend
- Appendix C: Analytical Narrative
  - Metals (EPA 6010)
  - SVOC (EPA 8270D)
- Appendix D: Final Data Reports
  - 6/28/2011
    - Metals (EPA 6010) Sequential by SEL ID number
    - SVOC (EPA 8270D) Sequential by SEL ID number
  - 6/29/2011
    - Metals (EPA 6010) Sequential by SEL ID number
    - SVOC (EPA 8270D) Sequential by SEL ID number

Sample results were only provided in a paper hard copy reports. There was no Electronic Data Deliverable (EDD) request for the data relating to the Wilcox Refinery.

Documentation:

SEL #505891 (Field Blank) and # 505982 (Trip Blank) were rejected. These samples are typically associated with VOC analysis, which was not requested for the Wilcox Refinery samples.

SEL #505893 (SVOC Lab Blank) was created after the sample receipt activities were completed; however, the sample was not included on the COC. The final report is included in Appendix D.

Sample Receipt/Custody:

Samples were stored on ice immediately after collection, transferred to the laboratory on ice, and delivered directly to the SELSD Sample Management refrigerators. Samples were delivered during closing, and thus, no sample temperatures were documented on the CoC.

Analysis:

Analytical batch narratives were documented during analysis and are included in Attachment C

Data Corrections:

The final data report for SEL #505887 required a data correction for Mercury. The final report included in this Data Packet is the corrected report.

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CALIBRATION SUMMARY OF REQUESTED PARAMETERS

The calibration summary for the analysis of Priority Pollutant (PP) Metals by US EPA Method 6010 and SVOCs by US EPA Method 8270D is included in Attachment B.

BATCH QUALITY CONTROL

The analytical results included in this report meet all applicable and required quality control. Any special circumstances are noted in the Analytical Batch Narratives in Attachment B.

The batch quality control summaries for the analysis of PP Metals by EPA 6010 and SVOCs by EPA 8270D are included in Attachment C.

OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

STATEMENT OF VERIFICATION AND RELEASE OF DATA

The SELSD certifies that this data package has been reviewed for completeness and procedural compliancy. The release of data contained within this hard copy data package has been authorized by the appropriate SELSD Manager or designee and the SELSD QA Officer as verified by the following signatures.

Greg Goode, Metals Section Manager (405) 702-9131	09.22.11 Date
Les Campbell, GCMS Organics Section Manager (405) 702-1032	9-22-2011 Date
April Beltz, SELSD Quality Assurance Officer (405) 702-1038	9-22-2011 Date

Any questions regarding the components of this Level IV Data Packet should be addressed to the signatories listed above.

Appendix A: Chain of Custody and Log In Forms

CHAIN OF CUSTODY RECORD

SUPERFUND/ SITE REMEDIATION UNIT
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Site Name:	Site Location:	Code:	Return Results To:
Wilcox Refinery	Bristow, OK.	582	Todd Downham

SAMPLE I.D.	Date	Time	Number of Containers	VOC/ GCMS Purgeables	SVOC/ GCMS Extractables	Metals	General Chemistry				SEL Numbers
W-8	6/28/11	10:15	2		X	X					505872
W-5		10:35	2		X	X					505873
SED-11		10:56	2		X	X					505874
W-3		11:12	2		X	X					505875
W-1		11:23	2		X	X					505876
W-2		11:30	2		X	X					505877
W-4		11:40	2		X	X					505878
SS-8		12:52	2		X	X					505879
SS-6		13:10	2		X	X					505880
SS-7		13:15	2		X	X					505881
SS-5		13:21	2		X	X					505882
SS-4		13:32	2		X	X					505883
SS-3		13:41	2		X	X					505884
SED-8		13:51			X	X					505885

Sampler's Signature (Relinquished by): Todd Downham	Date/Time 6/28/11 16:30	Received by: [signature]	Date/Time 6-29-11 12:10
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

CHAIN OF CUSTODY RECORD

SUPERFUND/ SITE REMEDIATION UNIT
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

Site Name:	Site Location:	Code:	Return Results To:
Wilcox Refinery	Bristow, OK	582	Todd Downham

SAMPLE I.D.	Date	Time	Number of Containers	VOC/ GCMS Purgeables	SVOC/ GCMS Extractables	Metals	General Chemistry				SEL Numbers
W-9	6/28/11	14:00	2		X	X					505886
SS-2		14:11	2		X	X					505887
SED-9		14:38	2		X	X					505888
SS-1		14:41	2		X	X					505889
W-6 (FD)		10:35			X	X					505890
Field Blank #1		11:53	1		X						505891
Trip Blank			1		X						505892

Sampler's Signature (Relinquished by): Todd Downham	Date/Time 6/28/11 16:30	Received by:	Date/Time 6-29-11 12:10
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

SUPERFUND
DEPARTMENT OF ENVIRONMENTAL QUALITY

Chain of Custody Record

Pg 1 of 14

Site Name:	Site Location:	Code:
Wilcox Refinery	Bristow, OK	582

Sample Location	Date	Time	*GCMS Extractables (SVOCs)	GCMS Purgeables	Metals	General Chemistry				S.E.L. Numbers
SED-1	6/29/11	10:20	X		X					505989
SED-2	6/29/11	10:55	X		X					505990
SED-3	6/29/11	11:10	X		X					505991
W-7	6/29/11	13:25	X		X					505992
SED-4	6/29/11	13:35	X		X					505993
SED-5	6/29/11	13:35	X		X					505994
SED-10	6/29/11	14:15	X		X					505995
~~SED-6~~ T.D. did not collect 6/30/11 15:49	6/29/11	14:25	X		X					~~505996~~ ST 6-30
SED-7	6/29/11	14:40	X		X					505996
~~Trip Blank~~ T.D. 6/30/11 15:49										
~~Field Blank #5~~ T.D. 6/30/11 15:49	6/29/11	14:30	X							
lab Blank										505997

Sampler's Signature (Relinquished by):

Received by:

Relinquished by: Todd D. 6/29/11 16:16

Received by: [illegible] 6/30/11 7:00

Relinquished by:

Received by:

Remarks:

*Indicate the number of containers for each analysis in the proper column.

STATE ENVIRONMENTAL LABORATORY
LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. SW-5

Project Code: 505872

This box must be completed in full or samples may be rejected

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 4/28/11 Time Collected: 10:15

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W-8 (Waste Sample)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
If there are two phases in one bottle; pick one. If you want both phases; we need two sets of sample to analyze each phase.	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: // // copy to: File
Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project [redacted]

This box must be completed in full or samples may be rej[redacted]

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 10:35

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W-5 (Waste Sample)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: " " copy to: File

Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: 505874

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 10:56

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-11

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
	Beryllium ____	Arsenic ____ Turbidity____
*Extractables (S-Vol's 8270) ✓	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
VOC's (Drinking Water 524.2) ____	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136, IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project C[redacted] 505875

This box must be completed in full or samples may be rej[redacted]

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6 / 28 / 11 Time Collected: 11 : 12

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W-3 (waste sample)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
		Antimony ____
	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint ____	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No.

Project Co[redacted] 505876

This box must be completed in full or samples may be rejecte[redacted]

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 11:23

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W-1 (Waste Sample)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
*Extractables (S-Vol's 8270) ✓	Beryllium ____	Arsenic ____ Turbidity____
VOC's (Drinking Water 524.2) ____	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

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LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: 505877

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6 / 28 / 11 Time Collected: 11 : 30

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W-2 (Waste Sample)
Level 4 Data Requested

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
	TCLP Metals ____	Antimony ____
		Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	~~DRO~~ ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code 505878

This box must be completed in full or samples may be rejected

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 11:40

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W-4 (Waste Sample)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓	11 JUN 23 PM 12:08 Drinking Water ____
*SCAN (Both Vol's/S-Vol's) ____	(6010)	**(PDES 200.7 or DW 200.8)
	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
	Beryllium ____	Arsenic ____ Turbidity____
*Extractables (S-Vol's 8270) ✓	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
VOC's (Drinking Water 524.2) ____	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: " " copy to: File

Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project C[redacted]

This box must be completed in full or samples may be rejec[redacted]

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 12:52

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SS-8

* Level 4 Data Requested *

'11 JUN 29 PM 12:00

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136, IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: " " Land Protection Division

copy to: File

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. [redacted] 505880

Project Code [redacted]

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW ____ or SW ____ or SF ____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID ____ or SEDIMENT ✓ or DRINKING WATER ____

Chlorinated? ____ Yes ____ No

Date Collected: 6 / 28 / 11 Time Collected: 13 : 10

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SS-6

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	'11 JUN 29 PM 12:00
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity ____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity ____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
		Antimony ____
	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides ____	
	Herbicides ____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint ____	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136, IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: " " Land Protection Division copy to: File

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: 505881

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 13:15

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SS-7

* Level 4 Data Requested *

11 JUN 29 PM 12:05

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
		Antimony ____
	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Cod[redacted]

This box must be completed in full or samples may be rejecte[redacted]

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 13:21

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SS-5 '11 JUN 29 PM12:09

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
*Extractables (S-Vol's 8270) ✓	Beryllium ____	Arsenic ____ Turbidity____
VOC's (Drinking Water 524.2) ____	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
If there are two phases in one bottle; pick one.	Thallium ____	Copper ____
If you want both phases; we need two sets of sample to analyze each phase.	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code [redacted]

This box must be completed in full or samples may be rejecte[redacted]

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 13:32

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SS-4

* Level 4 Data Requested *

11 JUN 29

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
*Extractables (S-Vol's 8270) ✓	Beryllium ____	Arsenic ____ Turbidity____
VOC's (Drinking Water 524.2) ____	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
If there are two phases in one bottle; pick one.	Copper ____	Cadmium ____
If you want both phases; we need two sets of sample to analyze each phase.	Lead ____	Chromium ____
	Thallium ____	Copper ____
Aqueous Phase ____	Nickel ____	Iron ____
Organic Phase ____	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
	TCLP Metals ____	Antimony ____
		Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	~~DRO~~ ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code [redacted] 505884

This box must be completed in full or samples may be rejected

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6 / 28 / 11 Time Collected: 13:41

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SS-3

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER. Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: 505885

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 13:51

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-8 JUN 29 12:10

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
*Extractables (S-Vol's 8270) ✓	Beryllium ____	Arsenic ____ Turbidity____
VOC's (Drinking Water 524.2) ____	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: 505886

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6 / 28 / 11 Time Collected: 14 : 00

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W-9 (Waste Sample)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
		Antimony ____
	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code [redacted]

This box must be completed in full or samples may be rejected

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 14:11

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SS-2

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
	Beryllium ____	Arsenic ____ Turbidity____
*Extractables (S-Vol's 8270) ✓	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
VOC's (Drinking Water 524.2) ____	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136, IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: 505888

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: 14:30

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-9

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code [redacted]

This box must be completed in full or samples may be rejected

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: ___/___/___ Time Collected: 14 : 41

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SS-1

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: 505890

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/28/11 Time Collected: ~~10:35~~ 10:35

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W- [redacted] (Waste Sample)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, Todd Downham, Ext. 5136,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: 505893

This box must be completed in full or samples may be rejected

Collector's Name: Todd Downham HW ____ or SW 505893

Facility Name: Wilcox Refinery

Check type of sample: LIQUID ____ or SEDIMENT ✓ or DRINKING WATER ____

Chlorinated? ____ Yes ____ No

Date Collected: ___/___/___ Time Collected: ___:___

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: LABBLANK (QA/QC)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	JUN 29 PM 12:15
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants (6010) ✓	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity ____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity ____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
Aqueous Phase ____	Lead ____	Chromium ____
Organic Phase ____	Thallium ____	Copper ____
	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
	TCLP Metals ____	Antimony ____
		Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides ____	
	Herbicides ____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: _____ copy to: File
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LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: SW-SE

This box must be completed in full or samples may be rejected.

505989

Collector's Name: Todd Downham HW____ or SW____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/29/11 - Time Collected: 10:20

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-1

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
*Extractables (S-Vol's 8270) ✓	Beryllium ____	Arsenic ____ Turbidity____
VOC's (Drinking Water 524.2) ____	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
_____	Pesticides____	_____
_____	Herbicides____	_____
_____	PCB's ____	_____
_____	DRO ____	_____
	GRO ____	
	Flashpoint ____	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: _____ copy to: File
Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. SW-SE

Project Code: [redacted]

This box must be completed in full or samples may be rejected

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6 / 29 / 11 Time Collected: 10 : 55

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-2

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
		Antimony ____
	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO____	
	GRO ____	
	Flashpoint____	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: _____ copy to: File

Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. SW-SE

Project Code: 505991

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/29/11 Time Collected: 11:10

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-3

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
		Antimony ____
	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO____	
	GRO ____	
	Flashpoint ____	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: _____ copy to: File

Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. SW-5F

Project Code: 505992

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/29/11 Time Collected: 13:25

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: W-7 (Waste Sample)
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
*Extractables (S-Vol's 8270) ✓	Beryllium ____	Arsenic ____ Turbidity____
VOC's (Drinking Water 524.2) ____	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

'11 JUN 30 PM4:00

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: _____ copy to: File
Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. SW-SE

Project Code: 505993

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/29/11 Time Collected: 13:35

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-4

* Level 4 Data Requested *

'11 JUN 30 PM 4:00

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
	TCLP Metals ____	Antimony ____
		Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: _____ copy to: File

Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. SW-SE

Project Code: [redacted]

This box must be completed in full or samples may be rej[redacted]

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/29/11 Time Collected: 13:35

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-5
* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water JUN 30 PM4:00 **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
		Antimony ____
	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. SW-SF

Project Code: [redacted]

This box must be completed in full or samples may be rejected.

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____Yes ____No

Date Collected: 6/29/11 Time Collected: 14:15

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-10
* Level 4 Data Requested *

'11 JUN 30 PM 4:01

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity____
	Cadmium ____	Barium ____
If there are two phases in one bottle; pick one.	Chromium ____	Beryllium ____
If you want both phases; we need two sets of sample to analyze each phase.	Copper ____	Cadmium ____
	Lead ____	Chromium ____
Aqueous Phase ____	Thallium ____	Copper ____
Organic Phase ____	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
	Mercury ____	Zinc ____
		Antimony ____
	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. SW-SF

Project Cod[redacted] 505996

This box must be completed in full or samples may be rejecte

Collector's Name: Todd Downham HW____ or SW____ or SF____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID____ or SEDIMENT ✓ or DRINKING WATER____

Chlorinated? ____ Yes ____ No

Date Collected: 6 / 29 / 11 Time Collected: 14:40

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: SED-7

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
	Priority Pollutants ✓ (6010)	Drinking Water ____ **(PDES 200.7 or DW 200.8)
*SCAN (Both Vol's/S-Vol's) ____	Arsenic ____	Silver ____ Conductivity____
*Purgeables (Vol's 8260) ____	Barium ____	Sodium ____
*Extractables (S-Vol's 8270) ✓	Beryllium ____	Arsenic ____ Turbidity____
VOC's (Drinking Water 524.2) ____	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
If there are two phases in one bottle; pick one.	Nickel ____	Iron ____
If you want both phases; we need two sets of sample to analyze each phase.	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides____	
	Herbicides____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER, _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

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Land Protection Division

LAND PROTECTION DIVISION
SAMPLE LOG-IN FORM

FOR LAB USE ONLY

Sample No. _____

Project Code: SW-SE

This box must be completed in full or samples may be rejected

505997

505997

Collector's Name: Todd Downham HW ____ or SW ____

Facility Name: Wilcox Refinery

Check type of sample: LIQUID ____ or SEDIMENT ✓ or DRINKING WATER ____

Chlorinated? ____ Yes ____ No

Date Collected: ___/___/___ Time Collected: ___:___

City: Bristow County: Creek Program Code: 582

Sample Identification or Sampler's Comments: ~~Trip Blank~~ Lab Blank

* Level 4 Data Requested *

GC/MS LAB	METALS LAB	
*SCAN (Both Vol's/S-Vol's) ____	Priority Pollutants ✓ (6010)	Drinking Water (PDES 200.7 or DW 200.8)
*Purgeables (Vol's 8260) ____	Arsenic ____	Silver ____ Conductivity ____
*Extractables (S-Vol's 8270) ✓	Barium ____	Sodium ____
VOC's (Drinking Water 524.2) ____	Beryllium ____	Arsenic ____ Turbidity ____
If there are two phases in one bottle; pick one. If you want both phases; we need two sets of sample to analyze each phase.	Cadmium ____	Barium ____
	Chromium ____	Beryllium ____
	Copper ____	Cadmium ____
	Lead ____	Chromium ____
	Thallium ____	Copper ____
	Nickel ____	Iron ____
	Silver ____	Lead ____
	Zinc ____	Manganese ____
	Antimony ____	Thallium ____
	Selenium ____	Nickel ____
Aqueous Phase ____	Mercury ____	Zinc ____
		Antimony ____
Organic Phase ____	TCLP Metals ____	Selenium ____
		Mercury ____

GENERAL CHEMISTRY LAB	ORGANICS LAB	OTHER
	Pesticides ____	
	Herbicides ____	
	PCB's ____	
	DRO ____	
	GRO ____	
	Flashpoint	

*CONTACT THE PROJECT MANAGER. _____, Ext. _____,
IF DILUTION FACTOR IS ABOVE 5.00 FOR PURGEABLES AND ABOVE 2.00 FOR EXTRACTABLES.

**METHOD SELECTION IS DETERMINED BY CONDUCTIVITY AND TURBIDITY.

Return to: _____ copy to: File

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Appendix B: Calibration and QA Summary

CALIBRATION RANGES OF REQUESTED PARAMETERS

Parameter	Method[1,2]	Calibration Range (mg/kg)	Upper Linear Range (mg/kg)	Correlation Coefficient
Antimony	3050/6010	0 - 10	25,000	1.00000
Arsenic	3050/6010	0 - 10	25,000	0.999981
Barium	3050/6010	0 - 10	25,000	1.00000
Beryllium	3050/6010	0 - 10	25,000	1.00000
Cadmium	3050/6010	0 - 10	25,000	1.00000
Chromium	3050/6010	0 - 10	25,000	0.999989
Copper	3050/6010	0 - 10	25,000	1.00000
Lead	3050/6010	0 - 10	25,000	0.999998
Mercury[3,4]	7471	0.0 - 0.8	N/A	0.99986
Nickel	3050/6010	0 - 10	25,000	1.00000
Selenium	3050/6010	0 - 10	25,000	0.999983
Silver	3050/6010	0 - 10	1,000	1.00000
Thallium	3050/6010	0 - 10	50,000	1.00000
Zinc	3050/6010	0 - 10	50,000	1.00000

[1]For all Parameters, excluding mercury, the digestion method is listed 1st and the analytical method is listed 2nd.
[2]All methods listed are EPA SW-846.
[3]Mercury units are in ug/L.
[4]The mercury was analyzed on two different days. The Correlation Coefficient for the 2nd day was 0.99801

SAMPLE DELIVERY GROUP- BATCH QUALITY CONTROL (Sorted by Sample ID)

PARAMETER	METHOD	BATCH ID	SAMPLE#	LRB	BLANK	LFB	LFM DUP	LCS
Antimony	6010	08-25-11	505881	-0.2586	0.1569	111	6.4	3.8
Arsenic	6010	08-25-11	505881	-0.1367	0.0891	101	1.1	88.8
Barium	6010	08-25-11	505881	0.0359	-0.0177	104	30.9	95.1
Beryllium	6010	08-25-11	505881	0.0071	0.0597	102	0.15	98.0
Cadmium	6010	08-25-11	505881	-0.0012	0.0139	102	0.8	90.3
Chromium	6010	08-25-11	505881	-0.1253	-0.8630	102	0.0	96.5
Copper	6010	08-25-11	505881	0.5270	0.6551	105	6.3	97.8
Lead	6010	08-25-11	505881	-0.0381	-0.6371	106	16.9	94.7
Nickel	6010	08-25-11	505881	0.1940	-0.1320	103	0.5	94.3
Selenium	6010	08-25-11	505881	0.8450	1.288	104	1.1	89.7
Silver	6010	08-25-11	505881	0.0332	0.2647	107	1	89.2
Thallium	6010	08-25-11	505881	0.0476	1.099	98.4	1.1	86.8
Zinc	6010	08-25-11	505881	-0.4960	-0.2321	102	2.6	95.1
Antimony	6010	08-25-11	505991	-0.2586	0.1569	111	5.1	3.8
Arsenic	6010	08-25-11	505991	-0.1367	0.0891	101	0.2	88.8
Barium	6010	08-25-11	505991	0.0359	-0.0177	104	18.6	95.1
Beryllium	6010	08-25-11	505991	0.0071	0.0597	102	0.54	98.0
Cadmium	6010	08-25-11	505991	-0.0012	0.0139	102	0.1	90.3
Chromium	6010	08-25-11	505991	-0.1253	-0.8630	102	0.6	96.5
Copper	6010	08-25-11	505991	0.5270	0.6551	105	1.3	97.8

PARAMETER	METHOD	BATCH ID	SAMPLE#	LRB	BLANK	LFB	LFM DUP	LCS
Lead	6010	08-25-11	505991	-0.0381	-0.6371	106	1.9	94.7
Nickel	6010	08-25-11	505991	0.1940	-0.1320	103	0.8	94.3
Selenium	6010	08-25-11	505991	0.8450	1.288	104	0.7	89.7
Silver	6010	08-25-11	505991	0.0332	0.2647	107	0.1	89.2
Thallium	6010	08-25-11	505991	0.0476	1.099	98.4	0.1	86.8
Zinc	6010	08-25-11	505991	-0.4960	-0.2321	102	2.5	95.1
Mercury	7471	070711Sa	505872	-0.01	N/A	100	4.7	98.3
Mercury	7471	070811S	505882	-0.01	N/A	105	21.1	100
Mercury	7471	070811S	505990	-0.01	N/A	105	0.0	100

SAMPLE DELIVERY GROUP- BATCH QUALITY CONTROL (Sorted by Parameter)

PARAMETER	METHOD	BATCH ID	SAMPLE#	LRB	BLANK	LFB	LFM DUP	LCS
Antimony	6010	08-25-11	505881	-0.2586	0.1569	111	6.4	3.8
Antimony	6010	08-25-11	505991	-0.2586	0.1569	111	5.1	3.8
Arsenic	6010	08-25-11	505881	-0.1367	0.0891	101	1.1	88.8
Arsenic	6010	08-25-11	505991	-0.1367	0.0891	101	0.2	88.8
Barium	6010	08-25-11	505881	0.0359	-0.0177	104	30.9	95.1
Barium	6010	08-25-11	505991	0.0359	-0.0177	104	18.6	95.1
Beryllium	6010	08-25-11	505881	0.0071	0.0597	102	0.15	98.0
Beryllium	6010	08-25-11	505991	0.0071	0.0597	102	0.54	98.0
Cadmium	6010	08-25-11	505881	-0.0012	0.0139	102	0.8	90.3
Cadmium	6010	08-25-11	505991	-0.0012	0.0139	102	0.1	90.3
Chromium	6010	08-25-11	505881	-0.1253	-0.8630	102	0.0	96.5
Chromium	6010	08-25-11	505991	-0.1253	-0.8630	102	0.6	96.5
Copper	6010	08-25-11	505881	0.5270	0.6551	105	6.3	97.8
Copper	6010	08-25-11	505991	0.5270	0.6551	105	1.3	97.8
Lead	6010	08-25-11	505881	-0.0381	-0.6371	106	16.9	94.7
Lead	6010	08-25-11	505991	-0.0381	-0.6371	106	1.9	94.7
Mercury	7471	070711Sa	505872	-0.01	N/A	100	4.7	98.3
Mercury	7471	070811S	505882	-0.01	N/A	105	21.1	100
Mercury	7471	070811S	505990	-0.01	N/A	105	0.0	100
Nickel	6010	08-25-11	505881	0.1940	-0.1320	103	0.5	94.3
Nickel	6010	08-25-11	505991	0.1940	-0.1320	103	0.8	94.3
Selenium	6010	08-25-11	505881	0.8450	1.288	104	1.1	89.7
Selenium	6010	08-25-11	505991	0.8450	1.288	104	0.7	89.7
Silver	6010	08-25-11	505881	0.0332	0.2647	107	1	89.2
Silver	6010	08-25-11	505991	0.0332	0.2647	107	0.1	89.2
Thallium	6010	08-25-11	505881	0.0476	1.099	98.4	1.1	86.8
Thallium	6010	08-25-11	505991	0.0476	1.099	98.4	0.1	86.8

PARAMETER	METHOD	BATCH ID	SAMPLE#	LRB	BLANK	LFB	LFM DUP	LCS
Zinc	6010	08-25-11	505881	-0.4960	-0.2321	102	2.6	95.1
Zinc	6010	08-25-11	505991	-0.4960	-0.2321	102	2.5	95.1

LRB:	Digested Lab Reagent Blank	Measured value
Blank:	Instrument Blank, Initial	Measured value
LFB:	Laboratory Fortified Blank, accuracy	% Recovery
LCS:	Laboratory Control Sample Initial, accuracy	% Recovery
MS:	Matrix Spike, accuracy	% Recovery
LFMDup:	Laboratory Fortified Matrix Duplicate, precision	Relative % Difference (RPD)
N/A:	Item not applicable to method	
Corr. Coef	Calibration correlation coefficient (R)	Minimum 0.995
< or >	Less (or greater) than indicated value	

Parameter	Method	Sample#	Sample Conc.	LOQ	Extraction Batch ID	Method Blank	LCS	MS	Dup	Analytical Batch ID	Instrument Blank	CCV	% RSD or Corr. Coef.
Benzo(a)anthracene	EPA 8270D and 3550C	505872	1300	10	EB110630S	< 10	107.31	89.31	84.51	AB110804JR	< 10	53.15	4.32
Benzo(a)pyrene	EPA 8270D and 3550C	505872	1200	10	EB110630S	< 10	114.81	89.69	85.94	AB110804JR	< 10	52.01	10.65
Benzo(b)fluoranthene	EPA 8270D and 3550C	505872	1100	10	EB110630S	< 10	112.98	88.66	84.98	AB110804JR	< 10	51.93	9.75
Benzo(ghi)perylene	EPA 8270D and 3550C	505872	3000	10	EB110630S	< 10	108.87	82.61	75.89	AB110804JR	< 10	53.30	11.19
Bis(2-ethylhexyl)phthalate	EPA 8270D and 3550C	505872	1400	10	EB110630S	< 10	97.07	82.12	80.62	AB110804JR	< 10	49.18	0.9994
Chrysene	EPA 8270D and 3550C	505872	2500	10	EB110630S	< 10	99.55	79.13	75.82	AB110804JR	< 10	48.74	7.28
Indeno(123cd)pyrene	EPA 8270D and 3550C	505872	1200	10	EB110630S	< 20	108.69	90.96	83.75	AB110804JR	< 10	54.17	17.94
Phenanthrene	EPA 8270D and 3550C	505872	2400	10	EB110630S	< 10	94.63	75.05	69.52	AB110804JR	< 10	50.69	8.02
Pyrene	EPA 8270D and 3550C	505872	2600	10	EB110630S	< 10	95.42	77.83	76.63	AB110804JR	< 10	48.68	7.32
Pyrene	EPA 8270D and 3550C	505875	490	10	EB110630S	< 10	95.42	77.83	76.63	AB110809JR	< 10	52.05	6.17
Benzo(a)anthracene	EPA 8270D and 3550C	505878	1800 (J)	10	EB110630S	< 10	107.31	89.31	84.51	AB110804JR	< 10	53.15	4.32
Pyrene	EPA 8270D and 3550C	505878	3300 (J)	10	EB110630S	< 10	95.42	77.83	76.63	AB110804JR	< 10	48.68	7.32
Benzo(a)anthracene	EPA 8270D and 3550C	505879	9200	10	EB110630S	< 10	107.31	89.31	84.51	AB110720JR	< 10	58.25	9.38
Benzo(a)pyrene	EPA 8270D and 3550C	505879	11000 (J)	10	EB110630S	< 10	114.81	89.69	85.94	AB110720JR	< 10	60.97	15.23
Benzo(b)fluoranthene	EPA 8270D and 3550C	505879	6600 (J)	10	EB110630S	< 10	112.98	88.66	84.98	AB110720JR	< 10	60.06	14.69
Benzo(ghi)perylene	EPA 8270D and 3550C	505879	6600 (J)	10	EB110630S	< 10	108.87	82.61	75.89	AB110720JR	< 10	56.08	9.55
Chrysene	EPA 8270D and 3550C	505879	34000	10	EB110630S	< 10	99.55	79.13	75.82	AB110720JR	< 10	55.09	3.59
Pyrene	EPA 8270D and 3550C	505879	12000	10	EB110630S	< 10	95.42	77.83	76.63	AB110720JR	< 10	53.97	6.17
Benzo(a)anthracene	EPA 8270D and 3550C	505883	1500	10	EB110630S	< 10	107.31	89.31	84.51	AB110713JR	< 10	52.57	9.38
Benzo(a)pyrene	EPA 8270D and 3550C	505883	1200	10	EB110630S	< 10	114.81	89.69	85.94	AB110713JR	< 10	53.92	15.23
Benzo(b)fluoranthene	EPA 8270D and 3550C	505883	1100	10	EB110630S	< 10	112.98	88.66	84.98	AB110713JR	< 10	55.56	14.69
Benzo(ghi)perylene	EPA 8270D and 3550C	505883	3200	10	EB110630S	< 10	108.87	82.61	75.89	AB110713JR	< 10	54.71	9.55
Chrysene	EPA 8270D and 3550C	505883	2800	10	EB110630S	< 10	99.55	79.13	75.82	AB110713JR	< 10	51.04	3.59
Phenanthrene	EPA 8270D and 3550C	505883	2700	10	EB110630S	< 10	94.63	75.05	69.52	AB110713JR	< 10	50.10	5.53
Pyrene	EPA 8270D and 3550C	505883	2800	10	EB110630S	< 10	95.42	77.83	76.63	AB110713JR	< 10	54.66	6.17
Benzo(a)anthracene	EPA 8270D and 3550C	505884	1100	10	EB110630S	< 10	107.31	89.31	84.51	AB110804JR	< 10	53.15	4.32
Benzo(ghi)perylene	EPA 8270D and 3550C	505884	1000	10	EB110630S	< 10	108.87	82.61	75.89	AB110804JR	< 10	53.30	11.19
Chrysene	EPA 8270D and 3550C	505884	1900	10	EB110630S	< 10	99.55	79.13	75.82	AB110804JR	< 10	48.74	7.28
Phenanthrene	EPA 8270D and 3550C	505884	2900	10	EB110630S	< 10	94.63	75.05	69.52	AB110804JR	< 10	50.69	8.02
Pyrene	EPA 8270D and 3550C	505884	2000	10	EB110630S	< 10	95.42	77.83	76.63	AB110804JR	< 10	48.68	7.32
Benzo(a)anthracene	EPA 8270D and 3550C	505887	910	10	EB110630S	< 10	107.31	89.31	84.51	AB110804JR	< 10	53.15	4.32
Benzo(a)pyrene	EPA 8270D and 3550C	505887	610	10	EB110630S	< 10	114.81	89.69	85.94	AB110804JR	< 10	52.01	10.65
Benzo(b)fluoranthene	EPA 8270D and 3550C	505887	520	10	EB110630S	< 10	112.98	88.66	84.98	AB110804JR	< 10	51.93	9.75
Benzo(ghi)perylene	EPA 8270D and 3550C	505887	550	10	EB110630S	< 10	108.87	82.61	75.89	AB110804JR	< 10	53.30	11.19
Chrysene	EPA 8270D and 3550C	505887	1400	10	EB110630S	< 10	99.55	79.13	75.82	AB110804JR	< 10	48.74	7.28
Phenanthrene	EPA 8270D and 3550C	505887	1800	10	EB110630S	< 10	94.63	75.05	69.52	AB110804JR	< 10	50.69	8.02
Pyrene	EPA 8270D and 3550C	505887	1200	10	EB110630S	< 10	95.42	77.83	76.63	AB110804JR	< 10	48.68	7.32
Benzo(b)fluoranthene	EPA 8270D and 3550C	505992	1200	10	EB110706S	< 10	105.05	96.51	110.16	AB110713JR	< 10	55.56	14.69
Fluoranthene	EPA 8270D and 3550C	505992	1500	10	EB110706S	< 10	104.11	97.57	106.53	AB110713JR	< 10	51.08	9.54
Pyrene	EPA 8270D and 3550C	505992	1200	10	EB110706S	< 10	89.45	86.55	94.03	AB110713JR	< 10	54.66	6.17

LOQ:	Limit of Quantitation (Reporting Limit)	µg/kg or Standard units; pH
Blank	Method Blank (MB) or Instrument Blank (IB)	Measured value
LCS:	Laboratory Control Sample, accuracy	% Recovery
MS:	Matrix Spike, accuracy	% Recovery
Dup:	Duplicate or Matrix Spike Duplicate, precision	Relative % Difference (RPD)
CCV:	Continuing Calibration Verification, accuracy	% Recovery
% RSD	Calibration by average response factor (% RSD)	Maximum 20%
Corr. Coef,:	Calibration by least squares regression (correlation coefficient)	Minimum 0.995
< or >	Less (or greater) than indicated value	
NA:	Item not applicable to method	

The theoretical concentration for each target analyte in the LCS, MS, and MSD is 100µg/kg.
The theoretical concentration for each target analyte in the CCV is 50µg/kg.
The extraction Method Blank, LCS, MS, and MSD in batch EB110630S were analyzed in batch AB110701JR.
The extraction Method Blank, LCS, MS, and MSD in batch EB110706S were analyzed in batch AB110711JR.

Appendix C: Analytical Data Narratives

Case Narrative
Method 3050 with 6010
Method 7471

SEL Sample ID: 505872 to 505890
SEL Sample ID: 505989 to 505996
Project Name: Wilcox Refinery

Digestion/Extraction Batch ID: (7471)070711Sa and 070811S (3050) 07-06-11
Analyst of Record: C. Freshour S. Tilley

Analytical Batch ID: (7471)070711Sa and 070811S (6010) 08-30-11
Analyst of Record: C. Freshour S. Tilley

Were there any deviations from standard operating procedures? [X] Yes [ ] No

3050:
Samples 505872-505890 and 505990-996 were digested via 3050 with HNO3 only (as needed for method 6020 analysis...). The digestion should have included HCl addition as well, as these samples were analyzed via method 6010. Digested samples are usually analyzed within a few days following the digestion; unfortunately these samples could not be analyzed within this normal timeframe due to permanent instrument failure. The samples were analyzed after a new instrument was brought on line and verified as suitable for sample analysis.

Were there any quality control failures? [X] Yes [ ] No

7471:
The LFM RPD measurement for 505882 was outside SOP DQR by 1.1%. The sample measurements were at the low end of the calibration curve, with 1 measurement falling below the low calibrator and 1 measurement falling just above the low calibrator. The individual %recovery's for each LFM passed DQR, however the LFM sample that fell below the low calibrator is a contributor to the failure of the precision measurement.

6010:
The LCS sample from the 7-6-11 digestion shows low antimony recovery (3.8%). The low antimony recovery is most likely due to the lack of HCl in the digestion, some antimony analyte may have also fallen out of solution during the longer than usual wait between digestion and analysis. All remaining analytes from the 7-6-11 LCS sample were found to have 86.5% recovery or higher (which is comparable to the recovery of other LCS samples within this analytic set).

The IPC sample following the sample 505996, had gone empty (solution level in the 50 mL tube was below the tip of the sample probe) and therefore shows all parameters failed. The next IPC sample which followed sample 508298, was full and shows all parameters of interest to have valid analyte recoveries (Ca was 88.6% and K was 89.4%).

The barium LFM Dup %RPD for 505881 exceeded the SOP DQR by 0.9%.
LFM1 %Recovery = 75.8; LFM2 %Recovery = 115; Avg LFM %Recovery = 91.5

No explanation for the 30.9% RPD could be determined.

The lead LFM %Recovery for 505881 did not meet SOP DQR. The amount of lead in the sample far exceeded the spike level, which caused the spike to be masked by the lead in the sample.

While all the samples from both sample batches displayed high iron and aluminum (greater than 1000 mg/kg), samples 505877, 505880-882, and 505886 (all from the first batch) show high lead as well. Samples 505990, and 505994 (both from the second batch) show high manganese.

Were there any data limitations or biases? [X] Yes [ ] No

3050/6010:

The lack of HCl in the digestion step could cause the reported values for Antimony and Silver to be biased low.

Were any professional judgments exercised in interpreting or qualifying the data? [ ] Yes [X] No

Case Narrative
Method 8270D

SEL Number(s): 505872 to 505996
Project Name(s): Wilcox Refinery

Extraction Batch:	110630S	Analysis Batch(es):	110701JR	110706JR	110711JR	110713JR
Extractionist of Record:	C. Kontas	Analyst of Record:	C. Kontas	C. Kontas	C. Kontas	C. Kontas
Extraction Batch:	110706S	Analysis Batch(es):	110720JR	110722JR	110804JR	110809SR
Extractionist of Record:	C. Kontas	Analyst of Record:	C. Kontas	C. Kontas	C. Kontas	C. Kontas

Were there any deviations from standard operating procedures? [ ] Yes [x] No

Were there any quality control failures? [x] Yes [ ] No

The following describes what failed and the corrective actions taken (e.g., instrument maintenance, re-extraction, etc.):

For the analysis batch 110713JR. there were multiple internal standard peak area response QC failures; therefore, a new internal standard solution was made (ID# IS110718M8270).
For the analysis batch 110713JR, benzidine did not pass the peak tailing factor check during the first daily calibration verification. Column maintenance was performed and a second daily calibration verification was analyzed in which benzidine passed QC criteria.
For the analysis batch 110804JR, the first daily calibration verification did not pass average response factor QC criteria for benzo(b)fluoranthene, and as this was a target analyte detected in field samples, a second calibration verification was analyzed. The second calibration verification passed all QC criteria for all target analytes.
For the analysis batch 110804JR, in comparing the first instrument blank to the daily calibration verification sample, there were two internal standards that did not pass peak area response QC criteria. A second instrument blank was analyzed, and all internal standards passed all QC criteria.
For the analysis batch 110809SR, the first daily calibration verification did not pass average response factor or percent drift QC criteria for at least 80% of target compounds. A second calibration verification was analyzed and passed all QC criteria for all quantitated target analytes.

Were there any data limitations or biases? [x] Yes [ ] No

The following describes which QC data indicated limitations or biases and which sample data were qualified:

In samples 505874 and 505991, there was matrix interference indicated on multiple target analytes (none of which were target analytes detected above the adjusted lower limit of quantitation in field samples). Both pairs of MS/MSD samples and their parent samples were reanalyzed (batch 110713SR) to exclude instrument behavior as a contributing factor in target analyte recovery or precision exceedances. The reanalysis confirmed that results failing in-house limits were not due to instrumentation, and the original sample analyses were used for customer reports.

For sample 505876, it was originally analyzed in batch 110701JR at a 1:10 dilution. It was reanalyzed in batch 110713JR with no dilution, and the internal standards 1,4-Dichlorobenzene-d4, Chrysene-d12, and Perylene-d12 failed QC criteria. Surrogates associated with failed internal standards were reported using the original 110701JR analysis and the others from the 110713JR analysis.
For sample 505877, it was originally analyzed in batch 110706JR at a 1:5 dilution. It was reanalyzed in batch 110713JR with no dilution, and all internal standards failed QC criteria. All surrogates were reported using the original 110706JR analysis.
For sample 505878, it was originally analyzed in batch 110706JR at a 1:20 dilution. It was reanalyzed in batch 110804JR with no dilution; the analysis was outside the 12-hour DFTPP window. It was reanalyzed in batch 110809SR at a 1:2 dilution; all internal standards failed QC criteria. The target analytes and surrogates were reported from the 110804JR analysis and qualified as estimated concentrations.

Case Narrative
Method 8270D

For sample 505879, it was originally analyzed in batch 110706JR at a 1:25 dilution. It was reanalyzed in batch 110720JR at a 1:5 dilution; the internal standard Perylene-d12 failed QC criteria, and the target analytes associated with that internal standard were qualified as estimates (as the internal standard failed high, the target analyte concentrations were calculated as lower than if the internal standard had passed).
For sample 505885, it was originally analyzed in batch 110706JR, and the internal standards Phenanthrene-d10, Chrysene-d12, and Perylene-d12 failed QC criteria. It was reanalyzed in batch 110713JR with no dilution; and the internal standards Chrysene-d12 and Perylene-d12 failed QC criteria. The associated surrogate Terphenyl-d14 was reported from the 110713JR analysis and qualified as an estimated concentration.
For sample 505888, it was originally analyzed in batch 110711JR at a 1:2 dilution. It was reanalyzed in batch 110713JR with no dilution; all internal standards except 1,4-Dichlorobenzene-d4 failed QC criteria. The surrogates were reported using the original 110711JR analysis.
For sample 505886, the surrogates 2-Fluorobiphenyl and 2,4,6-Tribromophenol had low recoveries as compared to in-house control limits. This was noted on the customer report. The analyst hypothesized the low surrogate recovery was due to the viscous matrix as noted during the extraction.

Tentatively Identified Compounds (TICs) are usually compared to the most closely eluting internal standard to calculate an estimated concentration. When internal standard peak area responses failed QC criteria, the TICs were compared to the most closely eluting internal standard that had peak area responses that passed QC criteria.
For sample 505879, it was reanalyzed in batch 110720JR at a 1:5 dilution; the internal standard Perylene-d12 failed QC criteria, and the TICs originally associated with that internal standard were instead calculated using Chrysene-d12.
For sample 505880, it was reanalyzed in batch 110720JR at a 1:10 dilution; the internal standard Perylene-d12 failed QC criteria, and the TICs originally associated with that internal standard were instead calculated using Chrysene-d12.
For sample 505881, it was reanalyzed in batches 110720JR and 110722JR both at a 1:10 dilution, and for both reanalyses, the internal standard Perylene-d12 failed QC criteria. The 110722JR analysis was used for customer reporting purposes, and the TICs originally associated with that internal standard were instead calculated using Chrysene-d12.
For sample 505885, it was reanalyzed in batch 110711JR with no dilution; the internal standard Perylene-d12 failed QC criteria, and the TIC originally associated with that internal standard was instead calculated using Phenanthrene-d10.
For sample 505888, it was reanalyzed in batch 110713JR with no dilution; the internal standard Perylene-d12 failed QC criteria, and the TIC originally associated with that internal standard was instead calculated using 1,4-Dichlorobenzene-d4.

Were professional judgments exercised in interpreting or qualifying data? [x] Yes [ ] No

The following describes the rationale and impact of professional judgments:

For sample 505872 (analyzed in batch 110804JR), when the internal standard peak area responses were compared to the daily calibration verification, Chrysene-d12 failed high; however, when compared to the mid-level calibration standard (initial calibration 110803JR), Chrysene-d12 passed criteria. The EPA Methods governing 8270D analysis, as well as the SELSD SOP #207, allow for either comparison. For this reason, the target analytes detected above the adjusted lower limit of quantitation associated with Chrysene-d12 were not qualified as estimated concentrations.

Comments:

The analyst (C. Kontas) witnessed the sample collector (T. Downham) deliver samples to the lab at approximately 4:30pm on 6/28/11 and at approximately 4:15pm on 6/29/11, at which time they were in coolers. After the sample collector relinquished the samples and he signed the COC, they were transferred to refrigerators in Sample Management. However, Sample Management personnel did not complete the COCs based on the times/dates they took physical possession of the samples nor did they document sample temperature upon receipt on SELSD login forms. The analyst did not qualify field sample data as estimated concentrations due to temperature upon receipt; however, the lack of documentation of sample temperature upon laboratory receipt was noted on customer reports.

Cassandra Kontas 8/18/2011

Appendix D: Final Analytical Data Reports

Sample Number: 505872
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1015
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		27.4	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		7.70	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		22.0	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		94.5	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-8 (WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505873
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1035
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		81.1	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		14.1	MG/KG	08/25/11	6010	3050
Copper, Sediment		7.90	MG/KG	08/25/11	6010	3050
Lead, Sediment		590	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		11.5	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		95.6	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-5(WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505874
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1056
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		90.0	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		13.1	MG/KG	08/25/11	6010	3050
Copper, Sediment		8.70	MG/KG	08/25/11	6010	3050
Lead, Sediment		16.6	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		11.4	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		75.9	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-11

ANALYST`S COMMENTS:

* * ANALYST Greg Goode
Greg Goode
State Environmental Laboratory

Sample Number: 505875
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1112
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

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OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		64.5	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		13.4	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		93.7	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-3 (WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505876
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1123
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		40.3	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		9.30	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment		122	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		34.5	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		95.9	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-1 (WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505877
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1130
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		16.9	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		5.50	MG/KG	08/25/11	6010	3050
Copper, Sediment		5.60	MG/KG	08/25/11	6010	3050
Lead, Sediment		2320	MG/KG	08/25/11	6010	3050
Nickel, Sediment		153	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		97.1	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-2 (WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505878
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1140
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		32.9	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		12.8	MG/KG	08/25/11	6010	3050
Copper, Sediment		7.40	MG/KG	08/25/11	6010	3050
Lead, Sediment		254	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		8.60	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		97.1	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-4 (WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505879
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1252
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		56.8	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		11.7	MG/KG	08/25/11	6010	3050
Copper, Sediment		11.0	MG/KG	08/25/11	6010	3050
Lead, Sediment		39.5	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		26.0	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		83.9	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-8

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505880
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1310
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		40.7	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		6.50	MG/KG	08/25/11	6010	3050
Copper, Sediment		84.0	MG/KG	08/25/11	6010	3050
Lead, Sediment		50000	MG/KG	08/25/11	6010	3050
Nickel, Sediment		191	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		26.1	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		90.7	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-6

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505881
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1315
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		39.8	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		6.10	MG/KG	08/25/11	6010	3050
Copper, Sediment		61.0	MG/KG	08/25/11	6010	3050
Lead, Sediment		43200	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		19.1	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/07/11	7471	3050
% Solids		95.0	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-7

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505882
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1321
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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707 N. ROBINSON
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OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		29.5	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		7.70	MG/KG	08/25/11	6010	3050
Copper, Sediment		68.3	MG/KG	08/25/11	6010	3050
Lead, Sediment		43600	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		24.7	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		94.4	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-5

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505883
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1332
Date Received: 6/29/2011
Date Completed: 08/31/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/31/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	
Barium, Sediment		35.5	MG/KG	08/25/11	6010	
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	
Chromium, Sediment		8.30	MG/KG	08/25/11	6010	
Copper, Sediment		11.7	MG/KG	08/25/11	6010	
Lead, Sediment		366	MG/KG	08/25/11	6010	
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	
Zinc, Sediment		23.9	MG/KG	08/25/11	6010	
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	
% Solids		99.2	%	07/12/11	CLP 5.4	

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-4

ANALYST`S COMMENTS:

Greg Goode

Greg Goode
State Environmental Laboratory

* * ANALYST

Sample Number: 505884
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1341
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		27.8	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		7.90	MG/KG	08/25/11	6010	3050
Copper, Sediment		12.7	MG/KG	08/25/11	6010	3050
Lead, Sediment		459	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		206	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		98.9	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-3

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505885
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1351
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		22.7	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		5.30	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment		82.7	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		52.5	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		95.8	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-8

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505886
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1400
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		62.2	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		16.1	MG/KG	08/25/11	6010	3050
Copper, Sediment		78.2	MG/KG	08/25/11	6010	3050
Lead, Sediment		1560	MG/KG	08/25/11	6010	3050
Nickel, Sediment		22.6	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		98.5	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		98.6	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-9 (WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505887
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1411
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/13/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		38.1	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		8.70	MG/KG	08/25/11	6010	3050
Copper, Sediment		10.0	MG/KG	08/25/11	6010	3050
Lead, Sediment		147	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		125	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment		1.73	MG/KG	07/08/11	7471	3050
% Solids		93.4	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-2

ANALYST`S COMMENTS:
(CF) Corrected final report. The Mercury result was corrected from 0.40 to 1.73.

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505888
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1438
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		14.2	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment		93.5	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		13.8	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		98.9	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-9

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505889
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1441
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		80.2	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		13.6	MG/KG	08/25/11	6010	3050
Copper, Sediment		9.80	MG/KG	08/25/11	6010	3050
Lead, Sediment		89.7	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		53.1	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		96.6	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-1

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505890
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1035
Date Received: 6/29/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		63.4	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		11.4	MG/KG	08/25/11	6010	3050
Copper, Sediment		6.70	MG/KG	08/25/11	6010	3050
Lead, Sediment		486	MG/KG	08/25/11	6010	3050
Nickel, Sediment		7.20	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		9.30	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		95.8	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-6 (WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505872
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1015
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		104.				
Acenaphthylene	<	1100	UG/KG	08/04/11	8270DM	
Acenaphthene	<	1100	UG/KG	08/04/11	8270DM	
Anthracene	<	1100	UG/KG	08/04/11	8270DM	
Benzo(b)fluoranthene		1100	UG/KG	08/04/11	8270DM	
Benzo(k)fluoranthene	<	1100	UG/KG	08/04/11	8270DM	
Benzo(a)pyrene		1200	UG/KG	08/04/11	8270DM	
Bis(2-chloroethyl)ether	<	1100	UG/KG	08/04/11	8270DM	
Bis(2-chloroethoxy)methane	<	1100	UG/KG	08/04/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	1100	UG/KG	08/04/11	8270DM	
Butylbenzylphthalate	<	1100	UG/KG	08/04/11	8270DM	
Chrysene		2500	UG/KG	08/04/11	8270DM	
Diethylphthalate	<	1100	UG/KG	08/04/11	8270DM	
Dimethylphthalate	<	1100	UG/KG	08/04/11	8270DM	
Fluoranthene	<	1100	UG/KG	08/04/11	8270DM	
Fluorene	<	1100	UG/KG	08/04/11	8270DM	
Hexachlorocyclopentadiene	<	1100	UG/KG	08/04/11	8270DM	
Hexachloroethane	<	1100	UG/KG	08/04/11	8270DM	
Indeno(123cd)pyrene		1200	UG/KG	08/04/11	8270DM	
Isophorone	<	1100	UG/KG	08/04/11	8270DM	
Nitrosodipropylamine	<	1100	UG/KG	08/04/11	8270DM	
Nitrosodiphenylamine	<	1100	UG/KG	08/04/11	8270DM	
Naphthalene	<	1100	UG/KG	08/04/11	8270DM	
Nitrobenzene	<	1100	UG/KG	08/04/11	8270DM	
p-Chloro-m-cresol	<	1100	UG/KG	08/04/11	8270DM	
Phenanthrene		2400	UG/KG	08/04/11	8270DM	
Pyrene		2600	UG/KG	08/04/11	8270DM	
Benzo(ghi)perylene		3000	UG/KG	08/04/11	8270DM	
Benzo(a)anthracene		1300	UG/KG	08/04/11	8270DM	
Dibenzo(ah)anthracene	<	1100	UG/KG	08/04/11	8270DM	
2-Chloronaphthalene	<	1100	UG/KG	08/04/11	8270DM	
2-Chlorophenol	<	1100	UG/KG	08/04/11	8270DM	
2-Nitrophenol	<	1100	UG/KG	08/04/11	8270DM	

Sample Number: 505872
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1015
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	1100	UG/KG	08/04/11	8270DM	
2,4-Dichlorophenol	<	1100	UG/KG	08/04/11	8270DM	
2,4-Dimethylphenol	<	1100	UG/KG	08/04/11	8270DM	
2,4-Dinitrotoluene	<	1100	UG/KG	08/04/11	8270DM	
2,4-Dinitrophenol	<	5200	UG/KG	08/04/11	8270DM	
2,4,6-Trichlorophenol	<	5200	UG/KG	08/04/11	8270DM	
2,6-Dinitrotoluene	<	1100	UG/KG	08/04/11	8270DM	
3,3'-Dichlorobenzidine	<	2100	UG/KG	08/04/11	8270DM	
4-Bromophenylphenyl ether	<	1100	UG/KG	08/04/11	8270DM	
4-Chlorophenyl phenylether	<	1100	UG/KG	08/04/11	8270DM	
4-Nitrophenol	<	5200	UG/KG	08/04/11	8270DM	
4,6-Dinitro-o-cresol	<	5200	UG/KG	08/04/11	8270DM	
Phenol	<	1100	UG/KG	08/04/11	8270DM	
Pentachlorophenol	<	5200	UG/KG	08/04/11	8270DM	
Bis(2-ethylhexyl)phthalate		1400	UG/KG	08/04/11	8270DM	
Di-n-butylphthalate	<	1100	UG/KG	08/04/11	8270DM	
Hexachlorobenzene	<	1100	UG/KG	08/04/11	8270DM	
Hexachlorobutadiene	<	1100	UG/KG	08/04/11	8270DM	
Benzyl alcohol	<	1100	UG/KG	08/04/11	8270DM	
Dibenzofuran	<	1100	UG/KG	08/04/11	8270DM	
2-Methylphenol	<	1100	UG/KG	08/04/11	8270DM	
4-Methylphenol	<	1100	UG/KG	08/04/11	8270DM	
2,4,5-Trichlorophenol	<	5200	UG/KG	08/04/11	8270DM	
4-Chloroaniline	<	1100	UG/KG	08/04/11	8270DM	
2-Nitroaniline	<	5200	UG/KG	08/04/11	8270DM	
3-Nitroaniline	<	5200	UG/KG	08/04/11	8270DM	
4-Nitroaniline	<	5200	UG/KG	08/04/11	8270DM	
2-Methylnaphthalene	<	1100	UG/KG	08/04/11	8270DM	
% Moisture - GC/MS Lab		6.3	%	08/04/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	53
2-FLUOROPHENOL	52

Sample Number: 505872
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1015
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
2-FLUOROBIPHENYL		51
2,4,6-TRIBROMOPHENOL		58
NITROBENZENE-D5		61
P-TERPHENYL-D14		57

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Benzo[e]pyrene		5300	µg/kg
Phenanthrene, 1-methyl-		2300	µg/kg
Phenanthrene, 2-methyl-		1500	µg/kg
Pyrene, methyl- (non-specific i		1500	µg/kg
Pyrene, methyl- (non-specific i		1600	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-8(WASTE SAMPLE)

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Pyrene, methyl- (non-specific isomer #1)
Pyrene, methyl- (non-specific isomer #2)

* * ANALYST Cassandra Kontas

Sample Number: 505873
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1035
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		34.6				
Acenaphthylene	<	350	UG/KG	07/01/11	8270DM	
Acenaphthene	<	350	UG/KG	07/01/11	8270DM	
Anthracene	<	350	UG/KG	07/01/11	8270DM	
Benzo(b)fluoranthene	<	350	UG/KG	07/01/11	8270DM	
Benzo(k)fluoranthene	<	350	UG/KG	07/01/11	8270DM	
Benzo(a)pyrene	<	350	UG/KG	07/01/11	8270DM	
Bis(2-chloroethyl)ether	<	350	UG/KG	07/01/11	8270DM	
Bis(2-chloroethoxy)methane	<	350	UG/KG	07/01/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	350	UG/KG	07/01/11	8270DM	
Butylbenzylphthalate	<	350	UG/KG	07/01/11	8270DM	
Chrysene	<	350	UG/KG	07/01/11	8270DM	
Diethylphthalate	<	350	UG/KG	07/01/11	8270DM	
Dimethylphthalate	<	350	UG/KG	07/01/11	8270DM	
Fluoranthene	<	350	UG/KG	07/01/11	8270DM	
Fluorene	<	350	UG/KG	07/01/11	8270DM	
Hexachlorocyclopentadiene	<	350	UG/KG	07/01/11	8270DM	
Hexachloroethane	<	350	UG/KG	07/01/11	8270DM	
Indeno(123cd)pyrene	<	350	UG/KG	07/01/11	8270DM	
Isophorone	<	350	UG/KG	07/01/11	8270DM	
Nitrosodipropylamine	<	350	UG/KG	07/01/11	8270DM	
Nitrosodiphenylamine	<	350	UG/KG	07/01/11	8270DM	
Naphthalene	<	350	UG/KG	07/01/11	8270DM	
Nitrobenzene	<	350	UG/KG	07/01/11	8270DM	
p-Chloro-m-cresol	<	350	UG/KG	07/01/11	8270DM	
Phenanthrene	<	350	UG/KG	07/01/11	8270DM	
Pyrene	<	350	UG/KG	07/01/11	8270DM	
Benzo(ghi)perylene	<	350	UG/KG	07/01/11	8270DM	
Benzo(a)anthracene	<	350	UG/KG	07/01/11	8270DM	
Dibenzo(ah)anthracene	<	350	UG/KG	07/01/11	8270DM	
2-Chloronaphthalene	<	350	UG/KG	07/01/11	8270DM	
2-Chlorophenol	<	350	UG/KG	07/01/11	8270DM	
2-Nitrophenol	<	350	UG/KG	07/01/11	8270DM	

Sample Number: 505873
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1035
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	350	UG/KG	07/01/11	8270DM	
2,4-Dichlorophenol	<	350	UG/KG	07/01/11	8270DM	
2,4-Dimethylphenol	<	350	UG/KG	07/01/11	8270DM	
2,4-Dinitrotoluene	<	350	UG/KG	07/01/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/01/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/01/11	8270DM	
2,6-Dinitrotoluene	<	350	UG/KG	07/01/11	8270DM	
3,3'-Dichlorobenzidine	<	690	UG/KG	07/01/11	8270DM	
4-Bromophenylphenyl ether	<	350	UG/KG	07/01/11	8270DM	
4-Chlorophenyl phenylether	<	350	UG/KG	07/01/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/01/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/01/11	8270DM	
Phenol	<	350	UG/KG	07/01/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/01/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	350	UG/KG	07/01/11	8270DM	
Di-n-butylphthalate	<	350	UG/KG	07/01/11	8270DM	
Hexachlorobenzene	<	350	UG/KG	07/01/11	8270DM	
Hexachlorobutadiene	<	350	UG/KG	07/01/11	8270DM	
Benzyl alcohol	<	350	UG/KG	07/01/11	8270DM	
Dibenzofuran	<	350	UG/KG	07/01/11	8270DM	
2-Methylphenol	<	350	UG/KG	07/01/11	8270DM	
4-Methylphenol	<	350	UG/KG	07/01/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/01/11	8270DM	
4-Chloroaniline	<	350	UG/KG	07/01/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/01/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/01/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/01/11	8270DM	
2-Methylnaphthalene	<	350	UG/KG	07/01/11	8270DM	
% Moisture - GC/MS Lab		3.70	%		1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROPHENOL	63
2-FLUOROBIPHENYL	73

Sample Number: 505873
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1035
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
PHENOL-D5		69
P-TERPHENYL-D14		93
NITROBENZENE-D5		71
2,4,6-TRIBROMOPHENOL		87

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Oleanonic aldehyde		1200	µg/kg
Hexadecanoic acid, 2-hydroxy-1-		750	µg/kg
Totarol		470	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-5(WASTE SAMPLE)

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester

* * ANALYST Cassandra Kontas

Sample Number: 505874
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1056
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier		Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab			45.3				
Acenaphthylene	MI	<	450	UG/KG	07/01/11	8270DM	
Acenaphthene		<	450	UG/KG	07/01/11	8270DM	
Anthracene		<	450	UG/KG	07/01/11	8270DM	
Benzo(b)fluoranthene		<	450	UG/KG	07/01/11	8270DM	
Benzo(k)fluoranthene		<	450	UG/KG	07/01/11	8270DM	
Benzo(a)pyrene		<	450	UG/KG	07/01/11	8270DM	
Bis(2-chloroethyl)ether	MI	<	450	UG/KG	07/01/11	8270DM	
Bis(2-chloroethoxy)methane		<	450	UG/KG	07/01/11	8270DM	
Bis(2-chloroisopropyl)ethe		<	450	UG/KG	07/01/11	8270DM	
Butylbenzylphthalate		<	450	UG/KG	07/01/11	8270DM	
Chrysene		<	450	UG/KG	07/01/11	8270DM	
Diethylphthalate		<	450	UG/KG	07/01/11	8270DM	
Dimethylphthalate	MI	<	450	UG/KG	07/01/11	8270DM	
Fluoranthene		<	450	UG/KG	07/01/11	8270DM	
Fluorene		<	450	UG/KG	07/01/11	8270DM	
Hexachlorocyclopentadiene	MI	<	450	UG/KG	07/01/11	8270DM	
Hexachloroethane	MI	<	450	UG/KG	07/01/11	8270DM	
Indeno(123cd)pyrene		<	450	UG/KG	07/01/11	8270DM	
Isophorone		<	450	UG/KG	07/01/11	8270DM	
Nitrosodipropylamine		<	450	UG/KG	07/01/11	8270DM	
Nitrosodiphenylamine		<	450	UG/KG	07/01/11	8270DM	
Naphthalene		<	450	UG/KG	07/01/11	8270DM	
Nitrobenzene	MI	<	450	UG/KG	07/01/11	8270DM	
p-Chloro-m-cresol		<	450	UG/KG	07/01/11	8270DM	
Phenanthrene		<	450	UG/KG	07/01/11	8270DM	
Pyrene		<	450	UG/KG	07/01/11	8270DM	
Benzo(ghi)perylene		<	450	UG/KG	07/01/11	8270DM	
Benzo(a)anthracene		<	450	UG/KG	07/01/11	8270DM	
Dibenzo(ah)anthracene		<	450	UG/KG	07/01/11	8270DM	
2-Chloronaphthalene		<	450	UG/KG	07/01/11	8270DM	
2-Chlorophenol	MI	<	450	UG/KG	07/01/11	8270DM	
2-Nitrophenol		<	450	UG/KG	07/01/11	8270DM	

Sample Number: 505874
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1056
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
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Report Date: 8/17/2011

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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Name	Qualifier		Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate		<	450	UG/KG	07/01/11	8270DM	
2,4-Dichlorophenol		<	450	UG/KG	07/01/11	8270DM	
2,4-Dimethylphenol		<	450	UG/KG	07/01/11	8270DM	
2,4-Dinitrotoluene		<	450	UG/KG	07/01/11	8270DM	
2,4-Dinitrophenol		<	2300	UG/KG	07/01/11	8270DM	
2,4,6-Trichlorophenol		<	2300	UG/KG	07/01/11	8270DM	
2,6-Dinitrotoluene		<	450	UG/KG	07/01/11	8270DM	
3,3'-Dichlorobenzidine		<	910	UG/KG	07/01/11	8270DM	
4-Bromophenylphenyl ether	MI	<	450	UG/KG	07/01/11	8270DM	
4-Chloropheny1 phenylether		<	450	UG/KG	07/01/11	8270DM	
4-Nitrophenol		<	2300	UG/KG	07/01/11	8270DM	
4,6-Dinitro-o-cresol	MI	<	2300	UG/KG	07/01/11	8270DM	
Phenol		<	450	UG/KG	07/01/11	8270DM	
Pentachlorophenol		<	2300	UG/KG	07/01/11	8270DM	
Bis(2-ethylhexyl)phthalate		<	450	UG/KG	07/01/11	8270DM	
Di-n-butylphthalate		<	450	UG/KG	07/01/11	8270DM	
Hexachlorobenzene		<	450	UG/KG	07/01/11	8270DM	
Hexachlorobutadiene	MI	<	450	UG/KG	07/01/11	8270DM	
Benzyl alcohol		<	450	UG/KG	07/01/11	8270DM	
Dibenzofuran		<	450	UG/KG	07/01/11	8270DM	
2-Methylphenol		<	450	UG/KG	07/01/11	8270DM	
4-Methylphenol		<	450	UG/KG	07/01/11	8270DM	
2,4,5-Trichlorophenol		<	2300	UG/KG	07/01/11	8270DM	
4-Chloroaniline		<	450	UG/KG	07/01/11	8270DM	
2-Nitroaniline		<	2300	UG/KG	07/01/11	8270DM	
3-Nitroaniline		<	2300	UG/KG	07/01/11	8270DM	
4-Nitroaniline		<	2300	UG/KG	07/01/11	8270DM	
2-Methylnaphthalene		<	450	UG/KG	07/01/11	8270DM	
% Moisture - GC/MS Lab			26.	%	07/01/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
P-TERPHENYL-D14	81
2-FLUOROBIPHENYL	67

Sample Number: 505874
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1056
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
PHENOL-D5		70
2,4,6-TRIBROMOPHENOL		80
2-FLUOROPHENOL		66
NITROBENZENE-D5		73

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
LUPEOL		1000	µg/kg
D:B-FRIEDO-B':A'-NEOGAMMACER-5-		460	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-11

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(MI) a Matrix Interference was indicated for these compounds by the matrix spike and matrix spike duplicate samples.
The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration.
Some "tentatively identified" compound names were truncated in the report table; their full names are:
D:B-FRIEDO-B':A'-NEOGAMMACER-5-EN-3-OL, (3-BETA)-

* * ANALYST Cassandra Kontas

Sample Number: 505875
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1112
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab:		35.2				
Acenaphthylene	<	350	UG/KG	08/09/11	8270DM	
Acenaphthene	<	350	UG/KG	08/09/11	8270DM	
Anthracene	<	350	UG/KG	08/09/11	8270DM	
Benzo(b)fluoranthene	<	350	UG/KG	08/09/11	8270DM	
Benzo(k)fluoranthene	<	350	UG/KG	08/09/11	8270DM	
Benzo(a)pyrene	<	350	UG/KG	08/09/11	8270DM	
Bis(2-chloroethyl)ether	<	350	UG/KG	08/09/11	8270DM	
Bis(2-chloroethoxy)methane	<	350	UG/KG	08/09/11	8270DM	
Bis(2-chloroisopropyl)ethe:	<	350	UG/KG	08/09/11	8270DM	
Butylbenzylphthalate	<	350	UG/KG	08/09/11	8270DM	
Chrysene	<	350	UG/KG	08/09/11	8270DM	
Diethylphthalate	<	350	UG/KG	08/09/11	8270DM	
Dimethylphthalate	<	350	UG/KG	08/09/11	8270DM	
Fluoranthene	<	350	UG/KG	08/09/11	8270DM	
Fluorene	<	350	UG/KG	08/09/11	8270DM	
Hexachlorocyclopentadiene	<	350	UG/KG	08/09/11	8270DM	
Hexachloroethane	<	350	UG/KG	08/09/11	8270DM	
Indeno(123cd)pyrene	<	350	UG/KG	08/09/11	8270DM	
Isophorone	<	350	UG/KG	08/09/11	8270DM	
Nitrosodipropylamine	<	350	UG/KG	08/09/11	8270DM	
Nitrosodiphenylamine	<	350	UG/KG	08/09/11	8270DM	
Naphthalene	<	350	UG/KG	08/09/11	8270DM	
Nitrobenzene	<	350	UG/KG	08/09/11	8270DM	
p-Chloro-m-cresol	<	350	UG/KG	08/09/11	8270DM	
Phenanthrene	<	350	UG/KG	08/09/11	8270DM	
Pyrene		490	UG/KG	08/09/11	8270DM	
Benzo(ghi)perylene	<	350	UG/KG	08/09/11	8270DM	
Benzo(a)anthracene	<	350	UG/KG	08/09/11	8270DM	
Dibenzo(ah)anthracene	<	350	UG/KG	08/09/11	8270DM	
2-Chloronaphthalene	<	350	UG/KG	08/09/11	8270DM	
2-Chlorophenol	<	350	UG/KG	08/09/11	8270DM	
2-Nitrophenol	<	350	UG/KG	08/09/11	8270DM	

Sample Number: 505875
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1112
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
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Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	350	UG/KG	08/09/11	8270DM	
2,4-Dichlorophenol	<	350	UG/KG	08/09/11	8270DM	
2,4-Dimethylphenol	<	350	UG/KG	08/09/11	8270DM	
2,4-Dinitrotoluene	<	350	UG/KG	08/09/11	8270DM	
2,4-Dinitrophenol	<	1800	UG/KG	08/09/11	8270DM	
2,4,6-Trichlorophenol	<	1800	UG/KG	08/09/11	8270DM	
2,6-Dinitrotoluene	<	350	UG/KG	08/09/11	8270DM	
3,3'-Dichlorobenzidine	<	700	UG/KG	08/09/11	8270DM	
4-Bromophenylphenyl ether	<	350	UG/KG	08/09/11	8270DM	
4-Chlorophenyl phenylether	<	350	UG/KG	08/09/11	8270DM	
4-Nitrophenol	<	1800	UG/KG	08/09/11	8270DM	
4,6-Dinitro-o-cresol	<	1800	UG/KG	08/09/11	8270DM	
Phenol	<	350	UG/KG	08/09/11	8270DM	
Pentachlorophenol	<	1800	UG/KG	08/09/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	350	UG/KG	08/09/11	8270DM	
Di-n-butylphthalate	<	350	UG/KG	08/09/11	8270DM	
Hexachlorobenzene	<	350	UG/KG	08/09/11	8270DM	
Hexachlorobutadiene	<	350	UG/KG	08/09/11	8270DM	
Benzyl alcohol	<	350	UG/KG	08/09/11	8270DM	
Dibenzofuran	<	350	UG/KG	08/09/11	8270DM	
2-Methylphenol	<	350	UG/KG	08/09/11	8270DM	
4-Methylphenol	<	350	UG/KG	08/09/11	8270DM	
2,4,5-Trichlorophenol	<	1800	UG/KG	08/09/11	8270DM	
4-Chloroaniline	<	350	UG/KG	08/09/11	8270DM	
2-Nitroaniline	<	1800	UG/KG	08/09/11	8270DM	
3-Nitroaniline	<	1800	UG/KG	08/09/11	8270DM	
4-Nitroaniline	<	1800	UG/KG	08/09/11	8270DM	
2-Methylnaphthalene	<	350	UG/KG	08/09/11	8270DM	
% Moisture - GC/MS Lab		5.7	%	08/09/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	62
2-FLUOROBIPHENYL	64

Sample Number: 505875
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1112
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
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Report of Analysis by GCMS

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
NITROBENZENE-D5		65
2,4,6-TRIBROMOPHENOL		69
P-TERPHENYL-D14		65
2-FLUOROPHENOL		52

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Dotriacontane		840	µg/kg
Nonatriacontane		1100	µg/kg
Octatriacontane		1400	µg/kg
Tricontane		430	µg/kg
Heptatriacontane		1400	µg/kg
Hexatriacontane		1200	µg/kg
Anthracene, 1-methyl-		360	µg/kg
Benzene, 1-methyl-2-(2-phenylet		350	µg/kg
Pentatriacontane		1500	µg/kg
Eicosane		370	µg/kg
Hentriacontane		1000	µg/kg
Phenanthrene, dimethyl- (non-sp		920	µg/kg
Tetratricontane		1300	µg/kg
Tritriacontane		1100	µg/kg
Nonacosane		390	µg/kg
Phenanthrene, dimethyl- (non-sp		800	µg/kg
Pristane		560	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

Sample Number: 505875
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1112
Date Received: 6/29/2011
Date Completed: 08/17/2011
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Report Date: 8/17/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-3 (WASTE SAMPLE)

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Benzene, 1-methyl-2-(2-phenylethyl)-
Phenanthrene, dimethyl- (non-specific isomer #1)
Phenanthrene, dimethyl- (non-specific isomer #2)

* * ANALYST Cassandra Kontas

Sample Number: 505876
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1123
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		102.				
Acenaphthylene	<	1000	UG/KG	07/13/11	8270DM	
Acenaphthene	<	1000	UG/KG	07/13/11	8270DM	
Anthracene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(b)fluoranthene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(k)fluoranthene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(a)pyrene	<	1000	UG/KG	07/13/11	8270DM	
Bis(2-chloroethyl)ether	<	1000	UG/KG	07/13/11	8270DM	
Bis(2-chloroethoxy)methane	<	1000	UG/KG	07/13/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	1000	UG/KG	07/13/11	8270DM	
Butylbenzylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Chrysene	<	1000	UG/KG	07/13/11	8270DM	
Diethylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Dimethylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Fluoranthene	<	1000	UG/KG	07/13/11	8270DM	
Fluorene	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorocyclopentadiene	<	1000	UG/KG	07/13/11	8270DM	
Hexachloroethane	<	1000	UG/KG	07/13/11	8270DM	
Indeno(123cd)pyrene	<	1000	UG/KG	07/13/11	8270DM	
Isophorone	<	1000	UG/KG	07/13/11	8270DM	
Nitrosodipropylamine	<	1000	UG/KG	07/13/11	8270DM	
Nitrosodiphenylamine	<	1000	UG/KG	07/13/11	8270DM	
Naphthalene	<	1000	UG/KG	07/13/11	8270DM	
Nitrobenzene	<	1000	UG/KG	07/13/11	8270DM	
p-Chloro-m-cresol	<	1000	UG/KG	07/13/11	8270DM	
Phenanthrene	<	1000	UG/KG	07/13/11	8270DM	
Pyrene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(ghi)perylene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(a)anthracene	<	1000	UG/KG	07/13/11	8270DM	
Dibenzo(ah)anthracene	<	1000	UG/KG	07/13/11	8270DM	
2-Chloronaphthalene	<	1000	UG/KG	07/13/11	8270DM	
2-Chlorophenol	<	1000	UG/KG	07/13/11	8270DM	
2-Nitrophenol	<	1000	UG/KG	07/13/11	8270DM	

Sample Number: 505876
Project Code: SW-SE
Agency Number:
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Date Received: 6/29/2011
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Collected By: TD
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Location Code:
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Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dichlorophenol	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dimethylphenol	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dinitrotoluene	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dinitrophenol	<	5100	UG/KG	07/13/11	8270DM	
2,4,6-Trichlorophenol	<	5100	UG/KG	07/13/11	8270DM	
2,6-Dinitrotoluene	<	1000	UG/KG	07/13/11	8270DM	
3,3'-Dichlorobenzidine	<	2000	UG/KG	07/13/11	8270DM	
4-Bromophenylphenyl ether	<	1000	UG/KG	07/13/11	8270DM	
4-Chlorophenyl phenylether	<	1000	UG/KG	07/13/11	8270DM	
4-Nitrophenol	<	5100	UG/KG	07/13/11	8270DM	
4,6-Dinitro-o-cresol	<	5100	UG/KG	07/13/11	8270DM	
Phenol	<	1000	UG/KG	07/13/11	8270DM	
Pentachlorophenol	<	5100	UG/KG	07/13/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	1000	UG/KG	07/13/11	8270DM	
Di-n-butylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorobenzene	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorobutadiene	<	1000	UG/KG	07/13/11	8270DM	
Benzyl alcohol	<	1000	UG/KG	07/13/11	8270DM	
Dibenzofuran	<	1000	UG/KG	07/13/11	8270DM	
2-Methylphenol	<	1000	UG/KG	07/13/11	8270DM	
4-Methylphenol	<	1000	UG/KG	07/13/11	8270DM	
2,4,5-Trichlorophenol	<	5100	UG/KG	07/13/11	8270DM	
4-Chloroaniline	<	1000	UG/KG	07/13/11	8270DM	
2-Nitroaniline	<	5100	UG/KG	07/13/11	8270DM	
3-Nitroaniline	<	5100	UG/KG	07/13/11	8270DM	
4-Nitroaniline	<	5100	UG/KG	07/13/11	8270DM	
2-Methylnaphthalene	<	1000	UG/KG	07/13/11	8270DM	
% Moisture - GC/MS Lab		3.6	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
P-TERPHENYL-D14	89
2-FLUOROPHENOL	78

Sample Number: 505876
Project Code: SW-SE
Agency Number:
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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
NITROBENZENE-D5		72
2-FLUOROBIPHENYL		68
2,4,6-TRIBROMOPHENOL		76
PHENOL-D5		82

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-1 (WASTE SAMPLE)

ANALYST'S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas

Sample Number: 505877
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1130
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab:		34.6				
Acenaphthylene	<	350	UG/KG	07/13/11	8270DM	
Acenaphthene	<	350	UG/KG	07/13/11	8270DM	
Anthracene	<	350	UG/KG	07/13/11	8270DM	
Benzo(b)fluoranthene	<	350	UG/KG	07/13/11	8270DM	
Benzo(k)fluoranthene	<	350	UG/KG	07/13/11	8270DM	
Benzo(a)pyrene	<	350	UG/KG	07/13/11	8270DM	
Bis(2-chloroethyl)ether	<	350	UG/KG	07/13/11	8270DM	
Bis(2-chloroethoxy)methane	<	350	UG/KG	07/13/11	8270DM	
Bis(2-chloroisopropyl)ethe:	<	350	UG/KG	07/13/11	8270DM	
Butylbenzylphthalate	<	350	UG/KG	07/13/11	8270DM	
Chrysene	<	350	UG/KG	07/13/11	8270DM	
Diethylphthalate	<	350	UG/KG	07/13/11	8270DM	
Dimethylphthalate	<	350	UG/KG	07/13/11	8270DM	
Fluoranthene	<	350	UG/KG	07/13/11	8270DM	
Fluorene	<	350	UG/KG	07/13/11	8270DM	
Hexachlorocyclopentadiene	<	350	UG/KG	07/13/11	8270DM	
Hexachloroethane	<	350	UG/KG	07/13/11	8270DM	
Indeno(123cd)pyrene	<	350	UG/KG	07/13/11	8270DM	
Isophorone	<	350	UG/KG	07/13/11	8270DM	
Nitrosodipropylamine	<	350	UG/KG	07/13/11	8270DM	
Nitrosodiphenylamine	<	350	UG/KG	07/13/11	8270DM	
Naphthalene	<	350	UG/KG	07/13/11	8270DM	
Nitrobenzene	<	350	UG/KG	07/13/11	8270DM	
p-Chloro-m-cresol	<	350	UG/KG	07/13/11	8270DM	
Phenanthrene	<	350	UG/KG	07/13/11	8270DM	
Pyrene	<	350	UG/KG	07/13/11	8270DM	
Benzo(ghi)perylene	<	350	UG/KG	07/13/11	8270DM	
Benzo(a)anthracene	<	350	UG/KG	07/13/11	8270DM	
Dibenzo(ah)anthracene	<	350	UG/KG	07/13/11	8270DM	
2-Chloronaphthalene	<	350	UG/KG	07/13/11	8270DM	
2-Chlorophenol	<	350	UG/KG	07/13/11	8270DM	
2-Nitrophenol	<	350	UG/KG	07/13/11	8270DM	

Sample Number: 505877
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1130
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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	350	UG/KG	07/13/11	8270DM	
2,4-Dichlorophenol	<	350	UG/KG	07/13/11	8270DM	
2,4-Dimethylphenol	<	350	UG/KG	07/13/11	8270DM	
2,4-Dinitrotoluene	<	350	UG/KG	07/13/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/13/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/13/11	8270DM	
2,6-Dinitrotoluene	<	350	UG/KG	07/13/11	8270DM	
3,3'-Dichlorobenzidine	<	690	UG/KG	07/13/11	8270DM	
4-Bromophenylphenyl ether	<	350	UG/KG	07/13/11	8270DM	
4-Chlorophenyl phenylether	<	350	UG/KG	07/13/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/13/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/13/11	8270DM	
Phenol	<	350	UG/KG	07/13/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/13/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	350	UG/KG	07/13/11	8270DM	
Di-n-butylphthalate	<	350	UG/KG	07/13/11	8270DM	
Hexachlorobenzene	<	350	UG/KG	07/13/11	8270DM	
Hexachlorobutadiene	<	350	UG/KG	07/13/11	8270DM	
Benzyl alcohol	<	350	UG/KG	07/13/11	8270DM	
Dibenzofuran	<	350	UG/KG	07/13/11	8270DM	
2-Methylphenol	<	350	UG/KG	07/13/11	8270DM	
4-Methylphenol	<	350	UG/KG	07/13/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/13/11	8270DM	
4-Chloroaniline	<	350	UG/KG	07/13/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
2-Methylnaphthalene	<	350	UG/KG	07/13/11	8270DM	
% Moisture - GC/MS Lab		4.6	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2,4,6-TRIBROMOPHENOL	60
2-FLUOROBIPHENYL	73

Sample Number: 505877
Project Code: SW-SE
Agency Number:
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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
2-FLUOROPHENOL		56
PHENOL-D5		64
NITROBENZENE-D5		64
P-TERPHENYL-D14		92

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
OCTADECANOIC ACID, 2-HYDROXY-1-		2100	µG/KG

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-2 (WASTE SAMPLE)

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Octadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester

* * ANALYST Cassandra Kontas

Sample Number: 505878
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1140
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Report of Analysis by GCMS

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		173.				
Acenaphthylene	<	1700	UG/KG	08/04/11	8270DM	
Acenaphthene	<	1700	UG/KG	08/04/11	8270DM	
Anthracene	<	1700	UG/KG	08/04/11	8270DM	
Benzo(b)fluoranthene	<	1700	UG/KG	08/04/11	8270DM	
Benzo(k)fluoranthene	<	1700	UG/KG	08/04/11	8270DM	
Benzo(a)pyrene	<	1700	UG/KG	08/04/11	8270DM	
Bis(2-chloroethyl)ether	<	1700	UG/KG	08/04/11	8270DM	
Bis(2-chloroethoxy)methane	<	1700	UG/KG	08/04/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	1700	UG/KG	08/04/11	8270DM	
Butylbenzylphthalate	<	1700	UG/KG	08/04/11	8270DM	
Chrysene	<	1700	UG/KG	08/04/11	8270DM	
Diethylphthalate	<	1700	UG/KG	08/04/11	8270DM	
Dimethylphthalate	<	1700	UG/KG	08/04/11	8270DM	
Fluoranthene	<	1700	UG/KG	08/04/11	8270DM	
Fluorene	<	1700	UG/KG	08/04/11	8270DM	
Hexachlorocyclopentadiene	<	1700	UG/KG	08/04/11	8270DM	
Hexachloroethane	<	1700	UG/KG	08/04/11	8270DM	
Indeno(123cd)pyrene	<	1700	UG/KG	08/04/11	8270DM	
Isophorone	<	1700	UG/KG	08/04/11	8270DM	
Nitrosodipropylamine	<	1700	UG/KG	08/04/11	8270DM	
Nitrosodiphenylamine	<	1700	UG/KG	08/04/11	8270DM	
Naphthalene	<	1700	UG/KG	08/04/11	8270DM	
Nitrobenzene	<	1700	UG/KG	08/04/11	8270DM	
p-Chloro-m-cresol	<	1700	UG/KG	08/04/11	8270DM	
Phenanthrene	<	1700	UG/KG	08/04/11	8270DM	
Pyrene	J	3300	UG/KG	08/04/11	8270DM	
Benzo(ghi)perylene	<	1700	UG/KG	08/04/11	8270DM	
Benzo(a)anthracene	J	1800	UG/KG	08/04/11	8270DM	
Dibenzo(ah)anthracene	<	1700	UG/KG	08/04/11	8270DM	
2-Chloronaphthalene	<	1700	UG/KG	08/04/11	8270DM	
2-Chlorophenol	<	1700	UG/KG	08/04/11	8270DM	
2-Nitrophenol	<	1700	UG/KG	08/04/11	8270DM	

Sample Number: 505878
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1140
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Report Date: 8/17/2011

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Sample Receiving: (405) 702-1113

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EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	1700	UG/KG	08/04/11	8270DM	
2,4-Dichlorophenol	<	1700	UG/KG	08/04/11	8270DM	
2,4-Dimethylphenol	<	1700	UG/KG	08/04/11	8270DM	
2,4-Dinitrotoluene	<	1700	UG/KG	08/04/11	8270DM	
2,4-Dinitrophenol	<	8700	UG/KG	08/04/11	8270DM	
2,4,6-Trichlorophenol	<	8700	UG/KG	08/04/11	8270DM	
2,6-Dinitrotoluene	<	1700	UG/KG	08/04/11	8270DM	
3,3'-Dichlorobenzidine	<	3500	UG/KG	08/04/11	8270DM	
4-Bromophenylphenyl ether	<	1700	UG/KG	08/04/11	8270DM	
4-Chlorophenyl phenylether	<	1700	UG/KG	08/04/11	8270DM	
4-Nitrophenol	<	8700	UG/KG	08/04/11	8270DM	
4,6-Dinitro-o-cresol	<	8700	UG/KG	08/04/11	8270DM	
Phenol	<	1700	UG/KG	08/04/11	8270DM	
Pentachlorophenol	<	8700	UG/KG	08/04/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	1700	UG/KG	08/04/11	8270DM	
Di-n-butylphthalate	<	1700	UG/KG	08/04/11	8270DM	
Hexachlorobenzene	<	1700	UG/KG	08/04/11	8270DM	
Hexachlorobutadiene	<	1700	UG/KG	08/04/11	8270DM	
Benzyl alcohol	<	1700	UG/KG	08/04/11	8270DM	
Dibenzofuran	<	1700	UG/KG	08/04/11	8270DM	
2-Methylphenol	<	1700	UG/KG	08/04/11	8270DM	
4-Methylphenol	<	1700	UG/KG	08/04/11	8270DM	
2,4,5-Trichlorophenol	<	8700	UG/KG	08/04/11	8270DM	
4-Chloroaniline	<	1700	UG/KG	08/04/11	8270DM	
2-Nitroaniline	<	8700	UG/KG	08/04/11	8270DM	
3-Nitroaniline	<	8700	UG/KG	08/04/11	8270DM	
4-Nitroaniline	<	8700	UG/KG	08/04/11	8270DM	
2-Methylnaphthalene	<	1700	UG/KG	08/04/11	8270DM	
% Moisture - GC/MS Lab		2.4	%	08/04/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
NITROBENZENE-D5 (J)	44
2-FLUOROBIPHENYL (J)	49

Sample Number: 505878
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1140
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

COMPOUND	SURROGATE RECOVERIES	RECOVERY %
2-FLUOROPHENOL (J)		41
P-TERPHENYL-D14 (J)		48
PHENOL-D5 (J)		40
2,4,6-TRIBROMOPHENOL (J)		55

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Cyclopentadecane		2000	µg/kg
Tetratriacontane		6900	µg/kg
Tridecane, 7-propyl-		39000	µg/kg
Pentadecane, 2,6,10-trimethyl-		47000	µg/kg
Pentadecane, 7-methyl-		18000	µg/kg
Phytane		67000	µg/kg
Heptylcyclohexane		3100	µg/kg
methyl-substituted alkane		37000	µg/kg
Naphthalene, trimethyl- (non-sp		11000	µg/kg
Tridecane		3500	µg/kg
Hexatriacontane		11000	µg/kg
Tridecane, 3-methyl-		2200	µg/kg
Octane, 2,6-dimethyl-		3800	µg/kg
Tetradecane		6900	µg/kg
Dodecane, 2,6,10-trimethyl-		7900	µg/kg
Naphthalene, dimethyl- (non-spe		2200	µg/kg
Pristane		93000	µg/kg
Hexadecane		11000	µg/kg
Naphthalene, trimethyl- (non-sp		9100	µg/kg
Nonadecane		2900	µg/kg
Pentatriacontane		10000	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

Sample Number: 505878
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1140
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
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OKLAHOMA CITY
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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-4 (WASTE SAMPLE)

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(J) The associated value is an estimated quantity.
The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration.

Some "tentatively identified" compound names were truncated in the report table; their full names are:
Naphthalene, dimethyl- (non-specific isomer)
Naphthalene, trimethyl- (non-specific isomer #1)
Naphthalene, trimethyl- (non-specific isomer #2)

* * ANALYST Cassandra Kontas

Sample Number: 505879
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1252
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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707 N. ROBINSON
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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier		Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab			561.				
Acenaphthylene		<	5600	UG/KG	07/06/11	8270DM	
Acenaphthene		<	5600	UG/KG	07/06/11	8270DM	
Anthracene		<	5600	UG/KG	07/06/11	8270DM	
Benzo(b)fluoranthene	J		6600	UG/KG	07/06/11	8270DM	
Benzo(k)fluoranthene		<	5600	UG/KG	07/06/11	8270DM	
Benzo(a)pyrene	J		11000	UG/KG	07/06/11	8270DM	
Bis(2-chloroethyl)ether		<	5600	UG/KG	07/06/11	8270DM	
Bis(2-chloroethoxy)methane		<	5600	UG/KG	07/06/11	8270DM	
Bis(2-chloroisopropyl)ethe		<	5600	UG/KG	07/06/11	8270DM	
Butylbenzylphthalate		<	5600	UG/KG	07/06/11	8270DM	
Chrysene			34000	UG/KG	07/06/11	8270DM	
Diethylphthalate		<	5600	UG/KG	07/06/11	8270DM	
Dimethylphthalate		<	5600	UG/KG	07/06/11	8270DM	
Fluoranthene		<	5600	UG/KG	07/06/11	8270DM	
Fluorene		<	5600	UG/KG	07/06/11	8270DM	
Hexachlorocyclopentadiene		<	5600	UG/KG	07/06/11	8270DM	
Hexachloroethane		<	5600	UG/KG	07/06/11	8270DM	
Indeno(123cd)pyrene		<	5600	UG/KG	07/06/11	8270DM	
Isophorone		<	5600	UG/KG	07/06/11	8270DM	
Nitrosodipropylamine		<	5600	UG/KG	07/06/11	8270DM	
Nitrosodiphenylamine		<	5600	UG/KG	07/06/11	8270DM	
Naphthalene		<	5600	UG/KG	07/06/11	8270DM	
Nitrobenzene		<	5600	UG/KG	07/06/11	8270DM	
p-Chloro-m-cresol		<	5600	UG/KG	07/06/11	8270DM	
Phenanthrene		<	5600	UG/KG	07/06/11	8270DM	
Pyrene			12000	UG/KG	07/06/11	8270DM	
Benzo(ghi)perylene	J		6600	UG/KG	07/06/11	8270DM	
Benzo(a)anthracene			9200	UG/KG	07/06/11	8270DM	
Dibenzo(ah)anthracene		<	5600	UG/KG	07/06/11	8270DM	
2-Chloronaphthalene		<	5600	UG/KG	07/06/11	8270DM	
2-Chlorophenol		<	5600	UG/KG	07/06/11	8270DM	
2-Nitrophenol		<	5600	UG/KG	07/06/11	8270DM	

Sample Number: 505879
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1252
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
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Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	5600	UG/KG	07/06/11	8270DM	
2,4-Dichlorophenol	<	5600	UG/KG	07/06/11	8270DM	
2,4-Dimethylphenol	<	5600	UG/KG	07/06/11	8270DM	
2,4-Dinitrotoluene	<	5600	UG/KG	07/06/11	8270DM	
2,4-Dinitrophenol	<	28000	UG/KG	07/06/11	8270DM	
2,4,6-Trichlorophenol	<	28000	UG/KG	07/06/11	8270DM	
2,6-Dinitrotoluene	<	5600	UG/KG	07/06/11	8270DM	
3,3'-Dichlorobenzidine	<	11000	UG/KG	07/06/11	8270DM	
4-Bromophenylphenyl ether	<	5600	UG/KG	07/06/11	8270DM	
4-Chlorophenyl phenylether	<	5600	UG/KG	07/06/11	8270DM	
4-Nitrophenol	<	28000	UG/KG	07/06/11	8270DM	
4,6-Dinitro-o-cresol	<	28000	UG/KG	07/06/11	8270DM	
Phenol	<	5600	UG/KG	07/06/11	8270DM	
Pentachlorophenol	<	28000	UG/KG	07/06/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	5600	UG/KG	07/06/11	8270DM	
Di-n-butylphthalate	<	5600	UG/KG	07/06/11	8270DM	
Hexachlorobenzene	<	5600	UG/KG	07/06/11	8270DM	
Hexachlorobutadiene	<	5600	UG/KG	07/06/11	8270DM	
Benzyl alcohol	<	5600	UG/KG	07/06/11	8270DM	
Dibenzofuran	<	5600	UG/KG	07/06/11	8270DM	
2-Methylphenol	<	5600	UG/KG	07/06/11	8270DM	
4-Methylphenol	<	5600	UG/KG	07/06/11	8270DM	
2,4,5-Trichlorophenol	<	28000	UG/KG	07/06/11	8270DM	
4-Chloroaniline	<	5600	UG/KG	07/06/11	8270DM	
2-Nitroaniline	<	28000	UG/KG	07/06/11	8270DM	
3-Nitroaniline	<	28000	UG/KG	07/06/11	8270DM	
4-Nitroaniline	<	28000	UG/KG	07/06/11	8270DM	
2-Methylnaphthalene	<	5600	UG/KG	07/06/11	8270DM	
% Moisture - GC/MS Lab		15.	%	07/06/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2,4,6-TRIBROMOPHENOL	67
PHENOL-D5	61

Sample Number: 505879
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1252
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
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Report Date: 8/17/2011

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
P-TERPHENYL-D14		62
NITROBENZENE-D5		63
2-FLUOROPHENOL		58
2-FLUOROBIPHENYL		62

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
PHENOL, O-(ALPHA-, ALPHA-DIMETH		86000	µg/kg
Phenol, 4-(1-methyl-1-phenyleth		340000	µg/kg
1H-Indene, 2,3-dihydro-1,1,3-tr		33000	µg/kg
Benzo[c]phenanthrene, dimethyl-		50000	µg/kg
Phenanthrene, trimethyl- (non-s		24000	µg/kg
Pyrene, dimethyl- (non-specific		16000	µg/kg
Pyrene, methyl- (non-specific i		24000	µg/kg
Benzo[c]phenanthrene, dimethyl-		11000	µg/kg
Phenanthrene, 3,4,5,6-tetrameth		19000	µg/kg
Pyrene, methyl- (non-specific i		17000	µg/kg
Phenanthrene, dimethyl- (non-sp		40000	µg/kg
Pyrene, dimethyl- (non-specific		23000	µg/kg
Pyrene, methyl- (non-specific i		23000	µg/kg
UNKNOWN		17000	µG/KG
Benz[a]anthracene, 7-methyl-		46000	µg/kg
2,4-Diphenyl-4-methyl-1-pentene		230000	µg/kg
2,4-Diphenyl-4-methyl-2(E)-pent		280000	µg/kg
Benzo[c]phenanthrene, dimethyl-		21000	µg/kg
Phenanthrene, trimethyl- (non-s		19000	µg/kg
Pyrene, dimethyl- (non-specific		22000	µg/kg
Pyrene, dimethyl- (non-specific		18000	µg/kg
Benzo[c]phenanthrene, dimethyl-		15000	µg/kg
Phenanthrene, trimethyl- (non-s		34000	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

Sample Number: 505879
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1252
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-8

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(J) The associated value is an estimated quantity.
The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration.

Some "tentatively identified" compound names were truncated in the report table; their full names are:
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-3-phenyl-
2,4-Diphenyl-4-methyl-2(E)-pentene
Benzo[c]phenanthrene, dimethyl- (non-specific isomer #1)
Benzo[c]phenanthrene, dimethyl- (non-specific isomer #2)
Benzo[c]phenanthrene, dimethyl- (non-specific isomer #3)
Benzo[c]phenanthrene, dimethyl- (non-specific isomer #4)
Phenanthrene, 3,4,5,6-tetramethyl-
Phenanthrene, dimethyl- (non-specific isomer)
Phenanthrene, trimethyl- (non-specific isomer #1)
Phenanthrene, trimethyl- (non-specific isomer #2)
Phenanthrene, trimethyl- (non-specific isomer #3)
Phenol, 4-(1-methyl-1-phenylethyl)-
Phenol, o-(alpha-, alpha-dimethylbenzyl)-
Pyrene, dimethyl- (non-specific isomer #1)
Pyrene, dimethyl- (non-specific isomer #2)
Pyrene, dimethyl- (non-specific isomer #3)
Pyrene, dimethyl- (non-specific isomer #4)
Pyrene, dimethyl- (non-specific isomer #5)
Pyrene, methyl- (non-specific isomer #1)
Pyrene, methyl- (non-specific isomer #2)
Pyrene, methyl- (non-specific isomer #3)

* * ANALYST Cassandra Kontas

Samp[redacted] Number: 505880
Proje[redacted] Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1310
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		362.				
Acenaphthylene	<	3600	UG/KG	07/20/11	8270DM	
Acenaphthene	<	3600	UG/KG	07/20/11	8270DM	
Anthracene	<	3600	UG/KG	07/20/11	8270DM	
Benzo(b)fluoranthene	<	3600	UG/KG	07/20/11	8270DM	
Benzo(k)fluoranthene	<	3600	UG/KG	07/20/11	8270DM	
Benzo(a)pyrene	<	3600	UG/KG	07/20/11	8270DM	
Bis(2-chloroethyl)ether	<	3600	UG/KG	07/20/11	8270DM	
Bis(2-chloroethoxy)methane	<	3600	UG/KG	07/20/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	3600	UG/KG	07/20/11	8270DM	
Butylbenzylphthalate	<	3600	UG/KG	07/20/11	8270DM	
Chrysene	<	3600	UG/KG	07/20/11	8270DM	
Diethylphthalate	<	3600	UG/KG	07/20/11	8270DM	
Dimethylphthalate	<	3600	UG/KG	07/20/11	8270DM	
Fluoranthene	<	3600	UG/KG	07/20/11	8270DM	
Fluorene	<	3600	UG/KG	07/20/11	8270DM	
Hexachlorocyclopentadiene	<	3600	UG/KG	07/20/11	8270DM	
Hexachloroethane	<	3600	UG/KG	07/20/11	8270DM	
Indeno(123cd)pyrene	<	3600	UG/KG	07/20/11	8270DM	
Isophorone	<	3600	UG/KG	07/20/11	8270DM	
Nitrosodipropylamine	<	3600	UG/KG	07/20/11	8270DM	
Nitrosodiphenylamine	<	3600	UG/KG	07/20/11	8270DM	
Naphthalene	<	3600	UG/KG	07/20/11	8270DM	
Nitrobenzene	<	3600	UG/KG	07/20/11	8270DM	
p-Chloro-m-cresol	<	3600	UG/KG	07/20/11	8270DM	
Phenanthrene	<	3600	UG/KG	07/20/11	8270DM	
Pyrene	<	3600	UG/KG	07/20/11	8270DM	
Benzo(ghi)perylene	<	3600	UG/KG	07/20/11	8270DM	
Benzo(a)anthracene	<	3600	UG/KG	07/20/11	8270DM	
Dibenzo(ah)anthracene	<	3600	UG/KG	07/20/11	8270DM	
2-Chloronaphthalene	<	3600	UG/KG	07/20/11	8270DM	
2-Chlorophenol	<	3600	UG/KG	07/20/11	8270DM	
2-Nitrophenol	<	3600	UG/KG	07/20/11	8270DM	

Sample Number: 505880
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1310
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
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To: TODD DOWNHAM/LPD

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	3600	UG/KG	07/20/11	8270DM	
2,4-Dichlorophenol	<	3600	UG/KG	07/20/11	8270DM	
2,4-Dimethylphenol	<	3600	UG/KG	07/20/11	8270DM	
2,4-Dinitrotoluene	<	3600	UG/KG	07/20/11	8270DM	
2,4-Dinitrophenol	<	18000	UG/KG	07/20/11	8270DM	
2,4,6-Trichlorophenol	<	18000	UG/KG	07/20/11	8270DM	
2,6-Dinitrotoluene	<	3600	UG/KG	07/20/11	8270DM	
3,3'-Dichlorobenzidine	<	7200	UG/KG	07/20/11	8270DM	
4-Bromophenylphenyl ether	<	3600	UG/KG	07/20/11	8270DM	
4-Chlorophenyl phenylether	<	3600	UG/KG	07/20/11	8270DM	
4-Nitrophenol	<	18000	UG/KG	07/20/11	8270DM	
4,6-Dinitro-o-cresol	<	18000	UG/KG	07/20/11	8270DM	
Phenol	<	3600	UG/KG	07/20/11	8270DM	
Pentachlorophenol	<	18000	UG/KG	07/20/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	3600	UG/KG	07/20/11	8270DM	
Di-n-butylphthalate	<	3600	UG/KG	07/20/11	8270DM	
Hexachlorobenzene	<	3600	UG/KG	07/20/11	8270DM	
Hexachlorobutadiene	<	3600	UG/KG	07/20/11	8270DM	
Benzyl alcohol	<	3600	UG/KG	07/20/11	8270DM	
Dibenzofuran	<	3600	UG/KG	07/20/11	8270DM	
2-Methylphenol	<	3600	UG/KG	07/20/11	8270DM	
4-Methylphenol	<	3600	UG/KG	07/20/11	8270DM	
2,4,5-Trichlorophenol	<	18000	UG/KG	07/20/11	8270DM	
4-Chloroaniline	<	3600	UG/KG	07/20/11	8270DM	
2-Nitroaniline	<	18000	UG/KG	07/20/11	8270DM	
3-Nitroaniline	<	18000	UG/KG	07/20/11	8270DM	
4-Nitroaniline	<	18000	UG/KG	07/20/11	8270DM	
2-Methylnaphthalene	<	3600	UG/KG	07/20/11	8270DM	
% Moisture - GC/MS Lab		8.1	%	07/20/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROBIPHENYL	88
2,4,6-TRIBROMOPHENOL	81

Sample Number: 505880
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
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EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
2-FLUOROPHENOL		78
PHENOL-D5		79
P-TERPHENYL-D14		86
NITROBENZENE-D5		91

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
28-Nor-17-alpha(H)-hopane		3800	µg/kg
Benzenethiol, 2-methyl-		5600	µg/kg
PENTADECANE, METHYL- (NON-SPECI		8600	µg/kg
Pentadecane, 2,6,10-trimethyl-		9000	µg/kg
Phytane		7400	µg/kg
Tridecane, 7-propyl-		4400	µg/kg
Dodecane, 2,6,10-trimethyl-		4800	µg/kg
Pentatriacontane		7600	µg/kg
Pristane		15000	µg/kg
Heptatriacontane		9900	µg/kg
unknown #2		4700	µg/kg
HEXADECANOIC ACID, 2-HYDROXY-1-		23000	µG/KG
Disulfide, bis(4-methylphenyl)		6700	µg/kg
Hexatriacontane		9100	µg/kg
Tetratriacontane		6100	µg/kg
unknown #1		4100	µg/kg
Tetradecane, 2,6,10-trimethyl-		3000	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

Sample Number: 505880
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1310
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
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Report Date: 8/17/2011

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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-6

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester

Pentadecane, methyl- (non-specific isomer)

* * ANALYST Cassandra Kontas

Sample Number: 505881
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1315
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		351.				
Acenaphthylene	<	3500	UG/KG	07/22/11	8270DM	
Acenaphthene	<	3500	UG/KG	07/22/11	8270DM	
Anthracene	<	3500	UG/KG	07/22/11	8270DM	
Benzo(b)fluoranthene	<	3500	UG/KG	07/22/11	8270DM	
Benzo(k)fluoranthene	<	3500	UG/KG	07/22/11	8270DM	
Benzo(a)pyrene	<	3500	UG/KG	07/22/11	8270DM	
Bis(2-chloroethyl)ether	<	3500	UG/KG	07/22/11	8270DM	
Bis(2-chloroethoxy)methane	<	3500	UG/KG	07/22/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	3500	UG/KG	07/22/11	8270DM	
Butylbenzylphthalate	<	3500	UG/KG	07/22/11	8270DM	
Chrysene	<	3500	UG/KG	07/22/11	8270DM	
Diethylphthalate	<	3500	UG/KG	07/22/11	8270DM	
Dimethylphthalate	<	3500	UG/KG	07/22/11	8270DM	
Fluoranthene	<	3500	UG/KG	07/22/11	8270DM	
Fluorene	<	3500	UG/KG	07/22/11	8270DM	
Hexachlorocyclopentadiene	<	3500	UG/KG	07/22/11	8270DM	
Hexachloroethane	<	3500	UG/KG	07/22/11	8270DM	
Indeno(123cd)pyrene	<	3500	UG/KG	07/22/11	8270DM	
Isophorone	<	3500	UG/KG	07/22/11	8270DM	
Nitrosodipropylamine	<	3500	UG/KG	07/22/11	8270DM	
Nitrosodiphenylamine	<	3500	UG/KG	07/22/11	8270DM	
Naphthalene	<	3500	UG/KG	07/22/11	8270DM	
Nitrobenzene	<	3500	UG/KG	07/22/11	8270DM	
p-Chloro-m-cresol	<	3500	UG/KG	07/22/11	8270DM	
Phenanthrene	<	3500	UG/KG	07/22/11	8270DM	
Pyrene	<	3500	UG/KG	07/22/11	8270DM	
Benzo(ghi)perylene	<	3500	UG/KG	07/22/11	8270DM	
Benzo(a)anthracene	<	3500	UG/KG	07/22/11	8270DM	
Dibenzo(ah)anthracene	<	3500	UG/KG	07/22/11	8270DM	
2-Chloronaphthalene	<	3500	UG/KG	07/22/11	8270DM	
2-Chlorophenol	<	3500	UG/KG	07/22/11	8270DM	
2-Nitrophenol	<	3500	UG/KG	07/22/11	8270DM	

Sample Number: 505881
Project Code: SW-SE
Agency Number:
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EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	3500	UG/KG	07/22/11	8270DM	
2,4-Dichlorophenol	<	3500	UG/KG	07/22/11	8270DM	
2,4-Dimethylphenol	<	3500	UG/KG	07/22/11	8270DM	
2,4-Dinitrotoluene	<	3500	UG/KG	07/22/11	8270DM	
2,4-Dinitrophenol	<	18000	UG/KG	07/22/11	8270DM	
2,4,6-Trichlorophenol	<	18000	UG/KG	07/22/11	8270DM	
2,6-Dinitrotoluene	<	3500	UG/KG	07/22/11	8270DM	
3,3'-Dichlorobenzidine	<	7000	UG/KG	07/22/11	8270DM	
4-Bromophenylphenyl ether	<	3500	UG/KG	07/22/11	8270DM	
4-Chlorophenyl phenylether	<	3500	UG/KG	07/22/11	8270DM	
4-Nitrophenol	<	18000	UG/KG	07/22/11	8270DM	
4,6-Dinitro-o-cresol	<	18000	UG/KG	07/22/11	8270DM	
Phenol	<	3500	UG/KG	07/22/11	8270DM	
Pentachlorophenol	<	18000	UG/KG	07/22/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	3500	UG/KG	07/22/11	8270DM	
Di-n-butylphthalate	<	3500	UG/KG	07/22/11	8270DM	
Hexachlorobenzene	<	3500	UG/KG	07/22/11	8270DM	
Hexachlorobutadiene	<	3500	UG/KG	07/22/11	8270DM	
Benzyl alcohol	<	3500	UG/KG	07/22/11	8270DM	
Dibenzofuran	<	3500	UG/KG	07/22/11	8270DM	
2-Methylphenol	<	3500	UG/KG	07/22/11	8270DM	
4-Methylphenol	<	3500	UG/KG	07/22/11	8270DM	
2,4,5-Trichlorophenol	<	18000	UG/KG	07/22/11	8270DM	
4-Chloroaniline	<	3500	UG/KG	07/22/11	8270DM	
2-Nitroaniline	<	18000	UG/KG	07/22/11	8270DM	
3-Nitroaniline	<	18000	UG/KG	07/22/11	8270DM	
4-Nitroaniline	<	18000	UG/KG	07/22/11	8270DM	
2-Methylnaphthalene	<	3500	UG/KG	07/22/11	8270DM	
% Moisture - GC/MS Lab		5.3	%	07/22/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2,4,6-TRIBROMOPHENOL	94
P-TERPHENYL-D14	113

Sample Number: 505881
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1315
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
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Location Code:
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Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

COMPOUND	SURROGATE RECOVERIES	RECOVERY %
NITROBENZENE-D5		111
2-FLUOROBIPHENYL		115
2-FLUOROPHENOL		90
PHENOL-D5		96

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Heptadecane, 4-methyl-		3800	µg/kg
Heptatriacontane		7800	µg/kg
methyl-pentadecane		10000	µg/kg
Tridecane, 7-propyl-		5100	µg/kg
HEXADECANOIC ACID, 2-HYDROXY-1-		31000	µG/KG
Pentadecane, 2,6,10-trimethyl-		11000	µg/kg
unknown #2		5500	µg/kg
Hexatriacontane		8400	µg/kg
Phytane		9700	µg/kg
Pristane		19000	µg/kg
Dodecane, 2,6,10-trimethyl-		5800	µg/kg
Pentatriacontane		9700	µg/kg
unknown #1		4800	µg/kg
Disulfide, bis(4-methylphenyl)		6800	µg/kg
Tetradecane, 2,6,10-trimethyl-		3500	µg/kg
Tritriacontane		4000	µg/kg
Benzenethiol, 2-methyl-		6500	µg/kg
Tetratriacontane		7600	µg/kg
unknown #3		3800	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

Sample Number: 505881
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1315
Date Received: 6/29/2011
Date Completed: 08/17/2011
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PWS Id:
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Report Date: 8/17/2011

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OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-7

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester

* * ANALYST Cassandra Kontas

Sample Number: 505882
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1321
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

To: TODD DOWNHAM/LPD

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OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		34.9				
Acenaphthylene	<	350	UG/KG	07/06/11	8270DM	
Acenaphthene	<	350	UG/KG	07/06/11	8270DM	
Anthracene	<	350	UG/KG	07/06/11	8270DM	
Benzo(b)fluoranthene	<	350	UG/KG	07/06/11	8270DM	
Benzo(k)fluoranthene	<	350	UG/KG	07/06/11	8270DM	
Benzo(a)pyrene	<	350	UG/KG	07/06/11	8270DM	
Bis(2-chloroethyl)ether	<	350	UG/KG	07/06/11	8270DM	
Bis(2-chloroethoxy)methane	<	350	UG/KG	07/06/11	8270DM	
Bis(2-chloroisopropyl)ethe:	<	350	UG/KG	07/06/11	8270DM	
Butylbenzylphthalate	<	350	UG/KG	07/06/11	8270DM	
Chrysene	<	350	UG/KG	07/06/11	8270DM	
Diethylphthalate	<	350	UG/KG	07/06/11	8270DM	
Dimethylphthalate	<	350	UG/KG	07/06/11	8270DM	
Fluoranthene	<	350	UG/KG	07/06/11	8270DM	
Fluorene	<	350	UG/KG	07/06/11	8270DM	
Hexachlorocyclopentadiene	<	350	UG/KG	07/06/11	8270DM	
Hexachloroethane	<	350	UG/KG	07/06/11	8270DM	
Indeno(123cd)pyrene	<	350	UG/KG	07/06/11	8270DM	
Isophorone	<	350	UG/KG	07/06/11	8270DM	
Nitrosodipropylamine	<	350	UG/KG	07/06/11	8270DM	
Nitrosodiphenylamine	<	350	UG/KG	07/06/11	8270DM	
Naphthalene	<	350	UG/KG	07/06/11	8270DM	
Nitrobenzene	<	350	UG/KG	07/06/11	8270DM	
p-Chloro-m-cresol	<	350	UG/KG	07/06/11	8270DM	
Phenanthrene	<	350	UG/KG	07/06/11	8270DM	
Pyrene	<	350	UG/KG	07/06/11	8270DM	
Benzo(ghi)perylene	<	350	UG/KG	07/06/11	8270DM	
Benzo(a)anthracene	<	350	UG/KG	07/06/11	8270DM	
Dibenzo(ah)anthracene	<	350	UG/KG	07/06/11	8270DM	
2-Chloronaphthalene	<	350	UG/KG	07/06/11	8270DM	
2-Chlorophenol	<	350	UG/KG	07/06/11	8270DM	
2-Nitrophenol	<	350	UG/KG	07/06/11	8270DM	

Sample Number: 505882
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1321
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

To: TODD DOWNHAM/LPD

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OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	350	UG/KG	07/06/11	8270DM	
2,4-Dichlorophenol	<	350	UG/KG	07/06/11	8270DM	
2,4-Dimethylphenol	<	350	UG/KG	07/06/11	8270DM	
2,4-Dinitrotoluene	<	350	UG/KG	07/06/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/06/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/06/11	8270DM	
2,6-Dinitrotoluene	<	350	UG/KG	07/06/11	8270DM	
3,3'-Dichlorobenzidine	<	700	UG/KG	07/06/11	8270DM	
4-Bromophenylphenyl ether	<	350	UG/KG	07/06/11	8270DM	
4-Chlorophenyl phenylether	<	350	UG/KG	07/06/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/06/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/06/11	8270DM	
Phenol	<	350	UG/KG	07/06/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/06/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	350	UG/KG	07/06/11	8270DM	
Di-n-butylphthalate	<	350	UG/KG	07/06/11	8270DM	
Hexachlorobenzene	<	350	UG/KG	07/06/11	8270DM	
Hexachlorobutadiene	<	350	UG/KG	07/06/11	8270DM	
Benzyl alcohol	<	350	UG/KG	07/06/11	8270DM	
Dibenzofuran	<	350	UG/KG	07/06/11	8270DM	
2-Methylphenol	<	350	UG/KG	07/06/11	8270DM	
4-Methylphenol	<	350	UG/KG	07/06/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/06/11	8270DM	
4-Chloroaniline	<	350	UG/KG	07/06/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/06/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/06/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/06/11	8270DM	
2-Methylnaphthalene	<	350	UG/KG	07/06/11	8270DM	
% Moisture - GC/MS Lab		4.76	%		1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
NITROBENZENE-D5	73
2-FLUOROPHENOL	59

Sample Number: 505882
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1321
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
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Facility:
Report Date: 9/7/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
2-FLUOROBIPHENYL		69
2,4,6-TRIBROMOPHENOL		60
P-TERPHENYL-D14		74
PHENOL-D5		64

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-5

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas

Sample Number: 505883
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1332
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Report of Analysis by GCMS

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		100.				
Acenaphthylene	<	1000	UG/KG	07/13/11	8270DM	
Acenaphthene	<	1000	UG/KG	07/13/11	8270DM	
Anthracene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(b)fluoranthene		1100	UG/KG	07/13/11	8270DM	
Benzo(k)fluoranthene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(a)pyrene		1200	UG/KG	07/13/11	8270DM	
Bis(2-chloroethyl)ether	<	1000	UG/KG	07/13/11	8270DM	
Bis(2-chloroethoxy)methane	<	1000	UG/KG	07/13/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	1000	UG/KG	07/13/11	8270DM	
Butylbenzylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Chrysene		2800	UG/KG	07/13/11	8270DM	
Diethylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Dimethylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Fluoranthene	<	1000	UG/KG	07/13/11	8270DM	
Fluorene	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorocyclopentadiene	<	1000	UG/KG	07/13/11	8270DM	
Hexachloroethane	<	1000	UG/KG	07/13/11	8270DM	
Indeno(123cd)pyrene	<	1000	UG/KG	07/13/11	8270DM	
Isophorone	<	1000	UG/KG	07/13/11	8270DM	
Nitrosodipropylamine	<	1000	UG/KG	07/13/11	8270DM	
Nitrosodiphenylamine	<	1000	UG/KG	07/13/11	8270DM	
Naphthalene	<	1000	UG/KG	07/13/11	8270DM	
Nitrobenzene	<	1000	UG/KG	07/13/11	8270DM	
p-Chloro-m-cresol	<	1000	UG/KG	07/13/11	8270DM	
Phenanthrene		2700	UG/KG	07/13/11	8270DM	
Pyrene		2800	UG/KG	07/13/11	8270DM	
Benzo(ghi)perylene		3200	UG/KG	07/13/11	8270DM	
Benzo(a)anthracene		1500	UG/KG	07/13/11	8270DM	
Dibenzo(ah)anthracene	<	1000	UG/KG	07/13/11	8270DM	
2-Chloronaphthalene	<	1000	UG/KG	07/13/11	8270DM	
2-Chlorophenol	<	1000	UG/KG	07/13/11	8270DM	
2-Nitrophenol	<	1000	UG/KG	07/13/11	8270DM	

Sample Number: 505883
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1332
Date Received: 6/29/2011
Date Completed: 08/17/2011
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PWS Id:
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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dichlorophenol	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dimethylphenol	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dinitrotoluene	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dinitrophenol	<	5000	UG/KG	07/13/11	8270DM	
2,4,6-Trichlorophenol	<	5000	UG/KG	07/13/11	8270DM	
2,6-Dinitrotoluene	<	1000	UG/KG	07/13/11	8270DM	
3,3'-Dichlorobenzidine	<	2000	UG/KG	07/13/11	8270DM	
4-Bromophenylphenyl ether	<	1000	UG/KG	07/13/11	8270DM	
4-Chlorophenyl phenylether	<	1000	UG/KG	07/13/11	8270DM	
4-Nitrophenol	<	5000	UG/KG	07/13/11	8270DM	
4,6-Dinitro-o-cresol	<	5000	UG/KG	07/13/11	8270DM	
Phenol	<	1000	UG/KG	07/13/11	8270DM	
Pentachlorophenol	<	5000	UG/KG	07/13/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	1000	UG/KG	07/13/11	8270DM	
Di-n-butylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorobenzene	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorobutadiene	<	1000	UG/KG	07/13/11	8270DM	
Benzyl alcohol	<	1000	UG/KG	07/13/11	8270DM	
Dibenzofuran	<	1000	UG/KG	07/13/11	8270DM	
2-Methylphenol	<	1000	UG/KG	07/13/11	8270DM	
4-Methylphenol	<	1000	UG/KG	07/13/11	8270DM	
2,4,5-Trichlorophenol	<	5000	UG/KG	07/13/11	8270DM	
4-Chloroaniline	<	1000	UG/KG	07/13/11	8270DM	
2-Nitroaniline	<	5000	UG/KG	07/13/11	8270DM	
3-Nitroaniline	<	5000	UG/KG	07/13/11	8270DM	
4-Nitroaniline	<	5000	UG/KG	07/13/11	8270DM	
2-Methylnaphthalene	<	1000	UG/KG	07/13/11	8270DM	
% Moisture - GC/MS Lab		0.6	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2,4,6-TRIBROMOPHENOL	52
2-FLUOROPHENOL	44

Sample Number: 505883
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1332
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
NITROBENZENE-D5		50
2-FLUOROBIPHENYL		54
PHENOL-D5		41
P-TERPHENYL-D14		60

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Anthracene, 1-methyl-		1100	µg/kg
Phenanthrene, 1-methyl-		2200	µg/kg
PYRENE, METHYL- (NON-SPECIFIC I		1100	µg/kg
Phenanthrene, 2-methyl-		1600	µg/kg
PYRENE, METHYL- (NON-SPECIFIC I		1700	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-4

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Pyrene, methyl- (non-specific isomer #1)
Pyrene, methyl- (non-specific isomer #2)

* * ANALYST Cassandra Kontas

Sample Number: 505884
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1341
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		99.6				
Acenaphthylene	<	1000	UG/KG	08/04/11	8270DM	
Acenaphthene	<	1000	UG/KG	08/04/11	8270DM	
Anthracene	<	1000	UG/KG	08/04/11	8270DM	
Benzo(b)fluoranthene	<	1000	UG/KG	08/04/11	8270DM	
Benzo(k)fluoranthene	<	1000	UG/KG	08/04/11	8270DM	
Benzo(a)pyrene	<	1000	UG/KG	08/04/11	8270DM	
Bis(2-chloroethyl)ether	<	1000	UG/KG	08/04/11	8270DM	
Bis(2-chloroethoxy)methane	<	1000	UG/KG	08/04/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	1000	UG/KG	08/04/11	8270DM	
Butylbenzylphthalate	<	1000	UG/KG	08/04/11	8270DM	
Chrysene		1900	UG/KG	08/04/11	8270DM	
Diethylphthalate	<	1000	UG/KG	08/04/11	8270DM	
Dimethylphthalate	<	1000	UG/KG	08/04/11	8270DM	
Fluoranthene	<	1000	UG/KG	08/04/11	8270DM	
Fluorene	<	1000	UG/KG	08/04/11	8270DM	
Hexachlorocyclopentadiene	<	1000	UG/KG	08/04/11	8270DM	
Hexachloroethane	<	1000	UG/KG	08/04/11	8270DM	
Indeno(123cd)pyrene	<	1000	UG/KG	08/04/11	8270DM	
Isophorone	<	1000	UG/KG	08/04/11	8270DM	
Nitrosodipropylamine	<	1000	UG/KG	08/04/11	8270DM	
Nitrosodiphenylamine	<	1000	UG/KG	08/04/11	8270DM	
Naphthalene	<	1000	UG/KG	08/04/11	8270DM	
Nitrobenzene	<	1000	UG/KG	08/04/11	8270DM	
p-Chloro-m-cresol	<	1000	UG/KG	08/04/11	8270DM	
Phenanthrene		2900	UG/KG	08/04/11	8270DM	
Pyrene		2000	UG/KG	08/04/11	8270DM	
Benzo(ghi)perylene		1000	UG/KG	08/04/11	8270DM	
Benzo(a)anthracene		1100	UG/KG	08/04/11	8270DM	
Dibenzo(ah)anthracene	<	1000	UG/KG	08/04/11	8270DM	
2-Chloronaphthalene	<	1000	UG/KG	08/04/11	8270DM	
2-Chlorophenol	<	1000	UG/KG	08/04/11	8270DM	
2-Nitrophenol	<	1000	UG/KG	08/04/11	8270DM	

Sample Number: 505884
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1341
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
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Report Date: 8/17/2011

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	1000	UG/KG	08/04/11	8270DM	
2,4-Dichlorophenol	<	1000	UG/KG	08/04/11	8270DM	
2,4-Dimethylphenol	<	1000	UG/KG	08/04/11	8270DM	
2,4-Dinitrotoluene	<	1000	UG/KG	08/04/11	8270DM	
2,4-Dinitrophenol	<	5000	UG/KG	08/04/11	8270DM	
2,4,6-Trichlorophenol	<	5000	UG/KG	08/04/11	8270DM	
2,6-Dinitrotoluene	<	1000	UG/KG	08/04/11	8270DM	
3,3'-Dichlorobenzidine	<	2000	UG/KG	08/04/11	8270DM	
4-Bromophenylphenyl ether	<	1000	UG/KG	08/04/11	8270DM	
4-Chlorophenyl phenylether	<	1000	UG/KG	08/04/11	8270DM	
4-Nitrophenol	<	5000	UG/KG	08/04/11	8270DM	
4,6-Dinitro-o-cresol	<	5000	UG/KG	08/04/11	8270DM	
Phenol	<	1000	UG/KG	08/04/11	8270DM	
Pentachlorophenol	<	5000	UG/KG	08/04/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	1000	UG/KG	08/04/11	8270DM	
Di-n-butylphthalate	<	1000	UG/KG	08/04/11	8270DM	
Hexachlorobenzene	<	1000	UG/KG	08/04/11	8270DM	
Hexachlorobutadiene	<	1000	UG/KG	08/04/11	8270DM	
Benzyl alcohol	<	1000	UG/KG	08/04/11	8270DM	
Dibenzofuran	<	1000	UG/KG	08/04/11	8270DM	
2-Methylphenol	<	1000	UG/KG	08/04/11	8270DM	
4-Methylphenol	<	1000	UG/KG	08/04/11	8270DM	
2,4,5-Trichlorophenol	<	5000	UG/KG	08/04/11	8270DM	
4-Chloroaniline	<	1000	UG/KG	08/04/11	8270DM	
2-Nitroaniline	<	5000	UG/KG	08/04/11	8270DM	
3-Nitroaniline	<	5000	UG/KG	08/04/11	8270DM	
4-Nitroaniline	<	5000	UG/KG	08/04/11	8270DM	
2-Methylnaphthalene	<	1000	UG/KG	08/04/11	8270DM	
% Moisture - GC/MS Lab		1.1	%	08/04/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROBIPHENYL	89
PHENOL-D5	76

Sample Number: 505884
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1341
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
NITROBENZENE-D5		86
P-TERPHENYL-D14		80
2-FLUOROPHENOL		71
2,4,6-TRIBROMOPHENOL		104

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Benz[a]anthracene, 7-methyl-		1300	µg/kg
Phenanthrene, 2-methyl-		1700	µg/kg
Napththalene, 2-phenyl-		1600	µg/kg
Pyrene, methyl- (non-specific i		1100	µg/kg
Phenanthrene, 1-methyl-		2600	µg/kg
Benzo[e]pyrene		1600	µg/kg
Octadecanoic acid, 2-hydroxy-1-		5300	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

Sample Number: 505884
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1341
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
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Report Date: 8/17/2011

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707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-3

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Octadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester

Pyrene, methyl- (non-specific isomer)

* * ANALYST Cassandra Kontas

Sample Number: 505885
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1351
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		34.4				
Acenaphthylene	<	340	UG/KG	07/13/11	8270DM	
Acenaphthene	<	340	UG/KG	07/13/11	8270DM	
Anthracene	<	340	UG/KG	07/13/11	8270DM	
Benzo(b)fluoranthene	<	340	UG/KG	07/13/11	8270DM	
Benzo(k)fluoranthene	<	340	UG/KG	07/13/11	8270DM	
Benzo(a)pyrene	<	340	UG/KG	07/13/11	8270DM	
Bis(2-chloroethyl)ether	<	340	UG/KG	07/13/11	8270DM	
Bis(2-chloroethoxy)methane	<	340	UG/KG	07/13/11	8270DM	
Bis(2-chloroisopropyl)ethe:	<	340	UG/KG	07/13/11	8270DM	
Butylbenzylphthalate	<	340	UG/KG	07/13/11	8270DM	
Chrysene	<	340	UG/KG	07/13/11	8270DM	
Diethylphthalate	<	340	UG/KG	07/13/11	8270DM	
Dimethylphthalate	<	340	UG/KG	07/13/11	8270DM	
Fluoranthene	<	340	UG/KG	07/13/11	8270DM	
Fluorene	<	340	UG/KG	07/13/11	8270DM	
Hexachlorocyclopentadiene	<	340	UG/KG	07/13/11	8270DM	
Hexachloroethane	<	340	UG/KG	07/13/11	8270DM	
Indeno(123cd)pyrene	<	340	UG/KG	07/13/11	8270DM	
Isophorone	<	340	UG/KG	07/13/11	8270DM	
Nitrosodipropylamine	<	340	UG/KG	07/13/11	8270DM	
Nitrosodiphenylamine	<	340	UG/KG	07/13/11	8270DM	
Naphthalene	<	340	UG/KG	07/13/11	8270DM	
Nitrobenzene	<	340	UG/KG	07/13/11	8270DM	
p-Chloro-m-cresol	<	340	UG/KG	07/13/11	8270DM	
Phenanthrene	<	340	UG/KG	07/13/11	8270DM	
Pyrene	<	340	UG/KG	07/13/11	8270DM	
Benzo(ghi)perylene	<	340	UG/KG	07/13/11	8270DM	
Benzo(a)anthracene	<	340	UG/KG	07/13/11	8270DM	
Dibenzo(ah)anthracene	<	340	UG/KG	07/13/11	8270DM	
2-Chloronaphthalene	<	340	UG/KG	07/13/11	8270DM	
2-Chlorophenol	<	340	UG/KG	07/13/11	8270DM	
2-Nitrophenol	<	340	UG/KG	07/13/11	8270DM	

Sample Number: 505885
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1351
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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STATE ENVIRONMENTAL LABORATORY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	340	UG/KG	07/13/11	8270DM	
2,4-Dichlorophenol	<	340	UG/KG	07/13/11	8270DM	
2,4-Dimethylphenol	<	340	UG/KG	07/13/11	8270DM	
2,4-Dinitrotoluene	<	340	UG/KG	07/13/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/13/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/13/11	8270DM	
2,6-Dinitrotoluene	<	340	UG/KG	07/13/11	8270DM	
3,3'-Dichlorobenzidine	<	690	UG/KG	07/13/11	8270DM	
4-Bromophenylphenyl ether	<	340	UG/KG	07/13/11	8270DM	
4-Chlorophenyl phenylether	<	340	UG/KG	07/13/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/13/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/13/11	8270DM	
Phenol	<	340	UG/KG	07/13/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/13/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	340	UG/KG	07/13/11	8270DM	
Di-n-butylphthalate	<	340	UG/KG	07/13/11	8270DM	
Hexachlorobenzene	<	340	UG/KG	07/13/11	8270DM	
Hexachlorobutadiene	<	340	UG/KG	07/13/11	8270DM	
Benzyl alcohol	<	340	UG/KG	07/13/11	8270DM	
Dibenzofuran	<	340	UG/KG	07/13/11	8270DM	
2-Methylphenol	<	340	UG/KG	07/13/11	8270DM	
4-Methylphenol	<	340	UG/KG	07/13/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/13/11	8270DM	
4-Chloroaniline	<	340	UG/KG	07/13/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
2-Methylnaphthalene	<	340	UG/KG	07/13/11	8270DM	
% Moisture - GC/MS Lab		3.0	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	85
2-FLUOROBIPHENYL	70

Sample Number: 505885
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1351
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
2-FLUOROPHENOL		81
2,4,6-TRIBROMOPHENOL		78
NITROBENZENE-D5		76
P-TERPHENYL-D14 (J)		71

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Nonacosane		530	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-8

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration.
(J) The associated value is an estimated quantity.

* * ANALYST Cassandra Kontas

Sample Number: 505886
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1400
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		2729				
Acenaphthylene	<	27000	UG/KG	08/04/11	8270DM	
Acenaphthene	<	27000	UG/KG	08/04/11	8270DM	
Anthracene	<	27000	UG/KG	08/04/11	8270DM	
Benzo(b)fluoranthene	<	27000	UG/KG	08/04/11	8270DM	
Benzo(k)fluoranthene	<	27000	UG/KG	08/04/11	8270DM	
Benzo(a)pyrene	<	27000	UG/KG	08/04/11	8270DM	
Bis(2-chloroethyl)ether	<	27000	UG/KG	08/04/11	8270DM	
Bis(2-chloroethoxy)methane	<	27000	UG/KG	08/04/11	8270DM	
Bis(2-chloroisopropyl)ether	<	27000	UG/KG	08/04/11	8270DM	
Butylbenzylphthalate	<	27000	UG/KG	08/04/11	8270DM	
Chrysene	<	27000	UG/KG	08/04/11	8270DM	
Diethylphthalate	<	27000	UG/KG	08/04/11	8270DM	
Dimethylphthalate	<	27000	UG/KG	08/04/11	8270DM	
Fluoranthene	<	27000	UG/KG	08/04/11	8270DM	
Fluorene	<	27000	UG/KG	08/04/11	8270DM	
Hexachlorocyclopentadiene	<	27000	UG/KG	08/04/11	8270DM	
Hexachloroethane	<	27000	UG/KG	08/04/11	8270DM	
Indeno(123cd)pyrene	<	27000	UG/KG	08/04/11	8270DM	
Isophorone	<	27000	UG/KG	08/04/11	8270DM	
Nitrosodipropylamine	<	27000	UG/KG	08/04/11	8270DM	
Nitrosodiphenylamine	<	27000	UG/KG	08/04/11	8270DM	
Naphthalene	<	27000	UG/KG	08/04/11	8270DM	
Nitrobenzene	<	27000	UG/KG	08/04/11	8270DM	
p-Chloro-m-cresol	<	27000	UG/KG	08/04/11	8270DM	
Phenanthrene	<	27000	UG/KG	08/04/11	8270DM	
Pyrene	<	27000	UG/KG	08/04/11	8270DM	
Benzo(ghi)perylene	<	27000	UG/KG	08/04/11	8270DM	
Benzo(a)anthracene	<	27000	UG/KG	08/04/11	8270DM	
Dibenzo(ah)anthracene	<	27000	UG/KG	08/04/11	8270DM	
2-Chloronaphthalene	<	27000	UG/KG	08/04/11	8270DM	
2-Chlorophenol	<	27000	UG/KG	08/04/11	8270DM	
2-Nitrophenol	<	27000	UG/KG	08/04/11	8270DM	

Sample Number: 505886
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1400
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	27000	UG/KG	08/04/11	8270DM	
2,4-Dichlorophenol	<	27000	UG/KG	08/04/11	8270DM	
2,4-Dimethylphenol	<	27000	UG/KG	08/04/11	8270DM	
2,4-Dinitrotoluene	<	27000	UG/KG	08/04/11	8270DM	
2,4-Dinitrophenol	<	140000	UG/KG	08/04/11	8270DM	
2,4,6-Trichlorophenol	<	140000	UG/KG	08/04/11	8270DM	
2,6-Dinitrotoluene	<	27000	UG/KG	08/04/11	8270DM	
3,3'-Dichlorobenzidine	<	55000	UG/KG	08/04/11	8270DM	
4-Bromophenylphenyl ether	<	27000	UG/KG	08/04/11	8270DM	
4-Chlorophenyl phenylether	<	27000	UG/KG	08/04/11	8270DM	
4-Nitrophenol	<	140000	UG/KG	08/04/11	8270DM	
4,6-Dinitro-o-cresol	<	140000	UG/KG	08/04/11	8270DM	
Phenol	<	27000	UG/KG	08/04/11	8270DM	
Pentachlorophenol	<	140000	UG/KG	08/04/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	27000	UG/KG	08/04/11	8270DM	
Di-n-butylphthalate	<	27000	UG/KG	08/04/11	8270DM	
Hexachlorobenzene	<	27000	UG/KG	08/04/11	8270DM	
Hexachlorobutadiene	<	27000	UG/KG	08/04/11	8270DM	
Benzyl alcohol	<	27000	UG/KG	08/04/11	8270DM	
Dibenzofuran	<	27000	UG/KG	08/04/11	8270DM	
2-Methylphenol	<	27000	UG/KG	08/04/11	8270DM	
4-Methylphenol	<	27000	UG/KG	08/04/11	8270DM	
2,4,5-Trichlorophenol	<	140000	UG/KG	08/04/11	8270DM	
4-Chloroaniline	<	27000	UG/KG	08/04/11	8270DM	
2-Nitroaniline	<	140000	UG/KG	08/04/11	8270DM	
3-Nitroaniline	<	140000	UG/KG	08/04/11	8270DM	
4-Nitroaniline	<	140000	UG/KG	08/04/11	8270DM	
2-Methylnaphthalene	<	27000	UG/KG	08/04/11	8270DM	
% Moisture - GC/MS Lab		1.4	%	08/04/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	30
2-FLUOROBIPHENYL	37

Sample Number: 505886
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1400
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
P-TERPHENYL-D14		35
2-FLUOROPHENOL		29
NITROBENZENE-D5		35
2,4,6-TRIBROMOPHENOL		42

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Octadecanoic acid, 2-hydroxy-1-		160000	µg/kg
Pyrene, methyl- (non-specific i		30000	µg/kg
Benzo[e]pyrene		44000	µg/kg

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-9 (WASTE SAMPLE)

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The surrogates 2-Fluorobiphenyl, and 2,4,6-Tribromophenol had recoveries below in-house control limits.
The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Octadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester
Pyrene, methyl- (non-specific isomer)

* * ANALYST Cassandra Kontas

Sample Number: 505887
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1411
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		35.6				
Acenaphthylene	<	360	UG/KG	08/04/11	8270DM	
Acenaphthene	<	360	UG/KG	08/04/11	8270DM	
Anthracene	<	360	UG/KG	08/04/11	8270DM	
Benzo(b)fluoranthene		520	UG/KG	08/04/11	8270DM	
Benzo(k)fluoranthene	<	360	UG/KG	08/04/11	8270DM	
Benzo(a)pyrene		610	UG/KG	08/04/11	8270DM	
Bis(2-chloroethyl)ether	<	360	UG/KG	08/04/11	8270DM	
Bis(2-chloroethoxy)methane	<	360	UG/KG	08/04/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	360	UG/KG	08/04/11	8270DM	
Butylbenzylphthalate	<	360	UG/KG	08/04/11	8270DM	
Chrysene		1400	UG/KG	08/04/11	8270DM	
Diethylphthalate	<	360	UG/KG	08/04/11	8270DM	
Dimethylphthalate	<	360	UG/KG	08/04/11	8270DM	
Fluoranthene	<	360	UG/KG	08/04/11	8270DM	
Fluorene	<	360	UG/KG	08/04/11	8270DM	
Hexachlorocyclopentadiene	<	360	UG/KG	08/04/11	8270DM	
Hexachloroethane	<	360	UG/KG	08/04/11	8270DM	
Indeno(123cd)pyrene	<	360	UG/KG	08/04/11	8270DM	
Isophorone	<	360	UG/KG	08/04/11	8270DM	
Nitrosodipropylamine	<	360	UG/KG	08/04/11	8270DM	
Nitrosodiphenylamine	<	360	UG/KG	08/04/11	8270DM	
Naphthalene	<	360	UG/KG	08/04/11	8270DM	
Nitrobenzene	<	360	UG/KG	08/04/11	8270DM	
p-Chloro-m-cresol	<	360	UG/KG	08/04/11	8270DM	
Phenanthrene		1800	UG/KG	08/04/11	8270DM	
Pyrene		1200	UG/KG	08/04/11	8270DM	
Benzo(ghi)perylene		550	UG/KG	08/04/11	8270DM	
Benzo(a)anthracene		910	UG/KG	08/04/11	8270DM	
Dibenzo(ah)anthracene	<	360	UG/KG	08/04/11	8270DM	
2-Chloronaphthalene	<	360	UG/KG	08/04/11	8270DM	
2-Chlorophenol	<	360	UG/KG	08/04/11	8270DM	
2-Nitrophenol	<	360	UG/KG	08/04/11	8270DM	

Sample Number: 505887
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1411
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	360	UG/KG	08/04/11	8270DM	
2,4-Dichlorophenol	<	360	UG/KG	08/04/11	8270DM	
2,4-Dimethylphenol	<	360	UG/KG	08/04/11	8270DM	
2,4-Dinitrotoluene	<	360	UG/KG	08/04/11	8270DM	
2,4-Dinitrophenol	<	1800	UG/KG	08/04/11	8270DM	
2,4,6-Trichlorophenol	<	1800	UG/KG	08/04/11	8270DM	
2,6-Dinitrotoluene	<	360	UG/KG	08/04/11	8270DM	
3,3'-Dichlorobenzidine	<	710	UG/KG	08/04/11	8270DM	
4-Bromophenylphenyl ether	<	360	UG/KG	08/04/11	8270DM	
4-Chlorophenyl phenylether	<	360	UG/KG	08/04/11	8270DM	
4-Nitrophenol	<	1800	UG/KG	08/04/11	8270DM	
4,6-Dinitro-o-cresol	<	1800	UG/KG	08/04/11	8270DM	
Phenol	<	360	UG/KG	08/04/11	8270DM	
Pentachlorophenol	<	1800	UG/KG	08/04/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	360	UG/KG	08/04/11	8270DM	
Di-n-butylphthalate	<	360	UG/KG	08/04/11	8270DM	
Hexachlorobenzene	<	360	UG/KG	08/04/11	8270DM	
Hexachlorobutadiene	<	360	UG/KG	08/04/11	8270DM	
Benzyl alcohol	<	360	UG/KG	08/04/11	8270DM	
Dibenzofuran	<	360	UG/KG	08/04/11	8270DM	
2-Methylphenol	<	360	UG/KG	08/04/11	8270DM	
4-Methylphenol	<	360	UG/KG	08/04/11	8270DM	
2,4,5-Trichlorophenol	<	1800	UG/KG	08/04/11	8270DM	
4-Chloroaniline	<	360	UG/KG	08/04/11	8270DM	
2-Nitroaniline	<	1800	UG/KG	08/04/11	8270DM	
3-Nitroaniline	<	1800	UG/KG	08/04/11	8270DM	
4-Nitroaniline	<	1800	UG/KG	08/04/11	8270DM	
2-Methylnaphthalene	<	360	UG/KG	08/04/11	8270DM	
% Moisture - GC/MS Lab		6.2	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	64
2-FLUOROPHENOL	60

Sample Number: 505887
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1411
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
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Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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SURROGATE RECOVERIES	
COMPOUND	RECOVERY %
2-FLUOROBIPHENYL	82
NITROBENZENE-D5	83
2,4,6-TRIBROMOPHENOL	78
P-TERPHENYL-D14	71

TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH		
COMPOUND	VALUE	UNITS
Benz[a]anthracene, 7-methyl-	1000	µg/kg
Stigmast-4-en-3-one	600	µg/kg
Perylene, methyl- (non-specific	630	µg/kg
D:C-Friedo-B':A'-neogammacer-9(	720	µg/kg
Phenanthrene, 1-methyl-	2000	µg/kg
Anthracene, 2-methyl-	590	µg/kg
Phenanthrene, dimethyl- (non-sp	670	µg/kg
Anthracene, 1-methyl-	620	µg/kg
Dibenzothiophene, 3-methyl-	530	µg/kg
Benzo[e]pyrene	1100	µg/kg
Dibenzothiophene, 4-methyl-	580	µg/kg
Phenanthrene, 2-methyl-	1400	µg/kg
Naphthalene, 2-phenyl-	1100	µg/kg
Phenanthrene, dimethyl- (non-sp	610	µg/kg
Pyrene, methyl- (non-specific i	630	µg/kg
Benzo[b]naphtho[2,1-d]thiophene	570	µg/kg
gamma-Sitosterol	670	µg/kg
Octadecanoic acid, 2-hydroxy-1-	4700	µg/kg
Perylene, methyl- (non-specific	570	µg/kg
Phenanthrene, dimethyl- (non-sp	600	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

Sample Number: 505887
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1411
Date Received: 6/29/2011
Date Completed: 08/17/2011
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707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-2

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Octadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester

D:C-Friedo-B':A'-neogammacer-9(11)-ene, 3-methoxy-, (3.beta)-
Octadecanoic acid, 2-hydroxy-1-(hydroxymethyl)eth
Perylene, methyl- (non-specific isomer #1)
Perylene, methyl- (non-specific isomer #2)
Phenanthrene, dimethyl- (non-specific isomer #1)
Phenanthrene, dimethyl- (non-specific isomer #2)
Phenanthrene, dimethyl- (non-specific isomer #3)
Pyrene, methyl- (non-specific isomer)

* * ANALYST Cassandra Kontas

Sample Number: 505888
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1438
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		33.9				
Acenaphthylene	<	340	UG/KG	07/13/11	8270DM	
Acenaphthene	<	340	UG/KG	07/13/11	8270DM	
Anthracene	<	340	UG/KG	07/13/11	8270DM	
Benzo(b)fluoranthene	<	340	UG/KG	07/13/11	8270DM	
Benzo(k)fluoranthene	<	340	UG/KG	07/13/11	8270DM	
Benzo(a)pyrene	<	340	UG/KG	07/13/11	8270DM	
Bis(2-chloroethyl)ether	<	340	UG/KG	07/13/11	8270DM	
Bis(2-chloroethoxy)methane	<	340	UG/KG	07/13/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	340	UG/KG	07/13/11	8270DM	
Butylbenzylphthalate	<	340	UG/KG	07/13/11	8270DM	
Chrysene	<	340	UG/KG	07/13/11	8270DM	
Diethylphthalate	<	340	UG/KG	07/13/11	8270DM	
Dimethylphthalate	<	340	UG/KG	07/13/11	8270DM	
Fluoranthene	<	340	UG/KG	07/13/11	8270DM	
Fluorene	<	340	UG/KG	07/13/11	8270DM	
Hexachlorocyclopentadiene	<	340	UG/KG	07/13/11	8270DM	
Hexachloroethane	<	340	UG/KG	07/13/11	8270DM	
Indeno(123cd)pyrene	<	340	UG/KG	07/13/11	8270DM	
Isophorone	<	340	UG/KG	07/13/11	8270DM	
Nitrosodipropylamine	<	340	UG/KG	07/13/11	8270DM	
Nitrosodiphenylamine	<	340	UG/KG	07/13/11	8270DM	
Naphthalene	<	340	UG/KG	07/13/11	8270DM	
Nitrobenzene	<	340	UG/KG	07/13/11	8270DM	
p-Chloro-m-cresol	<	340	UG/KG	07/13/11	8270DM	
Phenanthrene	<	340	UG/KG	07/13/11	8270DM	
Pyrene	<	340	UG/KG	07/13/11	8270DM	
Benzo(ghi)perylene	<	340	UG/KG	07/13/11	8270DM	
Benzo(a)anthracene	<	340	UG/KG	07/13/11	8270DM	
Dibenzo(ah)anthracene	<	340	UG/KG	07/13/11	8270DM	
2-Chloronaphthalene	<	340	UG/KG	07/13/11	8270DM	
2-Chlorophenol	<	340	UG/KG	07/13/11	8270DM	
2-Nitrophenol	<	340	UG/KG	07/13/11	8270DM	

Sample Number: 505888
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1438
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
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Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	340	UG/KG	07/13/11	8270DM	
2,4-Dichlorophenol	<	340	UG/KG	07/13/11	8270DM	
2,4-Dimethylphenol	<	340	UG/KG	07/13/11	8270DM	
2,4-Dinitrotoluene	<	340	UG/KG	07/13/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/13/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/13/11	8270DM	
2,6-Dinitrotoluene	<	340	UG/KG	07/13/11	8270DM	
3,3'-Dichlorobenzidine	<	680	UG/KG	07/13/11	8270DM	
4-Bromophenylphenyl ether	<	340	UG/KG	07/13/11	8270DM	
4-Chlorophenyl phenylether	<	340	UG/KG	07/13/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/13/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/13/11	8270DM	
Phenol	<	340	UG/KG	07/13/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/13/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	340	UG/KG	07/13/11	8270DM	
Di-n-butylphthalate	<	340	UG/KG	07/13/11	8270DM	
Hexachlorobenzene	<	340	UG/KG	07/13/11	8270DM	
Hexachlorobutadiene	<	340	UG/KG	07/13/11	8270DM	
Benzyl alcohol	<	340	UG/KG	07/13/11	8270DM	
Dibenzofuran	<	340	UG/KG	07/13/11	8270DM	
2-Methylphenol	<	340	UG/KG	07/13/11	8270DM	
4-Methylphenol	<	340	UG/KG	07/13/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/13/11	8270DM	
4-Chloroaniline	<	340	UG/KG	07/13/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/13/11	8270DM	
2-Methylnaphthalene	<	340	UG/KG	07/13/11	8270DM	
% Moisture - GC/MS Lab		1.6	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROBIPHENYL	69
PHENOL-D5	68

Sample Number: 505888
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1438
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
NITROBENZENE-D5		67
2,4,6-TRIBROMOPHENOL		68
2-FLUOROPHENOL		61
P-TERPHENYL-D14		77

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NONACOSANE		440	µG/KG
HEXADECANOIC ACID, 2-HYDROXY-1-		1500	µG/KG

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-9

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
Hexadecanoic acid, 2-hydroxy-1-(hydroxymethyl)ethyl ester

* * ANALYST Cassandra Kontas

Sample Number: 505889
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1441
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
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Report Date: 8/17/2011

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OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		34.5				
Acenaphthylene	<	350	UG/KG	07/22/11	8270DM	
Acenaphthene	<	350	UG/KG	07/22/11	8270DM	
Anthracene	<	350	UG/KG	07/22/11	8270DM	
Benzo(b)fluoranthene	<	350	UG/KG	07/22/11	8270DM	
Benzo(k)fluoranthene	<	350	UG/KG	07/22/11	8270DM	
Benzo(a)pyrene	<	350	UG/KG	07/22/11	8270DM	
Bis(2-chloroethyl)ether	<	350	UG/KG	07/22/11	8270DM	
Bis(2-chloroethoxy)methane	<	350	UG/KG	07/22/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	350	UG/KG	07/22/11	8270DM	
Butylbenzylphthalate	<	350	UG/KG	07/22/11	8270DM	
Chrysene	<	350	UG/KG	07/22/11	8270DM	
Diethylphthalate	<	350	UG/KG	07/22/11	8270DM	
Dimethylphthalate	<	350	UG/KG	07/22/11	8270DM	
Fluoranthene	<	350	UG/KG	07/22/11	8270DM	
Fluorene	<	350	UG/KG	07/22/11	8270DM	
Hexachlorocyclopentadiene	<	350	UG/KG	07/22/11	8270DM	
Hexachloroethane	<	350	UG/KG	07/22/11	8270DM	
Indeno(123cd)pyrene	<	350	UG/KG	07/22/11	8270DM	
Isophorone	<	350	UG/KG	07/22/11	8270DM	
Nitrosodipropylamine	<	350	UG/KG	07/22/11	8270DM	
Nitrosodiphenylamine	<	350	UG/KG	07/22/11	8270DM	
Naphthalene	<	350	UG/KG	07/22/11	8270DM	
Nitrobenzene	<	350	UG/KG	07/22/11	8270DM	
p-Chloro-m-cresol	<	350	UG/KG	07/22/11	8270DM	
Phenanthrene	<	350	UG/KG	07/22/11	8270DM	
Pyrene	<	350	UG/KG	07/22/11	8270DM	
Benzo(ghi)perylene	<	350	UG/KG	07/22/11	8270DM	
Benzo(a)anthracene	<	350	UG/KG	07/22/11	8270DM	
Dibenzo(ah)anthracene	<	350	UG/KG	07/22/11	8270DM	
2-Chloronaphthalene	<	350	UG/KG	07/22/11	8270DM	
2-Chlorophenol	<	350	UG/KG	07/22/11	8270DM	
2-Nitrophenol	<	350	UG/KG	07/22/11	8270DM	

Sample Number: 505889
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1441
Date Received: 6/29/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

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OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	350	UG/KG	07/22/11	8270DM	
2,4-Dichlorophenol	<	350	UG/KG	07/22/11	8270DM	
2,4-Dimethylphenol	<	350	UG/KG	07/22/11	8270DM	
2,4-Dinitrotoluene	<	350	UG/KG	07/22/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/22/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/22/11	8270DM	
2,6-Dinitrotoluene	<	350	UG/KG	07/22/11	8270DM	
3,3'-Dichlorobenzidine	<	690	UG/KG	07/22/11	8270DM	
4-Bromophenylphenyl ether	<	350	UG/KG	07/22/11	8270DM	
4-Chlorophenyl phenylether	<	350	UG/KG	07/22/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/22/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/22/11	8270DM	
Phenol	<	350	UG/KG	07/22/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/22/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	350	UG/KG	07/22/11	8270DM	
Di-n-butylphthalate	<	350	UG/KG	07/22/11	8270DM	
Hexachlorobenzene	<	350	UG/KG	07/22/11	8270DM	
Hexachlorobutadiene	<	350	UG/KG	07/22/11	8270DM	
Benzyl alcohol	<	350	UG/KG	07/22/11	8270DM	
Dibenzofuran	<	350	UG/KG	07/22/11	8270DM	
2-Methylphenol	<	350	UG/KG	07/22/11	8270DM	
4-Methylphenol	<	350	UG/KG	07/22/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/22/11	8270DM	
4-Chloroaniline	<	350	UG/KG	07/22/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/22/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/22/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/22/11	8270DM	
2-Methylnaphthalene	<	350	UG/KG	07/22/11	8270DM	
% Moisture - GC/MS Lab		3.2	%	07/22/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
NITROBENZENE-D5	110
2,4,6-TRIBROMOPHENOL	145

Sample Number: 505889
Project Code: SW-SE
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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
PHENOL-D5		104
P-TERPHENYL-D14		141
2-FLUOROPHENOL		91
2-FLUOROBIPHENYL		116

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
gamma-Sitosterol		390	µg/kg
unknown triterpenoid #1		420	µg/kg
unknown triterpenoid #2		480	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SS-1

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration.

* * ANALYST Cassandra Kontas

Sample Number: 505890
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1035
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

To: TODD DOWNHAM/LPD

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		34.5				
Acenaphthylene	<	350	UG/KG	07/11/11	8270DM	
Acenaphthene	<	350	UG/KG	07/11/11	8270DM	
Anthracene	<	350	UG/KG	07/11/11	8270DM	
Benzo(b)fluoranthene	<	350	UG/KG	07/11/11	8270DM	
Benzo(k)fluoranthene	<	350	UG/KG	07/11/11	8270DM	
Benzo(a)pyrene	<	350	UG/KG	07/11/11	8270DM	
Bis(2-chloroethyl)ether	<	350	UG/KG	07/11/11	8270DM	
Bis(2-chloroethoxy)methane	<	350	UG/KG	07/11/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	350	UG/KG	07/11/11	8270DM	
Butylbenzylphthalate	<	350	UG/KG	07/11/11	8270DM	
Chrysene	<	350	UG/KG	07/11/11	8270DM	
Diethylphthalate	<	350	UG/KG	07/11/11	8270DM	
Dimethylphthalate	<	350	UG/KG	07/11/11	8270DM	
Fluoranthene	<	350	UG/KG	07/11/11	8270DM	
Fluorene	<	350	UG/KG	07/11/11	8270DM	
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Hexachloroethane	<	350	UG/KG	07/11/11	8270DM	
Indeno(123cd)pyrene	<	350	UG/KG	07/11/11	8270DM	
Isophorone	<	350	UG/KG	07/11/11	8270DM	
Nitrosodipropylamine	<	350	UG/KG	07/11/11	8270DM	
Nitrosodiphenylamine	<	350	UG/KG	07/11/11	8270DM	
Naphthalene	<	350	UG/KG	07/11/11	8270DM	
Nitrobenzene	<	350	UG/KG	07/11/11	8270DM	
p-Chloro-m-cresol	<	350	UG/KG	07/11/11	8270DM	
Phenanthrene	<	350	UG/KG	07/11/11	8270DM	
Pyrene	<	350	UG/KG	07/11/11	8270DM	
Benzo(ghi)perylene	<	350	UG/KG	07/11/11	8270DM	
Benzo(a)anthracene	<	350	UG/KG	07/11/11	8270DM	
Dibenzo(ah)anthracene	<	350	UG/KG	07/11/11	8270DM	
2-Chloronaphthalene	<	350	UG/KG	07/11/11	8270DM	
2-Chlorophenol	<	350	UG/KG	07/11/11	8270DM	
2-Nitrophenol	<	350	UG/KG	07/11/11	8270DM	

Sample Number: 505890
Project Code: SW-SE
Agency Number:
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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	350	UG/KG	07/11/11	8270DM	
2,4-Dichlorophenol	<	350	UG/KG	07/11/11	8270DM	
2,4-Dimethylphenol	<	350	UG/KG	07/11/11	8270DM	
2,4-Dinitrotoluene	<	350	UG/KG	07/11/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/11/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/11/11	8270DM	
2,6-Dinitrotoluene	<	350	UG/KG	07/11/11	8270DM	
3,3'-Dichlorobenzidine	<	690	UG/KG	07/11/11	8270DM	
4-Bromophenylphenyl ether	<	350	UG/KG	07/11/11	8270DM	
4-Chlorophenyl phenylether	<	350	UG/KG	07/11/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/11/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/11/11	8270DM	
Phenol	<	350	UG/KG	07/11/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/11/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	350	UG/KG	07/11/11	8270DM	
Di-n-butylphthalate	<	350	UG/KG	07/11/11	8270DM	
Hexachlorobenzene	<	350	UG/KG	07/11/11	8270DM	
Hexachlorobutadiene	<	350	UG/KG	07/11/11	8270DM	
Benzyl alcohol	<	350	UG/KG	07/11/11	8270DM	
Dibenzofuran	<	350	UG/KG	07/11/11	8270DM	
2-Methylphenol	<	350	UG/KG	07/11/11	8270DM	
4-Methylphenol	<	350	UG/KG	07/11/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/11/11	8270DM	
4-Chloroaniline	<	350	UG/KG	07/11/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/11/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/11/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/11/11	8270DM	
2-Methylnaphthalene	<	350	UG/KG	07/11/11	8270DM	
% Moisture - GC/MS Lab		3.90	%		1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROBIPHENYL	79
2-FLUOROPHENOL	71

Sample Number: 505890
Project Code: SW-SE
Agency Number:
Date Collected: 6/28/2011
Time Collected: 1035
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
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Report Date: 9/7/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	80
P-TERPHENYL-D14	89
NITROBENZENE-D5	80
2,4,6-TRIBROMOPHENOL	97

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
2-Phenanthrenol, 4b,5,6,7,8,8a,		540	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-6 (WASTE SAMPLE)

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
2-Phenanthrenol, 4b,5,6,7,8,8a,9,10-octahydro-4b,8,8-trimethyl-1-(1-methylethyl)-, (4bS-trans)-

* * ANALYST Cassandra Kontas

Sample Number: 505893
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected:
Date Received: 6/29/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		33.2				
Acenaphthylene	<	330	UG/KG	07/01/11	8270DM	
Acenaphthene	<	330	UG/KG	07/01/11	8270DM	
Anthracene	<	330	UG/KG	07/01/11	8270DM	
Benzo(b)fluoranthene	<	330	UG/KG	07/01/11	8270DM	
Benzo(k)fluoranthene	<	330	UG/KG	07/01/11	8270DM	
Benzo(a)pyrene	<	330	UG/KG	07/01/11	8270DM	
Bis(2-chloroethyl)ether	<	330	UG/KG	07/01/11	8270DM	
Bis(2-chloroethoxy)methane	<	330	UG/KG	07/01/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	330	UG/KG	07/01/11	8270DM	
Butylbenzylphthalate	<	330	UG/KG	07/01/11	8270DM	
Chrysene	<	330	UG/KG	07/01/11	8270DM	
Diethylphthalate	<	330	UG/KG	07/01/11	8270DM	
Dimethylphthalate	<	330	UG/KG	07/01/11	8270DM	
Fluoranthene	<	330	UG/KG	07/01/11	8270DM	
Fluorene	<	330	UG/KG	07/01/11	8270DM	
Hexachlorocyclopentadiene	<	330	UG/KG	07/01/11	8270DM	
Hexachloroethane	<	330	UG/KG	07/01/11	8270DM	
Indeno(123cd)pyrene	<	330	UG/KG	07/01/11	8270DM	
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Nitrosodipropylamine	<	330	UG/KG	07/01/11	8270DM	
Nitrosodiphenylamine	<	330	UG/KG	07/01/11	8270DM	
Naphthalene	<	330	UG/KG	07/01/11	8270DM	
Nitrobenzene	<	330	UG/KG	07/01/11	8270DM	
p-Chloro-m-cresol	<	330	UG/KG	07/01/11	8270DM	
Phenanthrene	<	330	UG/KG	07/01/11	8270DM	
Pyrene	<	330	UG/KG	07/01/11	8270DM	
Benzo(ghi)perylene	<	330	UG/KG	07/01/11	8270DM	
Benzo(a)anthracene	<	330	UG/KG	07/01/11	8270DM	
Dibenzo(ah)anthracene	<	330	UG/KG	07/01/11	8270DM	
2-Chloronaphthalene	<	330	UG/KG	07/01/11	8270DM	
2-Chlorophenol	<	330	UG/KG	07/01/11	8270DM	
2-Nitrophenol	<	330	UG/KG	07/01/11	8270DM	

Sample Number: 505893
Project Code: SW-SE
Agency Number:
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Report of Analysis by GCMS

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	330	UG/KG	07/01/11	8270DM	
2,4-Dichlorophenol	<	330	UG/KG	07/01/11	8270DM	
2,4-Dimethylphenol	<	330	UG/KG	07/01/11	8270DM	
2,4-Dinitrotoluene	<	330	UG/KG	07/01/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/01/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/01/11	8270DM	
2,6-Dinitrotoluene	<	330	UG/KG	07/01/11	8270DM	
3,3'-Dichlorobenzidine	<	660	UG/KG	07/01/11	8270DM	
4-Bromophenylphenyl ether	<	330	UG/KG	07/01/11	8270DM	
4-Chlorophenyl phenylether	<	330	UG/KG	07/01/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/01/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/01/11	8270DM	
Phenol	<	330	UG/KG	07/01/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/01/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	330	UG/KG	07/01/11	8270DM	
Di-n-butylphthalate	<	330	UG/KG	07/01/11	8270DM	
Hexachlorobenzene	<	330	UG/KG	07/01/11	8270DM	
Hexachlorobutadiene	<	330	UG/KG	07/01/11	8270DM	
Benzyl alcohol	<	330	UG/KG	07/01/11	8270DM	
Dibenzofuran	<	330	UG/KG	07/01/11	8270DM	
2-Methylphenol	<	330	UG/KG	07/01/11	8270DM	
4-Methylphenol	<	330	UG/KG	07/01/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/01/11	8270DM	
4-Chloroaniline	<	330	UG/KG	07/01/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/01/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/01/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/01/11	8270DM	
2-Methylnaphthalene	<	330	UG/KG	07/01/11	8270DM	
% Moisture - GC/MS Lab			%		1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	75
2-FLUOROBIPHENYL	79

Sample Number: 505893
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected:
Date Received: 6/29/2011
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Report Date: 8/17/2011

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
NITROBENZENE-D5	78
2,4,6-TRIBROMOPHENOL	82
P-TERPHENYL-D14	105
2-FLUOROPHENOL	68

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
LAB BLANK

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas

Sample Number: 505989
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1020
Date Received: 6/30/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		35.5	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		9.20	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		53.3	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		60.2	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-1

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505990
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1055
Date Received: 6/30/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

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STATE ENVIRONMENTAL LABORATORY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		180	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		12.6	MG/KG	08/25/11	6010	3050
Copper, Sediment		9.90	MG/KG	08/25/11	6010	3050
Lead, Sediment		20.3	MG/KG	08/25/11	6010	3050
Nickel, Sediment		18.4	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		8.60	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		89.2	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-2

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505991
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1110
Date Received: 6/30/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		128	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		19.5	MG/KG	08/25/11	6010	3050
Copper, Sediment		12.3	MG/KG	08/25/11	6010	3050
Lead, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Nickel, Sediment		17.9	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		17.1	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		89.9	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-3

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505992
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1325
Date Received: 6/30/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		61.3	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		9.00	MG/KG	08/25/11	6010	3050
Copper, Sediment		6.10	MG/KG	08/25/11	6010	3050
Lead, Sediment		15.4	MG/KG	08/25/11	6010	3050
Nickel, Sediment		6.50	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		15.2	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		98.8	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-7 (WASTE SAMPLE)

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505993
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1335
Date Received: 6/30/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		33.0	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		8.40	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment		10.0	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		5.60	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		96.2	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-4

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505994
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1335
Date Received: 6/30/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		177	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		8.70	MG/KG	08/25/11	6010	3050
Copper, Sediment		5.70	MG/KG	08/25/11	6010	3050
Lead, Sediment		47.8	MG/KG	08/25/11	6010	3050
Nickel, Sediment		12.8	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		5.90	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		95.1	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-5

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505995
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1415
Date Received: 6/30/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

CC: FILE COPY

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		28.6	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment		6.90	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		73.8	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-10

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505996
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1440
Date Received: 6/30/2011
Date Completed: 08/30/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/30/2011

To: TODD DOWNHAM/LPD

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707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by Metals

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Arsenic, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Barium, Sediment		23.4	MG/KG	08/25/11	6010	3050
Beryllium, Sediment	<	2.00	MG/KG	08/25/11	6010	3050
Cadmium , Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Chromium, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Copper, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Lead, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Nickel, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Silver, Sediment	<	5.00	MG/KG	08/25/11	6010	3050
Zinc, Sediment		8.60	MG/KG	08/25/11	6010	3050
Antimony, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Selenium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Thallium, Sediment	<	10.0	MG/KG	08/25/11	6010	3050
Mercury, Sediment	<	0.25	MG/KG	07/08/11	7471	3050
% Solids		80.8	%	07/12/11	CLP 5.4	3050

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-7

ANALYST`S COMMENTS:

* * ANALYST Greg Goode

Greg Goode
State Environmental Laboratory

Sample Number: 505989
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1020
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		77.3				
Acenaphthylene	<	770	UG/KG	07/11/11	8270DM	
Acenaphthene	<	770	UG/KG	07/11/11	8270DM	
Anthracene	<	770	UG/KG	07/11/11	8270DM	
Benzo(b)fluoranthene	<	770	UG/KG	07/11/11	8270DM	
Benzo(k)fluoranthene	<	770	UG/KG	07/11/11	8270DM	
Benzo(a)pyrene	<	770	UG/KG	07/11/11	8270DM	
Bis(2-chloroethyl)ether	<	770	UG/KG	07/11/11	8270DM	
Bis(2-chloroethoxy)methane	<	770	UG/KG	07/11/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	770	UG/KG	07/11/11	8270DM	
Butylbenzylphthalate	<	770	UG/KG	07/11/11	8270DM	
Chrysene	<	770	UG/KG	07/11/11	8270DM	
Diethylphthalate	<	770	UG/KG	07/11/11	8270DM	
Dimethylphthalate	<	770	UG/KG	07/11/11	8270DM	
Fluoranthene	<	770	UG/KG	07/11/11	8270DM	
Fluorene	<	770	UG/KG	07/11/11	8270DM	
Hexachlorocyclopentadiene	<	770	UG/KG	07/11/11	8270DM	
Hexachloroethane	<	770	UG/KG	07/11/11	8270DM	
Indeno(123cd)pyrene	<	770	UG/KG	07/11/11	8270DM	
Isophorone	<	770	UG/KG	07/11/11	8270DM	
Nitrosodipropylamine	<	770	UG/KG	07/11/11	8270DM	
Nitrosodiphenylamine	<	770	UG/KG	07/11/11	8270DM	
Naphthalene	<	770	UG/KG	07/11/11	8270DM	
Nitrobenzene	<	770	UG/KG	07/11/11	8270DM	
p-Chloro-m-cresol	<	770	UG/KG	07/11/11	8270DM	
Phenanthrene	<	770	UG/KG	07/11/11	8270DM	
Pyrene	<	770	UG/KG	07/11/11	8270DM	
Benzo(ghi)perylene	<	770	UG/KG	07/11/11	8270DM	
Benzo(a)anthracene	<	770	UG/KG	07/11/11	8270DM	
Dibenzo(ah)anthracene	<	770	UG/KG	07/11/11	8270DM	
2-Chloronaphthalene	<	770	UG/KG	07/11/11	8270DM	
2-Chlorophenol	<	770	UG/KG	07/11/11	8270DM	
2-Nitrophenol	<	770	UG/KG	07/11/11	8270DM	

Sample Number: 505989
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1020
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

CC: FILE COPY

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	770	UG/KG	07/11/11	8270DM	
2,4-Dichlorophenol	<	770	UG/KG	07/11/11	8270DM	
2,4-Dimethylphenol	<	770	UG/KG	07/11/11	8270DM	
2,4-Dinitrotoluene	<	770	UG/KG	07/11/11	8270DM	
2,4-Dinitrophenol	<	3900	UG/KG	07/11/11	8270DM	
2,4,6-Trichlorophenol	<	3900	UG/KG	07/11/11	8270DM	
2,6-Dinitrotoluene	<	770	UG/KG	07/11/11	8270DM	
3,3'-Dichlorobenzidine	<	1700	UG/KG	07/11/11	8270DM	
4-Bromophenylphenyl ether	<	770	UG/KG	07/11/11	8270DM	
4-Chlorophenyl phenylether	<	770	UG/KG	07/11/11	8270DM	
4-Nitrophenol	<	3900	UG/KG	07/11/11	8270DM	
4,6-Dinitro-o-cresol	<	3900	UG/KG	07/11/11	8270DM	
Phenol	<	770	UG/KG	07/11/11	8270DM	
Pentachlorophenol	<	3900	UG/KG	07/11/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	770	UG/KG	07/11/11	8270DM	
Di-n-butylphthalate	<	770	UG/KG	07/11/11	8270DM	
Hexachlorobenzene	<	770	UG/KG	07/11/11	8270DM	
Hexachlorobutadiene	<	770	UG/KG	07/11/11	8270DM	
Benzyl alcohol	<	770	UG/KG	07/11/11	8270DM	
Dibenzofuran	<	770	UG/KG	07/11/11	8270DM	
2-Methylphenol	<	770	UG/KG	07/11/11	8270DM	
4-Methylphenol	<	770	UG/KG	07/11/11	8270DM	
2,4,5-Trichlorophenol	<	3900	UG/KG	07/11/11	8270DM	
4-Chloroaniline	<	770	UG/KG	07/11/11	8270DM	
2-Nitroaniline	<	3900	UG/KG	07/11/11	8270DM	
3-Nitroaniline	<	3900	UG/KG	07/11/11	8270DM	
4-Nitroaniline	<	3900	UG/KG	07/11/11	8270DM	
2-Methylnaphthalene	<	770	UG/KG	07/11/11	8270DM	
% Moisture - GC/MS Lab		57.1	%		1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	76
NITROBENZENE-D5	77

Sample Number: 505989
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1020
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD CC: FILE COPY

COMPOUND	SURROGATE RECOVERIES	RECOVERY %
P-TERPHENYL-D14		86
2,4,6-TRIBROMOPHENOL		93
2-FLUOROPHENOL		68
2-FLUOROBIPHENYL		75

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
beta-Amyrin		2100	µg/kg
gamma-Sitosterol		3600	µg/kg
Lup-20(29)-en-3-one		1200	µg/kg
Nonacosane		1200	µg/kg
Stigmastanol		1400	µg/kg
cyclic octaatomic sulfur		1300	µg.kg
4,4,6a,6b,8a,11,11,14b-Octameth		1400	µg/kg
alpha-Amyrin		2300	µg/kg

Summary

Labs performing analysis on this Sample:
Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-1

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration. Some "tentatively identified" compound names were truncated in the report table; their full names are:
4,4,6a,6b,8a,11,11,14b-Octamethyl-1,4,4a,5,6,6a,6b,7,8,8a,9,10,11,12,12a,14,14a,14b-octadecah

* * ANALYST Cassandra Kontas

Sample Number: 505990
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1055
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		37.5				
Acenaphthylene	<	390	UG/KG	07/22/11	8270DM	
Acenaphthene	<	390	UG/KG	07/22/11	8270DM	
Anthracene	<	390	UG/KG	07/22/11	8270DM	
Benzo(b)fluoranthene	<	390	UG/KG	07/22/11	8270DM	
Benzo(k)fluoranthene	<	390	UG/KG	07/22/11	8270DM	
Benzo(a)pyrene	<	390	UG/KG	07/22/11	8270DM	
Bis(2-chloroethyl)ether	<	390	UG/KG	07/22/11	8270DM	
Bis(2-chloroethoxy)methane	<	390	UG/KG	07/22/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	390	UG/KG	07/22/11	8270DM	
Butylbenzylphthalate	<	390	UG/KG	07/22/11	8270DM	
Chrysene	<	390	UG/KG	07/22/11	8270DM	
Diethylphthalate	<	390	UG/KG	07/22/11	8270DM	
Dimethylphthalate	<	390	UG/KG	07/22/11	8270DM	
Fluoranthene	<	390	UG/KG	07/22/11	8270DM	
Fluorene	<	390	UG/KG	07/22/11	8270DM	
Hexachlorocyclopentadiene	<	390	UG/KG	07/22/11	8270DM	
Hexachloroethane	<	390	UG/KG	07/22/11	8270DM	
Indeno(123cd)pyrene	<	390	UG/KG	07/22/11	8270DM	
Isophorone	<	390	UG/KG	07/22/11	8270DM	
Nitrosodipropylamine	<	390	UG/KG	07/22/11	8270DM	
Nitrosodiphenylamine	<	390	UG/KG	07/22/11	8270DM	
Naphthalene	<	390	UG/KG	07/22/11	8270DM	
Nitrobenzene	<	390	UG/KG	07/22/11	8270DM	
p-Chloro-m-cresol	<	390	UG/KG	07/22/11	8270DM	
Phenanthrene	<	390	UG/KG	07/22/11	8270DM	
Pyrene	<	390	UG/KG	07/22/11	8270DM	
Benzo(ghi)perylene	<	390	UG/KG	07/22/11	8270DM	
Benzo(a)anthracene	<	390	UG/KG	07/22/11	8270DM	
Dibenzo(ah)anthracene	<	390	UG/KG	07/22/11	8270DM	
2-Chloronaphthalene	<	390	UG/KG	07/22/11	8270DM	
2-Chlorophenol	<	390	UG/KG	07/22/11	8270DM	
2-Nitrophenol	<	390	UG/KG	07/22/11	8270DM	

Sample Number: 505990
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1055
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	390	UG/KG	07/22/11	8270DM	
2,4-Dichlorophenol	<	390	UG/KG	07/22/11	8270DM	
2,4-Dimethylphenol	<	390	UG/KG	07/22/11	8270DM	
2,4-Dinitrotoluene	<	390	UG/KG	07/22/11	8270DM	
2,4-Dinitrophenol	<	1900	UG/KG	07/22/11	8270DM	
2,4,6-Trichlorophenol	<	1900	UG/KG	07/22/11	8270DM	
2,6-Dinitrotoluene	<	390	UG/KG	07/22/11	8270DM	
3,3'-Dichlorobenzidine	<	750	UG/KG	07/22/11	8270DM	
4-Bromophenylphenyl ether	<	390	UG/KG	07/22/11	8270DM	
4-Chlorophenyl phenylether	<	390	UG/KG	07/22/11	8270DM	
4-Nitrophenol	<	1900	UG/KG	07/22/11	8270DM	
4,6-Dinitro-o-cresol	<	1900	UG/KG	07/22/11	8270DM	
Phenol	<	390	UG/KG	07/22/11	8270DM	
Pentachlorophenol	<	1900	UG/KG	07/22/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	390	UG/KG	07/22/11	8270DM	
Di-n-butylphthalate	<	390	UG/KG	07/22/11	8270DM	
Hexachlorobenzene	<	390	UG/KG	07/22/11	8270DM	
Hexachlorobutadiene	<	390	UG/KG	07/22/11	8270DM	
Benzyl alcohol	<	390	UG/KG	07/22/11	8270DM	
Dibenzofuran	<	390	UG/KG	07/22/11	8270DM	
2-Methylphenol	<	390	UG/KG	07/22/11	8270DM	
4-Methylphenol	<	390	UG/KG	07/22/11	8270DM	
2,4,5-Trichlorophenol	<	1900	UG/KG	07/22/11	8270DM	
4-Chloroaniline	<	390	UG/KG	07/22/11	8270DM	
2-Nitroaniline	<	1900	UG/KG	07/22/11	8270DM	
3-Nitroaniline	<	1900	UG/KG	07/22/11	8270DM	
4-Nitroaniline	<	1900	UG/KG	07/22/11	8270DM	
2-Methylnaphthalene	<	390	UG/KG	07/22/11	8270DM	
% Moisture - GC/MS Lab		11.	%	07/22/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROPHENOL	76
2,4,6-TRIBROMOPHENOL	120

Sample Number: 505990
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1055
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

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SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	88
P-TERPHENYL-D14	111
2-FLUOROBIPHENYL	92
NITROBENZENE-D5	93

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-2

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas

Sample Number: 505991
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1110
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier		Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab			36.6				
Acenaphthylene		<	370	UG/KG	07/11/11	8270DM	
Acenaphthene		<	370	UG/KG	07/11/11	8270DM	
Anthracene		<	370	UG/KG	07/11/11	8270DM	
Benzo(b)fluoranthene		<	370	UG/KG	07/11/11	8270DM	
Benzo(k)fluoranthene		<	370	UG/KG	07/11/11	8270DM	
Benzo(a)pyrene		<	370	UG/KG	07/11/11	8270DM	
Bis(2-chloroethyl)ether		<	370	UG/KG	07/11/11	8270DM	
Bis(2-chloroethoxy)methane		<	370	UG/KG	07/11/11	8270DM	
Bis(2-chloroisopropyl)ethe		<	370	UG/KG	07/11/11	8270DM	
Butylbenzylphthalate		<	370	UG/KG	07/11/11	8270DM	
Chrysene		<	370	UG/KG	07/11/11	8270DM	
Diethylphthalate		<	370	UG/KG	07/11/11	8270DM	
Dimethylphthalate		<	370	UG/KG	07/11/11	8270DM	
Fluoranthene		<	370	UG/KG	07/11/11	8270DM	
Fluorene		<	370	UG/KG	07/11/11	8270DM	
Hexachlorocyclopentadiene	MI	<	370	UG/KG	07/11/11	8270DM	
Hexachloroethane		<	370	UG/KG	07/11/11	8270DM	
Indeno(123cd)pyrene		<	370	UG/KG	07/11/11	8270DM	
Isophorone		<	370	UG/KG	07/11/11	8270DM	
Nitrosodipropylamine		<	370	UG/KG	07/11/11	8270DM	
Nitrosodiphenylamine		<	370	UG/KG	07/11/11	8270DM	
Naphthalene		<	370	UG/KG	07/11/11	8270DM	
Nitrobenzene		<	370	UG/KG	07/11/11	8270DM	
p-Chloro-m-cresol		<	370	UG/KG	07/11/11	8270DM	
Phenanthrene		<	370	UG/KG	07/11/11	8270DM	
Pyrene		<	370	UG/KG	07/11/11	8270DM	
Benzo(ghi)perylene		<	370	UG/KG	07/11/11	8270DM	
Benzo(a)anthracene		<	370	UG/KG	07/11/11	8270DM	
Dibenzo(ah)anthracene		<	370	UG/KG	07/11/11	8270DM	
2-Chloronaphthalene		<	370	UG/KG	07/11/11	8270DM	
2-Chlorophenol		<	370	UG/KG	07/11/11	8270DM	
2-Nitrophenol		<	370	UG/KG	07/11/11	8270DM	

Sample Number: 505991
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1110
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

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Name	Qualifier		Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate		<	370	UG/KG	07/11/11	8270DM	
2,4-Dichlorophenol		<	370	UG/KG	07/11/11	8270DM	
2,4-Dimethylphenol		<	370	UG/KG	07/11/11	8270DM	
2,4-Dinitrotoluene		<	370	UG/KG	07/11/11	8270DM	
2,4-Dinitrophenol	MI	<	1800	UG/KG	07/11/11	8270DM	
2,4,6-Trichlorophenol		<	1800	UG/KG	07/11/11	8270DM	
2,6-Dinitrotoluene		<	370	UG/KG	07/11/11	8270DM	
3,3'-Dichlorobenzidine		<	730	UG/KG	07/11/11	8270DM	
4-Bromophenylphenyl ether		<	370	UG/KG	07/11/11	8270DM	
4-Chlorophenyl phenylether		<	370	UG/KG	07/11/11	8270DM	
4-Nitrophenol		<	1800	UG/KG	07/11/11	8270DM	
4,6-Dinitro-o-cresol	MI	<	1800	UG/KG	07/11/11	8270DM	
Phenol		<	370	UG/KG	07/11/11	8270DM	
Pentachlorophenol		<	1800	UG/KG	07/11/11	8270DM	
Bis(2-ethylhexyl)phthalate		<	370	UG/KG	07/11/11	8270DM	
Di-n-butylphthalate		<	370	UG/KG	07/11/11	8270DM	
Hexachlorobenzene		<	370	UG/KG	07/11/11	8270DM	
Hexachlorobutadiene		<	370	UG/KG	07/11/11	8270DM	
Benzyl alcohol		<	370	UG/KG	07/11/11	8270DM	
Dibenzofuran		<	370	UG/KG	07/11/11	8270DM	
2-Methylphenol		<	370	UG/KG	07/11/11	8270DM	
4-Methylphenol		<	370	UG/KG	07/11/11	8270DM	
2,4,5-Trichlorophenol		<	1800	UG/KG	07/11/11	8270DM	
4-Chloroaniline		<	370	UG/KG	07/11/11	8270DM	
2-Nitroaniline		<	1800	UG/KG	07/11/11	8270DM	
3-Nitroaniline		<	1800	UG/KG	07/11/11	8270DM	
4-Nitroaniline		<	1800	UG/KG	07/11/11	8270DM	
2-Methylnaphthalene		<	370	UG/KG	07/11/11	8270DM	
% Moisture - GC/MS Lab			8.90	%		1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	81
2,4,6-TRIBROMOPHENOL	97

Sample Number: 505991
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1110
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

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Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
NITROBENZENE-D5		81
P-TERPHENYL-D14		95
2-FLUOROBIPHENYL		78
2-FLUOROPHENOL		72

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-3

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

(MI) a Matrix Interference was indicated for these compounds by the matrix spike and matrix spike duplicate samples.

* * ANALYST Cassandra Kontas

Sample Number: 505992
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1325
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		99.6				
Acenaphthylene	<	1000	UG/KG	07/13/11	8270DM	
Acenaphthene	<	1000	UG/KG	07/13/11	8270DM	
Anthracene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(b)fluoranthene		1200	UG/KG	07/13/11	8270DM	
Benzo(k)fluoranthene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(a)pyrene	<	1000	UG/KG	07/13/11	8270DM	
Bis(2-chloroethyl)ether	<	1000	UG/KG	07/13/11	8270DM	
Bis(2-chloroethoxy)methane	<	1000	UG/KG	07/13/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	1000	UG/KG	07/13/11	8270DM	
Butylbenzylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Chrysene	<	1000	UG/KG	07/13/11	8270DM	
Diethylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Dimethylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Fluoranthene		1500	UG/KG	07/13/11	8270DM	
Fluorene	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorocyclopentadiene	<	1000	UG/KG	07/13/11	8270DM	
Hexachloroethane	<	1000	UG/KG	07/13/11	8270DM	
Indeno(123cd)pyrene	<	1000	UG/KG	07/13/11	8270DM	
Isophorone	<	1000	UG/KG	07/13/11	8270DM	
Nitrosodipropylamine	<	1000	UG/KG	07/13/11	8270DM	
Nitrosodiphenylamine	<	1000	UG/KG	07/13/11	8270DM	
Naphthalene	<	1000	UG/KG	07/13/11	8270DM	
Nitrobenzene	<	1000	UG/KG	07/13/11	8270DM	
p-Chloro-m-cresol	<	1000	UG/KG	07/13/11	8270DM	
Phenanthrene	<	1000	UG/KG	07/13/11	8270DM	
Pyrene		1200	UG/KG	07/13/11	8270DM	
Benzo(ghi)perylene	<	1000	UG/KG	07/13/11	8270DM	
Benzo(a)anthracene	<	1000	UG/KG	07/13/11	8270DM	
Dibenzo(ah)anthracene	<	1000	UG/KG	07/13/11	8270DM	
2-Chloronaphthalene	<	1000	UG/KG	07/13/11	8270DM	
2-Chlorophenol	<	1000	UG/KG	07/13/11	8270DM	
2-Nitrophenol	<	1000	UG/KG	07/13/11	8270DM	

Sample Number: 505992
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1325
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dichlorophenol	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dimethylphenol	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dinitrotoluene	<	1000	UG/KG	07/13/11	8270DM	
2,4-Dinitrophenol	<	5000	UG/KG	07/13/11	8270DM	
2,4,6-Trichlorophenol	<	5000	UG/KG	07/13/11	8270DM	
2,6-Dinitrotoluene	<	1000	UG/KG	07/13/11	8270DM	
3,3'-Dichlorobenzidine	<	2000	UG/KG	07/13/11	8270DM	
4-Bromophenylphenyl ether	<	1000	UG/KG	07/13/11	8270DM	
4-Chlorophenyl phenylether	<	1000	UG/KG	07/13/11	8270DM	
4-Nitrophenol	<	5000	UG/KG	07/13/11	8270DM	
4,6-Dinitro-o-cresol	<	5000	UG/KG	07/13/11	8270DM	
Phenol	<	1000	UG/KG	07/13/11	8270DM	
Pentachlorophenol	<	5000	UG/KG	07/13/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	1000	UG/KG	07/13/11	8270DM	
Di-n-butylphthalate	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorobenzene	<	1000	UG/KG	07/13/11	8270DM	
Hexachlorobutadiene	<	1000	UG/KG	07/13/11	8270DM	
Benzyl alcohol	<	1000	UG/KG	07/13/11	8270DM	
Dibenzofuran	<	1000	UG/KG	07/13/11	8270DM	
2-Methylphenol	<	1000	UG/KG	07/13/11	8270DM	
4-Methylphenol	<	1000	UG/KG	07/13/11	8270DM	
2,4,5-Trichlorophenol	<	5000	UG/KG	07/13/11	8270DM	
4-Chloroaniline	<	1000	UG/KG	07/13/11	8270DM	
2-Nitroaniline	<	5000	UG/KG	07/13/11	8270DM	
3-Nitroaniline	<	5000	UG/KG	07/13/11	8270DM	
4-Nitroaniline	<	5000	UG/KG	07/13/11	8270DM	
2-Methylnaphthalene	<	1000	UG/KG	07/13/11	8270DM	
% Moisture - GC/MS Lab		0.6	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
NITROBENZENE-D5	72
2-FLUOROPHENOL	63

Sample Number: 505992
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1325
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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SURROGATE RECOVERIES	
COMPOUND	RECOVERY %
P-TERPHENYL-D14	87
PHENOL-D5	69
2-FLUOROBIPHENYL	73
2,4,6-TRIBROMOPHENOL	77

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
W-7 (WASTE SAMPLE)

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas

Sample Number: 505993
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1335
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		105.				
Acenaphthylene	<	1100	UG/KG	07/13/11	8270DM	
Acenaphthene	<	1100	UG/KG	07/13/11	8270DM	
Anthracene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(b)fluoranthene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(k)fluoranthene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(a)pyrene	<	1100	UG/KG	07/13/11	8270DM	
Bis(2-chloroethyl)ether	<	1100	UG/KG	07/13/11	8270DM	
Bis(2-chloroethoxy)methane	<	1100	UG/KG	07/13/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	1100	UG/KG	07/13/11	8270DM	
Butylbenzylphthalate	<	1100	UG/KG	07/13/11	8270DM	
Chrysene	<	1100	UG/KG	07/13/11	8270DM	
Diethylphthalate	<	1100	UG/KG	07/13/11	8270DM	
Dimethylphthalate	<	1100	UG/KG	07/13/11	8270DM	
Fluoranthene	<	1100	UG/KG	07/13/11	8270DM	
Fluorene	<	1100	UG/KG	07/13/11	8270DM	
Hexachlorocyclopentadiene	<	1100	UG/KG	07/13/11	8270DM	
Hexachloroethane	<	1100	UG/KG	07/13/11	8270DM	
Indeno(123cd)pyrene	<	1100	UG/KG	07/13/11	8270DM	
Isophorone	<	1100	UG/KG	07/13/11	8270DM	
Nitrosodipropylamine	<	1100	UG/KG	07/13/11	8270DM	
Nitrosodiphenylamine	<	1100	UG/KG	07/13/11	8270DM	
Naphthalene	<	1100	UG/KG	07/13/11	8270DM	
Nitrobenzene	<	1100	UG/KG	07/13/11	8270DM	
p-Chloro-m-cresol	<	1100	UG/KG	07/13/11	8270DM	
Phenanthrene	<	1100	UG/KG	07/13/11	8270DM	
Pyrene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(ghi)perylene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(a)anthracene	<	1100	UG/KG	07/13/11	8270DM	
Dibenzo(ah)anthracene	<	1100	UG/KG	07/13/11	8270DM	
2-Chloronaphthalene	<	1100	UG/KG	07/13/11	8270DM	
2-Chlorophenol	<	1100	UG/KG	07/13/11	8270DM	
2-Nitrophenol	<	1100	UG/KG	07/13/11	8270DM	

Sample Number: 505993
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1335
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	1100	UG/KG	07/13/11	8270DM	
2,4-Dichlorophenol	<	1100	UG/KG	07/13/11	8270DM	
2,4-Dimethylphenol	<	1100	UG/KG	07/13/11	8270DM	
2,4-Dinitrotoluene	<	1100	UG/KG	07/13/11	8270DM	
2,4-Dinitrophenol	<	5300	UG/KG	07/13/11	8270DM	
2,4,6-Trichlorophenol	<	5300	UG/KG	07/13/11	8270DM	
2,6-Dinitrotoluene	<	1100	UG/KG	07/13/11	8270DM	
3,3'-Dichlorobenzidine	<	2100	UG/KG	07/13/11	8270DM	
4-Bromophenylphenyl ether	<	1100	UG/KG	07/13/11	8270DM	
4-Chlorophenyl phenylether	<	1100	UG/KG	07/13/11	8270DM	
4-Nitrophenol	<	5300	UG/KG	07/13/11	8270DM	
4,6-Dinitro-o-cresol	<	5300	UG/KG	07/13/11	8270DM	
Phenol	<	1100	UG/KG	07/13/11	8270DM	
Pentachlorophenol	<	5300	UG/KG	07/13/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	1100	UG/KG	07/13/11	8270DM	
Di-n-butylphthalate	<	1100	UG/KG	07/13/11	8270DM	
Hexachlorobenzene	<	1100	UG/KG	07/13/11	8270DM	
Hexachlorobutadiene	<	1100	UG/KG	07/13/11	8270DM	
Benzyl alcohol	<	1100	UG/KG	07/13/11	8270DM	
Dibenzofuran	<	1100	UG/KG	07/13/11	8270DM	
2-Methylphenol	<	1100	UG/KG	07/13/11	8270DM	
4-Methylphenol	<	1100	UG/KG	07/13/11	8270DM	
2,4,5-Trichlorophenol	<	5300	UG/KG	07/13/11	8270DM	
4-Chloroaniline	<	1100	UG/KG	07/13/11	8270DM	
2-Nitroaniline	<	5300	UG/KG	07/13/11	8270DM	
3-Nitroaniline	<	5300	UG/KG	07/13/11	8270DM	
4-Nitroaniline	<	5300	UG/KG	07/13/11	8270DM	
2-Methylnaphthalene	<	1100	UG/KG	07/13/11	8270DM	
% Moisture - GC/MS Lab		5.8	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROBIPHENYL	69
P-TERPHENYL-D14	72

Sample Number: 505993
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1335
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

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OKLAHOMA, 73102-6010
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Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
PHENOL-D5		62
NITROBENZENE-D5		69
2,4,6-TRIBROMOPHENOL		76
2-FLUOROPHENOL		58

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-4

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas

Sample Number: 505994
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1335
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab.		104.				
Acenaphthylene	<	1100	UG/KG	07/13/11	8270DM	
Acenaphthene	<	1100	UG/KG	07/13/11	8270DM	
Anthracene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(b)fluoranthene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(k)fluoranthene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(a)pyrene	<	1100	UG/KG	07/13/11	8270DM	
Bis(2-chloroethyl)ether	<	1100	UG/KG	07/13/11	8270DM	
Bis(2-chloroethoxy)methane	<	1100	UG/KG	07/13/11	8270DM	
Bis(2-chloroisopropyl)ethe:	<	1100	UG/KG	07/13/11	8270DM	
Butylbenzylphthalate	<	1100	UG/KG	07/13/11	8270DM	
Chrysene	<	1100	UG/KG	07/13/11	8270DM	
Diethylphthalate	<	1100	UG/KG	07/13/11	8270DM	
Dimethylphthalate	<	1100	UG/KG	07/13/11	8270DM	
Fluoranthene	<	1100	UG/KG	07/13/11	8270DM	
Fluorene	<	1100	UG/KG	07/13/11	8270DM	
Hexachlorocyclopentadiene	<	1100	UG/KG	07/13/11	8270DM	
Hexachloroethane	<	1100	UG/KG	07/13/11	8270DM	
Indeno(123cd)pyrene	<	1100	UG/KG	07/13/11	8270DM	
Isophorone	<	1100	UG/KG	07/13/11	8270DM	
Nitrosodipropylamine	<	1100	UG/KG	07/13/11	8270DM	
Nitrosodiphenylamine	<	1100	UG/KG	07/13/11	8270DM	
Naphthalene	<	1100	UG/KG	07/13/11	8270DM	
Nitrobenzene	<	1100	UG/KG	07/13/11	8270DM	
p-Chloro-m-cresol	<	1100	UG/KG	07/13/11	8270DM	
Phenanthrene	<	1100	UG/KG	07/13/11	8270DM	
Pyrene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(ghi)perylene	<	1100	UG/KG	07/13/11	8270DM	
Benzo(a)anthracene	<	1100	UG/KG	07/13/11	8270DM	
Dibenzo(ah)anthracene	<	1100	UG/KG	07/13/11	8270DM	
2-Chloronaphthalene	<	1100	UG/KG	07/13/11	8270DM	
2-Chlorophenol	<	1100	UG/KG	07/13/11	8270DM	
2-Nitrophenol	<	1100	UG/KG	07/13/11	8270DM	

Sample Number: 505994
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1335
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	1100	UG/KG	07/13/11	8270DM	
2,4-Dichlorophenol	<	1100	UG/KG	07/13/11	8270DM	
2,4-Dimethylphenol	<	1100	UG/KG	07/13/11	8270DM	
2,4-Dinitrotoluene	<	1100	UG/KG	07/13/11	8270DM	
2,4-Dinitrophenol	<	5200	UG/KG	07/13/11	8270DM	
2,4,6-Trichlorophenol	<	5200	UG/KG	07/13/11	8270DM	
2,6-Dinitrotoluene	<	1100	UG/KG	07/13/11	8270DM	
3,3'-Dichlorobenzidine	<	2100	UG/KG	07/13/11	8270DM	
4-Bromophenylphenyl ether	<	1100	UG/KG	07/13/11	8270DM	
4-Chlorophenyl phenylether	<	1100	UG/KG	07/13/11	8270DM	
4-Nitrophenol	<	5200	UG/KG	07/13/11	8270DM	
4,6-Dinitro-o-cresol	<	5200	UG/KG	07/13/11	8270DM	
Phenol	<	1100	UG/KG	07/13/11	8270DM	
Pentachlorophenol	<	5200	UG/KG	07/13/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	1100	UG/KG	07/13/11	8270DM	
Di-n-butylphthalate	<	1100	UG/KG	07/13/11	8270DM	
Hexachlorobenzene	<	1100	UG/KG	07/13/11	8270DM	
Hexachlorobutadiene	<	1100	UG/KG	07/13/11	8270DM	
Benzyl alcohol	<	1100	UG/KG	07/13/11	8270DM	
Dibenzofuran	<	1100	UG/KG	07/13/11	8270DM	
2-Methylphenol	<	1100	UG/KG	07/13/11	8270DM	
4-Methylphenol	<	1100	UG/KG	07/13/11	8270DM	
2,4,5-Trichlorophenol	<	5200	UG/KG	07/13/11	8270DM	
4-Chloroaniline	<	1100	UG/KG	07/13/11	8270DM	
2-Nitroaniline	<	5200	UG/KG	07/13/11	8270DM	
3-Nitroaniline	<	5200	UG/KG	07/13/11	8270DM	
4-Nitroaniline	<	5200	UG/KG	07/13/11	8270DM	
2-Methylnaphthalene	<	1100	UG/KG	07/13/11	8270DM	
% Moisture - GC/MS Lab		4.6	%	07/13/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
P-TERPHENYL-D14	87
PHENOL-D5	77

Sample Number: 505994
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1335
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
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OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
2-FLUOROBIPHENYL		81
NITROBENZENE-D5		80
2,4,6-TRIBROMOPHENOL		97
2-FLUOROPHENOL		70

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
Hexatriacontane		9800	µg/kg
Pentatriacontane		5700	µg/kg

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-5

ANALYST'S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

The analysis indicates the presence of one or more compounds that have been 'tentatively identified,' and the associated numerical values represent their approximate concentration.

* * ANALYST Cassandra Kontas

Sample Number: 505995
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1415
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

To: TODD DOWNHAM/LPD

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab:		41.9				
Acenaphthylene	<	420	UG/KG	07/11/11	8270DM	
Acenaphthene	<	420	UG/KG	07/11/11	8270DM	
Anthracene	<	420	UG/KG	07/11/11	8270DM	
Benzo(b)fluoranthene	<	420	UG/KG	07/11/11	8270DM	
Benzo(k)fluoranthene	<	420	UG/KG	07/11/11	8270DM	
Benzo(a)pyrene	<	420	UG/KG	07/11/11	8270DM	
Bis(2-chloroethyl)ether	<	420	UG/KG	07/11/11	8270DM	
Bis(2-chloroethoxy)methane	<	420	UG/KG	07/11/11	8270DM	
Bis(2-chloroisopropyl)ethe:	<	420	UG/KG	07/11/11	8270DM	
Butylbenzylphthalate	<	420	UG/KG	07/11/11	8270DM	
Chrysene	<	420	UG/KG	07/11/11	8270DM	
Diethylphthalate	<	420	UG/KG	07/11/11	8270DM	
Dimethylphthalate	<	420	UG/KG	07/11/11	8270DM	
Fluoranthene	<	420	UG/KG	07/11/11	8270DM	
Fluorene	<	420	UG/KG	07/11/11	8270DM	
Hexachlorocyclopentadiene	<	420	UG/KG	07/11/11	8270DM	
Hexachloroethane	<	420	UG/KG	07/11/11	8270DM	
Indeno(123cd)pyrene	<	420	UG/KG	07/11/11	8270DM	
Isophorone	<	420	UG/KG	07/11/11	8270DM	
Nitrosodipropylamine	<	420	UG/KG	07/11/11	8270DM	
Nitrosodiphenylamine	<	420	UG/KG	07/11/11	8270DM	
Naphthalene	<	420	UG/KG	07/11/11	8270DM	
Nitrobenzene	<	420	UG/KG	07/11/11	8270DM	
p-Chloro-m-cresol	<	420	UG/KG	07/11/11	8270DM	
Phenanthrene	<	420	UG/KG	07/11/11	8270DM	
Pyrene	<	420	UG/KG	07/11/11	8270DM	
Benzo(ghi)perylene	<	420	UG/KG	07/11/11	8270DM	
Benzo(a)anthracene	<	420	UG/KG	07/11/11	8270DM	
Dibenzo(ah)anthracene	<	420	UG/KG	07/11/11	8270DM	
2-Chloronaphthalene	<	420	UG/KG	07/11/11	8270DM	
2-Chlorophenol	<	420	UG/KG	07/11/11	8270DM	
2-Nitrophenol	<	420	UG/KG	07/11/11	8270DM	

Sample Number: 505995
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1415
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	420	UG/KG	07/11/11	8270DM	
2,4-Dichlorophenol	<	420	UG/KG	07/11/11	8270DM	
2,4-Dimethylphenol	<	420	UG/KG	07/11/11	8270DM	
2,4-Dinitrotoluene	<	420	UG/KG	07/11/11	8270DM	
2,4-Dinitrophenol	<	2100	UG/KG	07/11/11	8270DM	
2,4,6-Trichlorophenol	<	2100	UG/KG	07/11/11	8270DM	
2,6-Dinitrotoluene	<	420	UG/KG	07/11/11	8270DM	
3,3'-Dichlorobenzidine	<	840	UG/KG	07/11/11	8270DM	
4-Bromophenylphenyl ether	<	420	UG/KG	07/11/11	8270DM	
4-Chlorophenyl phenylether	<	420	UG/KG	07/11/11	8270DM	
4-Nitrophenol	<	2100	UG/KG	07/11/11	8270DM	
4,6-Dinitro-o-cresol	<	2100	UG/KG	07/11/11	8270DM	
Phenol	<	420	UG/KG	07/11/11	8270DM	
Pentachlorophenol	<	2100	UG/KG	07/11/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	420	UG/KG	07/11/11	8270DM	
Di-n-butylphthalate	<	420	UG/KG	07/11/11	8270DM	
Hexachlorobenzene	<	420	UG/KG	07/11/11	8270DM	
Hexachlorobutadiene	<	420	UG/KG	07/11/11	8270DM	
Benzyl alcohol	<	420	UG/KG	07/11/11	8270DM	
Dibenzofuran	<	420	UG/KG	07/11/11	8270DM	
2-Methylphenol	<	420	UG/KG	07/11/11	8270DM	
4-Methylphenol	<	420	UG/KG	07/11/11	8270DM	
2,4,5-Trichlorophenol	<	2100	UG/KG	07/11/11	8270DM	
4-Chloroaniline	<	420	UG/KG	07/11/11	8270DM	
2-Nitroaniline	<	2100	UG/KG	07/11/11	8270DM	
3-Nitroaniline	<	2100	UG/KG	07/11/11	8270DM	
4-Nitroaniline	<	2100	UG/KG	07/11/11	8270DM	
2-Methylnaphthalene	<	420	UG/KG	07/11/11	8270DM	
% Moisture - GC/MS Lab		21.2	%		1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	76
2-FLUOROBIPHENYL	72

Sample Number: 505995
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1415
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 9/7/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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COMPOUND	SURROGATE RECOVERIES	RECOVERY %
NITROBENZENE-D5		75
P-TERPHENYL-D14		91
2-FLUOROPHENOL		67
2,4,6-TRIBROMOPHENOL		91

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-10

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas

Sample Number: 505996
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1440
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		41.5				
Acenaphthylene	<	430	UG/KG	07/22/11	8270DM	
Acenaphthene	<	430	UG/KG	07/22/11	8270DM	
Anthracene	<	430	UG/KG	07/22/11	8270DM	
Benzo(b)fluoranthene	<	430	UG/KG	07/22/11	8270DM	
Benzo(k)fluoranthene	<	430	UG/KG	07/22/11	8270DM	
Benzo(a)pyrene	<	430	UG/KG	07/22/11	8270DM	
Bis(2-chloroethyl)ether	<	430	UG/KG	07/22/11	8270DM	
Bis(2-chloroethoxy)methane	<	430	UG/KG	07/22/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	430	UG/KG	07/22/11	8270DM	
Butylbenzylphthalate	<	430	UG/KG	07/22/11	8270DM	
Chrysene	<	430	UG/KG	07/22/11	8270DM	
Diethylphthalate	<	430	UG/KG	07/22/11	8270DM	
Dimethylphthalate	<	430	UG/KG	07/22/11	8270DM	
Fluoranthene	<	430	UG/KG	07/22/11	8270DM	
Fluorene	<	430	UG/KG	07/22/11	8270DM	
Hexachlorocyclopentadiene	<	430	UG/KG	07/22/11	8270DM	
Hexachloroethane	<	430	UG/KG	07/22/11	8270DM	
Indeno(123cd)pyrene	<	430	UG/KG	07/22/11	8270DM	
Isophorone	<	430	UG/KG	07/22/11	8270DM	
Nitrosodipropylamine	<	430	UG/KG	07/22/11	8270DM	
Nitrosodiphenylamine	<	430	UG/KG	07/22/11	8270DM	
Naphthalene	<	430	UG/KG	07/22/11	8270DM	
Nitrobenzene	<	430	UG/KG	07/22/11	8270DM	
p-Chloro-m-cresol	<	430	UG/KG	07/22/11	8270DM	
Phenanthrene	<	430	UG/KG	07/22/11	8270DM	
Pyrene	<	430	UG/KG	07/22/11	8270DM	
Benzo(ghi)perylene	<	430	UG/KG	07/22/11	8270DM	
Benzo(a)anthracene	<	430	UG/KG	07/22/11	8270DM	
Dibenzo(ah)anthracene	<	430	UG/KG	07/22/11	8270DM	
2-Chloronaphthalene	<	430	UG/KG	07/22/11	8270DM	
2-Chlorophenol	<	430	UG/KG	07/22/11	8270DM	
2-Nitrophenol	<	430	UG/KG	07/22/11	8270DM	

Sample Number: 505996
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1440
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	430	UG/KG	07/22/11	8270DM	
2,4-Dichlorophenol	<	430	UG/KG	07/22/11	8270DM	
2,4-Dimethylphenol	<	430	UG/KG	07/22/11	8270DM	
2,4-Dinitrotoluene	<	430	UG/KG	07/22/11	8270DM	
2,4-Dinitrophenol	<	2100	UG/KG	07/22/11	8270DM	
2,4,6-Trichlorophenol	<	2100	UG/KG	07/22/11	8270DM	
2,6-Dinitrotoluene	<	430	UG/KG	07/22/11	8270DM	
3,3'-Dichlorobenzidine	<	830	UG/KG	07/22/11	8270DM	
4-Bromophenylphenyl ether	<	430	UG/KG	07/22/11	8270DM	
4-Chlorophenyl phenylether	<	430	UG/KG	07/22/11	8270DM	
4-Nitrophenol	<	2100	UG/KG	07/22/11	8270DM	
4,6-Dinitro-o-cresol	<	2100	UG/KG	07/22/11	8270DM	
Phenol	<	430	UG/KG	07/22/11	8270DM	
Pentachlorophenol	<	2100	UG/KG	07/22/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	430	UG/KG	07/22/11	8270DM	
Di-n-butylphthalate	<	430	UG/KG	07/22/11	8270DM	
Hexachlorobenzene	<	430	UG/KG	07/22/11	8270DM	
Hexachlorobutadiene	<	430	UG/KG	07/22/11	8270DM	
Benzyl alcohol	<	430	UG/KG	07/22/11	8270DM	
Dibenzofuran	<	430	UG/KG	07/22/11	8270DM	
2-Methylphenol	<	430	UG/KG	07/22/11	8270DM	
4-Methylphenol	<	430	UG/KG	07/22/11	8270DM	
2,4,5-Trichlorophenol	<	2100	UG/KG	07/22/11	8270DM	
4-Chloroaniline	<	430	UG/KG	07/22/11	8270DM	
2-Nitroaniline	<	2100	UG/KG	07/22/11	8270DM	
3-Nitroaniline	<	2100	UG/KG	07/22/11	8270DM	
4-Nitroaniline	<	2100	UG/KG	07/22/11	8270DM	
2-Methylnaphthalene	<	430	UG/KG	07/22/11	8270DM	
% Moisture - GC/MS Lab		20	%	07/22/11	1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
PHENOL-D5	78
2-FLUOROPHENOL	68

Sample Number: 505996
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected: 1440
Date Received: 6/30/2011
Date Completed: 08/17/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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SURROGATE RECOVERIES

COMPOUND	RECOVERY %
NITROBENZENE-D5	82
2,4,6-TRIBROMOPHENOL	92
P-TERPHENYL-D14	100
2-FLUOROBIPHENYL	79

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

Metals GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
SED-7

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
Sample temperature upon receipt in the laboratory was not documented.

(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas

Sample Number: 505997
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected:
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

To: TODD DOWNHAM/LPD

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General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Dilution Factor, Extractab		33.3				
Acenaphthylene	<	330	UG/KG	07/11/11	8270DM	
Acenaphthene	<	330	UG/KG	07/11/11	8270DM	
Anthracene	<	330	UG/KG	07/11/11	8270DM	
Benzo(b)fluoranthene	<	330	UG/KG	07/11/11	8270DM	
Benzo(k)fluoranthene	<	330	UG/KG	07/11/11	8270DM	
Benzo(a)pyrene	<	330	UG/KG	07/11/11	8270DM	
Bis(2-chloroethyl)ether	<	330	UG/KG	07/11/11	8270DM	
Bis(2-chloroethoxy)methane	<	330	UG/KG	07/11/11	8270DM	
Bis(2-chloroisopropyl)ethe	<	330	UG/KG	07/11/11	8270DM	
Butylbenzylphthalate	<	330	UG/KG	07/11/11	8270DM	
Chrysene	<	330	UG/KG	07/11/11	8270DM	
Diethylphthalate	<	330	UG/KG	07/11/11	8270DM	
Dimethylphthalate	<	330	UG/KG	07/11/11	8270DM	
Fluoranthene	<	330	UG/KG	07/11/11	8270DM	
Fluorene	<	330	UG/KG	07/11/11	8270DM	
Hexachlorocyclopentadiene	<	330	UG/KG	07/11/11	8270DM	
Hexachloroethane	<	330	UG/KG	07/11/11	8270DM	
Indeno(123cd)pyrene	<	330	UG/KG	07/11/11	8270DM	
Isophorone	<	330	UG/KG	07/11/11	8270DM	
Nitrosodipropylamine	<	330	UG/KG	07/11/11	8270DM	
Nitrosodiphenylamine	<	330	UG/KG	07/11/11	8270DM	
Naphthalene	<	330	UG/KG	07/11/11	8270DM	
Nitrobenzene	<	330	UG/KG	07/11/11	8270DM	
p-Chloro-m-cresol	<	330	UG/KG	07/11/11	8270DM	
Phenanthrene	<	330	UG/KG	07/11/11	8270DM	
Pyrene	<	330	UG/KG	07/11/11	8270DM	
Benzo(ghi)perylene	<	330	UG/KG	07/11/11	8270DM	
Benzo(a)anthracene	<	330	UG/KG	07/11/11	8270DM	
Dibenzo(ah)anthracene	<	330	UG/KG	07/11/11	8270DM	
2-Chloronaphthalene	<	330	UG/KG	07/11/11	8270DM	
2-Chlorophenol	<	330	UG/KG	07/11/11	8270DM	
2-Nitrophenol	<	330	UG/KG	07/11/11	8270DM	

Sample Number: 505997
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected:
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
707 N. ROBINSON
OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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Name	Qualifier	Value	Units	Analyzed	Method	Prep Type
Di-n-octylphthalate	<	330	UG/KG	07/11/11	8270DM	
2,4-Dichlorophenol	<	330	UG/KG	07/11/11	8270DM	
2,4-Dimethylphenol	<	330	UG/KG	07/11/11	8270DM	
2,4-Dinitrotoluene	<	330	UG/KG	07/11/11	8270DM	
2,4-Dinitrophenol	<	1700	UG/KG	07/11/11	8270DM	
2,4,6-Trichlorophenol	<	1700	UG/KG	07/11/11	8270DM	
2,6-Dinitrotoluene	<	330	UG/KG	07/11/11	8270DM	
3,3'-Dichlorobenzidine	<	670	UG/KG	07/11/11	8270DM	
4-Bromophenylphenyl ether	<	330	UG/KG	07/11/11	8270DM	
4-Chlorophenyl phenylether	<	330	UG/KG	07/11/11	8270DM	
4-Nitrophenol	<	1700	UG/KG	07/11/11	8270DM	
4,6-Dinitro-o-cresol	<	1700	UG/KG	07/11/11	8270DM	
Phenol	<	330	UG/KG	07/11/11	8270DM	
Pentachlorophenol	<	1700	UG/KG	07/11/11	8270DM	
Bis(2-ethylhexyl)phthalate	<	330	UG/KG	07/11/11	8270DM	
Di-n-butylphthalate	<	330	UG/KG	07/11/11	8270DM	
Hexachlorobenzene	<	330	UG/KG	07/11/11	8270DM	
Hexachlorobutadiene	<	330	UG/KG	07/11/11	8270DM	
Benzyl alcohol	<	330	UG/KG	07/11/11	8270DM	
Dibenzofuran	<	330	UG/KG	07/11/11	8270DM	
2-Methylphenol	<	330	UG/KG	07/11/11	8270DM	
4-Methylphenol	<	330	UG/KG	07/11/11	8270DM	
2,4,5-Trichlorophenol	<	1700	UG/KG	07/11/11	8270DM	
4-Chloroaniline	<	330	UG/KG	07/11/11	8270DM	
2-Nitroaniline	<	1700	UG/KG	07/11/11	8270DM	
3-Nitroaniline	<	1700	UG/KG	07/11/11	8270DM	
4-Nitroaniline	<	1700	UG/KG	07/11/11	8270DM	
2-Methylnaphthalene	<	330	UG/KG	07/11/11	8270DM	
% Moisture - GC/MS Lab			%		1005 M	

SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROPHENOL	56
PHENOL-D5	59

Sample Number: 505997
Project Code: SW-SE
Agency Number:
Date Collected: 6/29/2011
Time Collected:
Date Received: 6/30/2011
Date Completed: 07/25/2011
Collected By: TD
PWS Id:
Location Code:
Station:
Facility:
Report Date: 8/17/2011

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE ENVIRONMENTAL LABORATORY
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OKLAHOMA CITY
OKLAHOMA, 73102-6010
General Inquiries: 1-800-869-1400
Sample Receiving: (405) 702-1113

Report of Analysis by GCMS

EPA Drinking Water Certification #OK00013

To: TODD DOWNHAM/LPD

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SURROGATE RECOVERIES

COMPOUND	RECOVERY %
2-FLUOROBIPHENYL	59
NITROBENZENE-D5	62
2,4,6-TRIBROMOPHENOL	60
P-TERPHENYL-D14	66

COMPOUND	TENTATIVELY IDENTIFIED BY NBS LIBRARY SEARCH	VALUE	UNITS
NU			

Summary

Labs performing analysis on this Sample:

GCMS

SOURCE: WILCOX REFINERY

SAMPLERS COMMENTS:
LAB BLANK

ANALYST`S COMMENTS:
Analyst: Cassandra Kontas
(NU) The analysis indicates no 'tentatively identified' compounds present above the reporting limit for this analysis.

* * ANALYST Cassandra Kontas