



DATA VALIDATION REPORT

SAN JACINTO RIVER WASTE PITS
RUSH DIOXIN/FURAN SAMPLING

Additional Data

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Approved for Release:

A handwritten signature in dark ink, reading "Chr M. Frans". The signature is written in a cursive, flowing style.

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PROJECT NARRATIVE

Basis for Data Validation

This report summarizes the results of summary and full validation (EPA Stage 2B and Stage 4) performed on sediment sample data for the San Jacinto Waste Pits Rush Sampling. A complete list of samples is provided in the **Sample Index**.

Samples were analyzed by ALS Environmental, Houston, Texas. The analytical methods and EcoChem project chemists are listed below.

ANALYSIS	METHOD	PRIMARY REVIEW	SECONDARY REVIEW
Dioxin/Furan Compounds	1613B	E. Clayton	C. Frans

The data were reviewed using guidance and quality control criteria documented in the analytical methods and the following project and guidance documents:

- *Sampling and Analysis Plan: Sediment Study San Jacinto River Waste Pits Superfund Site* (Integral/Anchor QEA, April 2010).
- Addendum 3 (to the Sediment Sampling and Analysis Plan) - *Additional Sediment Sampling within the USEPA's Preliminary Site Perimeter, San Jacinto River Waste Pits Superfund Site* (Integral/Anchor QEA, March 2016).
- *USEPA National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) and Chlorinated Dibenzofurans (CDFs) Data Review* (USEPA 2011).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. If values are assigned an R, the data are to be rejected and should not be used for any site evaluation purposes. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above.

Data qualifier definitions, reason codes, and validation criteria are included as **APPENDIX A**. A Qualified Data Summary Table is included in **APPENDIX B**. Data Validation Worksheets and project associated communications will be kept on file at EcoChem, Inc. A qualified laboratory electronic data deliverable (EDD) is also submitted with this report.

Sample Index
San Jacinto Waste Pits
2017 Rush Sampling Additional Data

SDG	SAMPLE ID	LABORATORY ID	Dioxins/Furans
E1700973	SJWP-091517-020EPA	E1700973-001	✓
	SJWP-091517-021EPA	E1700973-002	✓
	SJWP-091517-022EPA	E1700973-003	✓
	SJWP-091517-023EPA	E1700973-004	✓
	SJWP-091517-024EPA	E1700973-005	✓
	SJWP-091517-025EPA	E1700973-006	✓
	SJWP-091517-026EPA	E1700973-007	✓
	SJWP-091517-027EPA	E1700973-008	✓
	SJWP-091517-028EPA	E1700973-009	✓
	SJWP-091517-029EPA	E1700973-010	✓
	SJWP-091517-030EPA	E1700973-011	✓
	SJWP-091517-031EPA	E1700973-012	✓
	SJWP-091517-032EPA	E1700973-013	✓
	SJWP-091517-033EPA	E1700973-014	✓
E1700974	SJWP-091517-020	E1700974-001	✓
	SJWP-091517-021	E1700974-002	✓
	SJWP-091517-022	E1700974-003	✓
	SJWP-091517-023	E1700974-004	✓
	SJWP-091517-024	E1700974-005	✓
	SJWP-091517-025	E1700974-006	✓
	SJWP-091517-026	E1700974-007	✓
	SJWP-091517-027	E1700974-008	✓
	SJWP-091517-028	E1700974-009	✓
	SJWP-091517-029	E1700974-010	✓
	SJWP-091517-030	E1700974-011	✓
	SJWP-091517-031	E1700974-012	✓
	SJWP-091517-032	E1700974-013	✓
	SJWP-091517-033	E1700974-014	✓

DATA VALIDATION REPORT
San Jacinto River Waste Pits
Rush Sediment Sampling – Additional Data
Dioxin/Furan Compounds by EPA 1613B

This report documents the review of analytical data from the analyses of sediment samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by ALS Environmental, Houston, Texas. Refer to the **Sample Index** for a complete list of samples.

SDG	NUMBER OF SAMPLES	VALIDATION LEVEL
E1700973	14 Sediment	EPA Stage 2B
E1700974	14 Sediment	EPA Stage 4

DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

EDD TO HARDCOPY VERIFICATION

Ten percent (10%) of the results in the laboratory EDD were verified by comparison to the laboratory data package.

TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

1	Sample Receipt, Preservation, and Holding Times	✓	Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)
✓	System Performance and Resolution Checks	1	Matrix Spikes/Matrix Spike Duplicates (MS/MSD)
✓	Initial Calibration (ICAL)	1	Field Replicate Samples
✓	Calibration Verification	✓	Target Analyte List
✓	Laboratory Blanks	2	Reported Results
1	Field Blanks	2	Compound Identification
2	Labeled Compound Recovery		

✓ Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

1 Quality control results are discussed below, but no data were qualified.

2 Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Sample Receipt, Preservation, and Holding Times

The validation guidance documents state that the cooler temperatures should be within an advisory temperature range of 2° to 6°C. The laboratory received the sample coolers within the advisory temperature range.

Field Blanks

No field blanks were submitted.

Labeled Compound Recovery

Isotope-stable labeled compounds were added to each field and QC sample. With the exceptions noted below, labeled compound recoveries were within the method-required control limits.

SDG E1700974: The following percent recovery (%R) values were less than the lower control limit in Sample SJWP-091517-030. The associated results were estimated (J-13).

Labeled Compound
¹³ C-1,2,3,4,7,8-HxCDD
¹³ C-1,2,3,6,7,8-HxCDD
¹³ C-1,2,3,4,6,7,8-HpCDD
¹³ C-OCDD
¹³ C-1,2,3,6,7,8-HxCDF
¹³ C-2,3,4,6,7,8-HxCDF
¹³ C-1,2,3,4,6,7,8-HpCDF
¹³ C-1,2,3,4,7,8,9-HpCDF

Matrix Spike/Matrix Spike Duplicates

Matrix spike/matrix spike duplicate (MS/MSD) samples are not required by the method and were not analyzed. Accuracy and precision were evaluated using the labeled compound and laboratory control sample/laboratory control sample duplicate (LCS/LCSD) results.

Field Replicates

No field replicates were submitted.

Reported Results

Reporting limits were adjusted for percent solids, starting sample size, and required dilutions.

SDG E1700973: For Sample SJWP-091517-030EPA, the results for 2,3,7,8-TCDD, OCDD, and 2,3,7,8-TCDF exceeded the calibration range and were flagged "E" by the laboratory. These results were flagged as do-not-report (DNR-20). The sample was re-analyzed at a 200x dilution and all other compounds in this analysis were flagged as do-not-report (DNR-11).

SDG E1700974: For Sample SJWP-091517-030, the results for 2,3,7,8-TCDD and 2,3,7,8-TCDF exceeded the calibration range and were flagged "E" by the laboratory. These results were flagged as do-not-report (DNR-20). The sample was re-analyzed at a 100x dilution and all other compounds in this analysis were flagged as do-not-report (DNR-11).

Compound Identification

The laboratory assigned K-flags to results where a peak was detected but did not meet ion ratio quantitation criteria. The reported values cannot be considered as positive identifications for these analytes. These results were considered potential false positives or estimated maximum possible concentrations (EMPC) and were qualified as not detected (U-25) at the reported values.

The method requires the confirmation of 2,3,7,8-TCDF using an alternate GC column as the DB5 column that is typically used cannot fully separate 2,3,7,8-TCDF from closely eluting non-target TCDF isomers. The laboratory did not perform a second column confirmation; however, the laboratory uses a DB-5MSUI column. This column provides adequate resolution of the TCDF isomers as indicated by the acceptable peak to valley ratios. Since the 2,3,7,8-TCDF resolution was acceptable, no action was necessary.

OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. Accuracy was acceptable as demonstrated by labeled compound and LCS/LCSD %R values. Precision was acceptable as demonstrated by the LCS/LCSD RPD values.

Detection limits were elevated due to ion ratio outliers. Results were estimated due to labeled compound recovery outliers and calibration range exceedances. Results were flagged as do not report (DNR) to indicate which results from multiple reported results should not be used.

Data flagged as do-not-report should not be used for any purpose.

All other data, as qualified, are acceptable for use.

APPENDIX A

DATA QUALIFIER DEFINITIONS

REASON CODES

AND CRITERIA TABLES

DATA VALIDATION QUALIFIER CODES

Based on National Functional Guidelines

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.
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DATA QUALIFIER REASON CODES

Group	Code	Reason for Qualification
Sample Handling	1	Improper Sample Handling or Sample Preservation (i.e., headspace, cooler temperature, pH, summa canister pressure); Exceeded Holding Times
Instrument Performance	24	Instrument Performance (i.e., tune, resolution, retention time window, endrin breakdown, lock-mass)
	5A	Initial Calibration (RF, %RSD, r^2)
	5B	Calibration Verification (CCV, CCAL; RF, %D, %R) Use bias flags (H,L) ¹ where appropriate
	5C	Initial Calibration Verification (ICV %D, %R) Use bias flags (H,L) ¹ where appropriate
Blank Contamination	6	Field Blank Contamination (Equipment Rinsate, Trip Blank, etc.)
	7	Lab Blank Contamination (i.e., method blank, instrument blank, etc.) Use low bias flag (L) ¹ for negative instrument blanks
Precision and Accuracy	8	Matrix Spike (MS and/or MSD) Recoveries Use bias flags (H,L) ¹ where appropriate
	9	Precision (all replicates: LCS/LCSD, MS/MSD, Lab Replicate, Field Replicate)
	10	Laboratory Control Sample Recoveries (a.k.a. Blank Spikes) Use bias flags (H,L) ¹ where appropriate
	12	Reference Material Use bias flags (H,L) ¹ where appropriate
	13	Surrogate Spike Recoveries (a.k.a. labeled compounds, recovery standards) Use bias flags (H,L) ¹ where appropriate
Interferences	16	ICP/ICP-MS Serial Dilution Percent Difference
	17	ICP/ICP-MS Interference Check Standard Recovery Use bias flags (H,L) ¹ where appropriate
	19	Internal Standard Performance (i.e., area, retention time, recovery)
	22	Elevated Detection Limit due to Interference (i.e., chemical and/or matrix)
	23	Bias from Matrix Interference (i.e. diphenyl ether, PCB/pesticides)
Identification and Quantitation	2	Chromatographic pattern in sample does not match pattern of calibration standard
	3	2 nd column confirmation (RPD or %D)
	4	Tentatively Identified Compound (TIC) (associated with NJ only)
	20	Calibration Range or Linear Range Exceeded
	25	Compound Identification (i.e., ion ratio, retention time, relative abundance, etc.)
Miscellaneous	11	A more appropriate result is reported (multiple reported analyses i.e., dilutions, re-extractions, etc. Associated with "R" and "DNR" only)
	14	Other (See DV report for details)
	26	Method QC information not provided

¹H = high bias indicated

L = low bias indicated

Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Sample Handling					
Cooler/Storage Temperature Preservation	Waters/Solids $\leq 6^{\circ}\text{C}$ & in the dark Tissues $< -10^{\circ}\text{C}$ & in the dark Preservation Aqueous: If Cl_2 is present Thiosulfate must be added and if pH > 9 it must be adjusted to 7 - 9	NFG ⁽¹⁾ Method ⁽²⁾	J(pos)/R(ND) if thiosulfate not added if Cl_2 present; J(pos)/UJ(ND) if pH not adjusted J(pos)/UJ(ND) if temp $> 20^{\circ}\text{C}$	1	EcoChem PJ, see TM-05
Holding Time	If properly stored, 1 year or: Extraction (all matrices): 30 days from collection Analysis (all matrices): 45 days from extraction	NFG ⁽¹⁾ Method ⁽²⁾	If not properly stored or HT exceedance: J(pos)/UJ(ND)	1	EcoChem PJ, see TM-05 Gross exceedance = > 1 year 2011 NFG Note: Under CWA, SDWA, and RCRA the HT for H ₂ O is 7 days.
Instrument Performance					
Mass Resolution (Tuning)	PFK (Perfluorokerosene) $\geq 10,000$ resolving power at m/z 304.9824. Exact mass of m/z 380.9760 w/in 5 ppm of theoretical value (380.97410 to 380.97790) . Analyzed prior to ICAL and at the start and end of each 12 hr. shift.	NFG ⁽¹⁾ Method ⁽²⁾	R(pos/ND) all analytes in all samples associated with the tune	24	Notify PM
Windows Defining Mix	Peaks for first and last eluters must be within established retention time windows for each selector group (chlorination level)	NFG ⁽¹⁾ Method ⁽²⁾	If peaks are not completely within windows (clipped): If natives are ok, J(pos)/UJ(ND) homologs (Totals) If natives are affected, R all results for that selector group	24	Notify PM
Column Performance Mix	Both mixes must be analyzed before ICAL and CCAL Valley $< 25\%$ (valley = $(x/y)*100\%$) where x = ht. of TCDD (or TCDF) & y = baseline to bottom of valley For all isomers eluting near the 2378-TCDD (TCDF) peak (TCDD only for 8290)	NFG ⁽¹⁾ Method ⁽²⁾	J(pos) if valley $> 25\%$	24	EcoChem PJ, see TM-05, Rev. 2; Note: TCDF is evaluated only if second column confirmation is performed
Initial Calibration Sensitivity	S/N ratio > 10 for all native and labeled compounds in CS1 std.	NFG ⁽¹⁾ Method ⁽²⁾	If < 10 , elevate Det. Limit or R(ND)	5A	
Initial Calibration Selectivity	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	NFG ⁽¹⁾ Method ⁽²⁾	If 2 or more ion ratios are out for one compound in ICAL, J(pos)	5A	EcoChem PJ, see TM-05, Rev. 2

Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Instrument Performance (continued)					
Initial Calibration (Minimum 5 stds.) Stability	%RSD < 20% for native compounds %RSD < 30% for labeled compounds (%RSD < 35% for labeled compounds under 1613b)	NFG ⁽¹⁾ Method ⁽²⁾	J(pos) natives if %RSD > 20%	5A	
	Absolute RT of ¹³ C ₁₂ -1234-TCDD >25 min on DB5 & >15 min on DB-225	NFG ⁽¹⁾ Method ⁽²⁾	Narrate, no action		EcoChem PJ, see TM-05, Rev. 2
Continuing Calibration (Prior to each 12 hr. shift) Sensitivity	S/N ratio for CS3 standard > 10	NFG ⁽¹⁾ Method ⁽²⁾	If <10, elevate Det. Limit or R(ND)	5B	
Continuing Calibration (Prior to each 12 hr. shift) Selectivity	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	NFG ⁽¹⁾ Method ⁽²⁾	For congener with ion ratio outlier, J(pos) natives in all samples associated with CCAL. No action for labeled congener ion ratio outliers.	25	EcoChem PJ, see TM-05
Continuing Calibration (Prior to each 12 hr. shift) Stability	%D +/-20% for native compounds %D +/-30% for labeled compounds (Must meet limits in Table 6, Method 1613B) If %D in the closing CCAL are within 25%/35%, the mean RF from the two CCAL may be used to calculate samples (Section 8.3.2.4 of 8290) .	NFG ⁽¹⁾ Method ⁽²⁾	Labeled compounds: Narrate, no action. Native compounds: 1613: J(pos)/UJ(ND) if %D is outside Table 6 limits J(pos)/R(ND) if %D is +/-75% of Table 6 limits 8290: J(pos)/UJ(ND) if %D = 20% - 75% J(pos)/R(ND) if %D > 75%	5B (H,L) ³	
	Absolute RT of ¹³ C ₁₂ -1234-TCDD and ¹³ C ₁₂ -123789-HxCDD should be ± 15 seconds of ICAL RRT for all other compounds must meet criteria listed in Table 2 Method 1316.	NFG ⁽¹⁾ Method ⁽²⁾	Narrate, no action	5B	EcoChem PJ, see TM-05
Blank Contamination					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > RL	NFG ⁽¹⁾ Method ⁽²⁾	U(pos) if result is < 5X action level.	7	Hierarchy of blank review: #1 - Review MB, qualify as needed #2 - Review FB , qualify as needed
Field Blank (FB)	FB: frequency as per QAPP No detected compounds > RL		U(pos) if result is < 5X action level.	6	

Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Precision and Accuracy					
MS/MSD (recovery)	MS/MSD not typically required for HRMS analyses. If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) if both %R > UCL - high bias J(pos)/UJ(ND) if both %R < LCL - low bias J(pos)/R(ND) if both %R < 10% - very low bias J(pos)/UJ(ND) if one > UCL & one < LCL, with no bias PJ if only one %R outlier	8 (H,L) ³	No action if only one spike %R is outside criteria. No action if parent concentration is > 4x the amount spiked. Qualify parent sample only unless other QC indicates systematic problems.
MS/MSD (RPD)	MS/MSD not typically required for HRMS analyses. If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) in parent sample if RPD > CL	9	Qualify parent sample only.
LCS (or OPR)	One per lab batch (of ≤ 20 samples) Use most current laboratory control limits or Limits from Table 6 of 1613B	NFG ⁽¹⁾ Method ⁽²⁾	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	10 (H,L) ³	No action if only one spike %R is outside criteria, when LCSD is analyzed. Qualify all associated samples.
LCSD/LCSD (RPD)	LCSD not typically required for HRMS analyses. One set per matrix and batch of 20 samples RPD < 35%	Method ⁽²⁾ EcoChem standard policy	J(pos) assoc. compound in all samples if RPD > CL	9	Qualify all associated samples.
Lab Duplicate (RPD)	Lab Dup not typically required for HRMS analyses. One per lab batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos)/UJ(ND) if RPD > CL	9	
Labeled Compounds (Internal Standards)	Added to all samples %R = 40% - 135% in all samples 8290 %R must meet limits in Table 7 Method 1613B	NFG ⁽¹⁾ Method ⁽²⁾	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	13 (H,L) ³	
Field Duplicates	Solids: RPD < 50% OR difference < 2X RL (for results < 5X RL) Aqueous: RPD < 35% OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	Narrate and qualify if required by project	9	Use professional judgment

Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Compound ID and Calculation					
Quantitation/ Identification	All ions for each isomer must maximize within ± 2 seconds. S/N ratio >2.5 Ion ratios must meet criteria listed in Table 8 Method 8290, or Table 9 of 1613B; RRTs w/in limits in Table 2 of 1613B	NFG ⁽¹⁾ Method ⁽²⁾	Narrate in report; qualify if necessary NJ(pos) for retention time outliers. U(pos) for ion ratio outliers.	25	EcoChem PJ, see TM-05
EMPC (estimated maximum possible concentration)	If quantitation identification criteria are not met, laboratory should report an EMPC value.	NFG ⁽¹⁾ Method ⁽²⁾	If laboratory correctly reported an EMPC value, qualify the native compound U(pos) to indicate that the value is a detection limit and qualify total homolog groups J (pos)	25	Use professional judgment See TM-18
Interferences	Interferences from chlorodiphenyl ether compounds	NFG ⁽¹⁾ Method ⁽²⁾	J(pos)/UJ(ND) if present	23	See TM-16
	Lock masses must not deviate $\pm 20\%$ from values in Table 8 of 1613B	Method ⁽²⁾	J(pos)/UJ(ND) if present	24	See TM-17
Second Column Confirmation	All 2,3,7,8-TCDF hits must be confirmed on a DB-225 (or equiv) column. All QC criteria must also be met for the confirmation analysis.	NFG ⁽¹⁾ Method ⁽²⁾	Report the DB-225 value. If not performed use PJ.	3	DNR-11 DB5 result if both results from both columns are reported. EcoChem PJ, see TM-05
Calculation Check	Check 10% of field & QC sample results	EcoChem standard policy	Contact laboratory for resolution and/or corrective action	na	Full data validation only.
Electronic Data Deliverable (EDD)					
Verification of EDD to hardcopy data	EcoChem verify @ 10% unless problems noted; then increase level up to 100% for next several packages.		Depending on scope of problem, correct at EcoChem (minor issues) to resubmittal by laboratory (major issues).	na	EcoChem Project Manager and/or Database Administrator will work with lab to provide long-term corrective action.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Standard reporting policy	Use "DNR" to flag results that will not be reported.	11	

(pos) - positive (detected) results; (ND) - not detected results

¹ National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) & Chlorinated Dibenzofurans (CDFs) Data Review, September 2011

² Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS), USEPA SW-846, Method 8290

² EPA Method 1613, Rev.B, Tetra-through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGS/HRMS, October 1994

³ NFG 2013 suggests using "+" / "-" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

APPENDIX B

QUALIFIED DATA SUMMARY TABLE

Qualified Data Summary Table
San Jacinto Waste Pits
Rush Dioxins Sampling

SDG	Sample ID	Lab Sample ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	DV Reason
E1700973	SJWP-091517-020EPA	E1700973-001	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.233	ng/kg	JK	U	25
	SJWP-091517-020EPA	E1700973-001	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzofuran	0.277	ng/kg	JK	U	25
	SJWP-091517-020EPA	E1700973-001	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	0.718	ng/kg	JK	U	25
	SJWP-091517-020EPA	E1700973-001	EPA1613B	Octachlorodibenzofuran	3.39	ng/kg	BJK	U	25
	SJWP-091517-021EPA	E1700973-002	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	3.2	ng/kg	JK	U	25
	SJWP-091517-021EPA	E1700973-002	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	2.12	ng/kg	JK	U	25
	SJWP-091517-021EPA	E1700973-002	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	0.582	ng/kg	JK	U	25
	SJWP-091517-021EPA	E1700973-002	EPA1613B	2,3,7,8-Tetrachlorodibenzofuran	7.61	ng/kg	K	U	25
	SJWP-091517-021EPA	E1700973-002	EPA1613B	Octachlorodibenzofuran	13.6	ng/kg	K	U	25
	SJWP-091517-022EPA	E1700973-003	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.324	ng/kg	JK	U	25
	SJWP-091517-022EPA	E1700973-003	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzofuran	0.547	ng/kg	JK	U	25
	SJWP-091517-022EPA	E1700973-003	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	0.614	ng/kg	JK	U	25
	SJWP-091517-022EPA	E1700973-003	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1	ng/kg	JK	U	25
	SJWP-091517-023EPA	E1700973-004	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.14	ng/kg	JK	U	25
	SJWP-091517-023EPA	E1700973-004	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.309	ng/kg	JK	U	25
	SJWP-091517-023EPA	E1700973-004	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1.05	ng/kg	JK	U	25
	SJWP-091517-023EPA	E1700973-004	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	1.34	ng/kg	JK	U	25
	SJWP-091517-023EPA	E1700973-004	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1.02	ng/kg	JK	U	25
	SJWP-091517-023EPA	E1700973-004	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	0.523	ng/kg	JK	U	25
	SJWP-091517-023EPA	E1700973-004	EPA1613B	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	0.591	ng/kg	JK	U	25
	SJWP-091517-023EPA	E1700973-004	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	0.622	ng/kg	JK	U	25
	SJWP-091517-024EPA	E1700973-005	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	1.02	ng/kg	JK	U	25
	SJWP-091517-024EPA	E1700973-005	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1.69	ng/kg	JK	U	25
	SJWP-091517-024EPA	E1700973-005	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	1.08	ng/kg	JK	U	25
	SJWP-091517-024EPA	E1700973-005	EPA1613B	1,2,3,7,8-Pentachlorodibenzofuran	1.81	ng/kg	JK	U	25
	SJWP-091517-025EPA	E1700973-006	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	2.02	ng/kg	JK	U	25
	SJWP-091517-025EPA	E1700973-006	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.63	ng/kg	JK	U	25
	SJWP-091517-025EPA	E1700973-006	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzofuran	11.7	ng/kg	K	U	25
	SJWP-091517-025EPA	E1700973-006	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	0.672	ng/kg	JK	U	25
	SJWP-091517-026EPA	E1700973-007	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	0.255	ng/kg	JK	U	25
	SJWP-091517-026EPA	E1700973-007	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	0.427	ng/kg	JK	U	25
	SJWP-091517-027EPA	E1700973-008	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	0.88	ng/kg	JK	U	25
	SJWP-091517-027EPA	E1700973-008	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	0.32	ng/kg	JK	U	25
	SJWP-091517-027EPA	E1700973-008	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1.15	ng/kg	JK	U	25
	SJWP-091517-027EPA	E1700973-008	EPA1613B	1,2,3,7,8-Pentachlorodibenzofuran	0.558	ng/kg	JK	U	25

Qualified Data Summary Table
San Jacinto Waste Pits
Rush Dioxins Sampling

SDG	Sample ID	Lab Sample ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	DV Reason
E1700973	SJWP-091517-027EPA	E1700973-008	EPA1613B	Octachlorodibenzofuran	13.5	ng/kg	K	U	25
	SJWP-091517-028EPA	E1700973-009	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.819	ng/kg	JK	U	25
	SJWP-091517-028EPA	E1700973-009	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.845	ng/kg	JK	U	25
	SJWP-091517-028EPA	E1700973-009	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzofuran	4.47	ng/kg	JK	U	25
	SJWP-091517-028EPA	E1700973-009	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	1.43	ng/kg	JK	U	25
	SJWP-091517-028EPA	E1700973-009	EPA1613B	1,2,3,7,8-Pentachlorodibenzofuran	2.84	ng/kg	JK	U	25
	SJWP-091517-029EPA	E1700973-010	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	7.2	ng/kg	K	U	25
	SJWP-091517-029EPA	E1700973-010	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.975	ng/kg	JK	U	25
	SJWP-091517-029EPA	E1700973-010	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	2.08	ng/kg	JK	U	25
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	1330	ng/kg	K,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1560	ng/kg	K,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	697	ng/kg	JK,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	57.6	ng/kg	JK,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzofuran	6020	ng/kg	D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	54	ng/kg	JK,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	1630	ng/kg	D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	53.7	ng/kg	JK,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	614	ng/kg	J,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	473	ng/kg	J,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	1,2,3,7,8-Pentachlorodibenzofuran	3460	ng/kg	D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	393	ng/kg	J,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	2,3,4,7,8-Pentachlorodibenzofuran	3010	ng/kg	D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	2,3,7,8-Tetrachlorodibenzo-p-dioxin	21200	ng/kg	E	DNR	20
	SJWP-091517-030EPA	E1700973-011	EPA1613B	2,3,7,8-Tetrachlorodibenzofuran	82400	ng/kg	E	DNR	20
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Heptachlorodibenzo-p-dioxin (Total)	1640	ng/kg	D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Heptachlorodibenzofuran (Total)	1020	ng/kg	U,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Hexachlorodibenzo-p-dioxin (Total)	147	ng/kg	J,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Hexachlorodibenzofuran (Total)	9090	ng/kg	D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Octachlorodibenzo-p-dioxin	9080	ng/kg	E	DNR	20
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Octachlorodibenzofuran	1800	ng/kg	JK,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Pentachlorodibenzo-p-dioxin (Total)	503	ng/kg	J,D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Pentachlorodibenzofuran (Total)	8500	ng/kg	D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Tetrachlorodibenzodioxin (Total)	62700	ng/kg	D	DNR	11
	SJWP-091517-030EPA	E1700973-011	EPA1613B	Tetrachlorodibenzofuran (Total)	242000	ng/kg	D	DNR	11

Qualified Data Summary Table
San Jacinto Waste Pits
Rush Dioxins Sampling

SDG	Sample ID	Lab Sample ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	DV Reason
E1700973	SJWP-091517-031EPA	E1700973-012	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	0.864	ng/kg	BJK	U	25
	SJWP-091517-031EPA	E1700973-012	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.29	ng/kg	BJK	U	25
	SJWP-091517-031EPA	E1700973-012	EPA1613B	Octachlorodibenzofuran	1.16	ng/kg	BJK	U	25
	SJWP-091517-032EPA	E1700973-013	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.05	ng/kg	JK	U	25
	SJWP-091517-032EPA	E1700973-013	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.771	ng/kg	JK	U	25
	SJWP-091517-032EPA	E1700973-013	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	1.24	ng/kg	JK	U	25
	SJWP-091517-032EPA	E1700973-013	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	0.631	ng/kg	JK	U	25
	SJWP-091517-032EPA	E1700973-013	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	0.807	ng/kg	JK	U	25
	SJWP-091517-033EPA	E1700973-014	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	0.966	ng/kg	JK	U	25
	SJWP-091517-033EPA	E1700973-014	EPA1613B	1,2,3,7,8-Pentachlorodibenzofuran	3.65	ng/kg	JK	U	25
	SJWP-091517-033EPA	E1700973-014	EPA1613B	2,3,4,7,8-Pentachlorodibenzofuran	3.41	ng/kg	JK	U	25
E1700974	SJWP-091517-020	E1700974-001	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	0.767	ng/kg	JK	U	25
	SJWP-091517-021	E1700974-002	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1.8	ng/kg	JK	U	25
	SJWP-091517-021	E1700974-002	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1.44	ng/kg	JK	U	25
	SJWP-091517-021	E1700974-002	EPA1613B	2,3,7,8-Tetrachlorodibenzofuran	3.22	ng/kg	K	U	25
	SJWP-091517-022	E1700974-003	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	2.02	ng/kg	JK	U	25
	SJWP-091517-022	E1700974-003	EPA1613B	Octachlorodibenzofuran	10.1	ng/kg	K	U	25
	SJWP-091517-023	E1700974-004	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.96	ng/kg	JK	U	25
	SJWP-091517-023	E1700974-004	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	2.05	ng/kg	JK	U	25
	SJWP-091517-023	E1700974-004	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	2.1	ng/kg	JK	U	25
	SJWP-091517-023	E1700974-004	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	1.02	ng/kg	JK	U	25
	SJWP-091517-023	E1700974-004	EPA1613B	1,2,3,7,8-Pentachlorodibenzofuran	5.54	ng/kg	JK	U	25
	SJWP-091517-023	E1700974-004	EPA1613B	2,3,4,7,8-Pentachlorodibenzofuran	5.28	ng/kg	JK	U	25
	SJWP-091517-024	E1700974-005	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.89	ng/kg	JK	U	25
	SJWP-091517-024	E1700974-005	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	1.33	ng/kg	JK	U	25
	SJWP-091517-024	E1700974-005	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzofuran	5.28	ng/kg	JK	U	25
	SJWP-091517-024	E1700974-005	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	3.02	ng/kg	JK	U	25
	SJWP-091517-024	E1700974-005	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	1.09	ng/kg	JK	U	25
	SJWP-091517-025	E1700974-006	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	10.1	ng/kg	K	U	25
	SJWP-091517-025	E1700974-006	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1.45	ng/kg	JK	U	25
	SJWP-091517-025	E1700974-006	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1.38	ng/kg	JK	U	25
	SJWP-091517-026	E1700974-007	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.438	ng/kg	JK	U	25
	SJWP-091517-027	E1700974-008	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	9.03	ng/kg	K	U	25
	SJWP-091517-027	E1700974-008	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1.32	ng/kg	JK	U	25

Qualified Data Summary Table
San Jacinto Waste Pits
Rush Dioxins Sampling

SDG	Sample ID	Lab Sample ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	DV Reason
E1700974	SJWP-091517-028	E1700974-009	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	0.995	ng/kg	JK	U	25
	SJWP-091517-028	E1700974-009	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	2.1	ng/kg	JK	U	25
	SJWP-091517-028	E1700974-009	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	1.18	ng/kg	JK	U	25
	SJWP-091517-028	E1700974-009	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	2.48	ng/kg	JK	U	25
	SJWP-091517-028	E1700974-009	EPA1613B	2,3,4,7,8-Pentachlorodibenzofuran	2.18	ng/kg	JK	U	25
	SJWP-091517-029	E1700974-010	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.576	ng/kg	JK	U	25
	SJWP-091517-029	E1700974-010	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzofuran	7.04	ng/kg	K	U	25
	SJWP-091517-029	E1700974-010	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	2.7	ng/kg	JK	U	25
	SJWP-091517-029	E1700974-010	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	1.18	ng/kg	JK	U	25
	SJWP-091517-029	E1700974-010	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	0.608	ng/kg	JK	U	25
	SJWP-091517-029	E1700974-010	EPA1613B	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	1.22	ng/kg	JK	U	25
	SJWP-091517-029	E1700974-010	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	0.578	ng/kg	JK	U	25
	SJWP-091517-029	E1700974-010	EPA1613B	2,3,4,7,8-Pentachlorodibenzofuran	4.77	ng/kg	JK	U	25
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	182	ng/kg		J	13L
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	7180	ng/kg	D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	649	ng/kg		J	13L
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	1080	ng/kg	K,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	232	ng/kg		J	13L
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	739	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	1.84	ng/kg	JK	U	25
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	932	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,4,7,8-Hexachlorodibenzofuran	2510	ng/kg	K,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	11.6	ng/kg	K	U	25
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1050	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	437	ng/kg		J	13L
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	528	ng/kg	JK,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	3.17	ng/kg	JK	U	25
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	941	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	739	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	739	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	1,2,3,7,8-Pentachlorodibenzofuran	1980	ng/kg	D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	78	ng/kg		J	13L
	SJWP-091517-030	E1700974-011	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	739	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	2,3,4,7,8-Pentachlorodibenzofuran	1410	ng/kg	K,D	DNR	11

Qualified Data Summary Table
San Jacinto Waste Pits
Rush Dioxins Sampling

SDG	Sample ID	Lab Sample ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	DV Reason
E1700974	SJWP-091517-030	E1700974-011	EPA1613B	2,3,7,8-Tetrachlorodibenzo-p-dioxin	16000	ng/kg	E	DNR	20
	SJWP-091517-030	E1700974-011	EPA1613B	2,3,7,8-Tetrachlorodibenzo-p-dioxin	33400	ng/kg	K,D	U	25
	SJWP-091517-030	E1700974-011	EPA1613B	2,3,7,8-Tetrachlorodibenzofuran	50100	ng/kg	E	DNR	20
	SJWP-091517-030	E1700974-011	EPA1613B	Heptachlorodibenzo-p-dioxin (Total)	7180	ng/kg	D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Heptachlorodibenzofuran (Total)	2030	ng/kg	D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Hexachlorodibenzo-p-dioxin (Total)	989	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Hexachlorodibenzofuran (Total)	739	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Octachlorodibenzo-p-dioxin	3050	ng/kg		J	13L
	SJWP-091517-030	E1700974-011	EPA1613B	Octachlorodibenzo-p-dioxin	278000	ng/kg	D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Octachlorodibenzofuran	4330	ng/kg	K,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Pentachlorodibenzo-p-dioxin (Total)	739	ng/kg	U,D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Pentachlorodibenzofuran (Total)	2190	ng/kg	D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Tetrachlorodibenzodioxin (Total)	3150	ng/kg	D	DNR	11
	SJWP-091517-030	E1700974-011	EPA1613B	Tetrachlorodibenzofuran (Total)	142000	ng/kg	D	DNR	11
	SJWP-091517-031	E1700974-012	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.519	ng/kg	JK	U	25
	SJWP-091517-031	E1700974-012	EPA1613B	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.77	ng/kg	K	U	25
	SJWP-091517-031	E1700974-012	EPA1613B	Octachlorodibenzofuran	1.84	ng/kg	JK	U	25
	SJWP-091517-032	E1700974-013	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran	5.98	ng/kg	JK	U	25
	SJWP-091517-032	E1700974-013	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.31	ng/kg	JK	U	25
	SJWP-091517-032	E1700974-013	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	1.58	ng/kg	JK	U	25
	SJWP-091517-032	E1700974-013	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzofuran	0.648	ng/kg	JK	U	25
	SJWP-091517-032	E1700974-013	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	0.31	ng/kg	JK	U	25
	SJWP-091517-032	E1700974-013	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	0.542	ng/kg	JK	U	25
	SJWP-091517-032	E1700974-013	EPA1613B	2,3,4,7,8-Pentachlorodibenzofuran	1.42	ng/kg	JK	U	25
	SJWP-091517-033	E1700974-014	EPA1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	113	ng/kg	K	U	25
	SJWP-091517-033	E1700974-014	EPA1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran	1.49	ng/kg	JK	U	25
	SJWP-091517-033	E1700974-014	EPA1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	3.03	ng/kg	JK	U	25
	SJWP-091517-033	E1700974-014	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	2.42	ng/kg	JK	U	25
	SJWP-091517-033	E1700974-014	EPA1613B	1,2,3,7,8,9-Hexachlorodibenzofuran	1.04	ng/kg	JK	U	25
	SJWP-091517-033	E1700974-014	EPA1613B	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	1.12	ng/kg	JK	U	25
	SJWP-091517-033	E1700974-014	EPA1613B	2,3,4,6,7,8-Hexachlorodibenzofuran	1.54	ng/kg	JK	U	25