

APPENDIX G
USABILITY REPORTS

Attachment 1

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project	SITEWD - FLF
Sampling Contractor	EPD Field Sampling Team
Analytical Laboratory	General Engineering
Analytical Method	EPA 905.0/DOE RP501
Sample Delivery Group	41594
COC No./Sample IDs	41594 / 097-64, 106-02, 106-43, 106-44, 106-45
Date Sampled	12/13/2019
Parameter(s)	Radionuclides

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs	X			
Detection Limits (CRDL)	X			
Duplicates			X	
Matrix Spike (MS/MSD)	X			
MS/MSD Recoveries	X			
Field Blanks			X	
Equipment Blanks			X	
Method Blanks	X			
Chain-of-Custody Forms	X			
Field Sampling Logs			X	
Holding Times	X			
Nonconformance			X	
Other			X	

Reviewed by : Larry Singh
(Project Manager)

Date : 01/13/2020

Site ID Verification Data

Sample ID	Site ID
41594-001	097-64
41594-002	106-02
41594-003	106-43
41594-004	106-44
41594-005	
41594-005	106-45
41594-005	
41594-005	

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	SITEWD - O3M
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	Test America - Missouri
Analytical Method and/or Parameter :	524.2
Sample Delivery Group :	41689
COC No. / Sample IDs :	41689 / TB-2, 095-323, 095-322, 105-67, 105-66, 113-19, 121-45
Date Sampled :	2/3/2020, 2/4/2020

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :		X		Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met.

				<p>Conformance was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Lab MDLs are lower than ground water standards</p>
Duplicates :			X	
Matrix Spike (MS/MSD) :			X	
MS/MSD Recoveries :			X	
Trip Blanks :	X			
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :	X			
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :	X			
Surrogates :	X			
Other :			X	

Reviewed by : Larry Singh
(Subject Matter Expert)

Date : 02/26/2020

Reviewed by : Larry Singh
(Project Manager)

Date : 02/26/2020

Site ID Verification Data

Sample ID	Site ID
41689-001	TB-2
41689-002	095-323
41689-003	095-322
41689-004	105-67
41689-005	105-66
41689-006	113-19
41689-007	121-45

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	SITEWD - O3B96
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	Test America - Missouri
Analytical Method and/or Parameter :	524.2
Sample Delivery Group :	41785
COC No. / Sample IDs :	41785 / 095-159
Date Sampled :	3/4/2020

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :		X		Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Lab MDLs are lower than ground water standards
Duplicates :			X	
Matrix Spike (MS/MSD) :			X	
MS/MSD Recoveries :			X	
Trip Blanks :			X	
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :	X			
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :			X	
Surrogates :	X			
Other :			X	

Reviewed by : Larry D. Singh
(Subject Matter Expert)

Date : 03/24/2020

Reviewed by : Larry D. Singh
(Project Manager)

Date : 03/24/2020

Site ID Verification Data

Sample ID	Site ID
41785-001	095-159

Detection Limits (CRDL) :		X		Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Lab MDL is lower than ground water standards
Duplicates :	X			
Matrix Spike (MS/MSD) :	X			
MS/MSD Recoveries :	X			
Trip Blanks :	X			
Field Blanks :	X			
Equipment Blanks :			X	
Method Blanks :	X			
Chain of Custody Forms :	X			
Field Sampling Logs :			X	

Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :		X		LCS n-Butylbenzene response above upper control limit. LCS Benzene, 1,2,4-trimethyl response above upper control limit. Associated samples did not have any positive results for these analytes
Surrogates :	X			
Other :			X	

Reviewed by : Larry D. Singh
 (Subject Matter Expert)

Reviewed by : Larry D. Singh
 (Project Manager)

Date : 05/11/2020

Date : 05/11/2020

Site ID Verification Data

Sample ID	Site ID
41884-001	TB-1
41884-002	085-354
41884-003	095-172
41884-004	095-170
41884-005	095-169
41884-006	095-168
41884-007	085-293
41884-008	085-335
41884-009	085-351
41884-010	085-352
41884-011	095-163
41884-012	BD-1
41884-013	FB-1
41884-014	
41884-014	095-165
41884-014	
41884-015	095-166
41884-016	095-312
41884-017	095-159
41884-018	095-162
41884-019	085-349
41884-020	085-350

Attachment 1

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project	SITEWD - O3S
Sampling Contractor	EPD Field Sampling Team
Analytical Laboratory	Test America - Missouri
Analytical Method	905
Sample Delivery Group	42009
COC No./Sample IDs	42009 / 075-664, 065-325
Date Sampled	6/8/2020
Parameter(s)	Radionuclides

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs	X			
Detection Limits (CRDL)	X			
Duplicates			X	
Matrix Spike (MS/MSD)			X	
MS/MSD Recoveries			X	
Field Blanks			X	
Equipment Blanks			X	
Method Blanks	X			
Chain-of-Custody Forms	X			
Field Sampling Logs			X	
Holding Times	X			
Nonconformance			X	
Other			X	

Reviewed by : _____
(Project Manager)

Larry D. Singh

Date : _____

07/06/2020

Site ID Verification Data

Sample ID	Site ID
42009-001	075-664
42009-002	065-325

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	SITEWD - O3A
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	Test America - Missouri
Analytical Method and/or Parameter :	524.2
Sample Delivery Group :	42181
COC No. / Sample IDs :	42181 / TB-3, 000-538, 000-537
Date Sampled :	7/30/2020

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :		X		Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met.

				<p>Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Lab MDLs are lower than groundwater standards</p>
Duplicates :			X	
Matrix Spike (MS/MSD) :	X			
MS/MSD Recoveries :	X			
Trip Blanks :	X			
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :	X			
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :		X		<p>LCS Naphthalene response above upper control limit. LCS Hexachlorobutadiene response above upper control limit. LCS Naphthalene response above upper control limit. LCS Hexachlorobutadiene response above upper control limit. Associated samples did not have any positive results for these analytes</p>
Surrogates :	X			
Other :			X	

Reviewed by : Larry D. Singh
(Subject Matter Expert)

Date : 08/27/2020

Reviewed by : Larry D. Singh
(Project Manager)

Date : 08/27/2020

Site ID Verification Data

Sample ID	Site ID
42181-001	TB-3
42181-001	
42181-001	
42181-002	000-538
42181-003	000-537

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	OU3 - APT-LP
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	Test America - Missouri
Analytical Method and/or Parameter :	524.2
Sample Delivery Group :	42302
COC No. / Sample IDs :	42302 / 800-122, 800-123, 800-124
Date Sampled :	9/1/2020

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :		X		Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for 1,2,4-Trichlorobenzene was not met. Contract Required Detection Limit for Methyl bromide was not met. Contract Required Detection Limit for Dichlorodifluoromethane was not met. Contract Required Detection Limit for 1,2,3-Trichlorobenzene was not met. Contract Required Detection Limit for Naphthalene was not met. Contract Required Detection Limit for DBCP was not met. Lab MDLs are lower than the groundwater standards
Duplicates :			X	
Matrix Spike (MS/MSD) :			X	
MS/MSD Recoveries :			X	
Trip Blanks :			X	
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :	X			

Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :			X	
Surrogates :	X			
Other :			X	

Reviewed by : Larry Singh
 (Subject Matter Expert)

Date : 09/24/2020

Reviewed by : _____
 (Project Manager)

Date : _____

Site ID Verification Data

Sample ID	Site ID
42302-001	800-122
42302-002	800-123
42302-003	800-124

Attachment 1

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project	SITEWD - O3B
Sampling Contractor	EPD Field Sampling Team
Analytical Laboratory	Test America - Missouri
Analytical Method	901.1, 905, 906.0
Sample Delivery Group	42359
COC No./Sample IDs	42359 / TB-2, 114-07, 122-10, 122-09, 122-22, 122-18, 122-19, 122-20, 121-49, 122-05, 122-04, 122-02
Date Sampled	9/17/2020, 9/18/2020
Parameter(s)	Radionuclides

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs	X			
Detection Limits (CRDL)	X			
Duplicates			X	
Matrix Spike (MS/MSD)	X			
MS/MSD Recoveries	X			
Field Blanks			X	
Equipment Blanks			X	
Method Blanks	X			
Chain-of-Custody Forms	X			
Field Sampling Logs			X	
Holding Times	X			
Nonconformance			X	
Other			X	

Reviewed by : _____
(Project Manager)

Date : _____

Larry D. Singh

11/18/2020

Site ID Verification Data

Sample ID	Site ID
42359-001	TB-2
42359-002	
42359-002	
42359-002	114-07
42359-003	122-10
42359-003	
42359-004	122-09
42359-005	122-22
42359-006	122-18
42359-007	122-19
42359-008	122-20
42359-009	121-49
42359-009	
42359-009	
42359-010	122-05
42359-011	122-04
42359-012	122-02

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	OU8 - PFAS14
Sampling Contractor :	Dvirka & Bartilucci
Analytical Laboratory :	Test America Buffalo
Analytical Method and/or Parameter :	8270D SIM ID
Sample Delivery Group :	42391
COC No. / Sample IDs :	42391 / PFC-GP-119, BD-1
Date Sampled :	10/5/2020, 10/6/2020

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :	X			
Duplicates :	X			
Matrix Spike (MS/MSD) :			X	
MS/MSD Recoveries :			X	
Trip Blanks :			X	
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :	X			1,4-Dioxane-d8, 3.67 UG/L. This is the surr
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :	X			
Surrogates :			X	
Other :			X	

Reviewed by : Larry Singh
(Subject Matter Expert)

Date : 10/26/2020

Reviewed by : _____
(Project Manager)

Date : _____

Site ID Verification Data

Sample ID	Site ID
42391-001	PFC-GP-119
42391-002	PFC-GP-119
42391-003	PFC-GP-119
42391-004	PFC-GP-119
42391-005	PFC-GP-119
42391-006	PFC-GP-119
42391-007	PFC-GP-119
42391-008	PFC-GP-119
42391-009	BD-1
42391-010	PFC-GP-119
42391-011	PFC-GP-119
42391-012	PFC-GP-119
42391-013	PFC-GP-119

Method Blank Verification Data

Sample ID	Compound	Prev Val	Prev Det Lim	New Val	New Det Lim	Lab Qual	New Qual
42391-001	1,4-Dioxane-d8	3.40	0.19	3.40	3.40		
42391-002	1,4-Dioxane-d8	3.20	0.19	3.20	3.20		
42391-003	1,4-Dioxane-d8	3.40	0.19	3.40	3.40		
42391-004	1,4-Dioxane-d8	3.20	0.19	3.20	3.20		
42391-005	1,4-Dioxane-d8	2.80	0.19	2.80	2.80		
42391-006	1,4-Dioxane-d8	3.10	0.19	3.10	3.10		
42391-007	1,4-Dioxane-d8	3.30	0.20	3.30	3.30		
42391-008	1,4-Dioxane-d8	3	0.19	3	3		
42391-010	1,4-Dioxane-d8	3.40	0.19	3.40	3.40		
42391-011	1,4-Dioxane-d8	3.30	0.19	3.30	3.30		
42391-012	1,4-Dioxane-d8	3.30	0.20	3.30	3.30		
42391-013	1,4-Dioxane-d8	3.10	0.19	3.10	3.10		

Attachment 2

Brookhaven National Laboratory

Analytical Data Package Verification Checklist

Project :	OU6 - EDB
Sampling Contractor :	EPD Field Sampling Team
Analytical Laboratory :	General Engineering
Analytical Method and/or Parameter :	EPA 504.1, EPA 524.2
Sample Delivery Group :	42596
COC No. / Sample IDs :	42596 / 000-512, 000-509, 000-510, TB-1
Date Sampled :	12/1/2020

	Satisfactory	Unsatisfactory	NA	Comments
Sample IDs :	X			
Detection Limits (CRDL) :		X		Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for DBCP was not met. Contract Required Detection Limit for DBCP was not met. Lab MDLs are lower than groundwater standards
Duplicates :			X	
Matrix Spike (MS/MSD) :	X			
MS/MSD Recoveries :	X			
Trip Blanks :	X			
Field Blanks :			X	
Equipment Blanks :			X	
Method Blanks :		X		1,2,4-Trichlorobenzene, 0.2 UG/L. Naphthalene, 0.22 UG/L. Associated samples did not have any positive results for these analytes
Chain of Custody Forms :	X			
Field Sampling Logs :			X	
Holding Times :	X			
Non-Conformance Summary :			X	
Laboratory Control Standard :	X			
Surrogates :	X			
Other :			X	

Reviewed by : Larry D. Singh
(Subject Matter Expert)

Date : 12/30/2020

Reviewed by : _____
(Project Manager)

Date : _____

Site ID Verification Data

Sample ID	Site ID
42596-001	
42596-001	
42596-001	
42596-001	000-512
42596-001	
42596-002	000-509
42596-003	000-510
42596-004	TB-1

NARRATIVE

SDG: 41219 Laboratory: GEL
Site: COC #: 41219
Number of Samples: 6 Date Sampled: 07/17/2019
Analysis: TAL Metals Project: ES WQUAL

Summary:

Critical: Results have unacceptable level of uncertainty and should not be used for making decisions.

Data have been qualified as rejected ("R").

Major: A level of uncertainty exists that may not meet the data quality objectives for the project. A bias is likely to be presented in the results. Data has been qualified as non-detect("U").

Minor: The level of uncertainty is acceptable. No significant bias in the data was observed.

Critical Findings: None

Major Findings:

Presence of Hg detected in associated blank at 0.067ug/L. The following sample results have been qualified as non-detect("U") based on sample concentration being less than 10x the blank result: 41219-001, 41219-002, 41219-003, 41219-004, and 41219-005

Minor Findings: None

Comment:

Holding time and preservation: within holding time and correct preservation

Interference Check Sample: Acceptable

Initial Calibration: Acceptable

Continuing calibration: Acceptable

Calibration blanks: Acceptable

Method blanks: Hg detected in associated blank at 0.067ug/L

Matrix Spike: Acceptable

Laboratory Duplicate: Acceptable

LCS: Acceptable

ICP Serial Dilution: Acceptable

Compound Identification and Quantitation: Acceptable

Summary: Samples 41219-001, 41219-002, 41219-003, 41219-004, 41219-005 for Mercury have been qualified as non-detected("U") due to the presence of the analyte being detected in the method blank and sample results being less than 10x the concentration found in the method blank. Sample 41219-006 has been left unqualified.

Reviewer's Signature: _____ Larry D. Singh _____

Date: _____ April 27, 2020 _____

NARRATIVE

SDG: 41940 41940R Laboratory: GEL
Site: COC #: 41940
Number of Samples: 1 Date Sampled: 05/06/2020
Analysis: Cyanide Project: ES SPDES

Summary:

Critical: Results have unacceptable level of uncertainty and should not be used for making decisions.

Data have been qualified as rejected ("R").

Major: A level of uncertainty exists that may not meet the data quality objectives for the project. A bias is likely to be presented in the results. Data has been qualified as non-detect("U").

Minor: The level of uncertainty is acceptable. No significant bias in the data was observed.

Critical Findings: Sample 41940-002(STP Effluent Grab) has an unacceptable level of uncertainty due to the possibility of laboratory contamination. Due to the historic low to non-detection of cyanide, the sample was re-analyzed outside holding time with a resulted of Undetected. Even thou the re-analysis was done outside the technical holding time; it is my judgement that based on the sample being preserved (NaOH at pH >12) and stored (at 4C) if cyanide were present it would have been detected in the re-analysis. Reanalysis is qualified undetected ("U ")

Major Findings: None

Minor Findings: None

Comment:

Holding time and preservation: within holding time and correct preservation for original analysis

Interference Check Sample: Acceptable

Initial Calibration: Acceptable

Continuing calibration: Acceptable

Calibration blanks: Acceptable

Method blanks: Acceptable

Matrix Spike: Acceptable

Laboratory Duplicate: Acceptable

LCS: Acceptable

ICP Serial Dilution: Acceptable

Compound Identification and Quantitation: possible laboratory contamination for cyanide

Summary: Sample 41940-002 result for cyanide has been rejected ("R") due to possible laboratory contamination based on a re-analysis of the sample ("U ").

Reviewer's Signature: _____ Larry D. Singh _____

Date: _____ June 5, 2020 _____