Bayou Cajun Environmental, Soil & Wetland Services Inc.
10728 Russ Rd. ● Abbeville, LA. 70510 ● B. Arville Touchet, Soil Scientist
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July 11, 2010

Mr. Victor Gregoire
Kean Miller
One American Place
301 Main St., Suite 1800
Baton Rouge, La. 70801

RE: Expert Report for State of Louisiana and The Vermilion Parish School Board, et al vs. The Louisiana Land and Exploration Company, et al—Suite No. 82,162, Division "D" –File No. 12224-S in 15th Judicial Court for the Parish of Vermilion, State of Louisiana

Dear Mr. Gregoire:

Bayou Cajun Environmental, Soil and Wetland Services, is submitting an amended report by e-mail concerning the above referenced matter.

This report presents opinion based upon soil descriptions, field reviews, sampling by ICON and MP & A, literature review, laboratory analysis and data evaluation, revised MP & A shallow soil sediment location map (Fig. 1R) plus 2 EC tables with 33 analysis results.

Sincerely,

B. Arville Touchet

B. Arville Touchet
Consultant Soil Scientist
Licensed Professional Geoscientist

Attachment: Expert Report

Copy: Ms. Shelby Wilson
King & Spalding
1100 Louisiana, Suite 4000
Houston, Texas 77002-5213

CONCLUSIONS

The Intracoastal Canal system, including the Schooner Bayou system, is the main conduit that brings salty Gulf of Mexico water into the northern interior part of the Mermentau Basin marshland. Salty Gulf water from hurricane surges that over-tops the Chenieres not only inundates the marshes but also inundates the rice growing upland areas, making these soils saline.

Laboratory data collected during the soil survey of both Vermilion and Cameron Parish taken in the soft saline Mississippi River marine mud indicated EC's between 10 and 14 mmhos/cm. The last two hurricane salt water surges were 12 feet high or more and stayed on the marshes and some of the rice producing uplands for more than two weeks. Low rainfall after the hurricanes caused water to evaporate concentrating the salinity in the whole Mermentau Basin. Leaks of salt water into the basin at Black Bayou Locks also contribute to the salinity of the Basin.

RECOMMENDATIONS:

I recommend that as far as salinity is concerned that we do not destroy any more marsh to remediate an area that ICON sample results indicate have less salinity than the surrounding marsh. This area is in transition from fresh water marsh on soft saline Mississippi River marine gulf mud to brackish water marsh on soft saline Mississippi River marine mud. Without storm protection and strict saline water control structures (navigational locks), it probably will become saline water marsh on soft saline Mississippi River marine gulf mud.

If the saline water conversion is slow, the soil and vegetation will change to accommodate the water changes. If the saline water conversion is rapid, the emergent vegetation will be decimated and in its place we will have open water.

I will amend this report according to new or additional data that may become available.

B. Arville Touchet

B. Arville Touchet
Consultant Soil Scientist
Licensed Professional Geoscientist
7/11/2010

TABLE 1
ELECTRICAL CONDUCTIVITY AND SHALLOW SOIL SEDIMENT SAMPLING PLAN
ICON ENVIRONMENTAL RESULTS

	Sample ID	EC (0-2')	EC (2-4')	ESP (0-2')	ESP (2-4')	SAR (0-2')	SAR (2-4')
Background Plots	Sed 1	15.4	16.1	14.7	12.2	16.1	18.2
	Sed 2	19.1	24.6	16.4	28.1	19	22.4
	Sed 3	16.4	19.3	13.1	19.6	13.3	15.1
	Average	**16.96666667**	**20**	**14.73333333**	**19.96666667**	**16.13333333**	**18.56666667**

	EC (0-2')	EC (2-4')	ESP (0-2')	ESP (2-4')	SAR (0-2')	SAR (2-4')
Highest	19.1	24.6	16.4	28.1	19	22.4
Lowest	15.4	16.1	13.1	12.2	13.3	15.1

	Sample ID	EC (0-2')	EC (2-4')	ESP (0-2')	ESP (2-4')	SAR (0-2')	SAR (2-4')
On-Site Plots	Sed 4	14.3		13.7		14.9	
	Sed 5	10.7		9.4		8.47	
	Sed 6	14.2		11.3		10.7	
	Sed 7	13.2	9.92	14.1	6.6	12.3	7.63
	Sed 8	12.7	8.82	11.6	7.9	10.6	7.84
	Sed 9	11.6	9.6	9.3	7	9.23	7.83
	Sed 10	17.2	11.3	11.8	8.1	15.7	10.8
	Sed 11	12.3	9.95	8.8	4.4	8.64	7.2
	Sed 12	13.6	8.15	11.5	7.1	11.4	11
	Sed 13	19.7	16.8	15.1	13.8	15.7	18.7
	Sed 14	15.4	9.88	12.6	8.1	17.2	14
	Sed 15	7.28	5.73	12.4	8.9	10.8	10.6
	Sed 16	14.5		12.2		13.2	
	Sed 17	11.3	8.67	12.1	11.8	13.5	9.8
	Sed 18	12	10.5	11.4	8.2	12	10.4
	Sed 19	11.8	7.91	6.5	7.5	9.23	7.1
	Sed 20	10	7.85	11.3	5.3	14.1	11
	Sed 21	12.3	6.34	10.6	7.1	11.8	11.5
	Sed 22	12.5	10	8.5	11.2	16.6	10.3
	Sed 23	10.5	9.67	11	7.7	14.2	8.66
	Sed 24	7.14	7.3	8.2	8.1	12.3	9.18
	Sed 25	12.6	13.2	13.4	18.7	16.2	17.6
	Sed 26	9.12	10.6	11.3	18.2	14.3	20
	Sed 27	18.4	11	11.1	11.8	15.1	13.9
	Sed 28	15.6	20.7	20.7	27	23.6	26.3
	Sed 29	19.6	21.5	32.7	19.2	27.7	30.5
	Sed 30	23.6	41.9	24.6	56.1	26.9	65.7
	Sed 31	18.7	39.6	10.3	25.9	21.4	32.5
	Sed 32	13.3	18.2	18.4	29.8	15.6	17.6
	Sed 33	21.2	37.4	10.8	26.5	23.5	31.7
	Average	**13.878**	**14.32653846**	**12.89**	**14.30769231**	**14.89566667**	**16.51307692**

	EC (0-2')	EC (2-4')	ESP (0-2')	ESP (2-4')	SAR (0-2')	SAR (2-4')
Highest	23.6	41.9	32.7	56.1	27.7	65.7
Lowest	7.14	5.73	6.5	4.4	8.47	7.1

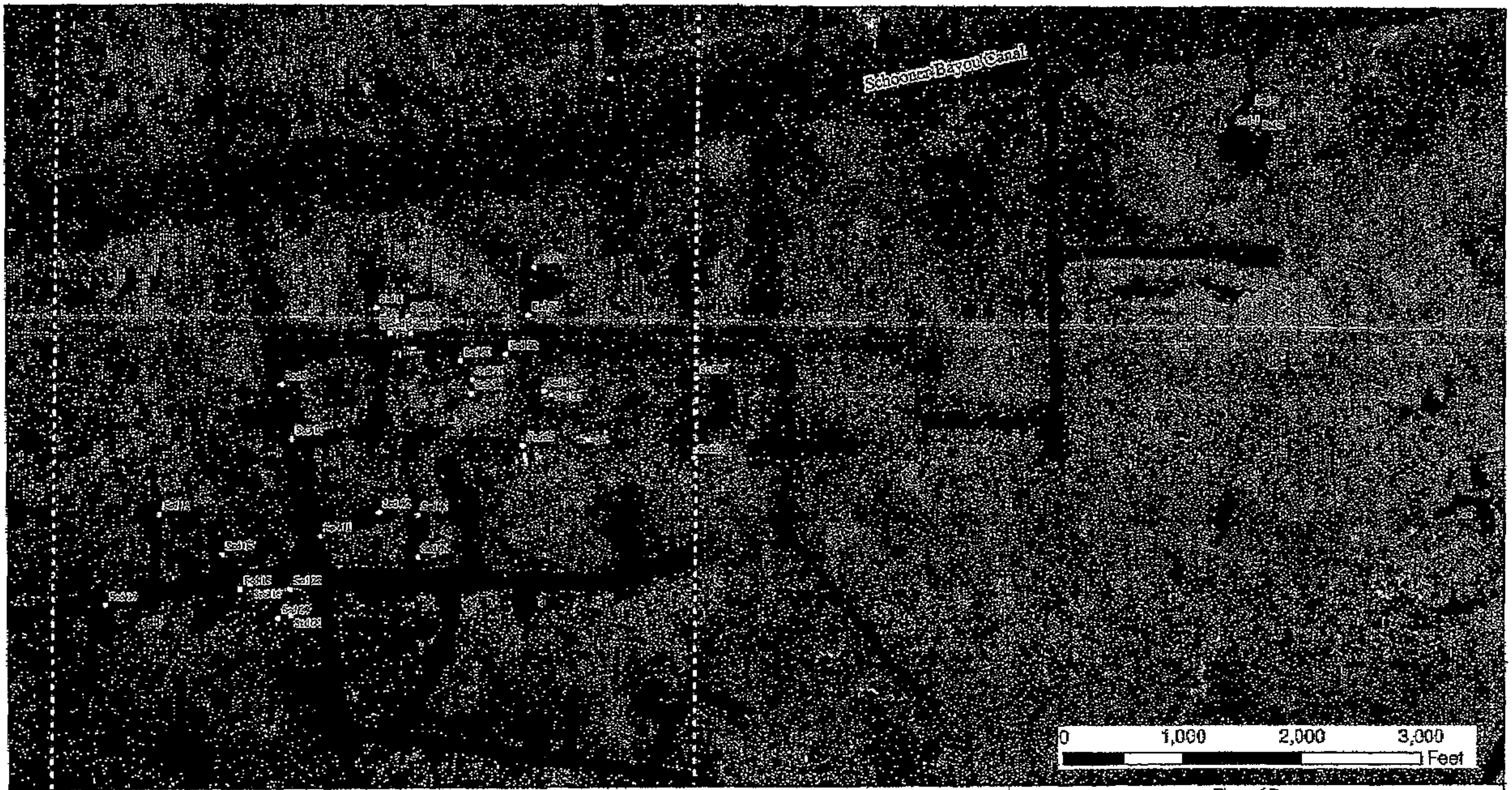
TABLE 2
ELECTRICAL CONDUCTIVITY AND SHALLOW SOIL SEDIMENT SAMPLING PLAN
MICHAEL PISANI AND ASSOCIATES SPLIT RESULTS

	Sample ID	EC (0-2')	EC (2-4')	ESP (0-2')	ESP (2-4')	SAR (0-2')	SAR (2-4')
Background Plots	Sed 1	13.9	28.2	14.9	25.9	18.5	19.2
	Sed 2	15.2	20.6	17.8	23.9	20	22.4
	Sed 3	20.8	21.1	12.8	26.8	15.4	16
	Average	16.63333333	23.3	15.16666667	25.53333333	17.96666667	19.2

	EC (0-2')	EC (2-4')	ESP (0-2')	ESP (2-4')	SAR (0-2')	SAR (2-4')
Highest	20.8	28.2	17.8	26.8	20	22.4
Lowest	13.9	20.6	12.8	23.9	18.5	16

	Sample ID	EC (0-2')	EC (2-4')	ESP (0-2')	ESP (2-4')	SAR (0-2')	SAR (2-4')
On-Site Plots	Sed 4	9.89		11.5		18	
	Sed 5	10.1		11.6		8.48	
	Sed 6	15.6		13.4		11	
	Sed 7	15.7	10	15.4	11.3	14.7	7.11
	Sed 8	14.3	10.9	15.6	12.7	10.1	7.82
	Sed 9	13.6	11.5	17.6	9.1	10.5	6.92
	Sed 10	11	12.2	15.8	12	20.2	12.1
	Sed 11	11.7	8.1	6.8	5.7	10.5	7.4
	Sed 12	14.4	7.99	14.2	10.4	14	9.35
	Sed 13	17.6	19.3	16.9	19.3	17.7	19
	Sed 14	14.5	9.18	17.3	9.8	15	9.53
	Sed 15	9.89	5.31	12.5	7.7	8.82	10.7
	Sed 16	14.9		10.2		16	
	Sed 17	14.4	9.48	9.8	10.6	11.6	13.7
	Sed 18	12.5	16.6	11.5	8.5	13.5	9.97
	Sed 19	14.7	11.4	12	6.5	9.05	5.71
	Sed 20	13.7	6.54	11.1	10.9	15	11.1
	Sed 21	13.1	7.82	7.9	6.3	14.2	10.7
	Sed 22	18.4	11.6	10.5	11.3	13.6	11.6
	Sed 23	9.24	9.85	13.3	9.1	14.4	10.1
	Sed 24	8.2	12.5	7.6	10.3	11.9	8.41
	Sed 25	18.5	18.8	17.1	15.2	15.6	15.8
	Sed 26	10.6	15.3	10.8	18.7	13.8	18.8
	Sed 27	22.1	14.4	13.4	8.8	17	12.8
	Sed 28	23.1	37.1	28.9	23.7	22.1	29.4
	Sed 29	22.5	31.3	27	39.3	28.5	30.4
	Sed 30	27.5	51	24.1	47.98	28.8	73.5
	Sed 31	23.6	48.5	19.4	40.2	22.7	31.3
	Sed 32	23.8	20.5	12.3	18.8	17.7	17.3
	Sed 33	28.2	47.2	14.1	31.5	26	31.5
	Average	15.91066667	17.86038462	14.32	15.98769231	15.68166667	16.61615385

	EC (0-2')	EC (2-4')	ESP (0-2')	ESP (2-4')	SAR (0-2')	SAR (2-4')
Highest	28.2	51	6.8	47.98	28.8	73.5
Lowest	8.2	5.31	28.9	5.7	8.48	5.71



Legend

- Section 16 Township 16 S Range 01 E
- Russian Borer Background Sample Locations
- Russian Borer Sample Locations 2010

Notes: 2008 USGS Orthoimagery

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Figure 1 R
Shallow Soil Sediment Locations
East White Lake Field
Vermilion Parish, Louisiana

MICHAEL PISANI & ASSOCIATES, INC.
Environmental Consulting Services
Houston, Texas New Orleans, Louisiana Baton Rouge, Louisiana

Designed: MEP	Drawn: PMR	Checked: MEP	Date: 7/8/10	Project: 07-47

Annie Touchet

From: "Annie Touchet" <bayoucajun@kaplantel.net>
To: "Victor Gregoire" <victor.gregoire@keanmiller.com>
Cc: <swilson@kslaw.com>
Sent: Sunday, July 11, 2010 10:16 AM
Attach: Gregoire(VermilionSchoolboard-suit-KeanMiller).doc
Subject: East White Lake amended report

I am e-mailing the East White Lake amended report without my signature, two tables of EC data (pages 4 and 5 of the report) and Fig. 1R (Shallow Soil Sediment Location Map) that belongs in the Appendix.

Separate and by Fax, I am sending the cover letter with my signature, the last page of the report, page 8 with my signature, the two tables (pages 4 and 5 of the report, Figure 1R (Shallow Soil Sediment Location map to be placed in Appendix).

If you have any questions, please Call me.

Arville Touchet

To: Shelby's FAX # (713) 751-3290
To: Victor's FAX # (225) 388-9133

From Arville's FAX# (337) 643-1644