

East White Lake SED-15 Remediation Bid  
Crown Oilfield Construction and Marine



MPA WHITE LAKE TASK 2 EXCAVATION								
DESCRIPTION			DAYS	DY RATE			TOTAL	REVIEW
<b>EQUIPMENT</b>								
SPUD BARGE			9	550			4950	
SHALE BARGES (4)			9	1,350			12150	
EXT REA EXC(OPER)			9	1,680			15120	
900 HP TUG W/CREW			9	2,800			25200	
300 HP DAY TUGW/CREW			9	1,750			15750	
SILT BOOM			9	250			2250	
OIL BOOM			9	250			2250	
CREW BOAT			9	1,100			9900	
<b>PERSONNEL</b>								
SUPERINTENDENT			9	900			8100	
							0	
							0	
							0	
							0	
							0	
							0	
							0	
<b>SMALL EQUIPMENT</b>								
	<b>DAYS</b>	<b>RATE</b>						
PUMP	9	150					1350	
							0	
							0	
							0	
							0	
<b>FUEL</b>								
	<b>UNITS</b>	<b>RATE</b>						
FUEL TUGS (EST)	8,100	4.38	0				35478	
FUEL EXCAVATOR	900	4.38	0				3942	
							0	
							0	
							0	
							0	
							0	
							0	
							0	
							0	
<b>MISC</b>								
SHALE BARGE MOB	4	1,000	0				4000	
SHALE ON/CHARTER	4	500					2000	
							0	
							0	
							0	
<b>PROJECT TOTAL</b>							142440	
Notes:								
ESTIMATED 2 BARGES LOADED PER DAY; 1500 BBLs TOTAL FUEL CONSUMP 1,000GALS/DAY								
PROJECT TOTAL BARRELS 1700 CUBIC YARDS @ 4.8 BBLs/YD= 8,160 BBLs								
3 DAYS MOBILIZATION DEMOBILIZATION PERSONNEL/EQUIPMENT								
CLEANING CHARGES BY DISPOSAL FACILITY COSTS BY OTHERS								

MPA WHITE LAKE TASK 3 BACKFILL/RESTORATION/ <b>REVISED</b>							TOTAL	REVIEW
DESCRIPTION			DAYS	DY RATE				
<b>EQUIPMENT</b>								
SPUD BARGE			9	550				4950
<b>DECK BARGES (3)</b>			<b>9</b>	<b>750</b>				<b>6750</b>
EXT REA EXC(OPER)			9	1,680				15120
900 HP TUG W/CREW			9	2,800				25200
400 HP DAY TUGW/CREW			9	1,750				15750
SILT BOOM			9	250				2250
OIL BOOM			9	250				2250
CREW BOAT W/ CAPT			9	1,100				9900
<b>PERSONNEL</b>								
SUPERINTENDENT			9	900				8100
								0
								0
								0
								0
								0
								0
								0
<b>SMALL EQUIPMENT</b>	<b>DAYS</b>	<b>RATE</b>						
PUMP	9	150						1350
								0
								0
								0
								0
<b>FUEL</b>	<b>GALS</b>	<b>RATE</b>						
FUEL TUGS (EST)	8,100	4.38	0					35478
FUEL EXCAVATOR	900	4.38	0					3942
								0
								0
<b>BACKFILL MATERIAL</b>	<b>UNITS</b>	<b>RATE</b>						
<b>BACKFILL SOIL</b>	<b>2,800</b>	<b>17.38</b>						<b>48664</b>
<b>DOCK RENTAL</b>	<b>9</b>	<b>1,000</b>						<b>9000</b>
								0
								0
<b>MISC</b>								
<b>OFF CHART SURVEYS</b>	<b>3</b>	<b>500</b>	<b>0</b>					<b>1500</b>
GRASS MATTING	25	65						1625
BERMUDA	100	6.5						650
FERTILIZER	300	2						600
<b>DECK BARGE</b>	<b>3</b>	<b>1,000</b>						<b>3000</b>
<b>PROJECT TOTAL</b>								<b>196079</b>
Notes:								
ESTIMATED OFF LOAD 1.5 BARGES/DAY				FUEL CONSUMP 1,000GALS/DAY				
PROJECT TOTAL BACKFILL 2,800 CUBIC YARDS								
DAILY BACKFILL TOTAL 500 CUBIC YARDS								

# Memorandum

**To:** Project File

**From:** Carlton Todd, Michael Pisani & Associates

**Date:** 10/1/2015

**Re:** Sheet Pile Cost Information

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Based on my conversation with Tracy Comardelle of Crown Construction on 9/15/15.

Sheet pile costs for 40-foot lengths based on \$1,200 per linear foot (lf) for first 1,000 feet and \$350-\$400 per linear foot for removal and reuse of sheet pile.



Foxworth, MS 39483

# Cost Proposal

Date	Proposal #
5/27/2014	4453

Name / Address
MICHAEL PISANI & ASSOCIATES, INC. 1100 POYDRAS STREET, SUITE 1430 NEW ORLEANS, LA 70163

Project Description
Environmental Services White Lake, LA

Description	Unit	Estimated Qty	Cost	Total
Mobilize/Demobilize	lump sum	1	1,850.00	1,850.00T
Sonic Drill Rig & Crew for (1) 4" wells & (1) 2" wells	per day	5	5,500.00	27,500.00T
* Daily rate NTE 10 hr. workday; Additional hrs. @ \$550.00/hr.			0.00	0.00T
4" PVC Well Materials	per ft.	60	25.00	1,500.00T
2" PVC Well Material	per ft.	60	12.00	720.00T
Per-diem	per day	5	300.00	1,500.00T
Above grade surface completions	per each	2	600.00	1,200.00T
2 hp 55 GPM well pump, motor & control box	per each	1	2,500.00	2,500.00T
Boat/Barge for access to drilling locations	per day	5	4,800.00	24,000.00T

Customer Acceptance of Cost Proposal:

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name/Title

\*Payment terms nte (30) days upon project completion.

\*1.5% interest will be charged monthly to all overdue invoices.

<b>Subtotal</b>	\$60,770.00
<b>Sales Tax (0.0%)</b>	\$0.00
<b>Total</b>	\$60,770.00

Walker-Hill Environmental, Inc.  
Phone: (601)736-3500 - Fax: (601)736-6006  
Email: eric@whenv.com





P.O. Box 1147  
Foxworth, MS 39483

# Cost Proposal

Date	Proposal #
5/27/2014	4453

Name / Address
MICHAEL PISANI & ASSOCIATES, INC. 1100 POYDRAS STREET, SUITE 1430 NEW ORLEANS, LA 70163

Project Description
Environmental Services White Lake, LA

Description	Unit	Estimated Qty	Cost	Total
Mobilize/Demobilize	lump sum	1	1,850.00	1,850.00T
Sonic Drill Rig & Crew for (2) 4" wells & (2) 1" wells	per day	8	5,500.00	44,000.00T
* Daily rate NTE 10 hr. workday; Additional hrs. @ \$550.00/hr.			0.00	0.00T
4" PVC Well Materials	per ft.	120	25.00	3,000.00T
1" PVC Well Material	per ft.	120	8.50	1,020.00T
Per-diem	per day	8	300.00	2,400.00T
Above grade surface completions	per each	4	600.00	2,400.00T
2 hp 55 GPM well pump, motor & control box	per each	2	2,500.00	5,000.00T
Boat/Barge for access to drilling locations	per day	8	4,800.00	38,400.00T

Customer Acceptance of Cost Proposal:

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name/Title

\*Payment terms nte (30) days upon project completion.  
\*1.5% interest will be charged monthly to all overdue invoices.

<b>Subtotal</b>	\$98,070.00
<b>Sales Tax (0.0%)</b>	\$0.00
<b>Total</b>	\$98,070.00

Walker-Hill Environmental, Inc.  
Phone: (601)736-3500 - Fax: (601)736-6006  
Email: eric@whenv.com



Summary of Costs for Site Restoration  
Peak Operating

**CHEVRON - ABANDONED FACILITIES DE-COMMISSIONING:**

EAST WHITE LAKE FIELD  
 VERMILION PARISH, LOUISIANA

CHEVRON USA INC  
 UNOCAL CO. CODE - 9198  
 TAX JURISDICTION CODE - TX7770100245  
 C/O PEAK ENERGY, LLC  
 3639 Ambassador Caffery, Suite 201  
 Lafayette, LA 70503  
 (337) 988-6050  
 James D. Collier - President  
 Earl P. Champagne - Project Manager & Coordinator

**INVOICES****Forward Invoices to:**

Thomas E. Gottsegen  
 Senior Counsel, Litigation Mgmt. Unit  
 Chevron Global Upstream and Gas Law  
 1400 Smith Street  
 Houston, TX 77002

Page 1 of 2



Vendor Name	Invoice Number	Invoice Date	Invoice Amount	Description of Expenditure	Mailed
Compass Engineering & Consulting	1000643-IN	10/06/10	\$ 5,200.00	On-Site Supervision	10/08/10
B & J Corporation	2495	10/07/10	10,532.00	Bid Job - tugs, barges, labor	10/15/10
B & J Corporation	2494	10/07/10	8,757.50	Tugboat Rental	10/15/10
Settoon Construction	18919	10/18/10	183,919.76	Construction/Labor	10/22/10
Compass Engineering & Consulting	1000661-IN	10/22/10	10,008.00	On-Site Supervision	10/22/10
Newpark Environmental Services LLC	217420	10/18/10	900.75	Waste Disposal	10/28/10
Newpark Environmental Services LLC	217419	10/18/10	744.00	Waste Disposal	10/28/10
Newpark Environmental Services LLC	217418	10/18/10	822.00	Waste Disposal	10/28/10
Newpark Environmental Services LLC	218511	10/31/10	1,119.50	Waste Disposal	11/15/10
Newpark Environmental Services LLC	218512	10/31/10	671.75	Waste Disposal	11/15/10
Compass Engineering & Consulting	1000709-IN	11/03/10	10,000.00	On-Site Supervision	11/15/10
Compass Engineering & Consulting	1000756-IN	11/16/10	10,000.00	On-Site Supervision	11/19/10
B & J Corporation	2520	10/28/10	110,343.20	Bid Job - tugs, barges, labor	11/19/10
Compass Engineering & Consulting	1000809-IN	11/30/10	8,000.00	On-Site Supervision	12/03/10
Compass Engineering & Consulting	1000855-IN	12/14/10	11,930.00	On-Site Supervision	12/15/10
B & J Corporation	2545	12/14/10	103,223.00	Bid Job - tugs, barges, labor	12/16/10
B & J Corporation	2546	12/14/10	96,800.00	Bid Job - tugs, barges, labor	12/16/10
B & J Corporation	2547	12/15/10	80,400.00	Bid Job - tugs, barges, labor	12/16/10
B & J Corporation	2554	12/23/10	116,202.00	Bid Job - tugs, barges, labor	12/29/10
Compass Engineering & Consulting	1000917-IN	12/29/11	10,000.00	On-Site Supervision	01/04/11
B & J Corporation	2557	01/07/11	90,890.81	Bid Job - tugs, barges, labor	01/11/11
Compass Engineering & Consulting	0011006-IN	01/12/11	11,930.00	On-Site Supervision	01/14/11
Compass Engineering & Consulting	0011052-IN	01/26/11	10,000.00	On-Site Supervision	01/27/11
B & J Corporation	2564	01/27/11	113,977.17	Bid Job - tugs, barges, labor	02/03/11
Compass Engineering & Consulting	0011099-IN	02/09/11	9,000.00	On-Site Supervision	02/10/11
B & J Corporation	2565	02/10/11	110,000.00	Bid Job - tugs, barges, labor	02/18/11
Compass Engineering & Consulting	0011149-IN	02/23/11	10,000.00	On-Site Supervision	02/25/11

Page 1 Total

**\$ 1,135,371.44**

**CHEVRON - ABANDONED FACILITIES DE-COMMISSIONING:**

EAST WHITE LAKE FIELD  
VERMILION PARISH, LOUISIANA

**INVOICES**

CHEVRON USA INC  
UNOCAL CO. CODE - 9198  
TAX JURISDICTION CODE - TX7770100245  
C/O PEAK ENERGY, LLC  
3639 Ambassador Caffery, Suite 201  
Lafayette, LA 70503  
(337) 988-6050  
James D. Collier - President  
Earl P. Champagne - Project Manager & Coordinator

**Forward Invoices to:**

Thomas E. Gottsegen  
Senior Counsel, Litigation Mgmt. Unit  
Chevron Global Upstream and Gas Law  
1400 Smith Street  
Houston, TX 77002



Vendor Name	Invoice Number	Invoice Date	Invoice Amount	Description of Expenditure	Mailed
			<i>Balance Fwd</i>		

Balance Forward from Page 1: \$ 1,135,371.44

Compass Engineering & Consulting	0011252-IN	03/09/11	\$ 10,000.00	On-Site Supervision	03/10/11
B & J Corporation	2578	03/01/11	98,800.00	Bid Job - tugs, barges, labor	03/10/11
Compass Engineering & Consulting	011328-IN	03/23/11	8,000.00	On-Site Supervision	03/29/11
B & J Corporation	2585	03/11/11	70,000.00	Bid Job - tugs, barges, labor	03/29/11
B & J Corporation	2596	03/29/11	95,952.50	Bid Job - tugs, barges, labor	04/06/11
Compass Engineering & Consulting	011368-IN	04/06/11	10,000.00	On-Site Supervision	04/08/11
B & J Corporation	2600	04/13/11	119,200.00	On-Site Supervision	04/18/11
Compass Engineering & Consulting	0011429-IN	04/19/11	12,000.00	On-Site Supervision	04/20/11
Compass Engineering & Consulting	0011480-IN	05/04/11	9,000.00	On-Site Supervision	05/05/11
B & J Corporation	2603	05/04/11	116,459.44	Bid Job - tugs, barges, labor	05/11/11
B & J Corporation	2604	05/04/11	102,185.50	Bid Job - tugs, barges, labor	05/11/11
Compass Engineering & Consulting	0011546-IN	05/18/11	13,000.00	On-Site Supervision	05/23/11
Compass Engineering & Consulting	0011607-IN	06/01/11	12,210.00	On-Site Supervision	06/02/11
Compass Engineering & Consulting	0011654-IN	06/15/11	4,000.00	On-Site Supervision	06/17/11
B & J Corporation	2609	05/23/11	93,459.39	Bid Job - tugs, barges, labor	06/20/11
B & J Corporation	2618	06/15/11	26,400.00	Bid Job - tugs, barges, labor	06/20/11
B & J Corporation	2619	06/15/11	8,757.50	Bid Job - tugs, barges, labor	06/20/11
B & J Corporation	2620	06/15/11	24,010.00	Bid Job - tugs, barges, labor	06/20/11

INVOICE TOTAL TO DATE

\$ 1,968,805.77



**MP&A Record of Communication**

Work Order # 07 - 47

Day & Date: Thursday, 5/29/14

Time: 10:00 am pm

Phone Conversation Logged by MP&A Employee: L Cooper / M Pisani

Conversation with: Earl Champagne, Position: VP

Organization: Peak Energy

Phone #: 337-988-6050 ext: \_\_\_\_\_ Location (City/State): Lafayette, LA

**Topic(s) Discussed:**

Concept of converting O/G well to SWD.

They (Peak) have done 2 conversions in last 3 yrs. @ \$350,000 to \$400,000.

- 2500 to 3500 ft injection zone.

- they also put a lot of rainwater into the SWD.

- Peak can handle a fair amount of water.

- LRC/MEP to call Earl on 6/2 to discuss details



MP&A Record of CommunicationWork Order # 07 - 47Day & Date: Monday, 6/2/14Time: 1110: (a) am / pmPhone Conversation Logged by MP&A Employee: L Cooper w/ M PisaniConversation with: Earl Champagne, Position: VPOrganization: Peak EnergyPhone #: 337-988-6050 ext: \_\_\_\_\_ Location (City/State): Lafayette, LA

## Topic(s) Discussed:

Conversion of well to SWD & Peak's capacity to accept volume of recovered gw.

① Gave Earl thumbnail sketch of proposed ~~recovery~~ contingent recovery

- 2 x 25 gpm wells (50 gpm = 1700 bpd)

- maybe saline

- convey to tank, pump out & meter w/ saltwater to blend into SWD.

② Questions for Earl

- How much salt water do you inject?

- o 5000 bbl/day have 2 wells w/ 5000 bpd capacity so they have lots of capacity

- Go into 750 bbl knock out tank then 3000 bbl suction tank.

- They inject all stormwater from these process/tank area & inject into SWD. No problems with fresh water into SWD. Could easily calculate

(cont.)

MP&A Record of Communication

Work Order # \_\_\_\_\_

Day & Date: \_\_\_\_\_, 6/2/14Time: 1110: \_\_\_\_\_ (am) / pmPhone Conversation Logged by MP&A Employee: Cooper/PisaniConversation with: Earl Champagne, Position: \_\_\_\_\_

Organization: \_\_\_\_\_

Phone #: \_\_\_\_\_ ext: \_\_\_\_\_ Location (City/State): \_\_\_\_\_

## Topic(s) Discussed:

maximum load.Cost info:Option 1: ~~Convert well to SWD~~ Send directly to Peak

- 3" flowline to process area for injection
- \$30/ft \* 3000 l.f.

- Operations

- Chemical treatment (biocide) \$10,000/yr

- Well Acid wash (\$100k / 2 yrs) \$50,000/yr

Option 2: Convert borehole to SWD

- Deck w/ piling & curbs \$100k

- 2000 bbl raw water tank w/ controls \$40k

- 2000 bbl mix tank w/ controls \$40k

- pumps \$20k

- mechanical piping \$40k

- Electrical \$50k

- Perm. Hg. \$10k

- Well Conversion \$400k

- Piping (\$30/ft estimate sec. l.f.) \$150,000k

(cont.)

MP&A Record of Communication

Work Order # \_\_\_\_\_

Day & Date: \_\_\_\_\_, 6/2/14

Time: 1110: \_\_\_\_\_ am/pm

Phone Conversation Logged by MP&A Employee: Cooper / Pisani

Conversation with: Earl Champagne, Position: \_\_\_\_\_

Organization: Peak

Phone #: \_\_\_\_\_ ext: \_\_\_\_\_ Location (City/State): \_\_\_\_\_

Topic(s) Discussed:

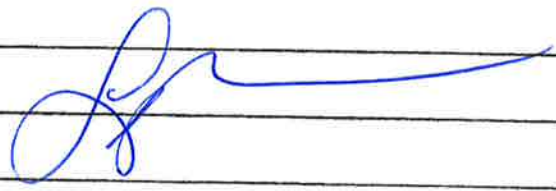
Option 3: Drill new well

Same as Option 2

except cost to drill new well ~ \$ 1 million

& piping much less since it could be very near recovery wells.

Reiterated that Peak has capacity to accept 1700 ± bbl/day into their process w/o trouble.





**MP&A Record of Communication**

Work Order # 07 - 47

Day & Date: Wednesday, 5/28/14

Time: 12:00 am/pm

Phone Conversation Logged by MP&A Employee: Lance Cooper

Conversation with: Guy Mirro, Position: Sales

Organization: Ecoserv (formerly New Park Environmental)

Phone #: 713-703-6000 ext: \_\_\_\_\_ Location (City/State): Houston, TX

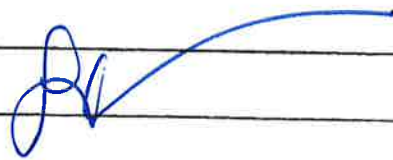
**Topic(s) Discussed:**

Cost for disposal of soil/sediment from East white Lake Pit Closure.

Rate is \$21.00/bbl

roughly 4.8 bbl/cy

must also include \$5000/berge for cleanout. Assume at least (2) 1200 bbl barges.





**MP&A Record of Communication**

Work Order # 07 - 47

Day & Date: Friday, 5/30/14

Time: 4:40 am / pm

Phone Conversation Logged by MP&A Employee: Lance Cooper

Conversation with: Bryan Richard, Position: \_\_\_\_\_

Organization: Crain Brothers

Phone #: 337-905-2411 ext: \_\_\_\_\_ Location (City/State): \_\_\_\_\_

**Topic(s) Discussed:**

Water barge for pump test:  
\$ 350/day for water barge  
~ 100<sup>K</sup> gallon capacity  
to 140K

**MP&A Record of Communication**

Work Order # 07-47

Day & Date: Tuesday, 5/20/14

Time: 13:05 am/pm

Phone Conversation Logged by MP&A Employee: Dave Angle

Conversation with: Wayne Hebert, Position: Water Well Driller

Organization: Black's Pump + Water Well Service, Abbeville, LA 70510

Phone #: 337-893-4605 ext: \_\_\_\_\_ Location (City/State): \_\_\_\_\_

**Topic(s) Discussed:**

Asked wayne cost of installing 40' + 500' domestic water wells in East White Lake area. He said would have to use barge to transport rig; therefore costs as follows:

~40' well 3" Diameter ~10K includes barge (estimated to be ~8.9K)

~500' well 3" Diameter ~20K includes barge

**From:** [David Rachou](#)  
**To:** [Lance Cooper](#)  
**Subject:** RE: Request for Budget Level Cost Estimate  
**Date:** Thursday, May 29, 2014 5:54:32 PM

---

30% normal usage is ballpark, but on the high side.  
Salt consumption is about \$12/month

Annual filter change on POU R/O \$60 + labor  
Annual filter change on POE R/O \$120 + labor  
10 yr replacement is also ballpark and a little high

8% tax is fine

Our labor charge is \$90/hr  
3-4 hrs average for RO & Softener (must be pre plumbed with access to drain and electrical outlet)

No problem with remote locations. 30% of my weekends are spent in the Pecan Island Marshes.

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**From:** Lance Cooper [mailto:[lcooper@mpisani.com](mailto:lcooper@mpisani.com)]  
**Sent:** Thursday, May 29, 2014 4:43 PM  
**To:** David Rachou  
**Cc:** Dave Angle  
**Subject:** RE: Request for Budget Level Cost Estimate

Thanks David.

If we assume 30% of normal household usage (3 days per week and 3 weekends per month) can we estimate the O&M? Again, ballpark estimates are fine. I need to include that in my report.

Based on your previous email, I will assume that we replace the system completely every 10 years.

For taxes, I will include 8%. What about labor costs to install? Do you figure a percentage of cost or a lump sum estimate. These will be remote locations and not easy to get to.

Thanks for your help and I look forward to hearing from you soon.

Lance R. Cooper, P.E.  
Michael Pisani & Associates, Inc.  
1100 Poydras Street, Suite 1430  
New Orleans, LA 70163  
504-582-2476 (phone)  
504-582-2470 (fax)  
315-246-4494 (cell)  
[lcooper@mpisani.com](mailto:lcooper@mpisani.com)

---

**From:** David Rachou [mailto:culligan@glacoxmail.com]  
**Sent:** Thursday, May 29, 2014 4:10 PM  
**To:** Lance Cooper  
**Subject:** RE: Request for Budget Level Cost Estimate

The deeper well is the better option based on the analysis. The shallow well would require additional treatment and has a much higher tds level (632 vs 5400)

To predict operation and maintenance cost would be difficult. How many times will they visit the camp and how much water will they consume each time? The average 2 person household on municipal water systems will use approximately 5500 gal/month. This is a different scenario.

30yrs? Most treatment systems have an average lifespan of 15yrs before being replaced. If the equipment is outdoors and not in a utility room, then it would be much less than 15yrs.

Hope this helps.

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**From:** Lance Cooper [mailto:lcooper@mpisani.com]  
**Sent:** Thursday, May 29, 2014 3:08 PM  
**To:** David Rachou  
**Cc:** Dave Angle  
**Subject:** RE: Request for Budget Level Cost Estimate

David;

Thanks for the attached information.

Would you recommend the same approach for the shallow well and the deeper well or would the system requirements be different based on the water quality data that I provided?

Also, how would we best estimate operation and maintenance cost assuming that it would be used for 30 years?

Lance R. Cooper, P.E.  
Michael Pisani & Associates, Inc.  
1100 Poydras Street, Suite 1430  
New Orleans, LA 70163  
504-582-2476 (phone)  
504-582-2470 (fax)  
315-246-4494 (cell)  
[lcooper@mpisani.com](mailto:lcooper@mpisani.com)

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**From:** David Rachou [mailto:culligan@glacoxmail.com]  
**Sent:** Thursday, May 29, 2014 2:19 PM

**To:** Lance Cooper

**Subject:** RE: Request for Budget Level Cost Estimate

Lance,

I attached the brochures for the Culligan water softener and reverse osmosis systems. I reviewed the water analysis you submitted and suggest the following general water treatment options. We would need to re test the water supply again after the well supply is selected.

Water Softener            \$1395 *Medallist Plus 10X49*

Treats calcium, magnesium and iron

The softener uses softener salt for regeneration and regen frequency is based on water consumption.

POU Reverse Osmosis \$725 *Aqua-Clear*

Point of use reverse osmosis offers a more affordable option and is usually installed under the kitchen sink. This supplies cooking and drinking water and can also supply the refrigerator/icemaker.

OR

-  
POE Reverse Osmosis \$5562

Point of entry reverse osmosis supplies the entire home. The system priced is for a *M1-2S 500GPD* system with a 120gal storage tank.

Reverse osmosis must be used with water softener pretreatment or membrane fouling will occur.

Price does not include Tax/Labor

Please review the brochures and contact us with any further questions. Thanks,

David Rachou  
Culligan - Lafayette

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**From:** Lance Cooper [<mailto:lcooper@mpisani.com>]

**Sent:** Wednesday, May 28, 2014 6:12 PM

**To:** [culligan@glacoxmail.com](mailto:culligan@glacoxmail.com)

**Cc:** Dave Angle

**Subject:** Request for Budget Level Cost Estimate

Dave:

Thanks for taking the time to talk with me earlier this afternoon. I am attaching laboratory analyses for two ground water zones at the site we are interested in.

The first is groundwater from 500-foot deep wells and the second is for shallower wells. We are potentially interested in treating each of these for domestic use.

Could you please utilize the attached lab data to provide us with a budget level cost estimate for the purchase, installation, and estimated annual operational costs (for a 30-year period) for a water treatment system for the following?

Treatment of the water needed for one average camp house (i.e. for bathing, washing, drinking, cooking, etc.)

Please call with any questions. Thank you in advance for your time.

Lance R. Cooper, P.E.  
Michael Pisani & Associates, Inc.  
1100 Poydras Street, Suite 1430  
New Orleans, LA 70163  
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**From:** Patrick Ritchie  
**Sent:** Wednesday, June 04, 2014 11:03 AM  
**To:** Dave Angle  
**Subject:** 07-47 East White Lake-Peak Water Well Usage

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Dave,

I just spoke to Aaron, current operator of the Peak facility, regarding the usage of the ~400' water well on site.

He called it the "fresh water well that they use for potable water". He specified that the use is for washing dishes and clothes, toilets, etc.

He indicated that the water was not used for drinking and that they drank only bottled water at the facility.

Contact: Aaron (Peak) cell# 337-322-5001

Best regards,  
Patrick Ritchie  
Michael Pisani and Associates  
1100 Poydras St. Suite 1430  
New Orleans, LA 70163  
Office: 504-582-2468  
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