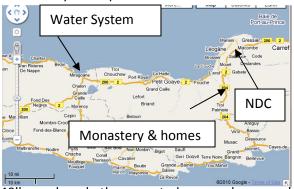
## Holy Spirit Haiti Mission Trip Report Miragoave Water Purification Installation, NDC Water System, Housing Review

## May 12, 2010

On May 3, 2010 a team of five members of the HSHM left Huntsville bound for Haiti. Our mission was to install a water purification in the community of Oliviar just to the East of Mirogoave, install a well pump at the Little Sisters of St. Therese monastery in Vialet, install a well pump at the Notre Dame de la Charite orphanage in Leogane and review the house building project that had been started right after the January earthquake. We were successful in all endeavors except the installation of the pump at the



Little Sisters monastery. It was decided that we would leave the pump with them, but since electricity could not be counted on for right now, they would continue using the hand pump. Installing the electrical pump and tank will only take 2-4 hours and the Haitians are very capable of doing this task.

Day 1 – Monday - We began the trip at 4:30 at the airport with 10 - 50 be bags, 5 carry-on's at about

40lbs each and other assorted personal carry-on's as allowed. American Airlines cut us a little slack as we were a couple of pounds over on two of the bags. We flew to Chicago, Miami and PAP and arrived in PAP at 4p. It took us an hour to get through customs and our bags were waiting for us as was Fre Olizard. Instead of driving to Mirogoave that evening, Fre Olizard felt it was better for us to stay in the



The new sleeping quarters at monastery. Courtyard in middle, chapel at end and taken from dining room.

new monastery at Palmiste au Vin and drive back and forth to Miragoave each day which is a 90 min drive.

Thanks to many donations, the new monastery sleeping quarters are very nice. Fre Olizard has built a house laid out as a square 'O' with the dining area at one end, rooms for the brothers on each of the two sides and their chapel at the other end. I don't know whose rooms we got, but we were the first ones to sleep in the

rooms. This is indicative of the hospitality of the brothers. Their bed is your bed.

That evening, Fre Olizard informed me that he was incredibly busy with many things in the community and he would go with us to Mirogoave, but would I mind if I drove the truck and he would leave after everything was properly arranged. I knew how busy he was and I agreed.

Day 2 – Tuesday - We set out about 6:30 meaning up at 5 for chapel and prayers, a quick breakfast and

90 min later we are at the community of Oliviar. The first day we split into two teams – inside and outside – with Gabe Freiburger leading the inside team building the system and I oversaw dropping the pump and getting the tanks installed on the roof. Inside worked pretty well and



Gabe ended up mounting the pump on the board totally different from one have ever seen or done and it saved about 1.5' of space. The well pump did not go as smoothly. We knew the water was about 80' down, so we put the pump down to 100' to be sure and then second guessed ourselves and dropped it another 20'. To no avail as the pump would not start, even though we had tested it on the surface. Up comes the pump and each 20' you have to cut the pipe as it is too unwieldy after that. We learned that about 60' up there was water in the PVC which meant we had dropped it way too far down. Since I was the one hauling the pump up, the boys took great pleasure in getting me soaked every time we cut another 20' section. There's a lot of water in 20' of 1'PVC!!! With the pump finally out and no visible evidence of any bad connections, the only thing I could rationalize was that our connections were too close together and were shorting in the water. So we rewired the pump putting each of the three connections about 6" up or down from each other and then carefully rewrapping the whole connection with electrical tape. This time we measured the water beginning at 42', so dropped the pump to 60' and it cooperated with us that afternoon.

The Little Sisters of St. Therese live about 5 miles to the east of Oliviar and we all got in the truck to eat lunch at their place. We did not go hungry and their hospitality was just wonderful. We were scheduled to put another well pump in their facility. Before the earthquake they had dependable power from the street most of the day. That luxury had not been restored yet, so the decision was made to leave the pump and equipment with them to be installed by the brothers later when they could count on the electricity. They have only one well and they feed 400 school kids each day and removing their hand pump would have had serious consequences.

It was dark by the time we got back to the monastery that night and as always, the hospitality of the Little Brothers is incredible. Dinner was waiting for us at 7:30. Bucket showers were all we had, but they sure felt good after a day in the sun.

Day 3 – Wednesday - More of the same, although this time Fre Olizard shoved us out the door on our own. He had much on his own plate and we had Ignace and Bertone on the team, so what could go wrong. The morning went smoothly. The inside and outside teams finished their tasks right after lunch. Oliviar has electricity, but not until 6p. Jackson Cuaco, the Haitian in charge of the Oliviar community had a generator, but his 220VAC plug was not working, so we borrowed a new one from the NDC orphanage. It's hard to test a water system without electricity. That afternoon I went about wiring and testing the components. We were testing the well pump and Ignace was on the roof watching the tank. His Haitian brother Bertone teased him by pulling the ladder away from the roof. Ignace, seeing this as no problem promptly goes to a tree close to the building and like many Haitians I've see go up and down palm trees, proceeds to come down the tree. Unfortunately at 5' he lost his grip and fell on his back about 3' feet from me. Thank God he did not break his back, but did break his arm in two places. I still feared a back injury, but we had no choice in the matter, so propped his arm with a board, locked up all our tools and promptly put Ignace in the truck bed with another Haitian holding him in his lap to try and minimize the pain of every bump in the road. Petite Goave was the closest medical facility which was 10 miles away. It was not an easy ride for Ignace, but we got him there only to learn there were no doctors there. Mother Mary to the rescue. Just then two nurses and a doctor come back to the hospital because they had forgotten something. After we got Ignace on a gurney I cleared everyone away and

we went outside to wait, only to be shaken in our boots a minute later by the most blood curdling scream that I am sure they heard in PAP 80 miles away. The doctor had pulled Ignace's arm to reset the bone. Yes, there was no medicine to help with that part of the pain. They did all they could to properly set it and put it in a cast. He needed an x-ray and that would have to be done in PAP the next day. Olizard had been called and he met us in Petit Goave and we began the long trip back to the monastery much more slowly with Ignace moaning each mile of the way and with every pothole I hit. At one part of the trip we had to ford a river which was running pretty good from an earlier rain and I had to drive fairly rapidly to maintain control and not stall the vehicle. That was painful. Ignace was put in a room in the monastery and made as comfortable as possible. The doc had given him some pain medicine which helped some, but it was a long night for him. Late dinner again and later to bed as Fre Olizard and I were up discussing plans after dinner that night until about 11p.

Day 3 – Thursday - Up at 4:30a, bucket shower, chapel, breakfast and off for the last day in Oliviar. We

put some final touches on the system, but the rest of the today was dedicated to training Cuaco and his operators not only how to operate and take care of the system, but about providing clean water training in the community, at the school and at the clinic. They were all most receptive to all we taught them and just before we left everyone proudly signed the water system board that the Oliviar community had just taken possession of. Bertone did a wonderful job of teaching everything that day. We returned home



at dark, had a wonderful dinner with the brothers and turned in knowing we had a good three days in spite of Ignace's injury.

Friday, Day 4 – We pile in the truck and head for Leogane to visit the NDC orphanage. We have a pump to install in their new well, two tanks to set up and hopefully get their water source organized. Their new well was hand dug to 25' and had been lined with stones. It was a very nice piece of workmanship. This time when we dropped the pump we could actually see it when it hit the water. Unfortunately when we started it up, the pump sucked the well dry in about 5 minutes and an hour later there was



enough water for another five minutes. We were pumping about 10 gal/min. Before we left, we had pumped about 200 gal of water and put it in one of the storage tanks on the roof of the



house Fre Olizard had build for just this purpose. Part of the reason to visit the orphanage was also to do a site survey as this is the next place we want to put a water purification system. Not only will the orphanage benefit, but this is a small business opportunity for them to be able to sell clean water to the surrounding community. So while the team was playing with the kids, Eliane and I discussed the plans and the covenant I had brought for her to sign. You can never leave a Haitian home without eating, so



Eliane had prepared a wonderful stew for us. We went away with plans to get the well dug deeper so she could have plenty of water. The kids were all in pretty good shape, but the living outside had taken a toll on Eliane. Life is hard, but they had a roof over their heads, a lot more space than they had in the past, their own property and the beginning of a very nice facility. There was other business I had to do with Garry Joseph in Leogane, so we set out in the afternoon to do that and got back to the monastery

about 4p. I had made arrangements with Jean Sylvian of Green Energy in Haiti who supplies solar system components to meet me at the orphanage because we wanted to solarize this next system since Eliane has no reputable power except her generator which is pretty expensive to run with gasoline at \$5/gallon. He was very good about coming out from PAP which is a gruesome 2 hr drive at that time of day (25 miles). We had a great discussion not only about the orphanage, but using Green Energy for getting many of the products we need in Haiti for our water systems. He was very nice, very knowledgeable and spoke several languages fluently. And most important, his past actions have show him to be very trustworthy. Yes, back after dark again.

Saturday, Day 6 – Today was the home tour day. Many people have come together to not only provide resources to rebuild the orphanage, the monastery and the school but also several family homes in the Palmiste au Vin area. Today, Brother Alabare was our guide and we didn't know it, but we were in for some heavy duty hiking. These homes are all within 2-3 miles of the monastery, but you have to be a goat to get to them. Most are only a few hundred feet off the highway, but you have to go 45 degrees up or down to get there. The labor to carry a cement block or a sheet of plywood into each site was incredible. As I am walking into some of these homes, I could not help but to imagine carrying a ¾" sheet of plywood and I doubt I could have made one trip let alone several. The first house Fre Olizard built was Eric's house. It was a little nicer than some of the other's but Olizard had to make it handicap accessible which is ironic because path down to his house is very steep. His view is absolutely spectacular though. We have contributed to 12 homes, the monastery, the school and the orphanage. That morning we visited Erick, Madam Danio, Madam Cylie, Mr. Dorlean, Madam Mini, Mr. Kercelin and the Belizaire family. We visited Mr. Pilliar and Mr. Miguel, but they were not home. Following are pictures of some of the homes. Most are based on the style like Madam Danio's home. They are two rooms, concrete floor, two doors, a couple of windows and open ceiling to vent the heat. There are summaries of expenses and costs of houses at the end of the report.



Erick with Bob & Paul

Erick's house form the Highway

Erick's view from the window



Madam Danio & family

This was the 1/2 way mark

Madam Danio's grandkids playing with the machins (cars)



Belizaire Home – About ½ mile hike in from the road down the mountain. Notice how much was hand dug out from the hill in back of the house. This is a good sized home by mountain standards in Haiti.

We then went on to visit the Belizaire family who is being sponsored by an ecumenical group in Rome, GA and other friends of theirs in various Southern states. Phillip and Lisa Moore adopted Ester Belizaire two years ago. She had a severe spinal crook and the family had no means to get it corrected. The Moore's paid for the operation in the US and one thing led to another and the adoption was set up. Ester will become a US citizen this summer and after that the Moore's will bring her back to Haiti to visit so she can keep a close link to her biological mother and father. The Moore's and the Rome group have contributed entirely to the Belizaire home which is on a nice lot carved entirely by hand out of the side of the mountain. Here you see the framing of a very nice 3 bedroom home.

We spent the rest of the day cutting out shelves to rebuild the Living Waters for the World (LWW) warehouse. The old warehouse was demolished by the earthquake, so LWW paid for another building. During cleanup, the brothers had placed all of the pieces that they had salvaged from the destruction into boxes and in the new locked building. However, nothing was organized as it needed to be so we spent almost until dark building the shelf units. The next day we would take them down to fit into the building. I also took some time to investigate problems we were having with the Lister-Petter generator we put in 2 yrs ago which I am sad to report is going to have to be replaced.



Sunday Day 7 – Since St. Rose was demolished, the five of us got in the truck and went to mass at Sister Claudette's SVdP Home for the Aging and Abandoned. We were a little late, but it was a good mass. We obviously stood out in the back because the priest called us forward and asked us what we were doing. It was a good opportunity to tell the congregation about some of the work we are doing in Haiti. We visited with Sister Claudette for a while, but she was very busy with the priest and others and



we said our good byes and went back to the monastery. After lunch we loaded all of the shelving we had built the day before into the truck and carried it down to the school area where the new warehouse resides. Once the shelves were in place, we went about the sorting and restocking of the shelves. The results of several hours of work were very rewarding as the warehouse which is used by many of the LWW teams was finally back in shape again. The inventory is attached to this report.

I was able to get the Lister-Petter generator to start back up by overriding the shutoff, but knew something bad was wrong with the unit. I found whte plastic shavings throughout the generator. Back in the US, I found that we were going to have to replace the unit as part of the commutator had come apart which is what I had feared. Of course it was out of warranty.

That evening we spent our last dinner with Fre Olizard laughing about the good times we had had and looking to the future. We packed our bags and what were 15 bags including the carry ons became about 7 as we consolidated bags inside of each other.

Monday – Day 8 – Up at 4a to be on the road at 4:30. The drive is not that long in miles, but the PAP traffic is awful. Our flight was at 9a and if you don't make it, I didn't even want to think about the consequences. We hugged Fre Olizard at the airport and looked forward to the trip home. We landed in Huntsville at 6 that evening with no delays. It was a good trip. It was much more physical than I remember other trips. Everything seemed harder, but people were surviving the best they could and like each trip, we try to find little pockets of opportunity where we can help make their lives a little easier.

I want to thank Deacon Jim, Paul, Gabe and my wife Kathy for their love, companionship and dedication to getting all the tasks done. I want to give a special thanks to Fre Olizard and all the Petit Freres and Soeurs of St. Therese for their incredible hospitality, love and oversight while we were there. And finally I want to thank Eliane and Garry for all they are doing with the orphanage and other ventures in spite of very difficult time. These Haitians are truly putting others before themselves.

We still have about \$26K in the account. \$18K of this is for the orphanage from CHS and Grissom donated funds donated. Some of the rest is for the new generator we will need and the remainder will likely go to one more house which is now about \$3200.

In summary, that would make 13 homes, a new monastery, a new 400 student school, health and hygiene additions (toilets, well, water system, tanks, generator) to the orphanage and a boost to the economy.

Thanks be to God for the Graces He has shed on this mission.

Bob McCoy

Haiti Mission Team Leader 5/30/2010

## Inventory PaV 5/9/2010

1-ozinator 1-rinse station 10-ep20bb 5 mic filters 4-ozinator lamps 2-trash filters 3-spanner wrenches 2-2' flex 1" 4-econet pumps 1-green pump 2-water meters 1-bag pipe brackets 1" 10-brass water faucets 1-uv unit and controller 3-uv lamps 13-cbc20bb .5 mic filter 1-box assorted hw, screws, etc 2-box 3/4" wood screws 10-pressure gauges 4-rolls teflon tape (assorted lengths) 4-pressure guage adapters 100-whirlpac tests 30-bags shock 2-large straps 4-injectors 1-4" well bear cover Sever water test kits- not whirl paca 1-duplex plug 1-switch 1 switch/plug 2-rolls electrical tape 1-bag wire connectors and plugs

2-pieces clear PVC Assorted rolls wire 4-rolls metal strap 4-partial rolls metal strap 1-box t, l, 45, valves, cross, connectors 1" a few 3/4" parts 1-box 1"-1 1/2" male/female adapters & reducers 1-box 1" assorted PVC pieces 2-empty boxes 10-pieces ozinator hose 15-big blue O rings

Salvage parts 2-big blue 1-trash filters 2-valves 2-guages 1-electrical box

Tools 2-ryobi drills 2-ryobi saws 2-ryobi batteries 2-ryobi chargers 2-tape measure 4-levels 1-b&d drill (no battery charger) 2-PVC cutter 1-square 1-tool bag w/most needed tools

Neview of costs for	7.9	•			Monastery			E	rick Celestii	า	Chapel & Refractory			
			Cost			Cost			Cost			Cost		
Material		Qty	Haitian	US	Qty	Haitian	US	Qty	Haitian \$H	US	Qty	Haitian	US	
	Sheet	35	\$H 2100	\$266	40	\$H 2400	\$304	50	2500 \$H	\$316	200	\$H 12000	\$1,519	
Metal	Sheet	23	\$H 6440	\$815	20	\$H 7800	\$987	30	7800 \$H	\$987	80	\$H 31200	\$3,949	
Plywood	еа	60	\$H 6000	\$759	50	\$H 3125	\$396	1000	9000 \$H	\$1,139	200	\$H 25000	\$3,164	
2x4	ea	24	\$H 1440	\$182	50	\$H 3000	\$380	60	3000 \$H	\$380	100	\$H 6000	\$759	
1x4	bag	24	\$H 1300	\$165	40	\$H 2600	\$329	50	2750 \$H	\$348	100	\$H 6500	\$823	
cement	box	2	\$H 800	\$101	1	\$H 450	\$57	3	1050 \$H	\$133	5	\$H 2250	\$285	
Nails	Truck	1	\$H 600	\$76	1	\$H 500	\$63	2	1000 \$H	\$127	5	\$H 3000	\$380	
Sand	Truck	1	\$H 600	\$76	1	\$H 500	\$63	2	1200 \$H	\$152	5	\$H 3000	\$380	
Stone	Truck				1	\$H 600	\$76	2	1200	\$152	5	\$H 4000	\$506	
Gravel	еа	1	\$H 500	\$63	1	\$H 2000	\$253	1	\$H 500 \$H	\$63	1	\$H 2000	\$253	
Transportation	ea	1	\$H 1600	\$203	1	\$H 2653 \$H	\$336	1	2000 \$H	\$253	1	\$H 9000 \$H	\$1,139	
Labor			\$H 21380	\$2,706		25628	\$3,244		32000	\$4 <i>,</i> 050		103950	\$13,157	

## **Review of Costs for the House Projects**

		Ignace Home		Mimise Home			Kercelin Home			Dorlean Home			
		Cost		Cost			Cost			Cost			
Material		Qty	Haitian	US	Qty	Haitian	US	Qty	Haitian \$H	US	Qty	Haitian	US
	Sheet	35	\$H 2100	\$266	35	\$H 2100	\$266	35	2100 \$H	\$266	35	\$H 2100	\$266
Metal	Sheet	23	\$H 6440	\$815	23	\$H 6440	\$815	23	6440 \$H	\$815	23	\$H 6440	\$815
Plywood	еа	60	\$H 6000	\$759	60	\$H 6000	\$759	60	6000 \$H	\$759	60	\$H 6000	\$759
2x4	ea	24	\$H 1440	\$182	24	\$H 1440	\$182	24	1440 \$H	\$182	24	\$H 1440	\$182
1x4	bag	20	\$H 1300	\$165	20	\$H 1300	\$165	20	1300	\$165	20	\$H 1300	\$165
cement	box	2	\$H 800	\$101	2	\$H 800	\$101	2	\$H 800	\$101	2	\$H 800	\$101
Nails	Truck	1	\$H 600	\$76	1	\$H 600	\$76	1	\$H 600	\$76	1	\$H 600	\$76
Sand	Truck	1	\$H 600	\$76	1	\$H 600	\$76	1	\$H 600	\$76	1	\$H 600	\$76
Stone	Truck												
Gravel	еа	1	\$H 500	\$63	1	\$H 500	\$63	1	\$H 500 \$H	\$63	1	\$H 500	\$63
Transportation	ea	1	\$H 1600	\$203	1	\$H 1600 \$H	\$203	1	1600 \$H	\$203	1	\$H 1600	\$203
Labor			\$H 21380	\$2,706		21380	\$2 <i>,</i> 706		21380	\$2 <i>,</i> 706		\$H 21380	\$2,706

			Miguel Home			Periel Home		Siler Home			
			Cos	t		Cos	st	Cost			
Material		Qty	Haitian	US	Qty	Haitian	US	Qty	Haitian	US	
									\$H		
	Sheet	35	\$H 2100	\$266	35	\$H 2100	\$266	35	2450	\$310	
									\$H		
Metal	Sheet	23	\$H 6440	\$815	23	\$H 6440	\$815	23	9200	\$1,164	
				4		4	4		\$H	4	
Plywood	ea	60	\$H 6000	\$759	60	\$H 6000	\$759	60	9000	\$1,139	
2.4		~ ^	<u> </u>	64.00	~ ~ ~	<u></u>	64.00		\$H	6949	
2x4	ea	24	\$H 1440	\$182	24	\$H 1440	\$182	24	1680	\$213	
14	haa	20	ću 1200	Ċ1CF	20	ću 1200	Ċ1CE	20	\$H	Ć1CE	
1x4	bag	20	\$H 1300	\$165	20	\$H 1300	\$165	20	1300	\$165	
cement	box	2	\$H 800	\$101	2	\$H 800	\$101	2	\$H 900	\$114	
Nails	Truck	1	\$H 600	\$76	1	\$H 600	\$76	1	\$H 700	\$89	
Sand	Truck	1	\$H 600	\$76	1	\$H 600	\$76	1	\$H 700	\$89	
Stone	Truck										
Gravel	ea	1	\$H 500	\$63	1	\$H 500	\$63	1	\$H 500	\$63	
									\$H		
Transportation	ea	1	\$H 1600	\$203	1	\$H 1600	\$203	1	2500	\$316	
						\$H			\$H		
Labor			\$H 21380	\$2,706		21380	\$2,706		28930	\$3 <i>,</i> 662	

		1	NDC Well & T	oliet	NDC Generator, House & Tank				
			Cost	t	Cost				
Material		Qty	Haitian	US	Qty	Haitian	US		
	Piece	10	\$H 800	\$101	40	\$H 3200	\$405		
Iron	Each	150	\$H 1200	\$152	400	\$H 3200	\$405		
Block		1	\$H 11850	\$1,500			\$0		
						\$H			
Drill Well				\$0	1	107200	\$2 <i>,</i> 680		
Honda Generator	bag	20	\$H 1300	\$165	100	\$H 6500	\$823		
						\$H			
cement				\$0	2	15800	\$2,000		
Water tank	Truck	1	\$H 1000	\$127	2	\$H 2000	\$253		
Sand	Truck	1	\$H 800	\$101	2	\$H 2000	\$253		
Stone	Truck	1	\$H 800	\$101	2	\$H 1800	\$228		
Gravel				\$0			\$0		
	ea	1	\$H 2000	\$253	1	\$H 5000	\$633		
						\$H			
Labor			\$H 19750	\$2,500		146700	\$7,679		
							\$10,179		