RFP-2013-008 Vacuum/Hydro Excavation of Sedimentation Ponds at the Rio Bravo Treatment Plant

Additional Information/ Testing Results

Pollution Control Services (Report on sample analysis)

POLLUTION CONTROL SERVICES

Report of Sample Analysis

Client Information	Sample Information	Laboratory Information
Fitzgeraldo G. Sanchez Webb County 515 Martha Drive Rio Bravo, TX 78046	Project Name: Sample ID: Sludge Matrix: Liquid Sludge Date/Time Taken: 01/14/2013 0900	**PCS Sample #: 316916** **Page 1 of 1** Date/Time Received: 01/15/2013 08:25 Report Date: 02/04/2013 Approved by: Chuck Wallgren, President

Test Description	Result	Units	RL	Analysis Date/Time	Analyst	Method
TCLP-Full	See Attached					

Quality Statement: ***All supporting quality control data adhered to data quality objectives and test results meet the requirements of NELAC unless otherwise noted as flagged exceptions or in a case narrative attachment. Reports with full quality data deliverables are available on request. TCEQ Certificate No. T104704361-08-TX***

These analytical results relate only to the sample tested.
All data is reported on an "As Is" basis unless designated as "Dry Wt."
RL= Reporting Limits

Web Site:www.pcslab.net
e-mail:chuck@pcslab.net
Toll Free 1-800-880-4616
1532 Universal City Blvd, Suite 100
Universal City, TX 78148
210-340-0343
Fax # 210-658-7903

Chuck Wallgren
Pollution Control Services
1532 Universal City Blvd. #100
Universal City, TX 78148-3318

austin analytical

nelac T104704336

Control # 97237
Report Date 2/1/2013

Project
Sample 316916
Matrix waste **Sample Qual**

Date/Time Taken Jan 14, 2013 9:00
Date/Time Rec'd Jan 17, 2013 8:15

Report of Analytical Data

Analyte	Result	Units	SQL	Date/Time Run		By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit	Qual
Arsenic, TC	0.023	mg/L	0.005	1/23/13	3:47	CTP	6010	4.9	13	119.7	114.0	77-117	95.1	87.7	82-117	A
Barium, TC	0.067	mg/L	0.0025	1/23/13	3:47	CTP	6010	5.5	12	122.1	115.5	75-125	99.7	92.0	85-115	A
Cadmium, TC	<0.0025	mg/L	0.0025	1/23/13	3:47	CTP	6010	3.9	12	121.0	116.4	75-118	97.4	90.7	85-114	A
Chromium, TC	0.0033	mg/L	0.0025	1/23/13	3:47	CTP	6010	3.3	9	115.9	119.9	76-118	101.3	94.0	84-114	A
Lead, TC	<0.0050	mg/L	0.005	1/23/13	3:47	CTP	6010	5.4	15	119.2	112.9	75-117	97.2	91.4	81-119	A
Mercury, TC	<0.00050	mg/L	0.0005	1/23/13	3:47	CTP	6010	4.0	12	119.3	114.6	75-120	96.0	90.2	80-120	NA
Selenium, TC	<0.0050	mg/L	0.005	1/23/13	3:47	CTP	6010	4.8	10	118.3	112.8	75-118	95.5	88.2	82-116	A
Silver, TC	<0.0050	mg/L	0.005	1/23/13	3:47	CTP	6010	3.5	15	121.6	117.3	75-118	98.4	92.3	80-120	A
Benzene, TC	<0.025	mg/L	0.025	1/31/13	11:28	MCK	8260	1.4	26	107.8	106.2	81-125	107.5	107.2	74-117	A
2-butanone, TC (MEK)	<0.50	mg/L	0.5	1/31/13	11:28	MCK	8260	4.9	25	87.1	82.9	62-140	97.9	95.4	74-130	A
Carbon tetrachloride, TC	<0.025	mg/L	0.025	1/31/13	11:28	MCK	8260	5.5	23	103.7	98.1	64-128	105.3	131.0	76-123	A
Chlorobenzene, TC	<0.025	mg/L	0.025	1/31/13	11:28	MCK	8260	4.9	26	111.0	116.6	73-128	110.3	111.1	72-119	A
Chloroform, TC	<0.025	mg/L	0.025	1/31/13	11:28	MCK	8260	1.3	21	106.5	105.1	73-135	106.0	106.1	70-124	A
1,4-dichlorobenzene, TC	<0.025	mg/L	0.025	1/31/13	11:28	MCK	8260	12.3	30	91.6	103.7	71-121	97.5	92.5	70-117	A
1,2-dichloroethane, TC	<0.025	mg/L	0.025	1/31/13	11:28	MCK	8260	5.8	22	101.3	95.5	66-136	107.9	104.0	70-124	A
1,1-dichloroethene, TC	<0.025	mg/L	0.025	1/31/13	11:28	MCK	8260	1.1	22	109.6	108.4	72-130	112.4	113.3	70-121	A
Tetrachloroethene, TC	<0.025	mg/L	0.025	1/31/13	11:28	MCK	8260	3.8	24	91.6	95.2	72-125	91.3	91.6	71-119	A

Methods refer to laboratory's SOP based on USEPA reference method unless otherwise noted. See Case Narrative.
Solid samples reported on a dry weight basis.
Data presented relate exclusively to results obtained from the analysis of the referenced sample.
SQL - sample specific quantification limit MS/MSD - matrix spikes LCS/LCSD - laboratory control standards
For an explanation of the flags used please see the attached Case Narrative
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All analyses were successfully completed and met the requirements of the laboratory quality control program except where flagged or noted in an attached Case Narrative.

Respectfully submitted,

Mark C. Krause
Technical Director

Chuck Wallgren
Pollution Control Services
1532 Universal City Blvd. #100
Universal City, TX 78148-3318

austin analytical

nelac T104704336

Control # 97237
Report Date 2/1/2013

Project
Sample 316916
Matrix waste **Sample Qual**

Date/Time Taken Jan 14, 2013 9:00
Date/Time Rec'd Jan 17, 2013 8:15

Report of Analytical Data

Analyte	Result	Units	SQL	Date/Time Run	By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit	Qual
Trichloroethene, TC	<0.025	mg/L	0.025	1/31/13 11:28	MCK	8260	1.4	30	99.5	101.0	60-140	98.3	95.7	70-116	A
Vinyl chloride, TC	<0.050	mg/L	0.05	1/31/13 11:28	MCK	8260	1.5	20	130.5	128.5	66-123	103.4	104.6	75-121	A
Dibromofluoromethane	surr	%		1/31/13 11:28	MCK	8260			113.5		80-119				
Toluene-d8 (surr)	surr	%		1/31/13 11:28	MCK	8260			100.3		85-115				NA
Bromofluorobenzene	surr	%		1/31/13 11:28	MCK	8260			103.1		77-118				NA
2,4-dinitrotoluene, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	21.8	32	86.4	107.5	68-119	101.5	103.7	70-125	A
Hexachlorobenzene, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	0.2	30	95.6	95.3	67-125	91.9	101.5	62-135	A
Hexachlorobutadiene, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	17.8	38	88.8	106.1	61-119	86.7	99.1	65-124	A
Hexachloroethane, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	5.1	35	91.9	87.2	52-128	108.9	103.1	60-133	A
2-methylphenol, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	7.9	34	87.0	94.2	67-123	97.4	88.6	67-126	A
3&4-methylphenol, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	6.9	31	97.4	104.4	62-132	95.6	93.6	62-129	A
Nitrobenzene, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	1.5	36	91.3	92.7	60-150	99.1	106.9	63-139	A
Pentachlorophenol, TC	<0.05	mg/L	0.05	1/30/13 8:45	MCK	8270	0.3	28	104.4	104.0	45-136	95.2	98.4	58-132	A
Pyridine, TC	<0.02	mg/L	0.02	1/30/13 8:45	MCK	8270	1.7	40	101.5	103.3	30-170	93.1	97.7	50-150	A
2,4,5-trichlorophenol, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	10.5	24	95.5	86.0	61-132	99.4	99.4	73-123	A
2,4,6-trichlorophenol, TC	<0.01	mg/L	0.01	1/30/13 8:45	MCK	8270	7.0	36	88.9	95.4	64-121	106.4	97.8	71-122	A
Fluorophenol (surr)	surr	%		1/30/13 8:45	MCK	8270	68.6				5-100				NA
Phenol-d6 (surr)	surr	%		1/30/13 8:45	MCK	8270	61.3				5-89				NA
Tribromophenol (surr)	surr	%		1/30/13 8:45	MCK	8270	79.0				26-131				NA

Methods refer to laboratory's SOP based on USEPA reference method unless otherwise noted. See Case Narrative.
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For an explanation of the flags used please see the attached Case Narrative
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Pollution Control Services
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austin analytical

nelac T104704336

Control # 97237
Report Date 2/1/2013

Project
Sample 316916
Matrix waste **Sample Qual**

Date/Time Taken Jan 14, 2013 9:00
Date/Time Rec'd Jan 17, 2013 8:15

Report of Analytical Data

Analyte	Result	Units	SQL	Date/Time Run		By	Method	RPD	Limit	MS	MSD	Limit	LCS	LCSD	Limit	Qual
Nitrobenzene-d5 (surr)	surr	%		1/30/13	8:45	MCK	8270	55.6				9-116				NA
Fluorobiphenyl (surr)	surr	%		1/30/13	8:45	MCK	8270	58.8				34-127				NA
Terphenyl-d14 (surr)	surr	%		1/30/13	8:45	MCK	8270	74.0				35-127				NA
alpha-Chlordane, TC	<0.002	mg/L	0.002	1/30/13	8:45	MCK	8270	0.0	31	94.2	94.2	69-120	98.7	98.7	69-125	NA
gamma-Chlordane, TC	<0.002	mg/L	0.002	1/30/13	8:45	MCK	8270	4.2	28	96.7	92.7	60-137	96.4	89.7	75-119	A
Endrin, TC	<0.0005	mg/L	0.0005	1/30/13	8:45	MCK	8270	6.5	26	99.5	93.2	57-137	104.8	88.3	68-124	NA
Heptachlor, TC	<0.0005	mg/L	0.001	1/30/13	8:45	MCK	8270	20.4	23	100.4	81.7	72-123	108.1	106.1	76-120	NA
Heptachlor epoxide, TC	<0.0005	mg/L	0.0005	1/30/13	8:45	MCK	8270	10.5	25	83.8	93.1	72-122	108.1	108.6	74-117	NA
Lindane, TC	<0.0005	mg/L	0.0005	1/30/13	8:45	MCK	8270	8.7	32	95.7	104.4	64-128	95.5	105.0	70-124	NA
Methoxychlor, TC	<0.0005	mg/L	0.0005	1/30/13	8:45	MCK	8270	10.6	26	98.2	88.3	58-130	104.9	87.3	76-118	A
Toxaphene, TC	<0.02	mg/L	0.02	1/30/13	8:45	MCK	8270	19.7	31	109.4	89.7	61-124	89.3	93.8	77-119	NA
2,4-D, TC	<0.001	mg/L	0.001	1/30/13	8:45	MCK	8270	5.5	26	87.6	92.6	63-130	108.0	104.7	80-110	NA
2,4,5-TP (Silvex), TC	<0.001	mg/L	0.001	1/30/13	8:45	MCK	8270	1.1	40	103.1	102.0	60-129	89.3	87.4	69-122	NA

Methods refer to laboratory's SOP based on USEPA reference method unless otherwise noted. See Case Narrative.
Solid samples reported on a dry weight basis.
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POLLUTION CONTROL SERVICES

LAB NUMBER 316916

SINGLE SAMPLE ANALYSIS REQUEST AND CHAIN OF CUSTODY FORM

Container Extensions: ☐ S ☐ B1 ☐ B2 ☐ N ☐ HEM ☐ P Other

CUSTOMER INFORMATION	REPORT INFORMATION
Name: Webb County	Attention: Telephone: (956) 723-9708 FAX: (956) 724-7906

SAMPLE INFORMATION *(Please complete all items as they pertain to your sample)*

Sample Collection	☑ Grab Sample Date: 1/14/13 Sample Time: 9 AM	Collected By: G. Cerda	Project Name
	☐ Composite Start Date: End Date: Start Time: End Time:	☐ Time/Equal Portion or ☐ Flow Weighed ☐ 3 Part ☐ 6 Part ☐ 12 Part ☐ 24 Hour	Project Number: Project Location:
Sample Identification	☑ Wastewater ☑ Domestic ☐ Industrial ☒ Sludge	☒ Liquid ☐ Aeration ☐ Reair ☐ RAS ☐ Track ☐ Digester ☐ Solid	Commercial Carrier ID Number
	☑ Influent ☐ Effluent	Other Misc Description/Location	Comments/Precautions/Special Instructions
	☐ Water ☐ Surface ☐ Stream ☐ Lake		
	☐ Groundwater ☐ Well Water ☐ Monitor Well	Regional WWTP	
	☐ Soil		Report ☐ As Is or ☐ Dry Weight

Field Parameters	pH: S.U.	Chlorine Res: mg/l	Water Temp.: C / F	D.O. mg/l	Sp Cond. umhos/cm @ 25 C
Sample Preservation	☐ Cool 4°	pH<2 ☐ HNO3-Mtls	H2SO4-COD,FOG,Nutrients,Phenol	pH>12 ☐ NaOH - T CN	Other

ANALYSIS REQUEST *Check analysis desired below. (See Schedule of Services for other available analysis.)*

GENERAL CHEMISTRY			METALS ☐ Total ☐ Dissolved			RCRA WASTE PROFILE	BACTERIOLOGICAL
☑ pH	☐ D.O.	☐ T.Acidity	☐ Ag	☐ Hg	☐ Sr	☐ PCT	☐ F.Coliform - col/100 ml
☑ BOD5	☐ COD	☐ T.Alk.	☐ Al	☐ K	☐ Tl	☒ TCLP - Full	☐ F.Coliform - col/gm dry wt
☐ CBOD5	☐ FOG	☐ P.Alk	☐ As	☐ Mg	☐ V	☐ TCLP - Full w/o H/P	☐ T.Coliform - col/100 ml, P/A
☑ TSS	___ FOG A	☐ Sp.Cond.	☐ Ba	☐ Mn	☐ Zn	☐ TCLP - Vol	☐ Quanti Tray - MPN
☐ VSS	___ FOG B	☐ TDS	☐ Be	☐ Mo	___	☐ TCLP - Semi Vol	☐ *E. coli* - MPN
☐ MLSS	___ FOG C	☐ T.Hard	☐ Cu	☐ Na	___	☐ TCLP 8 Metals	
☐ VMLSS	___ FOG D	☐ Cl	☐ Cd	☐ Ni	___	☐ TCLP - Pb	**MISCELLANEOUS**
☐ NH3N	☐ T.CN	☐ SO4	☐ Cr	☐ Pb	___	☐ RCRA 8 Metals	☐ 503 Metals
☐ NO3N	___	☐ TCEQ Well Wtr	☐ HexCr	☐ Sb	___	☐ BTEX	☐ Soil/Sludge Nutrients
☐ NO2N	___	**Std. Well Water**	☐ Cu	☐ Se	___	☐ TPH	☐ F.Coli (7 Replicate)
☐ TKN	☐ % Org N	☐ w/ Coliform	☐ Fe	☐ Sn	___	☐ MTBE	☐ S.O.U.R.
☐ TPO4P	☐ % Ash	☐ w/o Coliform					

REQUIRED TURNAROUND: ☐ Routine (6-10 days) *EXPEDITE:* (See Surcharg ☐ < 8 Hrs. ☐ < 16 Hrs ☐ < 24 Hrs ☐ 5 days ☐ Other: _____ *Rush Charges Authorized by:*

SAMPLE Archive/Disposal: ☐ Laboratory Standard ☐ Hold for client pick up **Container Type / #:** ☐ Plastic ___ Number: ☐ Glass ___ Number: ☐ Other ___ Number

Relinquished By: Galuno Cerda	Date: 1/14/13	Time: 10:30	Received By: [illegible]	Date: 1-15-13	Time: 0825
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By	Date:	Time:	Received By:	Date:	Time:

Single Sample COC 20130127

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P (210) 340-0343 or (800) 880-4616 - F (210) 658-7903

Login at www.pcslab.net
TCEQ NELAP T104704361-TX

CASE NARRATIVE

Definitions and Data Report Flags

L	Laboratory control standard or standard duplicate recovery out of normal laboratory control limits. Data verified and flagged.
LP	Laboratory control standard/duplicate precision higher than normal laboratory control limit. Data verified and flagged
M	Matrix spike/spike duplicate recovery out of normal laboratory control limits. Data verified and flagged.
MP	Matrix spike/spike duplicate precision higher than normal laboratory control limit. Data verified and flagged.
S	Surrogate recovery outside of normal laboratory control limits. Data verified and flagged.
C	Calibration verification not within normal laboratory control limits. Data verified; laboratory control standard within normal limits. Data flagged.
T	Tuning compound criteria not met. Data flagged as not acceptable for tentative identification of unknowns.
Q	Sample received in bulk container; bulk sampling methodology followed for sample preparation.
NP	Sample was not received properly preserved and/or received in an improper container.
SC	Sample was received in an improper sample container
HS	Headspace was present in volatile vials upon receipt
B	Analyte detected in blank above the sample quantification limit; data flagged.
J	Analyte detected in sample below the sample quantification limit but above the sample detection limit. This data is of limited use and should not be used as a quantitative value.
E	Estimated concentration; analyte concentration exceeded the calibration range for the method or sampling errors (preservation, container) prevents the data from being used for quantitative purposes or regulatory comparison.

Method references are to USEPA or other reference standard methods, as interpreted and modified by Austin Analytical Standard Operating Procedures. For a complete listing of the method procedure and any modifications employed please refer to the applicable SOP.

Method Detection Limits shown are calculated per the methods set forth in 40 CFR 136 Appendix B.

Control limits are calculated using the methods referenced in the Austin Analytical SOP.

All data qualifications and control limit excursions are noted in the report. There are no further exceptions to this report other than those specifically flagged in the data reports.

POLLUTION CONTROL SERVICES
1532 Universal City Blvd, Suite 100
Universal City, TX 78148-3318
Facsimilie 210.658.7903
210.340.0343

1237098

CHAIN OF CUSTODY & SUBCONTRACT TRACKING SHEET

TO: Austin Analytical
8900 Shoal Creek Blvd #111
Austin, TX 78757

Relinquished by: Bruce Wallgren
Date/Time: 01/16/2013 @ 1760 Pm
Received by: [illegible]
Date/Time: 1/17/13 0815

PCS#	Date	Time	Analysis Requested		Pres	T. A. T.
316916	01/14/2013	0900 WASTE	TCLP-Full	97237	145	Std
317215	01/16/2013	0915 1	TCLP-Full	97238	1	Std

Comments/Special Instructions: 1.9°C
THERM 1185
450 ZPS41470

Unless otherwise requested, send results and invoice to:

Chuck Wallgren
Pollution Control Services
1532 Universal City Blvd, Suite 100
Universal City, TX 78148-3318

Authorized by: Bruce Wallgren Date: 1-16-13

Pollution Control Services

Sample Log-In Checklist

PCS Sample No(s) 316916 **COC No.** 316916

Client/Company Name: WEBB Co. **Checklist Completed by:** [illegible]

Sample Delivery to Lab Via:

Client Drop Off _____

Commercial Carrier: Bus ✓ UPS _____ Lone Star _____ FedEx _____ USPS _____

PCS Field Services: Collection/Pick Up _____ Other: _____

Sample Kit/Coolers

Sample Kit/Cooler? Yes ✓ No ____ Sample Kit/Cooler: Intact? Yes ✓ No ___

Custody Seals on Sample Kit/Cooler: Not Present ✓ If Present, Intact ___ Broken ___

Sample Containers Intact; Unbroken and Not Leaking? Yes ✓ No ___

Custody Seals on Sample Bottles: Not Present ✓ If Present, Intact ___ Broken ___

COC Present with Shipment or Delivery or Completed at Drop Off? Yes ✓ No ___

Has COC sample date/time and other pertinent information been provided by client/sampler? Yes: ✓ No: ___

Has COC been properly Signed when Received/Relinquished? Yes ✓ No ___

Does COC agree with Sample Bottle Information, Bottle Types, Preservation, etc.? Yes ✓ No ___

All Samples Received before Hold Time Expiration? Yes ✓ No ___

Sufficient Sample Volumes for Analysis Requested? Yes ✓ No ___

Zero Headspace in VOA Vial if Present? Yes ___ No ___

Sample Preservation

* ***Cooling:*** **Not Required** _____ or **Required** ✓ If Required, record temperature of submitted samples 0 °C

Is Ice Present in Sample Kit/Cooler? ✓ Yes _____ No Samples received same day as collected? _____ Yes ✓ No

Acid Preserved Sample - If present, is pH <2? **Yes** ____ **No** ____ ** _____ H_2SO_4 _____ HNO_3 _____ H_3PO_4

Base Preserved Sample - If present, is pH >12? Yes ____ No ____ _____ NaOH

Other Preservation: _____ If Present, Meets Requirements? Yes _____ No _____

Sample Preservations Checked by: _____ Date _____ Time _____

pH paper used to check sample preservation (PCS log #): _____ (HEM pH checked at analysis).

Samples Preserved/Adjusted by Lab:

Lab #	Parameters Preserved	Preservative Used	Log #

Adjusted by Tech/Analyst: _____ Date: _____ Time: _____

Client Notification/ Documentation for "No" Responses Above/ Discrepancies/ RevisionComments

Person Notified: _____ Contacted by: _____

Notified Date: _____ Time: _____

Method of Contact: At Drop Off: _____ Phone ___ Left Voice Mail ____ E-Mail _____ Fax _____

Unable to Contact _____ Authorized Laboratory to Proceed: _____ (Lab Director)

Regarding: _____

Comments: _____

Actions taken to correct problems/discrepancies: _____

Revision Comments _____

** Samples submitted for Metals Analysis (except Hex Cr) or Drinking Water for Coliform Bacteria Only are not required to be iced. Samples collected prior day to receipt at the laboratory must meet method specific thermal cooling requirements, "or will be flagged accordingly". Samples delivered the same day as collected may not meet thermal criteria, but shall be considered acceptable if evidence that the chilling process has begun, such as arrival on ice (EPA 815-F-08-006, June 2008). ** Water samples for metals analysis that are not acid preserved prior to shipment may be acceptably preserved by the laboratory on receipt – however, the sample digestion procedure must be delayed for at least 24 hours after preservation by the laboratory.*