



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Case Narrative for:  
**SHAW ENVIRONMENTAL & INFRASTRUCTURE**

Certificate of Analysis Number:

**L0021847**

<p><b>Report To:</b></p> <p><b>SHAW ENVIRONMENTAL &amp; INFRASTRUCTURE</b>  <b>LISA PULTZ</b>  <b>4171 ESSEN LANE</b></p> <p><b>BATON ROUGE</b>  <b>LA</b>  <b>70809-</b>  <b>ph: (225) 932-2500      fax: (225) 987-7300</b></p>	<p><b>Project Name:</b> 147497 LDNR- BAYOU CORNE(INDUS  <b>Site:</b> LA DNR BAYOU CORNE  <b>Site Address:</b></p> <p><b>PO Number:</b> 812666  <b>State:</b> Louisiana  <b>State Cert. No.:</b> 02048  <b>Date Reported:</b> 11/7/2012</p>
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Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data for those samples spiked by the laboratory and may be applicable to other samples of similar matrix from the site. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process. If insufficient sample is supplied for MS/MSD, a Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) are reported with the analytical batch and serve as the batch quality control (QC).

Results are reported on a Wet Weight Basis unless otherwise noted in the sample unit field as -dry.

This report may contain data results from tests performed in the field by non-laboratory personnel. Such data will be indicated within the report using the method code, FIELD, and analyst initials of FT indicating results obtained by a field technician.

The collection of samples using encores, terracores or other field collection devices may result in inconsistent initial sample weights for the parent sample and MS/MSD samples.

The MS/MSD recovery and precision data are calculated based on detected spike concentrations that are adjusted for initial sample weights. As a result of the variability between initial sample weights, the calculated RPD may have increased bias.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

Accutest Gulf Coast is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Cristina Thibeaux  
 Project Manager

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11/7/2012

Date

Test results meet all requirements of NELAC, unless specified in the narrative.

Version 2.1 - Modified February 11, 2011



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**SHAW ENVIRONMENTAL & INFRASTRUCTURE**

Certificate of Analysis Number:

**L0021847**

**Report To:** SHAW ENVIRONMENTAL & INFRASTRUCTURE  
 LISA PULTZ  
 4171 ESSEN LANE  
  
 BATON ROUGE  
 LA  
 70809-  
 ph: (225) 932-2500 fax: (225) 987-7300

**Project Name:** 147497 LDNR- BAYOU CORNE(INDUS  
**Site:** LA DNR BAYOU CORNE  
**Site Address:**  
  
**PO Number:** 812666  
**State:** Louisiana  
**State Cert. No.:** 02048  
**Date Reported:** 11/7/2012

**Fax To:**

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
007-131-103012	L0021847-01	Water	10/30/2012 9:45	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-098-103012	L0021847-02	Water	10/30/2012 10:10	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-072-103012	L0021847-03	Water	10/30/2012 10:50	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-072-103012MS	L0021847-03MS	Water	10/30/2012 10:50	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-072-103012MSD	L0021847-03MSD	Water	10/30/2012 10:50	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-073-103012	L0021847-04	Water	10/30/2012 11:40	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-081-103012	L0021847-05	Water	10/30/2012 13:00	10/31/2012 4:40:00 PM		<input type="checkbox"/>
FIELD DUP 8009-103012	L0021847-06	Water	10/30/2012 0:00	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-080-103012	L0021847-07	Water	10/30/2012 13:40	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-090-103012	L0021847-08	Water	10/30/2012 14:00	10/31/2012 4:40:00 PM		<input type="checkbox"/>
007-089-103012	L0021847-09	Water	10/30/2012 14:30	10/31/2012 4:40:00 PM		<input type="checkbox"/>
TRIP BLANK	L0021847-10	Water	10/30/2012 0:00	10/31/2012 4:40:00 PM		<input type="checkbox"/>

*Cristina C. Thibeaux*

Cristina Thibeaux  
 Project Manager

11/7/2012

Date

Ron Benjamin  
 Laboratory Director

Rebecca Haryett  
 Quality Assurance Officer



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID 007-131-103012 Collected: 10/30/2012 9:45 Lab Sample ID: L0021847-01

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	2850		250	50	11/06/12 12:00	JMR	4786693

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 1:08	E_G	4781306
Surr: o-Terphenyl	103	%	47-125	1	11/02/12 1:08	E_G	4781306

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 16:21	JHP	4784905
Surr: 1,4-Difluorobenzene	84.7	%	70-135	1	11/05/12 16:21	JHP	4784905
Surr: 4-Bromofluorobenzene	105	%	89-126	1	11/05/12 16:21	JHP	4784905

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	5890		10	1	11/05/12 16:00	SPM	4785871

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 13:38	CDP	4785631
Ethylbenzene	ND		0.005	1	11/05/12 13:38	CDP	4785631
Toluene	ND		0.005	1	11/05/12 13:38	CDP	4785631
m,p-Xylene	ND		0.005	1	11/05/12 13:38	CDP	4785631
o-Xylene	ND		0.005	1	11/05/12 13:38	CDP	4785631
Xylenes,Total	ND		0.005	1	11/05/12 13:38	CDP	4785631
Surr: 1,2-Dichloroethane-d4	102	%	84-124	1	11/05/12 13:38	CDP	4785631
Surr: 4-Bromofluorobenzene	96.0	%	89-111	1	11/05/12 13:38	CDP	4785631
Surr: Toluene-d8	96.1	%	83-115	1	11/05/12 13:38	CDP	4785631

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte Detected In The Associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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 11/7/2012 10:37:15 AM



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID 007-098-103012 Collected: 10/30/2012 10:10 Lab Sample ID: L0021847-02

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	3320		250	50	11/06/12 12:00	JMR	4786700

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 1:33	E_G	4781307
Surr: o-Terphenyl	108	%	47-125	1	11/02/12 1:33	E_G	4781307

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 19:52	JHP	4784910
Surr: 1,4-Difluorobenzene	85.2	%	70-135	1	11/05/12 19:52	JHP	4784910
Surr: 4-Bromofluorobenzene	106	%	89-126	1	11/05/12 19:52	JHP	4784910

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	5960		10	1	11/05/12 16:00	SPM	4785872

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 14:08	CDP	4785632
Ethylbenzene	ND		0.005	1	11/05/12 14:08	CDP	4785632
Toluene	ND		0.005	1	11/05/12 14:08	CDP	4785632
m,p-Xylene	ND		0.005	1	11/05/12 14:08	CDP	4785632
o-Xylene	ND		0.005	1	11/05/12 14:08	CDP	4785632
Xylenes, Total	ND		0.005	1	11/05/12 14:08	CDP	4785632
Surr: 1,2-Dichloroethane-d4	106	%	84-124	1	11/05/12 14:08	CDP	4785632
Surr: 4-Bromofluorobenzene	94.2	%	89-111	1	11/05/12 14:08	CDP	4785632
Surr: Toluene-d8	96.9	%	83-115	1	11/05/12 14:08	CDP	4785632

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte Detected In The Associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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 11/7/2012 10:37:16 AM



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID 007-072-103012 Collected: 10/30/2012 10:50 Lab Sample ID: L0021847-03

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	3010		250	50	11/06/12 12:00	JMR	4786702

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 1:59	E_G	4781308
Surr: o-Terphenyl	101	%	47-125	1	11/02/12 1:59	E_G	4781308

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 19:22	JHP	4784909
Surr: 1,4-Difluorobenzene	82.8	%	70-135	1	11/05/12 19:22	JHP	4784909
Surr: 4-Bromofluorobenzene	102	%	89-126	1	11/05/12 19:22	JHP	4784909

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	5500		10	1	11/05/12 16:00	SPM	4785873

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 14:39	CDP	4785633
Ethylbenzene	ND		0.005	1	11/05/12 14:39	CDP	4785633
Toluene	ND		0.005	1	11/05/12 14:39	CDP	4785633
m,p-Xylene	ND		0.005	1	11/05/12 14:39	CDP	4785633
o-Xylene	ND		0.005	1	11/05/12 14:39	CDP	4785633
Xylenes,Total	ND		0.005	1	11/05/12 14:39	CDP	4785633
Surr: 1,2-Dichloroethane-d4	106	%	84-124	1	11/05/12 14:39	CDP	4785633
Surr: 4-Bromofluorobenzene	97.1	%	89-111	1	11/05/12 14:39	CDP	4785633
Surr: Toluene-d8	96.0	%	83-115	1	11/05/12 14:39	CDP	4785633

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 B - Analyte Detected In The Associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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 11/7/2012 10:37:19 AM



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID 007-073-103012 Collected: 10/30/2012 11:40 Lab Sample ID: L0021847-04

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	2140		250	50	11/06/12 12:00	JMR	4786709

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 2:24	E_G	4781309
Surr: o-Terphenyl	102	%	47-125	1	11/02/12 2:24	E_G	4781309

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 20:22	JHP	4784911
Surr: 1,4-Difluorobenzene	84.9	%	70-135	1	11/05/12 20:22	JHP	4784911
Surr: 4-Bromofluorobenzene	105	%	89-126	1	11/05/12 20:22	JHP	4784911

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	1680		10	1	11/05/12 16:00	SPM	4785867

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 15:09	CDP	4785634
Ethylbenzene	ND		0.005	1	11/05/12 15:09	CDP	4785634
Toluene	ND		0.005	1	11/05/12 15:09	CDP	4785634
m,p-Xylene	ND		0.005	1	11/05/12 15:09	CDP	4785634
o-Xylene	ND		0.005	1	11/05/12 15:09	CDP	4785634
Xylenes, Total	ND		0.005	1	11/05/12 15:09	CDP	4785634
Surr: 1,2-Dichloroethane-d4	103	%	84-124	1	11/05/12 15:09	CDP	4785634
Surr: 4-Bromofluorobenzene	96.7	%	89-111	1	11/05/12 15:09	CDP	4785634
Surr: Toluene-d8	95.8	%	83-115	1	11/05/12 15:09	CDP	4785634

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 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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 11/7/2012 10:37:20 AM



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID 007-081-103012 Collected: 10/30/2012 13:00 Lab Sample ID: L0021847-05

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	3480		250	50	11/06/12 12:00	JMR	4786711

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 2:49	E_G	4781310
Surr: o-Terphenyl	106	%	47-125	1	11/02/12 2:49	E_G	4781310

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 20:52	JHP	4784912
Surr: 1,4-Difluorobenzene	83.8	%	70-135	1	11/05/12 20:52	JHP	4784912
Surr: 4-Bromofluorobenzene	104	%	89-126	1	11/05/12 20:52	JHP	4784912

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	5900		10	1	11/05/12 16:00	SPM	4785874

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 15:39	CDP	4785635
Ethylbenzene	ND		0.005	1	11/05/12 15:39	CDP	4785635
Toluene	ND		0.005	1	11/05/12 15:39	CDP	4785635
m,p-Xylene	ND		0.005	1	11/05/12 15:39	CDP	4785635
o-Xylene	ND		0.005	1	11/05/12 15:39	CDP	4785635
Xylenes,Total	ND		0.005	1	11/05/12 15:39	CDP	4785635
Surr: 1,2-Dichloroethane-d4	105	%	84-124	1	11/05/12 15:39	CDP	4785635
Surr: 4-Bromofluorobenzene	96.9	%	89-111	1	11/05/12 15:39	CDP	4785635
Surr: Toluene-d8	97.6	%	83-115	1	11/05/12 15:39	CDP	4785635

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte Detected In The Associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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 11/7/2012 10:37:21 AM



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID FIELD DUP 8009-103012 Collected: 10/30/2012 0:00 Lab Sample ID: L0021847-06

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	2850		250	50	11/06/12 12:00	JMR	4786713

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 3:15	E_G	4781311
Surr: o-Terphenyl	80.0	%	47-125	1	11/02/12 3:15	E_G	4781311

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 21:22	JHP	4784913
Surr: 1,4-Difluorobenzene	84.1	%	70-135	1	11/05/12 21:22	JHP	4784913
Surr: 4-Bromofluorobenzene	106	%	89-126	1	11/05/12 21:22	JHP	4784913

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	5410		10	1	11/05/12 16:00	SPM	4785875

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 16:10	CDP	4785636
Ethylbenzene	ND		0.005	1	11/05/12 16:10	CDP	4785636
Toluene	ND		0.005	1	11/05/12 16:10	CDP	4785636
m,p-Xylene	ND		0.005	1	11/05/12 16:10	CDP	4785636
o-Xylene	ND		0.005	1	11/05/12 16:10	CDP	4785636
Xylenes,Total	ND		0.005	1	11/05/12 16:10	CDP	4785636
Surr: 1,2-Dichloroethane-d4	105	%	84-124	1	11/05/12 16:10	CDP	4785636
Surr: 4-Bromofluorobenzene	95.8	%	89-111	1	11/05/12 16:10	CDP	4785636
Surr: Toluene-d8	97.0	%	83-115	1	11/05/12 16:10	CDP	4785636

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte Detected In The Associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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 11/7/2012 10:37:22 AM



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID 007-080-103012 Collected: 10/30/2012 13:40 Lab Sample ID: L0021847-07

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	3090		250	50	11/06/12 12:00	JMR	4786715

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 3:40	E_G	4781312
Surr: o-Terphenyl	90.1	%	47-125	1	11/02/12 3:40	E_G	4781312

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 21:52	JHP	4784914
Surr: 1,4-Difluorobenzene	83.6	%	70-135	1	11/05/12 21:52	JHP	4784914
Surr: 4-Bromofluorobenzene	106	%	89-126	1	11/05/12 21:52	JHP	4784914

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	3950		10	1	11/05/12 16:00	SPM	4785876

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 16:40	CDP	4785637
Ethylbenzene	ND		0.005	1	11/05/12 16:40	CDP	4785637
Toluene	ND		0.005	1	11/05/12 16:40	CDP	4785637
m,p-Xylene	ND		0.005	1	11/05/12 16:40	CDP	4785637
o-Xylene	ND		0.005	1	11/05/12 16:40	CDP	4785637
Xylenes, Total	ND		0.005	1	11/05/12 16:40	CDP	4785637
Surr: 1,2-Dichloroethane-d4	105	%	84-124	1	11/05/12 16:40	CDP	4785637
Surr: 4-Bromofluorobenzene	97.4	%	89-111	1	11/05/12 16:40	CDP	4785637
Surr: Toluene-d8	96.0	%	83-115	1	11/05/12 16:40	CDP	4785637

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte Detected In The Associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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 11/7/2012 10:37:23 AM



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID 007-090-103012 Collected: 10/30/2012 14:00 Lab Sample ID: L0021847-08

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	2850		250	50	11/06/12 12:00	JMR	4786717

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 4:05	E_G	4781313
Surr: o-Terphenyl	56.0	%	47-125	1	11/02/12 4:05	E_G	4781313

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 22:23	JHP	4784915
Surr: 1,4-Difluorobenzene	83.7	%	70-135	1	11/05/12 22:23	JHP	4784915
Surr: 4-Bromofluorobenzene	105	%	89-126	1	11/05/12 22:23	JHP	4784915

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	5230		10	1	11/05/12 16:00	SPM	4785877

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 17:10	CDP	4785638
Ethylbenzene	ND		0.005	1	11/05/12 17:10	CDP	4785638
Toluene	ND		0.005	1	11/05/12 17:10	CDP	4785638
m,p-Xylene	ND		0.005	1	11/05/12 17:10	CDP	4785638
o-Xylene	ND		0.005	1	11/05/12 17:10	CDP	4785638
Xylenes,Total	ND		0.005	1	11/05/12 17:10	CDP	4785638
Surr: 1,2-Dichloroethane-d4	107	%	84-124	1	11/05/12 17:10	CDP	4785638
Surr: 4-Bromofluorobenzene	97.8	%	89-111	1	11/05/12 17:10	CDP	4785638
Surr: Toluene-d8	94.8	%	83-115	1	11/05/12 17:10	CDP	4785638

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte Detected In The Associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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 11/7/2012 10:37:24 AM



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Client Sample ID 007-089-103012 Collected: 10/30/2012 14:30 Lab Sample ID: L0021847-09

Site: LA DNR BAYOU CORNE

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
<b>CHLORIDE BY SM4500</b>				<b>MCL</b>	<b>M4500-CL C</b>	<b>Units: mg/L</b>	
Chloride	1740		250	50	11/06/12 12:00	JMR	4786719

Prep Method	Prep Date	Prep Initials	Prep Factor
	11/06/2012 12:00		1.00

<b>RECAP DIESEL RANGE ORGANICS BY METHOD 8015C</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Diesel Range Organics (C10-C28)	ND		0.15	1	11/02/12 4:31	E_G	4781314
Surr: o-Terphenyl	102	%	47-125	1	11/02/12 4:31	E_G	4781314

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3511	11/01/2012 12:30	DGP	1.00

<b>RECAP GASOLINE RANGE ORGANICS</b>				<b>MCL</b>	<b>SW8015C</b>	<b>Units: mg/L</b>	
Gasoline Range Organics (C6-C10)	ND		0.1	1	11/05/12 22:53	JHP	4784916
Surr: 1,4-Difluorobenzene	83.3	%	70-135	1	11/05/12 22:53	JHP	4784916
Surr: 4-Bromofluorobenzene	105	%	89-126	1	11/05/12 22:53	JHP	4784916

<b>TOTAL DISSOLVED SOLIDS BY SM2540 C</b>				<b>MCL</b>	<b>M2540 C</b>	<b>Units: mg/L</b>	
Total Dissolved Solids (Residue,filterable)	2790		10	1	11/05/12 16:00	SPM	4785878

<b>VOLATILE ORGANICS:METHOD 8260B:BTEX - WATER</b>				<b>MCL</b>	<b>SW8260B</b>	<b>Units: mg/L</b>	
Benzene	ND		0.005	1	11/05/12 17:40	CDP	4785639
Ethylbenzene	ND		0.005	1	11/05/12 17:40	CDP	4785639
Toluene	ND		0.005	1	11/05/12 17:40	CDP	4785639
m,p-Xylene	ND		0.005	1	11/05/12 17:40	CDP	4785639
o-Xylene	ND		0.005	1	11/05/12 17:40	CDP	4785639
Xylenes,Total	ND		0.005	1	11/05/12 17:40	CDP	4785639
Surr: 1,2-Dichloroethane-d4	105	%	84-124	1	11/05/12 17:40	CDP	4785639
Surr: 4-Bromofluorobenzene	96.7	%	89-111	1	11/05/12 17:40	CDP	4785639
Surr: Toluene-d8	96.9	%	83-115	1	11/05/12 17:40	CDP	4785639

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte Detected In The Associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated value between MDL and PQL  
 E - Estimated Value exceeds calibration curve  
 TNTC - Too numerous to count

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# *Quality Control Documentation*

**Quality Control Report**

**SHAW ENVIRONMENTAL & INFRASTRUCTURE**

147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

**Analysis:** RECAP Diesel Range Organics by Method 8015C  
**Method:** SW8015C

**WorkOrder:** L0021847  
**Lab Batch ID:** 116267

**Method Blank**

RunID: TPHC\_121101A-4781295 Units: mg/L  
Analysis Date: 11/01/2012 19:15 Analyst: E\_G  
Preparation Date: 11/01/2012 12:30 Prep By: DGP Method SW3511

**Samples in Analytical Batch:**

Lab Sample ID	Client Sample ID
L0021847-01C	007-131-103012
L0021847-02C	007-098-103012
L0021847-03C	007-072-103012
L0021847-04C	007-073-103012
L0021847-05C	007-081-103012
L0021847-06C	FIELD DUP 8009-103012
L0021847-07C	007-080-103012
L0021847-08C	007-090-103012
L0021847-09C	007-089-103012

Analyte	Result	Rep Limit
Diesel Range Organics (C10-C28)	ND	0.15
Surr: o-Terphenyl	93.1	47-125

**Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)**

RunID: TPHC\_121101A-4781296 Units: mg/L  
Analysis Date: 11/01/2012 19:40 Analyst: E\_G  
Preparation Date: 11/01/2012 12:30 Prep By: DGP Method SW3511

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	6.00	4.98	83.0	6.00	5.13	85.5	2.9	26	21	140
Surr: o-Terphenyl	0.100	0.0965	96.5	0.100	0.0961	96.1	0.4	30	47	125

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Sample Spiked: L0021847-03  
RunID: TPHC\_121101A-4781298 Units: mg/L  
Analysis Date: 11/01/2012 20:30 Analyst: E\_G  
Preparation Date: 11/01/2012 12:30 Prep By: DGP Method SW3511

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics (C10-C28)	ND	6	4.67	77.8	6	4.84	80.7	3.62	26	21	140
Surr: o-Terphenyl	ND	0.1	0.0884	88.4	0.1	0.0917	91.7	3.66	30	47	125

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B - Analyte Detected In The Associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated Value Between MDL And PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.



ACCUTEST GULF COAST  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

Quality Control Report

SHAW ENVIRONMENTAL & INFRASTRUCTURE  
 147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

Analysis: RECAP Diesel Range Organics by Method 8015C  
 Method: SW8015C

WorkOrder: L0021847  
 Lab Batch ID: 116267

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
 B - Analyte Detected In The Associated Method Blank  
 J - Estimated Value Between MDL And PQL  
 E - Estimated Value exceeds calibration curve  
 N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
 TNTC - Too numerous to count

MI - Matrix Interference  
 D - Recovery Unreportable due to Dilution  
 \* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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**Quality Control Report**

**SHAW ENVIRONMENTAL & INFRASTRUCTURE**  
147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

**Analysis:** RECAP Gasoline Range Organics  
**Method:** SW8015C

**WorkOrder:** L0021847  
**Lab Batch ID:** R297994

Method Blank

RunID: HPAA\_121105A-4784902 Units: mg/L  
Analysis Date: 11/05/2012 14:38 Analyst: JHP

Analyte	Result	Rep Limit
Gasoline Range Organics (C6-C10)	ND	0.10
Surr: 1,4-Difluorobenzene	83.6	70-135
Surr: 4-Bromofluorobenzene	101.4	89-126

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
L0021847-01B	007-131-103012
L0021847-02B	007-098-103012
L0021847-03B	007-072-103012
L0021847-04B	007-073-103012
L0021847-05B	007-081-103012
L0021847-06B	FIELD DUP 8009-103012
L0021847-07B	007-080-103012
L0021847-08B	007-090-103012
L0021847-09B	007-089-103012

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HPAA\_121105A-4784900 Units: mg/L  
Analysis Date: 11/05/2012 12:38 Analyst: JHP

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Gasoline Range Organics (C6-C10)	5.00	5.49	110	5.00	5.57	111	1.4	7	77	118
Surr: 1,4-Difluorobenzene	30.0	29.0	96.8	30.0	29.2	97.4	0.7	30	70	135
Surr: 4-Bromofluorobenzene	30.0	31.5	105	30.0	32.3	108	2.3	30	89	126

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: L0021847-03  
RunID: HPAA\_121105A-4784906 Units: mg/L  
Analysis Date: 11/05/2012 16:51 Analyst: JHP

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics (C6-C10)	ND	25	26.3	105	25	27.2	109	3.46	7	77	118

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B - Analyte Detected In The Associated Method Blank  
J - Estimated Value Between MDL And PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

Quality Control Report

**SHAW ENVIRONMENTAL & INFRASTRUCTURE**  
147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

Analysis: RECAP Gasoline Range Organics  
Method: SW8015C

WorkOrder: L0021847  
Lab Batch ID: R297994

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: L0021847-03  
RunID: HPAA\_121105A-4784906 Units: mg/L  
Analysis Date: 11/05/2012 16:51 Analyst: JHP

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Surr: 1,4-Difluorobenzene	ND	150	143	95.6	150	145	96.9	1.37	30	70	135
Surr: 4-Bromofluorobenzene	ND	150	163	109	150	163	108	0.231	30	89	126

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B - Analyte Detected In The Associated Method Blank  
J - Estimated Value Between MDL And PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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**Quality Control Report**

**SHAW ENVIRONMENTAL & INFRASTRUCTURE**  
147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

**Analysis:** Volatile Organics:Method 8260B:BTEX - water  
**Method:** SW8260B

**WorkOrder:** L0021847  
**Lab Batch ID:** R298023

Method Blank

RunID: GB\_121105A-4785628 Units: ug/L  
Analysis Date: 11/05/2012 12:26 Analyst: CDP

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes, Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	103.4	84-124
Surr: 4-Bromofluorobenzene	96.3	89-111
Surr: Toluene-d8	96.5	83-115

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
L0021847-01A	007-131-103012
L0021847-02A	007-098-103012
L0021847-03A	007-072-103012
L0021847-04A	007-073-103012
L0021847-05A	007-081-103012
L0021847-06A	FIELD DUP 8009-103012
L0021847-07A	007-080-103012
L0021847-08A	007-090-103012
L0021847-09A	007-089-103012

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: GB\_121105A-4785621 Units: ug/L  
Analysis Date: 11/05/2012 11:25 Analyst: CDP

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Benzene	20.0	20.4	102	20.0	21.6	108	5.7	10	82	119
Ethylbenzene	20.0	20.6	103	20.0	22.0	110	6.3	10	84	117
Toluene	20.0	20.1	100	20.0	21.3	107	6.1	10	80	121
m,p-Xylene	40.0	41.6	104	40.0	44.6	111	6.9	10	82	121
o-Xylene	20.0	20.7	103	20.0	21.7	108	4.9	10	84	119
Xylenes, Total	60.0	62.3	104	60.0	66.3	110	6.3	10	81	122
Surr: 1,2-Dichloroethane-d4	50.0	52.6	105	50.0	52.3	105	0.5	30	84	124
Surr: 4-Bromofluorobenzene	50.0	48.3	96.6	50.0	49.1	98.2	1.7	30	89	111
Surr: Toluene-d8	50.0	48.3	96.7	50.0	48.4	96.7	0.1	30	83	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B - Analyte Detected In The Associated Method Blank  
J - Estimated Value Between MDL And PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

**Quality Control Report**

**SHAW ENVIRONMENTAL & INFRASTRUCTURE**

147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

**Analysis:** Volatile Organics:Method 8260B:BTEX - water  
**Method:** SW8260B

**WorkOrder:** L0021847  
**Lab Batch ID:** R298023

Sample Spiked: L0021847-03  
RunID: GB\_121105A-4785641 Units: ug/L  
Analysis Date: 11/05/2012 18:11 Analyst: CDP

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	100	102	102	100	101	101	1.33	10	82	119
Ethylbenzene	ND	100	103	103	100	99.0	99.0	3.59	10	84	117
Toluene	ND	100	100	100	100	98.5	98.5	1.54	10	80	121
m,p-Xylene	ND	200	203	102	200	198	98.9	2.69	10	82	121
o-Xylene	ND	100	101	101	100	97.8	97.8	3.27	10	84	119
Xylenes, Total	ND	300	304	101	300	296	98.6	2.88	10	81	122
Surr: 1,2-Dichloroethane-d4	ND	250	262	105	250	262	105	0.262	30	84	124
Surr: 4-Bromofluorobenzene	ND	250	249	99.5	250	241	96.5	3.07	30	89	111
Surr: Toluene-d8	ND	250	245	97.9	250	241	96.4	1.56	30	83	115

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B - Analyte Detected In The Associated Method Blank  
J - Estimated Value Between MDL And PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

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11/7/2012 10:37:29 AM

Quality Control Report

SHAW ENVIRONMENTAL & INFRASTRUCTURE  
 147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

Analysis: Total Dissolved Solids by SM2540 C  
 Method: M2540 C

WorkOrder: L0021847  
 Lab Batch ID: R298039

Method Blank

RunID: WET\_121105U-4785864 Units: mg/L  
 Analysis Date: 11/05/2012 16:00 Analyst: SPM

Analyte	Result	Rep Limit
Total Dissolved Solids (Residue,filterable)	ND	10

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
L0021847-01D	007-131-103012
L0021847-02D	007-098-103012
L0021847-03D	007-072-103012
L0021847-04D	007-073-103012
L0021847-05D	007-081-103012
L0021847-06D	FIELD DUP 8009-103012
L0021847-07D	007-080-103012
L0021847-08D	007-090-103012
L0021847-09D	007-089-103012

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: WET\_121105U-4785865 Units: mg/L  
 Analysis Date: 11/05/2012 16:00 Analyst: SPM

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Total Dissolved Solids (Residue,filterab	200.0	187.0	93.50	200.0	190.0	95.00	1.6	20	90	110

Sample Duplicate

Original Sample: L0021847-04  
 RunID: WET\_121105U-4785867 Units: mg/L  
 Analysis Date: 11/05/2012 16:00 Analyst: SPM

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Total Dissolved Solids (Residue,filterab	1680	1723	2.35	20

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
 B - Analyte Detected In The Associated Method Blank  
 J - Estimated Value Between MDL And PQL  
 E - Estimated Value exceeds calibration curve  
 N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
 TNTC - Too numerous to count  
 MI - Matrix Interference  
 D - Recovery Unreportable due to Dilution  
 \* - Recovery Outside Advisable QC Limits

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**Quality Control Report**

**SHAW ENVIRONMENTAL & INFRASTRUCTURE**  
147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

**Analysis:** Chloride by SM4500  
**Method:** M4500-CL C

**WorkOrder:** L0021847  
**Lab Batch ID:** R298081

**Method Blank**

RunID: WET\_121106F-4786690 Units: mg/L  
Analysis Date: 11/06/2012 12:00 Analyst: JMR  
Preparation Date: 11/06/2012 12:00 Prep By: Method

Analyte	Result	Rep Limit
Chloride	ND	5.0

**Samples in Analytical Batch:**

Lab Sample ID	Client Sample ID
L0021847-01D	007-131-103012
L0021847-02D	007-098-103012
L0021847-03D	007-072-103012
L0021847-04D	007-073-103012
L0021847-05D	007-081-103012
L0021847-06D	FIELD DUP 8009-103012
L0021847-07D	007-080-103012
L0021847-08D	007-090-103012
L0021847-09D	007-089-103012

**Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)**

RunID: WET\_121106F-4786691 Units: mg/L  
Analysis Date: 11/06/2012 12:00 Analyst: JMR  
Preparation Date: 11/06/2012 12:00 Prep By: Method

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Chloride	150.0	151.9	101.3	150.0	150.3	100.2	1.0	10	90	110

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Sample Spiked: L0021847-01  
RunID: WET\_121106F-4786696 Units: mg/L  
Analysis Date: 11/06/2012 12:00 Analyst: JMR  
Preparation Date: 11/06/2012 12:00 Prep By: Method

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	2849	7500	10440	101.3	7500	10370	100.2	0.7605	20	80	120

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B - Analyte Detected In The Associated Method Blank  
J - Estimated Value Between MDL And PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

Quality Control Report

SHAW ENVIRONMENTAL & INFRASTRUCTURE  
 147497 LDNR- BAYOU CORNE(INDUSTRIAL H2O WELL SAMP)

Analysis: Chloride by SM4500  
 Method: M4500-CL C

WorkOrder: L0021847  
 Lab Batch ID: R298081

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Sample Spiked: L0021847-03  
 RunID: WET\_121106F-4786705 Units: mg/L  
 Analysis Date: 11/06/2012 12:00 Analyst: JMR  
 Preparation Date: 11/06/2012 12:00 Prep By: Method

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	3007	7500	10600	101.3	7500	10600	101.3	0	20	80	120

**Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

Sample Spiked: L0021923-04  
 RunID: WET\_121106F-4786724 Units: mg/L  
 Analysis Date: 11/06/2012 12:00 Analyst: JMR  
 Preparation Date: 11/06/2012 12:00 Prep By: Method

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	39.56	150	188.3	99.17	150	186.7	98.11	0.8442	20	80	120

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
 B - Analyte Detected In The Associated Method Blank  
 J - Estimated Value Between MDL And PQL  
 E - Estimated Value exceeds calibration curve  
 N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
 TNTC - Too numerous to count  
 MI - Matrix Interference  
 D - Recovery Unreportable due to Dilution  
 \* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

*Sample Receipt Checklist  
And  
Chain of Custody*



**ACCUTEST GULF COAST**  
 500 AMBASSADOR CAFFERY PARKWAY  
 SCOTT, LA 70583  
 (337) 237-4775

**Sample Receipt Checklist**

Workorder:	<b>L0021847</b>	Received By:	<b>GAS</b>
Date and Time Received:	<b>10/31/2012 4:40:00 PM</b>	Carrier name:	<b>Accutest-Delivery</b>
Temperature:	<b>4.5°C</b>	Chilled by:	<b>Water Ice</b>

- |   |   |                             |  |
|---|---|-----------------------------|--|
| <b>1. Shipping container/cooler in good condition?</b>              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>               |
| <b>2. Custody seals intact on shipping container/cooler?</b>        | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>    |
| <b>3. Custody seals intact on sample bottles?</b>                   | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/>    |
| <b>4. Chain of custody present?</b>                                 | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| <b>5. Chain of custody signed when relinquished and received?</b>   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| <b>6. Chain of custody agrees with sample labels?</b>               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| <b>7. Samples in proper container/bottle?</b>                       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| <b>8. Sample containers intact?</b>                                 | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| <b>9. Sufficient sample volume for indicated test?</b>              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| <b>10. All samples received within holding time?</b>                | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| <b>11. Container/Temp Blank temperature in compliance?</b>          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |  |
| <b>12. Water - VOA vials have zero headspace?</b>                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input type="checkbox"/>     |
| <b>13. Water - Preservation checked upon receipt (except VOA*)?</b> | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

\*VOA Preservation Checked After Sample Analysis

Accutest Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:



**CHAIN OF CUSTODY**  
**Accutest Gulf Coast**  
 500 Ambassador Caffery Pkwy, Scott, LA 70583  
 TEL: 337-237-4775 FAX: 337-237-7838  
 www.acctest.com

LSR-F005.00

PAGE 1 OF 1

Client / Reporting Information		Project Information		Requested Analyses		Matrix Codes	
Company Name Shaw E&E	Project Name LDNR - BayouCarne (Industrial Water)	Street 4771 Essen Ln.	Billing Information (if different from Report to) Company Name	Requested Analyses		Matrix Codes	
City Baton Rouge, LA	State	City	State	Requested Analyses		Matrix Codes	
Project Contact Hugh Adams	Project #	Street Address	City	Requested Analyses		Matrix Codes	
Phone #	Client Purchase Order #	City	State	Requested Analyses		Matrix Codes	
Sampler(s) Name(s) Kevin Simonsen	Project Manager Lisa Pultz	Attention:	Zip	Requested Analyses		Matrix Codes	
Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	Number of preserved bottles	
007-131-103012	10/30/12	0945	KS/DR	GW	10	X BTEX	X TPH-DRO
007-093-103012		1010				X TPH-GRO	
007-072-103012		1050					
007-072-103012-MS		1050					
007-072-103012-MSD		1050					
007-073-103012		1140					
Field DV8009-103012		1300					
007-080-103012		1340					
007-090-103012		1400					
007-089-103012	10/30/12	1430	KS/DR	GW	10	X BTEX	X TPH-DRO
Turnaround Time (Business days)		Data Deliverable Information		Comments / Special Instructions			
<input checked="" type="checkbox"/> Standard	Approved By (Accutest PM) / Date:	<input type="checkbox"/> TRRP	<input type="checkbox"/> Commercial "A" (Level 1)	Received at Baton Rouge			
<input type="checkbox"/> 5 Day RUSH		<input type="checkbox"/> EDD Format	<input type="checkbox"/> Commercial "B" (Level 2)				
<input type="checkbox"/> 4 Day RUSH		<input type="checkbox"/> FULT1 (Level 3+4)	<input type="checkbox"/> FULT1 (Level 3+4)				
<input type="checkbox"/> 3 Day RUSH		<input type="checkbox"/> REDT1 (Level 3+4)	<input type="checkbox"/> REDT1 (Level 3+4)				
<input type="checkbox"/> 2 Day RUSH		<input type="checkbox"/> Commercial "C"	<input type="checkbox"/> Commercial "C"				
<input type="checkbox"/> 1 Day EMERGENCY		Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial "C" = Results + QC & Surrogate Summary					
Emergency & Rush T/A data available VIA Lablink		Sample Custody must be documented below each time samples change possession, including courier delivery.					
Relinquished by Sampler:	Date Time:	Relinquished By:	Date Time:	Relinquished By:	Date Time:	Relinquished By:	Date Time:
1 / [Signature]	10/30/12 1625	[Signature]	10/31/12	[Signature]	1300	[Signature]	10/31/12
3 / [Signature]	10/31/12 1640	[Signature]					
5 / [Signature]							
Relinquished by:		Preserved where applicable		On Ice		Cooler Temp	
		[Signature]		[Signature]		41.5 (50)	