K P R G

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

ADDITIONAL COMMENT RESPONSES AND
REVISED ADDITIONAL SITE INVESTIGATION WORK PLAN

November 22, 2016

RECEIVED
NOV 28 2016
Initial:

Mr. John J. Hnat, P.G., C.P.G.
Wisconsin Department of Natural Resources
2300 North Martin Luther King, Jr. Drive
Milwaukee, WI 53212

Re: Former Bayside Natural Cleaners
8828 North Port Washington Road, Bayside, WI
FID# 341140250, BRRTS# 02-41-548572

KPRG Project No. 18806.3

Dear Mr. Hnat:

On June 26, 2015, KPRG and Associates, Inc. (KPRG), on behalf of Former Bayside Natural Cleaners, submitted comment responses and an Additional Site Investigation (SI) Work Plan for what we believed, based on discussions with Wisconsin Department of Natural Resources (WDNR), would be the final segment of site investigation activities. The resulting additional data were summarized in a Supplemental Site Investigation Report dated November 10, 2015 requesting that the SI portion of the project (which was started in August 2007), be considered complete and to allow the site to move into remediation. On April 20, 2016, WDNR issued a review letter requesting still additional site investigation work to be performed. Specifically, seven additional vapor probes were requested to be installed within the basement of the building (despite having two rounds of indoor air sampling from across the footprint of the building which did not indicate any indoor air exceedances for chlorinated volatile organic compounds [CVOCs]), four additional exterior soil borings and updated documentation on the effectiveness of the existing sub-slab depressurization system (SSDS) that was installed in 2012.

On May 31, 2016, KPRG submitted comment responses, an Additional Site Investigation Work Plan that included all additional work requested and a Proposed Alternate Interim Remedial Action. On November 2, 2016 (approximately 5 months after submittal of our responses and work plan) WDNR issued another comment letter requesting yet additional site investigation work to be added to the work plan, including more monitoring wells. The letter consisted of eight comments. Each is addressed separately below.

- Comment 1 – This comment requests additional soil borings to the north and south of location GP-5, along the east property line. These were part of the initial request addressed in the KPRG response dated May 31, 2016. In addition, soil borings to the

north towards location GP-6 and to the south towards well MW-3 are now also being requested.

Response – The additional requested borings are included in the revised work plan and cost estimate provided in Attachment 1. This will yield a total of six additional soil sampling locations with two soil samples collected per location. The samples will be analyzed for chlorinated volatile organic compounds (CVOCs).

- Comment 2 – This comment agrees to reducing the originally requested seven vapor probe locations within the basement of the building to four locations.

  Response – The revised work plan and cost estimate provided in Attachment 1 reflects this change. The four vapor probes will be evenly space along the east wall of the building, as allowed by access.

- Comment 3 – This comment reiterates that testing of the sub-slab depressurization system (SSDS) that has been installed will need to be performed to establish a baseline prior to any remediation and subsequently after remediation.

  Response – This comment was previously addressed and is included in the attached work plan and cost estimate. No changes are proposed at this time.

- Comment 4 – This comment states that additional monitoring wells are required to the north of MW-2 and east on the adjacent property.

  Response – An additional well (MW-5) will be installed to the north of MW-2 as noted in the revised work plan and cost estimate provided in Attachment 1. There are currently four monitoring wells on the adjacent property to the east. Multiple rounds of sampling from these wells have not detected impacts. Additional wells on this property are not warranted and are not included in the attached work plan.

- Comment 5 – This comment requires an additional piezometer to be installed downgradient of the source area.

  Response – The revised work plan and cost estimate in Attachment 1 includes an additional piezometer to be clustered next to downgradient well MW-3.

- Comments 6 through 8 – These comments are relative to the alternate proposal for the implementation of an interim remedial action (IRA) included with KPRG's previous submittal dated May 31, 2016. The comments request clarification on the type of injectate proposed, an evaluation of a direct soil removal alternative and for the completion of a formal Remedial Actions Options Report (RAOR).

  Response – In the opening paragraph of the WDNR letter dated November 2, 2016, the WDNR states that an IRA can not be approved at this time because of an incomplete site

investigation. Although KPRG would like to note that IRAs are often, if not usually, performed concurrent with completion of site investigation work to help expedite implementation of remedy, it is clear that in this case the WDNR does not believe the implementation of an IRA is warranted. Therefore, rather than further addressing the technical aspects of these comments, KPRG withdraws the alternate proposal until after WDNR concurrence that the site investigation is complete.

KPRG and Natural Cleaners appreciate the continued cooperation with WDNR in addressing these issues and we request an expedited approval of this additional site investigation work plan. If there are any questions, please contact me at 262-781-0475.

Sincerely,
KPRG and Associates, Inc.

Richard R Gnat

Richard R. Gnat, P.G.
Principal

cc: Marilyn Fleming, Former Natural Cleaners
Derek Reinke, Ogden & Company, Inc.
Donald P. Gallo, Husch Blackwell, LLP

ATTACHMENT 1

Revised Additional Site Investigation Work Plan and Cost Estimate

REVISED ADDITIONAL SITE INVESTIGATION WORK PLAN AND COST ESTIMATE

1.0 WORK PLAN SCOPE OF WORK

1.1 Sub-Slab Vapor Probe Installations/Sampling

KPRG will install additional four sub-slab vapor probes equally spaced (as allowed by access) along the east basement wall of the building. KPRG will use the Cox-Colvin vapor pin sampling system. The pins will be installed through the concrete floor slab per manufacturer directions. A concrete hammer drill will be used to drill through the floor slab. The sampling pin will then be installed and cemented into place. After a minimum of six hours, the sampling pin completion will be tested for tightness using a helium gas testing set-up. Once each location is tested to be air tight, sub-slab vapor sampling will commence using a Suma Canister with a 1-hour sampling control regulator. Samples will be sent to a Wisconsin Certified analytical laboratory for analysis of CVOCs using Method TO15.

1.2 Additional Soil Borings

KPRG will install six additional soil borings at locations noted on Figure 1 (locations GP-20 through GP-24 and MW-5). The soil borings will extend to at least 12 feet below ground surface (bgs). The soil borings will be advanced using the Geoprobe sampling technique. Continuous soil core samples will be collected. Each core will be field screened with a photoionization detector (PID) for total organic vapors. The core will also be visually inspected and logged using the Unified Soil Classification System (USCS).

Two soil samples will be collected per boring based on field screening and visual inspection. This will yield a total of 12 soil samples. One sample will be from the one to three foot depth interval and one from a deeper interval based on field screening. The samples will be collected using syringes and injected directly into laboratory prepared containers with a methanol preservative. The samples will then be placed on ice and delivered to the analytical laboratory under a completed chain-of-custody. The samples will be analyzed for CVOCs by a Wisconsin certified laboratory.

1.3 Check Working Condition of Existing SSDS

In 2012, KPRG installed a SSDS in the vicinity of the defined PCE release. A follow-up round of field extension test readings will be taken by the installation contractor (RMES). In addition, a set of at least four PID readings will be taken over the course of a single day at the vent of the system. The readings will be recorded and submitted to the WDNR.

1.4 Additional Well Installations and Groundwater Sampling

KPRG will install two additional wells using hollow stem auger drilling. The well locations are shown on Figure 1. Well MW-5 will be a water table monitoring well installed to the north of existing well MW-2. The depth of this well is anticipated to be approximately 25 feet. A deeper piezometer (MW-3D) will also be installed adjacent to existing well MW-3. The depth of the piezometer is anticipated to be approximately 45 to 50 feet. Both wells will be constructed using schedule 40 PVC. The water table well will include a 10-foot screen and the piezometer will include a 5-foot screen. Surface completions will be flush mounts. All well construction will be performed in accordance with NR 141 requirements. Digger's Hotline will be contact to mark public utilities prior to drilling. In addition, a private locate firm will be contracted to check for additional private utilities within the proposed drilling locations.

Upon completion, the wells will be properly developed and the locations and top of casing elevations will be surveyed by a Wisconsin licensed surveyor.

One round of groundwater samples will be collected from the new and all existing wells plus an additional verification round of sampling for the two new wells will be performed. The full round of sampling will include 11 wells and a duplicate sample. The verification round will consist of two wells and a duplicate sample. This will yield a total of 15 groundwater samples. Groundwater sampling will be performed in accordance with procedures previously approved for the site. The samples will be preserved with hydrochloric acid, placed on ice and delivered to the analytical laboratory under a completed chain-of-custody. Samples will be analyzed for CVOCs by a Wisconsin certified laboratory.

1.5 Additional Site Investigation Addendum No. 2

All data generated will be summarized in a Site Investigation Addendum No. 2 report. The report will include an updated geologic cross-section per WDNR request. Any figures will also include the additional information requested by WDNR.

1.6 Investigation Derived Waste

Investigation derived waste (IDW) will be handled in accordance with previously approved practices for this site.

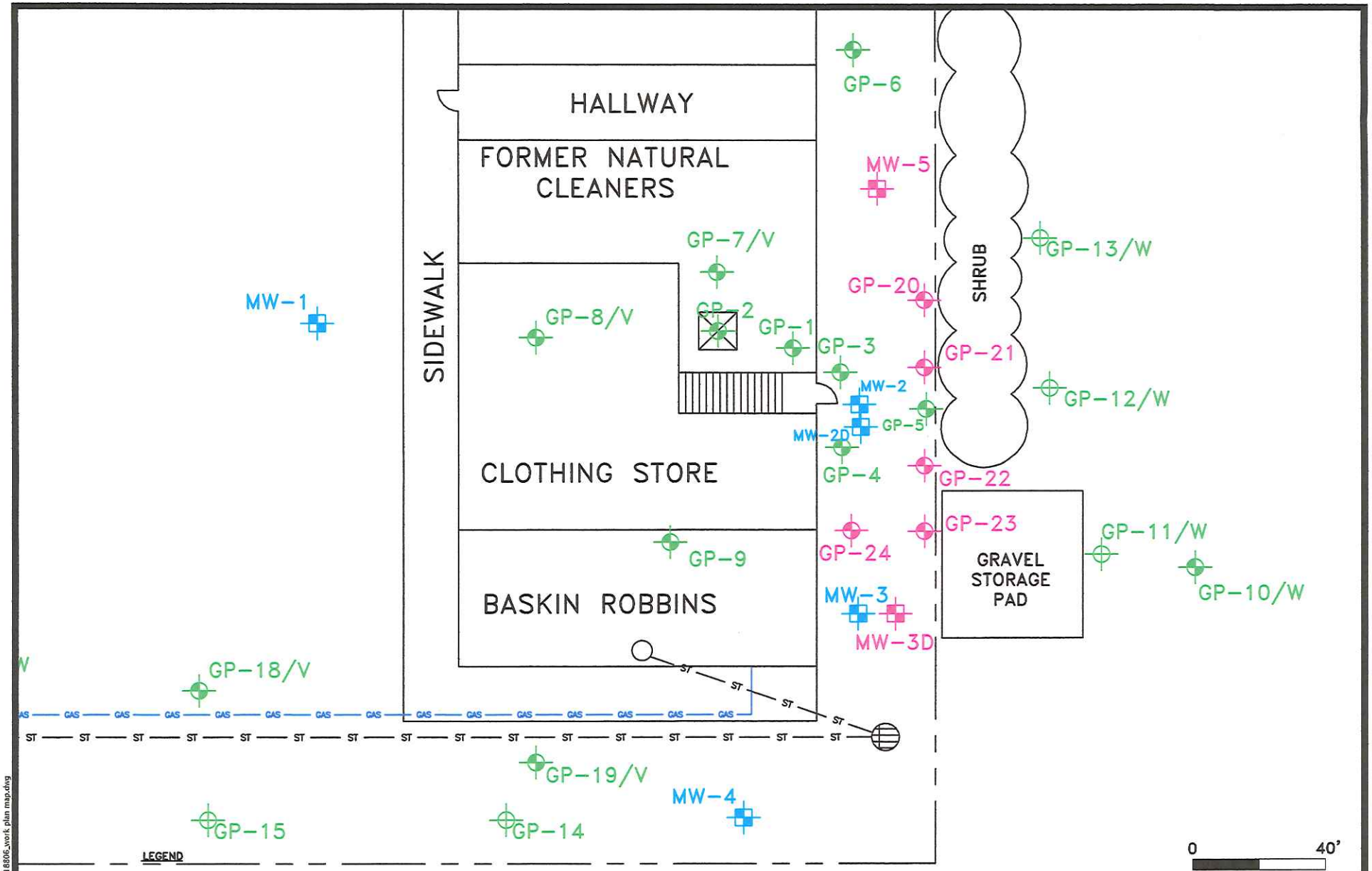
2.0 COST ESTIMATE

The above defined scope of work can be completed for an estimated cost of $33,025. The estimated cost is summarized in Table 1 followed by detailed task costing sheets. The costs are based on the following assumptions:

- Four additional sub-slab soil vapor probes sampled for CVOCs. Standard analytical turnaround.
- Six additional soil borings with two soil samples per borings analyzed for CVOCs with a standard analytical turnaround.

- One-half day of RMES services to check on condition of existing SSDS system. No repairs will be necessary.

- Two new well installations followed by one full round of groundwater sampling and a second verification round of sampling for the two new wells..



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ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, inc.

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PROPOSED ADDITIONAL GEOPROBE AND MONITORING WELL LOCATIONS

FORMER NATURAL CLEANERS
BAYSIDE, WISCONSIN

Scale: 1" = 40' | Date: November 16, 2016

KPRG Project No. 18806.3 | FIGURE 1

Table 1. Estimated Additional Work Cost Summary 11-16-16 - Natural Cleaners - Bayside, WI

			Contractors						
Task	KPRG Labor	Expenses	Analytical	Driller	SSDS Contractor	Surveyor	Private Locate	IDW Disp.	Totals
1) Interior Vapor Probe Installation/Sampling	$2,870	$1,175	$700	$0	$0	$0	$0	$0	$4,745
2) Soil Borings/Sampling	$1,425	$180	$910	$1,800	$0	$0	$0	$175	$4,490
3) SSDS System Check	$460	$110	$0	$0	$1,500	$0	$0	$0	$2,070
4) Additional Well Installations and Groundwater Sampling	$6,985	$1,280	$825	$4,200	$0	$750	$550	$1,400	$15,990
5) Additional SI Reporting	$5,530	$200	$0	$0	$0	$0	$0	$0	$5,730
Totals	$17,270	$2,945	$2,435	$6,000	$1,500	$750	$550	$1,575	$33,025

KPRG TASK COSTING SHEET

Project: Former Natural Cleaners, Bayside, WI

Task: 1 -Interior Vapor Probe Installation and Sampling

Professional Labor	Rate ($/Hr.)		Units	Total
Principal/Proj. Mgr.	$135		4	$540.00
Field Eng./Sci.	$70		32	$2,240.00
CADD	$60		0	$0.00
Admin. Asst/ Word Proc.	$45		2	$90.00
			Total Labor	$2,870.00

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$50	Daily	1	$50.00
Field Vehicle	$60	Daily	4	$240.00
Hammer Drill	$75	Daily	1	$75.00
Vapor Pins	$80	Each	4	$320.00
Water Level Meter	$25	Daily	0	$0.00
Bailers	$15	Each	0	$0.00
Helium Test Kit	$200	Daily	1	$200.00
Summa Canisters/Controller	$60	Each	4	$240.00
Shipping	$50	Est.	1	$50.00
Access Agreement	$250	Est.	0	$0.00
			Total Exp.	$1,175.00

Contractors	Rate	Type	Units	Total
Analytical	$55	VOC-Soil	0	$0.00
	$55	VOC-Water	0	$0.00
	$144	NA Para. - Water	0	$0.00
	$35	TOC-Soil	0	$0.00
	$175	VOC-Vapor	4	$700.00
	$250	Profile	0	$0.00
IDW Disposal	$275	Per Drum Est	0	$0.00
			Total Contractors	$700.00

TASK TOTAL:	$4,745.00

KPRG TASK COSTING SHEET

Project: Former Natural Cleaners, Bayside, WI

Task: 2 - Soil Borings/Sampling

Professional Labor	Rate ($/Hr.)		Units	Total
Principal/Proj. Mgr.	$135		4	$540.00
Field Eng./Sci.	$70		12	$840.00
CADD	$60		0	$0.00
Admin. Asst/ Word Proc.	$45		1	$45.00
			Total Labor	$1,425.00

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$50	Daily	1	$50.00
Field Vehicle	$60	Daily	1	$60.00
Soil Sampling Supplies	$20	Daily	1	$20.00
GW Qual. Meters	$150	Daily	0	$0.00
Water Level Meter	$25	Daily	0	$0.00
Bailers	$15	Each	0	$0.00
Slug Test Equip.	$200	Daily	0	$0.00
Summa Canisters	$60	Each	0	$0.00
Shipping	$50	Est.	1	$50.00
Permit	$175	Est.	0	$0.00
			Total Exp.	$180.00

Contractors	Rate	Type	Units	Total
Drilling/Geoprobe	$1,800	Est.	1	$1,800.00
Surveyor	$750	Est.	0	$0.00
Analytical	$55	VOC-Soil	12	$660.00
	$250	Profile	1	$250.00
IDW Disposal	$175	Per Drum Est	1	$175.00
			Total Contractors	$2,885.00

TASK TOTAL:	$4,490.00

KPRG TASK COSTING SHEET

Project: Former Natural Cleaners, Bayside, WI

Task: 3 - SSDS System Check

Professional Labor	Rate ($/Hr.)		Units	Total
Principal/Proj. Mgr.	$135		1	$135.00
Field Eng./Sci.	$70		4	$280.00
CADD	$60		0	$0.00
Admin. Asst/ Word Proc.	$45		1	$45.00
			Total Labor	$460.00

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$50	Daily	1	$50.00
Field Vehicle	$60	Daily	1	$60.00
Soil Sampling Supplies	$20	Daily	0	$0.00
GW Qual. Meters	$150	Daily	0	$0.00
Water Level Meter	$25	Daily	0	$0.00
Bailers	$15	Each	0	$0.00
Slug Test Equip.	$200	Daily	0	$0.00
Summa Canisters	$60	Each	0	$0.00
Shipping	$50	Est.	0	$0.00
Permit	$175	Est.	0	$0.00
			Total Exp.	$110.00

Contractors	Rate	Type	Units	Total
SSDS Contractor (RMES)	$1,500	Est.	1	$1,500.00
Surveyor	$750	Est.	0	$0.00
Analytical	$55	VOC-Soil	0	$0.00
	$250	Profile	0	$0.00
IDW Disposal	$175	Per Drum Est	0	$0.00
			Total Contractors	$1,500.00

TASK TOTAL:	$2,070.00

KPRG TASK COSTING SHEET

Project: Former Natural Cleaners, Bayside, WI

Task: 4 - Additional Well Installations and Groundwater Sampling

Professional Labor	Rate ($/Hr.)		Units	Total
Principal/Proj. Mgr.	$135		12	$1,620.00
Field Eng./Sci.	$70		76	$5,320.00
CADD	$60		0	$0.00
Admin. Asst/ Word Proc.	$45		1	$45.00
			Total Labor	$6,985.00

External Expenses	Rate	Type	Units	Total
Photoionization Detector	$50	Daily	2	$100.00
Field Vehicle	$60	Daily	6	$360.00
Soil Sampling Supplies	$20	Daily	0	$0.00
GW Qual. Meters	$150	Daily	3	$450.00
Water Level Meter	$25	Daily	3	$75.00
Bailers	$15	Each	13	$195.00
Slug Test Equip.	$200	Daily	0	$0.00
Summa Canisters	$60	Each	0	$0.00
Shipping	$50	Est.	2	$100.00
Permit	$175	Est.	0	$0.00
			Total Exp.	$1,280.00

Contractors	Rate	Type	Units	Total
Drilling	$4,200	Est.	1	$4,200.00
Private Locate	$550	Est.	1	$550.00
Surveyor	$750	Est.	1	$750.00
Analytical	$55	CVOC-W	15	$825.00
	$250	Profile	0	$0.00
IDW Disposal	$175	Per Drum Est	8	$1,400.00
			Total Contractors	$7,725.00

TASK TOTAL:	$15,990.00

KPRG TASK COSTING SHEET

Project: Former Natural Cleaners, Bayside, WI

Task: 5 - Additional SI Reporting

Professional Labor	Rate ($/Hr.)		Units	Total
Principal/Proj. Mgr.	$135		16	$2,160.00
Field Eng./Sci.	$70		40	$2,800.00
CADD	$60		8	$480.00
Admin. Asst/ Word Proc.	$45		2	$90.00
			Total Labor	$5,530.00

External Expenses	Rate	Type	Units	Total
Reproduction	$100	Est.	1	$100.00
Field Vehicle	$60	Daily	0	$0.00
Soil Sampling Supplies	$20	Daily	0	$0.00
GW Qual. Meters	$150	Daily	0	$0.00
Water Level Meter	$25	Daily	0	$0.00
Bailers	$15	Each	0	$0.00
Slug Test Equip.	$200	Daily	0	$0.00
Summa Canisters	$60	Each	0	$0.00
Shipping	$100	Est.	1	$100.00
Permit	$175	Est.	0	$0.00
			Total Exp.	$200.00

Contractors	Rate	Type	Units	Total
Drilling/Geoprobe	$750	Lump Sum	0	$0.00
Surveyor	$750	Est.	0	$0.00
Analytical	$50	VOC-Soil	0	$0.00
	$50	VOC-Water	0	$0.00
	$144	NA Para. - Water	0	$0.00
	$35	TOC-Soil	0	$0.00
	$180	VOC-Vapor	0	$0.00
	$250	Profile	0	$0.00
IDW Disposal	$175	Per Drum Est	0	$0.00
			Total Contractors	$0.00

TASK TOTAL:	$5,730.00