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January 31, 2007

Mr. Kenneth Herstowski
Environmental Protection Agency
901 N. Fifth Street
Kansas City, Kansas 66101

Re: Quarterly Update – 4th Quarter 2006
Former Augusta Refinery RCRA Facility Investigation (RFI)
Williams Petroleum Services, LLC
Augusta Kansas – KSD007235138

Dear Mr. Herstowski:

This letter is offered as the report of investigation activities at the Former Augusta Refinery in accordance with Section X, "Reporting," of the Administrative Order on Consent dated October 24, 2003, Docket No. RCRA-07-2004-0009. This report addresses activities occurring during the period of October 1 through December 31, 2006.

Description of Activities

The following field activities were completed during the quarter:

- Bi-monthly sampling of temporary groundwater monitor wells installed at the background area was performed in accordance with the respective Sampling and Analysis Plan. Background groundwater sampling was completed on October 3 and December 11, 2006.
- On October 3 through October 18, completed soil sampling and installation of temporary monitor wells at AOC 1 and SWMU 16 in accordance with the respective Sampling and Analysis Plan.
- On October 19 sampled surface and subsurface soil samples in the background area for arsenic, selenium, and cadmium analysis by EPA method 6010B.
- On October 20 through October 24, completed additional soil sampling in AOC 4, AOC 6, and SWMU 15.
- On October 24 through November 1, 2006, completed well development and groundwater sampling activities for the temporary monitor wells at AOC 1 and SWMU 16.
- On October 27, 2006 a total of 32, 55-gallon drums of non-hazardous classified investigative derived soil were transported to the Clean Harbors Landfill in Deer Trail, Colorado for disposal. Three, 55-gallon drums of hazardous classified investigative derived water were also transported to the Clean Harbors Kimball Incinerator, Kimball, Nebraska for disposal by "lean water incineration".

- On November 7 through November 11, 2007, completed the geophysical survey for SWMU 8, 9, AOC B, and AOC D.
- On November 14 through November 17, completed soil sampling and installation of temporary monitor wells at PA 2 and PA 3 in accordance with the respective Sampling and Analysis Plan.
- On November 17 through November 20, 2006, completed well development activities for the temporary monitor wells at PA 2 and PA 3.
- On November 21, 2006, survey activities for boring and temporary monitor well locations at AOC 1, SWMU 16, PA 2, and PA 3 were completed.
- On November 28 through December 5, 2006, completed well sampling activities for the temporary monitor wells at PA 2 and PA 3.
- On December 6 and December 21, 2006 select drums of investigative derived soil and water were sampled for disposal characterization.
- On December 12 through December 16, completed sediment and surface water sampling at SWMUs 10, 11, 13, and 14 in accordance with the respective Sampling and Analysis Plan.

Summary of All Findings

An investigation progress summary for AOC 1, SWMU 16, PA 2, and PA 3 is included as ***Table 1***.

Summaries of All EPA Approved Changes

None

Summaries of All Contacts

- On October 18, 2006, submitted PA 2 and PA 3 SAP for EPA review and approval.
- On October 30, 2006 submitted the 3rd quarter 2006 update.
- On November 9, 2006, submitted SWMU 10, SWMU 11, SWMU 13, and SWMU 14 SAP for EPA review and approval.
- In an e-mail message dated November 9, 2006, EPA expressed no objection to the implementation of the work proposed in the SAP for PA 2 and PA 3.
- In an e-mail message dated December 8, 2006, EPA expressed no objection to the implementation of the work proposed in the SAP for SWMUs 10, 11, 13, and 14.
- On December 19, 2006, submitted AOC A, AOC C, AOC E, AOC F, and AOC G SAP for EPA review and approval.

Summaries of Problems Encountered

A change in analytical methodology occurred between the first phase and second phase of field activities due to a switch in analytical laboratories. The switch resulted in a change in analytical methodology from graphite furnace atomic absorption (AA) method for the analysis of arsenic, cadmium and selenium in soil, to using inductively-coupled plasma atomic emission spectrometry (ICP). Evaluation of the arsenic analytical results for the background data collected during the

first phase compared to the second phase indicates that the arsenic results for soil are statistically different between the two phases of work.

Actions to Rectify Problems

The background soil was re-sampled and analyzed by ICP (EPA Method 6010B) for arsenic, cadmium, and selenium. This action was taken to determine if the statistical difference between results for the first phase and the second phase is due to the change in analytical methodology.

Table 2 presents the new metals dataset for the background soil. Summary statistics were performed for the new dataset (see ***Tables 3*** and ***4***). The 95 percent upper confidence level (95 percent UCL) of the mean background concentration for arsenic, cadmium and selenium for both surface and subsurface samples was calculated to be used as the representative value for these metals analyzed by EPA Method 6010B.

Changes in key project entities

None

Projected Work for the Next Reporting Period

SAPs for the following units will be developed during the first quarter of 2007 for subsequent submittal to EPA:

- AOC 5 – Leaded Tank Bottom Disposal Areas
- AOC B – Former Landfill North of Effluent Oxidation Pond
- AOC D – Asphaltic Material Disposal Area
- Groundwater – Site-wide

Field investigations for the following units will be performed or initiated during the next reporting period:

- AOCs A, B, C, D, E, F, and G – Oil Collection Pond, Former Landfill North of Effluent Oxidation Pond, Former Pond Areas, Asphaltic Material Disposal Area, Sludge Pond, Surface Staining, and liquid Fuel Burning Facility Area, respectively.
- SWMU 17 – Asphalt Landfill
- SWMUs 8 and 9 – East Landfill and Industrial Landfill
- AOC 5 – Leaded Tank Bottom Disposal Areas

Other Relevant Documentation

None

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to evaluate the information submitted. I certify that the information contained in or accompanying this submittal is true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I

certify that this submittal and all attachments were prepared in accordance with the procedures designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please provide all written correspondence regarding this Quarterly Update directly to Mr. Phil Roberts with Williams Petroleum Services, LLC. If you have any questions, do not hesitate to contact Mr. Roberts at (918) 573-0757.

Sincerely,
Williams Petroleum Services, LLC

Paul V. Hunter
Attorney in Fact

Enclosures

c: Mark deLorimier, Shaw Environmental, Inc.
David Way, Shaw Environmental, Inc.

Table 1. RCRA Facility Investigation Progress Summary, Former Augusta Refinery, Augusta, Kansas
Quarterly Status Report: 4th Quarter 2006

AOC / SWMU ID	Investigation Dates	Results			Actions Planned
		Surface Soil	Subsurface Soil	Groundwater	
AOC 1 - Surface Water Drainage Ditches	10/03/06 - 11/01/06	• Twenty-seven surface samples were above Region 9 direct soil exposure for arsenic.	• Two subsurface soil samples were above the Region 9 PRG DAF20 value for methylene chloride.	• Total and dissolved arsenic concentrations were above Region 9 PRG for tap water value and the MCL in all four temporary wells in AOC 1.	• Additional sampling for arsenic, benzene, and organic lead data in surface soil will be considered.
Total samples collected: twenty-seven surface samples, twenty-seven subsurface samples, and four groundwater samples.		• Fifteen surface samples were also above the 95 percent UCL of the mean background concentration for arsenic (6.05 mg/kg).	• One subsurface soil sample was above the Region 9 PRG DAF20 value for tetrachloroethylene.	• Benzene and naphthalene concentrations were above Region 9 PRG for tap water value in the four temporary wells in AOC 1.	• Benzene and naphthalene will be retained as COPC in groundwater for this Unit.
		• Six surface samples were above Region 9 direct soil exposure for organic lead.	• Nine subsurface samples were above the Region 9 PRG DAF 1 value for benzene[(1)].	• Benzene concentrations were above MCL value in the four temporary wells in AOC 1.	• For groundwater, a comparison of arsenic data to background levels will be performed after one year's worth of background quality data is collected.
		• One surface sample was above the Region 9 PRG DAF 1 value for benzene[(1)].	• One subsurface sample was above the Region 9 PRG DAF 1 value for naphthalene[(1)].		• Groundwater data will be used for consideration of additional well placement when the groundwater is investigated site wide.
					• Benzene, naphthalene, tetrachloroethylene, and methylene chloride will be retained as COPC in the subsurface soil and evaluated when groundwater is evaluated as a unit.

[(1)] Benzene and naphthalene were detected in the groundwater at AOC 1 above the Region 9 PRG for tap water value and therefore benzene and naphthalene concentrations in surface and subsurface soil were also screened against the Region 9 PRG DAF1 values.

Table 1. RCRA Facility Investigation Progress Summary, Former Augusta Refinery, Augusta, Kansas
Quarterly Status Report: 4th Quarter 2006

AOC / SWMU ID	Investigation Dates	Results			Actions Planned
		Surface Soil	Subsurface Soil	Groundwater	
SWMU 16 - Oily - Water Sewer System	10/09/2006 - 11/01/06	• Eight surface samples were above Region 9 direct soil exposure for arsenic.	• One subsurface soil sample was above the Region 9 PRG DAF20 value for 1,1,1-trichloroethane, 1,1-dichloroethane, and 1,1-dichloroethylene.	• Four of the six temporary monitoring wells installed in SWMU 16 were sampled. After development, SWMU 16-19 had 0.05 feet of product and was not sampled. SWMU 16-29 was dry at completion and not sampled.	• Additional sampling for arsenic, lead, and organic lead data in surface soil will be considered.
Total samples collected: eight surface samples, sixty-five subsurface samples, and four groundwater samples.		• Seven surface samples were also above the 95 percent UCL of the mean background concentration for arsenic (6.05 mg/kg).	• One subsurface soil sample was above the Region 9 PRG DAF20 value for ethylbenzene.	• Total and dissolved arsenic concentrations were above Region 9 PRG for tap water in all four temporary wells sampled.	• Benzene, 2-methylnaphthalene, and naphthalene will be retained as COPC in groundwater for this Unit.
		• Two surface samples were above Region 9 PRG direct soil exposure for lead.	• Ten subsurface soil samples were above the Region 9 PRG DAF20 value for methylene chloride.	• Total arsenic concentrations were above the MCL for three of the temporary wells sampled.	• For groundwater, a comparison of arsenic data to background levels will be performed after one year's worth of background quality data is collected.
		• One surface sample was above the Region 9 PRG direct soil exposure for organic lead.	• Fourteen subsurface soil samples were above Region 9 PRG DAF1 value for benzene[(2)].	• Dissolved arsenic concentrations were above the MCL for two of the temporary wells sampled.	• Groundwater data will be used for consideration of additional well placement when the groundwater is investigated site wide.
		• No laboratory results for the surface soil samples collected in SWMU 16 for benzene, 2-methylnaphthalene, and naphthalene were above the Region 9 PRG DAF1 value[(2)].	• Twenty-two subsurface soil samples were above Region 9 PRG DAF1 value for 2-methylnaphthalene[(2)].	• Benzene concentrations were above Region 9 PRG for tap water in the four temporary wells and the MCL value in three of the temporary monitoring wells.	• Benzene, naphthalene, 2-methylnaphthalene, ethylbenzene, 1,1,1-trichloroethane, 1,1-dichloroethane, and 1,1-dichloroethylene and methylene chloride will be retained as COPC in the subsurface soil and evaluated when groundwater is evaluated as a unit.
			• Thirteen subsurface soil samples were above Region 9 PRG DAF1 value for naphthalene[(2)].	• 2-methlynaphthalene concentrations were above Region 9 PRG for tap water value in two of the temporary wells.	
				• Naphthalene concentrations were above Region 9 PRG for tap water value in three of the temporary wells.	

Table 1. RCRA Facility Investigation Progress Summary, Former Augusta Refinery, Augusta, Kansas
Quarterly Status Report: 4th Quarter 2006

AOC / SWMU ID	Investigation Dates	Results			Actions Planned
		Surface Soil	Subsurface Soil	Groundwater	

[2] Benzene, 2-methylnaphthalene, and naphthalene were detected in the groundwater at SWMU 16 above the Region 9 PRG for tap water value and therefore benzene, 2-methylnaphthalene, and naphthalene concentrations in surface and subsurface soil were also screened against the Region 9 PRG DAF1 values.

Table 1. RCRA Facility Investigation Progress Summary, Former Augusta Refinery, Augusta, Kansas
Quarterly Status Report: 4th Quarter 2006

AOC / SWMU ID	Investigation Dates	Results			Actions Planned
		Surface Soil	Subsurface Soil	Groundwater	
PA 2 - Process Area 2	11/14/06 - 12/05/06	• Two surface samples were above Region 9 PRG direct soil exposure for organic lead.	• Three subsurface soil samples were above Region 9 PRG DAF1 value for benzene[3].	• Total and dissolved arsenic concentrations were above Region 9 PRG for Tap Water and the MCL in all three temporary wells.	• Additional sampling will be considered for 2-methylnaphthalene, organic lead and arsenic data in surface soil.
Total samples collected: ten surface samples, ten subsurface samples, and three groundwater samples.		• Ten surface samples were above Region 9 direct soil exposure for arsenic.	• Seven subsurface soil samples were above Region 9 PRG DAF1 value for naphthalene[3].	• Benzene concentrations were above Region 9 PRG for tap water and the MCL value in all three temporary wells.	• Benzene, 2-methylnaphthalene, and naphthalene will be retained as COPC in groundwater for this Unit.
		• One surface sample was also above the 95 percent UCL of the mean background concentration for arsenic (6.05 mg/kg).		• Two of the temporary monitoring wells had 2-methyl naphthalene concentrations in groundwater above Region 9 PRG for tap water value.	• For groundwater, a comparison of arsenic data to background levels will be performed after one year's worth of background quality data is collected.
		• One surface sample was above the Region 9 PRG DAF1 value[3] for 2-methylnaphthalene.		• Naphthalene concentrations were above the Region 9 PRG for tap water in all three temporary monitoring wells.	• Groundwater data will be used for consideration of additional well placement when the groundwater is investigated site wide.
		• No laboratory results for the surface soil samples collected in SWMU 16 for benzene or naphthalene were above the Region 9 PRG DAF1 value[3].			• Benzene and naphthalene will be retained as COPC in the subsurface soil and evaluated when groundwater is evaluated as a unit.

[3] Benzene, 2-methylnaphthalene, and naphthalene were detected in the groundwater at PA 2 above the Region 9 PRG for tap water value and therefore benzene, 2-methylnaphthalene, and naphthalene concentrations in surface and subsurface soil were also screened against the Region 9 PRG DAF1 values.

Table 1. RCRA Facility Investigation Progress Summary, Former Augusta Refinery, Augusta, Kansas
Quarterly Status Report: 4th Quarter 2006

AOC / SWMU ID	Investigation Dates	Results			Actions Planned
		Surface Soil	Subsurface Soil	Groundwater	
PA 3 - Process Area 3	11/15/06 - 12/05/06	• Organic lead concentrations in one surface sample was above Region 9 PRG direct soil exposure value for residential soil.	• Four subsurface soil samples were above Region 9 PRG DAF1 value for benzene[4].	• Total arsenic concentrations were above Region 9 PRG for Tap Water in the three temporary wells and above the MCL for dissolved arsenic concentration in one of the temporary wells.	• Additional sampling will be considered for benzene, organic lead and arsenic data in surface soil.
Total samples collected: ten surface samples, ten subsurface samples, and three groundwater samples.		• Benzene concentrations in one surface sample was above Region 9 PRG direct soil exposure value for residential soil.	• One subsurface soil sample was above Region 9 PRG DAF20 value for tetrachloroethylene.	• Benzene concentrations were above Region 9 PRG for tap water and the MCL value in all three temporary wells.	• Benzene, xylene, and naphthalene will be retained as COPC in groundwater for this Unit.
		• Ten surface samples were above Region 9 direct soil exposure for arsenic.		• Two of the temporary monitoring wells had xylene concentrations in groundwater above Region 9 PRG for tap water value.	• For groundwater, a comparison of arsenic data to background levels will be performed after one year's worth of background quality data is collected.
		• Four surface samples were also above the 95 percent UCL of the mean background concentration for arsenic (6.05 mg/kg).		• Naphthalene concentrations were above the Region 9 PRG for tap water in all three temporary monitoring wells.	• Groundwater data will be used for consideration of additional well placement when the groundwater is investigated site wide.
		• Three surface samples were above the Region 9 PRG DAF1 value[4] for benzene.			• Benzene and tetrachloroethylene will be retained as COPC in the subsurface soil and evaluated when groundwater is evaluated as a unit.
		• No laboratory results for the surface soil samples collected in SWMU 16 for xylene or naphthalene were above the Region 9 PRG DAF1 value[4].			

[4] Benzene, xylene, and naphthalene were detected in the groundwater at PA 3 above the Region 9 PRG for tap water value and therefore benzene, xylene, and naphthalene concentrations in surface and subsurface soil were also screened against the Region 9 PRG DAF1 values.

Background Area
Summary of Additional Soil Analytical Metal Results

Date: 11/15/2006

Williams Petroleum Services, LLC.

PERIOD: From 10/19/2006 thru 10/19/2006 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	DEPTH	Starting Depth (feet)	Ending Depth (feet)	Arsenic (mg/kg)	Cadmium (mg/kg)	Selenium (mg/kg)
BG-01	10/19/2006	0.00	0.00	1.00	5.9	3.1	[0.54]
BG-01	10/19/2006	6.00	6.00	8.00	5.9	<0.036	<0.32
BG-02	10/19/2006	0.00	0.00	1.00	6.0	0.63	<0.32
BG-02	10/19/2006	8.00	8.00	10.00	4.2	[0.25]	<0.31
BG-03	10/19/2006	0.00	0.00	1.00	5.2	[0.57]	[0.49]
BG-03	10/19/2006	2.00	2.00	4.00	6.8	[0.30]	<0.33
BG-04	10/19/2006	0.00	0.00	1.00	5.8	0.89	<0.30
BG-04	10/19/2006	4.00	4.00	6.00	4.3	[0.14]	<0.33
BG-05	10/19/2006	0.00	0.00	1.00	5.3	[0.047]	[0.53]
BG-05	10/19/2006	6.00	6.00	8.00	4.3	[0.071]	<0.33
BG-06	10/19/2006	0.00	0.00	1.00	7.2	<0.035	[0.44]
BG-06	10/19/2006	8.00	8.00	10.00	5.0	<0.036	[0.39]
BG-08	10/19/2006	0.00	0.00	1.00	5.4	[0.35]	[0.72]
BG-08	10/19/2006	8.00	8.00	10.00	5.3	[0.24]	<0.32
BG-09	10/19/2006	0.00	0.00	1.00	6.2	0.69	<0.34
BG-09	10/19/2006	1.00	1.00	2.00	8.8	<0.040	[0.40]
BG-10	10/19/2006	0.00	0.00	1.00	5.9	[0.29]	[0.31]
BG-10	10/19/2006	2.00	2.00	4.00	6.8	<0.035	[0.37]
BG-11	10/19/2006	0.00	0.00	1.00	4.9	[0.24]	<0.31
BG-11	10/19/2006	4.00	4.00	6.00	5.3	<0.035	<0.31

[x]=Less than Reporting Limit ---=Not analyzed

Background Area
Summary of Additional Soil Analytical Metal Results

Williams Petroleum Services, LLC.

PERIOD: From 10/19/2006 thru 10/19/2006 - Inclusive
SAMPLE TYPE: Soil

SITE	DATE	DEPTH	Starting Depth (feet)	Ending Depth (feet)	Arsenic (mg/kg)	Cadmium (mg/kg)	Selenium (mg/kg)
BG-12	10/19/2006	0.00	0.00	1.00	5.1	[0.29]	<0.32
BG-12	10/19/2006	6.00	6.00	8.00	4.3	[0.14]	<0.32
BG-13	10/19/2006	0.00	0.00	1.00	5.1	[0.56]	[0.36]
BG-13	10/19/2006	8.00	8.00	10.00	4.6	[0.13]	<0.31
BG-14	10/19/2006	0.00	0.00	1.00	5.4	[0.35]	<0.32
BG-14	10/19/2006	2.00	2.00	4.00	4.6	[0.046]	<0.30
BG-15	10/19/2006	0.00	0.00	1.00	5.6	0.90	[0.39]
BG-15	10/19/2006	4.00	4.00	6.00	3.4	[0.14]	<0.32
BG-16	10/19/2006	0.00	0.00	1.00	6.4	[0.54]	[0.40]
BG-16	10/19/2006	6.00	6.00	8.00	4.5	[0.15]	<0.32
BG-17	10/19/2006	0.00	0.00	1.00	8.6	<0.040	[0.63]
BG-17	10/19/2006	8.00	8.00	10.00	4.5	<0.035	<0.31
BG-18	10/19/2006	0.00	0.00	1.00	5.6	[0.42]	[0.46]
BG-18	10/19/2006	2.00	2.00	4.00	5.4	[0.11]	[0.36]
BG-19	10/19/2006	0.00	0.00	1.00	5.4	[0.21]	[0.44]
BG-19	10/19/2006	4.00	4.00	6.00	4.5	[0.10]	<0.32
BG-20	10/19/2006	0.00	0.00	1.00	5.5	[0.15]	[0.40]
BG-20	10/19/2006	6.00	6.00	8.00	4.9	<0.036	<0.32
BG-21	10/19/2006	0.00	0.00	1.00	6.2	[0.48]	[0.43]
BG-21	10/19/2006	8.00	8.00	10.00	5.1	<0.033	<0.30

[x]=Less than Reporting Limit ---=Not analyzed

Table 3

Summary Statistics for Chemicals in Additional Surface Soil [a] Background Data

Former Augusta Refinery
Williams Petroleum Services, LLC
Augusta, Kansas

Chemical	No. of Samples	No. of Detects	Percent Detects	Percent Nondetect	Range of values (mg/kg)						Statistical Distribution	Mean (mg/kg)	Standard Deviation	Median (mg/kg)	95th UCL [b] (mg/kg)
					Detected Concentrations		Reporting Limits		Method Detection Limits						
					Minimum	Maximum	Minimum	Maximum	Minimum	Maximum					
Arsenic	20	20	100	0	4.9	8.6	1.1	1.3	0.19	0.22	Nonparametric	5.84	0.84	5.60	6.05
Cadmium	20	18	90	10	0.047	3.1	0.55	0.66	0.033	0.64	Lognormal	0.54	0.66	0.385	0.89
Selenium	20	14	70	30	0.31	0.72	1.1	1.3	0.3	1.3	Lognormal	0.42	0.11	0.40	0.47

[a] Surface soil background data include additional samples collected from 0 to 1 foot below ground surface on October 19, 2006.

[b] For lognormally and nonparametrically distributed data, the 95% upper confidence limit (UCL) determined using bootstrapping (2000 replications).
For normally distributed data, the 95% UCL determined using the Student's-t method.

Note: Arsenic, cadmium, and selenium were analyzed using EPA method 6010B.

UCL - Upper confidence limit.

mg/kg - Milligram per kilogram.

Table 4

Summary Statistics for Chemicals in Additional Subsurface Soil [a] Background Data

Former Augusta Refinery
Williams Petroleum Services, LLC
Augusta, Kansas

Chemical	No. of Samples	No. of Detects	Percent Detection	Percent Nondetect	Range of values (mg/kg)						Statistical Distribution	Mean (mg/kg)	Standard Deviation (mg/kg)	Median (mg/kg)	95th UCL [b] (mg/kg)
					Detected		Reporting Limits		Method Detection Limits						
					Minimum	Maximum	Minimum	Maximum	Minimum	Maximum					
Arsenic	20	20	100	0	3.4	8.8	1.1	1.3	0.19	0.23	Lognormal	5.13	1.20	4.75	5.54
Cadmium	20	12	60	40	0.046	0.3	0.56	0.66	0.033	0.61	Nonparametric	0.11	0.08	0.0855	0.13
Selenium	20	4	20	80	0.36	0.4	1.1	1.3	0.3	1.3	Nonparametric	0.33	0.03	0.32	0.34

[a] Subsurface soil background data include additional samples collected from 1 to 10 feet below ground surface on October 19, 2006.

[b] For lognormally and nonparametrically distributed data, the 95% upper confidence limit (UCL) determined using bootstrapping (2000 replications).
For normally distributed data, the 95% UCL determined using the Student's-t method.

Note: Arsenic, cadmium, and selenium were analyzed using EPA method 6010B.

UCL - Upper confidence limit.

mg/kg - Milligram per kilogram.