SUPERFUND PRELIMINARY ASSESSMENT

501 South Park Street City of Madison, Wisconsin U.S. EPA ID: WIN000521952

WDNR FID #113058770 WDNR BRRTS #02-13-551461

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Preliminary Assessment 501 South Park Street WIN000521952

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ABBREVIATIONS / ACRONYMS:

cis-DCE	= cis-1,2-Dichloroethene
EPA	= U.S. Environmental Protection Agency
ES	= NR 140, Wisconsin Administrative Code, Enforcement Standard (for groundwater)
GIS Registry	= WDNR's Geographical Information Systems Registry
LUST	= Leaking Underground Storage Tank
mg/kg	= milligrams/kilogram
MCL	= EPA Maximum Contaminant Level (for drinking water)
PA	= Preliminary Assessment
PCBs	= polychlorinated biphenyls
PCE	= Tetrachloroethene (aka Perchloroethylene)
PCS	= Pre-CERCLA Screening
ppm	= parts per million
TCE	= Trichloroethene
TSCA	= Toxic Substances Control Act
UST	= Underground Storage Tank
µg/L	= micrograms/Liter
VC	= vinyl chloride
VOCs	= Volatile Organic Compounds
WDNR	= Wisconsin Department of Natural Resources

1.0 INTRODUCTION

Under authority of the Comprehensive Environmental Response Compensation Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Wisconsin Department of Natural Resources (WDNR) was tasked by the U.S. Environmental Protection Agency (EPA) to conduct a Pre-CERCLA Screening (PCS) and a Preliminary Assessment (PA) at the 501 South Park Street site in Madison, Wisconsin as part of the fiscal year 2023-2024 Cooperative Agreement. The purpose of this PA was to collect information concerning conditions at the 501 South Park Street site sufficient to assess the threat posed to human health and the environment and to determine the need for additional CERCLA/SARA or other appropriate action. The scope of the PA included review of available file information, a comprehensive target survey, and a site reconnaissance.

2.0 SITE BACKGROUND

2.1 Location

The 501 South Park Street site (the Site) is located at that address in a commercial-residential area near the center of the City of Madison, Dane County, Wisconsin (Figure 1). The geographic coordinates for the center of the Site are approximately 43.06185 North latitude and -89.400425 West longitude (Figure 1). The Site is a 0.1-acre parcel with the Parcel ID number of 070923314010 (Figure 2 and Reference 1). The climate of Dane County is continental and characterized by cold to very cold winters and mild to warm summers. The average January temperatures range from 13° to 27° F and average July temperatures range from 62° to 81° F. The average annual rainfall is 27.4 inches, and the average annual snowfall is 21.4 inches. (Reference 4).

2.2 Site Description

The property is used as a parking lot for the La Hacienda restaurant to the south. The Site is physically bounded to the north side by the right of way (ROW) for Drake Street, to the south by the La Hacienda Restaurant, to the east by residential properties, and to the west by the ROW for South Park Street. The closest residential properties are located immediately adjacent to the east side of the property. A fence separates the residential properties and the Site; however, the Site serves as a parking lot that is accessible to the public (Figures 2 and 3, Reference 1). The Site slopes towards Lake Monona to the east.

2.3 Operational History and Waste Characteristics

The Site's history consists of gas station and dry-cleaning services. Gas stations operated on the site from 1925 to 1961. Dry-cleaning operations then occurred at the property from 1963 to 1997 under the business names of "One Hour Martinizing" and "Finishing Touch." Evidence shows dry cleaning solvents likely spilled from the vent pipes of the dry-cleaning system during that time (Reference 2). It is unknown what quantity of chemicals spilled. The onsite building was removed in 2001, but the historical layout of the Site is shown on Figure 4.

2.4 Regulatory Status

The Site was entered into the EPA's Superfund Site Information on-line database based on the PCS completed on July 12, 2023. The Site is not listed in the EPA's RCRAInfo on-line database, based on a search of the Site's general street (non-numerical) address, city, and zip code. The Site is the location of an open WDNR Environmental Repair Program (ERP) case with Bureau for Remediation and Remediation and Redevelopment Tracking System (BRRTS) No. 02-13-551461. The case file can be found online at the web address:

https://apps.dnr.wi.gov/botw/GetActivityDetail.do?dsn=551461&siteId=1030400&crumb=1

2.5 Past Environmental Investigations

Soil contamination was first discovered on site during the removal of the onsite fuel storage tanks in 1994. Contamination related to the dry-cleaning operations was found later in 1998. Fuel oil and petroleum contaminates are being investigated under WDNR's Leaking Underground Storage Tank program separately from the dry-cleaning contamination. The dry-cleaning contaminates of concern include: PCE, TCE, cis 1,2 dichloroethene, trans 1,2 dichloroethene, and vinyl chloride. Soil investigation in 1998 revealed PCE concentrations as high as 1,200,000 ug/kg and TCE as high as 29,000 ug/kg on site at 8-10 feet in depth. In 2001 site redevelopment occurred which included razing the onsite building. Limited "shallow" soil sampling occurred after the work was completed and "no significant contaminants were found." Details on these samples were not provided in the Site's file. No documentation was found that indicates excavation of soils at depth took place (Reference 8).

Groundwater sampling was conducted from 2004 to 2008 on three onsite monitoring wells to a depth of 14 feet and showed concentrations as high as 61,000 ug/L for PCE, 30,000 ug/l for TCE, and 3,700 ug/l for vinyl chloride. In 2009, a piezometer was installed to a depth of 50 feet and found 466 ug/l of PCE, 60.1 ug/l of TCE, and 26.4 ug/l of vinyl chloride. Offsite groundwater sampling also took place during 2009 and showed a decrease in concentrations in the shallow groundwater to non-detect concentrations for the contaminates of concern in the northern most well GP-4. At depth in this location (31-33 feet) concentrations were 6.6 ug/L PCE, 2.5 ug/L TCE, and 153 ug/L cis 1,2 dichloroethylene, and non-detect for the other contaminates of concern (Reference 2). The overall groundwater investigation shows a diving plume of contaminates. However, the extent of groundwater contamination has not been defined.

In 2012, a vapor investigation began. This investigation included passive soil gas analysis onsite and on surrounding properties, sub-slab sampling, and indoor air analysis inside the surrounding residences and restaurant. Results are discussed in Section 6.

3.0 FIELD INSPECTION ACTIVITIES

Maizie Reif from the WDNR reviewed current (as of July 2022) and older (August 2018) street view imagery on Google Maps for the Site and its immediate surrounding area. The property remains a well-maintained parking lot with minimal cracks for the La Hacienda Restaurant. Drainage from the site appears to lead to storm sewers located in the streets. No schools or daycares are within 200 feet of the Site (Reference 7). Based on review of street view imagery (Appendix C), a site reconnaissance did not appear to be warranted at this time.

4.0 GROUNDWATER PATHWAY

4.1 Hydrogeologic Setting

Dane County is in the Lower Rock River Basin. The surficial deposits include glacial outwash, isolated patches of older till, and loess over bedrock. The bedrock deposits include the following formations: Devonian shale and limestones to Precambrian sandstone. The shallowest water source in the area is the sand and gravel aquifer. Dane county, however, primarily utilizes an underlying lower sandstone aquifer (Reference 3).

Borings logs for shallow Site monitoring wells indicate that local geology is shallow sandy soil with silty clay at depth. The shallow groundwater flow direction at the Site is documented to be north towards Lake Mendota, not east towards the much closer Lake Monona, and the depth to groundwater is approximately 6-8 feet below grade (References 3 and 2).

4.2 Groundwater Targets

The population within the four-mile radius of the Site is 157,302 people, with 37,610 people within the one-mile radius. A summary of the 2020 census population data (Reference 5) is shown in Table 1.

Radius	0-0.25 Mile	0.25-0.5 Mile	0.5-1 Mile	1-2 Miles	2-3 Miles	3-4 Miles	Total
Population		5,204	31,234	35,918	40,672	43,102	157,302
	1,172						
Households	569	2,271	12,953	15,220	19,034	20,751	70,798

 Table 1 – Population Distribution within 4 Miles of the 501 South Park Street Site

DNR was able to locate a total of 927 database entries for potable water supply wells within four miles of the Site (Table 2). Of these 172 are private potable wells, 15 are municipal wells, and 12 are considered "noncommunity", "non transient non community", and "transient noncommunity." The remaining 728 wells have an unknown status and are likely abandoned. The closest of the private wells, YH017, is approximately 1,300 feet from the site and serves as an emergency backup well for a health services building. This well draws from the underlying sandstone aquifer (Reference 6). It is unknown how many of the other 171 private wells are used by commercial businesses or by private residences. For the purposes of this PA, it is conservatively assumed all 171 wells belong to residential households. Using the 2020 census population data, it is assumed there are 2.06 residents per household; therefore, an estimated 352 residents rely on private potable wells rather than municipal systems within 4 miles of the site.

Most of the population within a 4-mile radius relies on municipal water supplies taken from groundwater. The 15 municipal wells within a 4-mile radius of the Site belong to three different municipal systems. Ten of the wells; BF506, BF508, BF512, BF514, BF517, BF518, BF519, BF523, AX011, and RG700 belong to the city of Madison. Four; HJ185, BF543, BF541, and BF542, belong to the city of Monona and one, BF528 belongs to the city of Fitchburg. The wells range from approximately 750-1000 feet in depth and pump from approximately 100-200 feet below ground surface from the sandstone aquifer. The nearest municipal community well, AX011, is approximately 3,300 feet from the site (Figure 7 – not for public viewing). In 2019 this municipal well had a detection of PCE at .34 ug/l but has since been no detect (Reference 6).

Table 2 - Wells within 4 Miles of the 501 South Park Street Site

	Distance (Miles)					Totals
Well Types	0.5	1	2	3	4	Totals
MUNICIPAL COMMUNITY		1	4	4	6	15
NONCOMMUNITY					1	1
NONTRANSIENT NONCOMMUNITY			1		1	2
OTHER-THAN-MUNICIPAL COMMUNITY			2			2
PRIVATE POTABLE	1	2	23	83	63	172
TRANSIENT NONCOMMUNITY				2	5	7
UNKNOWN/HISTORICAL LOG	2	4	146	213	363	728
Total	3	7	176	302	439	927

4.3 Groundwater Conclusions

A release of hazardous substances from the Site to the sand and gravel aquifer was detected in groundwater samples from the Site. It is unknown if the contamination has migrated to the underlying sandstone aquifer or how far from the site the contamination has reached in the shallow aquifer. Due to the unknown extent of the deep groundwater plume and the number of nearby drinking water wells, a threat to human health exists.

5.0 SURFACE WATER PATHWAY

There is no evidence of releases of contaminants to surface water via overland flow, groundwater seepage, and/or sewer discharge. Furthermore, the dry-cleaner CVOCs will likely have volatilized or would quickly become well-diluted upon reaching 3,274-acre Lake Monona, the nearest surface water body. Therefore, the surface water pathway is not believed to significantly affect the overall HRS site score. The air pathway does not qualify for further evaluation in the HRS process at this time and was not evaluated as part of this PA.

6.0 SOIL EXPOSURE AND SUBSURFACE INTRUSION (SESI) PATHWAY

6.1 Physical Conditions

While the Site is accessible to the public, as it is used as a public parking lot, the former dry-cleaning property is completely covered in pavement. Due to this the soil exposure component of the SESI Pathway is not a concern at the Site. However, CVOC contaminated groundwater is found at a depth of approximately 8 feet below ground surface on the northern side of the property. Therefore, soil gas and indoor air have been evaluated at several of the nearby buildings as a potential concern (Reference 2).

6.2 Soil and Subsurface Intrusion Targets

The nearest residence is 85 feet to the east of the Site. While the extent of the shallow groundwater impacts is not known, there are regularly occupied structures within 200 feet of the site that could potentially be impacted by subsurface intrusion. As shown in Figure 8, within 200 feet of the site there are 8 residents and 8 commercial businesses with 2 of those businesses having apartment units on the second floor. According to population data, 1,172 people reside within 0.25 miles of the Site.

Indoor air samples and sub-slab samples were collected at four of the surrounding residences as well as the La Hacienda Restaurant to the south. Results show elevated levels for PCE and TCE at the restaurant and TCE at one of the residences. The restaurant showed indoor air concentrations of PCE at 2.73 ppbv and TCE at 0.24 ppbv, exceeding the EPA's cancer risk screening levels of 1.59 ppbv and 0.0889 ppbv, respectively. The residence showed a sub-slab concentration of TCE at 0.340 ppbv (Reference 2).

6.3 Soil Exposure and Subsurface Intrusion Conclusions

Only two of the six nearby structures sampled have been found to have a potential subsurface (vapor) intrusion concern. However, the remaining occupied structures within 200 feet of the site have not had any indoor air or sub-slab analysis completed. The subsurface intrusion component of the SESI Pathway appears to pose a threat at the Site due to the unknown extent of shallow contaminated groundwater and the number of potential targets nearby. and.

7.0 AIR PATHWAY

Release of vapors and/or particulates to the air is unlikely due to the pavement of the parking lot covering the contaminated soil. In addition, during the perimeter survey, no odors were detected and there was no indication of blowing dust or soil. Therefore, the air pathway is not believed to significantly affect the overall HRS site score. The air pathway does not qualify for further evaluation in the HRS process at this time and was not evaluated as part of this PA.

8.0 SUMMARY AND CONCLUSIONS

The 501 South Park Street site is located in a commercial-residential area near the center of the City of Madison, Dane County, Wisconsin. The Site is a 0.1-acre completely paved parcel used for parking for the nearby La Hacienda Restaurant. Dry-cleaning operations occurred at the property from 1963 to 1997. Evidence shows dry-cleaning solvents (PCE, TCE) likely spilled from the vent pipes of the dry-cleaning system during that time. Impacts to groundwater and soil have been documented at the Site. Threats to human health through the subsurface intrusion component of the SESI Pathway are possible due to the unknown extent of the shallow groundwater plume at the Site and the number of potential targets nearby. Threats to human health through the groundwater pathway are also possible due to the potential contamination of nearby potable wells. Conversely, the surface water and air pathways and the soil exposure component of the SESI pathway are not believed to pose a significant threat to human health and the environment and were not further evaluated as part of this PA.

9.0 REFERENCES

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 <u>4!8i8192?entry=ttu</u>. (Accessed October 2023)
 </u>
- 8. Seymour Environmental Services Inc., Dry-Cleaner Site Investigation Letter Workplan, October 2008.





Figure 1. Site Location Map





Figure 2. Property Boundaries





Figure 3. Site Map



Figure 4. Historic Site Layout





- 1 Mile Radius



June 28, 2023



- 4 Mile Radius



June 28, 2023



APPENDIX B

EPA PCS Form

Pre-CERCLA Screening Checklist/Decision Form

This form is used in conjunction with a site map and any additional information required by the EPA Region to document completion of a Pre-CERCLA Screening (PCS). The form includes a decision on whether a site should be added to the Superfund program's active site inventory for further investigation. This checklist replaces Attachment A in the December 2016 PCS Guidance document. A current version of the PCS checklist and additional information is available at: https://www.epa.gov/superfund/pre-cercla-screening.

Region:	State/Territory:	T	Tribe:			
Site Name:					EPA ID No. (If A	vailable)
Other Site Name(s):						
Site Location:		(Street)			_	
Congressional District		(City)	(State/Terr.)	(County)	(Zip+4)	(No Zip Available)
If no street ad	dress is available	:				
Checklist Prepa	arer:	(Towns	ship-Range)	(Section)	
		(Name / Title)			(Date)	
		(Organization)			(Phone)	
		(Street)			e-Mail	
		(City)	(State/Terr.)	(Ce	ounty) (2	- Zip+4)
Site Contact Inf	o/Mailing Address	5:				
CERCLA 105d I	Petition for Prelim	inary Assessment?	lf Ves I	Petition Date (mm	v/dd/wwv).	
RCRA Subtitle (C Site Status: Is si	ite in RCRA Info?	lf Yes, I	RCRA Info Handle	r ID #:	
Ownership Type	e:		Additional RCF	RA Info ID #(s):		
Site Type:			State ID #(s):			
Site Sub-Type:		Other ID #(s):				
Federal Facility	?	Feder	al Facility Owner:			
Formerly Used D	Defense Site (FUDS	5)?				
Federal Facility	Docket?	lf Yes, FF	Docket Listing Date (mm/	/dd/yyyy):		
		Federal F	acility Docket Reporting Me	echanism:		
Native Americar	n Interest?	lf Yes	s, list Tribe:			
		Addit	tional Tribe (s):			
		Addit	tional Tribe (s):			

Site Description

Use this section to briefly describe site background and conditions if known or (easily) available, such as: operational history; physical setting and land use; site surface description, soils, geology and hydrogeology; source and waste characteristics; hazardous substances/contaminants of concern; historical releases, previous investigations and cleanup activities; previous regulatory actions, including permitting and enforcement actions; institutional controls; and community interest.

Geospatial Information

Latitude:

Longitude:

Decimal Degree North (e.g., 38.859156)

Decimal Degree West (e.g., 77.036783)

Provide 4 significant digits at a minimum, more if your collection method generates them.

Except for certain territories in the Pacific Ocean, all sites in U.S. states and territories are located within the northern and western hemispheres and will have a positive latitude sign and negative longitude sign. Coordinate signs displayed above are based on the State/Territory entry on page A-1. Geospatial data tips from the PCS Guidance document are available **here**.

PointDescription:Select the option below that best represents the site point for future reference and to distinguish it from any nearby sites. See additional information **here**.

Geocoded (address-matched) Site Address Site Entrance (approximate center of curb-cut) Approximate Center of Site Other Distinguishing Site Feature (briefly describe):

Point Collection Method: Check the method used to collect the coordinates above and enter the date of collection. See additional information **here**.

Online Map Interpolation GPS (handheld, smartphone, other device or technology with accuracy range < 25 meters) GPS Other (accuracy range is \geq 25 meters or unspecified) Address Matching: Urban Address Matching: Rural Other Method (briefly describe below):

POINT-SELECTION CONSIDERATIONS

- Often the best point is a feature associated with the environmental release or that identifies the site visually.
- Use the curb cut of the entrance to the site if there is a clear primary entrance and it is a good identifier for the overall location.
- The approximate center of the site (a guess at the centroid) is useful for large-area sites or where there are no appropriate distinguishing features.
- Use the geocoded address if that is the only or best option available, but if possible use something more representative for sites larger than 50 acres.

Collection Date (mm/dd/yyyy):

Cor Act	nplete this checklist to help determine if a site should be added to the Superfund ive site inventory. See Section 3.6 of the PCS guidance for additional information.	YES	NO	Unknown
1.	An initial search for the site in EPA's Superfund active, archive and non-site inventories should be performed prior to starting a PCS. Is this a new site that does not already exist in these site inventories?			
2.	Is there evidence of an actual release or a potential to release?			
3.	Are there possible targets that could be impacted by a release of contamination at the site?			
4.	Is there documentation indicating that a target has been exposed to a hazardous substance released from the site?			
5.	Is the release of a naturally occurring substance in its unaltered form, or is it altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?			
6.	Is the release from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures?			
7.	If there has been a release into a public or private drinking water supply, is it due to deterioration of the system through ordinary use?			
8.	Are the hazardous substances possibly released at the site, or is the release itself, excluded from being addressed under CERCLA?			
9.	Is the site being addressed under RCRA corrective action or by the Nuclear Regulatory Commission?			
10	Is another federal, state, tribe or local government environmental cleanup program other than site assessment actively involved with the site (e.g., state voluntary cleanup program)?			
11	Is there sufficient documentation or evidence that demonstrates there is no likelihood of a significant release that could cause adverse environmental or human health impacts?			
12	Are there other site-specific situations or factors that warrant further CERCLA remedial/integrated assessment or response?			

OLEM 9355.1-119

Preparer's Recommendation:

Add site to the Superfund Active site inventory.

Do not add site to the Superfund Active site inventory.

Please explain recommendation below:

PCS Summary and Decision Rationale

Use this section to summarize PCS findings and support the decision to add or not add the site to the Superfund active site inventory for further investigation. Information does not need to be specific but, where known, can include key factors such as source and waste characteristics (e.g., drums, contaminated soil); evidence of release or potential release; threatened targets (e.g., drinking water wells); key sampling results (if available); CERCLA eligibility; involvement of other cleanup programs; and other supporting factors. Attach additional pages as necessary.

Checklist Preparer Name

Checklist Preparer Organization

Date

EPA Regional Review and Pre-CERCLA Screening Decision

Add site to the Superfund active site inventory for completion of a:

Standard/full preliminary assessment (PA) Abbreviated preliminary assessment (APA) Combined preliminary assessment/site inspection (PA/SI) Inegrated removal assessment and preliminary assessment Integrated removal assessment and combined PA/SI Other:

Do not add site to the Superfund active site inventory. Site is:

Not a valid site or incident Being addressed by EPA's removal program Being addressed by a state cleanup program Being addressed by a tribal cleanup program Being addressed under the Resource Conservation and Recovery Act Being addressed by the Nuclear Regulatory Commission Other:

Optional-Print name of EPA Site Assessor making this decision:

EPA Regional Approval: (Enter

Date and then click this box to initiate digital signature stamp)

Date

Site Description

(All text as entered on page A-2)

PCS Summary and Decision Rationale

(All text as entered on page A-4)

APPENDIX C

Street View Imagery

















APPENDIX D References

ENVIRONMENTAL INVESTIGATION UPDATE LA HACIENDA RESTAURANT (BRRTS #03-13-546658) 501 SOUTH PARK STREET MADISON, WISCONSIN 53715

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The following personnel have reviewed this report for accuracy, content, and quality of presentation.

Robyn Seymour

Date

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Ε

1.0 INTRODUCTION

David Herrera, owner of the La Hacienda Restaurant (La Hacienda) retained Seymour Environmental Services, Inc. (Seymour) to provide environmental consulting for the La Hacienda property (formerly Amato property). Resource Engineering Associates identified dry cleaning chemicals at the site during their early investigation.

The site is located at the corner of South Park and Drake Streets in Madison, Wisconsin (Figure 1). The property was the site of gas stations that operated from around 1925 until 1961. From at least early 1963 until 1997 dry cleaning facilities (One Hour Martinizing and the Finishing Touch) were operated at the property. In 1993 the fuel storage tanks were removed at the site. During tank closure, petroleum odors were noted in the area of a fuel oil tank. A soil sample collected near the former heating oil UST in 1994 (HA-1) showed soils in the area contained elevated levels of diesel range organics (DRO), gasoline range organics (GRO), tetrachloroethene (PCE), and trichloroethene (TCE).

1.1 Summary of Previous Investigation

In 1998 Resource Engineering Associates (REA) conducted soil and groundwater sampling at the site. Four geoprobe borings were installed along the eastern edge of the property. The general site layout and the locations of the initial boring are shown on Figure 2. Soil and groundwater samples collected from those borings indicate that both motor fuel and dry cleaning related compounds are present at the site. The fuel oil contamination appears to be restricted to within 20 feet of the former UST. The dry cleaning chemicals at the site are more widespread. The highest levels of dry cleaning chemicals were noted in the area slightly south of the former UST; this is the location of the former vent for the dry cleaning system. The concentration of PCE in this area is very high; the soil near the water table contained 1200 mg/kg (0.12%) PCE. Not surprisingly, a groundwater sample collected at this location contained 3,000,000 ug/l PCE (0.3%). The solubility of PCE at 68° F is 0.02%. Laboratory results from the initial soil and groundwater sampling are summarized on Table 1.

In 2001 the redevelopment of the site was conducted. This work included the removal of the existing building on the north side of the lot and construction of a noise barrier wall/fence along the eastern side of the parcel. Limited soil sampling was conducted in the area of the barrier wall/fence as part of the redevelopment. Samples were collected in that area from the surface to a depth of approximately four feet to determine whether soils that required excavation for the barrier wall/fence construction would require special handling. No significant contaminants were found during the shallow soil sampling in this area.

In January 2004 REA installed three water-table monitoring wells at the site (Figure 3). Water level data and groundwater samples were collected from the wells on two occasions in early 2004. The water level data show that groundwater is present at a depth of approximately 8 feet below grade and indicate that shallow groundwater flow at the site is toward the north-northwest. Water level data is included on Table 2. It is unclear whether utility corridors in the area impact the water level information. Analytical data

show that groundwater across the site contained volatile organic compounds (VOCs) at concentrations in excess of WDNR groundwater quality standards (Table 3). Although several motor fuel related contaminants were detected in the groundwater only chlorinated compounds generally associated with dry cleaning were present at concentrations exceeding the NR140 enforcement standard (ES). The highest contaminant levels were noted in groundwater samples collected from MW-2. Contaminant levels were nearly as high in samples from MW-3. Compounds present in these wells at concentrations exceeding the ES include PCE, TCE, cis-1, 2 dichloroethylene, trans-1, 2 dichloroethylene, 1,1 dichloroethylene, and vinyl chloride. Groundwater in the area of MW-1 appears to be much cleaner than along the eastern side of the property. The only analytes present in this well above the ES were vinyl chloride and cis-1, 2 dichloroethylene.

1.2 Project Information

Property Location	La Hacienda Restaurant 501 South Park Street Madison, Wisconsin 53714 SW ¼ SW ¼ Section 23, T7N, R09E Contact: David Herrera (608) 255-8227
Consultant	Seymour Environmental Services, Inc. 2531 Dyreson Road McFarland, Wisconsin 53558-0398 Contact: Robyn Seymour (608) 838-9120
Geoprobe Contractor	Soil Essentials W6306 State Highway 39 New Glarus, Wisconsin 53574 Contact: Dave Paulson (608) 527-2355
Drilling Contractor	Badger State Drilling 360 Business Park Circle Stoughton, Wisconsin 53574 Contact: Dave Paulson (608) 527-2355
Analytical Laboratories	Pace Analytical 1241 Bellevue Street, Suite 9 Green Bay, Wisconsin 54302 Contact: Brian Basten (920) 469-2436
	Wisconsin State Laboratory of Hygiene 2601 Agriculture Drive, P.O. Box 7996 Madison, Wisconsin 53707-7996 Contact: Erin Mani (800) 442-4618

Analytical Laboratories

Beacon Environmental Services 2203A Commerce Road, Suite 1 Forest Hill, MD 21050 Contact: Harry O'Neil (410) 838-8780

2.0 SEYMOUR SOIL AND GROUNDWATER INVESTIGATION RESULTS

2.1 Initial Groundwater Sampling

La Hacienda obtained DERF eligibility and Seymour took over the project since REA is not currently participating in this program. Seymour submitted a scope of work budget request, which was approved on September 4, 2008. On September 24, 2008 Seymour sampled the existing monitoring wells. The analytical results are summarized on Table 3. The results show that the concentrations of many of the compounds have declined. The enforcement standards are still exceeded in all three monitoring wells. The contaminant concentrations in MW-2 and MW-3 continue to be substantially above the enforcement standards for one or more of the following compounds PCE, TCE, cis-1, 2 dichloroethylene, trans-1, 2 dichloroethylene and vinyl chloride. The extent of identified contamination in groundwater is shown on Figure 5. The Pace Analytical laboratory reports are included as Appendix A.

2.2 Piezometer Installation and Groundwater Sampling

On March 23, 2009 Seymour Environmental and Badger State Drilling installed a piezometer at the site. The well was located near the downgradient (north) edge of the subject parcel. The well was installed to a depth of 50 feet to characterize the vertical distribution of groundwater contamination.

On April 9, 2009 a groundwater sample was collected from the piezometer and analyzed for VOCs (Figure 4). The sampling results showed that the contamination has reached 50 feet. Tetrachloroethene, trichloroethene, cis 1, 2 dichloroethene and vinyl chloride all were present in the groundwater sample from the piezometer at concentrations exceeding the NR140 ESs. The contaminant levels present in the piezometer were compared with the levels detected in the nearby monitoring well (MW-2) during the most recent monitoring event. The concentration of all detected contaminants declined with depth. Generally, the contaminant levels present in the piezometer were approximately 5.5% of the levels present in the water table monitoring well. Analytical data from the monitoring wells is summarized on Table 3.

2.3 Geoprobe Soil Sampling

Geoprobe borings were installed on the property in April 2009 in order to further delimit the residual soil contamination in the source area. Three borings were installed at the site to collect soil samples. Soil samples were for analyzed for VOCs. No analytes were detected in samples from two of the borings (GP-B and GP-D). Tetrachloroethene was present in the soil slightly above the groundwater table in the remaining geoprobe (GP-C). The concentration present (325 ug/kg) is substantially above the concentration that may adversely impact groundwater quality. Based on the sampling it appears that soil contamination extends further to the west (toward Park Street) than previously identified. At this time we do not know the limit of contamination to the west. The identified volume of soil with solvent contamination is estimated to be 225 tons. The results of the geoprobe soil sampling are compiled along with historic information in Table 4. The estimated extent of the soil contamination is shown on Figure 7.

2.4 Geoprobe Groundwater Sampling

In April 2009 four geoprobe borings were installed to the north of the subject parcel to characterize the distribution of solvent contamination in the groundwater. Since data from the piezometer showed that contamination in the source area extended to a depth of at least 50 feet we decided to collected two groundwater samples at each geoprobe; one near the water table and one at the maximum probing depth before refusal (between 28.5 and 38 feet deep). Groundwater samples from the geoprobes were analyzed for VOCs. Contaminants were present in samples from three of the geoprobes. No analytes were present in the groundwater samples from GP-1, which is located to the east-northeast of the site. Generally, the shallow groundwater samples from GP-3 located just north of Drake Street contained vinyl chloride above the ES. The deeper groundwater samples from the geoprobes contained significantly higher levels of contaminants. The analytical data from the geoprobe groundwater samples is summarized in Table 2. An isoconcentration map was constructed showing the distribution of tetrachloroethene in groundwater using data from the monitoring wells and the deeper geoprobe groundwater samples (Figure 8).

3.0 VAPOR INVESTIGATION

Seymour submitted an Interim Action request budget on March 21, 2012 to assess vapor intrusion, and offsite migration of VOCs. A change order was submitted in November 2012 to conduct further vapor assessment.

3.1 Initial Passive Vapor Sampling

On July 9th and 10th of 2012 twenty-six (26) passive soil vapor samples were installed around the site (Figure 9). The sampling locations were selected to establish the distribution of CVOCs at the site and near utility trenches as well as determining whether vapors are present on the neighboring residential properties. Shallow (16") boreholes were installed at each of the sampling locations. A collector tube containing adsorptive media was placed in each of the boreholes. A foil seal was placed above each collector tube and the surface was sealed with material similar to the adjacent surface (soil, asphalt). After 7 days the collector tubes were removed. The tubes were sealed, chain of custody and sampling forms were completed, and the samples were submitted to Beacon Environmental Services for analysis. The passive vapor samples were analyzed for CVOCs including tetrachloroethene, trichloroethene, cis 1,2 dichloroethene, trans 1,2 dichloroethene, 1,1 dichloroethene, and vinyl chloride. The Beacon reports are attached in Appendix C.

CVOCs were identified in 18 of the 26 samples. The most widespread CVOC detected was tetrachloroethene (PCE). PCE was present in 18 of the 26 sampling points. The PCE levels in the passive samplers ranged from <25 to 65,486 nanograms (ng). The second most common CVOC detected was trichloroethene (TCE), which was present in 12 of the 26 sample points. The TCE levels ranged from <25 to 99,403 ng. Cis 1,2 dichloroethene, trans 1,2 dichloroethene, 1,1 dichloroethene were less widespread and were only detected in 9, 7, and 6 of the samplers respectively. Vinyl chloride was not detected at any of the 26 sample locations. The CVOC data collected from the passive samplers is consistent with the degradation of PCE and the vapor pressures of the various compounds. The passive sampling statistics are summarized on Table 6. Two charts are attached showing the CVOC mass and the CVOC ratio from select sampling points in the source area.

Data collected using the passive samplers indicates that CVOC contamination near the subject parcel is centered on the former dry cleaner where both soil and groundwater contamination were previously identified. All of the CVOCs except vinyl chloride were present in sample points in this area (PS-20, PS-24 and PS-25). PCE levels in these points ranged from 29,941 to 65,486 ng and TCE levels ranged from 8,236 to 99,043 ng. Relatively high levels of 1,1 DCE, cis 1,2 DCE and trans 1,2 DCE also were detected in the source area. Analytical data from the passive sampling are summarized in Table 7.

In the sample points just slightly outside of the source area the CVOC levels in the passive samplers dropped substantially. Five samplers were installed along the roadways and in neighboring yards just outside of the source area (PS-3, PS-12, PS-17, PS-18, and PS-19). PCE levels in these points ranged from 2,716 to 25,681 ng and TCE levels ranged from 1,028 to 5,705 ng. Chlorinated degradation products were commonly detected in these sample; 1,1 DCE, cis 1,2 DCE and trans 1,2 DCE typically were present at less than 100 ng.

Eight passive samplers were installed within the road right-of-way around the block to the north of the site. Elevated CVOC levels were present in three of these points (PS-9, PS-13 and PS-26); the impacted points are located along the north side of Drake Street just to the north-northeast of the subject parcel. CVOCs generally were not detected in the sample points along Park Street and West Shore Drive. The highest CVOC levels in the points north of Drake Street were present in PS-13. This sample was collected along the sewer lateral, which services 802 Drake Street. The PCE level at PS-13 was 10,280 ng and the TCE level was 3,904 ng. Other compounds were detected at 81-256 ng. At PS-26, which is located directly north of the contamination identified on the subject site, only PCE (2,744 ng) and TCE (104 ng) were detected. Further east along the north side of Drake Street (PS-13) only PCE was detected. The PCE level at PS-13 was 216 ng. This data appears to indicate that some preferential migration has occurred along the sewer service line at 802 Drake Street.

Seven passive samplers were installed to the east of the site along West Shore Drive and in the yards of several neighboring residential properties (PS-1, PS-2, PS-4, PS-5, PS-6,

PS-10, and PS-11). CVOCs were detected at six of the seven passive sampling locations; no analytes were detected at PS-4, which is located in the terrace east of 510 West Shore and is the furthest sampling point to the southeast. The highest CVOC levels in the residential area east of the site were present on the north and west sides of the property immediately east of the previously identified contamination (502 West Shore). Two samples (PS-10 and PS-11) were collected in this area. Both PCE (704 and 78 ng) and TCE (233 and 29 ng) were detected in these samples. The higher contaminant levels were present at the sample location (PS-10) further from the source area. The anomalously high contaminant levels PS-10, which is located in the terrace to the north of the residence, seems to confirm some preferential migration has occurred through the utility corridor beneath Drake Street. At the remaining passive sampling points in the residential area only PCE was detected. The PCE level in these locations ranged from 30 to 57 ng.

Three passive samplers were installed to the west of Park Street. No CVOCs were detected in these sampling points. Based on this it appears that contamination from the subject site has not migrated into the shallow sediments and groundwater west of the roadway where they could cause a vapor intrusion problem.

3.2 Second Phase Passive Vapor Sampling

On March 1, 2013 twelve additional passive gas samplers were installed near La Hacienda. The samplers were generally installed to the south of the area where the initial sampling was conducted. The objective was to further delimit the distributions of CVOCs around the site. One of the new passive samplers (PS-30) was installed adjacent to a point that had previously been sampled to allow for normalization of the data from the two passive gas sampling events.

Shallow (16") boreholes were installed at each of the sampling locations. A collector tube containing adsorptive media was placed in each of the boreholes. A foil seal was placed above each collector tube and the surface was sealed with material similar to the adjacent surface (soil, asphalt). After 7 days the collector tubes were removed. The tubes were sealed, chain of custody and sampling forms were completed and the samples were submitted to Beacon Environmental Services for analysis. The passive vapor samples were analyzed for CVOCs including tetrachloroethene, trichloroethene, cis 1,2 dichloroethene, 1,1 dichloroethene and vinyl chloride.

CVOCs were identified in all 12 samples. The most commonly detected CVOC was trans 1,2 dichloroethene, which was reported in each of the 12 samples. However, trans 1,2 dichloroethene also was present at 22 nanograms in the trip blank. Trans 1,2 dichloroethene levels in the samples ranged from 5 to123 nanograms. PCE was present in 9 of the 12 sampling points. Both trichloroethene and cis 1,2 dichloroethene were present in 3 of the 12 samples. Vinyl chloride and 1,1 DCE were not detected.

The PCE levels in the passive samplers ranged from <10 to 181 nanograms (ng). Passive sampler data from PS-30 was compared to data from PS-17 (installed in July 2012) since

they were placed within 1 foot of each other. During the recent sampling the PCE level in this area was 80 ng; during July 2012 the PCE level was 2,729 ng. A variation between the two data sets is likely the result of colder temperatures as well as the significant frost in the ground. PCE data from the recent sampling was normalized using a multiplier of 34 based on the data from PS17/PS-30. Normalized PCE data from the recent passive gas sampling range from non-detect to 6154 ng. The highest PCE levels were noted in samples collected from the east side of Park Street along side the La Hacienda Building and parking lot. The distribution of PCE in the passive gas vapors (normalized) is shown on Figure 9.

The second most common CVOC detected was trans 1,2 dichloroethene (DCE), which was also present in every sampling point. The trans 1,2 DCE levels ranged from 5 to 123 ng. Cis 1,2 DCE and trichloroethene were less widespread and were only detected in 3 of the samplers. Vinyl chloride was not detected at any of the 12 sample locations. The passive sampling results are summarized on Table 7.

3.3 Vapor Intrusion Sampling

On January 28, 2013 subslab sampling probes were installed at three of the residences located nearby the site. We returned on February 12, 2013 to install probes at the fourth property. No subslab probes were installed at the La Hacienda Restaurant since the building is equipped with a sub floor perimeter drain and sump pump system to control wetness in the basement. No subslab sampling probes were installed at the 510 West Shore Drive residence (Gary Davidsaver). The owner has been out of the area traveling and is not expected back until this summer. Locations where vapor sampling was conducted include:

Address	Owner	Media Sampled
802/804 Drake Street	Wartmann, William	Subslab/Indoor air
502 West Shore Drive	Davidsaver, Eleanor	Subslab/Indoor air
506 West Shore Drive	Sweet, Howard	Subslab/Indoor air
506 West Shore Drive	Hoffenberg, Stephen	Subslab/Indoor air
515 South Park Street	LaHacienda Restaurant	Drainage Sump/Indoor air

At each subslab sampling probe a 1.25" hole was drilled through the concrete floor and advanced to a depth of approximately 10 inches. A stainless steel sampling tip attached to 1/4 OD Teflon tubing was placed in the hole. The area around the probe was filled with clean filtered sand (#30) to 1.5" below the concrete floor slab. Granular bentonite was placed above the sand and extended upward to the just below the base of the floor. The bentonite was hydrated to provide a seal. The remaining borehole was filled with a concrete sand mix. A generalized sketch of the subslab vapor probe configuration is attached as Figure 10.

On March 15 and 16, 2013 initial vapor sampling was conducted around the site. Samples of subslab vapors and indoor air vapors were collected at each of the five properties. All of the samples were collected using 6-liter Summa canisters provided by the Wisconsin State Lab of Hygiene. Subslab sampling canisters were equipped with regulators so that the canisters filled over a 30-minute period limiting the flow to approximately 200 ml/min. Indoor air sampling canisters were equipped regulators to provide a 24-hour sampling. Vapor samples recovered were analyzed for CVOCs.

Prior to collecting the subslab samples a shroud was placed over each sampling probe to isolate the area surrounding the probe. A vacuum test was performed to ensure that the sampling lines did not leak. A vacuum of between 14 and 16 inches Hg was applied to the sampling lines at each point. The vacuum was checked and whenever a leak was noted fittings were tightened. No samples were collected until the vacuum in the sampling line could be maintained for a 5-minute period. After the vacuum test was passed a helium leakage test was performed. Helium was introduced into the shroud and the helium concentration in the shroud was measured with an Ion tack Instrument Leak Seeker 96 helium meter. Subsequently the sampling line was purged using a hand-operated vacuum pump and the organic vapor levels in the subslab vapors were measured. The helium meter was then moved to the sampling line and the helium level from the probe was measured to evaluate whether there was significant leakage through the probe. The leakage was less than 1% at all of the sampling probes. The Summa canisters were not filled until after the vacuum and helium leakage tests were completed satisfactorily. Field data from the sampling is summarized in Table 8.

The sump sample at La Hacienda Restaurant was collected from a dewatering sump located in the basement. Piping was attached to the sump to allow for purging of the sump and sample collection. Additionally, the vent line for the sump was temporarily sealed off to ensure that the sample that was collected was representative of the vapors beneath the floor. A low vacuum extraction pump was attached to the sump piping and vapors were extracted from the sump at a vacuum of approximately 1 inch of water for a period of 20 minutes. Based on the pump production rate, and estimated 400 cubic feet of air was removed from the sump and associated subslab lines during the purging. After the purging was complete the laboratory sample of the subslab vapors was collected.

3.4 Indoor Air Sampling Results

Low levels of CVOCs were detected in the indoor air samples at 4 of the 5 properties. The exception was the Wartmann property, which is the farthest from the subject site. All of the indoor air samples showed that the vapor levels in the basements were below the indoor air action levels. The highest PCE levels were noted in the basement of the LaHacienda Restaurant (2.73 vppb). This concentration is below the residential standard of 6.2 vppb as well as the commercial standard of 27 vppb, which would apply to the property. PCE also was noted in the basements at the residences immediately east of the area where soil contamination has been identified, E. Davidsaver and Sweet. The PCE level in the indoor air at these properties was 0.24 and 0.29 vppb. Trans 1,2 DCE was detected in the indoor air at three of the properties, Davidsaver, Sweet and Hoffenberg. No PCE was detected in the indoor air samples from the two properties located further

from the source area, Wartmann and Hoffenberg. Vapor sample results are summarized in Table 9.

3.5 Subslab Sampling Results

The PCE concentration in the subslab vapors beneath the LaHacienda Restaurant was 155 ppby; this concentration is below the indoor air action level (270 ppby). All of the CVOCs with the exception of vinyl chloride were present in the vent sample from the LaHacienda.

As with the indoor air samples only PCE and trans 1,2 DCE were detected in the subslab vapors at the nearby residential properties. PCE levels in samples from the subslab probes in the neighboring residences ranged from 0.36 to 1.49 ppbv; the PCE concentration in the subslab vapors were below the residential indoor air action levels. The trans 1,2 DCE ranged from <0.085 ppbv to 0.370 ppbv. The subslab sampling results are shown on Figure 11.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Additional investigation of the soil and groundwater will be required to define the extent of the contamination. We believe that it makes sense to conduct an interim remediation, removing the accessible contaminated soil beneath the parking lot. Some very high levels of contamination have been detected in the soil and passive vapor samples at the site. Additionally, replacement of the existing pavement with newer pavement will inhibit surface water infiltration. Some additional soil sampling should be conducted

4.1 Additional Soil Sampling (Pre-Remediation)

We propose to install additional soil samples at the site to better determine the area/volume of contaminated soils in the parking lot and across the property boundary to the east. We expect to install 6-8 soil borings on the property. Soil samples will be analyzed for VOCs. Two soil samples collected near the locations of the REA borings B-2 and B-3 will be run for TCLP VOCs as necessary. The proposed boring locations are shown on Figure 12.

4.2 Continued Groundwater Investigation

Sample Existing Wells

The four existing monitoring wells have not been sampled in several years. We will sample the wells and collect a sample from the Meriter High Capacity well prior to conducting additional groundwater investigation.

Install Geoprobe Borings

Additional direct push borings will be installed as shown on Figure 12. Groundwater samples will be collected from each boring when we encounter refusal.

Install Additional Monitoring Wells/Piezometers

The data from the existing monitoring wells, the geoprobe borings and the Meriter well will be used to determine the locations of additional permanent monitoring wells. It is likely that a monitoring well/piezometer will be installed to the northwest. We will conduct profiling during the installation of this well to determine the depth to set the piezometer(s). The proposed locations are shown on Figure 13.

4.3 Vapor Intrusion

An additional attempt will be made to obtain a paired indoor/sub-slab samples at 510 West Shore Road

5.0 **REFERENCES**

- Clayton, Lee and John W. Attic. 1997. Wisconsin Geological and Natural History. Pleistocene Geologic map of Dane County, Wisconsin.
- Cline Denzel, R. 1965. U.S. Geological Survey Water-Supply Paper 1779-U. <u>Geology</u> and Groundwater Resources of Dane County, Wisconsin.
- Mudrey, M. G., Jr., B. A. Brown, and J. K. Greenburg. 1982. <u>Bedrock Geology Map of</u> <u>Wisconsin</u>. University of Wisconsin - Extension, Geological and Natural History Survey.
- Resource Engineering Associates, 2001, Work Plan for Site Redevelopment.

Resource Engineering Associates, 2004, <u>Groundwater Analytical Data-2 Rounds of</u> <u>Groundwater Sampling-Site Remedial Investigation.</u>

Trotta, L. C., and R. D. Cotter. 1973. <u>Depth to Bedrock in Wisconsin</u>. University of Wisconsin - Extension, Geological and Natural History Survey.

United States Department of Agriculture. 1978. Soil Survey of Dane County, Wisconsin

USGS. Quadrangle. Wisconsin Map. 7.5 Minute Series: 1:24,000

Wisconsin Department of Natural Resources, 2001, Wisconsin Administrative Code, Chs. NR 700-749, <u>Investigation and Remediation of Environmental</u> <u>Contamination</u>. Additional direct push borings will be installed east, west and south of the site. Groundwater samples will be collected from each boring at the water table and again when we encounter refusal.

Install Additional Monitoring Wells/Piezometers

The data from the existing monitoring wells, the geoprobe borings and the Meriter well will be used to determine the locations of additional permanent monitoring wells. It is likely that a monitoring well/piezometer will be installed to the northwest. We will conduct profiling during the installation of this well to determine the depth to set the piezometer(s).

4.3 Vapor Intrusion

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Wisconsin Department of Natural Resources, 2001, Wisconsin Administrative Code, Chs. NR 700-749, <u>Investigation and Remediation of Environmental</u> <u>Contamination</u>.

























		SUMMARY 501 Sor	TAE OF GEOPRO La Hacienc uth Park Stree	3LE 1 BE SAMPLII la Restaurant et, Madison, V	NG (May 1998 Visconsin	;)		
Media		S	Soil	.		Groun	dwater	
Location	B-1	B-2	B-3	B-4	B-2	B-3	B-4	B-4
Depth (ft)	6-8	8-10	8-10	8-10	10	10	10	20
Benzene	<250	<12000	<1200	<250	<7500	<600	40	<30
Chloroethane	<250	<12000	<1200	<250	<20000	<1600	<80	<80
Chloromethane	<250	<12000	<1200	<250	<22000	<1800	<90	<90
Tetrachloroethene	1600	1200000	77000	4900	3000000	5800	9800	3800
Trichloroethene	<250	26000	29000	810	80000	20000	1200	2600
cis 1,2 dichloroethene	<250	28000	210000	21000	45000	74000	2800	3800
trans 1,2 dichloroethene	<250	<12000	14000	<250	<7500	5600	50	140
Vinyl chloride	<250	<12000	<1200	<250	<12000	3200	<50	<50
1,1 dichloroethylene	<250	<12000	<1200	<250	<5000	<400	<20	<20
Toluene	<250	<12000	<1200	<250	<5000	<400	<20	<20
Ethylbenzene	<250	<12000	<1200	<250	<5000	<400	<20	<20
Chlorobenzene	<250	<12000	<1200	<250	<7500	<600	<30	<30

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Soil data is listed in ug/kgGroundwater data is listed in ug/l

Detected compounds in soil shown italicized
Groundwater exceeding NR140 enforcement standard are bold

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	SUMM	ARY OF WEL	L CONSTRUC	CTION	N DETAI	LS ANE) WAI	TER LEVEL	DATA		
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	motanea	Elevation	Берит			Dep	<u>oth</u>	Elevation	n Elevatio	n	
MW-1	01/05/04	97.16	14.20		10	4.2	0	92.96	82.96		87.96
MW-2	01/05/04	96.69	14.24		10	4.2	4	92.45	82.45		87.45
MW-3	01/05/04	96.93	14.22		10	4.2	2	92.71	82.71		87.71
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VVELL	Elevation	Depth	Elevati	on	De	oth	Ele	evation	Depth		Elevation
MW-1	97.16	8.74	88.42	2	8.0)7	8	9.09	7.26		89.90
MW-2	96.69	7.91	88.78	3	7.5	56	8	9.13	6.76		89.93
MW-3	96.93	8.39	88.54	1	7.0)9	8	9.84	6.61		90.32
- All data is list	ed in feet of feet	above local da	utum (100 ft ms	sl)							

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Well	Date	Benzene	Chloroethane	Chloromethane	Tetrachloroethene	Trichloroethene	cis 1,2 dichloroethene	trans 1,2 dichloroethene	Vinyl chloride	1,1 dichloroethylene	Toluene	Ethylbenzene	Chlorobenzene
MW-1	02/12/04	2.5	<1.0	<0.20	<0.50	2.1	1200	62	4.3	2.0	<0.20	<0.50	<0.20
	04/29/04	<8.0	<40	<8.0	<20	<8.0	1500	74	24	<20	<8.0	<20	<8.0
	09/24/08	2.9	6.6	0.26	<0.45	0.61	159	46.4	76.3	<0.57	<0.67	<0.54	<0.41
MW-2	02/12/04	<100	<500	<100	61000	30000	39000	1600	2900	<250	<100	<250	<100
	04/29/04	<8.0	<40	<8.0	56000	21000	35000	1700	3700	98	<8.0	<20	<8.0
	09/24/08	<41.0	<97.0	<24.0	8420	486	3130	<89.0	507	<57	<67.0	<54	<41
MW-3	02/12/04	2.3	<1.0	<0.20	29000	8500	41000	1600	<200	<500	1.9	0.84	4.4
	04/29/04	<8.0	<40	<8.0	9800	14000	28000	1200	44	34	<8.0	<20	<8.0
	09/24/08	<41.0	<97.0	<24.0	1340	1230	10200	386	20.1	<57	<67.0	<54	<41
PZ-1	04/09/09	<2.0	<4.8	<1.2	466	60.1	181	6.9	26.4	<2.8	<3.4	<2.7	<2.0
NR140	PAL	0.5	80	0.3	0.5	0.5	7	20	0.02	0.7	200	140	ns
NR140	ES	5	400	3	5	5	70	100	0.2	7	1000	700	ns

.

All data is listed in ug/lns = No standard established

NR140 PAL = Preventative action limit (exceedances bold)
NR140 ES = Enforcement standard (exceedances shaded)

	SUMMAR 501 Sou	TABLE 4 CY OF GEOPROBE SOIL S La Hacienda Restaurant uth Park Street, Madison, W	AMPLING isconsin	
Media		April 2009		
Location	GP-B	GP-C	GP-D	
Depth (ft)	4-6	4-6	4-7	
Benzene	<39.1	<27.0	<25.0	5.5
Chloroethane	<39.1	<27.0	<25.0	
Chloromethane	<39.1	<27.0	<25.0	
Tetrachloroethene	<39.1	325	<25.0	14 *
Trichloroethene	<39.1	<27.0	<25.0	14 *
cis 1,2 dichloroethene	<39.1	<27.0	<25.0	130 *
trans 1,2 dichloroethene	<39.1	<27.0	<25.0	
Vinyl chloride	<39.1	<27.0	<25.0	
1,1 dichloroethylene	<39.1	<27.0	<25.0	
Toluene	<39.1	<27.0	<25.0	1500
Ethylbenzene	<39.1	<27.0	<25.0	2900
Chlorobenzene	<39.1	<27.0	<25.0	700 *

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- Soil standards are NR720 RCLs or USEPA Groundwater Protection *

Soil data is listed in ug/kgDetected compounds in shown in bold

SU	MMARY	OF GROUI	NDWATE	TABL R CHEMIS	E 5 TRY OFF	SITE GEO	PROBE (A	pril 2009)		
		5(La La La La La	Hacienda I ark Street, I	Restaurant Madison, V	Visconsin				
Sample Location	G	P-1	GF	P-2	G	P-3	GF	P-4	NR	140
Depth (ft)	7-11	28.5-32.5	8-12	36-38	8-12	26.5-28.5	7-11	31-33	PAL	ES
Benzene	<0.41	<0.41	<0.41	<16.4	<0.41	<164	296	<1.0	0.5	5
Chloroethane	<0.97	<0.97	<0.97	<38.8	<0.97	<388	<4.8	<2.4	80	400
Chloromethane	<0.24	<0.24	<0.24	<9.6	<0.24	<96.0	<1.2	<0.60	0.3	3
Tetrachloroethene	<0.45	<0.45	<0.45	59.0	<0.45	1190	<2.2	6.6	0.5	5
Trichloroethene	<0.48	<0.48	<0.48	386	<0.48	7980	<2.4	2.5	0.5	5
cis 1,2 dichloroethene	<0.83	<0.83	1.3	4170	1.7	68700	<4.2	153	7	70
trans 1,2 dichloroethene	<0.89	<0.89	<0.89	168	<0.89	614	<4.4	4.1	20	100
Vinyl chloride	<0.18	<0.18	<0.18	165	3.8	253	<0.90	<0.45	0.02	0.2
1,1 dichloroethylene	<0.57	<0.57	<0.57	<22.8	<0.57	<228	<1.2	<1.4	7	70
Toluene	<0.67	<0.67	<0.67	<26.8	<0.67	<268	9.5	<1.7	200	1000
Ethylbenzene	<0.54	<0.54	<0.54	<21.6	<0.54	830	2.7	<1.4	140	700
Chlorobenzene	<0.41	<0.41	<0.41	<16.4	<0.41	<164	<2.0	<1.0	ns	ns
Isopropylbenzene	<0.59	<0.59	<0.59	<23.6	<0.59	<236	8.7	<1.5	ns	ns
МТВЕ	<0.61	<0.61	[·] <0.61	<24.4	<0.61	<244	4.1	<1.5	12	60
n-Propylbenzene	<0.81	<0.81	<0.81	<32.4	<0.81	<324	11.8	<2.0	ns	ns
Total Xylenes	<2.63	<2.63	<2.63	<6.6	<2.63	2610	<13.2	<6.6	1000	10000
- All data is listed in ug/l - ns = No standard establi	ished			-	• NR140 P. • NR140 E	AL = Prever S = Enforce	ntative action ment stand	on limit (ex ard (exceed	ceedances	italicized)

	SUMN	1ARY OF	RESULT	TABL S FROM	E 6 PASSIV	E VAPOF	R SAMPL	ING	
	~~~		LaF	Hacienda I	Restauran	t			
		501	South Par	k Street -	Madison,	, Wisconsi	in		
			ne	0	iene	e	Ле		
		oride	ethe	2 hen(	oeth	hen	thei	ed)	
DATE	Sample	Chlo	oro	s 1,5 oetl	nlor	roet	Droe	<b>E</b> aliz	TOTAL
DATE	ID	yl C	chl	ran:	Dicl	hlor	chlc	Ъ Щ	CVOCs
		Vin	Ď	t Dicl	,21	l'ric'	stra	(nc	
	1	F	1,]		cis 1		Ť		
	PS-1	<25	<25	<25	<25	<25	57		57
	PS-2	<25	<25	<25	<25	<25	30		30
	PS-3	<25	51	<25	82	5,705	25,681		31,519
	PS-4 DS-5	<25	<25	<25	<23	<25	23		
	PS-6	<25	<25	<25	<25	<25	36		36
	PS-7	<25	<25	<25	<25	<25	<25	-	nd
	PS-8	<25	<25	<25	<25	<25	<25		nd
	PS-9	<25	<25	<25	<25	<25	216		216
	PS-10	<25	<25	<25	<25	233	704		937
	PS-11	<25	<25	<25	<25	29	78		107
	PS-12	<25	<25	65	331	1,106	2,921		4,423
July 2012	PS-13	<25	81	100	256	3,904	10,280		14,621
	PS-14	<25	<25	<25	<25	<25	<25		nd
	PS-15	<25	<25	<25	<25	<25	52		52
1	PS-10 DS 17	<25	<25	22	<u>&lt;25</u> <u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	1 210	2720		1 <u>nu</u>
	PS-17	<25	<25	<25	27	1,417	17 290		18 784
	PS-19	<25	30	39	73	1 028	2 716		3 886
	PS-20	<25	96	232	3.033	8.236	29.941	-	41.538
	PS-21	<25	<25	<25	<25	<25	<25		nd
	PS-22	<25	<25	<25	<25	<25	<25		nd
	PS-23	<25	<25	<25	<25	<25	<25		nd
	PS-24	<25	417	234	827	51,540	47,072		100,090
	PS-25	<25	614	751	905	99,043	65,486		166,799
	PS-26	<25	<25	<25	<25	104	2,744		2,848
	PS-27	<10	<10	19	<10	<10	7	238	26
	PS-28	<10	<10	62	<10	<10	<10	nd	62
	PS-29	<10	<10	00	<10	<u>&lt;10</u> 12	<iu 00</iu 	<u>na</u>	10/
	PS-30	<10	<10	64	108	17	52	1768	241
	PS-32	<10	<10	123	12	84	181	6154	400
March 2013	PS-33	<10	<10	24	21	<10	6	204	51
	PS-34	<10	<10	5	<10	<10	<10	nd	5
	PS-35	<10	<10	14	<10	<10	23	782	37
	PS-36	<10	<10	51	<10	<10	11	374	62
	PS-37	<10	<10	32	<10	<10	23	782	55
	PS-38	<10	<10	27	<10	<10	23	782	50
- All results a	re listed in	nanograms							

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- PCE normalized using PS-17 and PS-30 (X34)

	SU	JMMARY 501	Y OF RES LaF South Par	TABL ULTS FR Hacienda I k Street -	E 7 COM PAS Restauran Madison,	SIVE SA t Wisconsi	MPLING in		
DATE	Sample ID	Vinyl Chloride	1,1 Dichloroethene	trans 1,2 Dichloroethene	cis 1,2 Dichloroethene	Trichloroethene	Tetrachloroethene	PCE (normalized)	TOTAL CVOCs
	PS-1	<25	<25	<25	<25	<25	57		57
	PS-2	<25	<25	<25	<25	<25	30		30
	PS-3	<25	51	<25	82	5,705	25,681		31,519
	PS-4	<25	<25	<25	<25	<25	<25		nd
	PS-5	<25	<25	<25	<25	<25	33		33
	PS-6	<25	<25	<25	<25	<25	36		. 36
	PS-7	<25	<25	<25	<25	<25	<25		nd
	PS-8	<25	<25	<25	<25	<25	<25		nd
	PS-9	<25	<25	<25	<25	<25	216		216
	PS-10	<25	<25	<25	<25	233	704		937
	PS-11	<25	<25	<25	<25	29	78		107
	PS-12	<25	<25	65	331	1,106	2,921		4,423
	PS-13	<25	81	100	256	3.904	10.280		14.621
July 2012	PS-14	<25	<25	<25	<25	<25	<25		nd
	PS-15	<25	<25	<25	<25	<25	52		52
	PS-16	<25	<25	<25	<25	<25	<25		nd
	PS-17	<25	<25	32	. 81	1.219	2.729		4.061
	PS-18	<25	<25	<25	27	1.467	17.290		18,784
	PS-19	<25	30	39	73	1.028	2.716		3.886
	PS-20	<25	96	232	3 033	8 236	29 941		41 538
	PS-21	<25	<25	<25	<25	<25	<25		nd
	PS-22	<25	<25	<25	<25	<25	<25		nd
	PS-23	<25	<25	<25	<25	<25	<25		nd
	PS-24	<25	417	234	827	51.540	47.072		100.090
	PS-25	<25	614	751	905	99.043	65,486		166.799
	PS-26	<25	<25	<25	<25	104	2.744		2.848
· · · · · ·	PS-27	<10	<10	19	<10	<10	7	238	26
	PS-28	<10	<10	62	<10	<10	<10	nd	62
	PS-29	<10	<10	66	<10	<10	<10	nd	66
	PS-30	<10	<10	91	<10	13	80	2720	184
	PS-31	<10	<10	64	108	17	52	1768	241
	PS-32	<10	<10	123	12	84	181	6154	400
March 2013	PS-33	<10	<10	24	21	<10	6	204	51
	PS-34	<10	<10	5	<10	<10	<10	nd	5
	PS-35	<10	<10	14	<10	<10	23	782	37
	PS-36	<10	<10	51	<10	<10	11	374	62
	PS-37	<10	<10	32	<10	<10	23	782	55
	PS-38	<10	<10	27	<10	<10	23	782	50
- All results a	re listed in	nanograms						, <u>, , , , , , , , , , , , , , , , , , </u>	

- PCE normalized using PS-17 and PS-30 (X34)

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			50	SUBSLA L 1 South F	TAB B SAMPL aHacienda Park Street	LE 8 ING FIEL Restaurat - Madison	LD DATÁ nt 1, Wisconsi	n				
SAMPLE ID	Line V (inche	acuum es Hg)		Helium (%)		PID Reading		Startup		C	Completio	n
7 	Initial	5 min.	Shroud	Line	Leakage		Date	Time	Vacuum	Date	Time	Vacuum
Davidsaver SS-1	16	16	13	0.03	0.23%	0	03/15/13	13:42	28	03/15/13	14:16	0
Davidsaver SS-2	15	15	8	0.05	0.63%	0	03/15/13	13:59	27	03/15/13	14:34	0
Davidsaver Indoor						0	03/15/13	14:03	28		15:35	0
Wartmann SS-1	16	16	8	0.05	0.63%	0.1	03/15/13	12:08	27	03/15/13	12:39	0
Wartmann SS-2	15.5	15.5	13	0	0.00%	0.4	03/15/13	12:23	27	03/15/13	12:54	0
Wartmann Indoor						1.3	03/15/13	12:28	28		15:45	0
Hoffenberg SS-1	15	15	20	0.02	0.10%	1.7	03/15/13	10:29	27.5	03/15/13	11:07	0
Hoffenberg SS-2	16	16	50	0.3	0.60%	3.4	03/15/13	10:45	30	03/15/13	11:24	0
Hoffenberg Indoor						0.8	03/15/13	10:55	28.5		16:10	0
Sweet SS-1	14	14	8	0.08	1.00%	1.1	03/15/13	9:05	28	03/15/13	9:36	0
Sweet SS-2	15	15	5	0.03	0.60%	4.7	03/15/13	9:28	27.5	03/15/13	10:03	0
Sweet Indoor					·	1.1	03/15/13	9:33	28		16:00	0
LaHacienda Sump	15	15				4.8	03/15/13	16:03	26	03/15/13	16:34	0
LaHacienda Indoor						0.9	03/15/13	16:05	29		15:50	0

.

SUMMAI	RY OF VAI	POR INTRUS LaHad	TABLE 9 ION SAMPLI cienda Restau	NG RESULT	S (March 15,	2013)
	50	1 South Park	Street - Madis	on, wisconsin		r
Location	Sample ID	Tetrachloroethene (ppbv)	Trichloroethene (ppbv)	cis 1,2 dichloroethene (ppbv)	trans 1,2 dichloroethene (ppbv)	Vinyl chloride (ppbv)
LaHacienda	Vent	155	<100	349	<100	<100
515 S. Park St.	Indoor	2.73	0.24	0.44	0.29	<0.085
	SS-1	0.780	<0.085	<0.085	<0.085	<0.085
W. Wartmann 802/4 Drake St.	SS-2	0.380	<0.085	<0.085	<0.085	<0.085
	Indoor	<0.085	<0.085	<0.085	<0.085	<0.085
	SS-1	1.49	0.340	<0.085	<0.085	<0.085
E. Davidsaver 502 West Shore	SS-2	0.360	<0.085	<0.085	<0.085	<0.085
	Indoor	0.240	<0.085	<0.085	0.270	<0.085
	SS-1	1.31	<0.085	<0.085	0.370	<0.085
H. Sweet 506 West Shore	SS-2	1.49	<0.085	<0.085	<0.085	<0.085
·	Indoor	0.29	<0.085	<0.085	0.30	<0.085
	SS-1	nr	nr	nr	nr	nr
S. Hoffenberg 512 West Shore	SS-2	0.500	<0.085	<0.085	<0.085	<0.085
	Indoor	<0.085	<0.085	<0.085	<b>0.300</b> ·	<0.085
		Res	idential Standa	rd		
Indoor Air Standa	ard (ug/m3)	42	2.1	ne	63	1.6
Molecular W	/eight	165.83	131.39	96.94	96.94	62.5
Indoor Air Stand	ard (ppbv)	6.2	0.39	ne	16	0.62
Subslab Standa (Attenuation fa	rd (ppbv) ctor 0.1)	62	3.9	ne	160	6.2
		Com	mercial Standa	ard		
Indoor Air Stand	ard (ppbv)	27	1.6	ne	65	11
Subslab Standa (Attenuation fa	rd (ppbv) ctor 0.1)	270	16	ne	650	110
- LaHacienda Resul	ts compared to	Commercial Sta	undard, all others	to Residential		

- Larracienda Results compared to Commercial Standard, all others to Residential - nr = no results; sample was collected but laboratory error resulted in compromised sample.

STOUG	HTON,	WISCO	NSIN		• <i>\$</i>		Job	No.	50	72	
		<u></u>	<u>. 12</u> 5. /	20	in and the second se	St. Maricon VI FLEV	Bori		0		
GR W/	OUN	D W Be	hile drill sfore cas	ing ing n ng rer	emov	15 ⁻¹ Time after drilling         15 ⁻¹ I          Depth to water         S ⁻¹ Depth to cave-in			Start ( Unit_4 Chief 4	03/23 )-120 4. P. / 1	700 2 2.5,
eldn, o	isture	Blow San	/s on pler	nple overy	Blows	Cathers Cas VISUAL FIELD CLASSIFICATION AND REMARKS	sing/Probe $\frac{\geq 11}{140}$	gth		Blows on	
2ar Sar	Moi	0/6	6/12	Rec	Total	TOPS 51/ - 15" Dro	ight <u>77</u>	Unconi Stren	Bould Casing	Size Probe Size	Drillin
						= Slind Crill TOPESIL		;	61	4-	145 1-27
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State of Wisconsin Resources Route to: S	olid Waste D Haz, Waste D		MONITORI Form 4400-1	NG WELL CONSTRU 13A Ri	JCTION ev. 4-90
Env. ROMAN	Local Grid Location of W		Well Name		
- the at of the second	ft. EN.	ft. DE.		· - [	
Grading Lycense Permit of Monitoring Number	Grid Origin Location		Wis, Unique Well	Number DNR Well	Number
	Lat.	long.	r		
Type of Well Water Table Observation Well [7] 11	Cr Diana	N AF	Date Well Installed	· · · · · · · · · · · · · · · · · · ·	
Piezometer [] 12	Section Location of Waste	Source	-	$\mathcal{L} = \mathcal{L} = \mathcal{L} = \mathcal{L}$	T
Distance Well Is From Waste/Source Boundary			Well Installed By:	(Person's Name and	Firm)
fi.	1/4 OI1/4 OI Sec.	, 1N, K W	Alex P	anner -	*
Is Well A Point of Enforcement Std. Application?	Location of Well Kelative	io waste/Source			
	d 🗖 Downgradient	1 D Not Known	Babber 2	<u>Nate Dille</u>	
A Discontinue mine top elevation FUCS	ft MSL	1. Cap and lock	2	🗹 Yes	
A. Protective pipe, top cive anone and a set a	A MOT	2. Protective co	over pipe:	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
B. Well casing, top elevation	IL MSL	a. Inside dian	neter:		7. Cin.
C Land mutana playation	ft.MSL	b. Length:		··· · · · · · · · · · · · · · · · · ·	]. <i>C</i> n.
		c. Material:		Steel	図 04
D. Surface seal, bottom ft. MSL or _		K E	lush mau	<u>Other</u> Other	
12. USCS classification of soil near screen:		d. Additiona	1 protection?		DÍ No -
GP GM GC GW SW G		If yes, des	cribe:		
		3. Surface seal:		Bentonite	<b>D</b> 30
Berrock LJ	í. K			Concrete	Ø 01
13. Sieve analysis anacheu. Li 165 2		×		Other	
14. Drilling method used: Rotary		4. Material bet	ween well casing and	protective pipe:	
Hollow Stem Auger				Bentonite	14 30
				Annular space seal	
Les num nu su Warre 1002 An 17	ío, 🕅			Other	
15. Drilling thurd used: Water 102 Air to		5. Annular space	ce seal: a	Granular Bentonite	
		bLbs/	gal mud weight	Bentonite-sand slurry	0.35
16. Drilling additives used? 🔲 Yes		cLbs/	gal mud weight	. Bentonite slurry	
		d%D	Et ³ usluma addad	fan anvi af tha abava	
Describe		C. University	Ptvolume audeu	Tor may of the above	
17. Source of water (attach analysis):		I. HOW INSU		Tornie remmed	
				Gravity	
		A Rentonite ca	-s]-	Bentonite granules	m 22
T Presenting and the ft MSL or	/ Øft. 👹		$\Pi$	in Remonite nellets	17 22
E. Bensonne seal, top				Other	n - 22
F. Fine sand, top ft. MSL or	425 m \ 00	7. Fine sand m	aterial: Manufactur	er, product name & me	esh size
анан жана жана жана жана аланда мала аланда жана аланда жана аланда жана аланда жана аланда жана аланда жана а Аланда жана аланда жана алан		A/ 1 aphic	<u>2 40-60</u>	<i>z</i> .	
G. Filter pack, top ft. MSL or	42.5 m NB	b. Volume a	added	ft ³	
and he was a fear of the second s		8. Filter pack r	naterial: Manufactu	rer, product name and r	mesh size
H. Screen joint, top ft. MSL or	12.5 ft	B / Ohio	S & S	•	
		b. Volume	adtled	ft ³	
L Well bottom	2015 4~ 「湄	9. Well casing	: Flush thread	ed PVC schedule 40	<b>□</b> 23
			Flush thread	ed PVC schedule 80	24
J. Filter pack, bottom ft. MSL or				Other	
•		10. Screen mate	rial: 11/C		23
K. Borehole, bottom ft. MSL or _	<u>530</u> ft.	a. Screen r	ype:	Factory cut	e 11
		×.		Continuous slot	01
L. Borehole, diameter 22.0 in.		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	į	Other	
		b. Manufact	nirer <u>Al (2003 13</u>	<u>the X</u>	1
M. O.D. well casing $2 2$ in.		c. Slot size	:	0.	Le_in.
		A Slotted I	ength:		_ <u>2</u> . <i>C</i> n.
N. I.D. well casing $2 O_{-}$ in.		11. Backfill mat	erial (below filter pac	ik): None	<b>日 14</b> 日 850
				Uner	<b>L</b> 💥
I hereby certify that the Mormation on t	nis torm is true and co	TRECT TO THE DEST OF MY	knowledge.		
Signad Pla Jokh ()	Rada .	Stato Doilli	tur		
1 junited	1 1-Clag 0	Juge chille	-9 INC.	114 142 and 160 W	

Please complete both sides of \$25 form and return to the appropriate DNR/office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch.144, Wis Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions or more information including where the completed form should be sent.

State of Wisconsin Department of Natural Resources

Boring Dolled by Soil Essentials (Cory Johnson)         Seymour Environmental (R. Seymour)         Date issualid dollar dollar dollar 2"         Date issualid dollar dollar Water Level         Date issualid dollar dollar dollar dollar dollar dollar dollar dollar dollar dollar dollar dollar do	Facility/Project Name     S       LaHacienda - 501 South Park Madison, WI     1				Seymour Project Number 10509.01				License/Permit/Monitoring Number Boring B							
Soil Essentials (Cory Johnson)         Seymour Environmental (R. Seymour)         Odd/30/2009           Boring B         Water Level         Surface Elevation           Boring B         Sw % of Section _23 T _ N R _ 9 E         Grid Location (fapplicable)           County         Dane         County Code         13         Civil Town         Madison           S         E         D         County Code         13         Civil Town         Madison           S         E         D         County Code         13         Civil Town         Madison           S         E         D         SoftProperties         SoftProperties         Blow           N         O         Asphalt Pavement         N         N         N         N           P         V         O         Asphalt Pavement         SP         SP         I         I         I         I         I         I         I         I         I         I         SP         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I	Boring Drilled by										Date Installed					
Boing B     2*     Intensity     Joint Right       SW kof SW kof Section     23     T     T     N     R     9     E     Ord Location (if applicable)       County     Date     County Code     13     Civil Town     Madison       S     R     D     Stable     Stable     Stable     Stable     Stable       A     C     P     SOIL/ROCK     W     I     U     RQ     V       L     R     C     S     V     N     Stable     Stable     Soil Properties       P     V     T     DESCRPTION     K     C     V     N     N       L     R     C     N     S     V     N     N     N       I     0     Asphalt Pavement     Brown fine Sand (fill),     SP     I     I     I       1     2     G     Same as above     S     SP     I     I     I       2     6     Same as above     S     I     I     I     I       9     10     I     I     I     I     I     I     I       11     I     I     I     I     I     I     I     I       10 <td colspan="5">Soil Essentials (Cory Johnson) Seymour Environmental (R. Seyr</td> <td>eyr</td> <td colspan="3">ymour) Borehole Diameter</td> <td>_</td> <td colspan="6">04/30/2009 Water Lovel Surface Elevation</td>	Soil Essentials (Cory Johnson) Seymour Environmental (R. Seyr					eyr	ymour) Borehole Diameter			_	04/30/2009 Water Lovel Surface Elevation					
SW kof       SW kof Section       23       T       T       N       R       9       E       Grid Location (if applicable)         County       Dane       County Code       13       Civil Town       Madison         S       R       D       SolL/ROCK       W       D       U       RO       Stable       Soil Properties       Blow         P       V       T       DESCRIPTION       K       A       S       S       V       M       O       P       Soil Properties       Blow         1       2       0       Asphalt Pavement Brown fine Sand (fill),       S       SP       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I <thi< th="">       I       I</thi<>	Boring B					2"				Water	Level	51		actuation .		
County       Dane       County Code       13       Civil Town       Madison         S $\mathbb{R}$ D       Soll/ROCK       W $\mathbb{R}$ Subel $\mathbb{Soll}$ $\mathbb{Soll}$ $\mathbb{R}$ <	<u>SW</u> '4 of <u>SW</u> '4 of Section <u>23</u> T <u>7</u> N R <u>9</u> E				Grid Location (if applicable)											
S       R       D       SOIL/ROCK       W       A       V       Stable	County Dane County Code 13			C	Civil Town Madison											
A       C       P       SOIL/ROCK       W       A       Stable	s			р				Г —								
M       O       P       SOL/ROCK       E       A       O       RQ       O       P       Mow Court       How Court         L       R       C       S       D       M       S       U       M       S       U       M       G       W       U       FL       P       Court       How Court         L       R       C       S       D       M       S       U       M       S       U       M       G       W       U       FL       P200       How Court         L       R       C       S       D       M       S       U       M       S       U       M       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U       U <td>A</td> <td>č</td> <td colspan="2">C E</td> <td>W</td> <td>w I</td> <td>Ĩ</td> <td></td> <td></td> <td>Stable</td> <td></td> <td colspan="4">Soil Properties</td> <td></td>	A	č	C E		W	w I	Ĩ			Stable		Soil Properties				
L       E       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H	M P	0 V	P T	SOIL/ROCK DESCRIPTION	E		A G	US	RQ D	O V						Blow Count
E       R       (ft)       A       S       (vppm)       q       V       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L       L <thl< th="">       L       L       L&lt;</thl<>	L	E	Н		L		R	Ĉ		М					<b>Da</b> 00	
1       Asphalt Pavement Brown fine Sand (fill), 3       SP       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I	E	R Y	(ft)			J	A M	S		(vppm)	q	w	LL	rL.	P200	
1       Srown time Sand (fill),         1       Silty fine sand         2       3         3       Same as above         5       SP         6       SP         7       Silty clay         End of boring       CL         10       CL         11       SP         12       8         9       Int         10       Int         11       Int         12       12         13       Int         14       Int         15       Firm: Seymour Environmental Services, Inc.			0	Asphalt Pavement												
1       2         3       3         2       6         7       Silty clay End of boring         0       1         10       1         11       1         12       6         13       10         14       15         13       14         14       15			1	Brown fine Sand (fill), Silty fine sand				QD				1				
1       2         3       3         2       4         5       Same as above         5       Same as above         7       Silty clay End of boring         10       10         11       10         11       11         12       12         13       14         14       15         Signature       & & & & & & & & & & & & & & & & & & &			1	Sitty file said				51								
3       3       3       3       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1	1		2													
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1       A       Same as above       Same as a			-													
2       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5       5			1	Same as above												
2       6       SP       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I			5													
7       Silty clay End of boring       CL       CL       Image: Classical structure         8       9       Image: Classical structure       Image: Classical structure       Image: Classical structure         10       Image: Classical structure         10       Image: Classical structure	2		6					SP								
10     11       11       12       13       14       15         Signature         Population         Population         Population         CL         CL         CL         Population			~	0.14												
8       9         10       10         11       11         12       13         14       15         Signature       Robust Services, Inc.				End of boring				CL								
9       10         11       11         12       13         14       15         Signature       Robum Summer         Firm: Seymour Environmental Services, Inc.			8													
10       11         11       11         12       13         13       14         15       Firm: Seymour Environmental Services, Inc.			9													
11     11       12     13       14     15       Signature     Robus Services, Inc.			10													
11       11         12       13         14       14         15       Firm: Seymour Environmental Services, Inc.			10													
12       13       14       15   Firm: Seymour Environmental Services, Inc.			11													
13       14       15   Firm: Seymour Environmental Services, Inc.			12													
14       15       Signature       Robum Services, Inc.			13													
15       Signature       Robum       Firm:       Seymour Environmental Services, Inc.			14													
15       Signature       Robum       Firm:       Seymour Environmental Services, Inc.			17													
Signature Rokum Sermin Firm: Seymour Environmental Services, Inc.			15													
	Signa	Signature Robin Servion -				Firm: Seymour Environmental Services, Inc.										
Facility LaHa	Facility/Project NameSeymour Project NumberLicense/Permit/Monitoring NumberLaHacienda - 501 South Park Madison, WI10509.01Boring C															
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Boring	Drilled	by					<u></u>			Date In	nstallec	1				
Soil E	Essenti	als (Co	ry Johnson) Seymour Environmental	l (R.	. Sey	mour)				04/30	)/2009	)		1		
Boring	Boring	g C	wi Unique wen Number (assigned by DNR	.)		Boreno	1000000000000000000000000000000000000	,,		water	Level	51	Irface E	levation		
<u>SW</u> ¼	of SW	4 of S	ection <u>23</u> T <u>7</u> N R <u>9</u>	E		Grid I	ocation	n (if applica	ible)							
Coun	ty ]	Dane	County Code 13		Civil	Гown	Madi	son								
S A	R E C	D E		w	D I			Stable	5	Soil P	roper	ties	]			
M P	V V		DESCRIPTION		A G	S	D RQ	0 V						Blow Count		
L E	R Y	H (ft)		L	R A M	s		M (vppm)	q	w	LL	PL	P200			
		0	Asphalt Pavement Brown fine Sand (fill)	1												
		1	Silty fine sand			SP										
1		2														
		3														
		4	anna anna anna anna anna anna anna ann													
		5	Same as above													
2		6				SP										
		7	Silty clay End of boring			CL										
		8						· ·								
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		14														
	,	15														
Signa	ture	Rola	mSumon		l	Firn	n: <u>S</u> e	ymour E	nviro	nmen	tal Se	rvice	s, Inc.			

Facility	y/Project	t Name	South Dark Madican WI	roject Number License/Permit/Monitoring Number												
LaHa Boring	Drilled	- 501 by	Souin Park Madison, WI			10209	.01			Date Installed						
Soil I	Essenti	als (Co	ry Johnson) Seymour Environmental	<u>(R.</u>	Sey	mour)	a D:-	ator		04/30	/2009	)	rfore F	lovotion		
Boring	or well Boring	$\mathbf{D}$	wi Unique well Number (assigned by DNR	)		sorenol	e Dian 2	ю(ег ,,		water	Level	Sı	mace E	ievation		
<u>SW</u> ¼	of SW	_ ¼ of S	Lection <u>23</u> T <u>7</u> N R <u>9</u>	E	Grid Location (if applicable)											
Coun	ty I	Dane	County Code 13	(	Civil Town Madison											
s	R E	D			D					Soil D	ן ר					
A M	C O	E P	SOIL/ROCK E A				RO	Stable O			Toper	105	]	Blow		
P	V	T	DESCRIPTION	SOIL/ROCK E DESCRIPTION L				V						Count		
Ē	R	(ft)		L	A	s		(vppm)	q	w	LL	PL.	P200			
	I	0	Asphalt Pavement	1	1											
		1	Silty fine sand			SP										
1		2				-										
_																
		3														
		A	Same as above													
		5														
2		6				SP										
		7	Silty clay			CL.										
		8					-									
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		13				1										
		14														
		15														
	<u> </u>	2.						<u> </u>								
Signa	ture ,	Kobi	ptymon			Firn	n: Se	eymour E	nvirc	nmen	ital Se	rvice	s, Inc.			
		,														

Facility LaHa	//Project	t Name - 501	South Park - Madison WI		Seymou	ur Proje	ct Number		Licens B-1	c/Perm	it/Mor	itoring	Number	
Boring	Drilled	by		;	10507	.01			Date 1	nstallec	1			
Soil I	essenti	als (Co	bry Johnson) Seymour Environmenta	$\frac{1}{(R.)}$	Sey	mour)	a Diam	otor		04/30	)/2009	)	urfage E	lovation
Boring	B-1	INUITIOCI	wi Onique wen Number (assigned by Divis	.)		Solenoi	2'	, ,		water	Levei	31		levation
<u>SW</u> ¼	of <u>SW</u>	4 of S	Section <u>23</u> T <u>7</u> N R <u>9</u>	Е		Grid Location (if applicable)								
Cour		Dana	County Code 12			Civil Tour Madison								
Coun				T				Iviaui	son					
S	S E D I							<b>6</b> .11		Soil P	roper	ties	7	
A M	0	P P	SOIL/ROCK	U	RQ	O					J	Blow		
P T	V F	Т Н	DESCRIPTION	G R	S	D	V M						Count	
Ē	R	(ft)							q	w	LL	PL	<b>P</b> 200	
		0	Asphalt Pavement		IVI						1		-	
			Blind drilled to 12, collected											
			water sample 8-11											
			Collected another sample at											
			depth											
						1								
										1				
						ļ								ļ
Signa	ture	Rok	molumum	<u></u>		Firn	n: Se	ymour E	nviro	nmer	ıtal Se	rvice	s, Inc.	

Facility/Project Name LaHacienda – 501 South Park, - Madison, WI	Seymour Project Number         License/Permit/Monitoring Number           10509.01         B-2
Boring Drilled by	Date Installed
Boring or Well Number WI Unique Well Number (assigned by DNR)	Borehole Diameter Water Level Surface Elevation
B-2	2"
<u>3w 701 3w 701 section 25 1 7 10 R 9 E</u>	
County Dane County Code 13	Civil Town Madison
A C E W M O P SOIL/ROCK E	I Stable Soil Properties Blow
P V T DESCRIPTION L	G S D V Count
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	A S (vppm) q W LL PL P200
water sample 8-12 Drilled to refusal at 38 Collected another sample at depth	
Signature Robert Ourseen	Firm: Seymour Environmental Services, Inc.

Facilit LaHa	y/Projec cienda	t Name 1 – 501	South Park Madison, WI		Seymoi 10509	ur Proje ).01	ect Number		Licens B-3	e/Perm	it/Mor	nitoring	Number	
Boring	Drilled	by		1 (1)						Date In	nstalled	1		
Boring	ssenti	als (Co Number	r WI Unique Well Number (assigned by DNF	<u>ו (R.</u> ט	Sey	mour) Borehol	le Dian	neter		04/30 Water	)/2009 Level	<del>)</del> Si	Irface F	levation
	B-3			-/			2	,,						
<u>SW</u> ¼	of <u>SW</u>	_ ¼ of S	Section <u>23</u> T <u>7</u> N R <u>9</u>	E		Grid Location (if applicable)								
Coun	ty ]	Dane	County Code 13			Civil 7	Fown	Madi	son					
G	R E D								·				ר	
A	č	E	SOU /BOCK	W	I		RO	Stable		Soil P	roper	ties		Diam
P	v	T P	DESCRIPTION		A G	s	D	v		-				Count
L E	E R	H (ft)			R A	C S		M (vppm)	q	w	LL	PL	P200	
	Y		A see halt Davament		M					1	T			
			Blind drilled to 12, collected		ł									
			water sample 8-12				ļ							
			Drilled to refusal at 28.5											
			depth											
	,					Í		ĺ			1			
Signa	ture	Ra La.				Firm	<u> </u>		aviro	nmen	tal Sa			
- pigna	nuie /	- v ker	mounary			1.111	u. 56	ymour Ei	1110	nmen	iai Se	A VICE	s, me.	

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Facility LaHa	/Project	Name - 501	South Park Madison, WI		Seymour Project Number         License/Permit/Monitoring N           10509.01         B-4						Number			
Boring	Drilled	by		1 (D		```	• • •			Date I	nstalled			
Boring	or Well	als (Co Number	r WI Unique Well Number (assigned by DNI	$\frac{1(K)}{N}$	Sey	mour) Borehol	e Diam	eter		Water	Level	, 	Irface E	levation
	B-4			·,			2'	,						
<u>SW</u> ¼	of <u>SW</u>	_ ¼ of S	Section 23 T 7 N R 9	E		Grid Location (if applicable)								
Coun	ty I	Dane	County Code 13			Civil 7	Гown	Madi	son			·		
	R	D											1	
A	C	D D D W I P SOIL/ROCK E A						Stable		Soil P	roper	ties		
M P	o V	Р Т	SOIL/ROCK E A DESCRIPTION L C L F				RQ D	v v		_				Blow Count
	E R	H (ft)		L	R A			M (vppm)	q	w	LL	PL	<b>P</b> 200	
	Ŷ				M	ļ_		('pp)			·			
		0	Asphalt Pavement Blind drilled to 12 collected	1	I									
			water sample 8-12											
			Drilled to refusal at 33											
			Collected another sample at depth											
			acpin											
		1												
											•			
						1								
Signa	ture	Rob	molyner		-	Firn	n: Se	ymour Er	nviro	nmer	tal Se	rvice	s, Inc.	

Netter Va. 11 autoravar	TT BIAINI A' EXCLUDES OF MERI A' O' KOMES OF MERI A' MARKAN A'								
Department of Natural Resources	Form 3300-5B Rev. 3-95								
All Abandonment work shall be performed in accordance with the provi	ision of Chapters NR 811, NR 812 or NR 141, Wis. Adm.								
Code, whichever is applicable. Also, see instructions on back.									
(1) GENERAL INFORMATION	(2) FACILITY NAME								
Well/Drillhole/Borehole County	Original Well Owner (If Known)								
Location - $B - 1/(-P - D)$ Dane	La Hacienda								
	Drasent Well Owner								
	Le Hegiende								
1/4 01 1/4 01 Sec , 1 1/, K [///									
(If Applicable) Street or Koute	CIC C. D. J. Classic								
Gov't Lot Grid Number	515 S. Park Street								
Grid Location	City, State, Zip Code								
Ft. 🗋 N. 🗋 S Ft. 🗋 E. 🗋 W.	Madison, WI								
Civil Town Name	Facility Well No. and/or Name (If App) WI Unique Well No.								
Madison									
Street Address of Well	Reason For Abandonment								
515 C. Darle Street	NO I ONCED NEEDED								
City Village	Date of Abandonment								
Chy, Village									
WELL/DRILLHOLF/RODEHOLF INFORMATION	1/JV/U7								
(3) Original Well/Drillhole/Borehole Construction Completed On	(A) Depth to Water (Feet) 0'								
(3) Original WeinDrinnold/Borenole Construction Completed On	(4) Deptil to Water (Peer)								
(Date)	Pump & Piping Removed? U Yes No X Not Applicable								
	Liner(s) Removed?								
Monitoring Well Construction Report Available?	Screen Removed? Yes No X Not Applicable								
∐ Water Well ∐ Yes ⊠ No	Casting Left in Place?								
Drill Hole	If No, Explain <u>No Casing</u>								
🛛 Borehole	Was Casting Cut Off Below Surface?  Yes No								
Construction Type:	Did Sealing Material Rise to Surface? 🛛 🛛 Yes 🗌 No								
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours 🗌 Yes 🛛 No								
Other (Specify) Geoprobe	If Yes, Was Hole Retopped? 🛛 Yes 🗌 No								
	(5) Required Method of Placing Sealed Material								
	(5) Required Method of Placing Sealed Material								
Formation Type:	(5) Required Method of Placing Sealed Material								
Formation Type:	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity</li> <li>Dump Bailer</li> <li>Other (Explain)</li> </ul>								
Formation Type: Unconsolidated Formation Bedrock Total Well Depth(ft.) 3. Casting Diameter(in.)	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity</li> <li>Dump Bailer</li> <li>Other (Explain)</li> <li>(6) Sealing Materials</li> <li>For monitoring wells and</li> </ul>								
Formation Type:         Unconsolidated Formation         Total Well Depth(ft.)         Grom groundsurface)	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity</li> <li>Dump Bailer</li> <li>Conductor Pipe-Pumped</li> <li>Other (Explain)</li> <li>(6) Sealing Materials</li> <li>For monitoring wells and monitoring well boreholes only</li> </ul>								
Formation Type:         Unconsolidated Formation         Total Well Depth(ft.)         '         (From groundsurface)             Casting Depth(ft.)	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity</li> <li>Conductor Pipe-Pumped</li> <li>Dump Bailer</li> <li>Other (Explain)</li> <li>(6) Sealing Materials</li> <li>For monitoring wells and</li> <li>Neat Cement Grout</li> <li>monitoring well boreholes only</li> <li>Sand-Cement (Concrete) Grout</li> </ul>								
Formation Type:         Image: Markow Construction         Image: Construction	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity</li> <li>Dump Bailer</li> <li>Conductor Pipe-Pumped</li> <li>Other (Explain)</li> <li>(6) Sealing Materials</li> <li>For monitoring wells and</li> <li>Meat Cement Grout</li> <li>Sand-Cement (Concrete) Grout</li> <li>Concrete</li> <li>Bentonite Pellets</li> </ul>								
Formation Type:         Image: Markow Construction         Image: Construction	(5) Required Method of Placing Sealed Material         Conductor Pipe-Gravity       Conductor Pipe-Pumped         Dump Bailer       Other (Explain)         (6) Sealing Materials       For monitoring wells and         Neat Cement Grout       monitoring well boreholes only         Sand-Cement (Concrete) Grout       '         Concrete       Bentonite Pellets         Clay-Sand Slurry       Granular Bentonite								
Formation Type:         Image: Structure         Image: Structure     <	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity Conductor Pipe-Pumped</li> <li>Dump Bailer Other (Explain)</li> <li>(6) Sealing Materials For monitoring wells and</li> <li>Neat Cement Grout monitoring well boreholes only</li> <li>Sand-Cement (Concrete) Grout</li> <li>Concrete   Bentonite Pellets</li> <li>Clay-Sand Slurry   Granular Bentonite</li> <li>Bentonite-Sand Slurry   Bentonite - Cement Grout</li> </ul>								
Formation Type:       Bedrock         Inconsolidated Formation       Bedrock         Total Well Depth(ft.)       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)         Lower Drillhole Diameter (in.)       2"         Was Well Annular Space Grouted?       Yes       No       Unknown         If Yes, To What Depth?       Feet	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity</li> <li>Dump Bailer</li> <li>Other (Explain)</li> <li>(6) Sealing Materials</li> <li>For monitoring wells and</li> <li>Meat Cement Grout</li> <li>Sand-Cement (Concrete) Grout</li> <li>Concrete</li> <li>Clay-Sand Slurry</li> <li>Bentonite Pellets</li> <li>Clay-Sand Slurry</li> <li>Bentonite - Cement Grout</li> <li>Kentonite</li> </ul>								
Formation Type:       □ Bedrock         □ Unconsolidated Formation       □ Bedrock         Total Well Depth(ft.)       Ø'       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity</li> <li>Dump Bailer</li> <li>Other (Explain)</li> <li>(6) Sealing Materials</li> <li>For monitoring wells and</li> <li>Neat Cement Grout</li> <li>Sand-Cement (Concrete) Grout</li> <li>Concrete</li> <li>Bentonite Pellets</li> <li>Clay-Sand Slurry</li> <li>Bentonite - Cement Grout</li> <li>Kerner Grout</li> <li>Chipped Bentonite</li> </ul>								
Formation Type:       □ Bedrock         □ Unconsolidated Formation       □ Bedrock         Total Well Depth(ft.)       Ø',       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)	<ul> <li>(5) Required Method of Placing Sealed Material</li> <li>Conductor Pipe-Gravity</li> <li>Dump Bailer</li> <li>Other (Explain)</li> <li>(6) Sealing Materials</li> <li>For monitoring wells and monitoring well boreholes only</li> <li>Sand-Cement (Concrete) Grout</li> <li>Concrete</li> <li>Clay-Sand Slurry</li> <li>Bentonite Pellets</li> <li>Clay-Sand Slurry</li> <li>Bentonite - Cement Grout</li> <li>Chipped Bentonite</li> </ul>								
Formation Type:       □ Bedrock         □ Unconsolidated Formation       □ Bedrock         Total Well Depth(ft.)       ③ '       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)	(5) Required Method of Placing Sealed Material         Conductor Pipe-Gravity       Conductor Pipe-Pumped         Dump Bailer       Other (Explain)         (6) Sealing Materials       For monitoring wells and         Meat Cement Grout       monitoring well boreholes only         Sand-Cement (Concrete) Grout       '         Concrete               Bentonite Pellets         Clay-Sand Slurry               Granular Bentonite         Bentonite-Sand Slurry               Bentonite - Cement Grout         Chipped Bentonite       No. Yards         From (Ft.)       To (Ft.)       Sacks, Sealant (Circle       Mix Ratio								
Formation Type:       Bedrock         Munconsolidated Formation       Bedrock         Total Well Depth(ft.)       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)         Lower Drillhole Diameter (in.)       2"	(5) Required Method of Placing Sealed Material         Conductor Pipe-Gravity       Conductor Pipe-Pumped         Dump Bailer       Other (Explain)         (6) Sealing Materials       For monitoring wells and         Meat Cement Grout       monitoring well boreholes only         Sand-Cement (Concrete) Grout       '         Concrete               Bentonite Pellets         Clay-Sand Slurry               Granular Bentonite         Bentonite-Sand Slurry               Bentonite - Cement Grout         Chipped Bentonite       No. Yards         From (Ft.)       To (Ft.)       Sacks, Sealant (Circle or Volume One)								
Formation Type:       Bedrock         Muconsolidated Formation       Bedrock         Total Well Depth(ft.)       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)         Lower Drillhole Diameter (in.)       2"	(5) Required Method of Placing Sealed Material         Conductor Pipe-Gravity       Conductor Pipe-Pumped         Dump Bailer       Other (Explain)         (6) Sealing Materials       For monitoring wells and         Meat Cement Grout       monitoring well boreholes only         Sand-Cement (Concrete) Grout       Bentonite Pellets         Clay-Sand Slurry       Bentonite Pellets         Bentonite-Sand Slurry       Bentonite - Cement Grout         Chipped Bentonite       No. Yards         From (Ft.)       To (Ft.)         Sacks, Sealant (Circle or Volume One)       Mix Ratio or Mud Weight         Surface       %								
Formation Type:       Bedrock         Munconsolidated Formation       Bedrock         Total Well Depth(ft.)       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)         Lower Drillhole Diameter (in.)       2"	(5) Required Method of Placing Sealed Material         Conductor Pipe-Gravity       Conductor Pipe-Pumped         Dump Bailer       Other (Explain)         (6) Sealing Materials       For monitoring wells and         Neat Cement Grout       monitoring well boreholes only         Sand-Cement (Concrete) Grout       Image: Description of the state of the stat								
Formation Type:   \[Delta Unconsolidated Formation   Total Well Depth(ft.)   \[Granular Bentonite     Image: Strang Depth (ft.)   Image: Stran	(5) Required Method of Placing Sealed Material         □ Conductor Pipe-Gravity       □ Conductor Pipe-Pumped         □ Dump Bailer       □ Other (Explain)         (6) Sealing Materials       For monitoring wells and         □ Neat Cement Grout       monitoring well boreholes only         □ Sand-Cement (Concrete) Grout       `         □ Concrete         □ Bentonite Pellets         □ Clay-Sand Slurry         □ Granular Bentonite         □ Bentonite-Sand Slurry         ⊠ Bentonite - Cement Grout         ○ Chipped Bentonite       No. Yards         From (Ft.)       To (Ft.)         Sacks, Sealant (Circle or Volume One)       Mix Ratio or Mud Weight         Surface       𝔅 '         13       Ibs								
Formation Type:   \[Delta Unconsolidated Formation   Total Well Depth(ft.)   \[Granular Bentonite     Image: Strateging Depth(ft.)   Image: Strateging Depth(ft.)	(5) Required Method of Placing Sealed Material         □ Conductor Pipe-Gravity       □ Conductor Pipe-Pumped         □ Dump Bailer       □ Other (Explain)         (6) Sealing Materials       For monitoring wells and         □ Neat Cement Grout       monitoring well boreholes only         □ Sand-Cement (Concrete) Grout       '         □ Concrete         □ Bentonite Pellets         □ Clay-Sand Slurry         □ Granular Bentonite         □ Bentonite-Sand Slurry         ⊠ Bentonite - Cement Grout         ○ Chipped Bentonite       No. Yards         From (Ft.)       To (Ft.)         Sacks, Sealant (Circle or Volume One)       Mix Ratio         or Volume       One)         Surface       ½ '         13       Ibs								
Formation Type:   \[Delta Unconsolidated Formation   Total Well Depth(ft.)   (from groundsurface)   Casting Diameter(in.)   (From groundsurface)   Casting Depth(ft.)   Lower Drillhole Diameter (in.)   2"	(5) Required Method of Placing Sealed Material         □ Conductor Pipe-Gravity       □ Conductor Pipe-Pumped         □ Dump Bailer       □ Other (Explain)         (6) Sealing Materials       For monitoring wells and         □ Neat Cement Grout       monitoring well boreholes only         □ Sand-Cement (Concrete) Grout       '         □ Concrete         □ Bentonite Pellets         □ Clay-Sand Slurry         □ Granular Bentonite         □ Bentonite-Sand Slurry         □ Bentonite - Cement Grout         □ Chipped Bentonite       No. Yards         From (Ft.)       To (Ft.)         Sacks, Sealant (Circle or Volume One)       Mix Ratio         or Volume       One)         Surface       ½ '         13       Ibs								
Formation Type:       Bedrock         Muconsolidated Formation       Bedrock         Total Well Depth(ft.)       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)         Lower Drillhole Diameter (in.)       2"	(5) Required Method of Placing Sealed Material         □ Conductor Pipe-Gravity       □ Conductor Pipe-Pumped         □ Dump Bailer       □ Other (Explain)         (6) Sealing Materials       For monitoring wells and         □ Neat Cement Grout       monitoring well boreholes only         □ Sand-Cement (Concrete) Grout       '         □ Concrete         □ Bentonite Pellets         □ Clay-Sand Slurry         □ Granular Bentonite         □ Bentonite-Sand Slurry         □ Bentonite - Cement Grout         □ Chipped Bentonite       No. Yards         From (Ft.)       To (Ft.)         Sacks, Sealant (Circle or Volume One)       Mix Ratio         or Volume       One)       or Mud Weight         Surface       𝔅 '       1 𝔅 lbs								
Formation Type:    Muconsolidated Formation    Bedrock    Total Well Depth(ft.)   (From groundsurface)   Casting Diameter(in.)   (From groundsurface)   Casting Depth(ft.)   Lower Drillhole Diameter (in.)   2"   Was Well Annular Space Grouted?   Yes   No   If Yes, To What Depth?   Feet      (7) Material Used To Fill Well/Drillhole   Granular Bentonite   (8) Comments:	(5) Required Method of Placing Sealed Material         □ Conductor Pipe-Gravity       □ Conductor Pipe-Pumped         □ Dump Bailer       □ Other (Explain)         (6) Sealing Materials       For monitoring wells and         □ Neat Cement Grout       monitoring well boreholes only         □ Sand-Cement (Concrete) Grout       '         □ Concrete         □ Bentonite Pellets         □ Clay-Sand Slurry         □ Granular Bentonite         □ Bentonite-Sand Slurry         □ Bentonite - Cement Grout         □ Chipped Bentonite       No. Yards         From (Ft.)       To (Ft.)         Sacks, Sealant (Circle or Volume One)       Mix Ratio         or Volume       One)       or Mud Weight         Surface       𝔅       1 𝔅         □       □       □								
Formation Type:   \[Delta Unconsolidated Formation   \[Delta Unconsolidated Formation   Total Well Depth(ft.)   [From groundsurface)   Casting Diameter(in.)   [From groundsurface)   Casting Depth(ft.)   Lower Drillhole Diameter (in.)   2"	(5) Required Method of Placing Sealed Material         Conductor Pipe-Gravity       Conductor Pipe-Pumped         Dump Bailer       Other (Explain)         (6) Sealing Materials       For monitoring wells and         Neat Cement Grout       monitoring well boreholes only         Sand-Cement (Concrete) Grout       '         Concrete               Bentonite Pellets         Clay-Sand Slurry               Granular Bentonite         Bentonite-Sand Slurry               Bentonite - Cement Grout         K Chipped Bentonite       No. Yards       Mix Ratio         From (Ft.)       To (Ft.)       Sacks, Sealant (Circle or Volume One)       Mix Ratio         Surface       g'       // 3       Ibs								
Formation Type:   \[Delta Unconsolidated Formation    Bedrock   Total Well Depth(ft.) //// Casting Diameter(in.)   (From groundsurface)    Casting Depth(ft.)      Lower Drillhole Diameter (in.) _2"   Was Well Annular Space Grouted?    Yes    No    Unknown   If Yes, To What Depth?   (7)   Material Used To Fill Well/Drillhole   Granular Bentonite   (8) Comments:   (9) Name of Person of Firm Doing Sealing Work   Soil Essentials (Dave Paulson)	(5) Required Method of Placing Sealed Material								
Formation Type:   \[Delta Unconsolidated Formation    Bedrock   Total Well Depth(ft.) <u>\$'</u> Casting Diameter(in.)   (From groundsurface)    Casting Depth(ft.)   Lower Drillhole Diameter (in.) <u>2"</u> Was Well Annular Space Grouted?    Yes    No    Unknown   If Yes, To What Depth?    Yes    No    Unknown   If Yes, To What Depth?    Yes    No    Unknown   (7)   Material Used To Fill Well/Drillhole   Granular Bentonite   (8) Comments:   (9) Name of Person of Firm Doing Sealing Work   Soil Essentials (Dave Paulson)   Signature of Person Doing-Work	(5) Required Method of Placing Sealed Material            Conductor Pipe-Gravity         Dump Bailer        Conductor Pipe-Pumped             Dump Bailer        Other (Explain)          (6) Sealing Materials        For monitoring wells and             Neat Cement Grout        monitoring well boreholes only             Sand-Cement (Concrete) Grout        Image: Description of the second s								
Formation Type:       Bedrock         Muconsolidated Formation       Bedrock         Total Well Depth(ft.)       Casting Diameter(in.)         (From groundsurface)       Casting Depth(ft.)         Lower Drillhole Diameter (in.)       2"	(5) Required Method of Placing Sealed Material								
Formation Type:   Solution []   Material Unconsolidated Formation   Bedrock   Total Well Depth(ft.)   Casting Diameter(in.)   (From groundsurface)   Casting Depth(ft.)   Lower Drillhole Diameter (in.)   2"	(5) Required Method of Placing Sealed Material								
Formation Type:   Ø Unconsolidated Formation   Bedrock   Total Well Depth(ft.)   (From groundsurface)   Casting Diameter(in.)   (From groundsurface)   Casting Depth(ft.)   Lower Drillhole Diameter (in.)   2"   Was Well Annular Space Grouted?   Yes   No   If Yes, To What Depth?   Feet     (7)   Material Used To Fill Well/Drillhole     Granular Bentonite     (8) Comments:     (9) Name of Person of Firm Doing Sealing Work   Soil Essentials (Dave Paulson)   Signature of Person Doing-Work   Date Signed   5/3/09   Street or Route   W6306 STH 39	(5) Required Method of Placing Sealed Material								
Formation Type:       □ Bedrock         Total Well Depth(ft.)       0         (From groundsurface)       Casting Diameter(in.)         Lower Drillhole Diameter (in.)       2"	(5) Required Method of Placing Sealed Material								

Department of Natural Resources	Form 3300-5B Rev. 3-95					
All Abandonment work shall be performed in accordance with the	provision of Chapters NR 811, NR 812 or NR 141, Wis. Adm.					
Code, whichever is applicable. Also, see instructions on back.						
(1) GENERAL INFORMATION	(2) FACILITY NAME					
Well/Drillhole/Porebole County	Original Well Owner (If Known)					
Location - 2-2-2-C Dane						
1/4 of 1/4 of Sec; T: N;R	W     La Hacienda					
(If Applicable)Street or Route						
Gov't Lot Grid Nu	mber 515 S. Park Street					
Grid Location	City, State, Zip Code					
Ft. 🗋 N. 🗋 S Ft. 🗋 E. 🗋 W.	Madison, WI					
Civil Town Name	Facility Well No. and/or Name (If App) WI Unique Well No.					
Madison						
Street Address of Well	Reason For Abandonment					
515 S. Park Street	NO LONGER NEEDED					
City, Village Madicon	Jate of Abandonment					
WELL/DRILLHOLE/BOREHOLE INFORMATION	4/50/09					
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet) 9'					
(Date) $4/30/09$	Pump & Pining Removed? Ves No. X Not Applicable					
(2 m) <u> </u>	Liner(s) Removed? $\Box$ Yes $\Box$ No $\boxtimes$ Not Applicable					
Monitoring Well Construction Report Available	Screen Removed? Yes No X Not Applicable					
🗌 Water Well 🗌 Yes 🖾 No	Casting Left in Place?  Yes No					
Drill Hole	If No, Explain No Casing					
Borehole	Was Casting Cut Off Below Surface?  Yes No					
Construction Type:	Did Sealing Material Rise to Surface? 🛛 🛛 Yes 🗌 No					
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours 🗌 Yes 🛛 No					
Other (Specify) Geoprobe	If Yes, Was Hole Retopped? Yes No					
	(5) Required Method of Placing Sealed Material					
Formation Type:	Conductor Pipe-Gravity Conductor Pipe-Pumped					
Unconsolidated Formation	Dump Bailer Other (Explain)					
Total Well Depth(ft) $\mathbf{a}$ ' Casting Diameter(in)	(6) Sealing Materials For monitoring wells and					
(From groundsurface) Casting Depth(ft.)	Neat Cement Grout monitoring well boreholes only					
	Sand-Cement (Concrete) Grout					
Lower Drillhole Diameter (in.) _2"	Concrete   Bentonite Pellets					
	Clay-Sand Slurry					
Was Well Annular Space Grouted? [] Yes [] No [] Unkno	own Bentonite-Sand Slurry Sentonite - Cement Grout					
If Yes, 10 what Depth? Feet						
(7)	No. Yards					
Material Used To Fill Well/Drillhole	From (Ft.) To (Ft.) Sacks, Sealant (Circle Mix Ratio					
	or Volume One) or Mud Weight					
Granular Bentonite	Surface $\mathscr{G}$ ' 13 lbs					
(8) Comments						
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY					
Soil Essentials (Dave Paulson)	Date Received/Inspected District/County					
Signature of Person Doing Work Date Signed						
5/3/09	Reviewer/Inspector					
W6306 STH 39	Follow-up Necessary					
1 (000)32/-2333						
City State Zin Code: New Glarus, Wi 53574	Tonow-up ivecessary					



Department of Natural Resources	Form 3300-5B Rev. 3-95					
All Abandonment work shall be performed in accordance with the provis	sion of Chapters NR 811, NR 812 or NR 141, Wis. Adm.					
Code, which ever is applicable. Also, see instructions on back.	······································					
(1) GENERAL INFORMATION	(2) FACILITY NAME					
Well/Drillhole/Borehole County	Original Well Owner (If Known)					
Location - 3-27CP-D Dane	La Hacienda					
$\mathbf{\Sigma}\mathbf{E}$	Present Well Owner					
1/4 of 1/4 of Sec; T:N;R W	La Hacienda					
(If Applicable)Street or Route	515 S. Dark Streat					
	Madison WI					
II. [] II. [] II. [] D	Facility Well No. and/or Name (If App) WI Unique Well No.					
Madison	racinty wen No. and/or reame (if App) wir oinque wen No.					
Street Address of Well	Reason For Abandonment					
515 S. Park Street	NO LONGER NEEDED					
City. Village	Date of Abandonment					
Madison	4/30/09					
WELL/DRILLHOLE/BOREHOLE INFORMATION						
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet) 9'					
(Date)4/30/09	Pump & Piping Removed? 🗌 Yes 🗌 No 🖾 Not Applicable					
	Liner(s) Removed?  Yes No X Not Applicable					
Monitoring Well Construction Report Available?	Screen Removed? 🛛 Yes 🗌 No 🔀 Not Applicable					
🗌 Water Well 📃 Yes 🖾 No	Casting Left in Place?					
Drill Hole	If No, Explain <u>No Casing</u>					
Borehole	Was Casting Cut Off Below Surface? 🛛 🗌 Yes 🖾 No					
Construction Type:	Did Sealing Material Rise to Surface? Xes No					
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours ∐ Yes ⊠ No					
Other (Specify) <u>Geoprobe</u>	If Yes, Was Hole Retopped? Yes No					
	(5) Required Method of Placing Sealed Material					
Formation Type:	Conductor Pipe-Gravity					
Unconsolidated Formation	Dump Bailer Other (Explain)					
Total Well Depth(ft.) $\mathscr{G}'$ , Casting Diameter(in.)	(6) Sealing Materials For monitoring wells and					
(From groundsurface) Casting Depth(ft.)	Neat Cement Grout monitoring well boreholes only					
	Sand-Cement (Concrete) Grout					
Lower Drillhole Diameter (in.) _2"	Concrete   Bentonite Pellets					
	Clay-Sand Slurry   Granular Bentonite					
Was Well Annular Space Grouted? [] Yes [] No [] Unknown	Bentonite-Sand Slurry   🛛 Bentonite - Cement Grout					
It Yes, To What Depth? Feet	X Chipped Bentonite					
(7)	No. Yards					
Material Used To Fill Well/Drillhole	From (Ft.) To (Ft.) Sacks, Sealant (Circle Mix Ratio					
	or Volume One) or Mud Weight					
Granular Bentonite	Surface $8'$ , $13$ lbs					
	<u> </u>					
	<u> </u>					
(8) Comments:						
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY					
Soil Essentials (Dave Paulson)	Date Received/Inspected District/County					
Signature of Person Doing Work   Date Signed						
5/3/09	Reviewer/Inspector					
Street of Route Telephone Number	Noncomplying Work					
W6306 STH 39 (608)527-2355	Follow-up Necessary					
City State Zin Code, New Clama Wi 52574						



NERED OF TTRUCUARA							
<b>Department of Natural Resources</b>		Form	3300-5B	Rev. 3	8-95		
All Abandonment work shall be performed in ac	cordance with the provis	ion of Char	tors NR 9	211 NR 812 or	ND 141	Wie Adm	
Code which were is applicable. Also, soo instructi	condance whit the provis	non or Chap	JUCIS INK C	511, IAN 812 UI	NN 141	, WIS. AUIII.	
(1) CENEDAL INFORMATION	JIS OII DACK.		T 1/1757 ST 4	BAT2			
(1) GENERAL INFORMATION		(2) FACE	LITY NA				
Well/Drillhole/Borehole County		Original W	ell Owner	(If Known)			
Location - $13-6/67-1$ Dane		La Hacien	nda				
	×Ε	Present We	ell Owner				
1/4 of 1/4 of Sec; T:.	N:R W	La Haci	enda				
(If Applicable) Street or Poute				·····			
(II Applicable) Street of Route	Crid Number	515 C D	-l- Cimani				
	Gild Number	515 S. Pa	ark Street				
Grid Location		City, State,	Zip Code				
Ft. 🗍 N. 🗍 S.,	Ft. TE. TW.	Madison	WI				
Civil Town Name		Facility Wa	Il No. and	lor Nome (If Ar		VI Liniana Wall No.	
		Facility we	ii ino. and	for Name (II Ap	vp) (v	vi Unique wen No.	
Madison						· · · · · · · · · · · · · · · · · · ·	
Street Address of Well		Reason For	r Abandon	ment			
515 S. Park Street		NO LON	IGER NEI	EDED			
City, Village		Date of Ah	andonmen	t			
Madison		4/30/09					
WELL/DRILLHOLE/ROREHOLE INFORMAT	TION					·····	
(3) Original Well/Drillhole/Rorehole Construction C	ompleted On	(A) Donth +	o Water A	Feet) 0'			
(5) Original Weil/Drinnole/Dorenole Constituction C	ompleted Off	(+) Deptil (	o water (I	<u> </u>			
(Date) <u>4/30/09</u>		Pump &	Piping Re	moved? 🔲 Ye	s 🗌 No	🛛 Not Applicable	
1		Liner(s) l	Removed?	🗌 Ye	s 🗌 No	🛛 Not Applicable	
Monitoring Well Construction	on Report Available?	Screen R	emoved?	Ye	s 🗍 No	Not Applicable	
Water Well Ves	No	Casting I	Left in Plac	ce?	s 🖾 No		
		If No. E.		Cosing			
		II INO, EX					
X Borehole		Was Cas	ting Cut O	ff Below Surfac	xe?	Yes 🛛 No	
Construction Type:		Did Seali	ng Materi	al Rise to Surfac	ce? [2	🖌 Yes 🛄 No	
Drilled Driven (Sandpoin	nt) 🗌 Dug	Did Mate	erial Settle	After 24 Hours		] Yes 🛛 No	
Other (Specify) Geoprobe		If Yes	s, Was Ho	le Retopped?	Γ	Yes No	
		(5) Poquire	d Mathad	of Diaging Soul	ad Matar		
		(3) Kequire	u memou	of Flacing Seal		lai	
Formation Type:			uctor Pipe	-Gravity		ctor Pipe-Pumped	
Unconsolidated Formation Bedro	ock		Bailer	Ĩ	Other	(Explain)	
						<u>(piun_/</u>	
Total Well Depth(tt.) 2.7 Casting Diar	neter(in.)	(6) Sealing	Materials	For m	onitorin	g wells and	
(From groundsurface) Casting Dep	th(ft.)	Neat	Cement G	rout monit	oring we	ell boreholes only	
		Sand-	Cement (	Concrete) Grout			
Lower Drillhole Diameter (in.) <u>2"</u>		Conci	rete		Bentoni	te Pellets	
		Clay-	Sand Sluri	y I	Granula	r Bentonite	
Was Well Annular Space Grouted? Yes	🗌 No 🕅 Unknown	Bento	onite-Sand	Slurry   🕅	Bentoni	te - Cement Grout	
If Yes. To What Depth?	Feet	Ching	ed Bentor	nite			
	× •••			······			
(7)				No. Yards			
Material Used To Fill Well/Drillhol	e	From (Ft.)	To (Ft.)	Sacks. Sealant	(Circle	Mix Ratio	
				or Volume	One)	or Mud Weight	
01 D		a c		12 11		or much thought	
Granular Bentonite		Surface	7	, IC lbs			
			32,5	2 18			
				- yas			
				**************************************			
·						L	
(8) Comments:							
(9) Name of Person or Firm Doing Sealing Work		(10)	FOR	DNR OR COU	INTY U	SE ONLY	
Soil Essentials (Dave Paulson)		Date Rec	eived/Insr	ected	District	County	
Signature of Person Doing-Work	Date Signed		F			-	
( The offers	5/3/09	Reviewer	/Inspector			nnlying Work	
Oreet or Route	Keviewer/inspector						
	0255	Noncomplying Work					
	-2333	Follow-u	p Necessa	гу			
City, State, Zip Code: New Glarus, Wi 53574		1				I	

Department of Natural Resources	Form 3300-5B Rev. 3-95					
All Abandonment work shall be performed in accordance with the provis	sion of Chapters NR 811, NR 812 or NR 141, Wis. Adm.					
(1) CENERAL INFORMATION	(2) FACILITY NAME					
Well/Drillhole/Borehole / County	Original Well Owner (If Known)					
Location - $B = 7/(-P-3)$ Dane	La Hacienda					
	Present Well Owner					
1/4 of 1/4 of Sec; T:N;R W	La Hacienda					
(If Applicable)Street or Route						
Gov't Lot Grid Number	515 S. Park Street					
Crid Logation	City State Zin Code					
	Medicon WI					
FL. [] P. [] S FL. [] E. [] W.	Facility Well No. and/on News (IS Apr) With the sure Well No.					
Civil Town Name	Facility well No. and/or Name (II App) wit Unique well No.					
Street Address of Well	Reason For Abandonment					
515 C. Davis Streat						
City Village	Date of Abandonment					
Madison	4/30/09					
WELL/DRILLHOLE/BOREHOLE INFORMATION						
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet) 9'					
(Date) $4/30/09$	Pump & Pining Removed? Ves No. X Not Applicable					
(Date)	Liner(s) Removed? $\Box$ Yes $\Box$ No $\boxtimes$ Not Applicable					
Monitoring Well Construction Report Available?	Screen Removed? $\Box$ Yes $\Box$ No $\boxtimes$ Not Applicable					
Water Well Yes No	Casting Left in Place? Yes 🛛 No					
	If No. Explain No Casing					
X Borehole	Was Casting Cut Off Below Surface? Yes X No					
Construction Type:	Did Sealing Material Rise to Surface? X Yes No					
Driven (Sandpoint) Dug	Did Material Settle After 24 Hours Yes X No					
Other (Specify) Geoprobe	If Yes, Was Hole Retopped?					
	(5) Required Method of Placing Sealed Material					
Formation Type:	Conductor Pipe-Gravity					
Total Well Depth(ft.) (9.5' Casting Diameter(in.)	(6) Sealing Materials For monitoring wells and					
(From groundsurface) Casting Depth(ft.)	Neat Cement Grout monitoring well boreholes only					
Leven Deille 1- Dismeter (in ) 0"	Sand-Cement (Concrete) Grout					
Lower Drainole Diameter (in.)	Clay Sand Shurgy					
Was Well Annular Space Grouted? 🗌 Ves 🗍 No. 🗍 Unknown	Bentonite-Sand Slurry   Bentonite - Cement Grout					
If Yes To What Denth?	Chinned Bentonite					
(7)	No. Yards					
Material Used To Fill Well/Drillhole	From (Ft.) To (Ft.) Sacks, Sealant (Circle Mix Ratio					
	or Volume One) or Mud Weight					
Granular Bentonite	Surface 6' 1/ lbs					
	6 28.5 1.500.4					
	┟╍╍╴╴╴╍┝┈╴╌╴┤╴╴╴╴╴╴╴					
(8) Comments:						
(Q) Name of Person of Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY					
Soil Desontials (Dava Daulson)	Data Dessived/Inspected District/County					
Signature of Dereen Deing Work	District/County					
Date Signed	Reviewer/Inspector					
5/2/00	Reviewer/Inspector					
Street or Route	Reviewer/Inspector					
Mu5/3/09Street or RouteTelephone NumberW6306 STH 39(608)527-2355	Reviewer/Inspector     Complying Work       Follow-up Necessary     Noncomplying Work					
Mu5/3/09Street or RouteTelephone NumberW6306 STH 39(608)527-2355City. State. Zip. Code: New Clarus. Wi 53574	Reviewer/Inspector     Complying Work       Follow-up Necessary     Noncomplying Work					

Denartment of Natur	 D Resource	96		Form	3300-5R	Rev 3-95	*** * ###** #* *## %#* ****###* * #					
All Abandonment work shall be ne	formed in	accordance y	with the provis	ision of Chapters NR 811, NR 812 or NR 141, Wis. Adm.								
Code.whichever is applicable. Also.	see instruc	ctions on bac	k.	non or Chap		511, 101 012 01 101						
(1) GENERAL INFORMATION				(2) FACI	LITY NA	ME						
Well/Drillhole/Borehole	County			Original W	ell Owner	(If Known)						
Location - B-7/GP-L	Dane			La Hacienda								
,			⊠E	Present Well Owner								
1/4 of 1/4 of Sec	<u> </u>	N;R	· 🗆 W	La Haci	enda							
(If Applicable)Street or Route Gov't Lot			Grid Number	515 S P	ark Street							
Grid Logation				City State	Zin Code							
		Et 🗍 E	Πw	Madison	wi	¢						
Civil Town Name	<u></u>		• • • • • • • • • • • • • • • • • • • •	Facility We	il No. and	/or Name (If App)	WI Unique Well No					
Madison				racinty we	/i 1 <b>10</b> . and	(or realice (ir repp)	Wi Oinque Wen 110.					
Street Address of Well				Reason For	r Abandon	ment						
515 S Park Street				NO LON	IGER NE	EDED						
City, Village				Date of Ab	andonmer	nt						
Madison				4/30/09		· · · · · · · · · · · · · · · · · · ·						
WELL/DRILLHOLE/BOREHOLE	INFORM	ATION										
(3) Original Well/Drillhole/Borehole (	Construction	n Completed	Un	(4) Depth t	o Water (	Feet) <u>9'</u>						
(Date) <u>4/30/09</u>				Pump &	Piping Re	moved? 🗌 Yes 🗌	No 🖾 Not Applicable					
				Liner(s)	Removed?		No 🖾 Not Applicable					
Monitoring Well	Construc	tion Report A	Available?	Screen R	emoved?	$\square Yes \square$	No 🔀 Not Applicable					
		es 🖂 N	NO		Left in Pla	Cerima	INO					
				If No, Explain No Casing Was Casting Out Off Balow Surface?								
Construction Type				Did Sealing Material Rise to Surface?								
Drilled Dr	iven (Sandr	ooint)	່ງແຜ	Did Material Settle After 24 Hours Yes X No								
Other (Specify) Geoprobe				If Ye	s. Was Ho	le Retopped?						
				(5) Require	d Method	of Placing Sealed M	faterial					
Formation Type					uctor Dine	Gravity DC	anductor Dine-Dumned					
Unconsolidated Formation	ПВе	drock		Dump Bailer Other (Explain)								
Total Wall Donth(ft) 20'	Casting D	hismotor(in)		(6) Sealing Materials For monitoring wells and								
(From groundsurface)	Casting D	enth(ft)		(6) Sealing Materials For monitoring wells and								
(Trom Broundburnet)	0401			Sand-Cement (Concrete) Grout								
Lower Drillhole Diameter (in.)	?"				rete	Ben	tonite Pellets					
	_			Clay-	Sand Slur	ry   🗌 Gra	nular Bentonite					
Was Well Annular Space Grouted	Ye 🗌 Ye	s 🗌 No	Unknown	Bento	onite-Sand	Slurry   🛛 Ben	tonite - Cement Grout					
It Yes, To What Depth?			_ Feet	K Chipp	bed Bento	nite						
(7)						No. Yards						
Material Used To Fil	l Well/Drill	hole		From (Ft.)	To (Ft.)	Sacks, Sealant (Cir	rcle Mix Ratio					
						or Volume O	ne) or Mud Weight					
Granular Bentonite				Surface	7'	10 lbs						
Bentonite growt	-			ר'	38	2 gals						
	·····											
(8) Comments	<u></u>				L	[						
(o) Comments.												
(9) Name of Person or Firm Doing Se			(10)	FOR	DNR OR COUNT	Y USE ONLY						
Soil Essentials (Dave Panlson)					eived/Insp	bected Dis	strict/County					
Signature of Person Doing Work Date Signed					· · · · · · · · · · · · · · · · · · ·							
5/3/09				Reviewer/Inspector								
Street of Route Telephone Number				Follow-up Necessary								
City, State, Zin Code: New Glarus, N	Ni 53574	-2333		Follow-up Necessary								
			•		1	1						

Department of Natur	al Desources	Form	3300-5R	Ray 3.0	
All Abandonment work shall be ne	rformed in accordance with the prov	ision of Chai	nters NR	811 NR 812 or NI	2 141 Wie Adm
Code.whichever is applicable. Also	see instructions on back.	ision of Chap	piers tere	011, IAK 012 01 IA	x 141, Wis, Aum.
(1) GENERAL INFORMATION		(2) FACI	LITY NA	ME	······································
Well/Drillhole/Borehole	County	Original W	ell Owner	· (If Known)	
Location - $B-5/CP-4$	Dane	La Hacier	nda	. ,	
<u></u>	×	Present We	ell Owner		
1/4 of 1/4 of Sec	; T:N;R 🗍 V	V La Haci	ienda		
(If Applicable)Street or Route		1	<del></del>		
Gov't Lot	Grid Number	515 S. P	ark Street		
Grid Location		City, State	Zip Code	9	
$Ft$ , $\Box$ N, $\Box$ S.	Ft. TE. TW.	Madison	WI		
Civil Town Name		Facility We	ell No. and	/or Name (If App)	WI Unique Well No
Madison					
Street Address of Well	ан, маладаала Алдаа ( Алдааланда , , , , , , , , , , , , , , , , , , ,	Reason Fo	r Abandor	nment	<u></u>
515 S. Park Street		NO LON	NGER NE	EDED	
City, Village		Date of Ab	andonmer	nt	
Madison		4/30/09			
WELL/DRILLHOLE/BOREHOLI	E INFORMATION				
(3) Original Well/Drillhole/Borehole	Construction Completed On	(4) Depth t	to Water (	Feet) <u>9'</u>	-
(Date) <u>4/30/09</u>		Pump &	Piping Re	emoved? 🛄 Yes 🗌	No 🛛 Not Applicable
	1	Liner(s)	Removed	? <b>[]</b> Yes [	No 🛛 Not Applicable
Monitoring Well	Construction Report Available?	Screen R	Removed?		No 🛛 Not Applicable
		Casting	Left in Pla	ce? Yes	J NO
Drill Hole		If No, E	xplain <u>N</u>	Casing	
⊠ Borenole Construction Trunc		Was Cas	ting Cut C	Jff Below Surface?	$\square Yes \boxtimes No$
$\Box$ Drilled $\Box$ D	riven (Sandnoint) Dug	Did Seal	nig Materi	After 24 Hours	
$\square$ Other (Specify) Geoprope			was Was Ho	le Retonned?	
Es canor (opecial)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(5) Require	ed Method	of Placing Sealed 1	<u> </u>
		(J) Require			viatoriai
Formation Type:			luctor Pipe	e-Gravity	Conductor Pipe-Pumped
Unconsolidated Formation	Bedrock		p Bailer		Other (Explain)
Total Well Depth(ft.) 33	Casting Diameter(in.)	(6) Sealing	Materials	For mon	itoring wells and
(From groundsurface)	Casting Depth(ft.)	Neat	Cement C	brout monitori	ng well boreholes only
Lower Drillhole Diamotor (in)	יי <b>ר</b>		-Cement (	Concrete) Grout	ntanita Dallata
	<u></u>		Sand Shur		anular Bentonite
Was Well Annular Space Grouted	? Yes No Unknown		onite-Sand	I Slurry   🛛 Be	ntonite - Cement Grout
If Yes, To What Depth?	Feet	Chip	ped Bento	nite	
(7) Material Used To Fil	II Well/Drillhole	From (Et )	To (Et	NO. Yards	irale Mix Patio
Matchai Oscu 1011		110m (11.)	10 (11.)	or Volume	() or Mud Weight
Granular Bentonite		Surface		17 lbs	Sho) of Ivad Ivagin
			23	12.03	
		<u> </u>	21	29015	
(8) Comments:			<u> </u>		
		<u> </u>			······································
(9) Name of Person or Firm Doing Se	aling Work	(10)	FOR	DNR OR COUNT	<b>FY USE ONLY</b>
		Doto Doc	ceived/Insi	pected D	istrict/County
Soil Essentials (Dave Paulson	)	- Date Net		1	
Soil Essentials (Dave Paulson Signature of Person Doing Work	Date Signed				
Signature of Person Doing Work	Date Signed 5/3/09	Reviewer	r/Inspecto	r E	Complying Work
Soil Essentials (Dave Paulson Signature of Person Doing Work Street or Route W6306 STH 39	Date Signed 5/3/09 Telephone Number (608)527-2355	Reviewer	r/Inspecto	r [	] Complying Work ] Noncomplying Work
Soil Essentials (Dave Paulson Signature of Person Doing Work Street or Route W6306 STH 39 City State Zin Code: New Clarus	) Date Signed 5/3/09 Telephone Number (608)527-2355 Wi 53574	Reviewer Follow-u	r/Inspecto	r []	] Complying Work ] Noncomplying Work

# **Appendix B Pace Analytical Laboratory Reports**



May 11, 2009

Robyn Seymour Seymour Environmental Services, INC. 2531 Dyreson Road Mc Farland, WI 53558

RE: Project: LA HACIENDA Pace Project No.: 4016991

Dear Robyn Seymour:

Enclosed are the analytical results for sample(s) received by the laboratory on May 07, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brian Basten

brian.basten@pacelabs.com Project Manager

Enclosures

#### REPORT OF LABORATORY ANALYSIS

Page 1 of 30





## **CERTIFICATIONS**

Project: LA HACIENDA Pace Project No.: 4016991

#### **Green Bay Certification IDs**

Green Bay Certification IDS Wisconsin DATCP Certification #: 105-444 Wisconsin DATCP Certification #: 105-444 Wisconsin Certification #: 405132750 Wisconsin Certification #: 405132750 South Carolina Certification #: 83006001 North Dakota Certification #: R-200 North Dakota Certification #: R-150 North Carolina Certification #: 503 North Carolina Certification #: 503 North Carolina Certification #: 503 New York Certification #: 11887

New York Certification #: 11888 Minnesota Certification #: 055-999-334 Minnesota Certification #: 055-999-334 Minnesota Certification #: 055-999-334 Louisiana Certification #: 04169 Louisiana Certification #: 04168 Kentucky Certification #: 83 Kentucky Certification #: 82 Illinois Certification #: 200051 Illinois Certification #: 20050 Florida/NELAP Certification #: E87951 Florida/NELAP Certification #: E87948

#### **REPORT OF LABORATORY ANALYSIS**

Page 2 of 30





#### SAMPLE SUMMARY

Project: LA HACIENDA Pace Project No.: 4016991

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4016991001	GP-B 4-6	 Solid	04/30/09 08:15	05/07/09 09:00
4016991002	GP-C 4-6	Solid	04/30/09 08:45	05/07/09 09:00
4016991003	GP-D 4-7	Solid	04/30/09 09:15	05/07/09 09:00
4016991004	GP-2 SHALLOW	Water	04/30/09 11:15	05/07/09 09:00
4016991005	GP-2 DEEP	Water	04/30/09 11:45	05/07/09 09:00
4016991006	GP-4 SHALLOW	Water	04/30/09 12:15	05/07/09 09:00
4016991007	GP-4 DEEP	Water	04/30/09 12:45	05/07/09 09:00
4016991008	GP-1 SHALLOW	Water	04/30/09 13:15	05/07/09 09:00
4016991009	GP-1 DEEP	Water	04/30/09 13:45	05/07/09 09:00
4016991010	GP-3 SHALLOW	Water	04/30/09 14:15	05/07/09 09:00
4016991011	GP-3 DEEP	Water	04/30/09 14:45	05/07/09 09:00

## **REPORT OF LABORATORY ANALYSIS**

Page 3 of 30





#### SAMPLE ANALYTE COUNT

Project:LA HACIENDAPace Project No.:4016991

Lab ID	Sample ID	Method	Analysts	Analytes Reported
4016991001	GP-B 4-6	ASTM D2974-87	MRN	1
		EPA 8260	JJB	64
4016991002	GP-C 4-6	ASTM D2974-87	MRN	1
		EPA 8260	JJB	64
4016991003	GP-D 4-7	ASTM D2974-87	MRN	1
		EPA 8260	JJB	64
4016991004	GP-2 SHALLOW	EPA 8260	SMT	64
4016991005	GP-2 DEEP	EPA 8260	SMT	64
4016991006	GP-4 SHALLOW	EPA 8260	SMT	64
4016991007	GP-4 DEEP	EPA 8260	SMT	64
4016991008	GP-1 SHALLOW	EPA 8260	SMT	64
4016991009	GP-1 DEEP	EPA 8260	SMT	. 64
4016991010	GP-3 SHALLOW	EPA 8260	SMT	64
4016991011	GP-3 DEEP	EPA 8260	SMT	64

## **REPORT OF LABORATORY ANALYSIS**

Page 4 of 30





Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-B 4-6	Lab ID:	4016991001	Collected:	04/30/0	9.08.15	Received: 05/	07/09 09·00 Ma	trix: Solid	
Results reported on a "dn/-weight"	hasis		0011001001	0					
Results reported on a "dry-weight	00313								
Parameters	Results	Units		LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA 8	3260 Prepara	tion Meth	od: EPA	5035/5030B			
Benzene	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	71-43-2	w
Bromobenzene	<39.1 u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	108-86 <b>-1</b>	W
Bromochloromethane	<39.1 u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	74-97-5	W
Bromodichloromethane	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	75-27-4	W
Bromoform	<40.5 u	g/kg	93.8	40.5	1	05/08/09 09:09	05/08/09 18:19	75-25 <b>-</b> 2	W
Bromomethane	<39.1 u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	74-83-9	W
n-Butylbenzene	<b>&lt;63.1</b> u	g/kg	93.8	63.1	1	05/08/09 09:09	05/08/09 18:19	104-51-8	W
sec-Butylbenzene	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	135-98-8	W
tert-Butylbenzene	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	98-06-6	W
Carbon tetrachloride	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	56-23-5	W
Chlorobenzene	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	108-90-7	W
Chloroethane	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	75-00-3	CC,L1, W
Chloroform	< <b>39.1</b> u	q/kq	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	67-66-3	W
Chloromethane	<39.1 u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	74-87-3	w
2-Chlorotoluene	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	95-49-8	w
4-Chlorotoluene	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	106-43-4	W
1,2-Dibromo-3-chloropropane	<129 u	g/kg	391	129	1	05/08/09 09:09	05/08/09 18:19	96-12-8	w
Dibromochloromethane	<b>&lt;39.1</b> u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	124-48-1	w
1.2-Dibromoethane (EDB)	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	106-93-4	w
Dibromomethane	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	74-95-3	W
1.2-Dichlorobenzene	<69.4 u	a/ka	93.8	69.4	1	05/08/09 09:09	05/08/09 18:19	95-50-1	W
1.3-Dichlorobenzene	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	541-73-1	W
1.4-Dichlorobenzene	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	106-46-7	W
Dichlorodifluoromethane	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	75-71-8	W
1.1-Dichloroethane	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	75-34-3	W
1.2-Dichloroethane	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	107-06-2	W
1 1-Dichloroethene	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	75-35-4	W
cis-1 2-Dichloroethene	< <b>39.1</b> u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	156-59-2	w
trans-1.2-Dichloroethene	< <b>39.1</b> u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	156-60-5	W
1.2-Dichloropropane	< <b>39.1</b> u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	78-87-5	w
1.3-Dichloropropane	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	142-28-9	Ŵ
2.2-Dichloropropane	< <b>39.1</b> u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	594-20-7	W
1.1-Dichloropropene	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	563-58-6	W
cis-1.3-Dichloropropene	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	10061-01-5	W
trans-1.3-Dichloropropene	< <b>39.1</b> u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	10061-02-6	W
Diisopropyl ether	< <b>39.1</b> u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	108-20-3	Ŵ
Ethvibenzene	< <b>39.1</b> u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	100-41-4	W
Hexachloro-1.3-butadiene	< <b>41.2</b> µ	a/ka	93.8	41.2	1	05/08/09 09:09	05/08/09 18:19	87-68-3	w
Isopropylbenzene (Cumene)	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	98-82-8	w
n-Isopropyltoluene	< <b>39.1</b> µ	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	99-87-6	W
Methylene Chloride	< <b>39.1</b> u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	75-09-2	W
Methyl-tert-butyl ether	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	1634-04-4	W
Naphthalene	<39.1 u	a/ka	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	91-20-3	Ŵ
n-Propylbenzene	<39.1 u	g/kg	93.8	39.1	1	05/08/09 09:09	05/08/09 18:19	103-65-1	W

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-B 4-6 Lab ID: 4016991001 Collected: 04/30/09 08:15 Received: 05/07/09 09:00 Matrix: Solid Results reported on a "dry-weight" basis Parameters Results Units LOQ LOD DF Prepared Analyzed CAS No. Qual 8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B 93.8 <39.1 ug/kg 39.1 1 05/08/09 09:09 05/08/09 18:19 100-42-5 w Styrene 1,1,1,2-Tetrachloroethane <39.1 ug/kg 93.8 39.1 05/08/09 09:09 05/08/09 18:19 630-20-6 w 1 1,1,2,2-Tetrachioroethane <39.1 ug/kg 93.8 39.1 1 05/08/09 09:09 05/08/09 18:19 79-34-5 W 39.1 05/08/09 09:09 Tetrachloroethene <39.1 ug/kg 93.8 1 05/08/09 18:19 127-18-4 w 93.8 39.1 05/08/09 09:09 05/08/09 18:19 108-88-3 w Toluene <39.1 ug/kg 1 <39.1 ug/kg 93.8 39.1 05/08/09 09:09 05/08/09 18:19 87-61-6 w 1.2.3-Trichlorobenzene 1 1,2,4-Trichlorobenzene <39.1 ug/kg 93.8 39.1 1 05/08/09 09:09 05/08/09 18:19 120-82-1 w 93.8 39.1 1,1,1-Trichloroethane <39.1 ug/kg 1 05/08/09 09:09 05/08/09 18:19 71-55-6 w 1,1,2-Trichloroethane <39.1 ug/kg 93.8 39.1 05/08/09 09:09 05/08/09 18:19 79-00-5 W 1 Trichloroethene <39.1 ug/kg 93.8 39.1 1 05/08/09 09:09 05/08/09 18:19 79-01-6 w Trichlorofluoromethane <39.1 ug/kg 93.8 39.1 1 05/08/09 09:09 05/08/09 18:19 75-69-4 w 93.8 05/08/09 09:09 05/08/09 18:19 96-18-4 w 1,2,3-Trichloropropane <39.1 ug/kg 39.1 1 93.8 39.1 05/08/09 09:09 05/08/09 18:19 95-63-6 w 1,2,4-Trimethylbenzene <39.1 ug/kg 1 1,3,5-Trimethylbenzene <39.1 ug/kg 93.8 39.1 1 05/08/09 09:09 05/08/09 18:19 108-67-8 w 93.8 39.1 05/08/09 09:09 05/08/09 18:19 75-01-4 Vinyl chloride <39.1 ug/kg 1 w m&p-Xylene <78.1 ug/kg 188 78.1 1 05/08/09 09:09 05/08/09 18:19 1330-20-7 W o-Xylene <39.1 ug/kg 93.8 39.1 1 05/08/09 09:09 05/08/09 18:19 95-47-6 w Dibromofluoromethane (S) 251 % 70-150 1 05/08/09 09:09 05/08/09 18:19 1868-53-7 1j 70-155 05/08/09 09:09 05/08/09 18:19 2037-26-5 Toluene-d8 (S) 249 % 1 1j 70-147 1 05/08/09 09:09 05/08/09 18:19 460-00-4 4-Bromofluorobenzene (S) 232 % 1j Percent Moisture Analytical Method: ASTM D2974-87 Percent Moisture 21.2 % 0.10 0.10 1 05/08/09 08:19 Sample: GP-C 4-6 Lab ID: 4016991002 Collected: 04/30/09 08:45 Received: 05/07/09 09:00 Matrix: Solid Results reported on a "dry-weight" basis

LOQ LOD Parameters Results Units DF Prepared Analyzed CAS No. Qual 8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Benzene <27.0 ug/kg 64.9 27.0 1 05/08/09 09:09 05/08/09 18:42 71-43-2 W Bromobenzene <27.0 ug/kg 64.9 27.0 1 05/08/09 09:09 05/08/09 18:42 108-86-1 W Bromochloromethane 64.9 <27.0 ug/kg 27.0 05/08/09 09:09 05/08/09 18:42 74-97-5 W 1 64.9 Bromodichloromethane <27.0 ug/kg 27 0 05/08/09 09:09 05/08/09 18:42 75-27-4 w 1 Bromoform <28.0 ug/kg 64.9 28.0 1 05/08/09 09:09 05/08/09 18:42 75-25-2 w <27.0 ug/kg Bromomethane 64.9 27.0 1 05/08/09 09:09 05/08/09 18:42 74-83-9 W n-Butylbenzene <43.7 ug/kg 64.9 43.7 1 05/08/09 09:09 05/08/09 18:42 104-51-8 w 64.9 27.0 05/08/09 09:09 05/08/09 18:42 135-98-8 sec-Butylbenzene <27.0 ug/kg 1 w tert-Butylbenzene <27.0 ug/kg 64.9 27.0 1 05/08/09 09:09 05/08/09 18:42 98-06-6 W Carbon tetrachloride <27.0 ug/kg 64.9 27.0 1 05/08/09 09:09 05/08/09 18:42 56-23-5 W 27.0 05/08/09 09:09 05/08/09 18:42 108-90-7 Chlorobenzene <27.0 ug/kg 64.9 1 w CC,L1, Chloroethane <27.0 ug/kg 64.9 27.0 05/08/09 09:09 05/08/09 18:42 75-00-3 1 w Chloroform <27.0 ug/kg 64.9 27.0 1 05/08/09 09:09 05/08/09 18:42 67-66-3 w

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## REPORT OF LABORATORY ANALYSIS

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-C 4-6	Lab ID:	4016991002	Collected:	04/30/09	9 08:45	Received: 05/	07/09 09:00 Ma	atrix: Solid	
Results reported on a "dry-weight"	" basis								
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytica	Il Method: EPA 8	3260 Prepara	ation Meth	od: EPA	5035/5030B		3	
Chloromethane	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	74-87-3	w
2-Chlorotoluene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	95-49-8	W
4-Chlorotoluene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	106-43-4	W
1,2-Dibromo-3-chloropropane	<89.0	ug/kg	270	89.0	1	05/08/09 09:09	05/08/09 18:42	96-12-8	W
Dibromochloromethane	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	124-48-1	W
1,2-Dibromoethane (EDB)	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	106-93-4	W
Dibromomethane	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	74-95-3	W
1,2-Dichlorobenzene	<48.0	ug/kg	64.9	48.0	1	05/08/09 09:09	05/08/09 18:42	95-50-1	W
1,3-Dichlorobenzene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	541-73-1	W
1,4-Dichlorobenzene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	106-46-7	W
Dichlorodifluoromethane	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	75-71-8	W
1,1-Dichloroethane	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	75-34-3	W
1,2-Dichloroethane	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	107-06-2	W
1,1-Dichloroethene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	75-35-4	W
cis-1,2-Dichloroethene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	156-59-2	W
trans-1,2-Dichloroethene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	156-60-5	W
1,2-Dichloropropane	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	78-87-5	W
1.3-Dichloropropane	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	142-28-9	w
2.2-Dichloropropane	<27.0	ug/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	594-20-7	W
1.1-Dichloropropene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	563-58-6	w
cis-1.3-Dichloropropene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	10061-01-5	W
trans-1.3-Dichloropropene	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	10061-02-6	w
Diisopropyl ether	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	108-20-3	w
Ethylbenzene	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	100-41-4	w
Hexachloro-1.3-butadiene	<28.5	ua/ka	64.9	28.5	1	05/08/09 09:09	05/08/09 18:42	87-68-3	w
Isopropylbenzene (Cumene)	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	98-82-8	w
p-Isopropyltoluene	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	99-87-6	w
Methylene Chloride	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	75-09-2	w
Methyl-tert-butyl ether	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	1634-04-4	w
Naphthalene	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	91-20-3	w
n-Propylbenzene	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	103-65-1	w
Styrene	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	100-42-5	w
1.1.1.2-Tetrachloroethane	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	630-20-6	w
1 1 2 2-Tetrachloroethane	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	79-34-5	w
Tetrachloroethene	325	ug/kg	69.7	29.0	1	05/08/09 09:09	05/08/09 18:42	127-18-4	••
Toluene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	108-88-3	w
1 2 3-Trichlorobenzene	<27.0	ug/kg ug/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	87-61-6	w
1 2 4-Trichlorobenzene	<27.0	ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	120-82-1	w
1 1 1-Trichloroethane	<27.0	ug/kg ug/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	71-55-6	w
1 1 2-Trichloroethane	<27.0	ug/kg ug/kg	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	79-00-5	w
Trichloroethene	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	79-01-6	w
Trichlorofluoromethane	<27.0	ua/ka	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	75-69-4	 W
1 2 3-Trichloronronane	<27.0	ug/ng	64.9	27.0	1	05/08/09 09:09	05/08/09 18:42	96-18-4	w w
1.2.4-Trimothylbenzene	<27.0	vy/Ny Na/ka	64.0	27.0	1	05/08/09 09:09	05/08/00 18:42	05-63-6	νν \\\/
1.2.5 Trimethylbonzono	~27.0	ug/kg	64.9	27.0	1	05/08/00 00:00	05/08/00 19:42	109-67-9	v v \\/
r,ə,ə-mmetnyibenzene	\$21.0	uy/ky	04.9	21.0	1	00/00/09 09:09	03/00/09 10:42	100-07-0	vv

Date: 05/11/2009 02:05 PM

## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-C 4-6 Lab ID: 4016991002 Collected: 04/30/09 08:45 Received: 05/07/09 09:00 Matrix: Solid Results reported on a "dry-weight" basis Units LOO LOD DF CAS No. Parameters Results Prepared Analyzed Qual Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B 8260 MSV Med Level Normal List 64.9 27.0 05/08/09 09:09 05/08/09 18:42 75-01-4 w Vinyl chloride <27.0 ug/kg 1 05/08/09 09:09 m&p-Xylene <54.1 ug/kg 130 54.1 1 05/08/09 18:42 1330-20-7 w o-Xylene <27.0 ug/kg 64.9 27.0 1 05/08/09 09:09 05/08/09 18:42 95-47-6 W Dibromofluoromethane (S) 153 % 70-150 05/08/09 09:09 05/08/09 18:42 1868-53-7 1 1j 70-155 05/08/09 09:09 05/08/09 18:42 2037-26-5 Toluene-d8 (S) 153 % 1 140 % 70-147 05/08/09 09:09 05/08/09 18:42 460-00-4 4-Bromofluorobenzene (S) 1 **Percent Moisture** Analytical Method: ASTM D2974-87 Percent Moisture 6.9 % 0.10 0.10 1 05/08/09 08:19

Collected: 04/30/09 09:15

Received: 05/07/09 09:00

Matrix: Solid

Sample: GP-D 4-7 Lab ID: 4016991003 Results reported on a "dry-weight" basis

Parameters Results Units LOQ LOD DF Prepared Analyzed CAS No. Qual 8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 71-43-2 W Benzene Bromobenzene <25.0 ug/kg 60.0 25.0 05/08/09 09:09 05/08/09 19:05 108-86-1 W 1 60.0 25.0 05/08/09 19:05 74-97-5 Bromochloromethane <25.0 ug/kg 1 05/08/09 09:09 W <25.0 ug/kg 60.0 25.0 Bromodichloromethane 05/08/09 09:09 05/08/09 19:05 75-27-4 w 1 Bromoform <25.9 ug/kg 60.0 25.9 1 05/08/09 09:09 05/08/09 19:05 75-25-2 W <25.0 ug/kg Bromomethane 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 74-83-9 W n-Butylbenzene <40.4 ug/kg 60.0 40.4 1 05/08/09 09:09 05/08/09 19:05 104-51-8 w 60.0 25.0 05/08/09 09:09 05/08/09 19:05 135-98-8 W sec-Butylbenzene <25.0 ug/kg 1 tert-Butylbenzene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 98-06-6 W Carbon tetrachloride <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 56-23-5 w 60.0 25.0 05/08/09 09:09 05/08/09 19:05 108-90-7 Chlorobenzene <25.0 ug/kg 1 w Chloroethane 60.0 25.0 05/08/09 09:09 05/08/09 19:05 75-00-3 CC,L1, <25.0 ug/kg 1 w Chloroform <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 67-66-3 W Chloromethane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 74-87-3 w <25.0 ug/kg 05/08/09 09:09 05/08/09 19:05 95-49-8 60.0 25.0 2-Chlorotoluene 1 w 4-Chlorotoluene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 106-43-4 w 1.2-Dibromo-3-chloropropane 250 82.3 05/08/09 09:09 05/08/09 19:05 96-12-8 W <82.3 ug/kg 1 Dibromochloromethane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 124-48-1 W 60.0 25.0 05/08/09 09:09 05/08/09 19:05 1,2-Dibromoethane (EDB) <25.0 ug/kg 1 106-93-4 W <25.0 ug/kg Dibromomethane 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 74-95-3 W 1,2-Dichlorobenzene <44.4 ug/kg 60.0 44.4 1 05/08/09 09:09 05/08/09 19:05 95-50-1 W 1,3-Dichlorobenzene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 541-73-1 w 60.0 25.0 05/08/09 19:05 106-46-7 <25.0 ug/kg 1 05/08/09 09:09 w 1.4-Dichlorobenzene <25.0 ug/kg 60.0 25.0 05/08/09 19:05 75-71-8 Dichlorodifluoromethane 1 05/08/09 09:09 W <25.0 ug/kg 60.0 25.0 05/08/09 09:09 05/08/09 19:05 75-34-3 W 1.1-Dichloroethane 1 1,2-Dichloroethane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 107-06-2 w 1,1-Dichloroethene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 75-35-4 W

Date: 05/11/2009 02:05 PM

## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-D 4-7 Lab ID: 4016991003 Collected: 04/30/09 09:15 Received: 05/07/09 09:00 Matrix: Solid Results reported on a "dry-weight" basis LOQ DF Parameters Results Units LOD Prepared Analyzed CAS No. Qual 8260 MSV Med Level Normal List Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B cis-1,2-Dichloroethene 60.0 25.0 05/08/09 09:09 <25.0 ug/kg 1 05/08/09 19:05 156-59-2 w trans-1,2-Dichloroethene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 156-60-5 W 1,2-Dichloropropane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 78-87-5 w 1,3-Dichloropropane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 142-28-9 W 25.0 2,2-Dichloropropane <25.0 ug/kg 60.0 1 05/08/09 09:09 05/08/09 19:05 594-20-7 W 60.0 25.0 1,1-Dichloropropene <25.0 ug/kg 1 05/08/09 09:09 05/08/09 19:05 563-58-6 w cis-1,3-Dichloropropene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 10061-01-5 w trans-1,3-Dichloropropene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 10061-02-6 W 25.0 Diisopropyl ether <25.0 ug/kg 60.0 1 05/08/09 09:09 05/08/09 19:05 108-20-3 W Ethylbenzene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 100-41-4 W Hexachloro-1,3-butadiene <26.4 ug/kg 60.0 26.4 1 05/08/09 09:09 05/08/09 19:05 87-68-3 W Isopropylbenzene (Cumene) 60.0 25.0 <25.0 ua/ka 1 05/08/09 09:09 05/08/09 19:05 98-82-8 W <25.0 ug/kg 60.0 25.0 w p-lsopropyltoluene 1 05/08/09 09:09 05/08/09 19:05 99-87-6 Methylene Chloride <25.0 ug/kg 60.0 25.0 05/08/09 09:09 1 05/08/09 19:05 75-09-2 w Methyl-tert-butyl ether <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 1634-04-4 W Naphthalene <25.0 ug/kg 60.0 25.0 05/08/09 09:09 05/08/09 19:05 91-20-3 1 w n-Propylbenzene <25.0 ug/kg 60.0 25.0 05/08/09 09:09 05/08/09 19:05 103-65-1 W 1 Styrene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 100-42-5 W 1,1,1,2-Tetrachloroethane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 630-20-6 w <25.0 ug/kg 60.0 1,1,2,2-Tetrachloroethane 25.0 05/08/09 09:09 05/08/09 19:05 79-34-5 1 w <25.0 ug/kg 25.0 05/08/09 09:09 Tetrachloroethene 60.0 1 05/08/09 19:05 127-18-4 w Toluene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 108-88-3 w 1,2,3-Trichlorobenzene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 87-61-6 W 1,2,4-Trichlorobenzene 60.0 25.0 05/08/09 09:09 05/08/09 19:05 <25.0 ug/kg 1 120-82-1 w 1,1,1-Trichloroethane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 71-55-6 W 1,1,2-Trichloroethane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 79-00-5 W Trichloroethene 60.0 25.0 <25.0 ug/kg 1 05/08/09 09:09 05/08/09 19:05 79-01-6 w 60.0 25.0 Trichlorofluoromethane <25.0 ug/kg 1 05/08/09 09:09 05/08/09 19:05 75-69-4 w 1,2,3-Trichloropropane <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 96-18-4 w 1,2,4-Trimethylbenzene 60.0 25.0 05/08/09 09:09 <25.0 ug/kg 1 05/08/09 19:05 95-63-6 w 1,3,5-Trimethylbenzene <25.0 ug/kg 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 108-67-8 W 60.0 Vinyl chloride <25.0 ug/kg 25.0 1 05/08/09 09:09 05/08/09 19:05 75-01-4 W m&p-Xylene <50.0 ug/kg 120 50.0 1 05/08/09 09:09 05/08/09 19:05 1330-20-7 w o-Xylene 60.0 25.0 1 05/08/09 09:09 05/08/09 19:05 95-47-6 w <25.0 ug/kg Dibromofluoromethane (S) 125 % 70-150 1 05/08/09 09:09 05/08/09 19:05 1868-53-7 Toluene-d8 (S) 121 % 70-155 1 05/08/09 09:09 05/08/09 19:05 2037-26-5 4-Bromofluorobenzene (S) 104 % 70-147 1 05/08/09 09:09 05/08/09 19:05 460-00-4 **Percent Moisture** Analytical Method: ASTM D2974-87 Percent Moisture 26.3 % 05/08/09 08:19 0.10 0.10 1

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#### **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-2 SHALLOW	Lab ID:	4016991004	Collecte	d: 04/30/09	9 11:15	Received: 05	5/07/09 09:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytica	I Method: EPA 8	3260						
Benzene	<0.41	ug/L	1.0	0.41	1		05/08/09 16:18	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		05/08/09 16:18	108-86-1	
Bromochloromethane	<0.97 (	ug/L	1.0	0.97	1		05/08/09 16:18	74-97-5	
Bromodichloromethane	<0.56 (	ug/L	1.0	0.56	1		05/08/09 16:18	75-27-4	
Bromoform	<0.94 (	ug/L	1.0	0.94	1		05/08/09 16:18	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		05/08/09 16:18	74-83-9	
n-Butylbenzene	<0.93 (	ug/L	1.0	0.93	1		05/08/09 16:18	104-51-8	
sec-Butylbenzene	<0.89 (	ug/L	5.0	0.89	1		05/08/09 16:18	135-98-8	
tert-Butylbenzene	<0.97 (	ug/L	1.0	0.97	1		05/08/09 16:18	98-06-6	
Carbon tetrachloride	<0.49 (	ug/L	1.0	0.49	1		05/08/09 16:18	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		05/08/09 16:18	108-90-7	
Chloroethane	<0.97 (	ug/L	1.0	0.97	1		05/08/09 16:18	75-00-3	
Chloroform	<1.3 (	ug/L	5.0	1.3	1		05/08/09 16:18	67-66-3	
Chloromethane	<0.24 (	ug/L	1.0	0.24	1		05/08/09 16:18	74-87-3	
2-Chlorotoluene	<0.85 (	ug/L	1.0	0.85	1		05/08/09 16:18	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		05/08/09 16:18	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		05/08/09 16:18	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		05/08/09 16:18	124-48-1	
1,2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		05/08/09 16:18	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		05/08/09 16:18	74-95-3	
1,2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		05/08/09 16:18	95-50-1	
1,3-Dichlorobenzene	<0.87	ug/L	1.0	0.87	1		05/08/09 16:18	541-73-1	
1,4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		05/08/09 16:18	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		05/08/09 16:18	75-71-8	
1,1-Dichloroethane	<0.75	ug/L	1.0	0.75	1		05/08/09 16:18	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		05/08/09 16:18	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		05/08/09 16:18	75-35-4	
cis-1,2-Dichloroethene	<0.83	ug/L	1.0	0.83	1		05/08/09 16:18	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		05/08/09 16:18	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		05/08/09 16:18	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		05/08/09 16:18	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		05/08/09 16:18	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		05/08/09 16:18	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		05/08/09 16:18	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		05/08/09 16:18	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		05/08/09 16:18	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		05/08/09 16:18	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		05/08/09 16:18	87-68-3	
Isopropylbenzene (Cumene)	<0.59 (	ug/L	1.0	0.59	1		05/08/09 16:18	98-82-8	
p-isopropyltoluene	<0.67	ug/L	1.0	0.67	1		05/08/09 16:18	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		05/08/09 16:18	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		05/08/09 16:18	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		05/08/09 16:18	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		05/08/09 16:18	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		05/08/09 16:18	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		05/08/09 16:18	630-20-6	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-2 SHALLOW	Lab ID:	4016991004	Collecter	d: 04/30/0	9 11:15	Received: 0	5/07/09 09:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 8	3260						
1,1,2,2-Tetrachloroethane	<b>&lt;0.20</b> u	g/L	1.0	0.20	1		05/08/09 16:18	79-34-5	
Tetrachloroethene	<b>&lt;0.45</b> u	g/L	1.0	0.45	1		05/08/09 16:18	127-18-4	
Toluene	<0.67 u	g/L	1.0	0.67	1		05/08/09 16:18	108-88-3	
1.2.3-Trichlorobenzene	<0.74 u	a/L	1.0	0.74	1		05/08/09 16:18	87-61-6	
1.2.4-Trichlorobenzene	<0.97 u	a/L	1.0	0.97	1		05/08/09 16:18	120-82-1	
1.1.1-Trichloroethane	<0.90 u	a/L	1.0	0.90	1		05/08/09 16:18	71-55-6	
1.1.2-Trichloroethane	<0.42 u	a/L	1.0	0.42	1		05/08/09 16:18	79-00-5	
Trichloroethene	<0.48 u	.g/L	1.0	0.48	1		05/08/09 16:18	79-01-6	
Trichlorofluoromethane	<0.79 u	ig/L	1.0	0.79	1		05/08/09 16:18	75-69-4	
1 2 3-Trichloronronane	<0.99 u	ig/L	1.0	0.70	1		05/08/09 16:18	96-18-4	
1.2.4-Trimetbylbenzene	<0.05 u	a/L	1.0	0.00	1		05/08/09 16:18	95-63-6	
1 3 5-Trimethylbenzene	<0.37 u		1.0	0.37	1		05/08/09 16:18	108-67-8	
Vipul oblogida	<0.05 u	ig/L	1.0	0.00	1		05/00/05 10:10	75 01 4	
	<0.18 u	lg/∟ ∽/l	1.0	1.0	1		05/06/09 10.10	10-01-4	
map-Aylene	<1.0 u	ig/L	2.0	1.0			05/06/09 10:16	1330-20-7	
o-xylene	<0.83 u	g/L	1.0	0.83	1		05/08/09 16:18	95-47-6	
4-Bromolluorobenzene (S)	90 %	(o	70-130		1		05/08/09 16:18	460-00-4	
Dibromotiuoromethane (S)	104 %	ίο ,	70-130		1		05/08/09 16:18	1868-53-7	
Ioluene-d8 (S)	106 %	ά	70-130		1		05/08/09 16:18	2037-26-5	
Sample: GP-2 DEEP	Lab ID:	4016991005	Collected	d: 04/30/0	9 11:45	Received: 0	5/07/09 09:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 8	3260						
Benzene	<b>&lt;0.41</b> u	g/L	1.0	0.41	1		05/08/09 15:55	71-43-2	
Bromobenzene	< <b>0.82</b> u	a/L	1.0	0.82	1		05/08/09 15:55	108-86-1	
Bromochloromethane	<0.97 u	a/L	1.0	0.97	1		05/08/09 15:55	74-97-5	
Bromodichloromethane	<0.56 u	a/L	1.0	0.56	1		05/08/09 15:55	75-27-4	
Bromoform	<0.94 u	a/L	1.0	0.94	1		05/08/09 15:55	75-25-2	
Bromomethane	<0.91 u	a/L	1.0	0.91	1		05/08/09 15:55	74-83-9	
n-Butvlbenzene	<0.93 u	a/L	1.0	0.93	1		05/08/09 15:55	104-51-8	
sec-Butylbenzene	<0.89 u	a/L	5.0	0.89	1		05/08/09 15:55	135-98-8	
tert-Butvibenzene	<0.97 u	ια/L	1.0	0.97	1		05/08/09 15:55	98-06-6	
Carbon tetrachloride	<0.49 µ	a/l	10	0.49	1		05/08/09 15:55	56-23-5	
Chlorobenzene	<0.41 1	ig/L	1.0	0.10	1		05/08/09 15:55	108-90-7	
Chloroethane	<0.97 1	ig/L	1.0	0.11	1		05/08/00 15:55	75-00-3	
Chloroform	<1.3 1	ig/L	5.0	1 2	1		05/09/09 15:55	67-66-3	
Chloromethane	~1.3 U	igi L Ind/I	1.0	1.3	1		05/08/00 15:55	74-87.2	
	<0.24 u	lg/∟	1.0	0.24	1		05/06/09 15:55	14-01-3	
	< U.85 U	iy/L	1.0	0.05	1		05/06/09 15:55	90-49-8 106 49 4	
	<0.74 u	iy/L	1.0	0.74	1		05/06/09 15:55	100-43-4	
I,∠-Dipromo-3-chioropropane	<1.7 u	ig/L	5.0	1./	1		05/08/09 15:55	90-12-8	
	<0.81 u	ig/L	1.0	0.81	1		05/08/09 15:55	124-48-1	
1,2-Dibromoethane (EDB)	<0.56 u	ig/L	1.0	0.56	1		05/08/09 15:55	106-93-4	
Dibromomethane	<0.60 u	Ig/L	1.0	0.60	1		05/08/09 15:55	/4-95-3	

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-2 DEEP	Lab ID:	4016991005	Collected	d: 04/30/0	9 11:45	Received: 05	/07/09 09:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	I Method: EPA 8	3260						
1,2-Dichlorobenzene	<0.83 ເ	ıg/L	1.0	0.83	1		05/08/09 15:55	95-50-1	
1,3-Dichlorobenzene	<b>&lt;0.87</b> ເ	ıg/L	1.0	0.87	1		05/08/09 15:55	541-73-1	
1,4-Dichlorobenzene	<0.95 ເ	ıg/L	1.0	0.95	1		05/08/09 15:55	106-46-7	
Dichlorodifluoromethane	<b>&lt;0.99</b> u	ıg/L	1.0	0.99	1		05/08/09 15:55	75-71-8	
1,1-Dichloroethane	<b>&lt;0.75</b> ເ	ıg/L	1.0	0.75	1		05/08/09 15:55	75-34-3	
1,2-Dichloroethane	<b>&lt;0.36</b> L	ıg/L	1.0	0.36	1		05/08/09 15:55	107-06-2	
1,1-Dichloroethene	<b>&lt;0.57</b> ເ	ıg/L	1.0	0.57	1		05/08/09 15:55	75-35-4	
cis-1,2-Dichloroethene	<0.83 u	ıg/L	1.0	0.83	1		05/08/09 15:55	156-59-2	
trans-1,2-Dichloroethene	<0.89 ເ	ıg/L	1.0	0.89	1		05/08/09 15:55	156-60-5	
1,2-Dichloropropane	<b>&lt;0.49</b> ເ	ıg/L	1.0	0.49	1		05/08/09 15:55	78-87-5	
1,3-Dichloropropane	<b>&lt;0.61</b> ເ	ıg/L	1.0	0.61	1		05/08/09 15:55	142-28-9	
2,2-Dichloropropane	<b>&lt;0.62</b> ເ	ıg/L	1.0	0.62	1		05/08/09 15:55	594-20-7	
1,1-Dichloropropene	<0.75 ເ	ıg/L	1.0	0.75	1		05/08/09 15:55	563-58-6	
cis-1,3-Dichloropropene	<0.20 u	Jg/L	1.0	0.20	1		05/08/09 15:55	10061-01-5	
trans-1,3-Dichloropropene	<b>&lt;0.19</b> ເ	ıg/L	1.0	0.19	1		05/08/09 15:55	10061-02-6	
Diisopropyl ether	<0.76 u	ıg/L	1.0	0.76	1		05/08/09 15:55	108-20-3	
Ethylbenzene	<0.54 ເ	ig/L	1.0	0.54	1		05/08/09 15:55	100-41-4	
Hexachloro-1,3-butadiene	<b>&lt;0.67</b> ເ	ıg/L	5.0	0.67	1		05/08/09 15:55	87-68-3	
Isopropylbenzene (Cumene)	<0.59 ເ	ıg/L	1.0	0.59	1		05/08/09 15:55	98-82-8	
p-isopropyitoluene	<b>&lt;0.67</b> ເ	ug/L	1.0	0.67	1		05/08/09 15:55	99-87-6	
Methylene Chloride	<0.43 u	ig/L	1.0	0.43	1		05/08/09 15:55	75-09-2	
Methyl-tert-butyl ether	<0.61 ເ	ıg/L	1.0	0.61	1		05/08/09 15:55	1634-04-4	
Naphthalene	<b>&lt;0.8</b> 9 ເ	Jg/L	5.0	0.89	1		05/08/09 15:55	91-20-3	
n-Propylbenzene	< <b>0.81</b> L	ıg/L	1.0	0.81	1		05/08/09 15:55	103-65-1	
Styrene	<b>&lt;0.86</b> L	ug/L	1.0	0.86	1		05/08/09 15:55	100-42-5	
1,1,1,2-Tetrachloroethane	<b>&lt;0.92</b> ເ	ıg/L	1.0	0.92	1		05/08/09 15:55	630-20-6	
1,1,2,2-Tetrachloroethane	<0.20 u	ıg/L	1.0	0.20	1		05/08/09 15:55	79-34-5	
Tetrachloroethene	<b>&lt;0.45</b> ເ	ig/L	1.0	0.45	1		05/08/09 15:55	127-18-4	
Toluene	<b>&lt;0.67</b> L	ıg/L	1.0	0.67	1		05/08/09 15:55	108-88-3	
1,2,3-Trichlorobenzene	<b>&lt;0.74</b> ເ	ig/L	1.0	0.74	1		05/08/09 15:55	87-61-6	
1,2,4-Trichlorobenzene	<b>&lt;0.97</b> ເ	ığ/L	1.0	0.97	1		05/08/09 15:55	120-82-1	
1,1,1-Trichloroethane	<0.90 u	ug/L	1.0	0.90	1		05/08/09 15:55	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.42</b> ເ	ıg/L	1.0	0.42	1		05/08/09 15:55	79-00-5	
Trichloroethene	< <b>0.48</b> נ	lg/L	1.0	0.48	1		05/08/09 15:55	79-01-6	
Trichlorofluoromethane	<0.79 u	ig/L	1.0	0.79	1		05/08/09 15:55	75-69-4	
1,2,3-Trichloropropane	<b>&lt;0.99</b> ເ	.g/L	1.0	0.99	1		05/08/09 15:55	96-18-4	
1,2,4-Trimethylbenzene	<b>&lt;0.97</b> ເ	Jg/L	1.0	0.97	1		05/08/09 15:55	95-63-6	
1,3,5-Trimethylbenzene	<0.83 ເ	ig/L	1.0	0.83	1		05/08/09 15:55	108-67-8	
Vinyl chloride	< <b>0.18</b> u	ig/L	1.0	0.18	1		05/08/09 15:55	75-01-4	
m&p-Xylene	<1.8 ເ	ig/L	2.0	1.8	1		05/08/09 15:55	1330-20-7	
o-Xylene	< <b>0.83</b> L	ig/L	1.0	0.83	1		05/08/09 15:55	95-47-6	
4-Bromofluorobenzene (S)	98 9	6	70-130		1		05/08/09 15:55	460-00-4	
Dibromofluoromethane (S)	101 9	%	70-130		1		05/08/09 15:55	1868-53-7	
Toluene-d8 (S)	106 9	%	70-130		1		05/08/09 15:55	2037-26-5	

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#### **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-4 SHALLOW	Lab ID:	4016991006	Collecte	d: 04/30/09	9 12:15	Received: 05	5/07/09 09:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytica	I Method: EPA 8	260						
Benzene	296 t	Jg/L	5.0	2.0	5		05/08/09 17:52	71-43-2	
Bromobenzene	<b>&lt;4.1</b> ι	ug/L	5.0	4.1	5		05/08/09 17:52	108-86-1	
Bromochloromethane	<4.8 ເ	ug/L	5.0	4.8	5		05/08/09 17:52	74-97-5	
Bromodichloromethane	<2.8 ເ	Jg/L	5.0	2.8	5		05/08/09 17:52	75 <b>-</b> 27-4	
Bromoform	<4.7 u	ug/L	5.0	4.7	5		05/08/09 17:52	75-25-2	
Bromomethane	<4.6 ເ	Jg/L	5.0	4.6	5		05/08/09 17:52	74-83-9	
n-Butylbenzene	<4.6 u	ug/L	5.0	4.6	5		05/08/09 17:52	104-51-8	
sec-Butylbenzene	<4.4 ι	Jg/L	25.0	4.4	5		05/08/09 17:52	135-98-8	
tert-Butylbenzene	<4.8 เ	ug/L	5.0	4.8	5		05/08/09 17:52	98-06-6	
Carbon tetrachloride	< <b>2.</b> 4 u	ıg/L	5.0	2.4	5		05/08/09 17:52	56-23-5	
Chlorobenzene	< <b>2.0</b> u	ıg/L	5.0	2.0	5		05/08/09 17:52	108-90-7	
Chloroethane	<4.8 ເ	ug/L	5.0	4.8	5		05/08/09 17:52	75-00-3	
Chloroform	<6.5 ເ	ig/L	25.0	6.5	5		05/08/09 17:52	67-66-3	
Chloromethane	<1.2 ເ	ug/L	5.0	1.2	5		05/08/09 17:52	74-87-3	
2-Chlorotoluene	< <b>4.2</b> ι	ıg/L	5.0	4.2	5		05/08/09 17:52	95-49-8	
4-Chlorotoluene	<b>&lt;3.7</b> ເ	ug/L	5.0	3.7	5		05/08/09 17:52	106-43-4	
1,2-Dibromo-3-chloropropane	<b>&lt;8.4</b> ເ	ug/L	25.0	8.4	5		05/08/09 17:52	96-12-8	
Dibromochloromethane	<4.0 ι	ug/L	5.0	4.0	5		05/08/09 17:52	124 <b>-</b> 48-1	
1,2-Dibromoethane (EDB)	< <b>2.</b> 8 t	ug/L	5.0	2.8	5		05/08/09 17:52	106-93-4	
Dibromomethane	<b>&lt;3.0</b> t	ug/L	5.0	3.0	5		05/08/09 17:52	74-95-3	
1,2-Dichlorobenzene	<4.2 t	ug/L	5.0	4.2	5		05/08/09 17:52	95-50-1	
1,3-Dichlorobenzene	<b>&lt;4.4</b> u	ug/L	5.0	4.4	5		05/08/09 17:52	541-73-1	
1,4-Dichlorobenzene	<4.8 เ	Jg/L	5.0	4.8	5		05/08/09 17:52	106-46-7	
Dichlorodifluoromethane	<5.0 ເ	ug/L	5.0	5.0	5		05/08/09 17:52	75-71-8	
1,1-Dichloroethane	<3.8 ເ	Jg/L	5.0	3.8	5		05/08/09 17:52	75-34-3	
1,2-Dichloroethane	<1.8 ເ	ug/L	5.0	1.8	5		05/08/09 17:52	107-06-2	
1,1-Dichloroethene	<b>&lt;2.8</b> ເ	ug/L	5.0	2.8	5		05/08/09 17:52	75-35-4	
cis-1,2-Dichloroethene	<4.2 t	Jg/L	5.0	4.2	5		05/08/09 17:52	156-59-2	
trans-1,2-Dichloroethene	<4.4 u	ug/L	5.0	4.4	5		05/08/09 17:52	156-60-5	
1,2-Dichloropropane	<2.4 t	Jg/L	5.0	2.4	5		05/08/09 17:52	78-87-5	
1,3-Dichloropropane	<b>&lt;3.0</b> t	ug/L	5.0	3.0	5		05/08/09 17:52	142-28-9	
2,2-Dichloropropane	<b>&lt;3.1</b> t	Jg/L	5.0	3.1	5		05/08/09 17:52	594-20-7	
1,1-Dichloropropene	<b>&lt;3.8</b> ι	ug/L	5.0	3.8	5		05/08/09 17:52	563-58-6	
cis-1,3-Dichloropropene	<1.0 ເ	ug/L	5.0	1.0	5		05/08/09 17:52	10061-01-5	
trans-1,3-Dichloropropene	<0.95 ເ	ug/L	5.0	0.95	5		05/08/09 17:52	10061-02-6	
Diisopropyl ether	<3.8 ເ	ıg/L	5.0	3.8	5		05/08/09 17:52	108-20-3	
Ethylbenzene	<b>2.7</b> J ι	ıg∕L	5.0	2.7	5		05/08/09 17:52	100-41-4	
Hexachloro-1,3-butadiene	<b>&lt;3.4</b> u	ıg/L	25.0	3.4	5		05/08/09 17:52	87-68-3	
Isopropylbenzene (Cumene)	8.7 u	ig/L	5.0	3.0	5		05/08/09 17:52	98-82-8	
p-Isopropyltoluene	<b>&lt;3.4</b> ι	ıg/L	5.0	3.4	5		05/08/09 17:52	99-87-6	
Methylene Chloride	<2.2 ເ	ig/L	5.0	2.2	5		05/08/09 17:52	75-09-2	
Methyl-tert-butyl ether	4.1J ι	ıg/L	5.0	3.0	5		05/08/09 17:52	1634-04-4	
Naphthalene	<4.4 u	ıg/L	25.0	4.4	5		05/08/09 17:52	91-20-3	
n-Propylbenzene	11.8 u	.g∕L	5.0	4.0	5		05/08/09 17:52	103-65-1	
Styrene	<4.3 u	.g∕L	5.0	4.3	5		05/08/09 17:52	100-42-5	
1,1,1,2-Tetrachloroethane	<4.6 ເ	Jg/L	5.0	4.6	5		05/08/09 17:52	630-20-6	

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Chloromethane

2-Chlorotoluene

4-Chlorotoluene

Dibromomethane

1,2-Dibromo-3-chloropropane

Dibromochloromethane

1,2-Dibromoethane (EDB)

Date: 05/11/2009 02:05 PM

Sample: GP-4 SHALLOW	Lab ID:	4016991006	Collected	: 04/30/0	9 12:15	Received: 05	/07/09 09:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytica	I Method: EPA 8	3260						
1,1,2,2-Tetrachioroethane	<1.0 t	ug/L	5.0	1.0	5		05/08/09 17:52	79-34-5	
Tetrachloroethene	< <b>2.2</b> t	ug/L	5.0	2.2	5		05/08/09 17:52	127-18-4	
Toluene	9.5 u	ug/L	5.0	3.4	5		05/08/09 17:52	108-88-3	
1,2,3-Trichlorobenzene	<b>&lt;3.7</b> t	ug/L	5.0	3.7	5		05/08/09 17:52	87-61-6	
1,2,4-Trichlorobenzene	<4.8 ເ	ug/L	5.0	4.8	5		05/08/09 17:52	120-82-1	
1.1.1-Trichloroethane	<4.5 t	ua/L	5.0	4.5	5		05/08/09 17:52	71-55-6	
1.1.2-Trichloroethane	<2.1 (	ua/L	5.0	2.1	5		05/08/09 17:52	79-00-5	
Trichloroethene	<2.4	ua/L	5.0	2.4	5		05/08/09 17:52	79-01-6	
Trichlorofluoromethane	<4.0 (	ug/l	5.0	4.0	5		05/08/09 17:52	75-69-4	
1 2 3-Trichloronronane	<5.0 1	ug/L	5.0	5.0	5		05/08/09 17:52	96-18-4	
1 2 4-Trimethylbenzene	<4.8 1	ug/L	5.0	4.8	5		05/08/09 17:52	95-63-6	
1 3 5-Trimethylbenzene	<4.0	ug/L	5.0	4.0	5		05/08/09 17:52	108-67-8	
Vinyl chloride	<0.00	ug/L	5.0	0 00	5		05/08/09 17:52	75-01-4	
m8 p-Yulono	<0.30 (	ug/L	10.0	0.50	5		05/08/09 17:52	1330-20-7	
	< 3.0	ug/L	10.0	5.0 1 2	5		05/08/09 17:52	05-47-6	
	~4.2	uy/L	70 120	4.2	5		05/00/05 17:52	460.00.4	
4-Biomoliuorobenzene (S)	97	70	70-130		5		05/08/09 17:52	400-00-4	
Talvana dR (0)	100 -	70 D/	70-130		5		05/06/09 17:52	1000-00-7	
Toluene-d8 (S)	105 1	70	70-130		5		05/06/09 17:52	2037-20-5	
Sample: GP-4 DEEP	Lab ID:	4016991007	Collected	: 04/30/0	9 12:45	Received: 05	/07/09 09:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytica	I Method: EPA 8	8260						
Benzene	<1.0	ug/L	2.5	1.0	2.5		05/08/09 17:29	71-43-2	
Bromobenzene	<2.0	ua/L	2.5	2.0	2.5		05/08/09 17:29	108-86-1	
Bromochloromethane	<2.4	ua/L	2.5	2.4	2.5		05/08/09 17:29	74-97-5	
Bromodichloromethane	<1.4	ua/L	2.5	1.4	2.5		05/08/09 17:29	75-27-4	
Bromoform	<2.4	ua/l	2.5	2.4	2.5		05/08/09 17:29	75-25-2	
Bromomethane	<2.3	ug/L	2.5	23	2.5		05/08/09 17:29	74-83-9	
n-Butylbenzene	<23	ug/L	2.5	2.3	2.5		05/08/09 17:29	104-51-8	
sec-Butylbenzene	<2.2	ug/L	12.5	2.0	2.5		05/08/09 17:29	135-98-8	
tert-Butylbenzene	-2.2	ug/L	2.5	2.2	2.5		05/08/09 17:29	98-06-6	
Carbon tetrachloride	~2.4	ug/L	2.5	2. <del>1</del> 1 0	2.5		05/08/09 17:29	56-23-5	
Chlorobonzono	<1.2	ug/L	2.J 2.5	1.4	2.5		05/08/00 17:29	108-00-7	
Chloroothana	<1.0 ( -2 A -	ug/L	2.0	1.0	2.5		05/08/09 17.29	75 00 2	
Chloroform	~2.4	uy/L	Z.U 40 F	2.4	2.0		05/06/09 17:29	10-00-3	
Chioroform	<3.2	ug/L	12.5	3.2	∠.⊃		05/08/09 17:29	61-00-3	



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2.5

2.5

2.5

12.5

2.5

2.5

2.5

0.60

2.1

1.8

4.2

2.0

1.4

1.5

2.5 2.5

2.5

2.5

2.5

2.5

2.5

<0.60 ug/L

<2.1 ug/L

<1.8 ug/L

<4.2 ug/L

<2.0 ug/L

<1.4 ug/L

<1.5 ug/L

05/08/09 17:29 74-87-3

05/08/09 17:29 95-49-8

05/08/09 17:29 106-43-4

05/08/09 17:29 96-12-8

05/08/09 17:29 124-48-1 05/08/09 17:29 106-93-4

05/08/09 17:29 74-95-3



Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-4 DEEP	Lab ID:	4016991007	Collected	d: 04/30/09	9 12:45	Received: 05	5/07/09 09:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 8	260						
1,2-Dichlorobenzene	< <b>2.1</b> ug	g/L	2.5	2.1	2.5		05/08/09 17:29	95-50-1	
1,3-Dichlorobenzene	<2.2 ug	g/L	2.5	2.2	2.5		05/08/09 17:29	541-73-1	
1,4-Dichlorobenzene	< <b>2.4</b> ug	g/L	2.5	2.4	2.5		05/08/09 17:29	106-46-7	
Dichlorodifluoromethane	< <b>2.5</b> ug	g/L	2.5	2.5	2.5		05/08/09 17:29	75-71-8	
1,1-Dichloroethane	<1.9 ug	g/L	2.5	1.9	2.5		05/08/09 17:29	75-34-3	
1,2-Dichloroethane	<0.90 ug	g/L	2.5	0.90	2.5		05/08/09 17:29	107-06-2	
1,1-Dichloroethene	<1.4 ug	g/L	2.5	1.4	2.5		05/08/09 17:29	75-35-4	
cis-1,2-Dichloroethene	153 ug	g/L	2.5	2.1	2.5		05/08/09 17:29	156-59-2	
trans-1,2-Dichloroethene	4.1 ug	g/L	2.5	2.2	2.5		05/08/09 17:29	156-60-5	
1,2-Dichloropropane	<1.2 ug	- g/L	2.5	1.2	2.5		05/08/09 17:29	78-87-5	
1,3-Dichloropropane	<1.5 ug	- g/L	2.5	1.5	2.5		05/08/09 17:29	142-28-9	
2,2-Dichloropropane	<1.6 ug	a/L	2.5	1.6	2.5		05/08/09 17:29	594-20 <b>-</b> 7	
1,1-Dichloropropene	<1.9 uc	- a/L	2.5	1.9	2.5		05/08/09 17:29	563-58-6	
cis-1.3-Dichloropropene	<0.50 ug	a/L	2.5	0.50	2.5		05/08/09 17:29	10061-01-5	
trans-1.3-Dichloropropene	<0.48 ug	- a/L	2.5	0.48	2.5		05/08/09 17:29	10061-02-6	
Diisopropyl ether	<1.9 ug	- g/L	2.5	1.9	2.5		05/08/09 17:29	108-20-3	
Ethylbenzene	<1.4 ug	, p/L	2.5	1.4	2.5		05/08/09 17:29	100-41-4	
Hexachloro-1,3-butadiene	<1.7 ug	- a/L	12.5	1.7	2.5		05/08/09 17:29	87-68-3	
sopropylbenzene (Cumene)	<1.5 uc	a/L	2.5	1.5	2.5		05/08/09 17:29	98-82-8	
p-Isopropyltoluene	<1.7 uc	- a/L	2.5	1.7	2.5		05/08/09 17:29	99-87-6	
Methylene Chloride	<1.1 ug	a/L	2.5	1.1	2.5		05/08/09 17:29	75-09-2	
Methyl-tert-butyl ether	<1.5 uc	a/L	2.5	1.5	2.5		05/08/09 17:29	1634-04-4	
Naphthalene	<2.2 uc	- a/L	12.5	2.2	2.5		05/08/09 17:29	91-20-3	
n-Propylbenzene	<2.0 ug	a/L	2.5	2.0	2.5		05/08/09 17:29	103-65-1	
Styrene	<2.2 ug	- g/L	2.5	2.2	2.5		05/08/09 17:29	100-42-5	
1,1,1,2-Tetrachloroethane	<2.3 ug	a/L	2.5	2.3	2.5		05/08/09 17:29	630-20-6	
1,1,2,2-Tetrachloroethane	<0.50 ug	g/L	2.5	0.50	2.5		05/08/09 17:29	79-34-5	
Tetrachloroethene	6.6 u	a/L	2.5	1.1	2.5		05/08/09 17:29	127-18-4	
Toluene	<1.7 uc	, a/L	2.5	1.7	2.5		05/08/09 17:29	108-88-3	
1.2.3-Trichlorobenzene	<1.8 uc	a/L	2.5	1.8	2.5		05/08/09 17:29	87-61-6	
1.2.4-Trichlorobenzene	<2.4 uc	z a/L	2.5	2.4	2.5		05/08/09 17:29	120-82-1	
1.1.1-Trichloroethane	<2.2 uc	a/L	2.5	2.2	2.5		05/08/09 17:29	71-55-6	
1,1,2-Trichloroethane	<1.0 ug	- g/L	2.5	1.0	2.5		05/08/09 17:29	79-00-5	
Trichloroethene	2.5 ug	a/L	2.5	1.2	2.5		05/08/09 17:29	79-01-6	
Trichlorofluoromethane	< <b>2.0</b> ud	a/L	2.5	2.0	2.5		05/08/09 17:29	75-69-4	
1,2,3-Trichloropropane	< <b>2.5</b> ug	a/L	2.5	2.5	2.5		05/08/09 17:29	96-18-4	
1.2.4-Trimethylbenzene	<2.4 u	- g/L	2.5	2.4	2.5		05/08/09 17:29	95-63-6	
1.3.5-Trimethylbenzene	< <b>2.1</b> uc	- a/L	2.5	2.1	2.5		05/08/09 17:29	108-67-8	
Vinvl chloride	<0.45 uc	a/L	2.5	0.45	2.5		05/08/09 17:29	75-01-4	
m&p-Xylene	<4.5 uc	- g/L	5.0	4.5	2.5		05/08/09 17:29	1330-20-7	
o-Xylene	<2.1 uc	- a/L	2.5	2.1	2.5		05/08/09 17:29	95-47-6	
4-Bromofluorobenzene (S)	98 %	-	70-130		2.5		05/08/09 17:29	460-00-4	
Dibromofluoromethane (S)	103 %		70-130		2.5		05/08/09 17:29	1868-53-7	
Toluene-d8 (S)	106 %		70-130		2.5		05/08/09 17:29	2037-26-5	

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-1 SHALLOW	Lab ID: 4016991008		Collecte	Collected: 04/30/09 13:15			Received: 05/07/09 09:00 Matrix: Water			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV	Analytica	I Method: EPA 8	3260							
Benzene	<b>&lt;0.41</b> ເ	ıg/L	1.0	0.41	1		05/08/09 16:42	71-43-2		
Bromobenzene	<b>&lt;0.82</b> ເ	ıg/L	1.0	0.82	1		05/08/09 16:42	108-86-1		
Bromochloromethane	<b>&lt;0.97</b> ເ	ig/L	1.0	0.97	1		05/08/09 16:42	74-97-5		
Bromodichloromethane	<0.56 u	ıg/L	1.0	0.56	1		05/08/09 16:42	75-27-4		
Bromoform	< <b>0.94</b> ι	ig/L	1.0	0.94	1		05/08/09 16:42	75-25-2		
Bromomethane	<b>&lt;0.91</b> ເ	ıg/L	1.0	0.91	1		05/08/09 16:42	74-83-9		
n-Butylbenzene	< <b>0.93</b> ι	ıg/L	1.0	0.93	1		05/08/09 16:42	104-51-8		
sec-Butylbenzene	< <b>0.8</b> 9 ເ	ıg/L	5.0	0.89	1		05/08/09 16:42	135-98-8		
tert-Butylbenzene	<b>&lt;0.97</b> ເ	ig/L	1.0	0.97	1		05/08/09 16:42	98-06-6		
Carbon tetrachloride	< <b>0.4</b> 9 ι	ığ/L	1.0	0.49	1		05/08/09 16:42	56-23-5		
Chlorobenzene	<b>&lt;0.41</b> ເ	ig/L	1.0	0.41	1		05/08/09 16:42	108-90-7		
Chloroethane	<b>&lt;0.97</b> ເ	ıg/L	1.0	0.97	1		05/08/09 16:42	75-00-3		
Chloroform	<b>&lt;1.3</b> ເ	ig/L	5.0	1.3	1		05/08/09 16:42	67-66-3		
Chloromethane	<0.24 u	ıg/L	1.0	0.24	1		05/08/09 16:42	74-87-3		
2-Chlorotoluene	<0.85 u	ığ/L	1.0	0.85	1		05/08/09 16:42	95-49-8		
4-Chlorotoluene	<b>&lt;0.74</b> t	ig/L	1.0	0.74	1		05/08/09 16:42	106-43-4		
1,2-Dibromo-3-chloropropane	<1.7 t	ig/L	5.0	1.7	1	e	05/08/09 16:42	96-12-8		
Dibromochloromethane	<0.81 ເ	ug/L	1.0	0.81	1		05/08/09 16:42	124-48-1		
1,2-Dibromoethane (EDB)	<b>&lt;0.5</b> 6 ເ	ıg/L	1.0	0.56	1		05/08/09 16:42	106-93-4		
Dibromomethane	<0.60 <b>ι</b>	ug/L	1.0	0.60	1		05/08/09 16:42	74-95-3		
1,2-Dichlorobenzene	< <b>0.83</b> ເ	ıg/L	1.0	0.83	1		05/08/09 16:42	95-50-1		
1,3-Dichlorobenzene	< <b>0.87</b> ι	ig/L	1.0	0.87	1		05/08/09 16:42	541-73-1		
1,4-Dichlorobenzene	<0.95 ເ	Jg/L	1.0	0.95	1		05/08/09 16:42	106-46-7		
Dichlorodifluoromethane	<b>&lt;0.9</b> 9 ເ	ıg/L	1.0	0.99	1		05/08/09 16:42	75-71-8		
1,1-Dichloroethane	<b>&lt;0.75</b> ເ	ıg/L	1.0	0.75	1		05/08/09 16:42	75-34-3		
1,2-Dichloroethane	<b>&lt;0.3</b> 6 ເ	Jg/L	1.0	0.36	1		05/08/09 16:42	107-06-2		
1,1-Dichloroethene	<b>&lt;0.57</b> ເ	ıg/L	1.0	0.57	1		05/08/09 16:42	75-35-4		
cis-1,2-Dichloroethene	<b>1.3</b> ι	ıg/L	1.0	0.83	1		05/08/09 16:42	156-59-2		
trans-1,2-Dichloroethene	<b>&lt;0.89</b> ເ	ug/L	1.0	0.89	1		05/08/09 16:42	156-60-5		
1,2-Dichloropropane	<0.49 t	ıg/L	1.0	0.49	1		05/08/09 16:42	78-87-5		
1,3-Dichloropropane	<b>&lt;0.61</b> ເ	ıg/L	1.0	0.61	1		05/08/09 16:42	142 <b>-</b> 28-9		
2,2-Dichloropropane	< <b>0.62</b> t	ıg/L	1.0	0.62	1		05/08/09 16:42	594-20-7		
1,1-Dichloropropene	<0.75 u	ug/L	1.0	0.75	1		05/08/09 16:42	563 <b>-</b> 58-6		
cis-1,3-Dichloropropene	<b>&lt;0.20</b> t	ug/L	1.0	0.20	1		05/08/09 16:42	10061-01-5		
trans-1,3-Dichloropropene	<b>&lt;0.19</b> ເ	ıg/L	1.0	0.19	1		05/08/09 16:42	10061-02-6		
Diisopropyl ether	<0.76 u	ug/L	1.0	0.76	1		05/08/09 16:42	108-20-3		
Ethylbenzene	<b>&lt;0.54</b> t	ıg/L	1.0	0.54	1		05/08/09 16:42	100-41-4		
Hexachloro-1,3-butadiene	<b>&lt;0.67</b> ເ	ug/L	5.0	0.67	1		05/08/09 16:42	87-68-3		
Isopropylbenzene (Cumene)	<0.59 u	ug/L	1.0	0.59	1		05/08/09 16:42	98-82-8		
p-Isopropy!toluene	<0.67 t	ug/L	1.0	0.67	1		05/08/09 16:42	99-87-6		
Methylene Chloride	< <b>0.43</b> ι	ug/L	1.0	0.43	1		05/08/09 16:42	75-09-2		
Methyl-tert-butyl ether	< <b>0.61</b> u	ıg∕L	1.0	0.61	1		05/08/09 16:42	1634-04-4		
Naphthalene	<0.89 ເ	ug/L	5.0	0.89	1		05/08/09 16:42	91-20-3		
n-Propylbenzene	<0.81 u	ıg/L	1.0	0.81	1		05/08/09 16:42	103-65 <b>-</b> 1		
Styrene	<0.86 u	ug/L	1.0	0.86	1		05/08/09 16:42	100-42-5		
1,1,1,2-Tetrachloroethane	<b>&lt;0.92</b> ເ	Jg/L	1.0	0.92	1		05/08/09 16:42	630-20-6		

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-1 SHALLOW	Lab ID: 4016991008		Collected: 04/30/09 13:15			Received: 05/07/09 09:00 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV	Analytical	Method: EPA 8	3260							
1,1,2,2-Tetrachloroethane	<b>&lt;0.20</b> u	ıg/L	1.0	0.20	1		05/08/09 16:42	79-34-5		
Tetrachloroethene	<b>&lt;0.45</b> u	ig/L	1.0	0.45	1		05/08/09 16:42	127-18-4		
Toluene	<b>&lt;0.67</b> ປ	ig/L	1.0	0.67	1		05/08/09 16:42	108-88-3		
1,2,3-Trichlorobenzene	<b>&lt;0.74</b> u	ig/L	1.0	0.74	1		05/08/09 16:42	87-61-6		
1,2,4-Trichlorobenzene	<b>&lt;0.97</b> u	ig/L	1.0	0.97	1		05/08/09 16:42	120-82-1		
1,1,1-Trichloroethane	<b>&lt;0.90</b> u	ig/L	1.0	0.90	1		05/08/09 16:42	71-55-6		
1,1,2-Trichloroethane	<0.42 u	ig/L	1.0	0.42	1		05/08/09 16:42	79-00-5		
Trichloroethene	<0.48 u	ig/L	1.0	0.48	1		05/08/09 16:42	79-01-6		
Trichlorofluoromethane	< <b>0.79</b> u	a/L	1.0	0.79	1		05/08/09 16:42	75-69-4		
1,2,3-Trichloropropane	< <b>0.99</b> u	a/L	1.0	0.99	1		05/08/09 16:42	96-18-4		
1.2.4-Trimethylbenzene	<0.97 u	a/L	1.0	0.97	1		05/08/09 16:42	95-63-6		
1.3.5-Trimethylbenzene	<b>&lt;0.83</b> u	a/L	1.0	0.83	1		05/08/09 16:42	108-67-8		
Vinvl chloride	<0.18 u	a/L	1.0	0.18	1		05/08/09 16:42	75-01-4		
m&p-Xvlene	<1.8 u	a/L	2.0	1.8	1		05/08/09 16:42	1330-20-7		
o-Xvlene	<0.83 u	a/L	1.0	0.83	1		05/08/09 16:42	95-47-6		
4-Bromofluorobenzene (S)	97 9	6	70-130	0.00	1		05/08/09 16:42	460-00-4		
Dibromofluoromethane (S)	103 9	6	70-130		1		05/08/09 16:42	1868-53-7		
Toluene-d8 (S)	107 9	6	70-130		1		05/08/09 16:42	2037-26-5		
Sample: GP-1 DEEP	Lab ID:	4016991009	Collected	d: 04/30/0	9 13:45	Received: 05	5/07/09 09:00 Ma	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV		Method: EPA 8	3260						•	
Benzene	<16.4 µ	ia/l	40.0	16.4	40		05/08/09 18:16	71-43-2		
Bromobenzene	<32.8 µ	ig/L	40.0	32.8	40		05/08/09 18:16	108-86-1		
Bromochloromethane	<38.8 µ	ig/L	40.0	38.8	40		05/08/00 18:16	74-07-5		
Bromodichloromethane	<22.4 1	igit.	40.0	22 4	40		05/08/09 18:16	75-27-4		
Bromoform	<37.6 µ	ig/L	40.0	37.6	40		05/08/09 18:16	75-25-2		
Bromomethane	<36.4 1	ig/L	40.0	36.4	40		05/08/09 18:16	74-83-0		
n-Butylbenzene	<37.2 L	ig/L	40.0	37.2	40		05/08/09 18:16	104-51-8		
sec-Butylbenzene	<35.6 U		200	35.6	40		05/08/09 10:10	125 09 9		
sec-Dutyibenzene	<39.9 1	ig/L	200	20.0	40		05/08/09 18:10	133-90-0		
Carbon totrachlorida	<10.6 1	ig/L	40.0	10.6	40		05/08/09 18:10	56-00-0		
Chlorobenzene	<16.4	9/L	-10.0 /0.0	15.0	40		05/08/09 10.10	108-00-7		
Chloroethane	~10.4 0	9/L  0/1	40.0 10 0	20.4	40		05/00/09 10:10	75.00.2		
Chloroform	-30.0 U	ig/L	40.0	50.0 50.0	40		05/06/09 16:16	10-00-0		
Chloromothono		igric Ia/l	200	52.0	40		05/06/09 16:16	74 97 0		
	-34.0 U	19/L	40.0	9.0	40		05/08/09 18:16	14-01-3		
	<34.0 U	iy/L	40.0	34.U 20 C	40		05/06/09 18:16	90-49-8 406 42 4		
1.2-Dibromo-3-chloropropono	~23.0 0	ישיב ומיז	40.0	29.0	40		05/06/09 16:16	100-43-4		
1,2-DIDIONO-0-CHIOIOPIOPANE	<b>~07.2</b> U	M/ L	200	Q1.Z	40		00/00/09 10:10	JU-12-0		

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Dibromochloromethane

Dibromomethane

1,2-Dibromoethane (EDB)

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32.4

22.4

24.0

40

40

40

40.0

40.0

40.0

<32.4 ug/L

<22.4 ug/L

<24.0 ug/L

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05/08/09 18:16 124-48-1

05/08/09 18:16 106-93-4

05/08/09 18:16 74-95-3





Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-1 DEEP	Lab ID:	4016991009	Collected	d: 04/30/09	9 13:45	Received: 05	/07/09 09:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytica	I Method: EPA 8	3260						
1,2-Dichlorobenzene	<b>&lt;33.2</b> u	ug/L	40.0	33.2	40		05/08/09 18:16	95-50-1	
1,3-Dichlorobenzene	<34.8 ເ	ug/L	40.0	34.8	40		05/08/09 18:16	541-73-1	
1,4-Dichlorobenzene	<b>&lt;38.0</b> ເ	ug/L	40.0	38.0	40		05/08/09 18:16	106-46-7	
Dichlorodifluoromethane	<39.6 t	ug/L	40.0	39.6	40		05/08/09 18:16	75-71-8	
1,1-Dichloroethane	<b>&lt;30.0</b> ι	ug/L	40.0	30.0	40		05/08/09 18:16	75-34-3	
1,2-Dichloroethane	<14.4 ເ	ug/L	40.0	14.4	40		05/08/09 18:16	107-06-2	
1,1-Dichloroethene	<22.8 ເ	Jg/L	40.0	22.8	40		05/08/09 18:16	75-35-4	
cis-1,2-Dichloroethene	<b>4170</b> ι	ug/L	40.0	33.2	40		05/08/09 18:16	156-59-2	
trans-1,2-Dichloroethene	168 <b>ເ</b>	Jg/L	40.0	35.6	40		05/08/09 18:16	156-60-5	
1,2-Dichloropropane	<19.6 ເ	Jg/L	40.0	19.6	40		05/08/09 18:16	78-87-5	
1,3-Dichloropropane	<b>&lt;24.4</b> u	ug/L	40.0	24.4	40		05/08/09 18:16	142-28-9	
2,2-Dichloropropane	<24.8 ເ	Jg/L	40.0	24.8	40		05/08/09 18:16	594-20-7	
1,1-Dichloropropene	< <b>30.0</b> (	Jg/L	40.0	30.0	40		05/08/09 18:16	563-58-6	
cis-1,3-Dichloropropene	<b>&lt;8.0</b> ເ	Jg/L	40.0	8.0	40		05/08/09 18:16	10061-01-5	
trans-1,3-Dichloropropene	<7.6 ເ	ug/L	40.0	7.6	40		05/08/09 18:16	10061-02-6	
Diisopropyl ether	<b>&lt;30.4</b> ι	Jg/L	40.0	30.4	40		05/08/09 18:16	108-20-3	
Ethylbenzene	<b>&lt;21.6</b> t	ug/L	40.0	21.6	40		05/08/09 18:16	100-41-4	
Hexachloro-1,3-butadiene	<26.8 t	Jg/L	200	26.8	40		05/08/09 18:16	87-68-3	
Isopropylbenzene (Cumene)	<b>&lt;23.6</b> t	ug/L	40.0	23.6	40		05/08/09 18:16	98-82-8	
p-Isopropyltoluene	< <b>26.8</b> u	ug/L	40.0	26.8	40		05/08/09 18:16	99-87-6	
Methylene Chloride	<17.2 u	ug/L	40.0	17.2	40		05/08/09 18:16	75-09-2	
Methyl-tert-butyl ether	<b>&lt;24.4</b> u	ig/L	40.0	24.4	40		05/08/09 18:16	1634-04-4	
Naphthalene	<35.6 u	ug/L	200	35.6	40		05/08/09 18:16	91-20-3	
n-Propylbenzene	<32.4 (	ug/L	40.0	32.4	40		05/08/09 18:16	103-65- <b>1</b>	
Styrene	<34.4 (	ug/L	40.0	34.4	40		05/08/09 18:16	100-42-5	
1,1,1,2-Tetrachloroethane	<36.8 u	ug/L	40.0	36.8	40		05/08/09 18:16	630-20-6	
1,1,2,2-Tetrachloroethane	<8.0 u	ug/L	40.0	8.0	40		05/08/09 18:16	79-34-5	
Tetrachloroethene	<b>59.0</b> (	ug/L	40.0	18.0	40		05/08/09 18:16	127-18-4	
Toluene	<b>&lt;26.8</b> ເ	ug/L	40.0	26.8	40		05/08/09 18:16	108-88-3	
1,2,3-Trichlorobenzene	<29.6 t	ug/L	40.0	29.6	40		05/08/09 18:16	87-61-6	
1,2,4-Trichlorobenzene	<38.8	ug/L	40.0	38.8	40		05/08/09 18:16	120-82- <b>1</b>	
1,1,1-Trichloroethane	<b>&lt;36.0</b> t	ug/L	40.0	36.0	40		05/08/09 18:16	71-55-6	
1,1,2-Trichloroethane	<16.8 נ	ug/L	40.0	16.8	40		05/08/09 18:16	79-00-5	
Trichloroethene	386 (	ug/L	40.0	19.2	40		05/08/09 18:16	79-0 <b>1-</b> 6	
Trichlorofluoromethane	<b>&lt;31.6</b> t	ug/L	40.0	31.6	40		05/08/09 18:16	75-69-4	
1,2,3-Trichloropropane	<39.6	ug/L	40.0	39.6	40		05/08/09 18:16	96-18-4	
1,2,4-Trimethylbenzene	<38.8 (	ug/L	40.0	38.8	40		05/08/09 18:16	95-63-6	
1,3,5-Trimethylbenzene	<b>&lt;33.2</b> t	ug/L	40.0	33.2	40		05/08/09 18:16	108-67-8	
Vinyl chloride	165 เ	ug/L	40.0	7.2	40		05/08/09 18:16	75-01-4	
m&p-Xylene	<72.0 t	ug/L	80.0	72.0	40		05/08/09 18:16	1330-20-7	
o-Xylene	<33.2 t	ug/L	40.0	33.2	40		05/08/09 18:16	95-47-6	
4-Bromofluorobenzene (S)	97 9	%	70-130		40		05/08/09 18:16	460-00-4	
Dibromofluoromethane (S)	104 9	%	70-130		40		05/08/09 18:16	1868-53-7	
Toluene-d8 (S)	105 9	%	70-130		40		05/08/09 18:16	2037-26-5	

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No .: 4016991

Sample: GP-3 SHALLOW	Lab ID:	4016991010	Collecte	d: 04/30/0	9 14:15	Received: 05	5/07/09 09:00 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytica	il Method: EPA 8	3260						
Benzene	<0.41	ug/L	1.0	0.41	1		05/08/09 17:05	71-43-2	
Bromobenzene	<0.82	ug/L	1.0	0.82	1		05/08/09 17:05	108-86-1	
Bromochloromethane	<0.97	ug/L	1.0	0.97	1		05/08/09 17:05	74-97-5	
Bromodichloromethane	<0.56	ug/L	1.0	0.56	1		05/08/09 17:05	75-27-4	
Bromoform	<0.94	ug/L	1.0	0.94	1		05/08/09 17:05	75-25-2	
Bromomethane	<0.91	ug/L	1.0	0.91	1		05/08/09 17:05	74-83-9	
n-Butylbenzene	<0.93	ug/L	1.0	0.93	1		05/08/09 17:05	104-51-8	
sec-Butylbenzene	<0.89	ug/L	5.0	0.89	1		05/08/09 17:05	135-98-8	
tert-Butylbenzene	<0.97	ug/L	1.0	0.97	1		05/08/09 17:05	98-06-6	
Carbon tetrachloride	<0.49	ug/L	1.0	0.49	1		05/08/09 17:05	56-23-5	
Chlorobenzene	<0.41	ug/L	1.0	0.41	1		05/08/09 17:05	108-90-7	
Chloroethane	<0.97	ug/L	1.0	0.97	1		05/08/09 17:05	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		05/08/09 17:05	67-66-3	
Chloromethane	<0.24	ug/L	1.0	0.24	1		05/08/09 17:05	74-87-3	
2-Chlorotoluene	<0.85	ug/L	1.0	0.85	1		05/08/09 17:05	95-49-8	
4-Chlorotoluene	<0.74	ug/L	1.0	0.74	1		05/08/09 17:05	106-43-4	
1,2-Dibromo-3-chloropropane	<1.7	ug/L	5.0	1.7	1		05/08/09 17:05	96-12-8	
Dibromochloromethane	<0.81	ug/L	1.0	0.81	1		05/08/09 17:05	124-48-1	
1.2-Dibromoethane (EDB)	<0.56	ug/L	1.0	0.56	1		05/08/09 17:05	106-93-4	
Dibromomethane	<0.60	ug/L	1.0	0.60	1		05/08/09 17:05	74-95-3	
1.2-Dichlorobenzene	<0.83	ug/L	1.0	0.83	1		05/08/09 17:05	95-50-1	
1.3-Dichlorobenzene	<0.87	ua/L	1.0	0.87	1		05/08/09 17:05	541-73 <b>-</b> 1	
1.4-Dichlorobenzene	<0.95	ug/L	1.0	0.95	1		05/08/09 17:05	106-46-7	
Dichlorodifluoromethane	<0.99	ug/L	1.0	0.99	1		05/08/09 17:05	75-71-8	
1.1-Dichloroethane	<0.75	ua/L	1.0	0.75	1		05/08/09 17:05	75-34-3	
1,2-Dichloroethane	<0.36	ug/L	1.0	0.36	1		05/08/09 17:05	107-06-2	
1,1-Dichloroethene	<0.57	ug/L	1.0	0.57	1		05/08/09 17:05	75-35-4	
cis-1,2-Dichloroethene	1.7	ug/L	1.0	0.83	1		05/08/09 17:05	156-59-2	
trans-1,2-Dichloroethene	<0.89	ug/L	1.0	0.89	1		05/08/09 17:05	156-60-5	
1,2-Dichloropropane	<0.49	ug/L	1.0	0.49	1		05/08/09 17:05	78-87-5	
1,3-Dichloropropane	<0.61	ug/L	1.0	0.61	1		05/08/09 17:05	142-28-9	
2,2-Dichloropropane	<0.62	ug/L	1.0	0.62	1		05/08/09 17:05	594-20-7	
1,1-Dichloropropene	<0.75	ug/L	1.0	0.75	1		05/08/09 17:05	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	1.0	0.20	1		05/08/09 17:05	10061-01-5	
trans-1,3-Dichloropropene	<0.19	ug/L	1.0	0.19	1		05/08/09 17:05	10061-02-6	
Diisopropyl ether	<0.76	ug/L	1.0	0.76	1		05/08/09 17:05	108-20-3	
Ethylbenzene	<0.54	ug/L	1.0	0.54	1		05/08/09 17:05	100-41-4	
Hexachloro-1,3-butadiene	<0.67	ug/L	5.0	0.67	1		05/08/09 17:05	87-68-3	
Isopropylbenzene (Cumene)	<0.59	ug/L	1.0	0.59	1		05/08/09 17:05	98-82-8	
p-Isopropyltoluene	<0.67	ug/L	1.0	0.67	1		05/08/09 17:05	99-87-6	
Methylene Chloride	<0.43	ug/L	1.0	0.43	1		05/08/09 17:05	75-09-2	
Methyl-tert-butyl ether	<0.61	ug/L	1.0	0.61	1		05/08/09 17:05	1634-04-4	
Naphthalene	<0.89	ug/L	5.0	0.89	1		05/08/09 17:05	91-20-3	
n-Propylbenzene	<0.81	ug/L	1.0	0.81	1		05/08/09 17:05	103-65-1	
Styrene	<0.86	ug/L	1.0	0.86	1		05/08/09 17:05	100-42-5	
1,1,1,2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		05/08/09 17:05	630-20-6	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Sample: GP-3 SHALLOW	Lab ID: 4016991010		Collected: 04/30/09 14:15			Received: 05/07/09 09:00 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV	Analytical	Method: EPA 8	3260							
1,1,2,2-Tetrachloroethane	<b>&lt;0.20</b> u	g/L	1.0	0.20	1		05/08/09 17:05	79-34-5		
Tetrachloroethene	<b>&lt;0.45</b> u	g/L	1.0	0.45	1		05/08/09 17:05	127-18-4		
Toluene	<b>&lt;0.67</b> u	g/L	1.0	0.67	1		05/08/09 17:05	108-88-3		
1,2,3-Trichlorobenzene	<b>&lt;0.74</b> u	g/L	1.0	0.74	1		05/08/09 17:05	87-61-6		
1,2,4-Trichlorobenzene	<b>&lt;0.97</b> u	g/L	1.0	0.97	1		05/08/09 17:05	120-82-1		
1,1,1-Trichloroethane	<b>&lt;0.90</b> u	g/L	1.0	0.90	1		05/08/09 17:05	71-55-6		
1,1,2-Trichloroethane	<0.42 u	g/L	1.0	0.42	1		05/08/09 17:05	79-00-5		
Trichloroethene	<b>&lt;0.48</b> u	g/L	1.0	0.48	1		05/08/09 17:05	79-01-6		
Trichlorofluoromethane	<0.79 u	a/L	1.0	0.79	1		05/08/09 17:05	75-69-4		
1.2.3-Trichloropropane	<b>&lt;0.99</b> u	a/L	1.0	0.99	1		05/08/09 17:05	96-18-4		
1.2.4-Trimethylbenzene	<0.97 u	a/L	1.0	0.97	1		05/08/09 17:05	95-63-6		
1.3.5-Trimethylbenzene	<0.83 u	a/L	1.0	0.83	1		05/08/09 17:05	108-67-8		
Vinvl chloride	3.8 u	a/L	1.0	0.18	1		05/08/09 17:05	75-01-4		
m&p-Xvlene	<1.8 u	a/L	2.0	1.8	1		05/08/09 17:05	1330-20-7		
o-Xviene	<0.83 u	α/l.	1.0	0.83	1		05/08/09 17:05	95-47-6		
4-Bromofluorobenzene (S)	98 %	/ <del>.</del>	70-130		1		05/08/09 17:05	460-00-4		
Dibromofluoromethane (S)	102 %	6	70-130		1		05/08/09 17:05	1868-53-7		
Toluene-d8 (S)	105 %	6	70-130		1		05/08/09 17:05	2037-26-5		
Sample: GP-3 DEEP	Lab ID:	4016991011	Collected	: 04/30/0	9 14:45	Received: 0	5/07/09 09:00 M	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
8260 MSV	Analytical	Method: EPA 8	3260							
Benzene	<164 u	a/L	400	164	400		05/08/09 18:39	71-43-2		
Bromobenzene	<328 u	a/L	400	328	400		05/08/09 18:39	108-86-1		
Bromochloromethane	<388 u	a/L	400	388	400		05/08/09 18:39	74-97-5		
Bromodichloromethane	<224 u	ia/L	400	224	400		05/08/09 18:39	75-27-4		
Bromoform	<376 u	ia/L	400	376	400		05/08/09 18:39	75-25-2		
Bromomethane	<364 u	ia/l	400	364	400		05/08/09 18:39	74-83-9		
n-Butylbenzene	<372 1	ig/1	400	372	400		05/08/09 18:39	104-51-8		
sec-Butylbenzene	<356 u	.g/L Ia/l	2000	356	400		05/08/09 18:39	135-98-8		
tert-Butylbenzene	<388 u	ig/L	400	388	400		05/08/09 18:39	98-06-6		
Carbon tetrachloride	<196 u	ig/L	400	196	400		05/08/09 18:39	56-23-5		
Chlorobenzene	<164 u	ig/L	400	164	400		05/08/09 18:39	108-90-7		
Chloroethane	<104 u	ig/L	400	388	400		05/08/00 18:30	75-00-3		
Chloroform	<520 u	ig/L	2000	520	400		05/08/09 18:39	67-66-3		
Chloromothano	~020 U	igi L	2000	06.0	400		05/08/00 19:39	74-97-3		
	-2240 ···	19/L	400	30.0	400		05/08/00 10:39	05-10 9		
	<340 U ∠2000 ···	ig/L	400	340	400		05/00/09 18:39	90-49-0 106 42 4		
	<290 U	ig/L	400	290	400		05/06/09 18:39	100-43-4		
1,∠-Dibromo-3-chioropropane	<6/2 u	ig/L	2000	672	400		05/08/09 18:39	90-12-8		
	<324 u	ig/L	400	324	400		05/08/09 18:39	124-48-1		
I,Z-DIDFORDORINANG (EDB)	<224 u	ig/L	400	224	400		05/08/09 18:39	100-93-4		
upromometnane	<240 u	ig/L	400	240	400		05/08/09 18:39	14-90-3		

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4016991

Parameters         Results         Units         LOQ         LOD         DF         Prepared         Analyzed         CAS No.         Qual           8250 MSV         Analytical Method: EPA 8260         Ill         1.2-Dichlorobenzene         <332 ug/L         400         332 400         05/08/09 18.39         95-50-1         1.3-Dichlorobenzene         <380 ug/L         400         336 400         05/08/09 18.39         163-7         1.1-Dichlorobenzene         <396 ug/L         400         336 400         05/08/09 18.39         163-7         1.1-Dichlorobenzene         <300 ug/L         400         336 400         05/08/09 18.39         175-71-8         1.1-Dichlorobenzene         <300 ug/L         400         332 400         05/08/09 18.39         175-73-1         1.1-Dichlorobenzene         63700 ug/L         400         332 400         05/08/09 18.39         175-65-2           1.2-Dichloropthene         <196 ug/L         400         326 400         05/08/09 18.39         132-97-5         1.3-Dichloropthene         <100 ug/L         400         244 ug/L         400         56/08/09 18.39         132-28-9         2.2-Dichloroptopene         <260 ug/L         400         05/08/09 18.39         106-10-5         1.3-Dichloroptopene         <260 ug/L         400         05/08/09 18.39         106-10-5         1.3-Dichloro	Sample: GP-3 DEEP	Lab ID:	4016991011	Collected	1: 04/30/0	9 14:45	Received: 05	5/07/09 09:00 Ma	atrix: Water	
S20 MSV         Analytical Method: EPA 8280           1,2-Dichlorobenzene         <32 ug/L         400         332         400         050809 18:39         95-0-1           1,3-Dichlorobenzene         <348 ug/L         400         346         400         050809 18:39         95-1-1           1,4-Dichlorobenzene         <356 ug/L         400         386         400         050809 18:39         75-71-8           1,1-Dichlorothane         <306 ug/L         400         386         400         050809 18:39         75-74-3           1,2-Dichlorothane         <714 ug/L         400         144         400         050809 18:39         156-52-2           1,1-Dichlorothene         68700 ug/L         400         356         400         050809 18:39         156-55-2           1,2-Dichlorothene         68700 ug/L         400         156         400         050809 18:39         156-55-2           1,2-Dichloropropane         <248 ug/L         400         244         400         56604         153         554-6-5           1,2-Dichloropropane         <248 ug/L         400         244         400         560809         153         55-6-5           1,2-Dichloropropane         <240         000         050809 <td< th=""><th>Parameters</th><th>Results</th><th>Units</th><th>LOQ</th><th>LOD</th><th>DF</th><th>Prepared</th><th>Analyzed</th><th>CAS No.</th><th>Qual</th></td<>	Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
1.2-Dichlorobenzene       <332	8260 MSV	Analytical	I Method: EPA	8260						
1.3-Dichloroberzene       <348 ug/L	1,2-Dichlorobenzene	<b>&lt;332</b> L	ıg/L	400	332	400		05/08/09 18:39	95-50-1	
1,4-Dichloroberzene       <380 up/L	1,3-Dichlorobenzene	<348 L	ig/L	400	348	400		05/08/09 18:39	541-73-1	
Dichloromethane         <336         upl.         400         386         400         0508009         18.39         75-71.8           1.1-Dichloromethane         <300	1,4-Dichlorobenzene	<b>&lt;380</b> u	ig/L	400	380	400		05/08/09 18:39	106-46-7	
1,1-Dichlorosthane         <300 upl.	Dichlorodifluoromethane	<b>&lt;396</b> ι	Jg/L	400	396	400		05/08/09 18:39	75-71-8	
12-Dichlorosthane         <144 ug/L         400         14.4         400         050809 18.39         107-06-2           1.1-Dichlorosthene         6700 ug/L         400         228         400         050809 18.39         155-69-2           trans-1.2-Dichlorosthene         614 ug/L         400         352         400         050809 18.39         158-69-2           1.2-Dichloropropane         <196 ug/L	1,1-Dichloroethane	<b>&lt;300 ι</b>	ıg/L	400	300	400		05/08/09 18:39	75-34-3	
1,1-Dichloroethene         <228 upL         400         228 400         0508/09 18.39         75-35-4           cis-1,2-Dichloroethene         68700 ug/L         400         332         400         0508/09 18.39         156-50-2           1,2-Dichloroethene         614 ug/L         400         356         400         0508/09 18.39         78-87-5           1,2-Dichloropropane         <244 ug/L	1,2-Dichloroethane	<b>&lt;14</b> 4 ເ	ug/L	400	144	400		05/08/09 18:39	107-06-2	
cis-1,2-Dichloroethene         66700         ug/L         400         332         400         0508/09         18:39         156-50-2           trans-1,2-Dichloroethene         614         ug/L         400         156         400         0508/09         18:39         156-60-5           1,3-Dichloropropane         244         ug/L         400         244         400         0508/09         18:39         564-0-7           1,1-Dichloropropane         2300         ug/L         400         300         400         0508/09         18:39         563-58-6           cis-1,3-Dichloropropane         <80.0	1,1-Dichloroethene	<228 ເ	ig/L	400	228	400		05/08/09 18:39	75-35-4	
trans-12-Dichloroethene         614         ug/L         400         356         400         0508/09         18:38         18:6-00-5           1.2-Dichloropropane         <244	cis-1,2-Dichloroethene	68700 L	ug/L	400	332	400		05/08/09 18:39	156-59-2	
1,2-Dichloropropane       <196 ug/L	trans-1,2-Dichloroethene	614 u	ug/L	400	356	400		05/08/09 18:39	156-60-5	
1,3-Dichloropropane       <244 ug/L	1,2-Dichloropropane	<196 ເ	ug/L	400	196	400		05/08/09 18:39	78-87-5	
2,2-Dichloropropane         <248	1.3-Dichloropropane	< <b>24</b> 4 ເ	ug/L	400	244	400		05/08/09 18:39	142-28-9	
1,1-Dichloropropene       <300 ug/L	2.2-Dichloropropane	<248 เ	ug/L	400	248	400		05/08/09 18:39	594-20-7	
cis-1,3-Dichloropropene         <80.0         ug/L         400         80.0         400         05/08/09         18:39         10061-01-5           trans-1,3-Dichloropropene         <60.0	1.1-Dichloropropene	<b>&lt;300</b> ເ	ug/L	400	300	400		05/08/09 18:39	563-58-6	
trans-1,3-Dichloropropene         <76.0         ug/L         400         76.0         400         05/08/09         18.39         10061-02-6           Dilsopropyl ether         <304	cis-1.3-Dichloropropene	<80.0 ເ	Ja/L	400	80.0	400		05/08/09 18:39	10061-01-5	
Disopropyl ether         <304 ug/L         400         304         400         05/08/09         18.39         108-20-3           Ethylbenzene         830 ug/L         400         216         400         05/08/09         18.39         100-41-4           Hexachloro-1,3-butadiene         <268 ug/L	trans-1.3-Dichloropropene	<76.0 ເ	uq/L	400	76.0	400		05/08/09 18:39	10061-02-6	
Ethylberzene         830 ug/L         400         216         400         05/08/09         18:39         100-41-4           Hexachloro-1,3-butadiene         <268 ug/L	Diisopropyl ether	< <b>304</b> u	ua/L	400	304	400		05/08/09 18:39	108-20-3	
Hexachior-1,3-butadiene         <268         ug/L         2000         268         400         05/08/09         18:39         87-68-3           Isopropylberzene (Cumene)         <236	Ethvlbenzene	830 L	Ja/L	400	216	400		05/08/09 18:39	100-41-4	
Isopropylbenzene (Cumene)         <236         ug/L         400         236         400         05/08/09         18:39         98-82-8           p-Isopropylbuene         <268	Hexachloro-1.3-butadiene	<268 เ	ja/L	2000	268	400		05/08/09 18:39	87-68-3	
p-Isopropytoluene         <268         ug/L         400         268         400         05/08/09         18:39         99-87-6           Methylene Chloride         <172	Isopropylbenzene (Cumene)	<236 L	Ja/L	400	236	400		05/08/09 18:39	98-82-8	
Mathylene Chioride         <172 ug/L         400         172         400         05/08/09 18:39         75-09-2           Methyl-tert-butyl ether         <244 ug/L	p-lsopropyltoluene	<268 u	Ja/L	400	268	400		05/08/09 18:39	99-87-6	
Mathyliteri-butyl ether         <244 ug/L         400         244         400         05/08/09         18:39         1634-04-4           Naphthalene         <356 ug/L	Methylene Chloride	<172 u	Ja/L	400	172	400		05/08/09 18:39	75-09-2	
Naphthalene	Methyl-tert-butyl ether	<244 1	Ja/L	400	244	400		05/08/09 18:39	1634-04-4	
n-Propylbenzene       <324 ug/L	Naphthalene	<356 1	ua/L	2000	356	400		05/08/09 18:39	91-20-3	
Styrene       <344 ug/L	n-Propylbenzene	<324	ua/L	400	324	400		05/08/09 18:39	103-65-1	
1,1,1,2-Tetrachloroethane       <368	Styrene	<344 1	ua/L	400	344	400		05/08/09 18:39	100-42-5	
1,1,2,2-Tetrachloroethane       <80.0 ug/L	1.1.1.2-Tetrachloroethane	<368 L	Ja/L	400	368	400		05/08/09 18:39	630-20-6	
Tight officiency       1190 ug/L       400       180       400       05/08/09 18:39       127-18-4         Toluene       <268 ug/L	1.1.2.2-Tetrachloroethane	<80.0 L	Ja/L	400	80.0	400		05/08/09 18:39	79-34-5	
Toluene         100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100       100	Tetrachloroethene	1190 1	ia/l	400	180	400		05/08/09 18:39	127-18-4	
1,2,3-Trichlorobenzene       <296	Toluene	<268 ι	ua/L	400	268	400		05/08/09 18:39	108-88-3	
1,2,4-Trichlorobenzene       <388 ug/L	1.2.3-Trichlorobenzene	<296 1	ια/L	400	296	400		05/08/09 18:39	87-61-6	
1,1,1-Trichloroethane       <360 ug/L	1 2 4-Trichlorobenzene	<388 1	ια/L	400	388	400		05/08/09 18:39	120-82-1	
1,1,2-Trichloroethane       <168 ug/L	1.1.1-Trichloroethane	<360 1	ια/L	400	360	400		05/08/09 18:39	71-55-6	
Trichloroethene       7980 ug/L       400       192       400       05/08/09 18:39       79-01-6         Trichlorofluoromethane       <316 ug/L	1.1.2-Trichloroethane	<168 u	ua/L	400	168	400		05/08/09 18:39	79-00-5	
Trichlorofluoromethane       <316 ug/L       400       316       400       05/08/09 18:39       75-69-4         1,2,3-Trichloropropane       <396 ug/L	Trichloroethene	7980 u	Ja/L	400	192	400		05/08/09 18:39	79-01-6	
1,2,3-Trichloropropane       <396 ug/L       400       396       400       05/08/09 18:39       96-18-4         1,2,4-Trimethylbenzene       677 ug/L       400       388       400       05/08/09 18:39       95-63-6         1,3,5-Trimethylbenzene       <332 ug/L	Trichlorofluoromethane	<316 נ	ua/L	400	316	400		05/08/09 18:39	75-69-4	
1,2,4-Trimethylbenzene       677 ug/L       400       388       400       05/08/09 18:39       95-63-6         1,3,5-Trimethylbenzene       <332 ug/L	1.2.3-Trichloropropane	<396 ι	ια/L	400	396	400		05/08/09 18:39	96-18-4	
1,3,5-Trimethylbenzene         400       332       400       05/08/09 18:39       108-67-8         Vinyl chloride       253J ug/L       400       72.0       400       05/08/09 18:39       75-01-4         m&p-Xylene       2610 ug/L       800       720       400       05/08/09 18:39       1330-20-7         o-Xylene       <332 ug/L	1.2.4-Trimethylbenzene	677 1	ua/L	400	388	400		05/08/09 18:39	95-63-6	
Vinyl chloride         253 J ug/L         400         72.0         400         05/08/09 18:39         75-01-4           m&p-Xylene         2610 ug/L         800         720         400         05/08/09 18:39         75-01-4           o-Xylene         <332 ug/L	1.3.5-Trimethylbenzene	<332 1	ua/L	400	332	400		05/08/09 18:39	108-67-8	
m&p-Xylene         2610 ug/L         800         720         400         05/08/09 18:39         130-20-7           o-Xylene         <332 ug/L	Vinvl chloride	253J I	10/l	400	72.0	400		05/08/09 18:39	75-01-4	
o-Xylene       <332 ug/L	m&p-Xvlene	2610	Ja/L	800	720	400		05/08/09 18:39	1330-20-7	
4-Bromofluorobenzene (S)         98 %         70-130         400         05/08/09 18:39         460-00-4           Dibromofluoromethane (S)         103 %         70-130         400         05/08/09 18:39         1868-53-7           Toluene-d8 (S)         106 %         70-130         400         05/08/09 18:39         2037-26-5	o-Xvlene	<332 1	ua/L	400	332	400		05/08/09 18:39	95-47-6	
Dibromofluoromethane (S)         103 %         70-130         400         05/08/09 18:39         1868-53-7           Toluene-d8 (S)         106 %         70-130         400         05/08/09 18:39         2037-26-5	4-Bromofluorobenzene (S)	QR C	~	70-130	002	400		05/08/09 18:39	460-00-4	
Toluene-d8 (S) 106 % 70-130 400 05/08/09 18:39 2037-26-5	Dibromofluoromethane (S)	103 9	~~ %	70-130		400		05/08/09 18:39	1868-53-7	
	Toluene-d8 (S)	106 9	%	70-130		400		05/08/09 18:39	2037-26-5	

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# **REPORT OF LABORATORY ANALYSIS**

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## **QUALITY CONTROL DATA**

Project:	LA HACIENDA									
Pace Project No.:	4016991									
QC Batch:	PMST/2445		Analysis Meth	iod:	ASTM D2974	-87				······
QC Batch Method:	ASTM D2974-87	,	Analysis Desc	Analysis Description:		Dry Weight/Percent Moisture				
Associated Lab Sar	mples: 40169910	01, 4016991002,	4016991003							
SAMPLE DUPLICA	TE: 154926									
			4016923001	Dup			Max			
Parar	neter	Units	Result	Result	RPD		RPD		Qualifiers	
Percent Moisture		%	6.1	Ę	5.6	8		10		

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA Pace Project No.: 4016991

QC Batch:	MSV/4388	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samp	oles: 4016991004,	4016991005, 4016991006, 4016991007, 401	6991008, 4016991009, 4016991010, 4016991011
METHOD BLANK:	154956	Matrix: Water	

Associated Lab Samples:	4016991004, 4016991005, 401	16991006, 40169	91007, 4016991008,	4016991009,	4016991010,	4016991011
		<b>D</b> 1 1				

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.92	1.0	05/08/09 09:13	
1,1,1-Trichloroethane	ug/L	<0.90	1.0	05/08/09 09:13	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	1.0	05/08/09 09:13	
1,1,2-Trichloroethane	ug/L	<0.42	1.0	05/08/09 09:13	
1,1-Dichloroethane	ug/L	<0.75	1.0	05/08/09 09:13	
1,1-Dichloroethene	ug/L	<0.57	1.0	05/08/09 09:13	
1,1-Dichloropropene	ug/L	<0.75	1.0	05/08/09 09:13	
1,2,3-Trichlorobenzene	ug/L	<0.74	1.0	05/08/09 09:13	
1,2,3-Trichloropropane	ug/L	<0.99	1.0	05/08/09 09:13	
1,2,4-Trichlorobenzene	ug/L	<0.97	1.0	05/08/09 09:13	
1,2,4-Trimethylbenzene	ug/L	<0.97	1.0	05/08/09 09:13	
1,2-Dibromo-3-chloropropane	ug/L	<1.7	5.0	05/08/09 09:13	
1,2-Dibromoethane (EDB)	ug/L	<0.56	1.0	05/08/09 09:13	
1,2-Dichlorobenzene	ug/L	<0.83	1.0	05/08/09 09:13	
1,2-Dichloroethane	ug/L	<0.36	1.0	05/08/09 09:13	
1,2-Dichloropropane	ug/L	<0.49	1.0	05/08/09 09:13	
1,3,5-Trimethylbenzene	ug/L	<0.83	1.0	05/08/09 09:13	
1,3-Dichlorobenzene	ug/L	<0.87	1.0	05/08/09 09:13	
1,3-Dichloropropane	ug/L	<0.61	1.0	05/08/09 09:13	
1,4-Dichlorobenzene	ug/L	<0.95	1.0	05/08/09 09:13	
2,2-Dichloropropane	ug/L	<0.62	1.0	05/08/09 09:13	
2-Chlorotoluene	ug/L	<0.85	1.0	05/08/09 09:13	
4-Chlorotoluene	ug/L	<0.74	1.0	05/08/09 09:13	
Benzene	ug/L	<0.41	1.0	05/08/09 09:13	
Bromobenzene	ug/L	<0.82	1.0	05/08/09 09:13	
Bromochloromethane	ug/L	<0.97	1.0	05/08/09 09:13	
Bromodichloromethane	ug/L	<0.56	1.0	05/08/09 09:13	
Bromoform	ug/L	<0.94	1.0	05/08/09 09:13	
Bromomethane	ug/L	<0.91	1.0	05/08/09 09:13	
Carbon tetrachloride	ug/L	<0.49	1.0	05/08/09 09:13	
Chlorobenzene	ug/L	<0.41	1.0	05/08/09 09:13	
Chloroethane	ug/L	<0.97	1.0	05/08/09 09:13	
Chloroform	ug/L	<1.3	5.0	05/08/09 09:13	
Chloromethane	ug/L	<0.24	1.0	05/08/09 09:13	
cis-1,2-Dichloroethene	ug/L	<0.83	1.0	05/08/09 09:13	
cis-1,3-Dichloropropene	ug/L	<0.20	1.0	05/08/09 09:13	
Dibromochloromethane	ug/L	<0.81	1.0	05/08/09 09:13	
Dibromomethane	ug/L	<0.60	1.0	05/08/09 09:13	
Dichlorodifluoromethane	ug/L	<0.99	1.0	05/08/09 09:13	
Diisopropyl ether	ug/L	<0.76	1.0	05/08/09 09:13	
Ethylbenzene	ug/L	<0.54	1.0	05/08/09 09:13	
Hexachloro-1,3-butadiene	ug/L	<0.67	5.0	05/08/09 09:13	
Isopropylbenzene (Cumene)	ug/L	<0.59	1.0	05/08/09 09:13	

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA Pace Project No.: 4016991

METHOD BLANK: 154956

Matrix: Water

Associated Lab Samples: 4016991004, 4016991005, 4016991006, 4016991007, 4016991008, 4016991009, 4016991010, 4016991011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	<1.8	2.0	05/08/09 09:13	
Methyl-tert-butyl ether	ug/L	<0.61	1.0	05/08/09 09:13	
Methylene Chloride	ug/L	<0.43	1.0	05/08/09 09:13	
n-Butylbenzene	ug/L	<0.93	1.0	05/08/09 09:13	
n-Propylbenzene	ug/L	<0.81	1.0	05/08/09 09:13	
Naphthalene	ug/L	<0.89	5.0	05/08/09 09:13	
o-Xylene	ug/L	<0.83	1.0	05/08/09 09:13	
p-Isopropyitoluene	ug/L	<0.67	1.0	05/08/09 09:13	
sec-Butylbenzene	ug/L	<0.89	5.0	05/08/09 09:13	
Styrene	ug/L	<0.86	1.0	05/08/09 09:13	
tert-Butylbenzene	ug/L	<0.97	1.0	05/08/09 09:13	
Tetrachloroethene	ug/L	<0.45	1.0	05/08/09 09:13	
Toluene	ug/L	<0.67	1.0	05/08/09 09:13	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	05/08/09 09:13	
trans-1,3-Dichloropropene	ug/L	<0.19	1.0	05/08/09 09:13	
Trichloroethene	ug/L	<0.48	1.0	05/08/09 09:13	
Trichlorofluoromethane	ug/L	<0.79	1.0	05/08/09 09:13	
Vinyl chloride	ug/L	<0.18	1.0	05/08/09 09:13	
4-Bromofluorobenzene (S)	%	96	70-130	05/08/09 09:13	
Dibromofluoromethane (S)	%	96	70-130	05/08/09 09:13	
Toluene-d8 (S)	%	107	70-130	05/08/09 09:13	

LABORATORY CONTROL SAM	PLE & LCSD: 154957		15	4958						
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.1	50.8	100	102	70-132	1	20	
1,1,2,2-Tetrachioroethane	ug/L	50	47.9	48.1	96	96	69-130	.6	20	
1,1,2-Trichloroethane	ug/L	50	48.5	48.9	97	98	70-130	.9	20	
1,1-Dichloroethane	ug/L	50	49.9	49.5	100	99	70-130	.9	20	
1,1-Dichloroethene	ug/L	50	48.8	48.5	98	97	70-130	.6	20	
1,2-Dichloroethane	ug/L	50	47.5	48.0	95	96	70-134	1	20	
1,2-Dichloropropane	ug/L	50	49.9	50.7	100	101	70-130	2	20	
Benzene	ug/L	50	50.6	49.9	101	100	70-131	1	20	
Bromodichloromethane	ug/L	50	47.4	47.7	95	95	70-130	.6	20	
Bromoform	ug/L	50	50.2	49.9	100	100	70-130	.6	20	
Bromomethane	ug/L	50	40.8	42.5	82	85	23-200	4	20	
Carbon tetrachloride	ug/L	50	51.0	50.4	102	101	70-144	1	20	
Chlorobenzene	ug/L	50	51.1	50.6	102	101	70-130	1	20	
Chloroethane	ug/L	50	45.0	43.8	90	88	70-136	3	20	
Chloroform	ug/L	50	47.7	48.3	95	97	70-130	1	20	
Chloromethane	ug/L	50	34.3	34.2	69	68	54-148	.5	20	
cis-1,2-Dichloroethene	ug/L	50	48.8	49.4	98	99	70-130	1	20	
cis-1,3-Dichloropropene	ug/L	50	51.7	51.8	103	104	70-130	.3	20	
Dibromochloromethane	ug/L	50	48.6	48.6	97	97	70-130	.08	20	
Ethylbenzene	ug/L	50	52.9	52.5	106	105	70-130	.7	20	

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## **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: LA HACIENDA 4016991 Pace Project No .:

#### LABORATORY CONTROL SAMPLE & LCSD: 154957

LABORATORY CONTROL SAMP	PLE & LCSD: 154957		15	4958						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
m&p-Xylene	ug/L	100	107	106	107	106	70-130	1	20	
Methylene Chloride	ug/L	50	48.7	48.0	97	96	66-130	1	20	
o-Xylene	ug/L	50	53.5	52.5	107	105	70-130	2	20	
Styrene	ug/L	50	49.7	49.4	99	99	70-130	.6	20	
Tetrachioroethene	ug/L	50	54.1	53.8	108	108	75-130	.5	20	
Toluene	ug/L	50	52.9	52.5	106	105	70-130	.7	20	
trans-1,2-Dichloroethene	ug/L	50	51.3	50.9	103	102	70-130	.6	20	
trans-1,3-Dichloropropene	ug/L	50	51.4	51.5	103	103	70-130	.1	20	
Trichloroethene	ug/L	50	50.3	50.0	101	100	70-130	.6	20	
Vinyl chloride	ug/L	50	40.2	40.1	80	80	63-141	.2	20	
4-Bromofluorobenzene (S)	%				100	99	70-130			
Dibromofluoromethane (S)	%				99	101	70-130			
Toluene-d8 (S)	%				107	106	70-130			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155090 155091												
Parameter	4(	016991005 Rosult	MS Spike	MSD Spike	MS	MSD Bosult	MS % Roo	MSD	% Rec	חסס	Max	Qual
Falameter								70 Rec		<u></u>		
1,1,1-Trichloroethane	ug/L	<0.90	50	50	54.1	54.4	108	109	70-137	.4	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	50	50	47.8	50.1	96	100	67-130	5	20	
1,1,2-Trichloroethane	ug/L	<0.42	50	50	48.0	49.1	96	98	70-130	2	20	
1,1-Dichloroethane	ug/L	<0.75	50	50	52.6	51.1	105	102	70-130	3	20	
1,1-Dichloroethene	ug/L	<0.57	50	50	54.5	54.9	109	110	70-130	.7	20	
1,2-Dichloroethane	ug/L	<0.36	50	50	52.0	51.5	104	103	69-134	1	20	
1,2-Dichloropropane	ug/L	<0.49	50	50	50.8	50.3	102	101	70-130	1	20	
Benzene	ug/L	<0.41	50	50	51.9	51.2	104	102	69-131	1	20	
Bromodichloromethane	ug/L	<0.56	50	50	49.6	49.3	99	99	70-130	.6	20	
Bromoform	ug/L	<0.94	50	50	47.5	50.1	95	100	68-130	5	20	
Bromomethane	ug/L	<0.91	50	50	52.4	54.9	105	110	22-200	5	20	
Carbon tetrachloride	ug/L	<0.49	50	50	54.0	54.2	108	108	70-144	.5	20	
Chlorobenzene	ug/L	<0.41	50	50	51.7	51.4	103	103	70-130	.6	20	
Chloroethane	ug/L	<0.97	50	50	51.8	51.9	104	104	66-136	.2	20	
Chloroform	ug/L	<1.3	50	50	51.3	50.1	103	100	70-130	2	20	
Chloromethane	ug/L	<0.24	50	50	49.0	49.3	98	99	54 <b>-</b> 148	.6	20	
cis-1,2-Dichloroethene	ug/L	<0.83	50	50	52.5	50.1	105	100	70-130	5	20	
cis-1,3-Dichloropropene	ug/L	<0.20	50	50	51.7	50.5	103	101	70-130	2	20	
Dibromochloromethane	ug/L	<0.81	50	50	49.8	50.2	100	100	70-130	.8	20	
Ethylbenzene	ug/L	<0.54	50	50	53.8	53.2	108	106	70-130	1	20	
m&p-Xylene	ug/L	<1.8	100	100	108	107	108	107	70-130	1	20	
Methylene Chloride	ug/L	<0.43	50	50	52.4	51.7	105	103	64-130	1	20	
o-Xylene	ug/L	<0.83	50	50	54.1	53.8	108	108	70-130	.7	20	
Styrene	ug/L	<0.86	50	50	49.6	49.5	99	99	43-130	.1	20	
Tetrachloroethene	ug/L	<0.45	50	50	54.6	53.9	109	108	70-130	1	20	
Toluene	ug/L	<0.67	50	50	53.2	52.8	106	105	70-130	.6	20	
trans-1,2-Dichloroethene	ug/L	<0.89	50	50	53.2	53.5	106	107	70-130	.6	20	
trans-1,3-Dichloropropene	ug/L	<0.19	50	50	50.5	51.1	101	102	70-130	1	20	
Trichloroethene	ug/L	<0.48	50	50	53.1	51.5	106	103	70-130	3	20	

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# **REPORT OF LABORATORY ANALYSIS**

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Project:LA HACIENDAPace Project No.:4016991

MATRIX SPIKE & MATRIX SPI	KE DUPLICAT	E: 15509	0		155091							
	40	16991005	MS Snike	MSD Spike	MS	MSD	MS	MSD	% Rec		May	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Vinyl chloride	ug/L	<0.18	50	50	51.8	53.3	104	107	59-141	3	20	
4-Bromofluorobenzene (S)	%						100	102	70-130			
Dibromofluoromethane (S)	%						103	102	70-130			
Toluene-d8 (S)	%						106	106	70-130			

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#### **REPORT OF LABORATORY ANALYSIS**

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## **QUALITY CONTROL DATA**

EPA 8260

8260 MSV Med Level Normal List

Analysis Method:

Project:LA HACIENDAPace Project No.:4016991

.

QC Batch: MSV/4393

QC Batch Method:EPA 5035/5030BAnalysis Description:Associated Lab Samples:4016991001, 4016991002, 4016991003

Associated Lab Samples:         4016991001, 4016991002, 4016991003         Blank Result         Reporting Limit         Analyzed         Qualifiers           1,1,12-Tetrachloroethane         ug/kg         <25.0         60.0         5508/09 11:21         Qualifiers           1,1,2-Tetrachloroethane         ug/kg         <25.0         60.0         5508/09 11:21         1           1,12-Tetrachloroethane         ug/kg         <25.0         60.0         5508/09 11:21         1           1,12-Tetrachloroethane         ug/kg         <25.0         60.0         5508/09 11:21         1           1,1-Dichloroethane         ug/kg         <25.0         60.0         5508/09 11:21         1           1,2-Trichloropopane         ug/kg         <25.0         60.0         5508/09 11:21         1           1,2-Trichlorobenzene         ug/kg         <25.0         60.0         5508/09 11:21         1           1,2-Dichlorobenzene
Parameter         Units         Result         Limit         Analyzed         Qualifiers           1,1,1-2-Tetrachloroethane         ug/kg         <25.0
Parameter         Units         Result         Limit         Analyzed         Qualifiers           1,1,12-Tetrachloroethane         ug/kg         <25.0
1,1,2-Tetrachloroethane         ug/kg         <25.0         60.0         05/08/09         11:21           1,1,2-Tichioroethane         ug/kg         <25.0
1,1.1-Trichloroethane       ug/kg       <25.0
1,1,2,2-Tichloroethane         ug/kg              1,1,2,2-Tichloroethane         ug/kg         <25.0
1,1,2-Trichloroethane         ug/kg         225.0         60.0         65/08/09         11:21           1,1-Dichloroethane         ug/kg         <25.0
1,1-Dichloroethane       ug/kg       <25.0
The individual of the second
Heinstein         Ug/kg               1, -Dichloropropene         Ug/kg         <25.0
1,2,3-Trichlorobenzene         ug/kg <t< td=""></t<>
1,2,3-Trichloropropane       ug/kg       <25.0
1,2,4-Trichlorobenzene       ug/kg       225.0       60.0       05/08/09       11:21         1,2,4-Trichlorobenzene       ug/kg       <25.0
12.4-Trinethylbenzene       ug/kg       25.0       60.0       05/08/09       11:1         12.4-Trinethylbenzene       ug/kg       <82.3
1,2-Dibromo-3-chloropropane       ug/kg       28.3       250       05/08/09       11:21         1,2-Dibromo-3-chloropropane       ug/kg       <25.0
12-Dibromoethane (EDB)       ug/kg       <25.0
1,2-Dichlorobenzene       ug/kg       <44.4
1,2-Dichloroberhane       ug/kg       <25.0
1,2-Dichloropropane       ug/kg       <25.0
1,3,5-Trimethylbenzene       ug/kg       <25.0
1,3-Dichlorobenzeneug/kg1,3-Dichloropropaneug/kg<25.0
1,3-Dichloropropaneug/kg<25.060.005/08/0911.211,3-Dichloropropaneug/kg<25.0
1,4-Dichlorophynineug/kg<25.060.005/08/09 11:211,4-Dichloropaneug/kg<25.0
1, - Dichlorobrizenteug/kg-22.060.005/08/0911.212,2-Dichloropropaneug/kg<25.0
2Chlorotolueneug/kg25.060.005/08/09 11:214-Chlorotolueneug/kg<25.0
2-binototototicug/kg22.060.005/06/0311.214-Chlorotolueneug/kg<25.0
Benzene       ug/kg       <25.0
Bronobenzeneug/kg<25.060.005/06/0311.21Bromochloromethaneug/kg<25.0
Distributionug/kg225.060.005/06/09 11:21Bromochloromethaneug/kg<25.0
Bromodichloromethane       ug/kg       <25.0
Bromoform       ug/kg       <25.9
Bromomethaneug/kg25.060.005/08/09 11:21Bromomethaneug/kg<25.0
Carbon tetrachloride         ug/kg         25.0         60.0         05/08/09 11:21           Chlorobenzene         ug/kg         <25.0
Chlorobenzene       ug/kg       <25.0
Chloroethane       ug/kg       <25.0
Chloroform         ug/kg         <25.0         60.0         05/08/09         11.21         Color           Chloroform         ug/kg         <25.0
Chloromethane         ug/kg          25.0         60.0         05/08/09         11:21           cis-1,2-Dichloroethene         ug/kg         <25.0
cis-1,2-Dichloropropene         ug/kg         <25.0         60.0         05/08/09         11:21           cis-1,3-Dichloropropene         ug/kg         <25.0
cis-1,3-Dichloropropene         ug/kg         <25.0         60.0         05/08/09         11:21           Dibromochloromethane         ug/kg         <25.0
Dibromochloromethane         ug/kg         <25.0         60.0         05/08/09         11:21           Dibromomethane         ug/kg         <25.0
Dibromomethane         ug/kg         <25.0         60.0         05/08/09         11:21
Dichlorodifluoromethane ug/kg <25.0 60.0 05/08/09.11:21
Diisopropyl ether ug/kg <25.0 60.0 05/08/09 11:21
Ethylbenzene ug/kg <25.0 60.0 05/08/09 11·21
Hexachloro-1.3-butadiene ug/kg <26.4 60.0 05/08/09 11:21
lsopropylbenzene (Cumene) ug/kg <25.0 60.0 05/08/09 11:21

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Project: LA HACIENDA Pace Project No.: 4016991

METHOD BLANK: 15500	4	Matrix:	Solid		
Associated Lab Samples:	4016991001, 4016991002, 40	16991003			
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
m&p-Xylene	ug/kg	<50.0	120	05/08/09 11:21	
Methyl-tert-butyl ether	ug/kg	<25.0	60.0	05/08/09 11:21	
Methylene Chloride	ug/kg	<25.0	60.0	05/08/09 11:21	
n-Butylbenzene	ug/kg	<40.4	60.0	05/08/09 11:21	
n-Propylbenzene	ug/kg	<25.0	60.0	05/08/09 11:21	
Naphthalene	ug/kg	<25.0	60.0	05/08/09 11:21	
o-Xylene	ug/kg	<25.0	60.0	05/08/09 11:21	
p-Isopropyltoluene	ug/kg	<25.0	60.0	05/08/09 11:21	
sec-Butylbenzene	ug/kg	<25.0	60.0	05/08/09 11:21	
Styrene	ug/kg	<25.0	60.0	05/08/09 11:21	
tert-Butylbenzene	ug/kg	<25.0	60.0	05/08/09 11:21	
Tetrachloroethene	ug/kg	<25.0	60.0	05/08/09 11:21	
Toluene	ug/kg	<25.0	60.0	05/08/09 11:21	
trans-1,2-Dichloroethene	ug/kg	<25.0	60.0	05/08/09 11:21	
trans-1,3-Dichloropropene	ug/kg	<25.0	60.0	05/08/09 11:21	
Trichloroethene	ug/kg	<25.0	60.0	05/08/09 11:21	
Trichlorofluoromethane	ug/kg	<25.0	60.0	05/08/09 11:21	
Vinyl chloride	ug/kg	<25.0	60.0	05/08/09 11:21	
4-Bromofluorobenzene (S)	%	92	70-147	05/08/09 11:21	
Dibromofluoromethane (S)	%	112	70-150	05/08/09 11:21	
Toluene-d8 (S)	%	105	70-155	05/08/09 11:21	

LABORATORY CONTROL SAM	PLE & LCSD: 155005		15	5006						
Deservation	Linte	Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	Qualifier
Parameter		Conc.	Result	Result	% Rec	% Rec		RPD	RPD	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2770	2830	111	113	68-140	2	20	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2650	2620	106	105	67-131	1	20	
1,1,2-Trichloroethane	ug/kg	2500	2610	2590	104	104	70-130	.5	20	
1,1-Dichloroethane	ug/kg	2500	2500	2490	100	99	70-130	.7	20	
1,1-Dichloroethene	ug/kg	2500	2980	3030	119	121	70-133	1	20	
1,2-Dichloroethane	ug/kg	2500	2640	2680	106	107	70-132	1	20	
1,2-Dichloropropane	ug/kg	2500	2540	2560	102	102	70-130	.6	20	
Benzene	ug/kg	2500	2560	2580	102	103	70-130	.8	20	
Bromodichloromethane	ug/kg	2500	2770	2790	111	111	70-130	.5	20	
Bromoform	ug/kg	2500	2760	2760	110	110	70-130	.2	20	
Bromomethane	ug/kg	2500	3710	3810	148	152	65-153	3	20	
Carbon tetrachloride	ug/kg	2500	2990	3040	120	122	70-142	2	20	
Chlorobenzene	ug/kg	2500	2440	2500	98	100	70-130	2	20	
Chloroethane	ug/kg	2500	5130	5270	205	211	70-178	3	20	CC,L0
Chloroform	ug/kg	2500	2690	2720	108	109	70-130	1	20	
Chloromethane	ug/kg	2500	2250	2320	90	93	53-143	3	20	
cis-1,2-Dichloroethene	ug/kg	2500	2550	2610	102	105	70-130	2	20	
cis-1,3-Dichloropropene	ug/kg	2500	2430	2430	97	97	70-130	.006	20	
Dibromochloromethane	ug/kg	2500	2750	2720	110	109	70-130	.8	20	
Ethylbenzene	ug/kg	2500	2420	2460	97	99	70-130	2	20	

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## **REPORT OF LABORATORY ANALYSIS**

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## **QUALITY CONTROL DATA**

Project: LA HACIENDA Pace Project No.: 4016991

#### LABORATORY CONTROL SAMPLE & LCSD: 155005

LABORATORY CONTROL SAMP	LE & LCSD: 155005		15	5006						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
m&p-Xylene	ug/kg	5000	4890	4950	98	99	70-130	1	20	
Methylene Chloride	ug/kg	2500	2970	3040	119	121	70-134	2	20	
o-Xylene	ug/kg	2500	2370	2440	95	98	70-130	3	20	
Styrene	ug/kg	2500	2290	2320	92	93	70-130	1	20	
Tetrachloroethene	ug/kg	2500	2420	2460	97	98	70-130	2	20	
Toluene	ug/kg	2500	2380	2430	95	97	70-130	2	20	
trans-1,2-Dichloroethene	ug/kg	2500	2520	2520	101	101	67-130	.2	20	
trans-1,3-Dichloropropene	ug/kg	2500	2420	2410	97	96	70-130	.5	20	
Trichloroethene	ug/kg	2500	2580	2580	103	103	70-130	.2	20	
Vinyl chloride	ug/kg	2500	2240	2320	90	93	70-130	4	20	
4-Bromofluorobenzene (S)	%				89	91	70-147			
Dibromofluoromethane (S)	%				105	110	70-150			
Toluene-d8 (S)	%				99	103	70-155			

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#### **REPORT OF LABORATORY ANALYSIS**

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#### QUALIFIERS

Project: LA HACIENDA Pace Project No.: 4016991

#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

#### ANALYTE QUALIFIERS

- 1j Surrogate recovery outside laboratory control limits due to methanol leakage.
- CC The continuing calibration for this compound is outside of method control limits. The result is estimated.
- L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
- W Non-detect results are reported on a wet weight basis.

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#### **REPORT OF LABORATORY ANALYSIS**

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April 14, 2009

Robyn Seymour Seymour Environmental Services, INC. 2531 Dyreson Road Mc Farland, WI 53558

RE: Project: LA HACIENDA Pace Project No.: 4015838

Dear Robyn Seymour:

Enclosed are the analytical results for sample(s) received by the laboratory on April 09, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brian Basten

brian.basten@pacelabs.com Project Manager

Enclosures

## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: LA HACIENDA Pace Project No.: 4015838

# Green Bay Certification IDs

Wisconsin DATCP Certification #: 105-444 Wisconsin DATCP Certification #: 105-444 Wisconsin Certification #: 405132750 Wisconsin Certification #: 405132750 South Carolina Certification #: 83006001 South Carolina Certification #: 83006001 North Dakota Certification #: R-200 North Dakota Certification #: R-150 North Carolina Certification #: 503 North Carolina Certification #: 503 North Carolina Certification #: 503 New York Certification #: 11888 New York Certification #: 11887 Minnesota Certification #: 055-999-334 Minnesota Certification #: 055-999-334 Louisiana Certification #: 04169 Louisiana Certification #: 04168 Kentucky Certification #: 83 Kentucky Certification #: 83 Illinois Certification #: 200051 Illinois Certification #: 20050 Florida/NELAP Certification #: E87951 Florida/NELAP Certification #: E87948

#### **REPORT OF LABORATORY ANALYSIS**

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## SAMPLE SUMMARY

Lab ID	Sample ID	Matrix	Date Collected	Date Received	
Pace Project No .:	4015838				
Project:	LA HACIENDA				

04/09/09 08:40

4015838001	PZ-1	Water	04/08/09 15:00
4010000001	1 6-1	viu(c)	04/00/05 10.00

**REPORT OF LABORATORY ANALYSIS** 

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4015838001

PZ-1

Pace Analytical Services, Inc. 1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

64

PASI-G

## SAMPLE ANALYTE COUNT

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
Pace Project No.:	4015838				
Project:	LA HACIENDA				

EPA 8260

HNW

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#### **PROJECT NARRATIVE**

Project: LA HACIENDA Pace Project No.: 4015838

 Method:
 EPA 8260

 Description:
 8260 MSV

 Client:
 SEYMOUR ENVIRONMENTAL SERVICES, INC.

 Date:
 April 14, 2009

#### **General Information:**

1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### **Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

Internal Standards: All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### QC Batch: MSV/4164

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4015887013

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 144543)
  - 1,1,1-Trichloroethane
  - Tetrachloroethene
  - Trichloroethene
- MSD (Lab ID: 144544)
  - 1,1,1-Trichloroethane
  - 1,1-Dichloroethane
  - Tetrachloroethene
  - Trichloroethene

#### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

#### **REPORT OF LABORATORY ANALYSIS**

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#### **PROJECT NARRATIVE**

Project: LA HACIENDA

Pace Project No.: 4015838

Method: EPA 8260

Description:8260 MSVClient:SEYMOUR ENVIRONMENTAL SERVICES, INC.Date:April 14, 2009

Analyte Comments:

QC Batch: MSV/4164

1j: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample's MSD analysis).

- MS (Lab ID: 144543)
  - Dibromofluoromethane (S)

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 144543)
  - 1,1-Dichloroethane
  - 1,1,1-Trichloroethane
  - Tetrachloroethene
  - Trichloroethene
- MSD (Lab ID: 144544)
  - 1,1-Dichloroethane
  - 1,1,1-Trichloroethane
  - Tetrachloroethene
  - Trichloroethene

This data package has been reviewed for quality and completeness and is approved for release.

#### REPORT OF LABORATORY ANALYSIS

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Project: LA HACIENDA

Pace Project No.: 4015838

Sample: PZ-1	Lab ID:	4015838001	Collecte	d: 04/08/09	9 15:00	Received: 04	/09/09 08:40 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 8	3260						
Benzene	<b>&lt;2.0</b> u	ıg/L	5.0	2.0	5		04/13/09 16:21	71-43-2	
Bromobenzene	<b>&lt;4.1</b> u	ig/L	5.0	4.1	5		04/13/09 16:21	108-86-1	
Bromochloromethane	<4.8 u	ig/L	5.0	4.8	5		04/13/09 16:21	74-97-5	
Bromodichloromethane	<b>&lt;2.8</b> u	ig/L	5.0	2.8	5		04/13/09 16:21	75-27-4	
Bromoform	<b>&lt;4.7</b> u	ig/L	5.0	4.7	5		04/13/09 16:21	75-25-2	
Bromomethane	<b>&lt;4.6</b> u	ig/L	5.0	4.6	5		04/13/09 16:21	74-83-9	
n-Butylbenzene	<b>&lt;4.6</b> u	ig/L	5.0	4.6	5		04/13/09 16:21	104-51-8	
sec-Butylbenzene	<b>&lt;4.4</b> u	ig/L	25.0	4.4	5		04/13/09 16:21	135-98-8	
tert-Butylbenzene	<b>&lt;4.8</b> u	ig/L	5.0	4.8	5		04/13/09 16:21	98-06-6	
Carbon tetrachloride	<b>&lt;2.4</b> u	ig/L	5.0	2.4	5		04/13/09 16:21	56-23-5	
Chlorobenzene	<b>&lt;2.0</b> u	ig/L	5.0	2.0	5		04/13/09 16:21	108-90-7	
Chloroethane	<b>&lt;4.8</b> u	ıg/L	5.0	4.8	5		04/13/09 16:21	75-00-3	
Chloroform	<b>&lt;6.5</b> u	ig/L	25.0	6.5	5		04/13/09 16:21	67-66-3	
Chloromethane	<b>&lt;1.2</b> u	ig/L	5.0	1.2	5		04/13/09 16:21	74-87-3	
2-Chlorotoluene	<b>&lt;4.2</b> u	ıg/L	5.0	4.2	5		04/13/09 16:21	95-49-8	
4-Chlorotoluene	<b>&lt;3.7</b> u	ig/L	5.0	3.7	5		04/13/09 16:21	106-43-4	
1,2-Dibromo-3-chloropropane	<b>&lt;8.4</b> u	ig/L	25.0	8.4	5		04/13/09 16:21	96-12-8	
Dibromochloromethane	<b>&lt;4.0</b> u	ig/L	5.0	4.0	5		04/13/09 16:21	124-48-1	
1,2-Dibromoethane (EDB)	<b>&lt;2.8</b> u	ig/L	5.0	2.8	5		04/13/09 16:21	106-93-4	
Dibromomethane	<3.0 ປ	ig/L	5.0	3.0	5		04/13/09 16:21	74-95-3	
1,2-Dichlorobenzene	<b>&lt;4.2</b> u	ig/L	5.0	4.2	5		04/13/09 16:21	95-50-1	
1.3-Dichlorobenzene	<4.4 เ	ig/L	5.0	4.4	5		04/13/09 16:21	541-73-1	
1,4-Dichlorobenzene	<4.8 เ	ig/L	5.0	4.8	5		04/13/09 16:21	106-46-7	
Dichlorodifluoromethane	< <b>5.0</b> u	ig/L	5.0	5.0	5		04/13/09 16:21	75-71-8	
1.1-Dichloroethane	<b>&lt;3.8</b> ເ	ig/L	5.0	3.8	5		04/13/09 16:21	75-34-3	
1,2-Dichloroethane	<b>&lt;1.8</b> u	ig/L	5.0	1.8	5		04/13/09 16:21	107-06-2	
1,1-Dichloroethene	<b>&lt;2.8</b> ເ	ig/L	5.0	2.8	5		04/13/09 16:21	75-35-4	
cis-1,2-Dichloroethene	181 u	ig/L	5.0	4.2	5		04/13/09 16:21	156-59-2	
trans-1,2-Dichloroethene	6.9 L	ig/L	5.0	4.4	5		04/13/09 16:21	156-60-5	
1,2-Dichloropropane	<b>&lt;2.4</b> ι	ig/L	5.0	2.4	5		04/13/09 16:21	78-87-5	
1,3-Dichloropropane	<b>&lt;3.0</b> ເ	ig/L	5.0	3.0	5		04/13/09 16:21	142-28-9	
2,2-Dichloropropane	<b>&lt;3.1</b> ι	ig/L	5.0	3.1	5		04/13/09 16:21	594-20-7	
1,1-Dichloropropene	<3.8 ເ	ig/L	5.0	3.8	5		04/13/09 16:21	563-58-6	
cis-1,3-Dichloropropene	<b>&lt;1.0</b> ι	ig/L	5.0	1.0	5		04/13/09 16:21	10061-01-5	
trans-1,3-Dichloropropene	<0.95 u	ig/L	5.0	0.95	5		04/13/09 16:21	10061-02-6	
Diisopropyl ether	<b>&lt;3.8</b> ເ	ig/L	5.0	3.8	5		04/13/09 16:21	108-20-3	
Ethylbenzene	<b>&lt;2.7</b> U	ig/L	5.0	2.7	5		04/13/09 16:21	100-41-4	
Hexachloro-1,3-butadiene	<b>&lt;3.4</b> ι	ig/L	25.0	3.4	5		04/13/09 16:21	87-68-3	
Isopropylbenzene (Cumene)	<b>&lt;3.0</b> u	ig/L	5.0	3.0	5		04/13/09 16:21	98-82-8	
p-Isopropyltoluene	<b>&lt;3.4</b> u	ig/L	5.0	3.4	5		04/13/09 16:21	99-87-6	
Methylene Chloride	<b>&lt;2.2</b> L	ig/L	5.0	2.2	5		04/13/09 16:21	75-09-2	
Methyl-tert-butyl ether	<b>&lt;3.0</b> u	ig/L	5.0	3.0	5		04/13/09 16:21	1634-04-4	
Naphthalene	<b>&lt;4.4</b> เ	ig/L	25.0	4.4	5		04/13/09 16:21	91-20-3	
n-Propylbenzene	<4.0 u	ig/L	5.0	4.0	5		04/13/09 16:21	103-65-1	
Styrene	<4.3 L	ig/L	5.0	4.3	5		04/13/09 16:21	100-42-5	
1,1,1,2-Tetrachloroethane	<b>&lt;4.6</b> L	ig/L	5.0	4.6	5		04/13/09 16:21	630-20-6	

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA

Pace Project No.: 4015838

Sample: PZ-1	Lab ID: 4015838001		Collected	1: 04/08/09	9 15:00	Received: 04	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical	Method: EPA 8	3260						
1,1,2,2-Tetrachloroethane	<1.0 ug	g/L	5.0	1.0	5		04/13/09 16:21	79-34-5	
Tetrachloroethene	466 ug	g/L	5.0	2.2	5		04/13/09 16:21	127-18-4	
Toluene	<3.4 ug	g/L	5.0	3.4	5		04/13/09 16:21	108-88-3	
1,2,3-Trichlorobenzene	< <b>3.</b> 7 ug	g/L	5.0	3.7	5		04/13/09 16:21	87-61-6	
1,2,4-Trichlorobenzene	<4.8 ug	g/L	5.0	4.8	5		04/13/09 16:21	120-82-1	
1,1,1-Trichloroethane	<4.5 ug	g/L	5.0	4.5	5		04/13/09 16:21	71-55-6	
1,1,2-Trichloroethane	<2.1 ug	g/L	5.0	2.1	5		04/13/09 16:21	79-00-5	
Trichloroethene	60.1 ug	g/L	5.0	2.4	5		04/13/09 16:21	79-01-6	
Trichlorofluoromethane	<4.0 ug	g/L	5.0	4.0	5		04/13/09 16:21	75-69-4	
1,2,3-Trichloropropane	< <b>5.0</b> ug	g/L.	5.0	5.0	5		04/13/09 16:21	96-18-4	
1,2,4-Trimethylbenzene	<4.8 ug	g/L	5.0	4.8	5		04/13/09 16:21	95-63-6	
1,3,5-Trimethylbenzene	<4.2 ug	g/L	5.0	4.2	5		04/13/09 16:21	108-67-8	
Vinyl chloride	26.4 ug	g/L	5.0	0.90	5		04/13/09 16:21	75-01-4	
m&p-Xylene	<9.0 ug	g/L	10.0	9.0	5		04/13/09 16:21	1330-20-7	
o-Xylene	<4.2 ug	g/L	5.0	4.2	5		04/13/09 16:21	95-47-6	
4-Bromofluorobenzene (S)	96 %	•	70-130		5		04/13/09 16:21	460-00-4	
Dibromofluoromethane (S)	98 %	,	70-130		5		04/13/09 16:21	1868-53-7	
Toluene-d8 (S)	99 %	)	70-130		5		04/13/09 16:21	2037-26-5	

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## **REPORT OF LABORATORY ANALYSIS**

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### **QUALITY CONTROL DATA**

Project: LA HACIEN	1DA		•			
Pace Project No.: 4015838						
OC Batch: MSV/4164	4	Analysis Meth	nod: EF	PA 8260		
OC Batch Method: EPA 8260		Analysis Des	cription: 82	260 MSV		
Accesisted Lab Complexity 40%	15020004					
Associated Lab Samples: 40	15838001					
METHOD BLANK: 144540		Matrix:	Water			
Associated Lab Samples: 40*	15838001					
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyzed	Qualifiers	
1,1,1,2-Tetrachloroethane	ug/L	<0.92	1.0	04/13/09 07:15		
1,1,1-Trichloroethane	ug/L	<0.90	1.0	04/13/09 07:15		
1,1,2,2-Tetrachloroethane	ug/L	<0.20	1.0	04/13/09 07:15		
1,1,2-Trichloroethane	ug/L	<0.42	1.0	04/13/09 07:15		
1,1-Dichloroethane	ug/L	<0.75	1.0	04/13/09 07:15		
1,1-Dichloroethene	ug/L	<0.57	1.0	04/13/09 07:15		
1,1-Dichloropropene	ug/L	<0.75	1.0	04/13/09 07:15		
1,2,3-Trichlorobenzene	ug/L	<0.74	1.0	04/13/09 07:15		
1,2,3-Trichloropropane	ug/L	<0.99	1.0	04/13/09 07:15		
1,2,4-Trichlorobenzene	ug/L	<0.97	1.0	04/13/09 07:15		
1,2,4-Trimethylbenzene	ug/L	<0.97	1.0	04/13/09 07:15		
1,2-Dibromo-3-chloropropane	ug/L	<1.7	5.0	04/13/09 07:15		
1,2-Dibromoethane (EDB)	ug/L	<0.56	1.0	04/13/09 07:15		
1,2-Dichlorobenzene	ug/L	<0.83	1.0	04/13/09 07:15		
1,2-Dichloroethane	ug/L	<0.36	1.0	04/13/09 07:15		
1,2-Dichloropropane	ug/L	<0.49	1.0	04/13/09 07:15		
1,3,5-Trimethylbenzene	ug/L	<0.83	1.0	04/13/09 07:15		
1,3-Dichlorobenzene	ug/L	<0.87	1.0	04/13/09 07:15		
1,3-Dichloropropane	ug/L	<0.61	1.0	04/13/09 07:15		
1,4-Dichlorobenzene	ug/L	<0.95	1.0	04/13/09 07:15		
2,2-Dichloropropane	ug/L	<0.62	1.0	04/13/09 07:15		
2-Chlorotoluene	ug/L	<0.85	1.0	04/13/09 07:15		
4-Chlorotoluene	ug/L	<0.74	1.0	04/13/09 07:15		
Benzene	ug/L	<0.41	1.0	04/13/09 07:15		
Bromobenzene	ug/L	<0.82	1.0	04/13/09 07:15		
Bromochloromethane	ug/L	<0.97	1.0	04/13/09 07:15		
Bromodichloromethane	ug/L	<0.56	1.0	04/13/09 07:15		
Bromoform	ug/L	<0.94	1.0	04/13/09 07:15		
Bromomethane	ug/L	<0.91	1.0	04/13/09 07:15		
Carbon tetrachloride	ug/L	<0.49	1.0	04/13/09 07:15		
Chlorobenzene	ug/L	<0.41	1.0	04/13/09 07:15		
Chloroethane	ug/L	<0.97	1.0	04/13/09 07:15		
Chloroform	ug/L	<1.3	5.0	04/13/09 07:15		
Chloromethane	ug/L	<0.24	1.0	04/13/09 07:15		
cis-1,2-Dichloroethene	ug/L	<0.83	1.0	04/13/09 07:15		
cis-1,3-Dichloropropene	ug/L	<0.20	1.0	04/13/09 07:15		
Dibromochloromethane	ug/L	<0.81	1.0	04/13/09 07:15		
Dibromomethane	ug/L	<0.60	1.0	04/13/09 07:15		
Dichlorodifluoromethane	ug/L	<0.99	1.0	04/13/09 07:15		
Diisopropyl ether	ug/L	<0.76	1.0	04/13/09 07:15		
Ethylbenzene	ug/L	<0.54	1.0	04/13/09 07:15		
Hexachloro-1,3-butadiene	ug/L	<0.67	5.0	04/13/09 07:15		
Isopropylbenzene (Cumene)	ug/L	<0.59	1.0	04/13/09 07:15		

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA Pace Project No.: 4015838

METHOD BLANK: 144540

Associated Lab Samples: 4015838001

Matrix: Water

Parameter	Linits	Blank Result	Reporting	Analyzed	Qualifiers
					Quanters
m&p-Xylene	ug/L	<1.8	2.0	04/13/09 07:15	
Methyl-tert-butyl ether	ug/L	<0.61	1.0	04/13/09 07:15	
Methylene Chloride	ug/L	<0.43	1.0	04/13/09 07:15	
n-Butylbenzene	ug/L	<0.93	1.0	04/13/09 07:15	
n-Propylbenzene	ug/L	<0.81	1.0	04/13/09 07:15	
Naphthalene	ug/L	<0.89	5.0	04/13/09 07:15	
o-Xylene	ug/L	<0.83	1.0	04/13/09 07:15	
p-Isopropyltoluene	ug/L	<0.67	1.0	04/13/09 07:15	
sec-Butylbenzene	ug/L	<0.89	5.0	04/13/09 07:15	
Styrene	ug/L	<0.86	1.0	04/13/09 07:15	
tert-Butylbenzene	ug/L	<0.97	1.0	04/13/09 07:15	
Tetrachloroethene	ug/L	<0.45	1.0	04/13/09 07:15	
Toluene	ug/L	<0.67	1.0	04/13/09 07:15	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	04/13/09 07:15	
trans-1,3-Dichloropropene	ug/L	<0.19	1.0	04/13/09 07:15	
Trichloroethene	ug/L	<0.48	1.0	04/13/09 07:15	
Trichlorofluoromethane	ug/L	<0.79	1.0	04/13/09 07:15	
Vinyl chloride	ug/L	<0.18	1.0	04/13/09 07:15	
4-Bromofluorobenzene (S)	%	96	70-130	04/13/09 07:15	
Dibromofluoromethane (S)	%	98	70-130	04/13/09 07:15	
Toluene-d8 (S)	%	99	70-130	04/13/09 07:15	

LABORATORY CONTROL SAM	PLE & LCSD: 144541		14	4542						
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.9	55.2	108	110	75-128	2	20	
1,1,2,2-Tetrachloroethane	ug/L	50	49.1	48.1	98	96	67-125	2	20	
1,1,2-Trichloroethane	ug/L	50	50.8	50.9	102	102	75-125	.3	20	
1,1-Dichloroethane	ug/L	50	53.2	52.9	106	106	71-130	.6	20	
1,1-Dichloroethene	ug/L	50	53.7	55.4	107	111	75-125	3	20	
1,2-Dichloroethane	ug/L	50	50.6	51.6	101	103	71-132	2	20	
1,2-Dichloropropane	ug/L	50	52.4	49.4	105	99	73-125	6	20	
Benzene	ug/L	50	52.5	53.0	105	106	75-125	.9	20	
Bromodichloromethane	ug/L	50	51.8	50.1	104	100	75 <b>-</b> 125	3	20	
Bromoform	ug/L	50	48.0	46.0	96	92	75-125	4	20	
Bromomethane	ug/L	50	47.6	47.9	95	96	66-125	.6	20	
Carbon tetrachloride	ug/L	50	54.8	55.8	110	112	75-125	2	20	
Chlorobenzene	ug/L	50	50.7	50.5	101	101	75-125	.3	20	
Chloroethane	ug/L	50	52.7	51.9	105	104	72-126	2	20	
Chloroform	ug/L	50	51.0	54.8	102	110	75-125	7	20	
Chloromethane	ug/L	50	47.7	46.9	95	94	46-143	2	20	
cis-1,2-Dichloroethene	ug/L	50	52.2	54.8	104	110	75-125	5	20	
cis-1,3-Dichloropropene	ug/L	50	52.8	50.6	106	101	75-125	4	20	
Dibromochloromethane	ug/L	50	48.4	48.2	97	96	75-125	.4	20	
Ethylbenzene	ug/L	50	51.7	50.1	103	100	75-125	3	20	

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## QUALITY CONTROL DATA

Project: LA HACIENDA Pace Project No .: 4015838

#### LABORATORY CONTROL SAMPLE & LCSD: 144541

LABORATORY CONTROL SAMPL		14	4542							
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
m&p-Xylene	ug/L	100	102	100	102	100	75-125	2	20	
Methylene Chloride	ug/L	50	51.0	48.6	102	97	75-125	5	20	
o-Xylene	ug/L	50	52.1	50.0	104	100	75-125	4	20	
Styrene	ug/L	50	47.4	46.9	95	94	75-125	.9	20	
Tetrachloroethene	ug/L	50	52.5	50.1	105	100	75-130	5	20	
Toluene	ug/L	50	52.4	51.4	105	103	75-125	2	20	
trans-1,2-Dichloroethene	ug/L	50	52.0	54.8	104	110	75-125	5	20	
trans-1,3-Dichloropropene	ug/L	50	51.4	48.5	103	97	75-125	6	20	
Trichloroethene	ug/L	50	52.7	52.3	105	105	75-125	.8	20	
Vinyl chloride	ug/L	50	52.5	54.7	105	109	65-130	4	20	
4-Bromofluorobenzene (S)	%				96	94	70-130			
Dibromofluoromethane (S)	%				99	101	70-130			
Toluene-d8 (S)	%				100	99	70-130			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 144543 144544												
	40	015887013	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1,1-Trichloroethane	ug/L	3460	50	50	2690	2640	-1530	-1650	70-130	2	30	E,M0
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	49.4	49.3	99	99	70-130	.2	30	
1,1,2-Trichloroethane	ug/L	ND	50	50	53.7	51.2	107	102	70-130	5	30	
1,1-Dichloroethane	ug/L	978	50	50	1030	999	106	42	70-130	3	30	E,M0
1,1-Dichloroethene	ug/L	ND	50	50	75.8	74.9	121	119	70-135	1	30	
1,2-Dichloroethane	ug/L	ND	50	50	48.4	50.0	97	100	70-130	3	30	
1,2-Dichloropropane	ug/L	ND	50	50	51.2	51.9	102	104	70-130	1	30	
Benzene	ug/L	ND	50	50	51.9	51.7	104	103	70-130	.5	30	
Bromodichloromethane	ug/L	ND	50	50	51.9	51.2	104	102	70-130	1	30	
Bromoform	ug/L	ND	50	50	49.8	48.6	100	97	70-130	3	30	
Bromomethane	ug/L	ND	50	50	46.1	45.8	92	92	63-147	.6	30	
Carbon tetrachloride	ug/L	ND	50	50	52.4	52.3	105	105	70-131	.2	30	
Chlorobenzene	ug/L	ND	50	50	51.6	49.7	103	99	70-130	4	30	
Chloroethane	ug/L	ND	50	50	51.7	48.4	103	97	67-138	6	30	
Chloroform	ug/L	ND	50	50	51.4	49.5	103	99	70-130	4	30	
Chloromethane	ug/L	ND	50	50	46.3	44.4	93	89	43-150	4	30	
cis-1,2-Dichloroethene	ug/L	ND	50	50	52.5	51.6	105	103	70-130	2	30	
cis-1,3-Dichloropropene	ug/L	ND	50	50	51.3	52.5	103	105	70-130	2	30	
Dibromochloromethane	ug/L	ND	50	50	45.2	44.7	90	89	70-130	1	30	
Ethylbenzene	ug/L	ND	50	50	51.9	51.1	104	102	70-136	2	30	
m&p-Xylene	ug/L	ND	100	100	106	102	102	99	70-137	3	30	
Methylene Chloride	ug/L	ND	50	50	49.4	49.0	99	98	70-130	.8	30	
o-Xylene	ug/L	ND	50	50	52.9	51.1	106	102	70-130	4	30	
Styrene	ug/L	ND	50	50	47.9	46.5	96	93	70-130	3	30	
Tetrachloroethene	ug/L	4000	50	50	3630	3450	-729	-1100	70-130	5	30 1	E,M0
Toluene	ug/L	ND	50	50	55.9	54.0	107	104	70-130	3	30	
trans-1,2-Dichloroethene	ug/L	ND	50	50	52.8	51.5	106	103	70-130	2	30	
trans-1,3-Dichloropropene	ug/L	ND	50	50	52.5	50.1	105	100	70-130	5	30	
Trichloroethene	ug/L	561	50	50	648	630	173	137	70-130	3	30	E,M0

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## **REPORT OF LABORATORY ANALYSIS**

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Project: LA HACIENDA Pace Project No.: 4015838

MATRIX SPIKE & MATRIX SPI	KE DUPLICAT	E: 14454	3		144544							
			MS	MSD								
	40	015887013	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Vinyl chloride	ug/L	ND	50	50	51.8	51.5	104	103	62-138	.6	30	
4-Bromofluorobenzene (S)	%						95	95	70-130			
Dibromofluoromethane (S)	%						69	71	70-130			1j
Toluene-d8 (S)	%						100	99	70-130			

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#### QUALIFIERS

Project: LA HACIENDA Pace Project No.: 4015838

#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected.

#### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

#### ANALYTE QUALIFIERS

- 1j Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample's MSD analysis).
- E Analyte concentration exceeded the calibration range. The reported result is estimated.
- M0 Matrix spike recovery was outside laboratory control limits.

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#### **REPORT OF LABORATORY ANALYSIS**

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October 03, 2008

Robyn Seymour Seymour Environmental Services, INC. 2531 Dyreson Road Mc Farland, WI 53558

RE: Project: 10509.00 LA HACIENDA Pace Project No.: 409497

Dear Robyn Seymour:

Enclosed are the analytical results for sample(s) received by the laboratory on September 26, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Brian Basten

brian.basten@pacelabs.com Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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#### CERTIFICATIONS

10509.00 LA HACIENDA Project: Pace Project No.: 409497

Green Bay Certification IDs Louisiana Certification #: 04168 Kentucky Certification #: 82 Wisconsin DATCP Certification #: 105-444 Wisconsin Certification #: 405132750 South Carolina Certification #: 83006001 Minnesota Certification #: 055-999-334

#### **Green Bay Volatiles Certification IDs**

Louisiana Certification #: 04169 Kentucky Certification #: 83 Wisconsin DATCP Certification #: 105-444 Wisconsin Certification #: 405132750 South Carolina Certification #: 83006001 Minnesota Certification #: 055-999-334

North Carolina Certification #: 503 North Dakota Certification #: R-150 New York Certification #: 11888 Illinois Certification #: 200050 Florida (NELAP) Certification #: E87948

North Carolina Certification #: 503 North Dakota Certification #: R-200 New York Certification #: 11887 Illinois Certification #: 200051 Florida (NELAP) Certification #: E87951

### **REPORT OF LABORATORY ANALYSIS**

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#### SAMPLE SUMMARY

Project:10509.00 LA HACIENDAPace Project No.:409497

Lab ID	Sample ID	Matrix	Date Collected	Date Received
409497001	MW-1	Water	09/24/08 09:45	09/26/08 09:05
409497002	MW-2	Water	09/24/08 10:30	09/26/08 09:05
409497003	MW-3	Water	09/24/08 10:05	09/26/08 09:05

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## SAMPLE ANALYTE COUNT

Project:10509.00 LA HACIENDAPace Project No.:409497

Lab ID	Sample ID	Ar Method Analysts Re	nalytes ported	Laboratory
409497001	MW-1	EPA 8260 SMT	64	PASI-G
409497002	MW-2	EPA 8260 SMT	64	PASI-G
409497003	MW-3	EPA 8260 SMT	64	PASI-G

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#### PROJECT NARRATIVE

Project: 10509.00 LA HACIENDA

Pace Project No.: 409497

#### Method: EPA 8260

 Description:
 8260 MSV

 Client:
 SEYMOUR ENVIRONMENTAL SERVICES, INC.

 Date:
 October 03, 2008

#### **General Information:**

3 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.
 MW-2 (Lab ID: 409497002)

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### **Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

#### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

#### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

#### **Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## **REPORT OF LABORATORY ANALYSIS**

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Project: 10509.00 LA HACIENDA

Pace Project No.: 409497

Sample: MW-1	Lab ID: 409497001		Collecte	Collected: 09/24/08 09:45			5 Received: 09/26/08 09:05 Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual			
8260 MSV	Analytica	I Method: EPA	8260									
Benzene	<b>2.9</b> u	ıg/L	1.0	0.41	1		09/30/08 15:16	71-43-2				
Bromobenzene	<0.82 ເ	Ja/L	1.0	0.82	1		09/30/08 15:16	108-86-1				
Bromochloromethane	< <b>0.97</b> ι	ug/L	1.0	0.97	1		09/30/08 15:16	74-97-5				
Bromodichloromethane	<b>&lt;0.56</b> u	ug/L	1.9	0.56	1		09/30/08 15:16	75-27-4				
Bromoform	<0.94 u	Jg/L	3.1	0.94	1		09/30/08 15:16	75-25-2				
Bromomethane	<0.91 ເ	ug/L	3.0	0.91	1		09/30/08 15:16	74-83-9				
n-Butylbenzene	<b>&lt;0.93</b> ເ	ug/L	1.0	0.93	1		09/30/08 15:16	104-51-8				
sec-Butylbenzene	<0.89 t	Jq/L	5.0	0.89	1		09/30/08 15:16	135-98-8				
tert-Butvibenzene	<0.97 t	Ja/L	1.0	0.97	1		09/30/08 15:16	98-06-6				
Carbon tetrachloride	< <b>0.49</b> (	ug/L	1.0	0.49	1		09/30/08 15:16	56-23-5				
Chlorobenzene	<0.41 t	Ja/L	1.0	0.41	1		09/30/08 15:16	108-90-7				
Chloroethane	6.6 <b>ι</b>	Ja/L	1.0	0.97	1		09/30/08 15:16	75-00-3				
Chloroform	<1.3 ເ	Ja/L	4.3	1.3	1		09/30/08 15:16	67-66-3				
Chloromethane	0.26J i	Ja/L	0.80	0.24	1		09/30/08 15:16	74-87-3				
2-Chlorotoluene	<0.85 u	Ja/L	1.0	0.85	1		09/30/08 15:16	95-49-8				
4-Chlorotoluene	<0.74 u	Ja/L	1.0	0.74	1		09/30/08 15:16	106-43-4				
1.2-Dibromo-3-chloropropane	<1.7 נ	Ja/L	5.6	1.7	1		09/30/08 15:16	96-12-8				
Dibromochloromethane	<0.81 เ	Ja/L	1.0	0.81	1		09/30/08 15:16	124-48-1				
1.2-Dibromoethane (EDB)	<0.56 (	Ja/L	1.9	0.56	1		09/30/08 15:16	106-93-4				
Dibromomethane	<0.60 u	Ja/L	1.0	0.60	1		09/30/08 15:16	74-95-3				
1.2-Dichlorobenzene	<0.83 (	Ja/L	1.0	0.83	1		09/30/08 15:16	95-50-1				
1.3-Dichlorobenzene	<0.87	Ja/L	1.0	0.87	1		09/30/08 15:16	541-73-1				
1.4-Dichlorobenzene	<0.95 1	ua/L	1.0	0.95	1		09/30/08 15:16	106-46-7				
Dichlorodifluoromethane	<0.99 1	Ja/L	1.0	0.99	1		09/30/08 15:16	75-71-8				
1.1-Dichloroethane	<0.75	Ja/L	1.0	0.75	1		09/30/08 15:16	75-34-3				
1.2-Dichloroethane	<0.36 1	ua/L	1.0	0.36	1		09/30/08 15:16	107-06-2				
1.1-Dichloroethene	<0.57	Ja/L	1.0	0.57	1		09/30/08 15:16	75-35-4				
cis-1.2-Dichloroethene	159 1	ua/L	1.0	0.83	1		09/30/08 15:16	156-59-2				
trans-1.2-Dichloroethene	46.4 เ	ua/L	1.0	0.89	1		09/30/08 15:16	156-60-5				
1.2-Dichloropropane	<0.49 (	ua/L	1.0	0.49	1		09/30/08 15:16	78-87-5				
1.3-Dichloropropane	<0.61	ua/L	2.0	0.61	1		09/30/08 15:16	142-28-9				
2.2-Dichloropropane	<0.62	ua/L	1.0	0.62	1		09/30/08 15:16	594-20-7				
1.1-Dichloropropene	<0.75 u	ua/L	1.0	0.75	1		09/30/08 15:16	563-58-6				
cis-1.3-Dichloropropene	<0.20 (	ua/L	0.67	0.20	1		09/30/08 15:16	10061-01-5				
trans-1.3-Dichloropropene	<0.19 (	ua/L	0.63	0.19	1		09/30/08 15:16	10061-02-6				
Diisopropyl ether	<0.76 u	ua/L	1.0	0.76	1		09/30/08 15:16	108-20-3				
Ethvlbenzene	<0.54	ua/L	1.0	0.54	1		09/30/08 15:16	100-41-4				
Hexachloro-1.3-butadiene	<0.67	ua/L	5.0	0.67	1		09/30/08 15:16	87-68-3				
Isopropylbenzene (Cumene)	<0.59	-9 Ja/L	1.0	0.59	1		09/30/08 15:16	98-82-8				
p-isopropyltoluene	<0.67	ua/L	1.0	0.67	1		09/30/08 15:16	99-87-6				
Methylene Chloride	<0.43	ua/L	1.4	0.43	1		09/30/08 15:16	75-09-2				
Methyl-tert-butyl ether	<0.61	Ja/L	2.0	0.61	1		09/30/08 15:16	1634-04-4				
Naphthalene	<0.89	ua/L	5.0	0.89	1		09/30/08 15:16	91-20-3				
n-Propylbenzene	<0.00 (	ug/l	10	0.00	1		09/30/08 15:16	103-65-1				
Styrene	<0.86	ua/L	1.0	0.86	1		09/30/08 15:16	100-42-5				
1.1.1.2-Tetrachloroethane	<0.92	ug/L	1.0	0.92	1		09/30/08 15:16	630-20-6				

Date: 10/03/2008 10:21 AM

## **REPORT OF LABORATORY ANALYSIS**

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Project: 10509.00 LA HACIENDA

Pace Project No.: 409497

Sample: MW-1	Lab ID:	Lab ID: 409497001		Collected: 09/24/08 09:45			Received: 09/26/08 09:05 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
8260 MSV	Analytical	Method: EPA	8260								
1,1,2,2-Tetrachloroethane	< <b>0.20</b> u	g/L	0.67	0.20	1		09/30/08 15:16	79-34-5			
Tetrachloroethene	<0.45 u	g/L	1.0	0.45	1		09/30/08 15:16	127-18-4			
Toluene	<0.67 u	g/L	1.0	0.67	1		09/30/08 15:16	108-88-3			
1,2,3-Trichlorobenzene	<0.74 u	g/L	1.0	0.74	1		09/30/08 15:16	87-61-6			
1,2,4-Trichlorobenzene	<b>&lt;0.97</b> u	g/L	1.0	0.97	1		09/30/08 15:16	120-82-1			
1,1,1-Trichloroethane	<0.90 u	g/L	1.0	0.90	1		09/30/08 15:16	71-55-6			
1,1,2-Trichloroethane	<0.42 u	g/L	1.4	0.42	1		09/30/08 15:16	79-00-5			
Trichloroethene	0.61J u	g/L	1.0	0.48	1		09/30/08 15:16	79-01-6			
Trichlorofluoromethane	<0.79 u	g/L	1.0	0.79	1		09/30/08 15:16	75-69-4			
1.2.3-Trichloropropane	<b>&lt;0.99</b> u	g/L	1.0	0.99	1		09/30/08 15:16	96-18-4			
1.2.4-Trimethylbenzene	<0.97 u	g/L	1.0	0.97	1		09/30/08 15:16	95-63-6			
1.3.5-Trimethylbenzene	<b>&lt;0.83</b> u	a/L	1.0	0.83	1		09/30/08 15:16	108-67-8			
Vinvl chloride	76.3 u	a/L	0.60	0.18	1		09/30/08 15:16	75-01-4			
m&p-Xvlene	<1.8 u	a/L	2.0	1.8	1		09/30/08 15:16	1330-20-7			
o-Xvlene	<0.83 u	a/L	1.0	0.83	1		09/30/08 15:16	95-47-6			
4-Bromofluorobenzene (S)	100 %	6	64-132		1		09/30/08 15:16	460-00-4			
Dibromofluoromethane (S)	96 %	- /	68-122		1		09/30/08 15:16	1868-53-7			
Toluene-d8 (S)	105 %	6	73-127		1		09/30/08 15:16	2037-26-5			
Sample: MW-2	Lab ID:	409497002	Collecte	d: 09/24/0	8 10:30	Received: 09	/26/08 09:05 Ma	atrix: Water			
			1.0.0			- ·		0.0.0	<u> </u>		
Parameters	Results	Units		LOD		Prepared	Analyzed	CAS NO.	Qual		
8260 MSV	Analytical	Method: EPA	8260								
Benzene	<b>&lt;41.0</b> u	g/L	100	41.0	100		10/01/08 03:47	71-43-2			
Bromobenzene	<b>&lt;82.0</b> u	g/L	100	82.0	100		10/01/08 03:47	108-86-1			
Bromochioromethane	<97.0 u	g/L	100	97.0	100		10/01/08 03:47	74-97-5			
Bromodichloromethane	<b>&lt;56.0</b> u	g/L	187	56.0	100		10/01/08 03:47	75-27-4			
Bromoform	<b>&lt;94.0</b> u	g/L	313	94.0	100		10/01/08 03:47	75-25-2			
Bromomethane	<b>&lt;91.0</b> u	g/L	303	91.0	100		10/01/08 03:47	74-83-9			
n-Butylbenzene	<b>&lt;93.0</b> u	ig/L	100	93.0	100		10/01/08 03:47	104-51-8			
sec-Butylbenzene	<b>&lt;89.0</b> u	ig/L	500	89.0	100		10/01/08 03:47	135-98-8			
tert-Butylbenzene	<b>&lt;97.0</b> u	g/L	100	97.0	100		10/01/08 03:47	98-06-6			
Carbon tetrachloride	<b>&lt;49.0</b> u	g/L	100	49.0	100		10/01/08 03:47	56-23-5			
Chlorobenzene	<41.0 u	g/L	100	41.0	100		10/01/08 03:47	108-90-7			
Chloroethane	<b>&lt;97.0</b> u	g/L	100	97.0	100		10/01/08 03:47	75-00-3			
Chloroform	<130 u	ig/L	433	130	100		10/01/08 03:47	67-66-3			
Chloromethane	<b>&lt;24.0</b> u	g/L	80.0	24.0	100		10/01/08 03:47	74-87-3			
2-Chlorotoluene	<b>&lt;85.0</b> u	ig/L	100	85.0	100		10/01/08 03:47	95-49-8			
4-Chlorotoluene	<b>&lt;74.0</b> u	g/L	100	74.0	100		10/01/08 03:47	106-43-4			
1,2-Dibromo-3-chloropropane	<168 u	g/L	560	168	100		10/01/08 03:47	96-12-8			
Dibromochloromethane	<b>&lt;81.0</b> u	g/L	100	81.0	100		10/01/08 03:47	124-48-1			
1,2-Dibromoethane (EDB)	<b>&lt;56.0</b> u	ig/L	187	56.0	100		10/01/08 03:47	106-93-4			
Dibromomethane	<b>&lt;60.0</b> u	ig/L	100	60.0	100		10/01/08 03:47	74-95-3			

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Project: 10509.00 LA HACIENDA

Pace Project No.: 409497

Sample: MW-2	Lab ID: 409497002		Collected	Collected: 09/24/08 10:30			Received: 09/26/08 09:05 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
8260 MSV	Analytical	Method: EPA	8260								
1,2-Dichlorobenzene	<83.0 u	g/L	100	83.0	100		10/01/08 03:47	95-50-1			
1,3-Dichlorobenzene	<b>&lt;87.0</b> u	g/L	100	87.0	100		10/01/08 03:47	541-73-1			
1,4-Dichlorobenzene	<b>&lt;95.0</b> u	g/L	100	95.0	100		10/01/08 03:47	106-46-7			
Dichlorodifluoromethane	<b>&lt;99.0</b> u	g/L	100	99.0	100		10/01/08 03:47	75-71-8			
1,1-Dichloroethane	<75.0 u	g/L	100	75.0	100		10/01/08 03:47	75-34-3			
1,2-Dichloroethane	<b>&lt;36.0</b> u	g/L	100	36.0	100		10/01/08 03:47	107-06-2			
1,1-Dichloroethene	<57.0 u	g/L	100	57.0	100		10/01/08 03:47	75-35-4			
cis-1,2-Dichloroethene	3130 u	g/L	100	83.0	100		10/01/08 03:47	156-59-2			
trans-1,2-Dichloroethene	<89.0 u	g/L	100	89.0	100		10/01/08 03:47	156-60-5			
1,2-Dichloropropane	<49.0 u	g/L	100	49.0	100		10/01/08 03:47	78-87-5			
1,3-Dichloropropane	<61.0 u	g/L	203	61.0	100		10/01/08 03:47	142-28-9			
2,2-Dichloropropane	<b>&lt;62.0</b> u	g/L	100	62.0	100		10/01/08 03:47	594-20-7			
1,1-Dichloropropene	< <b>75.0</b> u	g/L	100	75.0	100		10/01/08 03:47	563-58-6			
cis-1,3-Dichloropropene	<20.0 u	g/L	66.7	20.0	100		10/01/08 03:47	10061-01-5			
trans-1,3-Dichloropropene	<19.0 u	g/L	63.3	19.0	100		10/01/08 03:47	10061-02-6			
Diisopropyl ether	<b>&lt;76.0</b> u	g/L	100	76.0	100		10/01/08 03:47	108-20-3			
Ethylbenzene	<b>&lt;54.0</b> u	g/L	100	54.0	100		10/01/08 03:47	100-41-4			
Hexachloro-1,3-butadiene	< <b>67.0</b> u	g/L	500	67.0	100		10/01/08 03:47	87-68-3			
Isopropylbenzene (Cumene)	<b>&lt;59.0</b> u	g/L	100	59.0	100		10/01/08 03:47	98-82-8			
p-lsopropyltoluene	<67.0 u	g/L	100	67.0	100		10/01/08 03:47	99-87-6			
Methylene Chloride	<b>&lt;43.0</b> u	g/L	143	43.0	100		10/01/08 03:47	75-09-2			
Methyl-tert-butyl ether	<b>&lt;61.0</b> u	g/L	203	61.0	100		10/01/08 03:47	1634-04-4			
Naphthalene	<89.0 u	g/L	500	89.0	100		10/01/08 03:47	91-20-3			
n-Propylbenzene	<b>&lt;81.0</b> u	g/L	100	81.0	100		10/01/08 03:47	103-65-1			
Styrene	<b>&lt;86.0</b> u	g/L	100	86.0	100		10/01/08 03:47	100-42-5			
1,1,1,2-Tetrachloroethane	<b>&lt;92.0</b> u	g/L	100	92.0	100		10/01/08 03:47	630-20-6			
1,1,2,2-Tetrachloroethane	<b>&lt;20.0</b> u	g/L	66.7	20.0	100		10/01/08 03:47	79-34-5			
Tetrachloroethene	8420 u	g/L	100	45.0	100		10/01/08 03:47	127-18-4			
Toluene	<67.0 u	g/L	100	67.0	100		10/01/08 03:47	108-88-3			
1,2,3-Trichlorobenzene	<74.0 u	g/L	100	74.0	100		10/01/08 03:47	87-61-6			
1,2,4-Trichlorobenzene	<b>&lt;97.0</b> u	g/L	100	97.0	100		10/01/08 03:47	120-82 <b>-</b> 1			
1,1,1-Trichloroethane	<90.0 u	g/L	100	90.0	100		10/01/08 03:47	71-55-6			
1,1,2-Trichloroethane	<b>&lt;42.0</b> u	g/L	140	42.0	100		10/01/08 03:47	79-00-5			
Trichloroethene	486 u	g/L	100	48.0	100		10/01/08 03:47	79-01-6			
Trichlorofluoromethane	<b>&lt;79.0</b> u	g/L	100	79.0	100		10/01/08 03:47	75-69-4	1		
1,2,3-Trichloropropane	<b>&lt;99.0</b> u	g/L	100	99.0	100		10/01/08 03:47	96-18-4			
1,2,4-Trimethylbenzene	<b>&lt;97.0</b> u	g/L	100	97.0	100		10/01/08 03:47	95-63-6			
1,3,5-Trimethylbenzene	<b>&lt;83.0</b> u	g/L	100	83.0	100		10/01/08 03:47	108-67-8			
Vinyl chloride	507 u	g/L	60.0	18.0	100		10/01/08 03:47	75-01-4			
m&p-Xylene	<b>&lt;180</b> u	_ g/L	200	180	100		10/01/08 03:47	1330-20-7			
o-Xylene	<83.0 u	g/L	100	83.0	100		10/01/08 03:47	95-47-6			
4-Bromofluorobenzene (S)	101 %	- 0	64-132		100		10/01/08 03:47	460-00-4			
Dibromofluoromethane (S)	95 %	, 0	68-122		100		10/01/08 03:47	1868-53 <b>-</b> 7	pН		
Toluene-d8 (S)	106 %	, 0	73-127		100		10/01/08 03:47	2037-26-5	-		

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Project: 10509.00 LA HACIENDA

Pace Project No.: 409497

Sample: MW-3	Lab ID: 409497003		Collecte	Collected: 09/24/08 10:05			Received: 09/26/08 09:05 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
8260 MSV	Analytica	I Method: EPA	8260								
Benzene	<41.0 ເ	ug/L	100	41.0	100		10/01/08 04:11	71-43-2			
Bromobenzene	<82.0 ເ	ug/L	100	82.0	100		10/01/08 04:11	108-86-1			
Bromochloromethane	<97.0 ເ	ıg/L	100	97.0	100		10/01/08 04:11	74-97-5			
Bromodichloromethane	<56.0 ເ	ıg/L	187	56.0	100		10/01/08 04:11	75-27-4			
Bromoform	<b>&lt;94.0</b> t	ug/L	313	94.0	100		10/01/08 04:11	75-25 <b>-</b> 2			
Bromomethane	<b>&lt;91.0</b> ເ	Jg/L	303	91.0	100		10/01/08 04:11	74-83-9			
n-Butylbenzene	<b>&lt;93.0</b> t	ug/L	100	93.0	100		10/01/08 04:11	104-51-8			
sec-Butylbenzene	<89.0 t	Jg/L	500	89.0	100		10/01/08 04:11	135-98-8			
tert-Butylbenzene	<97.0 ເ	Jg/L	100	97.0	100		10/01/08 04:11	98-06-6			
Carbon tetrachloride	<49.0 ເ	Jg/L	100	49.0	100		10/01/08 04:11	56-23-5			
Chlorobenzene	<41.0 ເ	Jg/L	100	41.0	100		10/01/08 04:11	108-90-7			
Chloroethane	<b>&lt;97.0</b> ເ	ıg/L	100	97.0	100		10/01/08 04:11	75-00-3			
Chloroform	<130 ເ	ıg/L	433	130	100		10/01/08 04:11	67-66-3			
Chloromethane	<b>&lt;24.0</b> ເ	ıg/L	80.0	24.0	100		10/01/08 04:11	74-87-3			
2-Chlorotoluene	<b>&lt;85.0</b> ເ	ug/L	100	85.0	100		10/01/08 04:11	95-49-8			
4-Chlorotoluene	<74.0 เ	ıg/L	100	74.0	100		10/01/08 04:11	106-43-4			
1,2-Dibromo-3-chloropropane	<168 เ	ıg/L	560	168	100		10/01/08 04:11	96-12-8			
Dibromochloromethane	<b>&lt;81.0</b> t	Jg/L	100	81.0	100		10/01/08 04:11	124-48-1			
1,2-Dibromoethane (EDB)	<b>&lt;56.0</b> ເ	ıg/L	187	56.0	100		10/01/08 04:11	106-93-4			
Dibromomethane	<60.0 ເ	Jg/L	100	60.0	100		10/01/08 04:11	74-95-3			
1,2-Dichlorobenzene	<b>&lt;83.0</b> ເ	ıg/L	100	83.0	100		10/01/08 04:11	95-50-1			
1,3-Dichlorobenzene	<b>&lt;87.0</b> เ	Jg/L	100	87.0	100		10/01/08 04:11	541-73-1			
1,4-Dichlorobenzene	<95.0 ເ	ug/L	100	95.0	100		10/01/08 04:11	106-46-7			
Dichlorodifluoromethane	<b>&lt;99.0</b> ເ	ug/L	100	99.0	100		10/01/08 04:11	75-71-8			
1,1-Dichloroethane	<75.0 u	ug/L	100	75.0	100		10/01/08 04:11	75-34-3			
1,2-Dichloroethane	<36.0 u	Jg/L	100	36.0	100		10/01/08 04:11	107-06-2			
1,1-Dichloroethene	< <b>57.0</b> t	ıg/L	100	57.0	100		10/01/08 04:11	75-35-4			
cis-1,2-Dichloroethene	10200 t	ıg/L	100	83.0	100		10/01/08 04:11	156-59-2			
trans-1,2-Dichloroethene	386 ι	ug/L	100	89.0	100		10/01/08 04:11	156-60-5			
1,2-Dichloropropane	<49.0 ເ	Jg/L	100	49.0	100		10/01/08 04:11	78-87-5			
1,3-Dichloropropane	<61.0 u	ug/L	203	61.0	100		10/01/08 04:11	142-28-9			
2,2-Dichloropropane	<62.0 t	ıg/L	100	62.0	100		10/01/08 04:11	594-20-7			
1,1-Dichloropropene	<75.0 ເ	Jg/L	100	75.0	100		10/01/08 04:11	563-58-6			
cis-1,3-Dichloropropene	<20.0 (	Jg/L	66.7	20.0	100		10/01/08 04:11	10061-01-5			
trans-1,3-Dichloropropene	<19.0 L	Jg/L	63.3	19.0	100		10/01/08 04:11	10061-02-6			
Diisopropyi etner	6.0 L</td <td>Jg/∟</td> <td>100</td> <td>76.0</td> <td>100</td> <td></td> <td>10/01/08 04:11</td> <td>108-20-3</td> <td></td>	Jg/∟	100	76.0	100		10/01/08 04:11	108-20-3			
Ethylbenzene	<54.0 L	lg/∟	100	54.0	100		10/01/08 04:11	100-41-4			
Hexachioro-1,3-butadiene	<67.0 l	lg/∟	500	67.0	100		10/01/08 04:11	87-68-3			
Isopropyibenzene (Cumene)	<59.0 L	ug/L	100	59.0	100		10/01/08 04:11	98-82-8			
p-Isopropyitoluene	<67.0 L	ig/L	100	67.0	100		10/01/08 04:11	99-87-6			
Methylene Unionde	<43.0 L	1g/L	143	43.0	100		10/01/08 04:11	15-09-2			
Meinyl-tert-butyl ether	<61.0 L	ug/L .≂/\	203	61.0	100		10/01/08 04:11	1034-04-4			
	<89.0 t	ug/∟	500	89.0	100		10/01/08 04:11	91-20-3			
n-ropyidenzene	<81.0 L	ug/L	100	81.0	100		10/01/08 04:11	103-65-1			
Styrene	<86.0 L	ug/∟	100	85.0	100		10/01/08 04:11	100-42-5			
1,1,1,2-letrachioroethane	<92.0 ເ	ig/L	100	92.0	100		10/01/08 04:11	630-20-6			

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Project: 10509.00 LA HACIENDA

Pace Project No.: 409497

Sample: MW-3	Lab ID:	Lab ID: 409497003		Collected: 09/24/08 10:05			Received: 09/26/08 09:05 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
8260 MSV	Analytical	Method: EPA	8260								
1,1,2,2-Tetrachloroethane	<b>&lt;20.0</b> u	g/L	66.7	20.0	100		10/01/08 04:11	79-34-5			
Tetrachloroethene	1340 u	g/L	100	45.0	100		10/01/08 04:11	127-18-4			
Toluene	<67.0 u	g/L	100	67.0	100		10/01/08 04:11	108-88-3			
1,2,3-Trichlorobenzene	<74.0 u	g/L	100	74.0	100		10/01/08 04:11	87-61-6			
1,2,4-Trichlorobenzene	<97.0 u	g/L	100	97.0	100		10/01/08 04:11	120-82-1			
1,1,1-Trichloroethane	<90.0 u	g/L	100	90.0	100		10/01/08 04:11	71-55-6			
1,1,2-Trichloroethane	<42.0 u	g/L	140	42.0	100		10/01/08 04:11	79-00-5			
Trichloroethene	1230 u	g/L	100	48.0	100		10/01/08 04:11	79-01-6			
Trichlorofluoromethane	<79.0 u	g/L	100	79.0	100		10/01/08 04:11	75-69 <b>-</b> 4			
1,2,3-Trichloropropane	<99.0 u	g/L	100	99.0	100		10/01/08 04:11	96-18-4			
1,2,4-Trimethylbenzene	<97.0 u	g/L	100	97.0	100		10/01/08 04:11	95-63-6			
1,3,5-Trimethylbenzene	<83.0 u	g/L	100	83.0	100		10/01/08 04:11	108-67-8			
Vinyl chloride	20.1J u	g/L	60.0	18.0	100		10/01/08 04:11	75-01-4			
m&p-Xylene	<180 u	g/L	200	180	100		10/01/08 04:11	1330-20-7			
o-Xylene	<83.0 u	g/L	100	83.0	100		10/01/08 04:11	95-47-6			
4-Bromofluorobenzene (S)	100 %	, 0	64-132		100		10/01/08 04:11	460-00-4			
Dibromofluoromethane (S)	96 %	, 0	68-122		100		10/01/08 04:11	1868-53-7			
Toluene-d8 (S)	105 %	<u>6</u>	73-127		100		10/01/08 04:11	2037-26-5			

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Project: 10509.00 LA HACIENDA

Pace Project No.: 409497

QC Batch: MSV/2693 Analysis Method: EPA 8260 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Associated Lab Samples: 409497001, 409497002, 409497003 METHOD BLANK: 82151 Matrix: Water Associated Lab Samples: 409497001, 409497002, 409497003 Blank Reporting Parameter Units Result Limit Analyzed Qualifiers 1,1,1,2-Tetrachloroethane <0.92 1.0 09/30/08 06:50 ug/L <0.90 1,1,1-Trichloroethane ug/L 1.0 09/30/08 06:50 1,1,2,2-Tetrachloroethane ug/L <0.20 0.67 09/30/08 06:50 1,1,2-Trichloroethane ug/L <0.42 1.4 09/30/08 06:50 1,1-Dichloroethane ug/L <0.75 1.0 09/30/08 06:50 1,1-Dichloroethene < 0.57 1.0 09/30/08 06:50 ug/L 1,1-Dichloropropene ug/L <0.75 1.0 09/30/08 06:50 ug/L 1.2.3-Trichlorobenzene <0.74 1.0 09/30/08 06:50 1,2,3-Trichloropropane ug/L <0.99 1.0 09/30/08 06:50 1,2,4-Trichlorobenzene ug/L <0.97 1.0 09/30/08 06:50 1,2,4-Trimethylbenzene ug/L < 0.97 1.0 09/30/08 06:50 5.6 09/30/08 06:50 1,2-Dibromo-3-chloropropane ug/L <1.7 <0.56 1.9 09/30/08 06:50 1,2-Dibromoethane (EDB) ug/L 1,2-Dichlorobenzene ug/L < 0.83 1.0 09/30/08 06:50 1.2-Dichloroethane < 0.36 1.0 09/30/08 06:50 ug/L 09/30/08 06:50 1,2-Dichloropropane ug/L < 0.49 1.0 1,3,5-Trimethylbenzene <0.83 1.0 09/30/08 06:50 ug/L 1,3-Dichlorobenzene ug/L <0.87 1.0 09/30/08 06:50 2.0 1,3-Dichloropropane ug/L <0.61 09/30/08 06:50 ug/L <0.95 1.0 09/30/08 06:50 1,4-Dichlorobenzene 2,2-Dichloropropane ug/L <0.62 1.0 09/30/08 06:50 2-Chlorotoluene ug/L <0.85 1.0 09/30/08 06:50 <0.74 09/30/08 06:50 4-Chlorotoluene ug/L 1.0 Benzene ug/L <0.41 1.0 09/30/08 06:50 Bromobenzene ug/L <0.82 1.0 09/30/08 06:50 Bromochloromethane 1.0 09/30/08 06:50 ug/L < 0.97 Bromodichloromethane <0.56 1.9 09/30/08 06:50 ug/L Bromoform ug/L < 0.94 3.1 09/30/08 06:50 Bromomethane ug/L <0.91 3.0 09/30/08 06:50 Carbon tetrachloride ug/L < 0.49 1.0 09/30/08 06:50 Chlorobenzene ug/L < 0.41 1.0 09/30/08 06:50 Chloroethane ug/L < 0.97 1.0 09/30/08 06:50 Chloroform ug/L <1.3 4.3 09/30/08 06:50 ug/L 0.80 Chloromethane <0.24 09/30/08 06:50 cis-1,2-Dichloroethene ug/L < 0.83 1.0 09/30/08 06:50 cis-1.3-Dichloropropene ug/L < 0.20 0.67 09/30/08 06:50 Dibromochloromethane <0.81 1.0 09/30/08 06:50 ug/L Dibromomethane ug/L <0.60 1.0 09/30/08 06:50 Dichlorodifluoromethane ug/L < 0.99 1.0 09/30/08 06:50 1.0 09/30/08 06:50 Diisopropyl ether ug/L < 0.76 Ethylbenzene ug/L < 0.54 1.0 09/30/08 06:50 ug/L <0.67 09/30/08 06:50 Hexachloro-1,3-butadiene 5.0 Isopropylbenzene (Cumene) ug/L < 0.59 1.0 09/30/08 06:50

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Pace Project No.: 409497

METHOD BLANK: 82151		Matrix:	Water		
Associated Lab Samples:	409497001, 409497002, 4094	97003			
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	<1.8	2.0	09/30/08 06:50	
Methyl-tert-butyl ether	ug/L	<0.61	2.0	09/30/08 06:50	
Methylene Chloride	ug/L	<0.43	1.4	09/30/08 06:50	
n-Butylbenzene	ug/L	<0.93	1.0	09/30/08 06:50	
n-Propylbenzene	ug/L	<0.81	1.0	09/30/08 06:50	
Naphthalene	ug/L	<0.89	5.0	09/30/08 06:50	
o-Xylene	ug/L	<0.83	1.0	09/30/08 06:50	
p-Isopropyltoluene	ug/L	<0.67	1.0	09/30/08 06:50	
sec-Butylbenzene	ug/L	<0.89	5.0	09/30/08 06:50	
Styrene	ug/L	<0.86	1.0	09/30/08 06:50	
tert-Butylbenzene	ug/L	<0.97	1.0	09/30/08 06:50	
Tetrachloroethene	ug/L	<0.45	1.0	09/30/08 06:50	
Toluene	ug/L	<0.67	1.0	09/30/08 06:50	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	09/30/08 06:50	
trans-1,3-Dichloropropene	ug/L	<0.19	0.63	09/30/08 06:50	
Trichloroethene	ug/L	<0.48	1.0	09/30/08 06:50	
Trichlorofluoromethane	ug/L	<0.79	1.0	09/30/08 06:50	
Vinyl chloride	ug/L	<0.18	0.60	09/30/08 06:50	
4-Bromofluorobenzene (S)	%	101	64-132	09/30/08 06:50	
Dibromofluoromethane (S)	%	96	68-122	09/30/08 06:50	
Toluene-d8 (S)	%	107	73-127	09/30/08 06:50	

LABORATORY CONTROL SAM	PLE & LCSD: 82152		82	2153						
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	48.3	49.0	97	98	75-128	1	20	
1,1,2,2-Tetrachloroethane	ug/L	50	44.3	45.6	89	91	67-125	3	20	
1,1,2-Trichloroethane	ug/L	50	47.9	48.4	96	97	75-125	1	20	
1,1-Dichloroethane	ug/L	50	47.1	46.7	94	93	71-130	.7	20	
1,1-Dichloroethene	ug/L	50	49.5	49.0	99	98	75-125	.9	20	
1,2-Dichloroethane	ug/L	50	44.5	45.3	89	91	71-132	2	20	
1,2-Dichloropropane	ug/L	50	48.7	48.7	97	97	73-125	.1	20	
Benzene	ug/L	50	48.2	48.7	96	97	75 <b>-125</b>	1	20	
Bromodichloromethane	ug/L	50	47.3	47.3	95	95	75-125	.01	20	
Bromoform	ug/L	50	45. <b>2</b>	46.3	90	93	75-125	2	20	
Bromomethane	ug/L	50	38.3	43.1	77	86	66-125	12	20	
Carbon tetrachloride	ug/L	50	49.7	50.6	99	101	75 <b>-</b> 125	2	20	
Chlorobenzene	ug/L	50	51.1	51.4	102	103	75-125	.6	20	
Chloroethane	ug/L	50	45.3	45.3	91	91	72-126	.02	20	
Chloroform	ug/L	50	46.0	46.2	92	92	75-125	.4	20	
Chloromethane	ug/L	50	36.4	36.7	73	73	46-143	.7	20	
cis-1,2-Dichloroethene	ug/L	50	49.0	48.6	98	97	75-125	.9	20	
cis-1,3-Dichloropropene	ug/L	50	49.8	51.1	100	102	75-125	3	20	
Dibromochloromethane	ug/L	50	46.6	47.7	93	95	75-125	2	20	
Ethylbenzene	ug/L	50	51.1	51.1	102	102	75-125	.08	20	

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#### LABORATORY CONTROL SAMPLE & LCSD: 82152

LABORATORY CONTROL SAMP	LE & LCSD: 82152		82	153						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
m&p-Xylene	ug/L	100	106	106	106	106	75-125	.1	20	
Methylene Chloride	ug/L	50	47.8	48.1	96	96	75-125	.5	20	
o-Xylene	ug/L	50	52.4	51.7	105	103	75-125	1	20	
Styrene	ug/L	50	47.7	48.1	95	96	75-125	.9	20	
Tetrachloroethene	ug/L	50	53.3	53.4	107	107	75-130	.2	20	
Toluene	ug/L	50	51.2	51.2	102	102	75 <b>-</b> 125	.04	20	
trans-1,2-Dichloroethene	ug/L	50	52.9	55.9	106	112	75-125	6	20	
trans-1,3-Dichloropropene	ug/L	50	46.2	47.7	92	95	75-125	3	20	
Trichloroethene	ug/L	50	50.5	50.7	101	101	75-125	.4	20	
Vinyl chloride	ug/L	50	40.9	42.0	82	84	65-130	3	20	
4-Bromofluorobenzene (S)	%				102	102	64-132			
Dibromofluoromethane (S)	%				95	95	68-122			
Toluene-d8 (S)	%				106	106	73-127			

MATRIX SPIKE & MATRIX SP	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 82541 82542											
Desemates	Linito	109470002 Boowlt	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec	חחח	Max	Qual
Parameter			Conc.	Conc.	Result	Result	% Rec	% Rec				Quai
1,1,1-Trichloroethane	ug/L	<0.90	50	50	52.6	49.2	105	98	70 <b>-</b> 130	7	30	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	50	50	47.7	43.8	95	88	70-130	9	30	
1,1,2-Trichloroethane	ug/L	<0.42	50	50	50.1	47.0	100	94	70-130	6	30	
1,1-Dichloroethane	ug/L	<0.75	50	50	51.4	48.2	103	96	70-130	7	30	
1,1-Dichloroethene	ug/L	<0.57	50	50	56.1	52.3	112	105	70-135	7	30	
1,2-Dichloroethane	ug/L	<0.36	50	50	47.4	44.5	95	89	70-130	6	30	
1,2-Dichloropropane	ug/L	<0.49	50	50	52.3	48.4	105	97	70-130	8	30	
Benzene	ug/L	<0.41	50	50	51.6	48.4	103	96	70-130	6	30	
Bromodichloromethane	ug/L	<0.56	50	50	50.7	47.0	101	94	70-130	8	30	
Bromoform	ug/L	<0.94	50	50	47.5	44.2	95	88	70-130	7	30	
Bromomethane	ug/L	<0.91	50	50	52.8	51.0	106	102	63-147	4	30	
Carbon tetrachloride	ug/L	<0.49	50	50	55.0	51.3	110	103	70-131	7	30	
Chlorobenzene	ug/L	<0.41	50	50	54.2	49.2	108	98	70-130	10	30	
Chloroethane	ug/L	<0.97	50	50	53.8	50.0	108	100	67-138	7	30	
Chloroform	ug/L	<1.3	50	50	49.7	46.4	99	93	70-130	7	30	
Chloromethane	ug/L	<0.24	50	50	52.2	48.5	104	97	43-150	7	30	
cis-1,2-Dichloroethene	ug/L	<0.83	50	50	53.4	49.5	107	99	70-130	8	30	
cis-1,3-Dichloropropene	ug/L	<0.20	50	50	53.8	48.8	108	98	70-130	10	30	
Dibromochloromethane	ug/L	<0.81	50	50	49.2	46.3	98	93	70-130	6	30	
Ethylbenzene	ug/L	<0.54	50	50	53.6	49.4	107	99	70-136	8	30	
m&p-Xylene	ug/L	<1.8	100	100	111	101	110	101	70-137	9	30	
Methylene Chloride	ug/L	<0.43	50	50	53.6	49.6	107	99	70-130	8	30	
o-Xylene	ug/L	<0.83	50	50	54.5	49.5	109	99	70-130	10	30	
Styrene	ug/L	<0.86	50	50	49.8	45.6	100	91	70-130	9	30	
Tetrachloroethene	ug/L	<0.45	50	50	57.3	51.9	115	104	70-130	10	30	
Toluene	ug/L	<0.67	50	50	54.6	50.4	108	100	70-130	8	30	
trans-1,2-Dichloroethene	ug/L	<0.89	50	50	56.6	53.0	113	106	70-130	7	30	
trans-1,3-Dichloropropene	ug/L	<0.19	50	50	50.3	46.6	101	93	70-130	8	30	
Trichloroethene	ug/L	<0.48	50	50	54.7	50.2	109	100	70-130	8	30	

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MATRIX SPIKE & MATRIX SPI	ATRIX SPIKE & MATRIX SPIKE DUPLICATE: 82541 82542											
Parameter	Units	409470002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Quai
Vinyl chloride	ug/L	<0.18	50	50	53.7	50.1	107	100	62-138	7	30	
4-Bromofluorobenzene (S)	%						100	100	64-132			
Dibromofluoromethane (S)	%						97	97	68-122			
Toluene-d8 (S)	%						105	107	73-127			

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## **REPORT OF LABORATORY ANALYSIS**

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#### QUALIFIERS

Project:	10509.00 LA HACIENDA
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#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

PASI-G Pace Analytical Services - Green Bay

#### ANALYTE QUALIFIERS

pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

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#### **REPORT OF LABORATORY ANALYSIS**

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# Appendix C Beacon Environmental Services Reports



The Leaders in Soil Gas Surveys and Vapor Intrusion Monitoring

Seymour Environmental Services, Inc. 2531 Dyreson Road McFarland, WI 53558 <u>Attn: Ms. Robyn Seymour</u> Passive Soil Gas Survey – Analytical Report Date: August 1, 2012

#### Beacon Project No. 2541

Project Reference:	La Hacienda Restaurant, Madison, WI				
Samplers Installed:	July 9 and 10, 2012				
Samplers Retrieved:	July 16 and 17, 2012				
Samples Received:	July 18, 2012				
Analyses Completed:	July 25, 2012				
Laboratory Data Issued:	July 25, 2012				

#### EPA Method 8260C (Modified)

All samples were successfully analyzed using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation to target a custom compound list following EPA Method 8260C. Laboratory results are reported in nanograms (ng) of specific compound per sample.

Laboratory QA/QC procedures included internal standards, surrogates, and blanks based on EPA Method 8260C. Analyses and reporting were in accordance with BEACON's Quality Assurance Project Plan.

#### **Reporting limits**

The contract required quantification limit (CRQL) is 25 nanograms (ng) for individual compounds and 5,000 ng for Total Petroleum Hydrocarbons (TPH). **Table 1** provides survey results in nanograms per sampler by sample-point number and compound name. The CRQLs represent a baseline above which results exceed laboratory-determined limits of precision and accuracy. Any field sample measurements above the upper calibration standard are estimated; however, these values are reported without qualifiers because all reported measurements are relative to each other and are appropriate to meet the survey objectives of locating source areas and vapor intrusion pathways and defining the lateral extent of contamination.

#### **Calibration Verification**

The continuing calibration verification (CCV) values for the calibration check compounds were all within  $\pm 20\%$  of the true values as defined by the initial five-point calibration and met the requirements specified in Beacon Environmental's Quality Assurance Project Plan.

#### Method Blanks/Trip Blanks

Laboratory method blanks are run with each sample batch to identify contamination present in the laboratory. If contamination is detected on a method blank, measurements of identical compounds in that sample batch are flagged in the laboratory report. The laboratory method blanks analyzed in connection with the present samples revealed no contamination.

The trip blank is a sampler prepared, transported, and analyzed with other samples but intentionally not exposed. Any target compounds identified on the trip blanks are reported in the laboratory data. The analysis of the trip blank (labeled Trip-1 in **Table 1**) reported none of the targeted compounds.

#### **Passive Soil-Gas Survey Notes**

When sample locations are covered with or near the edge of an artificial surface (*e.g.*, asphalt or concrete), the concentrations of compounds in soil gas are often significantly higher than the concentrations would be if the surfacing were not present. Thus, a reading taken below or near an impermeable surface is much higher than it would be in the absence of such a cap. Therefore, the sample location conditions should be evaluated when comparing results between locations.

Survey findings are exclusive to this project and when the spatial relationships are compared with results of other BEACON Surveys it is necessary to incorporate survey and site information from both investigations (*e.g.*, depth to sources, soil types, porosity, soil moisture, presence of impervious surfacing, sample collection times). BEACON recommends the guidelines stated in **Attachment 1** to establish a relationship between reported soil-gas measurements and actual subsurface contaminant concentrations, which will indicate those measurements representing significant subsurface contamination.

#### **Project Details**

Samplers were deployed on July 9 and 10, 2012, and were retrieved on July 16 and 17, 2012. Attachment 2 describes the field procedures used. Individual deployment and retrieval times will be found in the Field Deployment Report (Attachment 3).

Twenty-six (26) field samples and one (1) trip blank were received by BEACON on July 18, 2012. Adsorbent cartridges from the passive samplers were thermally desorbed, then analyzed using gas chromatography/mass spectrometry (GC/MS) equipment, in accordance with EPA Method 8260C (Modified), as described in Attachment 4. BEACON's laboratory analyzed each sample for the targeted compounds; analyses were completed on July 25, 2012. Following a laboratory review, results were provided to SEYMOUR on July 25, 2012. The Chain-of-Custody form, which was shipped with the samples for this survey, is supplied as Attachment 5.

Field samples 20, 24, and 25 detected inordinately high measurements of Tetrachloroethen (PCE) that were not automatically identified (*i.e.*, integrated) by the analytical software. To ensure that data quality objectives were met, manual integration was performed by the analyst to quantify the PCE measurements on each of these samples, in accordance with BEACON's QA/QC program. All data reported for these samples are reported with high confidence.

Sample locations are shown on **Figure 1**. The following table lists frequency of detections based on the number of field samples analyzed, the reporting limit, and the maximum value for each mapped compound. The table also includes the transformation and interpolation method for the compound distribution maps provided.

Figure No.	2	3	4	
Compound	cis-1,2-Dichloroethene-	Trichloroethene	Tetrachloroethene	
Frequency	9	12	18	
Reporting Limit (nanograms)	25	25	25	
Max Value (nanograms)	3,033	99,043	65,486	
Transformation Method	Log	Log	Log	
Interpolation Method	Kriging	Kriging	Kriging	

#### Attachments:

- -1- Applying Results From Passive Soil-Gas Surveys
- -2- Field Procedures
- -3- Field Deployment Report
- -4- Laboratory Procedures
- -5- Chain-of-Custody Form

ALL DATA MEET REQUIREMENTS AS SPECIFIED IN THE BEACON ENVIRONMENTAL SERVICES, INC. QUALITY ASSURANCE PROJECT PLAN AND THE RESULTS RELATE ONLY TO THE SAMPLES REPORTED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY DIRECTOR OR HIS SIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURES:

Steven (. Thornley

Steven C. Thornley Laboratory Director

1 1093

Patti J. Riggs [↓] Quality Manager

#### Beacon Environmental Services, Inc. 323 Williams Street Bel Air, MD 21014 USA

C	lient Sample ID:	mb120723a	Trip-1	1	2	3	4
	Project Number:		2541	2541	2541	2541	2541
	Lab File ID:	A12072305	A12072323	A12072324	A12072325	A12072326	A12072464
	Received Date:		7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012
	Analysis Date:	7/23/2012	7/23/2012	7/23/2012	7/23/2012	7/23/2012	7/25/2012
	Analysis Time:	10:26	17:23	17:46	18:09	18:32	9:47
	Matrix:			Soil Gas	Soil Gas	Soil Gas	Soil Gas
	Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS							
Vinyl Chloride		<25	<25	<25	<25	<25	<25
1,1-Dichloroethene		<25	<25	<25	<25	51	<25
trans-1,2-Dichloroethene	이 감독 없이 가는	<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene		<25	<25	<25	<25	82	<25
Trichloroethene		<25	<25	<25	<25	5,705	<25
Tetrachloroethene		<25	<25	57	30	25,681	<25

#### Beacon Environmental Services, Inc. 323 Williams Street Bel Air, MD 21014 USA

	Client Sample ID:	5	6	7	8	9	10
	Project Number:	2541	2541	2541	2541	2541	2541
	Lab File ID:	A12072328	A12072329	A12072330	A12072331	A12072332	A12072333
	Received Date:	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012
	Analysis Date:	7/23/2012	7/23/2012	7/23/2012	7/23/2012	7/23/2012	7/23/2012
,	Analysis Time:	19:17	19:40	20:03	20:25	20:48	21:11
	Matrix:	Soil Gas					
	Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS							
Vinyl Chloride		<25	<25	<25	<25	<25	<25
1,1-Dichloroethene		<25	<25	<25	<25	<25	<25
trans-1,2-Dichloroethene		<25	<25	<25	<25	<25	<25
cis-1,2-Dichloroethene		<25	<25	<25	<25	<25	<25
Trichloroethene		<25	<25	<25	<25	<25	233
Tetrachloroethene		33	36	<25	<25	216	704

#### Beacon Environmental Services, Inc. 323 Williams Street Bel Air, MD 21014 USA

C	Client Sample ID:	11	12	13	14	15	16
	Project Number:	2541	2541	2541	2541	2541	2541
	Lab File ID:	A12072334	A12072335	A12072336	A12072337	A12072338	A12072339
	Received Date:	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012
	Analysis Date:	7/23/2012	7/23/2012	7/23/2012	7/23/2012	7/23/2012	7/23/2012
	Analysis Time:	21:34	21:56	22:19	22:42	23:05	23:28
	Matrix:	Soil Gas					
	Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS							
Vinyl Chloride		<25	<25	<25	<25	<25	<25
1,1-Dichloroethene		<25	<25	81	<25	<25	<25
trans-1,2-Dichloroethene		<25	65	100	<25	<25	<25
cis-1,2-Dichloroethene		<25	331	256	<25	<25	<25
Trichloroethene		29	1,106	3,904	<25	<25	<25
Tetrachloroethene		78	2,921	10,280	<25	52	<25

#### Beacon Environmental Services, Inc. 323 Williams Street Bel Air, MD 21014 USA

	Client Sample ID:	17	18	19	20	21	22
	Project Number:	2541	2541	2541	2541	2541	2541
	Lab File ID:	A12072340	A12072341	A12072342	A12072343	A12072465	A12072466
	Received Date:	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012	7/18/2012
	Analysis Date:	7/23/2012	7/24/2012	7/24/2012	7/24/2012	7/25/2012	7/25/2012
	Analysis Time:	23:50	0:13	0:36	0:59	10:09	10:32
	Matrix:	Soil Gas					
	Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS							
Vinyl Chloride		<25	<25	<25	<25	<25	<25
1,1-Dichloroethene		<25	<25	30	96	<25	<25
trans-1,2-Dichloroethene	이 가 좋아?	32	<25	39	232	<25	<25
cis-1,2-Dichloroethene		81	27	73	3,033	<25	<25
Trichloroethene		1,219	1,467	1,028	8,236	<25	<25
Tetrachloroethene		2,729	17,290	2,716	29,941	<25	<25

#### Beacon Environmental Services, Inc. 323 Williams Street Bel Air, MD 21014 USA

С	lient Sample ID:	23	24	25	26	mb120724a
	Project Number:	2541	2541	2541	2541	
	Lab File ID:	A12072346	A12072347	A12072348	A12072467	A12072413
	Received Date:	7/18/2012	7/18/2012	7/18/2012	7/18/2012	
	Analysis Date:	7/24/2012	7/24/2012	7/24/2012	7/25/2012	7/24/2012
	Analysis Time:	2:07	2:30	2:52	10:55	13:03
	Matrix:	Soil Gas	Soil Gas	Soil Gas	Soil Gas	
	Units:	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride		<25	<25	<25	<25	<25
1,1-Dichloroethene		<25	417	614	<25	<25
trans-1,2-Dichloroethene		<25	234	751	<25	<25
cis-1,2-Dichloroethene		<25	827	905	<25	<25
Trichloroethene		<25	51,540	99,043	104	<25
Tetrachloroethene		<25	47,072	65,486	2,744	<25





Beacon Project 2541 - Page 10 of 24



Beacon Project 2541 - Page 11 of 24



#### Attachment 1

#### APPLYING RESULTS FROM PASSIVE SOIL-GAS SURVEYS

The utility of soil-gas surveys is directly proportional to their accuracy in reflecting and representing changes in the subsurface concentrations of source compounds. Passive soil-gas survey results are the mass collected from the vapor-phase emanating from the source(s). The vapor-phase is merely a fractional trace of the source(s) and, as a matter of convenience, the units used in reporting detection values from passive soil-gas surveys are smaller than those employed for source-compound concentrations.

Passive soil gas data are reported in mass of compounds identified per sample location (e.g., nanograms (ng) or micrograms ( $\mu$ g) per sampler). Results from a passive soil gas survey typically are then used to guide where follow-on intrusive samples should be collected to obtain corresponding concentrations of the contaminants in soil, soil gas, and/or groundwater, as well as eliminate those areas where intrusive samples are not required. It is not practical to report passive soil gas data as concentration because the sampler's uptake rates of the compounds are often greater than the replenishment rates of the compounds around the sampler, which results in low bias measurements, and the replenishment rates will be dependent on several factors that include, at a minimum, soil gas concentrations, soil porosity and permeability, and soil moisture level.

Whatever the relative concentrations of source and associated soil gas, best results are realized when the ratio of soil-gas measurements to actual subsurface concentrations remains as close to constant as the real world permits. It is the reliability and consistency of this ratio, not the particular units of mass (*e.g.*, nanograms) that determine usefulness. Thus, BEACON emphasizes the necessity of conducting — at minimum — follow-on intrusive sampling in areas that show relatively high soil-gas measurements to obtain corresponding concentrations of soil and groundwater contaminants. These correspondent values furnish the basis for approximating a relationship. For extrapolating passive soil gas results to vapor intrusion evaluations, we recommend a minimum of three passive soil gas locations be converted to a shallow vapor well then sampled using an active soil gas measurements to estimate subsurface contaminant concentrations across the survey field. (See <u>www.beacon-usa.com/passivesoilgas.html</u>, Publication 1: *Mass to Concentration Tie-In for PSG Surveys* and Publication 4: *Groundwater and PSG Correlation*.) It is important to keep in mind, however, that specific conditions at individual sample points, including soil porosity and permeability, depth to contamination, and perched ground water, can have an impact on soil-gas measurements at those locations.

When passive soil-gas surveys are utilized as described above, the data provide information that can yield substantial savings in drilling costs and in time. They furnish, among other things, a checklist of compounds expected at each survey location and help to determine how and where drilling budgets can most effectively be spent. Passive soil-gas surveys can also be used as a remediation or general site monitoring tool that can be implemented on a quarterly, semi-annual or annual basis.

#### Attachment 2

#### FIELD PROCEDURES FOR PASSIVE SOIL-GAS SURVEYS

The following field procedures are routinely used during a BEACON Passive Soil-Gas Survey. Modifications can be and are incorporated from time to time in response to individual project requirements. In all instances, BEACON adheres to EPA-approved Quality Assurance and Quality Control practices.

- A. Field personnel carry a BESURE Sample Collection Kit[™] and support equipment to the site and deploy the passive samplers in a prearranged survey pattern. A passive sampler consists of a borosilicate glass vial containing hydrophobic adsorbent cartridges with a length of wire attached to the vial for retrieval. Although samplers require only one person for emplacement and retrieval, the specific number of field personnel required depends upon the scope and schedule of the project. Each Sampler emplacement generally takes less than two minutes.
- B. At each survey point a field technician clears vegetation as needed and, using a hammer drill with a 1"- to 1½"-diameter bit, creates a hole 12 to 14 inches deep. [Note: For locations covered with asphalt, concrete, or gravel surfacing, the field technician drills a 1"- to 1½"-diameter hole through the surfacing to the soils beneath]. The hole is then sleeved with a 1"-diameter metal sleeve.
- C. The technician then removes the solid plastic cap from a sampler and replaces it with a Sampling Cap (a plastic cap with a hole covered by screen meshing). The technician inserts the sampler, with the Sampling Cap end facing down, into the hole (see attached figure). The sampler is then covered with an aluminum foil plug and soils for uncapped locations or, for capped locations, an aluminum foil plug and a concrete patch. The sampler's location, time and date of emplacement, and other relevant information are recorded on the Field Deployment Form
- D. One or more trip blanks are included as part of the quality-control procedures.
- E. Once all the passive samplers have been deployed, field personnel schedule sampler recovery and depart, taking all other equipment and materials with them.
- F. Field personnel retrieve the samplers at the end of the exposure period. At each location, a field technician withdraws the sampler from its hole, removes the retrieval wire, and wipes the outside of the vial clean using gauze cloth; following removal of the Sampling Cap, the threads of the vial are also cleaned. A solid plastic cap is screwed onto the vial and the sample location number is written on the label. The technician then records sample-point location, date, time, etc. on the Field Deployment Form.
- G. Sampling holes are refilled with soil, sand, or other suitable material. If Samplers have been installed through asphalt or concrete, the hole is filled to grade with a plug of cold patch or cement.
- H. Following retrieval, field personnel ship or transport the passive samplers to BEACON's laboratory.

# **BEACON PASSIVE SAMPLER**



DEPLOYMENT THROUGH SOILS

### DEPLOYMENT THROUGH AN ASPHALT/CONCRETE CAP



		Project Informa	tion		REACON	Client Information			
	Beacon Project N	lo.: 2541			ENVIRONMENTAL	Company Name:	Seymour Environmental Services, Inc.		
	Site Name: La Hacienda Restaurant				SERVICES, INC.	McFarland, WI			
	Site Location:	Madison, WI		323 Williams Sa	cet, Sante D, Hel Air, MD 21014 (309) \$78-5510	Samples Collected By:	MRS+MDF		
Ram northers, northers, the	FIELD	Date Emplaced	Date Retrieved	Sampling Hole Depth	FIELD NOTES ( <i>e.g.</i> , asphalt/concrete/gravel, description of sample location, PID/FID readings)				
	SAMELE ID	Time Emplaced	Time Retrieved	(inches)					
	P5-1	1450	1230	16"	crass				
	P5-2	1455	1234		1 j				
	P5-3	1500	123年		u				
Ospining and	p-5-4	1.503	12.40		N.				
	PS-5	1504	1243		11				
	PS .6	1506	1245		11				
	125-7	1508	12.46		N.	·			
	PS-8	1510	1248		11				
Be	PS - 9	1513	1252		۸۱				
acon F	PS-10	1515	1254		N.				
roject	25-11	1517	1256		11				
2541	PS-12	1520	1259		11				
· Page	125-13	1522	1303		Ń				
18 of 2	PS-14	1525	1306		);				
24	p.5-15	1527	1307		11				

Beacon Project N Site Name: Site Location:	Project Informa No.: 2541 La Hacienda Madison, Wl	tion Restaurant		BEACON ENVIRONMENTAL SERVICES, INC. Ref. Sunte D. Bel Ali, MD 21914 (800) \$78-5510	Client Information   Company Name: Seymour Environmental Services   Office Location: McFarland, WI   Samples Collected By: DRS - DDF		
FIELD SAMPLE ID	Date Emplaced 1/9/20/2 Time Emplaced	Date Retrieved 7/16/2012 Time Retrieved	Sampling Hole Depth (inches)	FIELD NOTES ( <i>e.g.</i> , asphalt/concrete/gravel, description of sample location, PID/FID reading			
125-16	1529	1310	16"	Grass			
PS-17	1531	1312					
P5-18	1533	1314					
PS-19	1535	1317				······································	
PS-20	1537	1319					
PS-21	1545	1326					
PS-22	1547	1328					
PS-23	1550	1331					

Page <u>2</u> of <u>3</u>

	Project Information			REACON	Client Information				
Beacon Project N	No.: 2541			ENVIRONMENTAL	Company Name:	Seymour Environmental Services, Inc.			
Site Name:	La Hacienda	Restaurant		SERVICES, INC.	Office Location:	McFarland, WI			
Site Location:	Madison, WI	ىلىدىنىيەر بىلەر بىلە	323 Williams Ser	eet, Suite D, Bel Air, MD 21014 (800) 878-5510	Samples Collected By:	MRS+ MDF			
		l	1	1					
FIELD	Date Emplaced	Date Retrieved	Sampling		FIELD NOTES				
SAMPLE ID	7/10/2012	7/17/2012	Hole Depth	(e.g., asphalt/concrete/gravel, description of sample location, PID/FID readings)					
	Time Emplaced	Time Retrieved	(inches)						
125-24	1240	1155	12"	Concrete					
PS-25	1245	1159	12"	concrete					
PS-26	1252	1204	16"	arass					
				5					
B									
acon F					• • • • • • • • • • • • • • • • • • •				
roject									
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Page 3 of 3

#### Attachment 4

#### LABORATORY PROCEDURES FOR PASSIVE SOIL-GAS SAMPLES

Following are laboratory procedures used with BEACON Passive Soil-Gas Surveys, a screening technology for expedited site investigation. After exposure, adsorbent cartridges from the passive samplers are analyzed using U.S. EPA Method 8260C as a guidance document, a capillary gas chromatographic/mass spectrometric method, modified to accommodate high temperature thermal desorption of the adsorbent cartridges and to meet the objecitves of reporting semi-quantitative data. This procedure is summarized as follows:

- A. The adsorbent cartridges are loaded with internal standards and surrogates prior to loading the autosampler with the cartridges. The loaded cartridges are purged in a helium flow. Then the cartridges are thermally desorbed in a helium flow onto a focusing trap. Any analytes in the helium stream are adsorbed onto a focusing trap.
- B. Following trap focusing, the trap is thermally desorbed onto a Rxi-624Sil MS 20m, 0.18 mm ID, 1.00 micron filament thickness capillary column.
- C. The GC/MS is scanned between 35 and 270 Atomic Mass Units (AMU) at 3.12 scans per second.
- D. BFB tuning criteria and the initial five-point calibration procedures are those stated in method SW846-8260C. System performance and calibration check criteria are met prior to analysis of samples. A laboratory method blank is analyzed after the daily standard to determine that the system is contaminant-free.
- E. The instrumentation used for these analyses includes:
  - Agilent 6890-5973a Gas Chromatograph/Mass Spectrometer;
  - Markes Unity thermal desorber;
  - Markes UltrA autosampler; and
  - Markes Mass Flow Controller Modules

## CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES

Proj	ect Information	C		ient Information				
Beacon Project No.:	2541	BEACON	Company Name:	Seymour	Environmental Ser	vices. Inc.		
Site Name:	La Hacienda Restaurant	ENVIRONMENTAL	Office Location:	McFarla	ind, WI			
Site Location:	Madison, WI	SERVICES, INC.	Samples Submitted By:					
Analytical Method:	EPA Method 8260C	- 125 Wildows Silver, Silver E. Der All, S.D. 2014 (1993) Brossper	Contact Phone No.:					
Target Compounds:	Beacon Project Number 2541 Target	Compound List	**************************************					
Field Somple ID			S v on diagonomon and					
rield Sample ID		Notes						
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## CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES

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	Project Information		]		Clie	nt Info	ormati	ion	
	Beacon Project No.: 2541			BEACON	Company Name:	Seymo	our Env	ironmental Serv	vices, Inc.
	Site Name: La F	lacienda Restaurant	165	ENVIRONMENTAL	Office Location:	McFa	arland,	, WI	
	Site Location: Mad	ison, WI	1 222 Mathian	SERVICES, INC.	Samples Submitted By:				
	Analytical Method: EPA	Method 8260C	- 222 WILLING	19 23 640, XIBS D. DELVIL 2001 71014 10000 27 512 10	Contact Phone No.:				
	Target Compounds: Beac	con Project Number 2541 Target	Compo	ound List					
				Comment	S				
	Field Sample ID			(only necessary if problem	1 or discrepancy)				
	-		Notes					Time	Initial
	18					6711	6/12	13:14	
	19					<u> </u>		13:17	
	20							13:19	
	21					1 (		13:26	
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	23	· · · · · · · · · · · · · · · · · · ·				07/1	16/12	13:31	
	24					07/17/	12	11:55	
	25					07/1	17/12	11:58	
	26					07/1	17/42	12:04	
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ojec	Shipment of Field Kit to Site	e Custody Seal # 1735	0171		Intact? (Vi N	1		L	L
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The Leaders in Soil Gas Surveys and Vapor Intrusion Monitoring

Seymour Environmental Services, Inc. 2531 Dyreson Road McFarland, WI 53558 <u>Attn: Ms. Robyn Seymour</u> Passive Soil Gas Survey – Analytical Report

#### Date: April 3, 2013 Beacon Project No. 2638

Project Reference:	La Hacienda Restaurant, Madison, WI				
Samplers Installed:	March 1, 2013				
Samplers Retrieved:	March 8, 2013				
Samples Received:	March 12, 2013				
Analyses Completed:	March 15, 2013				
Laboratory Data Issued:	March 19, 2013				

#### EPA Method 8260C

All samples were successfully analyzed using thermal desorption-gas chromatography/mass spectrometry (TD-GC/MS) instrumentation to target a custom compound list following EPA Method 8260C. Laboratory results are reported in nanograms (ng) of specific compound per sample.

Laboratory QA/QC procedures included internal standards, surrogates, and blanks based on EPA Method 8260C. Analyses and reporting were in accordance with BEACON's Quality Assurance Project Plan.

#### **Reporting limits**

The reporting limit (RL) for each compound is equal to the limit of quantitation (LOQ), which is 10 nanograms (ng), and the limit of detection (LOD) is 5 ng. **Table 1** provides survey results in nanograms per sampler by sample-point number and compound name; measurements below the LOQ but above the MDL are flagged with a "J." The LOQs (<10 ng) represent a baseline above which results exceed laboratory-determined limits of precision and accuracy. Any field sample measurements above the upper calibration standard are estimated; however, these values are reported without qualifiers because all reported measurements are relative to each other and are appropriate to meet the survey objectives of locating source areas and vapor intrusion pathways and defining the lateral extent of contamination.

#### **Calibration Verification**

The continuing calibration verification (CCV) values for the calibration check compounds were all within  $\pm 20\%$  of the true values as defined by the initial five-point calibration and met the requirements specified in Beacon Environmental's Quality Assurance Project Plan.

#### Method Blanks/Trip Blanks

Laboratory method blanks are run with each sample batch to identify contamination present in the laboratory. If contamination is detected on a method blank, measurements of identical compounds in that sample batch are flagged in the laboratory report. The laboratory method blank analyzed in connection with the present samples revealed no contamination.

The trip blank is a sampler prepared, transported, and analyzed with other samples but intentionally not exposed. Any target compounds identified on the trip blanks are reported in the laboratory data. The analysis of the trip blank (labeled Trip-1 in **Table 1**) reported 22 ng of trans-1,2-Dichloroethene.

No other compounds were identified on the trip blanks, which suggests that except for the lower level measurements of trans-1,2-Dichloroethene, the survey site itself is the source of detected compounds.

#### **Passive Soil-Gas Survey Notes**

When sample locations are covered with or near the edge of an artificial surface (e.g., asphalt or concrete), the concentrations of compounds in soil gas are often significantly higher than the concentrations would be if the surfacing were not present. Thus, a reading taken below or near an impermeable surface is much higher than it would be in the absence of such a cap. Therefore, the sample location conditions should be evaluated when comparing results between locations.

Survey findings are exclusive to this project and when the spatial relationships are compared with results of other BEACON Surveys it is necessary to incorporate survey and site information from both investigations (*e.g.*, depth to sources, soil types, porosity, soil moisture, presence of impervious surfacing, sample collection times). BEACON recommends the guidelines stated in **Attachment 1** to establish a relationship between reported soil-gas measurements and actual subsurface contaminant concentrations, which will indicate those measurements representing significant subsurface contamination.

#### **Project Details**

Samplers were deployed on March 1, 2013, and were retrieved on March 8, 2013. Attachment 2 describes standard field procedures. Individual deployment and retrieval times will be found in the Field Deployment Report (Attachment 3).

Twelve (12) field samples and one (1) trip blank were received by BEACON on March 12, 2013. Adsorbent cartridges from the passive samplers were thermally desorbed, then analyzed using gas chromatography/mass spectrometry (GC/MS) equipment, in accordance with EPA Method 8260C, as described in Attachment 4. BEACON's laboratory analyzed each sample for the targeted compounds; analyses were completed on March 15, 2013. Following a laboratory review, results were provided to Seymour on March 19, 2013. The Chain-of-Custody form, which was shipped with the samples for this survey, is supplied as Attachment 5.

Sample locations are shown on **Figure 1**. The following table lists frequency of detections based on the number of field samples analyzed, the reporting limit, and the maximum value for each mapped compound. The table also includes the transformation and interpolation method for the compound distribution maps provided.

Figure No.	2	3	4	
Compound	Cis-1,2-Dichloroethene	Trichloroethene	Tetrachloroethene	
Frequency	3	3	9	
Reporting Limit (nanograms)	10	10	10	
Max Value (nanograms)	108	84	181	
Transformation Method	Log	Log	Log	
Interpolation Method	Kriging	Kriging	Kriging	

#### Attachments:

- -1- Applying Results From Passive Soil-Gas Surveys
- -2- Field Procedures
- -3- Field Deployment Report
- -4- Laboratory Procedures
- -5- Chain-of-Custody Form

ALL DATA MEET REQUIREMENTS AS SPECIFIED IN THE BEACON ENVIRONMENTAL SERVICES, INC. QUALITY ASSURANCE PROJECT PLAN AND THE RESULTS RELATE ONLY TO THE SAMPLES REPORTED. BEACON ENVIRONMENTAL SERVICES IS ACCREDITED TO ISO 17025:2005, AND THE WORK PERFORMED WAS IN ACCORDANCE WITH ISO 17025 REQUIREMENTS, WITH THE EXCEPTION THAT SAMPLES WERE ANALYZED WITHIN A 24-HOUR TUNE WINDOW. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY DIRECTOR OR HIS SIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURES:

Steven (. Thornley

Steven C. Thornley Laboratory Director

Patti J. Riggs V Quality Manager

#### Beacon Environmental Services, Inc. 2203A Commerce Road, Suite 1 Forest Hill, MD 21050 USA

#### Analysis by EPA Method 8260C

Client Sample ID:	mb130315c	Trip-1	27	28	29	30
Project Number:		2638	2638	2638	2638	2638
Lab File ID:	C13031503	C13031528	C13031529	C13031530	C13031531	C13031532
Received Date:		3/12/2013	3/12/2013	3/12/2013	3/12/2013	3/12/2013
Analysis Date:	3/15/2013	3/15/2013	3/15/2013	3/15/2013	3/15/2013	3/15/2013
Analysis Time:	8:53	17:54	18:15	18:36	18:57	19:16
Matrix:			Soil Gas	Soil Gas	Soil Gas	Soil Gas
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	<10	22	19	62	66	91
cis-1,2-Dichloroethene	<10	<10	<10	<10	<10	<10
Trichloroethene	<10	<10	<10	<10	<10	13
Tetrachloroethene	<10	<10	7 J	<10	<10	80

#### Beacon Environmental Services, Inc. 2203A Commerce Road, Suite 1 Forest Hill, MD 21050 USA

#### Analysis by EPA Method 8260C

Client Sample ID:	31	32	33	34	35	36
Project Number:	2638	2638	2638	2638	2638	2638
Lab File ID:	C13031533	C13031534	C13031535	C13031536	C13031537	C13031538
Received Date:	3/12/2013	3/12/2013	3/12/2013	3/12/2013	3/12/2013	3/12/2013
Analysis Date:	3/15/2013	3/15/2013	3/15/2013	3/15/2013	3/15/2013	3/15/2013
Analysis Time:	19:37	19:59	20:20	20:41	21:03	21:24
Matrix:	Soil Gas					
Units:	ng	ng	ng	ng	ng	ng
COMPOUNDS						
Vinyl Chloride	<10	<10	<10	<10	<10	<10
1,1-Dichloroethene	<10	<10	<10	<10	<10	<10
trans-1,2-Dichloroethene	64	123	24	5 J	14	51
cis-1,2-Dichloroethene	108	12	21	<10	<10	<10
Trichloroethene	17	84	<10	<10	<10	<10
Tetrachloroethene	52	181	6 J	<10	23	11

#### Beacon Environmental Services, Inc. 2203A Commerce Road, Suite 1 Forest Hill, MD 21050 USA

#### Analysis by EPA Method 8260C

Clie	nt Sample ID:	37	38		
Pro	2638	2638			
	Lab File ID:	C13031539	C13031540		
R	eceived Date:	3/12/2013	3/12/2013		
Α	Analysis Date:				
А	nalysis Time:	21:45	22:07		
	Matrix:	Soil Gas	Soil Gas		
	ng	ng			
COMPOUNDS					
Vinyl Chloride		<10	<10		
1,1-Dichloroethene		<10	<10		
trans-1,2-Dichloroethene	and the second se	32	27		
cis-1,2-Dichloroethene		<10	<10		
Trichloroethene		<10	<10		
Tetrachloroethene		23	23		

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Beacon Project 2638 -- Page 8 of 19



Beacon Project 2638 -- Page 9 of 19



Beacon Project 2638 -- Page 10 of 19

#### Attachment 1

#### APPLYING RESULTS FROM PASSIVE SOIL-GAS SURVEYS

The utility of soil-gas surveys is directly proportional to their accuracy in reflecting and representing changes in the subsurface concentrations of source compounds. Passive soil-gas survey results are the mass collected from the vapor-phase emanating from the source(s). The vapor-phase is merely a fractional trace of the source(s) and, as a matter of convenience, the units used in reporting detection values from passive soil-gas surveys are smaller than those employed for source-compound concentrations.

Passive soil gas data are reported in mass of compounds identified per sample location (e.g., nanograms (ng) or micrograms ( $\mu$ g) per sampler). Results from a passive soil gas survey typically are then used to guide where follow-on intrusive samples should be collected to obtain corresponding concentrations of the contaminants in soil, soil gas, and/or groundwater, as well as eliminate those areas where intrusive samples are not required. It is not practical to report passive soil gas data as concentration because the sampler's uptake rates of the compounds are often greater than the replenishment rates of the compounds around the sampler, which results in low bias measurements, and the replenishment rates will be dependent on several factors that include, at a minimum, soil gas concentrations, soil porosity and permeability, and soil moisture level.

Whatever the relative concentrations of source and associated soil gas, best results are realized when the ratio of soil-gas measurements to actual subsurface concentrations remains as close to constant as the real world permits. It is the reliability and consistency of this ratio, not the particular units of mass (*e.g.*, nanograms) that determine usefulness. Thus, BEACON emphasizes the necessity of conducting — at minimum — follow-on intrusive sampling in areas that show relatively high soil-gas measurements to obtain corresponding concentrations of soil and groundwater contaminants. These correspondent values furnish the basis for approximating a relationship. For extrapolating passive soil gas results to vapor intrusion evaluations, we recommend a minimum of three passive soil gas locations be converted to a shallow vapor well then sampled using an active soil gas measurements to estimate subsurface contaminant concentrations across the survey field. (See <u>www.beacon-usa.com/passivesoilgas.html</u>, Publication 1: *Mass to Concentration Tie-In for PSG Surveys* and Publication 4: *Groundwater and PSG Correlation.*) It is important to keep in mind, however, that specific conditions at individual sample points, including soil porosity and permeability, depth to contamination, and perched ground water, can have an impact on soil-gas measurements at those locations.

When passive soil-gas surveys are utilized as described above, the data provide information that can yield substantial savings in drilling costs and in time. They furnish, among other things, a checklist of compounds expected at each survey location and help to determine how and where drilling budgets can most effectively be spent. Passive soil-gas surveys can also be used as a remediation or general site monitoring tool that can be implemented on a quarterly, semi-annual or annual basis.

#### Attachment 2

#### FIELD PROCEDURES FOR PASSIVE SOIL-GAS SURVEYS

The following field procedures are routinely used during a BEACON Passive Soil-Gas Survey. Modifications can be and are incorporated from time to time in response to individual project requirements. In all instances, BEACON adheres to EPA-approved Quality Assurance and Quality Control practices.

- A. Field personnel carry a BESURE Sample Collection Kit[™] and support equipment to the site and deploy the passive samplers in a prearranged survey pattern. A passive sampler consists of a borosilicate glass vial containing hydrophobic adsorbent cartridges with a length of wire attached to the vial for retrieval. Although samplers require only one person for emplacement and retrieval, the specific number of field personnel required depends upon the scope and schedule of the project. Each Sampler emplacement generally takes less than two minutes.
- B. At each survey point a field technician clears vegetation as needed and, using a hammer drill with a 1"- to 1½"-diameter bit, creates a hole 12 to 14 inches deep. [Note: For locations covered with asphalt, concrete, or gravel surfacing, the field technician drills a 1"- to 1½"-diameter hole through the surfacing to the soils beneath]. The technician then, using a hammer drill with a ½" diameter bit, creates a hole three-feet deep. The hole is then sleeved with a 1"-diameter metal sleeve.
- C. The technician then removes the solid plastic cap from a sampler and replaces it with a Sampling Cap (a plastic cap with a hole covered by screen meshing). The technician inserts the sampler, with the Sampling Cap end facing down, into the hole (see attached figure). The sampler is then covered with an aluminum foil plug and soils for uncapped locations or, for capped locations, an aluminum foil plug and a concrete patch. The sampler's location, time and date of emplacement, and other relevant information are recorded on the Field Deployment Form.
- D. One or more trip blanks are included as part of the quality-control procedures.
- E. Once all the samplers have been deployed, field personnel schedule sampler recovery and depart, taking all other equipment and materials with them.
- F. Field personnel retrieve the samplers at the end of the exposure period. At each location, a field technician withdraws the sampler from its hole, removes the retrieval wire, and wipes the outside of the vial clean using gauze cloth; following removal of the Sampling Cap, the threads of the vial are also cleaned. A solid plastic cap is screwed onto the vial and the sample location number is written on the label. The technician then records sample-point location, date, time, etc. on the Field Deployment Form.
- G. Sampling holes are refilled with soil, sand, or other suitable material. If samplers have been installed through asphalt or concrete, the hole is filled to grade with a plug of cold patch or cement.
- H. Following retrieval, field personnel ship or transport the passive samplers to BEACON's laboratory.

## **BEACON'S PASSIVE SOIL-GAS SAMPLER**



DEPLOYMENT THROUGH SOILS

#### DEPLOYMENT THROUGH AN ASPHALT/CONCRETE CAP



Project Information			BEACON	Client Information			
Beacon Project ?	Beacon Project No.: 2638			ENVIRONMENTAL	Company Name:	Seymour Environmental Sves, Inc.	
Site Name:	LA Hacienda	n Restaurant	2203A Commerce Road   Suite 1		Office Location:	McFarland, WI	
Site Location:	Madison, WI		Forest Hill, 1 800-878-551	MD 21050 USA 0 [ 1-410-838-8780	Samples Collected By:	mper	
1 1		i	1	1			
	Date Emplaced	Date Retrieved	Samuling		and a set of the set of		
FIELD	03/01/2013	03/08/2013	Hole Depth	Can ambaltananata			
SAMPLE ID	Time Emplaced	Time Retrieved	(inches)	(e.g., asphalt/concrete/gravel, description of sample location, PID/FII			
27	12:32	10:40	12"	CONCLETE			
28	12:44	10:45	5	ASPHALT	······		
29	12:52	11:08		GRASS	. <u></u>		
	13:08	09:56		GARDEN BED			
31	13:15	10:03		Concerte			
32	13:19	10:07		GALDER BED			
33	13:24	10:13		Concrete			
34	13:33	10:10		Concharle			
BB 35	13:40	10:16		GARDON BED		- 	
36	13:47	10:18		Granss		· · · ·	
roject 37	13:52	10:20		Concenté	·		
1638 <u>3</u> 3	13:57	10:00	<u> </u>	Conceste			
Page							
16 of 1							
Q							
#### Attachment 4

#### LABORATORY PROCEDURES FOR PASSIVE SOIL-GAS SAMPLES

Following are laboratory procedures used with BEACON Passive Soil-Gas Surveys, a screening technology for expedited site investigation. After exposure, adsorbent cartridges from the passive samplers are analyzed using U.S. EPA Method 8260C as a guidance document, a capillary gas chromatographic/mass spectrometric method, modified to accommodate high temperature thermal desorption of the adsorbent cartridges and to meet the objecitves of reporting semi-quantitative data. This procedure is summarized as follows:

- A. The adsorbent cartridges are loaded with internal standards and surrogates prior to loading the autosampler with the cartridges. The loaded cartridges are purged in a helium flow. Then the cartridges are thermally desorbed in a helium flow onto a focusing trap. Any analytes in the helium stream are adsorbed onto a focusing trap.
- B. Following trap focusing, the trap is thermally desorbed onto a Rxi-624Sil MS 20m, 0.18 mm ID, 1.00 micron filament thickness capillary column.
- C. The GC/MS is scanned between 35 and 270 Atomic Mass Units (AMU) at 3.12 scans per second.
- D. BFB tuning criteria and the initial five-point calibration procedures are those stated in method SW846-8260C. System performance and calibration check criteria are met prior to analysis of samples. A laboratory method blank is analyzed after the daily standard to determine that the system is contaminant-free.
- E. The instrumentation used for these analyses includes:
  - Agilent 7890-5975c Gas Chromatograph/Mass Spectrometer;
  - Markes Unity2 thermal desorber;
  - Markes UltrA2 autosampler; and
  - Markes Mass Flow Controller Modules.

#### CHAIN-OF-CUSTODY PASSIVE SOIL-GAS SAMPLES

Project Information		BEACON	Client Information			
Beacon Project No .:	2638		Company Name:	Seymour Environmental Svcs, Inc.		
Site Name:	LA Hacienda Restaurant	SERVICES, INC.	Office Location:	McFarland, WI		
Site Location:	Madison, WI	Forest Hill, MD 21050 USA	Samples Submitted By:	ROBIN SEIMOLOL		
Analytical Method:	EPA Method 8260C	800-878-5510 [1-410-838-8780	Contact Phone No.:	(408) 838-9120		
Target Compounds:	Beacon Project Number 2638 Target	Compound List				

		Comm	ents			
Field Sample ID		(only necessary if prob	lem or discrepancy)			1
		Notes		Date	Time	Initial
Trip-I						
27				03/08/13	10:40	MOF
28				<u>}</u>	10:45	L
29					11:08	
2,0					9:56	
31				1 /	60:03	
32					10:07	$\lfloor \rangle$
37)					10:13	
34					10:10	<u> </u>
35					10:14	<u> </u>
36					10:18	
37					10:20	$  \rangle$
3 <u>8</u>				1	10:00	7
				<u> </u>	1	
D						
5						
Shipment of Field Kit to Sit	e — Custody Seal # 17350	297 Intac	(? (Y) N			
Relinquished by:	Date/Time	Courier	Received by:		Date/Ti	me
Racing Treaches	02-12-2013 / 1700 Hours	FedEx				
Shipment of Field Kit to La	boratory — Custody Seal # 1	7350298	Intact? (V) N			
Relinquished by:	Date/Time	Courier	Received by:		Date/Ti	me
to mark the	03/11/13-15:00	Jodik UPS	Steven Shormle	3.12	.2013/ 1	2.00
···· · · · · · · · · · · · · · · · · ·				0 .	r	

Page ____ of ____

# Appendix D Wisconsin Laboratory of Hygiene Reports



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division Organic Chemistry** NELAP LAB ID: E37658 EPA LAB WI00007 WDNR LAB ID: 113133790 WI DATCP ID: 105-415 WSLH Sample: OX002778 **Bill To** SEYMOUR ENVIRONMENTAL SERVICES **2531 DYRESON ROAD** Customer ID: 320225 MCFARLAND, WI 53558 **TRACKING 4920** 2601 AGRICULTURAL DRIVE MADISON WI 53718 ID#: LAHACIENDA SUMP Field #: Waterbody/Outfall ID: Collection Start: 03/15/2013 16:03:00 Point/Well: 03/15/2013 16:34:00 Collection End: Account #: LH034 Collected By: M. FRYMAN Project No: Date Received: 03/20/2013 07:30:00 County: Date Reported: 03/27/2013 Sample Source: INDOOR AIR Sample Reason: Sample Depth: Sample Information: Sample Location: Sample Description: Analyses and Results:

Analysis Date 03/25/2013	Lab Comment SEE OX002778.MM1							
Analysis Method	Result	Units	LOD	LOQ	Report Limit			
VINYL CHLORIDE	*IS*D< 100	PPB V	0.085	0.280				
TRANS-1,2-DICHLOROETHYLENE	*IS*D< 100	PPB V	0.085	0.280				
CIS-1,2-DICHLOROETHYLENE	*IS 349	PPB V	0.085	0.280				
TRICHLOROETHYLENE	*IS*D< 100	PPB V	0.085	0.280				
TETRACHLOROETHYLENE	*IS 155	PPB V	0.085	0.280				
OX002778.MM1:								
WISCONSIN STATE LABORATORY OF FOLLOWING FLAGS.	WISCONSIN STATE LABORATORY OF HYGIENE SAMPLE OX002778 CONTAINS THE FOLLOWING FLAGS.							
THE INTERNAL STANDARD QC LIMIT IS EXCEEDED - *IS. LOD NOT ACHIEVABLE DUE TO DILUTION - *D.								
IF YOU HAVE ANY QUESTIONS, CO	NTACT STEVE GEIS AT (	608) 224-6	269.					



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

Organic Chemistry

WDNR LAB ID: 113133790 N

NELAP LAB ID: E37658 EPA LAB WI00007 V

WI DATCP ID: 105-415

WSLH Sample: OX002778

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



## Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Heal	th Division	Orga	anic Chemistry	
WDNR LAB ID: 113133790	NELAP LAB ID: E37658	EPA LAB	WI00007 V	VI DATCP ID: 105-415
	WSI H Sample: O	V002770		
	WOLH Sample. U	XUUZI19		
SEYMOUR ENVIRON	MENTAL SERVICES		Bill To	
2531 DYRESON ROAI	)			
			Customer ID	320225
MCFARLAND, WI 535	58		TRACKING 4	4920
			2601 AGRIC	ULTURAL DRIVE
			MADISON V	VI 53718
			ID#:	
Field #: DAVIDSAVER SS-1			Waterbody/C	Dutfall ID:
Collection Start: 03/15/2013 13	:42:00		Point/Well:	
Collection End: 03/15/2013 14	:16:00		Account #:	LH034
Collected By: M. FRYMAN			Project No:	
County:			Date Receive	ed: 03/20/2013 07:30:00
Sample Source: INDOOR AIR			Date Reporte	ed: 03/27/2013
Sample Depth:			Sample Reas	son:
Sample Information:				
Sample Location:				
Sample Description:				
Analyses and Results:				

Analysis Date 03/25/2013	Lab Comment				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
CIS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TRICHLOROETHYLENE	0.340	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	1.49	PPB V	0.085	0.280	



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

**Organic Chemistry** 

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB WI00007

14/100007

WI DATCP ID: 105-415

WSLH Sample: OX002779

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



# Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Heal	th Division	Orga	anic Chemistry	
WDNR LAB ID: 113133790	NELAP LAB ID: E37658	EPA LAB	WI00007	WI DATCP ID: 105-415
	WSLH Sample: O	X002780		
SEYMOUR ENVIRONM	IENTAL SERVICES		Bill To	
2531 DYRESON ROAD	)		Out	
MCEARLAND WI 535	50		Customer	D: 320225
WCFARLAND, WI 555.	50		TRACKIN	IG 4920
			2601 AGF	RICULTURAL DRIVE
			MADISON	N WI 53718
			ID#:	
Field #: DAVIDSAVER SS-2			Waterbod	y/Outfall ID:
Collection Start: 03/15/2013 13	:59:00		Point/Wel	l:
Collection End: 03/15/2013 14:	34:00		Account #	t: LH034
Collected By: M. FRYMAN			Project No	o:
County:			Date Rec	eived: 03/20/2013 07:30:00
Sample Source: INDOOR AIR			Date Rep	orted: 03/27/2013
Sample Depth:			Sample R	leason:
Sample Information:				
Sample Location:				
Sample Description:				
Analyses and Results:				

Lab Comment			_	
Result	Units	LOD	LOQ	Report Limit
ND	PPB V	0.085	0.280	
ND	PPB V	0.085	0.280	
ND	PPB V	0.085	0.280	
ND	PPB V	0.085	0.280	
0.360	PPB V	0.085	0.280	
	Lab Comment Result ND ND ND ND 0.360	Lab Comment Result Units ND PPB V ND PPB V ND PPB V ND PPB V 0.360 PPB V	Lab CommentResultUnitsLODNDPPB V0.085NDPPB V0.085NDPPB V0.085NDPPB V0.0850.360PPB V0.085	Lab Comment         Units         LOD         LOQ           ND         PPB V         0.085         0.280           0.360         PPB V         0.085         0.280



D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

Organic Chemistry

WDNR LAB ID: 113133790

NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002780

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division Organic Chemistry** NELAP LAB ID: E37658 EPA LAB WI00007 WDNR LAB ID: 113133790 WI DATCP ID: 105-415 WSLH Sample: OX002781 Bill To SEYMOUR ENVIRONMENTAL SERVICES **2531 DYRESON ROAD** Customer ID: 320225 MCFARLAND, WI 53558 **TRACKING 4920** 2601 AGRICULTURAL DRIVE MADISON WI 53718 ID#: Field #: WARTMANN SS-1 Waterbody/Outfall ID: Collection Start: 03/15/2013 12:08:00 Point/Well: Collection End: 03/15/2013 12:39:00 Account #: LH034 Collected By: M. FRYMAN Project No: Date Received: 03/20/2013 07:30:00 County: Sample Source: INDOOR AIR Date Reported: 03/27/2013 Sample Reason: Sample Depth: Sample Information: Sample Location: Sample Description: Analyses and Results:

Analysis Date 03/25/2013	Lab Comment				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
CIS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TRICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	0.780	PPB V	0.085	0.280	



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

**Organic Chemistry** 

WDNR LAB ID: 113133790

NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002781

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



CANISTER CLEANING

Wisconsin State Laboratory of Hygicne 2601 Agriculture Drive, PO Box 7996 Madison, WI 53707-7996 (800)442-4618 • FAX (608)224-6213 http://www.slh.wisc.edu

## Laboratory Report

1

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division		Orga	inic Chemistry			
WDNR LAB ID: 113133790 NELAP I	AB ID: E37658	EPA LAB	WI00007	WI D	ATCP ID: 105-	415
WSL	H Sample: O	X002783				
SEYMOUR ENVIRONMENTAL S	ERVICES		Bill To			
2531 DYRESON ROAD			Customor	יחי	220225	
MCEARLAND WI 53558			Customer	שו. 	320225	
mor Areard, m 33356			TRACKING	G 4920		
			2601 AGR	ICULT	URAL DRIVE	
			MADISON	WI 5	3718	
			ID#:			
Field #: HOFFENBERG SS-1			Waterbody	/Outfal	II ID:	
Collection Start: 03/15/2013 10:29:00			Point/Well:	:		
Collection End: 03/15/2013 11:07:00			Account #:	LH0	34	
Collected By: M. FRYMAN			Project No	:		
County:			Date Rece	ived:	03/20/2013 0	7:30:00
Sample Source: INDOOR AIR			Date Repo	rted:	03/27/2013	
Sample Depth:			Sample Re	eason:		
Sample Information:						
Sample Location:						
Sample Description:						
Analyses and Results:						
Analysis Date	Lab Comment					
03/25/2013	LAB ACCIDE	NT - NO WO	RK DONE.			
Analysis Method	F	Result	Units	LOD	) LOQ	Report Limit

COMPLETE



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

**Organic Chemistry** 

WDNR LAB ID: 113133790

NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002783

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Men Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

AB WI00007 WI DATCP ID: 105-415
Bill To
Customer ID: 320225 TRACKING 4920 2601 AGRICULTURAL DRIVE MADISON WI 53718
ID#: Waterbody/Outfall ID: Point/Well: Account #: LH034 Project No: Date Received: 03/20/2013 07:30:00
Date Reported: 03/27/2013 Sample Reason:
4

Analysis Date 03/25/2013	Lab Comment				1 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
CIS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TRICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	0.500	PPB V	0.085	0.280	



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

Organic Chemistry

WDNR LAB ID: 113133790 N

NELAP LAB ID: E37658 EPA LAB WI00007 WI DA

WI DATCP ID: 105-415

WSLH Sample: OX002784

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection LOQ = Level of quantification ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division Organic Chemistry** NELAP LAB ID: E37658 EPA LAB WI00007 WDNR LAB ID: 113133790 WI DATCP ID: 105-415 WSLH Sample: OX002785 Bill To SEYMOUR ENVIRONMENTAL SERVICES 2531 DYRESON ROAD **Customer ID:** 320225 MCFARLAND, WI 53558 **TRACKING 4920** 2601 AGRICULTURAL DRIVE MADISON WI 53718 ID#: Field #: SWEET SS-2 Waterbody/Outfall ID: Collection Start: 03/15/2013 09:28:00 Point/Well: Collection End: 03/15/2013 10:03:00 Account #: LH034 Collected By: M. FRYMAN Project No: Date Received: 03/20/2013 07:30:00 County: Date Reported: 03/27/2013 Sample Source: INDOOR AIR Sample Reason: Sample Depth: Sample Information: Sample Location: Sample Description: Analyses and Results:

Analysis Date 03/25/2013	Lab Comment				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
CIS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TRICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	1.49	PPB V	0.085	0.280	



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

Organic Chemistry

WDNR LAB ID: 113133790 NEL

NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002785

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection LOQ = Level of quantification ND = None detected. Results are less than the LOD

Responsible Party: ______ Men ____ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB WI00007 WI DATCP ID: 105	5-415
WSI H Sample: OX002786	
SEYMOUR ENVIRONMENTAL SERVICES Bill To	
2531 DYRESON ROADCustomer ID: 320225MCFARLAND, WI 53558TRACKING 49202601 AGRICULTURAL DRIVEMADISON WI 53718	1
ID#:Field #: SWEET SS-1Waterbody/Outfall ID:Collection Start: 03/15/2013 09:05:00Point/Well:Collection End: 03/15/2013 09:36:00Account #: LH034Collected By: M. FRYMANProject No:County:Date Received: 03/20/2013 0Sample Source: INDOOR AIRDate Reported: 03/27/2013Sample Denth:Sample Reason:	07:30:00
Sample Information: Sample Location: Sample Description:	

Analyses and Results:

Analysis Date 03/25/2013	Lab Comment				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	0.370	PPB V	0.085	0.280	
CIS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TRICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	1.31	PPB V	0.085	0.280	



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

Organic Chemistry

WDNR LAB ID: 113133790

NELAP LAB ID: E37658 EPA LAB WI00007 V

WI DATCP ID: 105-415

WSLH Sample: OX002786

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection LOQ = Level of quantification ND = None detected. Results are less than the LOD

Responsible Party: _______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Heal	th Division	Orga	anic Chemistry	
WDNR LAB ID: 113133790	NELAP LAB ID: E37658	EPA LAB	WI00007	WI DATCP ID: 105-415
	WSLH Sample: O	X002797		
SEYMOUR ENVIRONI	MENTAL SERVICES		Bill To	
2531 DYRESON ROAI MCFARLAND, WI 535	D 58		Customer I TRACKING 2601 AGRI MADISON	ID: 320225 3 4920 ICULTURAL DRIVE WI 53718
Field #: HOFFENBERG INDO Collection Start: 03/15/2013 10 Collection End: 03/20/2013 16 Collected By: M. FRYMAN County: Sample Source: INDOOR AIR Sample Depth:	OR :55:00 :10:00		Waterbody Point/Well: Account #: Project No: Date Recei Date Repo Sample Re	/Outfall ID: LH034 : ived: 03/21/2013 12:02:00 rted: 03/27/2013 eason:
Sample Information: Sample Location: Sample Description: Analyses and Results:	· · · · · · · · · · · · · · · · · ·			

Analysis Date 03/25/2013	Lab Comment				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
CIS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TRICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	ND	PPB V	0.085	0.280	



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

**Organic Chemistry** 

WDNR LAB ID: 113133790

NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002797

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



## Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Hea	Ith Division	Orga	anic Chemistry	ý
WDNR LAB ID: 113133790	NELAP LAB ID: E37658	EPA LAB	WI00007	WI DATCP ID: 105-415
	WSLH Sample: O	X002798		
SEYMOUR ENVIRON	MENTAL SERVICES		Bill To	
2531 DYRESON ROA	D		Custom	ar ID: 320225
MCFARLAND, WI 535	58		TRACKI 2601 AG MADISC	NG 4920 GRICULTURAL DRIVE DN WI 53718
Field #: LAHACIENDA INDOC Collection Start: 03/15/2013 16 Collection End: 03/20/2013 15 Collected By: M. FRYMAN County:	PR 5:05:00 :20:00		ID#: Waterbo Point/We Account Project № Date Re	ody/Outfall ID: ell: #: LH034 No: ceived: 03/21/2013 12:02:00
Sample Source: INDOOR AIR Sample Depth:			Date Re Sample	ported: 03/27/2013 Reason:
Sample Information:				-
Sample Location:				
Sample Description:				
Analyses and Results:				
Analysis Data	Lab Commont			

Analysis Date 03/25/2013	Lab Comment THE INTERNAL STANDARD QC LIMIT IS EXCEEDED - *IS.				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	*IS ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	*IS 0.29	PPB V	0.085	0.280	
CIS-1,2-DICHLOROETHYLENE	*IS 0.44	PPB V	0.085	0.280	
TRICHLOROETHYLENE	*IS 0.24	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	*IS 2.73	PPB V	0.085	0.280	



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

**Organic Chemistry** 

WDNR LAB ID: 113133790

game enemery

NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002798

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Men Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division Organic Chemistry WDNR LAB ID: 113133790 NELAP LAB ID: E37658 EPA LAB WI00007 WI DATCP ID: 105-415

WSLH Sample: OX002799

SEYMOUR ENVIRONMENTAL SERVICES

2531 DYRESON ROAD

MCFARLAND, WI 53558

Bill To

Customer ID: 320225 TRACKING 4920 2601 AGRICULTURAL DRIVE MADISON WI 53718

Field #: SWEET INDOOR

 Collection Start:
 03/15/2013 09:33:00

 Collection End:
 03/20/2013 16:00:00

 Collected By:
 MARK FRYMAN

County:

Sample Source: INDOOR AIR

Sample Depth:

Sample Information:

Sample Location: LAHACIENDA, SOUTH PARK STREET, MADISON

Sample Description: SWEET INDOOR, DH-006

Analyses and Results:

MADISON WI 53718 ID#: Waterbody/Outfall ID: Point/Well: Account #: LH034 Project No: Date Received: 03/21/2013 Date Reported: 03/27/2013 Sample Reason:

Analysis Date 03/25/2013	Lab Comment THE INTERNAL STANDARD QC LIMIT IS EXCEEDED - *IS.				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	*IS ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	*IS 0.30	PPB V	0.085	0.280	
CIS-1,2-DICHLOROETHYLENE	*IS ND	PPB V	0.085	0.280	
TRICHLOROETHYLENE	*IS ND	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	*IS 0.29	PPB V	0.085	0.280	



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

**Organic Chemistry** 

WDNR LAB ID: 113133790

13133790 NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002799

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

07 WI DATCP ID: 105-415
ΙΤο
ustomer ID: 320225 RACKING 4920 01 AGRICULTURAL DRIVE ADISON WI 53718
#: aterbody/Outfall ID: bint/Well: ccount #: LH034 oject No: ate Received: 03/21/2013 12:02:00
ate Reported: 03/27/2013 ample Reason:

Analysis Date La 03/25/2013	ab Comment				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
VINYL CHLORIDE	ND	PPB V	0.085	0.280	
TRANS-1,2-DICHLOROETHYLENE	0.270	PPB V	0.085	0.280	
Note: The reported value above is e	equal to or greater than th	ne LOD and less	s than the	LOQ.	
CIS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TRICHLOROETHYLENE	ND	PPB V	0.085	0.280	
TETRACHLOROETHYLENE	0.340	PPB V	0.085	0.280	

Page 1 of 2



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

Organic Chemistry

WDNR LAB ID: 113133790

NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002800

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations:

LOD = Level of detection

LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.



## Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Heal	th Division	Orga	anic Chemistry	
WDNR LAB ID: 113133790	NELAP LAB ID: E37658	EPA LAB	WI00007 W	/I DATCP ID: 105-415
	WSLH Sample: O	X002801		
SEYMOUR ENVIRON	MENTAL SERVICES		Bill To	
2531 DYRESON ROAI MCFARLAND, WI 535	D 58		Customer ID: TRACKING 4 2601 AGRICI MADISON W	320225 920 JLTURAL DRIVE /I 53718
Field #: WARTMANN INDOOF Collection Start: 03/15/2013 12 Collection End: 03/20/2013 15 Collected By: M. FRYMAN County:	R :28:00 :45:00		ID#: Waterbody/O Point/Well: Account #: I Project No: Date Receive	utfall ID: _H034 :d: 03/21/2013 12:02:00
Sample Source: INDOOR AIR Sample Depth: 6 Sample Information: Sample Location: Sample Description:			Date Reporte Sample Reas	d: 03/27/2013 :on:

nalyses and Results:						
Analysis Date 03/25/2013	Lab Comment					
Analysis Method	Result	Units	LOD	LOQ	Report Limit	
VINYL CHLORIDE	ND	PPB V	0.085	0.280		
TRANS-1,2-DICHLOROETHYLENE	0.300	PPB V	0.085	0.280		
CIS-1,2-DICHLOROETHYLENE	ND	PPB V	0.085	0.280		
TRICHLOROETHYLENE	ND	PPB V	0.085	0.280		
TETRACHLOROETHYLENE	ND	PPB V	0.085	0.280		



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** 

Organic Chemistry

WDNR LAB ID: 113133790

NELAP LAB ID: E37658 EPA LAB WI00007

WI DATCP ID: 105-415

WSLH Sample: OX002801

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations:

LOD = Level of detection LOQ = Level of quantification

ND = None detected. Results are less than the LOD

Responsible Party: ______ Steve Geis, Chemist Supervisor

If there are questions about this report, please contact Steve Geis at 608-224-6269.

# **Appendix E Meriter Hospital Well Information**



November 4, 2011

Nick Crompton Meriter Hospital

Here is a breakdown on the reduced cost for the main hospital campus water project:

130 less feet of 4" copper pipe:

		/ft \$		/ft lbr	
4" cu pipe deduct	-130	\$30.00	- \$3.900.00	0.2	-26
			\$0.00		0
hangers	-13	\$5.00	-\$65.00	0.25	-3.25

\$3,400.00
\$4,365.00
\$ 650.00
\$54,001.00
<u>\$2,732.00</u>
\$65,148.00.

Original proposal amount:	\$277,728.00
Savings=	<u>\$ 65,148.00</u>
New proposal amount:	\$212,580.00.

There may be some savings associated with the allowance amount I have included for the traffic control, irrigation system repair, and possibly shoring of the tunnel since the drill rig would not be directly over the tunnel in the new proposed location. However, we are not currently carrying any contingency either and allowances can be credited back if not used or needed, which total \$6,370.00

I would also think that the electrical cost will go down since the control panel for the well is closer to the electrical panels in the tower mechanical room, that is assuming that the power will come from there.

Also, if we go with the interior bladder pressure tank at the C&A Facility there will be a savings of \$7,875.00 to that project as well.

The 70 GPM C&A Facility well capacity is called out on the Plan Notes 1 on plan sheet PE210.



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Hea	alth Division	Inorganic Chemistry	
WDNR LAB ID: 113133790	NELAP LAB ID: E37658	EPA LAB ID: WI00007	WI DATCP ID: 105-415

WSLH Sample: IX009709

MERITER HOSPITAL 202 S PARK ST MADISON WI 53715-1599 Bill To Billing ID: 7328890 Customer ID: 343236 MERITER HOSPITAL 202 S PARK ST MADISON WI 53715-1599

Collection Date: 10/10/2012 14:25:00 Owner: MERITER HOSPITAL Unique Well #: YH017 Well Construction: DRILLED County: DANE Driller or Pump Installers License #: Sampling Location: 202 S PARK ST MADISON WI 53715-1599 Sampling Point: SAMPLING FAUCET Sampling information: Collected By: RYAN UNZICKER Well Completion Date: 04/12/12 Account: PP001 Date Received: 10/10/2012 Date Reported: 10/18/2012 Sample Reason: ANNUAL TEST

Analyses and Results:

Analysis Date 10/17/2012	Lab Comment				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
ARSENIC	1.2	) UG/L	1	3	
Note: The reported value above is Your water is considered safe for d below the federal action level of 10	equal to or greater than the rinking with respect to arser micrograms per liter (UG/L	LOD and less t nic. The arseni , also known as	han the LC c concentr parts per	DQ. ation in yo billion, or p	ur water is opb) for arsenic
in drinking water. However, you sh change over time.	ould retest your well water o	each year beca	use conce	ntrations o	f arsenic can
Analysis Date 10/16/2012	Lab Comment				
Analysis Method	Result	Units	LOD	LOQ	Report Limit
DIG, AS/SE ONLY, PRIVATE (SW846 7060A)	COMPLETE				



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director • Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

Inorganic Chemistry

WDNR LAB ID: 113133790 NEL

_____

NELAP LAB ID: E37658 EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: IX009709

Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.wisc.edu/nelap/

List of Abbreviations: LOD = Level of detection LOQ = Level of quantification ND = None detected. Results are less than the LOD

Responsible Party:

havy totoch

Tracy Fritsch, Chemist Supervisor

If there are questions about this report, please contact Customer Service at 800-442-4618 or 608-224-6202.



#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

**Environmental Health Division** WDNR LAB ID: 113133790

NELAP LAB ID: E37658

EPA LAB ID: WI00007 WI DATCP ID: 105-415

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2

WSLH Sample: 45423001

Report To: MERITER HOSPITAL 202 S PARK ST MADISON, WI 53715-1599 Invoice To: MERITER HOSPITAL 202 S PARK ST MADISON, WI 53715-1599 Customer ID: 343236

10/10/2012

10/11/2012

Collection Date: 10/10/2012 2:20:00 PM Collected By: RYAN U Owner: MERITER HOSPITAL, 202 S PARK ST., (608) 417-Well Completion Date: 04/12/12 Unique Well #: YH017 Date Received: Well Construction: DRILLED Date Reported: Sample Reason: ANNUAL TEST

Driller or Pump Installers License #: Sampling Location: 202 S PARK ST.

MADISON, WI 53715 Sampling Point: SAMPLE FAUCET

#### Microbiology

6484

County: DANE

						Analysis
Analyte	Analysis Method	Result	Units	LOD LOQ RL	Prep Date	Date
Total Coliform - Colisure	SM9223B	Absent	(100mL)		10/10/12	10/11/12
INTERPRETATI At this time there been labeled "B modified, or the	ON: BACTERIOLOGICALI e is no indication of bacteria ACTERIOLOGICALLY SAF re is a change in appearance	_Y SAFE al contamination e E", you should re ce, taste, odor or i	ntering your well syst test it annually - or an flow.	iem. Even though you ay time it has been repa	r well has aired,	
E. Coli - Colisure	SM9223B	Absent	/100mL		10/10/12	10/11/12
The presence of	F coli indicates the prese	nce of fecal mater	ial. Their presence in	dicates that water may	he	

contaminated with organisms that can cause disease. There were NO E.coli bacteria found in you water sample.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

*Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.edu/nelap/



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#### Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division WDNR LAB ID: 113133790 NELAP LAB ID: E37658

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 45423001

#### List of Abbreviations

LOD = Level of detection LOQ = Level of quantification ND = None detected. Results are less than the LOD

Responsible Party: David Webb, Deputy Director, Environmental Health Division

The results in this report apply only to the sample specifically listed above. This report is not to be reproduced except in full.

If there are questions about this report, please contact the laboratory at the numbers listed below.

· 1 - ;

Microbiology: 608-224-6262

Wacenulli Depletiment of Natural Resources Includ pay			Pump Work - Water Test Request Form \$300-2014 (R 10/10)			
Notice: This complance laboratory fr	down is publicited by oth housekhickal wy at provides the leaf re	ch. NR i Der samj softs dire	812, Wa, Asim, pling requirement xdy to DNR wit	Code, This form will be use rds, The pump installer is ro Fim 30 days of completion o	il lo duternites porro le quired lo usa a caristed ( Ore antifysis,	ustader d
Collection	Dalo (NJ+CO-YY) /13/2012	10:00	Oam AM Oam	Collected By Kent Lange	License # (mandalo 370	ny)
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City	aur an ouce	State	lir Code	Town or City	County -	
<u>Madisc</u>	n	WI ]		Madison	Dane	
Latiludo (	JEG MI	ء 	Longiliata	DLG KUN	Latitong. Me	1003
****	Sam's Wel	I Drill	ing			
Maii Reaults To:	Address PO Box 1	50				
	Ciy Randolph		51ate	ZIP Code 53956	Do not use this form I Water Complance So	ky Putsu Anglaa
Approx. W	all Completion Date	YAS U	)17 r	Laborat Approved Method:	ory Use Only	
Reason for Previ Pumy Installer n first samp Sample Loc Data Other Other Dillar (An Other Test) Arsenio: Bran bala	Sampling Infor Tost Tost Jus Unzafe Followic Vark - Naw Viell Vark - Existing V mat collect a second to is invatid (a g., o addon: com Tap in Tap cell Construction II d cer well A Comment's: Tableting deuted	mation ng Pum da samp der tha Pressu Mikhon Nikhon Diven F Divg	p Wo:k la if fha n 43 hrs.). ra Tank Tap ute lion Point _ upg/L	Feinmentation Bio Feinmentation Bio Fresence/Abserce Other Laboral Bacterio/ogical Integra Bacterio/ogical Integra Bacterio/ogical Integra Fecal/E col Field Integrate Colform Fecal/E col Field Integrate Colform Fecal/E col Field Integrate Colform Fecal/E colform Fecal/E colform Integrate Colform Integrate Colform Field Fi	Ih a Enzyma Substrate ory Results italion: italion: italion: station: station: present) and: sentfrozen - fR frozen - fR	B Absent - LA Jam - SP - S N - JL
Pump instan The pump in sorrere as it soparata to SWD WI DI	on: All should areas stater may taken the is agent, however, pa the ent the duter's to Labs, LLC NR# 11108383	ero mana west del La arrecta A ferm si O	talory. Ior's fint must by in a factory.	Date / Time Received 4/13/2 Lab Sismple No. 672 Date Reported 4/16/2	012 4:15 F	PM

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001,91,921	a fra mora a la contra est	19222015.83		Pump We Form \$303-4	97K - YN 198A (R	aur iest Reques Jarioj
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Collection	Date (MACO-YY)	Tinta .	<u></u>	Collected By	Licens	# (mandelory)
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Outpar a Na	10/2012	1.0.00	<b>1</b>	Conner's Phone Numb	er	
Meritor	Hospital					ana ana amin'ny fanjarana amin'ny fanjara
Owner's St	ical Address			Well Address (Sveel s	or Legel	Descriction)
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City		State ZIP Co	de	Town or City	Cou	nty of children.
Madiso	n	wi		Madison	Da	ne
Letituca u	EG MIR	Lon	giluta	DLG MAN	- 1	st.A.ong. Mathod
eunite a contra	IN 1000				لدر	
	Sam'e Wal	Drilling				
Mail		a Munuð	- د موسط می		4	
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To:	PU BOX 1	00	<b></b>		<u> </u>	
	CN		State	ZIP Code	Dono	use this form for Publi
<u> </u>	Randolph			53956	182:67	Comprised Samples
Approx. We	Il Completion Date	Mis. Unque	Well #	Labora	tory Us	ə Only
		YH017	r.	Approved Method:		
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Reason for	Tost			FermeniaCon Bu	olh	
Previo	ous Unsafe Followi	ng Pump Wo:	k	X Presence/Absen	ca Enzy	me Substrate
് ലംസം	Viork - New Well			C Other		
PINTA PINTA	Work - Erizfine V	in 1				
Sastaller m	wel collect a secon	nd samela if ()	-	Labora	itory Re	sults
first sampl	lo is invalid (a.g., o	kler than 48 h	HS.).	Batteriological Intern	etalion:	
Sample Loc	ation:			Safe (Coldernt A	bsent)	
🗌 Bathro	nover Tapp 🗌	Pressure Ta	nk Tap	Unsate (Colloin	Presed	d) and:
🗌 Kache	n Tap	Mikhouse		Freat E Col Pr	esent [	Focabé Col Absen
Other					naber	samela)
W	ell Construction li	nformation			n.	Emzan - FR
Orlited	I N	Driven Point			a H	sty Arridani - I A
Jetted	i H	Diri		Turastay - Ti		Shiening Pimblam - S
Other					ינייי 1-Ci	overlight of a resolution - re
Driller (in	on nelj		******	< 34		
Other Tests	& Comman/9:			Nitrate: 1.04		Mg/L 33 N
Arsenic:		hair,	ι	Fluoride:		mgiL
Pump install	ara: All sheded areas	arð mandalery.		Date / Time Received		
The pump in	stater may cuter the	a well drifter's an	st	4/13/2	2012	4:15 PM
int elesson	lie nith the dulier's be	st form attaction	5	Lab Sample No. 679	4	
SWD	Labs, LLC			012	•	
WEDH	VR# 11108383	0		Date Reported	042	E164 A88
					-	

Wisconsin De dat wi gov	partment of Natural F	toscure	595 5	Wat Ferm	er Testing Form Fo 3300-217 (R 11/04)	r Private Water Systems
Collection E 5/4/2	0alo (MM-DD-YY) 2012	lime	12:30	PM	Stu Kok	License # (d pump installer or wall doller required sample)* 370
Owner's Ha Meriter	^{me} Hospital				Owner's Telephone N ()	umber
Owner's St 202 So	eet Address uth Prk Stre	et			202 South Pa	rk Street
City Madiso	n	State WI	ZIP Co	də	Town or City Madison	County Dane
Mall	Name Sam's Wel Address	l Dri	lling			Well Owner: Do you want a copy of results sent to DNR?
Results To:	PO Box 15	0		Riotal	ZIQ Code	Yes No
	Řandolph			ŴĬ	53956	Public Waler Compliance Samples
Reason for 1  • Leb is re Annue Annue New V Taste Other Sample Lo Bathro Kitche Other, Unded Jetted Other,	Sampling Information Test:	A mailor mailor Previo Pump Real E Pressi Pressi Milkho Driver Dug	YHO A N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	afə k Tap	Approved Method: MMO-MUG (Col Membrane Filter Multiple Tube Fe Presence/Absen Other Labora Bacteriological Interpr Safe (Coliform A Unsafe (Coliform A Unsafe (Coliform A Govergrown- OC Turbidity- TU Cchorine Present	Ilert&, Colisure&, etc.) prmentation kce elation: bsent) n Present) and: sent ====================================
SWD Lat WI DNR # WI DATC	os, LLC #111083830 P #105-458				Nitrate:	mg/L as N 2 3:05 PM

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Return Completed Forms To Department of Natural Resources Water Use Section - DG/5 PO Box 7921, Madison WI 53707-7921 dnr.wi.gov

#### Water Withdrawal Report

Form 3300-275 (R 11/12))

http://dnr.wi.gov/topic/WaterUse/

Notice: Pursuant to chs. NR 820 & 856 Wis. Adm. Code, this form is required to report monthly volumes of the withdrawal on an annual basis. Reports must be submitted by March 1 for the previous year's withdrawals. Personally identifiable information provided on this form is not intended to be used for any other purposes but may be made available to requesters under Wisconsin's Open Records law (s. 19.31-19.39, Wis. Stats.)

1. Property Information		All sources on the same p	roperty have the same prop	erty #.				
Property Name (Assigned by Owner):			Property # 12957					
OWNER # 20593		OPERATOR # 20593						
MERITER HEALTH SERVICES CROMPTON, NICK 202 SOUTH PARK STREET MADISON WI 53715		MERITER HEALTH SERVICES CROMPTON, NICK 202 SOUTH PARK STREET MADISON WI 53715						
Phone: (608) 417-6000 E-Mail: ncrompton@meriter.com 2. Source Information		Phone: (608) 417-6000 E-Mail: ncrompton@merit	er.com Each source has a uni	que/#.				
a. Source Name (Assigned by Owner): 1			Source # 18475	<u></u>				
b. PLSS: <u>NW</u> ¼ of	SW_14 of Section SW	, Township 7 N, Range	e <u>9 E</u>					
c. Hicap Well #: 71881	12	e. Unique Well #: YH017						
f. Pump Capacity (GPM): 250	g. Well Depth (ft): 560		h. Casing Diameter (in): 8					
3. Water Withdrawal Reporting for 2	012		Report each source se	parately.				
a, Measurement Code:		Month	Gallons Pumped or Withd Indicate zero gallons with a si	lrawn ngle "0"				
1 - 101		Example	<u> </u>	Gallons				
b. Water Use Code:	January	Q	Gallons					
PSId		February	Q	Gallons				
c. Comments:		March	0	Gallons				
		April		Gallons				
		Мау	2600	Gallons				
		June	0	Gallons				
		July		Gallons				
		August	<u>0</u> 0	Gallons				
d.  This source is approved exclusively for s	ingle family residential	September	Q	Gallons				
uses <u>and</u> the withdrawal capacity is less gallons per minute (GPM).	than or equal to 20	October	29,900	Gallons				
		November	19,500	Gallons				
e. I did <u>not</u> withdraw from this source in If you checked , select from the reasons	below:	December	<u>22,700</u> Gallons					
1)  Filled & Sealed Well 2)  Temporari	y Capped Well 3) 🗌 We	ell Not Drilled 4) 🗌 Do Not H	Know of this Well or Source					
5) 🗌 No Need for Water This Year 6) 🗌 Su	rface Water Source Tempo	rarily Offline 7) 🗍 Surface	Water Source Permanently Ter	rminated				
4. Certification and Signature								
I hereby certify that I am the owner or authorized re the information contained in this form and attachme	epresentative of the owner ints is accurate and comple	of the property which is the site.	ubject of this water use report.	I certify that				
Name (Print) Nicholas Cromp	ton	Owner 🔲 Agent of	Owner (if not, operator)	Operator				
Signature	Company Me	uter Health Servic	Date Signed 1-28-13					

Mail signed form to address in upper left-hand corner of this form. NO NOT mail in this form if you reported your water use online.



Wisconsin State Laboratory of Hygiene 2601 Agriculture Drive, PO Box 7996 Madison, WI 53707-7996 (800)442-4618 - FAX (608)224-6213 http://www.slh.wisc.edu

## Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division WDNR LAB ID: 113133790 NE

NELAP LAB ID: E37658 EF

EPA LAB ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 68024001

Report To: MERITER HOSPITAL 202 S PARK ST MADISON, WI 53715-1599 Invoice To: MERITER HOSPITAL 202 S PARK ST MADISON, WI 53715-1599 Customer ID: 343236

Collected By: MIKE MCLAUGHLIN Well Completion Date: 04/12/12

Date Received:4/13/2013Date Reported:4/15/2013Sample Reason:ANNUAL TEST

Collection Date: 4/12/2013 10:30:00 AM Owner: MERITER HOSPITAL, 202 S PARK ST., (608) 417-6484 Unique Well #: YH017 Well Construction: DRILLED County: DANE Driller or Pump Installers License #: Sampling Location: 202 S PARK ST. MADISON, WI 53715 Sampling Point: BASEMENT TAP

#### Microbiology

0,						Analysis
Analyte	Analysis Method	Result	Units	LOD LOQ RL	Prep Date	Date
Total Coliform - Colisure	SM9223B	Absent	(100mL) (100mL)		04/13/13	04/14/13
INTERPRETATI At this time ther been labeled "B modified, or the	ION: BACTERIOLOGICALI e is no indication of bacteria ACTERIOLOGICALLY SAF re is a change in appearance	Y SAFE Il contamination e E", you should re e, taste, odor or f	entering your well syst test it annually - or an flow.	em. Even though you y time it has been repa	r well has aired,	
E. Coli - Colisure	SM9223B	Absent	/100mL		04/13/13	04/14/13
<b>T</b> he sum a second second			del Their sussesses is			

The presence of E. coli indicates the presence of fecal material. Their presence indicates that water may be contaminated with organisms that can cause disease. There were NO E.coli bacteria found in you water sample.

The water microbiology unit analyzes samples as received and not all samples are tested for preservation before analysis is performed.

*Test results for NELAP accredited tests are certified to meet the requirements of the NELAC standards. For a list of accredited analytes see http://www.slh.edu/nelap/



Wisconsin State Laboratory of Hygiene 2601 Agriculture Drive, PO Box 7996 Madison, WI 53707-7996 (800)442-4618 - FAX (608)224-6213 http://www.slh.wisc.edu

## Laboratory Report

D.F. Kurtycz, M.D., Medical Director - Charles D. Brokopp, Dr.P.H., Director

Environmental Health Division

WDNR LAB ID: 113133790

NELAP LAB ID: E37658 EPA LAB ID:

3 ID: WI00007

WI DATCP ID: 105-415

WSLH Sample: 68024001

#### **List of Abbreviations**

LOD = Level of detection LOQ = Level of quantification ND = None detected. Results are less than the LOD

Responsible Party: David Webb, Deputy Director, Environmental Health Division

The results in this report apply only to the sample specifically listed above. This report is not to be reproduced except in full.

If there are questions about this report, please contact the laboratory at the numbers listed below.

Microbiology: 608-224-6262

Reference 8



### Demographic and Income Profile

La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 0 - 0.25 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

Summary		Census 20	010	Census 202	20	202	23	2028
Population		1,0	015	1,17	72	1,1	80	1,168
Households		2	439	56	59	5	76	574
Families		t	119		-	1	48	146
Average Household Size		2	.31	2.0	06	2.	05	2.03
Owner Occupied Housing Units		1	118		-	1	50	158
Renter Occupied Housing Units		3	321		-	4	26	417
Median Age		2	4.5		-	25	5.4	25.5
Trends: 2023-2028 Annual Rat	e		Area			State		National
Population			-0.20%			0.11%		0.30%
Households			-0.07%			0.33%		0.49%
Families			-0.27%			0.25%		0.44%
Owner HHs			1.04%			0.52%		0.66%
Median Household Income			3.09%			2.54%		2.57%
						2023		2028
Households by Income				Nu	mber	Percent	Number	Percent
<\$15,000					94	16.3%	80	13.9%
\$15,000 - \$24,999					21	3.6%	17	3.0%
\$25,000 - \$34,999					78	13.5%	66	11.5%
\$35,000 - \$49,999					46	8.0%	42	7.3%
\$50,000 - \$74,999					95	16.5%	94	16.4%
\$75,000 - \$99,999					69	12.0%	69	12.0%
\$100,000 - \$149,999					81	14.1%	93	16.2%
\$150,000 - \$199,999					70	12.2%	89	15.5%
\$200,000+					23	4.0%	24	4.2%
Median Household Income				\$60	),740		\$70,710	
Average Household Income				\$83	3,764		\$95,298	
Per Capita Income				\$38	3,318		\$43,909	
		Ce	nsus 2010			2023		2028
Population by Age		Number	Percent	Nu	mber	Percent	Number	Percent
0 - 4		28	2.8%		31	2.6%	32	2.7%
5 - 9		26	2.6%		30	2.5%	30	2.6%
10 - 14		16	1.6%		18	1.5%	18	1.5%
15 - 19		38	3.7%		42	3.6%	42	3.6%
20 - 24		446	44.0%		454	38.5%	442	37.9%
25 - 34		217	21.4%		277	23.5%	266	22.8%
35 - 44		66	6.5%		84	7.1%	88	7.6%
45 - 54		72	7.1%		75	6.4%	75	6.4%
55 - 64		63	6.2%		89	7.5%	83	7.1%
65 - 74		27	2.7%		52	4.4%	55	4.7%
75 - 84		11	1.1%		21	1.8%	26	2.2%
85+		4	0.4%		7	0.6%	8	0.7%
	Ce	ensus 2010	Cen	sus 2020		2023		2028
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White Alone	881	86.8%	920	78.5%	916	77.7%	890	76.1%
Black Alone	25	2.5%	62	5.3%	63	5.3%	65	5.6%
American Indian Alone	6	0.6%	6	0.5%	6	0.5%	7	0.6%
Asian Alone	63	6.2%	85	7.3%	88	7.5%	94	8.0%
Pacific Islander Alone	0	0.0%	3	0.3%	3	0.3%	3	0.3%
Some Other Race Alone	14	1.4%	17	1.5%	18	1.5%	20	1.7%
Two or More Races	26	2.6%	80	6.8%	85	7.2%	90	7.7%
Hispanic Origin (Any Race)	44	4.3%	65	5.5%	69	5.8%	75	6.4%
Data Note: Income is expressed in current do	ollars.							



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 0 - 0.25 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043













2023 Population by Race



²⁰²³ Percent Hispanic Origin: 5.8%



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 0.25 - 0.5 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

Summary		Census 201	0	Census 2	020	202	3	2028
Population		4,63	32	5,	204	5,44	6	5,540
Households		1,85	53	2,	271	2,38	3	2,448
Families		48	37		-	57	8	590
Average Household Size		2.2	25	2	2.02	2.0	3	2.01
Owner Occupied Housing Units		37	74		-	44	2	471
Renter Occupied Housing Units		1,47	78		-	1,94	1	1,977
Median Age		23	.9		-	24.	3	24.4
Trends: 2023-2028 Annual Rate	e		Area			State		National
Population			0.34%			0.11%		0.30%
Households			0.54%			0.33%		0.49%
Families			0.41%			0.25%		0.44%
Owner HHs			1.28%			0.52%		0.66%
Median Household Income			4.03%			2.54%		2.57%
						2023		2028
Households by Income				N	lumber	Percent	Number	Percent
<\$15,000					626	26.3%	586	23.9%
\$15,000 - \$24,999					169	7.1%	154	6.3%
\$25,000 - \$34,999					265	11.1%	231	9.4%
\$35,000 - \$49,999					211	8.9%	203	8.3%
\$50,000 - \$74,999					300	12.6%	318	13.0%
\$75,000 - \$99,999					197	8.3%	208	8.5%
\$100,000 - \$149,999					328	13.8%	400	16.3%
\$150,000 - \$199,999					179	7.5%	236	9.6%
\$200,000+					109	4.6%	112	4.6%
Median Household Income				\$•	43,429		\$52,908	
Average Household Income				\$	72,295		\$81,757	
Per Capita Income				\$	32,077		\$36,516	
		Cen	sus 2010			2023		2028
Population by Age		Number	Percent	N	lumber	Percent	Number	Percent
0 - 4		118	2.5%		125	2.3%	134	2.4%
5 - 9		105	2.3%		112	2.1%	113	2.0%
10 - 14		81	1.7%		89	1.6%	89	1.6%
15 - 19		538	11.6%		606	11.1%	611	11.0%
20 - 24		1,878	40.5%		2,073	38.1%	2,079	37.5%
25 - 34		837	18.1%		1,058	19.4%	1,066	19.2%
35 - 44		277	5.0%		338	6.2%	354	6.4%
45 - 54		325	7.0%		329	6.0%	338	6.1%
55 - 64		270	5.8%		357	6.6%	339	6.1%
65 - 74		124	2.7%		237	4.4%	256	4.6%
/5 - 84		55	1.2%		88	1.6%	116	2.1%
85+	<b>C</b>	24	0.5%		36	0.7%	45	0.8%
Dage and Ethnicity	Number	Dorcont	Number	Dorcont	Number	Dorcont	Number	Dorcont
	3 822	82.5%	3 884	74.6%	4 030	74.0%	4 021	72.6%
Black Alone	197	4 00%	315	6 10/-	טכט, <del>וי</del> גרב	6 00/	4,021	6 10/-
American Indian Alone	207	0%	26	0.170	520 20	0.0%	21	0.1%
Asian Alone	406	8.8%	509	0.5 % Q 8%	543	10.0%	587	10.6%
Pacific Islander Alone	1	0.0%	10	0.2%	10	0.2%	10	0.2%
Some Other Race Alone	58	1 5%	108	2 1 %	10	0.270 2.20%	136	0.270 2.5%
Two or More Races	125	2 7%	352	6.8%	386	2.2 /0 7 1%	420	7.6%
Two of more Naces	125	2.7 /0	552	0.070	500	/.1/0	720	7.070
Hispanic Origin (Any Race)	223	4.8%	344	6.6%	381	7 በ%	415	7 5%
	223	1.0 /0	511	5.0 /0	551	7.070	115	7.570

Data Note: Income is expressed in current dollars.



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 0.25 - 0.5 mile radius

Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043











#### 2023 Household Income

²⁰²³ Population by Race



²⁰²³ Percent Hispanic Origin: 7.0%



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 0.5 - 1 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

Summary		Census 201	L <b>O</b>	Census 20	020	2023		2028
Population		22,40	J4	31,	234	32,451	-	33,371
Households		9,02	21	12,9	953	13,558	3	14,073
Families		1,28	31		-	1,576	5	1,647
Average Household Size		2.0	)9	2	2.05	2.05	5	2.04
Owner Occupied Housing Units		1,40	00		-	1,707	7	1,887
Renter Occupied Housing Units		7,62	21		-	11,851	-	12,185
Median Age		22	.8		-	23.1		23.1
Trends: 2023-2028 Annual Rate	9		Area			State		National
Population			0.56%			0.11%		0.30%
Households			0.75%			0.33%		0.49%
Families			0.89%			0.25%		0.44%
Owner HHs			2.03%			0.52%		0.66%
Median Household Income			3.41%			2.54%		2.57%
Harrack alda har Taraanaa						2023	Number	2028
				IN	umber	Percent	Number	Percent
<\$15,000					4,657	34.3%	4,507	32.0%
\$15,000 - \$24,999					1,448	10.7%	1,266	9.0%
\$25,000 - \$34,999					1,258	9.3%	1,248	8.9%
\$35,000 - \$49,999					1,359	10.0%	1,465	10.4%
\$50,000 - \$74,999					1,413	10.4%	1,541	11.0%
\$75,000 - \$99,999					/ 51	5.5%	1 204	5.0%
\$100,000 - \$149,999					1,175	0.7%	1,394	9.9%
\$150,000 - \$199,999					743	5.5%	1,002	7.1% 6.10/
\$200,000+					/55	5.0%	009	0.1%
Modian Household Income				¢	0 703		¢25 110	
				\$2 ¢6	54 455		\$33,110	
Per Capita Income				ېر د :	07,433		\$73,400	
		Cen	sue 2010	φz	27,019	2023	\$30,942	2028
Population by Age		Number	Percent	N	umber	Percent	Number	Percent
0 - 4		228	1.0%		340	1.0%	368	1.1%
5 - 9		199	0.9%		256	0.8%	253	0.8%
10 - 14		193	0.9%		261	0.8%	237	0.7%
15 - 19		4.155	18.5%		4.770	14.7%	4.782	14.3%
20 - 24		11.351	50.7%	1	16.984	52.3%	17,750	53.2%
25 - 34		2,574	11.5%	_	4.311	13.3%	4.388	13.1%
35 - 44		892	4.0%		1,303	4.0%	1,264	3.8%
45 - 54		933	4.2%		1,134	3.5%	1,130	3.4%
55 - 64		971	4.3%		1,409	4.3%	1,348	4.0%
65 - 74		418	1.9%		943	2.9%	970	2.9%
75 - 84		258	1.2%		459	1.4%	563	1.7%
85+		231	1.0%		281	0.9%	316	0.9%
	Ce	ensus 2010	Cen	sus 2020		2023		2028
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White Alone	18,931	84.5%	22,558	72.2%	23,078	71.1%	23,129	69.3%
Black Alone	675	3.0%	842	2.7%	897	2.8%	964	2.9%
American Indian Alone	80	0.4%	114	0.4%	126	0.4%	130	0.4%
Asian Alone	1,922	8.6%	5,158	16.5%	5,548	17.1%	6,076	18.2%
Pacific Islander Alone	5	0.0%	29	0.1%	31	0.1%	32	0.1%
Some Other Race Alone	242	1.1%	546	1.7%	608	1.9%	681	2.0%
Two or More Races	548	2.4%	1,988	6.4%	2,164	6.7%	2,359	7.1%
Hispanic Origin (Any Race)	838	3.7%	1,682	5.4%	1,862	5.7%	2,054	6.2%
Data Note: Income is expressed in current de	llare							

Data Note: Income is expressed in current dollars.



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 0.5 - 1 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

#### Trends 2023-2028











2023 Population by Race



²⁰²³ Percent Hispanic Origin: 5.7%



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 1 - 2 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

S	ummary		Census 201	.0	Census 2	020	202	23	2028
	Population		30,67	79	35,	918	36,59	95	38,252
	Households		12,54	12	15,	220	15,70	)9	16,702
	Families		3,64	19		-	4,19	95	4,408
	Average Household Size		2.0	)5	1	1.96	1.9	94	1.93
	Owner Occupied Housing Units		3,26	57		-	3,88	37	4,080
	Renter Occupied Housing Units		9,27	75		-	11,82	22	12,622
	Median Age		24	.5		-	25	.1	25.3
Т	rends: 2023-2028 Annual Rate			Area			State		National
	Population			0.89%			0.11%		0.30%
	Households			1.23%			0.33%		0.49%
	Families			1.00%			0.25%		0.44%
	Owner HHs			0.97%			0.52%		0.66%
	Median Household Income			2.23%			2.54%		2.57%
							2023		2028
н	louseholds by Income				Ν	lumber	Percent	Number	Percent
	<\$15,000					3,041	19.4%	2,901	17.4%
	\$15,000 - \$24,999					1,280	8.1%	1,077	6.4%
	\$25,000 - \$34,999					1,456	9.3%	1,436	8.6%
	\$35,000 - \$49,999					1,923	12.2%	1,981	11.9%
	\$50,000 - \$74,999					2,429	15.5%	2,634	15.8%
	\$75,000 - \$99,999					1,426	9.1%	1,494	8.9%
	\$100,000 - \$149,999					1,496	9.5%	1,821	10.9%
	\$150,000 - \$199,999					1,087	6.9%	1,469	8.8%
	\$200,000+					1,569	10.0%	1,889	11.3%
	Median Household Income				\$	51,097		\$57,061	
	Average Household Income				\$	91,084		\$104,076	
	Per Capita Income				\$	40,317		\$46,726	
			Cen	sus 2010			2023		2028
Р	opulation by Age		Number	Percent	Ν	lumber	Percent	Number	Percent
	0 - 4		1,147	3.7%		1,140	3.1%	1,267	3.3%
	5 - 9		1,004	3.3%		974	2.7%	999	2.6%
	10 - 14		904	2.9%		957	2.6%	893	2.3%
	15 - 19		3,771	12.3%		4,223	11.5%	4,112	10.8%
	20 - 24		9,476	30.9%		10,919	29.8%	11,570	30.2%
	25 - 34		6,099	19.9%		7,815	21.4%	8,058	21.1%
	35 - 44		2,550	8.3%		3,066	8.4%	3,469	9.1%
	45 - 54		2,271	7.4%		2,359	6.4%	2,402	6.3%
	55 - 64		2,103	6.9%		2,362	6.5%	2,349	6.1%
	65 - 74		859	2.8%		1,772	4.8%	1,733	4.5%
	75 - 84		361	1.2%		717	2.0%	1,027	2.7%
	85+		133	0.4%		288	0.8%	371	1.0%
		Cer	ısus 2010	Cen	nsus 2020		2023		2028
R	ace and Ethnicity	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	White Alone	23,199	75.6%	25,269	70.4%	25,475	69.6%	25,908	67.7%
	Black Alone	2,561	8.3%	2,198	6.1%	2,218	6.1%	2,369	6.2%
	American Indian Alone	121	0.4%	211	0.6%	219	0.6%	247	0.6%
	Asian Alone	2,427	7.9%	3,401	9.5%	3,555	9.7%	3,902	10.2%
	Pacific Islander Alone	15	0.0%	18	0.1%	20	0.1%	21	0.1%
	Some Other Race Alone	1,393	4.5%	1,841	5.1%	1,949	5.3%	2,289	6.0%
	Two or More Races	963	3.1%	2,979	8.3%	3,159	8.6%	3,515	9.2%
	Hispanic Origin (Apy Pace)	3 167	10 3%	3 907	10 00/-	/ 151	11 20/-	1 761	17 /0/-
Data N	ote: Income is expressed in current doll	lars.	10.370	5,507	10.970	4,131	11.5%	4,701	12.470



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 1 - 2 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043







#### 2023 Household Income



2023 Population by Race



²⁰²³ Percent Hispanic Origin:11.3%



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 2 - 3 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

Summary		Census 201	LO	Census 2	020	202	3	2028
Population		37,39	92	40,	,672	42,12	0	42,801
Households		17,17	78	19,	,034	19,92	5	20,439
Families		8,53	37		-	9,40	5	9,586
Average Household Size		2.1	17	2	2.12	2.1	0	2.08
Owner Occupied Housing Units		7,81	18		-	9,17	2	9,497
Renter Occupied Housing Units		9,35	53		-	10,75	3	10,942
Median Age		33	.0		-	35.	5	35.2
Trends: 2023-2028 Annual Rate	e		Area			State		National
Population			0.32%			0.11%		0.30%
Households			0.51%			0.33%		0.49%
Families			0.38%			0.25%		0.44%
Owner HHs			0.70%			0.52%		0.66%
Median Household Income			2.62%			2.54%		2.57%
						2023		2028
Households by Income				Ν	lumber	Percent	Number	Percent
<\$15,000					2,008	10.1%	1,719	8.4%
\$15,000 - \$24,999					1,279	6.4%	993	4.9%
\$25,000 - \$34,999					1,585	8.0%	1,418	6.9%
\$35,000 - \$49,999					2,092	10.5%	1,971	9.6%
\$50,000 - \$74,999					3,321	16.7%	3,298	16.1%
\$75,000 - \$99,999					2,548	12.8%	2,562	12.5%
\$100,000 - \$149,999					3,005	15.1%	3,517	17.2%
\$150,000 - \$199,999					1,652	8.3%	2,193	10.7%
\$200,000+					2,436	12.2%	2,767	13.5%
					,			
Median Household Income				\$	71,700		\$81,579	
Average Household Income				\$1	13,147		\$127,855	
Per Capita Income				\$	53,638		\$61,189	
		Cen	sus 2010			2023		2028
Population by Age		Number	Percent	Ν	lumber	Percent	Number	Percent
0 - 4		2,582	6.9%		2,358	5.6%	2,460	5.7%
5 - 9		2,167	5.8%		2,159	5.1%	2,109	4.9%
10 - 14		1,801	4.8%		2,087	5.0%	1,927	4.5%
15 - 19		1,672	4.5%		2,045	4.9%	1,878	4.4%
20 - 24		3,208	8.6%		3,385	8.0%	3,861	9.0%
25 - 34		8,755	23.4%		8,652	20.5%	9,059	21.2%
35 - 44		4,933	13.2%		6,367	15.1%	6,056	14.1%
45 - 54		4,672	12.5%		4,349	10.3%	4,567	10.7%
55 - 64		4,167	11.1%		4,484	10.6%	4,057	9.5%
65 - 74		1,867	5.0%		3,873	9.2%	3,870	9.0%
75 - 84		1,096	2.9%		1,717	4.1%	2,231	5.2%
85+		471	1.3%		641	1.5%	727	1.7%
	Ce	ensus 2010	Cen	nsus 2020		2023		2028
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White Alone	27,736	74.2%	27,347	67.2%	27,807	66.0%	27,521	64.3%
Black Alone	3,084	8.2%	3,912	9.6%	4,139	9.8%	4,253	9.9%
American Indian Alone	190	0.5%	244	0.6%	260	0.6%	275	0.6%
Asian Alone	3,189	8.5%	3,281	8.1%	3,438	8.2%	3,699	8.6%
Pacific Islander Alone	9	0.0%	11	0.0%	13	0.0%	13	0.0%
Some Other Race Alone	1,967	5.3%	2,221	5.5%	2,505	5.9%	2,788	6.5%
Two or More Races	1,218	3.3%	3,656	9.0%	3,958	9.4%	4,252	9.9%
	,===		-,		-,- 50		·,	
Hispanic Origin (Any Race)	4,144	11.1%	4,722	11.6%	5,272	12.5%	5,765	13.5%
Data Nota: Incomo is expressed in surront de	llare				•		•	



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 2 - 3 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

#### Trends 2023-2028







#### 2023 Household Income



2023 Population by Race



²⁰²³ Percent Hispanic Origin: 12.5%



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 3 - 4 mile radius Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

Summary		Census 20	10	Census 2	020	202	13	2028
Population		39.2	04	43.	.102	44.82	29	46,440
Households		18 5	50	20	751	21.51	3	22 487
Families		9.5	73	20,	-	10.81	7	11.218
Average Household Size		2.	11		2.06	2.(	)7	2.05
Owner Occupied Housing Units		10.3	26	-	-	11.84	19	12.276
Renter Occupied Housing Units		8.2	32		-	9,66	54	10.211
Median Age		36	5.8		-	.39	.3	40.1
Trends: 2023-2028 Annual Rate	3		Area			State		National
Population			0.71%			0.11%		0.30%
Households			0.89%			0.33%		0.49%
Families			0.73%			0.25%		0.44%
Owner HHs			0.71%			0.52%		0.66%
Median Household Income			2.85%			2.54%		2.57%
						2023		2028
Households by Income				Ν	lumber	Percent	Number	Percent
<\$15,000					1,757	8.2%	1,476	6.6%
\$15,000 - \$24,999					1,165	5.4%	932	4.1%
\$25,000 - \$34,999					1,559	7.2%	1,384	6.2%
\$35,000 - \$49,999					2,380	11.1%	2,176	9.7%
\$50,000 - \$74,999					3,185	14.8%	3,167	14.1%
\$75,000 - \$99,999					2,929	13.6%	2,889	12.8%
\$100,000 - \$149,999					4,001	18.6%	4,730	21.0%
\$150,000 - \$199,999					2,197	10.2%	2,995	13.3%
\$200,000+					2,339	10.9%	2,738	12.2%
Median Household Income				\$	79,824		\$91,862	
Average Household Income				\$1	13,180		\$128,524	
Per Capita Income				\$	53,380		\$61,191	
		Cer	nsus 2010			2023		2028
Population by Age		Number	Percent	Ν	lumber	Percent	Number	Percent
0 - 4		2,548	6.5%		2,470	5.5%	2,582	5.6%
5 - 9		2,133	5.4%		2,364	5.3%	2,377	5.1%
10 - 14		1,922	4.9%		2,395	5.3%	2,307	5.0%
15 - 19		1,844	4.7%		2,252	5.0%	2,214	4.8%
20 - 24		2,488	6.3%		2,801	6.2%	3,114	6.7%
25 - 34		7,690	19.6%		6,899	15.4%	7,371	15.9%
35 - 44		5,277	13.5%		6,998	15.6%	6,554	14.1%
45 - 54		5,505	14.0%		5,166	11.5%	5,693	12.3%
55 - 64		5,142	13.1%		5,601	12.5%	5,145	11.1%
65 - 74		2,314	5.9%		4,817	10.7%	5,112	11.0%
75 - 84		1,598	4.1%		2,161	4.8%	2,923	6.3%
85+		741	1.9%		907	2.0%	1,048	2.3%
	Ce	nsus 2010	Cer	nsus 2020		2023		2028
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent	Number	Percent
White Alone	31,199	79.6%	31,713	73.6%	32,623	72.8%	33,059	71.2%
Black Alone	2,719	6.9%	2,569	6.0%	2,690	6.0%	2,828	6.1%
American Indian Alone	249	0.6%	268	0.6%	286	0.6%	307	0.7%
Asian Alone	2,214	5.6%	2,562	5.9%	2,712	6.0%	3,059	6.6%
Pacific Islander Alone	13	0.0%	15	0.0%	16	0.0%	16	0.0%
Some Other Race Alone	1,684	4.3%	2,410	5.6%	2,628	5.9%	2,912	6.3%
Two or More Races	1,125	2.9%	3,565	8.3%	3,873	8.6%	4,258	9.2%
Hispanic Origin (Any Race)	3,662	9.3%	5,066	11.8%	5,533	12.3%	6,094	13.1%
Data Note: Income is expressed in current do	llars.							



La Hacienda

501 S Park St, Madison, Wisconsin, 53715 Ring band: 3 - 4 mile radius

Prepared by Esri

Latitude: 43.06186 Longitude: -89.40043

#### Trends 2023-2028







#### 2023 Household Income



2023 Population by Race



²⁰²³ Percent Hispanic Origin: 12.3%