Periodic Review Report – 2013/2014

Former Churchville Ford, Inc. Site
NYSDEC Voluntary Cleanup Program Site #V00658
Village of Churchville, Town of Riga, Monroe County, New York

Prepared for:
BLW Properties of Churchville, LLC
7520 State Route 415
Bath, New York 14810

Prepared by:

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL
175 Sully's Trail, Suite 202
Pittsford, New York 14534

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1.0 Executive Summary

This Periodic Review Report (PRR) document is required as an element of ongoing site management at the former Churchville Ford site (hereinafter referred to as the "site") under the New York State (NYS) Voluntary Cleanup Program (VCP) administered by the New York State Department of Environmental Conservation (NYSDEC). The Site was remediated in accordance with and subject to Voluntary Cleanup Agreement (VCA) # B8-0640-03-09, Site # V00658-8 which was executed on September 29, 2003 and amended on April 9, 2009.

The VCA was executed by former owners Joseph Ognibene and Antonio Gabriele. The most recent transfer of ownership occurred on December 1, 2011, changing from Meyers at Churchville, LLC to BLW Properties of Churchville, LLC. This report is intended to satisfy the reporting requirements set forth in the approved Site Management Plan (SMP), dated December 2011. The SMP was approved by the NYSDEC on January 3, 2012, signifying the beginning of the annual requirements set forth within the SMP. The purpose of this report is to present the findings of the bi-annual sampling of residual groundwater contamination and to certify that the site was in compliance with the protocols and controls established in the SMP during this reporting period.

The former Churchville Ford site is located at 111 South Main Street in the Village of Churchville, Town of Riga, Monroe County, New York (Figure 1). The site consists of approximately 6 acres and has been used as a commercial auto, boat and recreational vehicle sales and service facility in recent years. In 2002, subsurface soil and groundwater contamination was discovered during environmental investigation work completed in conjunction with the transfer of ownership of the property. A remedial investigation (RI) was conducted between 2004 and 2008.

Investigation results indicated that volatile organic compounds (VOCs), including the chlorinated VOCs tetrachloroethene (PCE), tricholorethene (TCE), and associated breakdown components, were detected in subsurface soils and groundwater. A source area was defined by the RI and contained elevated levels of PCE, TCE, and cis-1,2-dichloroethene (cis-1,2-DCE) in groundwater beneath the southwestern portion of the building at levels exceeding applicable groundwater standards. This area was formerly used for solvent and waste oil storage.

Based on the findings of the RI, remedial action was recommended to address chlorinated solvents detected in groundwater at levels exceeding NYSDEC Part 703.5 Groundwater Standards and NYSDEC guidance (Technical and Operational Guidance Series (TOGS) 1.1.1).

Remedial activities completed at the Site were conducted in accordance with procedures outlined in the approved RAWP for the former Churchville Ford Site dated December 2008 and a minor modification dated September 4, 2009. Remedial activities were completed at the Site between May 2009 and January 2010. In-situ chemical oxidation (ISCO) using injected sodium permanganate (NaMnO4) was initiated in June 2009 and completed in January 2010. The

injection process included the direct injection of NaMnO4 into the contaminated zone of the saturated soils and groundwater underlying the southwest portion of the building.

Additional soil vapor intrusion (SVI) sampling was conducted beneath the workshop floor slab after the oxidant injection was completed to determine if additional vapor intrusion mitigation or long-term monitoring measures were needed. As detailed in the Site Management Plan (SMP), a Sub-Slab Depressurization System (SSDS) was installed in June 2011 in the western portion of the building (workshop), precluding the need for further soil vapor intrusion sampling.

The effectiveness of the remedial program has been monitored through subsequent SVI and groundwater sampling. Post-remedial SVI and groundwater sampling results indicate that residual contamination persists in saturated soils and groundwater in the immediate vicinity of the former source area. Groundwater samples collected during this reporting period (June 2013 through June 2014) exceeded applicable groundwater standards and CVOC concentrations fluctuated during that time period. Further groundwater sampling in the source area will determine the long-term effectiveness of the remedy and natural attenuation of identified contaminants.

No areas of non-compliance were observed during the 3 inspection events in regards to the major components of the Site Management Plan (SMP). All Institutional and Engineering Controls were in place and in compliance during this reporting period. Significant improvements were made to one of the two Engineering Controls at the site during this period. All procedures outlined in the Monitoring Plan and Operation and Maintenance Plan were complied with during this reporting period.

Based on the observations made and results of the work completed during this reporting period, Lu Engineers does not recommend modification of the SMP at this time.

2.0 Site Overview

The former Churchville Ford site is located at 111 South Main Street in the Village of Churchville, Town of Riga, Monroe County, New York (Figure 1). The site consists of approximately 6 acres and has been used as a commercial auto, boat and recreational vehicle sales and service facility in recent years. The site is situated immediately north of Interstate Route 490 and Sanford Road. The majority of the site is generally flat but drops in elevation rather abruptly to Sanford Rd. to the south and gently to the adjacent property to the west.

The site is bound by residential and commercial land to the north, South Main Street and residential housing to the east, Sanford Road and Interstate Route 490 to the south and a commercial Camping World Recreational Vehicle sales facility to the west. The majority of the site is covered with asphalt pavement and the site sales/service building.

Contamination was discovered at the Site in 2002 during an environmental investigation conducted in conjunction with a property transfer. A Remedial Investigation (RI) was conducted between 2004 and 2008. Subsurface soil analytical results did not reveal VOCs, SVOCs, or metals above the Restricted Commercial Use (RCU) Guidance Values (6 New York Codes, Rules, and Regulation (NYCRR) Part 375-6), therefore, soil remediation was not warranted. Tetrachloroethene (PCE), trichloroethene (TCE), and cis-1,2-dichloroethene (cis-1,2-DCE) were detected in shallow groundwater beneath the southwestern portion of the building at levels exceeding 6 NYCRR Part 703 Class GA drinking water standards. This area was formerly used for solvent and waste oil storage. The extent of contamination appears to be limited to beneath the southwest portion of the site building (workshop area) and immediately west of the west wall of the building. Based on the findings of the RI, remedial action was recommended to address chlorinated solvents detected in groundwater at levels exceeding applicable guidance criteria.

Remedial activities completed at the Site were conducted in accordance with procedures outlined in the NYSDEC-approved RAWP for the Churchville Ford Site dated December 2008, with a minor modification dated September 4, 2009. Remedial activities were completed at the Site between May 2009 and January 2010. The remedial strategy involved treating groundwater and subsurface soils via In-Situ Chemical Oxidation (ISCO) using sodium permanganate (NaMnO4). When this chemical oxidant comes into contact with organic compounds such at TCE, PCE, and associated breakdown products, a reaction occurs oxidizing the organic contaminants to relatively benign compounds, such as carbon dioxide (CO2) and water (H2O). The chemical oxidant was introduced via a Geoprobe, Inc. GS2000 cart-mounted injection system and was administered through a series of shallow injection wells (primarily 4 to 11.5 feet with a maximum depth of 20 feet (ft)) to treat saturated soils, as well as groundwater. This was to target groundwater with chlorinated solvent concentrations in excess of 5 parts per billion (ppb) and 2 ppb for vinyl chloride.

Soil vapor intrusion (SVI) sampling was conducted after the oxidant injection was completed to determine if additional vapor intrusion mitigation or long-term indoor air monitoring measures were needed. Based on the results and as detailed in the SMP, a SSDS was installed in June 2011 in the western portion of the building. The presence of the SSDS precludes the need for monitoring of indoor air.

Implementation of the SMP requires the imposition of an Institutional Control (IC) in the form of a Deed Restriction (DR) that requires a) limiting the use and development of the property to commercial use, which also permits industrial use; b) compliance with the approved SMP; c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the New York State Department of Health (NYSDOH); and d) the property owner to complete and submit an annual certification of Institutional and Engineering Controls (IC/EC).

Long term management of remaining contamination, as required by the DR, includes plans for ECs including; 1) monitoring; 2) operation and maintenance; and 3) reporting. The specific ECs

implemented at the site include: a) semi-annual groundwater sampling of monitoring wells MW-3, MW-6, MW-13 and MW-JCL-02 for VOCs, iron and manganese; b) management and inspection of the existing soil cover system (the cap); and c) operation, maintenance and inspection of the SSDS.

3.0 Remedy Performance, Effectiveness, and Protectiveness

Based on post-remedial groundwater and SVI sampling conducted to date, residual groundwater and soil vapor contamination persists in the immediate source area on Site. On January 15, 2010, Lu Engineers completed the last remedial ISCO injection event. Eight (8) post-remedial groundwater sampling events and one (1) SVI sampling event have been conducted at the Site since the completion of the ISCO program. All nine (9) events were conducted in accordance with and as outlined in the RAWP and SMP. The following is a list of post-remedial sampling events conducted to date.

- February and August 2010 (per RAWP)
- December 2011 (per SMP)
- June and November 2012 (per SMP)
- June and November 2013 (per SMP)
- June 2014 (per SMP)

Tables 1 and 2, included as an attachment to this report, indicate bi-annual CVOC sample concentrations since June 2012 following full implementation of the protocols outlined in the approved SMP. Table 1 illustrates detected VOC concentrations in groundwater samples compared to the applicable NYSDEC 6 NYCRR Part 703.5 Class GA and TOGs 1.1.1 groundwater standards. Table 2 illustrates detected iron and manganese, known indicators of natural attenuation, in comparison to applicable groundwater standards. Both tables include graphical presentations of contaminant concentration trends in groundwater since June 2012.

Following a significant decrease in CVOC concentrations observed in the post-remedial 2010 groundwater sampling events, CVOC concentrations rebounded in 2011 and 2012, generally exceeding applicable groundwater standards in each well tested except MW-13. It is noted that no VOCs have been detected in MW-13 since June 2012.

As indicated in the 2012 Annual Report, wells MW-03, MW-JCL-02 and MW-06 all revealed CVOC detections exceeding NYSDEC Part 703.5 ground water standards in 2012. Sample results indicated a rise in PCE concentrations in source area wells MW-3, MW-JCL-02 and MW-6 over the December 2011 results. TCE and cis-1,2-dichloroethene concentrations dropped in MW-03 but increased in MW-JCL-02 compared to December 2011 results. CVOC concentrations

decreased significantly in June 2012. No VOCs were detected in well MW-13 during either sampling event.

Iron (Fe) and manganese (Mn) levels fluctuated between December 2011 and June 2012, generally dropping during that time period. Fe and Mn exceeded applicable groundwater standards in both 2012 sampling events for all wells except MW-03, which was below standards for both metals in June 2012. Due to the relatively low permeability of Site soils and previous remedial injection of NaMnO4 at the site, it is anticipated that Fe and Mn concentrations may fluctuate over time as oxidation occurs.

Source area samples collected from MW-03, MW-06, and MW-JCL-02 continue to exceed groundwater standards through the most recent sampling event conducted in June 2014.

The Institutional Controls established for the site have been and continue to be in strict compliance since SMP approval. Though documented residual contamination exists in the subsurface soils and groundwater in the site source area, these controls successfully minimize the potential for human exposure. The Engineering Controls established for the site also have been effective in greatly limiting the potential for human exposure to known site contaminants. The intended remedy continues to be protective of human health and effective for the current site use.

4.0 Institutional Controls/Engineering Control Plan Compliance

Since remaining contaminated soil, groundwater, and soil vapor exists beneath the Site, EC/ICs are required to protect human health and the environment. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC.

Institutional Controls (ICs)

A series of ICs are required by the SMP to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the site to commercial and industrial uses only. Adherence to these ICs on the Site is required by the Deed Restriction (DR) and implemented under the SMP.

The Institutional Controls developed for the site include the following three primary components:

Landuse Restriction – Site property use is limited to Commercial and Industrial uses only; the site is currently used as a commercial Recreational Vehicle sales and service facility and has fully met the requirements of this restriction throughout this reporting period.

Groundwater Use Restriction – Use of groundwater as a potable or process water source is prohibited; the site is currently connected to a supplied potable water source from the Village of Churchville and does not use site groundwater in any capacity, therefore fully meeting the requirements of this restriction throughout this reporting period.

Site Management Plan (SMP) – Compliance with the SMP is required, including required periodic certifications; the site is currently in strict compliance with all components of the site-specific SMP and has been throughout this reporting period.

Additional site restrictions that apply to the Controlled Property are:

- The property may not be used for a higher level of use, without additional remediation and amendment of the DR, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The potential for vapor intrusion must be evaluated for any buildings developed on the Site, any potential impacts that are identified must be monitored or mitigated;
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP.
- NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

Institutional Controls identified in the DR may not be discontinued without an amendment to or extinguishment of the DR.

Engineering Controls

Soil Cover System (Cap)

Exposure to remaining contamination in subsurface soil/fill, groundwater and soil vapor at the Site is prevented by a soil cover system placed over the Site (the "Cap"). This cover system is comprised of asphalt pavement, concrete-covered sidewalks, and concrete building slabs. Procedures for maintaining the Cap are documented in the Operation and Maintenance Plan in Section 4 of the SMP.

The Excavation Work Plan (EWP) in Appendix A of the SMP outlines the procedures required to be implemented in the event the cover system is breached, penetrated or temporarily removed, and any underlying remaining contamination is disturbed. Procedures for the inspection, maintenance and monitoring of this cover are provided in the Monitoring Plan included in Section 3 of the SMP.

As indicated on the Site Inspection Form included as Attachment A of this report, the Cap was overall in good condition in June 2013. The asphalt cover surrounding the building revealed some minor cracking and potholes along the north side of the site building, and some minor cracking along the west end of the building near the source area. The concrete floor in the workshop area of the building was and continues to be in very good condition. It is epoxy coated throughout the workshop, has revealed no evidence of significant cracking and is unchanged since inspection began in 2012.

In October 2013, improvements were made to the site cap (EC). Per the provisions outlined in the SMP, the NYSDEC was notified of the planned improvement. The former cap was milled and repaved with new asphalt, including in the contaminant source area immediately west of the site building. Approximately 2/3 of the site was repaved (central and eastern portions) as illustrated on Figure 3 and Figure 4. No soil was disturbed as part of the re-surfacing process, therefore no monitoring was required per the Excavation Work Plan (EWP) in the SMP. The cap replacement was completed in October 2013 and continued to function as new as of June 2014. No cracking or holes have been observed in the asphalt since it was replaced. It is noted that as a component of the cap replacement, TREC Environmental was contracted to install new flushmount protective boxes around all wells located within the repaving area. This included wells MW-03, MW-13, MW-JCL-02, and MW-JCL-03. The elevations of the solid PVC well risers

at each well did not change during the protective box replacements. Photographs of the new asphalt surface and well completions are included as Attachment E of this report.

Other 2013 Improvements

Two other site improvements were made during this reporting period, in September and October. Per the SMP the NYSDEC was notified of the planned improvements and all procedures outlined in the EWP were followed. The improvements included the following:

- Installation of a retaining wall along the south entrance of the site at Sanford Rd.
- Installation of a waterline from Bay 1 of the workshop on north side of the building to the edge of the asphalt/grass near northern property line.

Retaining Wall

A shallow trench excavation (approximately 2 feet deep) was installed for establishing proper drainage and as a base for the retaining wall. Appropriate air monitoring with a PID was conducted during all excavation activities. A representative soil sample was collected of the excavated soils and sent for laboratory analysis of TCL VOCs. Sample results were non-detect for VOCs. The retaining wall was constructed prior to the repaving of the site cap and subsequently new asphalt was paved up to both sides of the wall. The location of the wall is illustrated on Figure 3 and Figure 4 and laboratory analytical results are included in Attachment C of this report. Photographs are provided in Attachment E of this report.

Waterline Installation

In October 2013, a waterline was installed adjacent to the west side of the Bay 1 overhead door (eastern-most bay) of the workshop and running north across the paved area to the edge of the grass north of the building (see Figure 3). The trench excavation was dug four (4) feet deep and approximately one (1) foot wide. Soils were continuously screened with a PID during excavation and were placed on the asphalt. No elevated PID readings were observed during excavation and no stained soils or odors were noted.

A representative soil sample was collected and analyzed for TCL VOCs. Laboratory results indicated no VOCs were detected. Once the waterline was installed, the trench was backfilled with the excavated soils. The waterline was installed and backfilled prior to the repaving of the site cap. Laboratory analytical results are included in Attachment C of this report and photographs are provided in Attachment E.

SSDS

Exposure to remaining contamination in soil vapor beneath the building is prevented by a SSDS installed beneath the western portion of the shop area of the building. The SSDS was installed in June 2011 in accordance with the NYSDEC-approved May 2011 Sub-Slab Depressurization System Design prepared by Lu Engineers and the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). The SSDS was installed by Mitigation Tech, a national Environmental Health Association (NEHA) certified mitigation contractor. The Procedures for the inspection and maintenance of this SSDS are provided in the Monitoring Plan included in Section 3 of the SMP.

Procedures for maintaining the SSDS are documented in the Operation and Maintenance Plan (Section 4 of the SMP). Procedures for monitoring the system are included in the Monitoring Plan (Section 3 of the SMP). The Monitoring Plan also addresses severe condition inspections in the event that a severe condition, which may affect controls at the Site, occurs. The active SSDS will not be discontinued unless prior written approval is granted by the NYSDEC.

As indicated on the Site Inspection Forms included as Attachment A of this report, the SSDS has operated as normal during this reporting period. No changes have been observed with the system or its performance since it was installed. During each site monitoring/inspection visit, both fans were generating the same amount of vacuum as the day they were installed. The Bay 3 fan continuously draws 0.8" WC and the Bay 5 fan continuously draws 0.5" WC. All system piping is in very good condition and is properly labeled. No air returns exist in proximity to the system exhaust on the building roof. No deficiencies have been observed with the SSDS and no changes are recommended.

The required IC/EC certification has been completed as a component of this report and a copy is included as Attachment D.

5.0 Monitoring Plan Compliance Report

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the site, the soil cover system, and all affected site media identified in the table below.

Monitoring/Inspection Schedule

Monitoring Program	Frequency*	Matrix	Analysis
1	Biannually (seasonal high and low groundwater)	Groundwater	EPA Method 8260 EPA Method 6010 Manganese and Iron
2	Annually	SSDS	N/A
3	Biannually	Soil Cover	N/A

* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

Monitoring activities completed during this reporting period (2013-2014) included the following:

- Bi-annual groundwater sampling of site wells MW-03, MW-JCL-02, MW-06, and MW-13
- Bi-annual inspection of site building SSDS (even though only required annually)
- Bi-annual inspection of the site soil cover system, including the asphalt surrounding the building (and source area) and concrete building floor (primarily in workshop area)

Groundwater Sampling

The following table summarizes the details of the groundwater sampling program to be completed during each bi-annual sampling event.

Media Sampling and Analysis Summary

Sample Type	Sample Location	Analytical Parameters	Frequency	QA/QC	Total
Groundwater	MW-03, 06, 13, MW-JCL-02	EPA 8260 EPA 6010 Manganese and Iron	Semi-Annual (twice each year during seasonal high and low groundwater)	Trip Blank (1)	5

The previously-mentioned site wells were sampled bi-annually with dedicated bailers per the procedures outlined in the SMP. Each well was purged a minimum of 3 well volumes prior to sampling. Groundwater quality measurements including temperature, turbidity, pH, conductivity and ORP were collected during the purging process at each well. Purge water from each well was containerized in steel 55-gallon drums. At each well, samples were collected for

TCL VOCs by EPA Method 8260B, iron and manganese. Groundwater sampling logs are included as Attachment B of this report.

Results of the groundwater sampling conducted during this period are summarized in Tables 1 and 2 and on Figures 2, 3, and 4. Table 1 presents the analytical results of VOCs detected in groundwater from June 2012 through June 2014 compared to the applicable standards. Table 2 presents the analytical results of iron and manganese (natural attenuation indicators) from June 2012 through June 2014. Both tables include graphical presentations of the data in an effort to establish trends in the sample results. Figure 2 illustrates the detected VOCs and associated concentrations in groundwater that exceed applicable standards for June 2013. Figure 3 illustrates the detected VOCs and associated concentrations in groundwater that exceed applicable standards for November 2013. Figure 4 illustrates the detected VOCs and associated concentrations in groundwater that exceed applicable standards for June 2014. Each figure also illustrates groundwater contours based on water level measurements collected at each well during each sampling event. It is noted that groundwater generally flows south and west across the site, primarily following topography.

The following sections summarize the analytical results for each year within this reporting period.

2013

CVOC concentrations in the source area wells continued to fluctuate in both 2013 sampling events and site contaminants of concern (PCE, TCE, cis-1,2-DCE) continued to exceed applicable groundwater standards. Acetone was detected in source area wells MW-03 and MW-JCL-02 at concentrations exceeding applicable standards during both sampling events. Iron and manganese were detected at concentrations exceeding groundwater standards in both bi-annual sampling events in all four (4) wells tested, with the exception of in MW-03 in June 2013.

2014

Acetone was no longer detected in source area wells MW-03 and MW-JCL-02 in June 2014. In MW-03, PCE and cis-1,2-DCE concentrations decreased since November 2013, and the TCE concentration slightly increased in this well. In the adjacent deeper source area well MW-JCL-02, all three CVOCs increased slightly in concentration from the November 2013 results. PCE decreased in concentration slightly in MW-06 and MW-13 continued to be non-detect for VOCs. All of the wells tested revealed iron and manganese concentrations above applicable groundwater standards except for MW-06 which was below standards for both metals. It is

noted that the concentrations of these metals decreased in all four (4) wells since the November 2013 sampling event.

In conclusion, groundwater in the source area remained out of compliance with applicable NYSDEC ambient groundwater standards during this reporting period for the CVOCs of concern for the site. A copy of all laboratory analytical data is included as Attachment C of this report. It is noted that all groundwater samples were analyzed at Paradigm Environmental Services, Inc., an appropriately certified laboratory located in Rochester, New York. All sampling methods and QA/QC measures were adhered to during each sampling event as outlined in the approved SMP.

6.0 Operation and Maintenance Plan Compliance Report

The only ECs in place at the Site are the building floor slab, sidewalks and asphalt pavement, collectively referred to as the "Cap" or soil cover system, and an SSDS installed in the westernmost portion of the Site building (workshop area). Operation and maintenance is limited to periodic inspection of the Cap and SSDS, which are documented using the Site-Wide Inspection Form. Copies of the Site-Wide Inspection Form are included as Attachment A in this report. The Operation and Maintenance Plan located in the SMP describes the measures necessary to operate, monitor and maintain the mechanical components of the remedy selected for the Site. Descriptions of the Cap and SSDS inspections and conditions are provided in Section 4.0 of this report.

7.0 Conclusions and Recommendations

IC/EC Compliance

The requirements set forth in the SMP for all ICs were met during this reporting period. This includes the following:

Landuse Restriction – The site is currently used as a commercial recreational vehicle sales and service facility and has fully met the requirements of this restriction throughout this reporting period.

Groundwater Use Restriction – The site is currently connected to a supplied potable water source and does not use site groundwater in any capacity, therefore fully meeting the requirements of this restriction throughout this reporting period.

Site Management Plan (SMP) – The site is currently in compliance with all components of the site-specific SMP and all requirements have been met during this reporting period.

The requirements set forth in the SMP for all ECs were met during this reporting period. This includes the following:

Soil Cover System (Cap) – The site Cap, a component of the ECs established for the site, was in compliance with the SMP in June 2013, prior to replacement in October 2013. Following asphalt replacement per the provisions outlined in the SMP, the Cap met and continues to meet the necessary compliance requirements as established in the SMP. All requirements have been met during this reporting period.

SSDS - The SSDS, a component of the ECs established for the site, has operated as normal during this reporting period. No changes have been observed with the system or its performance since it was installed in 2011. All requirements have been met during this reporting period.

ISCO via injection was the primary remedial component employed in saturated shallow subsurface soils and groundwater at the site. CVOC contaminant destruction in the source area appeared to be temporarily effective. Likely due to dense, primarily fine-grained soils encountered in the saturated source area, radial influence during ISCO injection may have been limited. Contaminant rebound appears to have occurred since the implementation of the monitoring component of the SMP was initiated in 2012.

Based on post-remedial groundwater and SVI sampling conducted to date, residual groundwater and soil vapor contamination persists in the source area. It does not appear that residual contamination is migrating on site. The previously discussed site-specific ICs and ECs established as part of the SMP for this site continue to effectively achieve the remedial objectives for the site while establishing protection of human health. The continued effective performance of the ICs/ECs and improvements made to the site Cap have allowed the remedial objectives at this site to be achieved for this reporting period.

Lu Engineers recommends that the frequency of the PRR submission remain unchanged for the next time period. Lu Engineers also recommends that the Department considers discontinuing the bi-annual monitoring of monitoring well MW-13 due to five consecutive rounds of sampling resulting in no VOC detections.

Tables

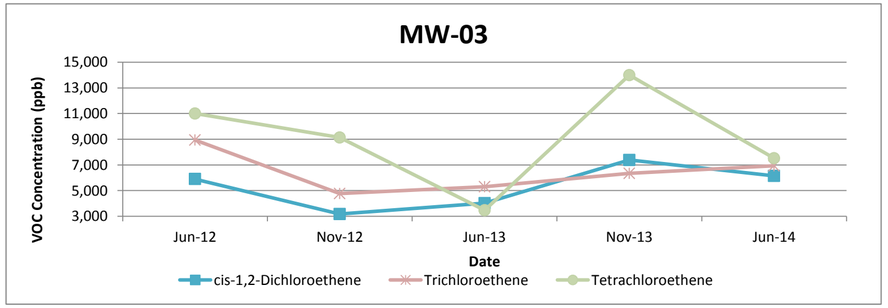
Former Churchville Ford Site (#V00658-8)
Village of Churchville
Town of Riga

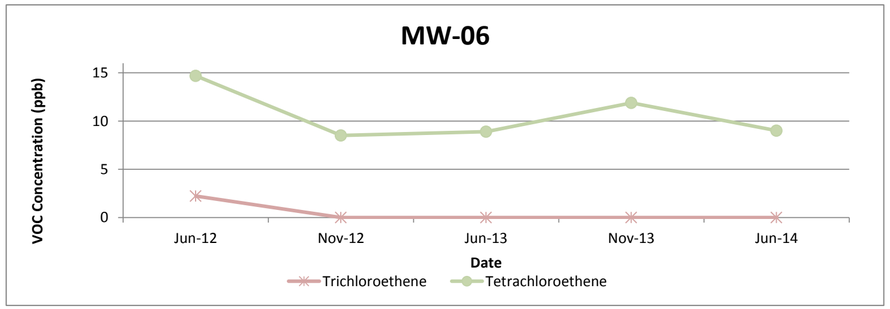
Table 1 Groundwater Results - VOCs

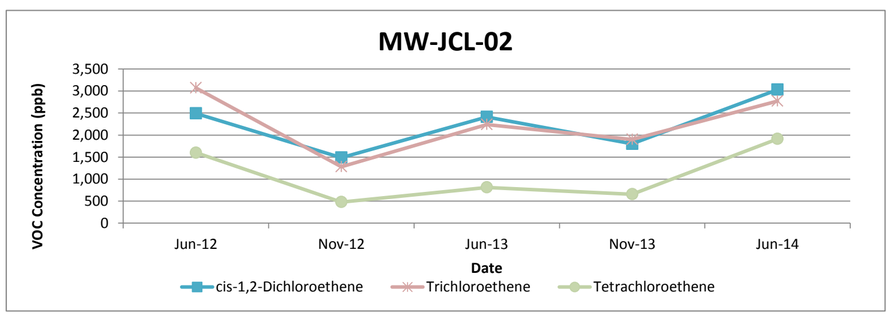
Detected Parameters[1]	NYS Groundwater Standard[2]	MW-03					MW-06					MW-13					MW-JCL-02				
		Post Remediation					Post Remediation					Post Remediation					Post Remediation				
		Jun-12	Nov-12	Jun-13	Nov-13	Jun-14	Jun-12	Nov-12	Jun-13	Nov-13	Jun-14	Jun-12	Nov-12	Jun-13	Nov-13	Jun-14	Jun-12	Nov-12	Jun-13	Nov-13	Jun-14
Acetone	50*	ND	ND	2270	1,200 B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	314	626 B	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	995 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	118 J	ND	ND	ND
Methyl Ethyl Ketone (2-butanone)	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	17.4	1.75 J	3.59	3.15	4.01	ND	ND	ND	ND	ND	90 J	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-Tert-Butyl Ether (MTBE)	10*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	11,000	9,140	3480	14,000	7,530	14.7	8.51	8.89	11.9	9.01	ND	ND	ND	ND	ND	1,600	480	812	659	1,910
Trichloroethene	5	8,940	4,760	5300	6,340	6,930	2.22	1.92 J	1.5 J	1.78 J	1.47 J	ND	ND	ND	ND	ND	3,070	1,280	2240	1,900	2,770
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	5,900	3,170	4030	7,380	6,150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,490	1,490	2410	1,800	3,030

~ parameter detected above NYS Ambient Groundwater Standard or applicable NYSDEC Guidance Value

J - value is estimated
ND - Not detected above reporting limit
1 - Results presentend in ug/L or parts per billion (ppb)
2 - NYS Ambient Groundwater Standards (6 NYCRR Part 703.5)
* - NYSDEC Guidance Value (TOGS 1.1.1)







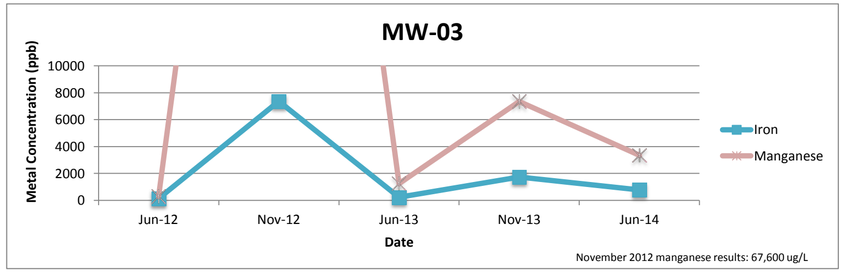
Former Churchville Ford Site (#V00658-8)
Village of Churchville
Town of Riga

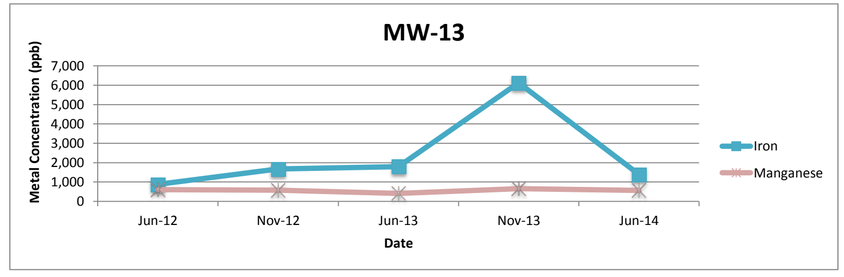
Table 2 Groundwater Results - Metals

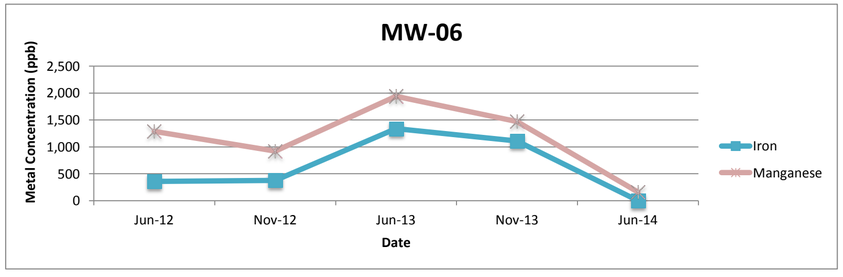
Parameters[1]	Groundwater Standards[2]	MW-03					MW-06					MW-13					MW-JCL-02				
		Post Remediation					Post Remediation					Post Remediation					Post Remediation				
		Jun-12	Nov-12	Jun-13	Nov-13	Jun-14	Jun-12	Nov-12	Jun-13	Nov-13	Jun-14	Jun-12	Nov-12	Jun-13	Nov-13	Jun-14	Jun-12	Nov-12	Jun-13	Nov-13	Jun-14
Iron	**300****	134	**7,370**	229	**1,740**	**789**	**360**	**378**	**1,340**	**1,110**	102 D	**875**	**1,670**	**1,800**	**6,130**	**1,390**	**5,250**	**611**	**6140**	**10,600**	**4,630**
Manganese	**300****	293	**67,600**	**1,250**	**7,350**	**3,350**	**1,290**	**920**	**1,940**	**1,470**	160	**606**	**576**	**411**	**655**	**574**	**2,260**	**1,290**	**1580**	**2,710**	**2,190**

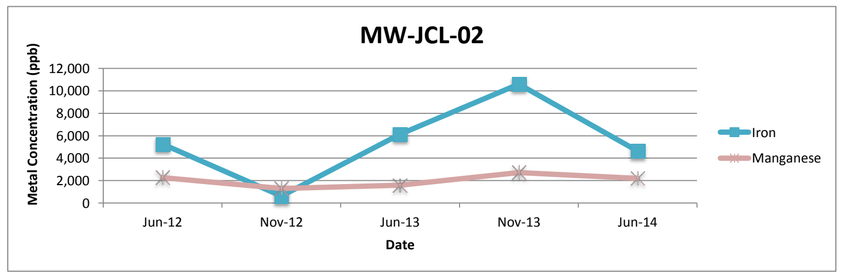
~ parameter detected above NYS Ambient Groundwater Standard or applicable NYSDEC Guidance Value

1 - Results presentend in parts per billion (ppb)
2 - NYS Ambient Groundwater Standards (6 NYCRR Part 703.5)
** - Sum total of Iron and Manganese results is 500 ug/L per NYSDEC Part 703.5 Class GA groundwater standards

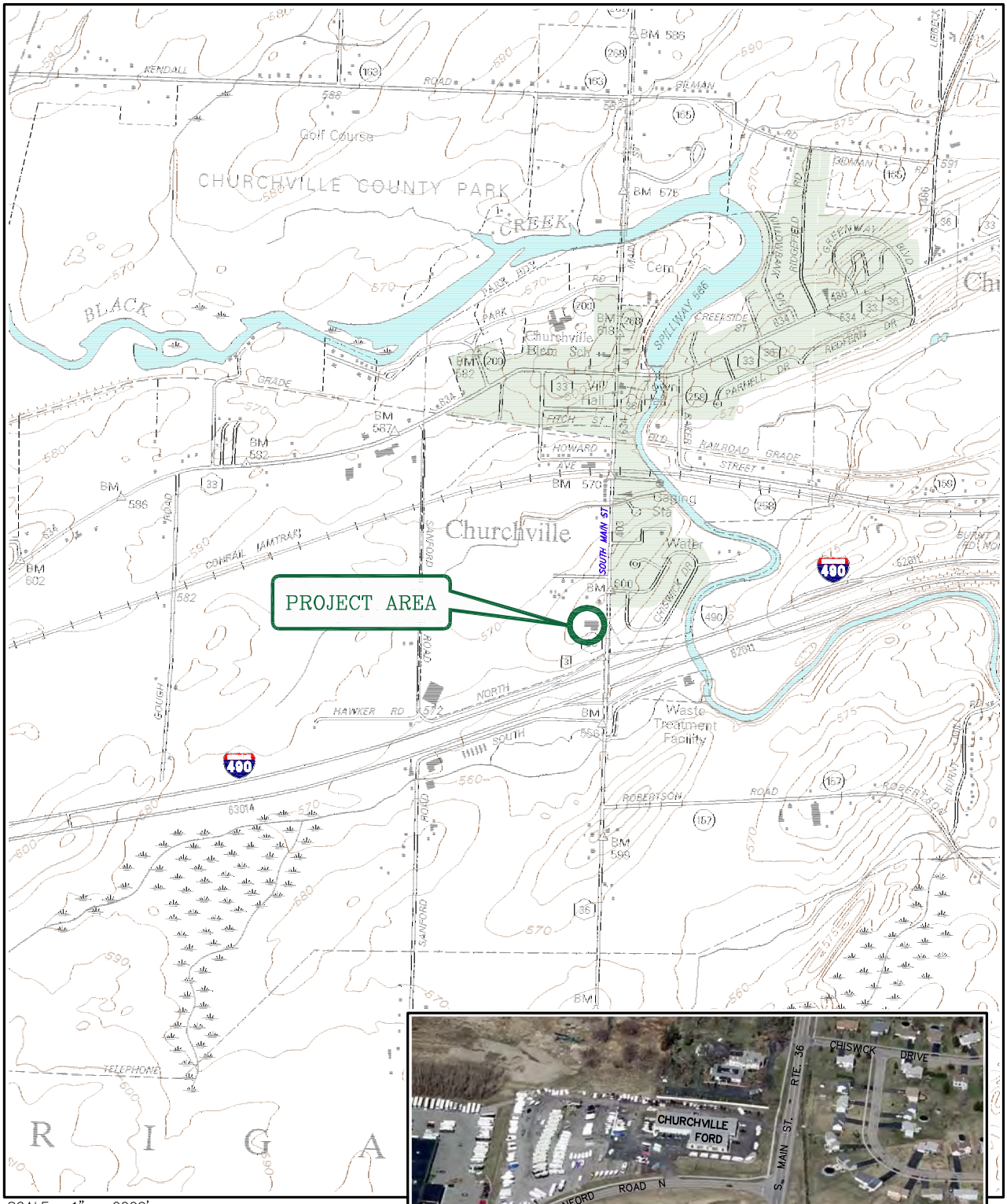








Figures



Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

FIGURE 1.
SITE LOCATION MAP

BONARIGO & McCUTCHEON, PLLC
FORMER CHURCHVILLE FORD
SITE MANAGEMENT PLAN

DATE:	MARCH 2010
SCALE:	1:24,000
DRAWN BY:	DLS

MAP SOURCE: NYS DOT RASTER QUADRANGLE, CHURCHVILLE & CLIFTON / NEW YORK, MONROE COUNTY DOT EDITION DATE: 1997 / USGS CONTOUR DATA: 1950

Groundwater Elevation - June 2014			
Monitoring Well	**PVC Elevation**	**Depth to Water**	**Elevation (ft)**
MW-03	591.76	3.57	588.19
MW-06	591.73	4.15	587.58
MW-13	591.08	1.10	589.98
MW-22	585.73	1.51	584.22
MW-JCL-01	587.08	4.43	582.65
MW-JCL-02	591.51	4.73	586.78
MW-JCL-03	591.33	1.45	589.88

MW-22

MW-JCL-03

MW-06:
Iron: 1,340
Manganese: 1,940
Tetrachloroethene: 8.89

MW-06

MW-03

MW-JCL-02

MW-01

MW-03:
Manganese: 1,250
Acetone: 2,270
Tetrachloroethene: 3,480
Trichloroethene: 5,300
cis-1,2-Dichloroethene: 4,030

MW-13

MW-JCL-02:
Iron: 6,140
Manganese: 1,580
Acetone: 314
Tetrachloroethene: 812
Trichloroethene: 2,240
cis-1,2-Dichloroethene: 2,410

MW-13:
Iron: 1,800
Manganese: 411

MW-JCL-01

Legend

- Monitoring Well - Not Sampled
- Monitoring Well - Sampled
- Groundwater Contour June 2013
- Groundwater Flow Direction

Analytical results displayed in ug/L exceed
6 NYCRR Part703.5 Groundwater Standards

1 inch = 40 feet

0 20 40 60 80 100 Feet

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX

DATE: JULY 2014
PROJECT NO: 50185-02
DRAWN/CHECKED: ED/SMK
DATA SOURCE: ESRI BASEMAP

FIGURE 2
GROUNDWATER CONTOURS AND ANALYTICAL RESULTS JUNE 2013
WILKINS RV, INC.
RIGA, NY

Lu Engineers

Groundwater Elevation - June 2014			
Monitoring Well	**PVC Elevation**	**Depth to Water**	**Elevation (ft)**
MW-03	591.76	4.65	587.11
MW-06	591.73	4.18	587.55
MW-13	590.87	4.89	585.98
MW-22	585.73	2.25	583.48
MW-JCL-01	587.08	3.91	583.17
MW-JCL-02	591.51	6.40	585.11
MW-JCL-03	591.33	4.98	586.35

MW-06:
Iron: 1,110
Manganese: 1,470
Tetrachloroethene: 11.9

MW-03:
Iron: 1,740
Manganese: 7,350
Acetone: 1,200
Tetrachloroethene:14,000
Trichloroethene: 6,340
cis-1,2-Dichloroethene: 7,380

MW-JCL-02:
Iron: 10,600
Manganese: 2,710
Acetone: 626
Tetrachloroethene: 659
Trichloroethene: 1,900
cis-1,2-Dichloroethene: 1,800

MW-13:
Iron: 6,130
Manganese: 655

MW-22
MW-JCL-03
MW-06
MW-03
MW-JCL-02
MW-01
MW-13
MW-JCL-01
584.0
584.5
585.0
586.0
586.5
587.0
587.5
585.5
583.5

Legend

- Monitoring Well - Not Sampled
- Monitoring Well - Sampled
- New Asphalt October 2013
- Retaining Wall Improvement October 2013
- Waterline Improvement October 2013
- Groundwater Contour November 2013
- Groundwater Flow Direction

Analytical results displayed in ug/L exceed 6 NYCRR Part703.5 Groundwater Standards

1 inch = 40 feet

0 20 40 60 80 100 Feet

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

DATE: JULY 2014
PROJECT NO: 50185-02
DRAWN/CHECKED: ED/SMK
DATA SOURCE: ESRI BASEMAP

FIGURE 3
GROUNDWATER CONTOURS AND ANALYTICAL RESULTS NOVEMBER 2013
WILKINS RV, INC.
RIGA, NY

Lu Engineers

Groundwater Elevation - June 2014			
Monitoring Well	**PVC Elevation**	**Depth to Water**	**Elevation (ft)**
MW-03	591.76	3.71	588.05
MW-06	591.73	3.37	588.36
MW-13	590.87	1.91	588.96
MW-22	585.73	1.47	584.26
MW-JCL-01	587.08	4.48	582.6
MW-JCL-02	591.51	5.03	586.48
MW-JCL-03	591.33	2.12	589.21

MW-06:
Tetrachloroethene: 9.01

MW-03:
Iron: 789
Manganese: 3,150
Tetrachloroethene: 7,530
Trichloroethene: 6,930
cis-1,2-Dichloroethene: 6,150

MW-JCL-02:
Iron: 4,630
Manganese: 2,190
Tetrachloroethene: 1,910
Trichloroethene: 2,770
cis-1,2-Dichloroethene: 3,030

MW-13:
Iron:1,390
Manganese: 574

MW-22
MW-JCL-03
MW-06
MW-03
MW-JCL-02
MW-01
MW-13
MW-JCL-01

584.5
585.0
585.5
589.0
588.5
588.0
587.5
587.0
586.5
586.0
585.5
585.0
584.5
584.0
583.5
583.0

Legend

- Monitoring Well - Not Sampled
- Monitoring Well - Sampled
- New Asphalt October 2013
- Retaining Wall Improvement October 2013
- Waterline Improvement October 2013
- Groundwater Flow Direction
- Groundwater Contour June 2014

Analytical results displayed in ug/L exceed
6 NYCRR Part703.5 Groundwater Standards

1 inch = 40 feet

0 20 40 60 80 100 Feet

DATE: JULY 2014
PROJECT NO: 50185-02
DRAWN/CHECKED: ED/SMK
DATA SOURCE: ESRI BASEMAP

FIGURE 4
GROUNDWATER CONTOURS AND ANALYTICAL RESULTS JUNE 2014
WILKINS RV, INC.
RIGA, NY

Lu Engineers

A - Site Inspection Forms

SITE-WIDE INSPECTION FORM
FORMER CHURCHVILLE FORD VCP SITE

Date: 6/14/13

Name: Eric Detweiler

Company: Lu Engineers

Position of person(s) conducting maintenance/inspection activities: Environmental Consultant

Document the following information during each biannual site visit for groundwater sampling:

1. Compliance with all ECs/ICs, including site usage

Yes, all ECs/ICs in compliance as is site usage (unchanged)

2. An evaluation of the condition and continued effectiveness of the Site Cap and SSDS

Site Cap: Asphalt generally in good condition surrounding building. Some cracking and pot holes exist on north side of building with some patching in place (not within source area); also some minor cracking and patched asphalt on west end of bldg. in source area (this area overall in good condition); SSDS: Interior workshop floor in very good condition throughout (unchanged) and epoxy coated. SSDS working as intended and drawing same vacuum levels as at time of install.

3. General site conditions at the time of the inspection

Site is overall in very good condition; housekeeping in workshop area is very good; no solvents or chemicals of concern observed

4. The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection This is first round of bi-annual groundwater sampling for 2013 and site inspection (including SSDS); No air sampling required due to SSDS being in place; Monitoring wells sampled per SMP = MW-3, MW-6, MW-13, MW-JCL-02

5. Compliance with permits and schedules included in the Operation and Maintenance Plan

Yes (first round of sampling/inspection for 2013)

6. Confirm that site records are up to date

Yes

7. Conduct a visual inspection of the complete SSDS (i.e., vent fan, piping, warning device, labeling on systems, etc.).

Both SSDS fans running as normal; vacuum generated at each point is same as at time of system install: Bay 3 fan drawing 0.8" wc, Bay 5 fan drawing 0.5" wc

- All system piping in excellent condition and properly labeled

8. Conduct an inspection of all surfaces to which vacuum is applied.
Workshop concrete floor in very good condition; no apparent new cracking or settling observed; Epoxy coated throughout floor surface.

9. Inspect all components for condition and proper operation. Are both fans operational?
Both SSDS fans are operational & functioning at same vacuum as at time of install

10. Inspect the exhaust or discharge point to verify that no air intakes have been located nearby.
No air intakes have been added or located near SSDS exhaust

11. Identify and repair any leaks in accordance with Sections 4.3.1(a) and 4.3.4(a) of the NYSDOH Guidance (i.e.; with the systems running, smoke tubes will used to check for leaks through concrete cracks, floor joints and at the suction points and any leaks will be resealed until smoke is no longer observed flowing through the opening).
No leaks detected

12. Interview an appropriate occupant seeking comments and observations regarding the operation of the System.
Shop manager indicated that SSDS vacuum has not changed and is checked frequently

Any Questions or Service needed to the SSDS call MITIGATION TECH at 1-800-637-9228

End of Inspection Form

SITE-WIDE INSPECTION FORM
FORMER CHURCHVILLE FORD VCP SITE

Date: 11/21/13

Name: Eric Detweiler

Company: Lu Engineers

Position of person(s) conducting maintenance/inspection activities: Environmental Consultant

Document the following information during each biannual site visit for groundwater sampling:

1. Compliance with all ECs/ICs, including site usage

   Yes, all ECs/ICs in compliance

2. An evaluation of the condition and continued effectiveness of the Site Cap and SSDS

   Site Cap: The cap is brand new as of 10/2014. former cap was milled and new asphalt was placed across majority of site; no subsurface soil was disturbed during re-paving process.

   SSDS: This system still functioning as new and as intended per design; continu to draw same vacuum at each point as when installed (0.8"wc Bay 3, 0.5"wc Bay 5)

3. General site conditions at the time of the inspection

   Site is well kept, free of clutter and chemicals; Overall in good conditions; Cleaning supplies properly stored, no solvents observed.

4. The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection

   Site management activities include: groundwater sampling of 4 site wells (MW-3, MW-6, MW-13, MW-ICL-02) for VOC & Fe/Mn analysis; inspection of SSDS in workshop portion of site building; cap inspection including asphalt & building slabs

5. Compliance with permits and schedules included in the Operation and Maintenance Plan

   Yes, this is the second round of groundwater sampling for 2013 (bi-annual) and site inspection

6. Confirm that site records are up to date

   Yes

7. Conduct a visual inspection of the complete SSDS (i.e., vent fan, piping, warning device, labeling on systems, etc.).

- Both SSDS fans are currently functioning as intended and at same vacuum levels as when installed: Bay 3 fan drawing 0.8" wc
  Bay 5 fan drawing 0.5" wc
- All system piping properly labeled and in excellent condition

8. Conduct an inspection of all surfaces to which vacuum is applied.
Concrete floor of workshop is in very good condition and unchanged since SSDS installation (no evidence of new cracking or settling). Floor has epoxy coating throughout workshop.

9. Inspect all components for condition and proper operation. Are both fans operational?
All working components of system are in good condition and operational. Both vacuum fans operating as designed/intended

10. Inspect the exhaust or discharge point to verify that no air intakes have been located nearby.
No air intakes near discharge points; same as at time of system install.

11. Identify and repair any leaks in accordance with Sections 4.3.1(a) and 4.3.4(a) of the NYSDOH Guidance (i.e.; with the systems running, smoke tubes will used to check for leaks through concrete cracks, floor joints and at the suction points and any leaks will be resealed until smoke is no longer observed flowing through the opening).
No leaks detected within system

12. Interview an appropriate occupant seeking comments and observations regarding the operation of the System.
Facility manager has indicated that the system has been continuously operational since install.

Any Questions or Service needed to the SSDS call MITIGATION TECH at 1-800-637-9228

End of Inspection Form

SITE-WIDE INSPECTION FORM
FORMER CHURCHVILLE FORD VCP SITE

Date: 6/19/14

Name: Eric Detweiler

Company: Lu Engineers

Position of person(s) conducting maintenance/inspection activities: Environmental Consultant

Document the following information during each biannual site visit for groundwater sampling:

1. Compliance with all ECs/ICs, including site usage

   Yes, all ECs/ICs appear to be in compliance

2. An evaluation of the condition and continued effectiveness of the Site Cap and SSDS

- Asphalt cap in excellent condition since replacement in October 2013. No cracks or potholes exist within the limits of the repaved area. Building floor slab in very good condition throughout.
- SSDS 8 is functioning as designed and continues to draw a vacuum at same level as at time of installation (0.8" WC in Bay 3, 0.5" WC in Bay 5)

3. General site conditions at the time of the inspection

The site is generally very well kept and in good condition. Items are properly stored; no unusual chemicals or chemicals of concern observed. Site much improved since change of ownership.

4. The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection

   Site management activities include: sampling of 4 site monitoring wells (MW-3, MW-6, MW-JCL-02, MW-13) for TCL VOCs and Fe/Mn analysis, inspection of cap and building slabs, inspection of SSDS

5. Compliance with permits and schedules included in the Operation and Maintenance Plan

   Yes; this is first round of bi-annual sampling and inspection for 2014.

6. Confirm that site records are up to date

   Yes

7. Conduct a visual inspection of the complete SSDS (i.e., vent fan, piping, warning device, labeling on systems, etc.).

Both SSDS fans are functioning as normal and generating same sub-slab vacuum as upon installation (Bay 3 fan drawing 0.8" WC and Bay 5 fan drawing 0.5" WC); all piping in excellent condition and proper labeling is intact

8. Conduct an inspection of all surfaces to which vacuum is applied.
Concrete workshop floor is in very good condition, unchanged since SSDS installation. Epoxy coating throughout.

9. Inspect all components for condition and proper operation. Are both fans operational?
Both fans are operational and manometers are functioning as normal.

10. Inspect the exhaust or discharge point to verify that no air intakes have been located nearby.
No air intakes near discharge points; same as at time of System install.

11. Identify and repair any leaks in accordance with Sections 4.3.1(a) and 4.3.4(a) of the NYSDOH Guidance (i.e.; with the systems running, smoke tubes will used to check for leaks through concrete cracks, floor joints and at the suction points and any leaks will be resealed until smoke is no longer observed flowing through the opening).
No leaks detected within system

12. Interview an appropriate occupant seeking comments and observations regarding the operation of the System.
Facility Manager has indicated that the system has been continuously operational since install.

Any Questions or Service needed to the SSDS call MITIGATION TECH at 1-800-637-9228

End of Inspection Form

B - Groundwater Sampling Logs

Groundwater Sampling Field Record

Lu Engineers

Project Name Wilkins RV SMP
Location ID MW-JCL-02
Activity Time 10:00

Field Sample ID MW-JCL-02_06-14-13
Sample Time 12:00

Job # 50185-02
Sampling Event # 3
Date 6/14/13

SAMPLING NOTES

Initial Depth to Water 4.73 feet
Final Depth to Water 35.31 feet
Screen Length _____ feet
Total Volume Purged 16 gallons
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Measurement Point TOR
Well Depth 35.75 feet
Pump Intake Depth NA
PID Well Head NA

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
10:45			16.2	7.27		25.9	1.2	-21	
11:23	35.2		14.8	7.75		66.4	1.2	-49	
12:00	35.31		15.0	7.80		19.0	1.089	-11	
SAMPLE									

Purge Observations: clear, slightly cloudy at bottom of well; bailed within 0.4' of dry
Purge Water Containerized: yes

EQUIPMENT DOCUMENTATION

Type of Pump: NA - bailer
Type of Tubing: ~~¼" HDPE~~ NA
Type of Water Quality Meter: Horiba U-22; LaMotte 2020

Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	✓
Fe, Mn	1 x 250 ml	✓

LOCATION NOTES

1 well vol = 5 gal
★ concrete completion/curb box heaved from frost. top of PVC riser is now flush with bottom of protective box so sediment/surface water can get in when J-plug is removed.

Signature: Eric Detel
Checked By: _____

Groundwater Sampling Field Record

Lu Engineers

Project Name Wilkins RV
Location ID MW-3
Activity Time 10:00

Field Sample ID MW-03_06-14-13
Sample Time 11:40

Job # 50185-02
Sampling Event # 3
Date 6/14/13

SAMPLING NOTES

Initial Depth to Water 3.57 feet
Final Depth to Water 15.87 feet
Screen Length 10 feet
Total Volume Purged 15 gallons
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Measurement Point TOR
Well Depth 21.35 feet
Pump Intake Depth NA
PID Well Head NA

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar heaved

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
10:30	6.5		16.0	6.89		12.9	1.032	-52	after 5gal
11:00	13.5		14.5	7.49		24.4	1.060	67	after 10gal
11:30	20.81		14.1	7.77		0.35	1.080	48	after 13 gal
SAMPLE									

Purge Observations: clear until 14 gal removed (bottom of well) then rusty then clear again
Purge Water Containerized: yes

EQUIPMENT DOCUMENTATION

Type of Pump: NA - bailer
Type of Tubing: ~~½" HDPE~~ NA
Type of Water Quality Meter: Horiba U-22; LaMotte 2020

Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2x 40 ml	✓
Fe, Mn	1x250 ml	✓

Signature: Eric Petrel
Checked By: _____

LOCATION NOTES

1 well vol = 2.9 (9 gal=3)

*After purging 14 gal water heavily rust colored & turbid (well bailed nearly dry); continue purging to within 6" of dry, water clears after evacuating 15 gal total
*concrete completion heaved

Groundwater Sampling Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV
Location ID MW-06
Activity Time 13:20

Field Sample ID MW-06_06-14-13
Sample Time 13:50

Job # 50185-02
Sampling Event # 3
Date 6/14/13

SAMPLING NOTES

Initial Depth to Water 4.15 feet
Final Depth to Water 17.82 feet
Screen Length 10 feet
Total Volume Purged ~~[illegible]~~ 14 gallons
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Measurement Point TOR
Well Depth 20.1 feet
Pump Intake Depth —
PID Well Head —

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
13:25			15.5	7.62		14.5	1.13	23	
13:35			17.0	7.61		7.42	1.17	86	
13:50	17.82		16.6	7.68		61.4	1.36	115	
Sample									

Purge Observations:
Purge Water Containerized: yes

EQUIPMENT DOCUMENTATION

Type of Pump: bailer
Type of Tubing: ~~¼" HDPE~~ NA
Type of Water Quality Meter: Horiba U-22; LaMotte 2020

Calibrated:

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	✓
~~Fe, Mn~~	1x250mL	✓

LOCATION NOTES

1 well vol = 2.5 gl
Bailed within ½ ft. dry

Signature: Eric Detrick
Checked By:

Groundwater Sampling
Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV SMP
Location ID MW-13
Activity Time 12:00

Field Sample ID MW-13_06-14-13
Sample Time 13:15

Job # 50185-02
Sampling Event # 03
Date 6/14/13

SAMPLING NOTES

Initial Depth to Water 1.10 feet
Final Depth to Water 1.45 feet
Screen Length 10 feet
Total Volume Purged 15 gallons
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Measurement Point TOR
Well Depth 16.81 feet
Pump Intake Depth —
PID Well Head —

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
12:10	6.4	—	17.7	7.30		7.12	0.683	-100	
~~13:05~~			19.8	7.80		28.9	0.679	-86	
Sample									

Purge Observations: _____
Purge Water Containerized: yes

EQUIPMENT DOCUMENTATION

Type of Pump: bailer
Type of Tubing: ~~¼" HDPE~~ NA
Type of Water Quality Meter: Horiba U-22; LaMotte 2020

Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	3x 40 ml	✓
Fe, Mn	1x 250ml	✓

LOCATION NOTES

1 well vol = 2.5 gal

Signature: Eric Detrick
Checked By: _____

Groundwater Sampling
Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV – SMP Sampling
Location ID MW-13
Activity Time 11:30
Field Sample ID MW-13_11-21-13
Sample Time 12:10
Job # 50185-02
Sampling Event # 04
Date 11/21/13

SAMPLING NOTES

Initial Depth to Water ~~5.1~~ 4.89 feet
Final Depth to Water 9.95 feet
Screen Length 10 feet
Total Volume Purged 6 gallons
Measurement Point TOR
Well Depth 16.81 feet
Pump Intake Depth —
PID Well Head —
Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
11:45			9.9	7.40		360	0.004	-31.2	
12:00			12.9	7.21		127	0.329	88.5	

Purge Observations: Slight odor, low turbidity
Purge Water Containerized: Yes

EQUIPMENT DOCUMENTATION

Type of Pump: NA – sample by bailer
Type of Tubing: —
Type of Water Quality Meter: YSI Pro, LaMotte 2020
Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	
Fe, Mn	1 x 250 ml	

LOCATION NOTES

1 Well Vol = 1.9
* New flushmount box was set too low during paving so j-plug won't fit on and allow cover to bolt on, will cut & re-survey PVC riser

Signature: Eric Detrick
Checked By: _____

Groundwater Sampling
Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV – SMP Sampling
Location ID MW-3
Activity Time 10:30
Field Sample ID MW-03_11-21-13
Sample Time 11:10
Job # 50185-02
Sampling Event # 04
Date 11/21/13

SAMPLING NOTES

Initial Depth to Water 4.65 feet
Final Depth to Water 18.5 feet
Screen Length 10 feet
Total Volume Purged ~~8~~ 8 gallons
Measurement Point TOR
Well Depth 21.35 feet
Pump Intake Depth —
PID Well Head —
Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
10.25			~~14~~	~~7.24~~		158		~~0.445~~	2.3
10.56			13.5	7.45		73.2	0.109	87.6	

Purge Observations: ~~Clear~~ turbidity increased during purge, no sheen, no purple
Purge Water Containerized: yes - drummed

EQUIPMENT DOCUMENTATION

Type of Pump: NA – sample by bailer
Type of Tubing: NA
Type of Water Quality Meter: YSI Pro, LaMotte 2020
Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	yes
Fe, Mn	1 x 250 ml	yes

LOCATION NOTES

2.7 gal = 1 well vol
Bailed within 2' of dry

Signature: Eric DeFeo
Checked By: _____

Groundwater Sampling
Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV – SMP Sampling
Job # 50185-02
Location ID MW-06
Field Sample ID MW-06_11-21-13
Sampling Event # Q4
Activity Time 12:45
Sample Time 13:25
Date 11/21/13

SAMPLING NOTES

Initial Depth to Water 4.18 feet
Measurement Point TOR
Well Diameter 2"
Final Depth to Water 16.80 feet
Well Depth 20.10 feet
Well Integrity:
Screen Length 10 feet
Pump Intake Depth —
Cap ✓
Total Volume Purged 7.8 gallons
PID Well Head —
Casing ✓
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Locked ✓
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth
Collar ✓

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
1:00			17.0	7.52		43.9	0.004	121.9	
1:00			17.0	7.45		~~47.8~~	0.017	113.5	
1:22			16.7	7.53		~~53.0~~ 50.8	0.005	103.3	

Purge Observations: purge water rosy / rust color after removing 1 gal, cleared during purge
Purge Water Containerized: yes - drum

EQUIPMENT DOCUMENTATION

Type of Pump: NA – sample by bailer
Type of Tubing: NA
Type of Water Quality Meter: YSI Pro, LaMotte 2020
Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	✓
Fe, Mn	1 x 250 ml	✓

LOCATION NOTES

1 well vol = 2.6 gal

Signature: Eric Diethelm
Checked By: _____

Groundwater Sampling
Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV – SMP Sampling
Location ID MW-JCL-02
Activity Time 10:30
Field Sample ID MW-JCL-02_11-21-13
Sample Time 11:30
Job # 50185-02
Sampling Event # 04
Date 11/21/13

SAMPLING NOTES

Initial Depth to Water 6.40 feet
Final Depth to Water 35' feet
Screen Length 10 feet
Total Volume Purged 14 gallons
Measurement Point TOR
Well Depth 35.75 feet
Pump Intake Depth —
PID Well Head —
Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
10:30		~	14.5	7.67		21.7	0.002	25.5	
11:30			12.1	7.53		112	0.004	109.3	
11:30			11.6	7.50		199	0.216	38.7	

Purge Observations: turbidity increased during purge
Purge Water Containerized: yes - drummed

EQUIPMENT DOCUMENTATION

Type of Pump: NA – sample by bailer
Type of Tubing:
Type of Water Quality Meter: YSI Pro, LaMotte 2020
Calibrated:

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
VOCs	2 x 40 ml	✓
Fe, Mn	1 x 250 ml	✓

LOCATION NOTES

4.8 gal = 1 well vol.
Purged to within 0.5' of dry after evacuating 2 well volumes

Signature:
Checked By:

Groundwater Sampling Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV
Location ID MW-3
Activity Time 12:20

Field Sample ID MW-03_06-19-14
Sample Time 12:55

Job # 50185-02
Sampling Event # 05
Date 6/19/14

SAMPLING NOTES

Initial Depth to Water 3.71 feet
Final Depth to Water 12.4 feet
Screen Length 10 feet
Total Volume Purged 9 gallons

Measurement Point TOR
Well Depth 21.35 feet
Pump Intake Depth —
PID Well Head —

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
	5.5		16.4	7.55	1.67	12.37	1.03	-5.2	
	9.8		13.4	7.60	1.56	44.0	1.02	0.5	3 gal
	11.6		13.1	7.62	1.45	32.3	1.03	-15.2	6 gal
	13.8		12.8	7.66	1.67	12.45	1.04	-17.6	8.7 gal

Purge Observations: cloudy through mid-purge then clear, no odor, no sheen
Purge Water Containerized: yes

EQUIPMENT DOCUMENTATION

Type of Pump: bailer
Type of Tubing: —
Type of Water Quality Meter: YSI Pro, LaMotte 2020

Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
2x TCL VOCs	40ml (2)	yes
Fe, Mn	250 ml	yes

LOCATION NOTES

1 well vol = 2.9 gal
very clear sample

Signature: Eric DeFino
Checked By: _____

Groundwater Sampling Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name WILKINS RV
Location ID MW-JCL-02
Activity Time 10:45

Field Sample ID MW-JCL-02_06-19-14
Sample Time 12:15

Job # 50185-02
Sampling Event # 05
Date 6/19/14

SAMPLING NOTES

Initial Depth to Water 5.03 feet
Final Depth to Water 35.38 feet
Screen Length 10 feet
Total Volume Purged 11.5 gallons

Measurement Point TOR
Well Depth 35.75 feet
Pump Intake Depth NA
PID Well Head NA

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
11:05	6.5	—	16.2	8.14	3.05	1.87	0.61	-101.5	
	21.75		13.4	7.85	2.02	9.63	1.21	-88.6	5 gal
	33.60		13.5	7.87	2.00	37.0	1.23	-91.6	10 gal
	35.00		13.4	7.88	2.02	79.4	1.21	-52.0	11 gal

Purge Observations: light turbidity (cloudy) after removing 10 gal; no odor, no sheen
Purge Water Containerized: yes

EQUIPMENT DOCUMENTATION

Type of Pump: Bailer
Type of Tubing: —
Type of Water Quality Meter: YSI Proplus, LaMotte 2020

Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
2x TCL VOCs	40 ml	✓
Fe, Mn	250 ml	✓

LOCATION NOTES

1 well vol = 5.0 gal

Signature: Eric Detar
Checked By: _____

Groundwater Sampling Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV
Location ID MW-06
Activity Time 1:50

Field Sample ID MW-06_06-19-14
Sample Time 2:30

Job # 50185-02
Sampling Event # 05
Date 6/19/14

SAMPLING NOTES

Initial Depth to Water 3.37 feet
Final Depth to Water 16.35 feet
Screen Length 10 feet
Total Volume Purged 8.3 gallons
[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

Measurement Point TOR
Well Depth 20.1 feet
Pump Intake Depth NA
PID Well Head NA

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
	4.5		18.3	7.76	2.47	1.85	0.95	-8.8	
	9.15		16.4	7.82	1.34	9.21	0.99	31.8	3 gal
	11.82		15.7	7.75	1.84	11.40	1.13	52.9	5.5 gal
	17.65		15.2	7.8	1.65	18.3	1.26	70.2	8.2 gal

Purge Observations: very clear, no odor, no sheen
Purge Water Containerized: yes

EQUIPMENT DOCUMENTATION

Type of Pump: bailer
Type of Tubing: —
Type of Water Quality Meter: YSI Pro Plus, LaMotte 2020

Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
2x TCL VOCs	40ml (2)	yes
Fe, Mn	1x250ml	

LOCATION NOTES

1 well vol = 2.7 gal
purged 3 vols

Signature: Eric Detril
Checked By: _____

Groundwater Sampling Field Record

Lu Engineers
ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name Wilkins RV
Location ID MW-13
Activity Time ~~1:00~~ 1:00

Field Sample ID MW-13_06-19-14
Sample Time 1:30

Job # 50185-02
Sampling Event # 05
Date 6/19/14

SAMPLING NOTES

Initial Depth to Water 1.91* feet
Final Depth to Water 2.17 feet
Screen Length 10 feet
Total Volume Purged 7.5 gallons

Measurement Point TOR
Well Depth (16.81) Now 16.61 feet
Pump Intake Depth NA
PID Well Head NA

Well Diameter 2"
Well Integrity:
Cap ✓
Casing ✓
Locked ✓
Collar ✓

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]
Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

Time	Depth to Water (ft)	Purge Rate (ml/min)	Temp. (deg. C)	pH (units)	Dissolved O2 (mg/L)	Turbidity (NTU)	Cond. (mS/cm)	ORP (mV)	Comments
	3.7		20.2	7.82	5.67	2.90	0.131	102.8	
	4.3		16.5	7.18	1.00	14.03	0.83	-93.1	2.5 gal
	2.8		18.2	7.20	0.86	13.89	0.82	-95.5	5 gal
	3.3		18.4	7.20	0.67	14.14	0.83	-90	7.5 gal

Purge Observations: very clear, no odor, no sheen
Purge Water Containerized: yes

EQUIPMENT DOCUMENTATION

Type of Pump: bailer
Type of Tubing: —
Type of Water Quality Meter: YSI Proplus, LaMotte 2020

Calibrated: _____

ANALYTICAL PARAMETERS

Parameter	Volumes	Sample Collected
2X TCL VOCs	40ml (2)	yes
Fe, Mn	1x 250 ml	yes

LOCATION NOTES

* check new PVC riser elevation (for DTW)
1 well vol = 2.4 gal
Fast recharge

Signature: Erin Detzel
Checked By: _____

C - Analytical Data

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

Lu Engineers, Inc.

For Lab Project ID

132206

Referencing

Wilkins RV - SMP Semi-Annual GW Sampling

Prepared

Monday, July 08, 2013

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-03_06-14-13
Lab Sample ID: 132206-01 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**0.229**	mg/L		6/25/2013
Manganese	**1.25**	mg/L		6/25/2013

Method Reference(s): EPA 6010C
EPA 3005
Data File: 062513b

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-03_06-14-13
Lab Sample ID: 132206-01 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 400	ug/L		6/19/2013
1,1,2,2-Tetrachloroethane	< 400	ug/L		6/19/2013
1,1,2-Trichloroethane	< 400	ug/L		6/19/2013
1,1-Dichloroethane	< 400	ug/L		6/19/2013
1,1-Dichloroethene	< 400	ug/L		6/19/2013
1,2,3-Trichlorobenzene	< 1000	ug/L		6/19/2013
1,2,4-Trichlorobenzene	< 1000	ug/L		6/19/2013
1,2-Dibromo-3-Chloropropane	< 2000	ug/L		6/19/2013
1,2-Dibromoethane	< 400	ug/L		6/19/2013
1,2-Dichlorobenzene	< 400	ug/L		6/19/2013
1,2-Dichloroethane	< 400	ug/L		6/19/2013
1,2-Dichloropropane	< 400	ug/L		6/19/2013
1,3-Dichlorobenzene	< 400	ug/L		6/19/2013
1,4-Dichlorobenzene	< 400	ug/L		6/19/2013
1,4-dioxane	< 4000	ug/L		6/19/2013
2-Butanone	< 2000	ug/L		6/19/2013
2-Hexanone	< 1000	ug/L		6/19/2013
4-Methyl-2-pentanone	< 1000	ug/L		6/19/2013
Acetone	**2270**	ug/L	B	6/19/2013
Benzene	< 140	ug/L		6/19/2013
Bromochloromethane	< 1000	ug/L		6/19/2013
Bromodichloromethane	< 400	ug/L		6/19/2013
Bromoform	< 1000	ug/L		6/19/2013
Bromomethane	< 400	ug/L		6/19/2013
Carbon disulfide	< 400	ug/L		6/19/2013
Carbon Tetrachloride	< 400	ug/L		6/19/2013
Chlorobenzene	< 400	ug/L		6/19/2013

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-03_06-14-13
Lab Sample ID: 132206-01 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Chloroethane	< 400	ug/L	6/19/2013
Chloroform	< 400	ug/L	6/19/2013
Chloromethane	< 400	ug/L	6/19/2013
cis-1,2-Dichloroethene	**4030**	ug/L	6/19/2013
cis-1,3-Dichloropropene	< 400	ug/L	6/19/2013
Cyclohexane	< 2000	ug/L	6/19/2013
Dibromochloromethane	< 400	ug/L	6/19/2013
Dichlorodifluoromethane	< 400	ug/L	6/19/2013
Ethylbenzene	< 400	ug/L	6/19/2013
Freon 113	< 400	ug/L	6/19/2013
Isopropylbenzene	< 400	ug/L	6/19/2013
m,p-Xylene	< 400	ug/L	6/19/2013
Methyl acetate	< 400	ug/L	6/19/2013
Methyl tert-butyl Ether	< 400	ug/L	6/19/2013
Methylcyclohexane	< 400	ug/L	6/19/2013
Methylene chloride	< 1000	ug/L	6/19/2013
o-Xylene	< 400	ug/L	6/19/2013
Styrene	< 1000	ug/L	6/19/2013
Tetrachloroethene	**3480**	ug/L	6/19/2013
Toluene	< 400	ug/L	6/19/2013
trans-1,2-Dichloroethene	< 400	ug/L	6/19/2013
trans-1,3-Dichloropropene	< 400	ug/L	6/19/2013
Trichloroethene	**5300**	ug/L	6/19/2013
Trichlorofluoromethane	< 400	ug/L	6/19/2013
Vinyl chloride	< 400	ug/L	6/19/2013

Method Reference(s): EPA 8260B
EPA 5030
Data File: X06142.D

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-JCL-02_06-14-13
Lab Sample ID: 132206-02 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**6.14**	mg/L		6/25/2013
Manganese	**1.58**	mg/L		6/25/2013

Method Reference(s): EPA 6010C
EPA 3005
Data File: 062513b

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-JCL-02_06-14-13
Lab Sample ID: 132206-02 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 50.0	ug/L		6/19/2013
1,1,2,2-Tetrachloroethane	< 50.0	ug/L		6/19/2013
1,1,2-Trichloroethane	< 50.0	ug/L		6/19/2013
1,1-Dichloroethane	< 50.0	ug/L		6/19/2013
1,1-Dichloroethene	< 50.0	ug/L		6/19/2013
1,2,3-Trichlorobenzene	< 125	ug/L		6/19/2013
1,2,4-Trichlorobenzene	< 125	ug/L		6/19/2013
1,2-Dibromo-3-Chloropropane	< 250	ug/L		6/19/2013
1,2-Dibromoethane	< 50.0	ug/L		6/19/2013
1,2-Dichlorobenzene	< 50.0	ug/L		6/19/2013
1,2-Dichloroethane	< 50.0	ug/L		6/19/2013
1,2-Dichloropropane	< 50.0	ug/L		6/19/2013
1,3-Dichlorobenzene	< 50.0	ug/L		6/19/2013
1,4-Dichlorobenzene	< 50.0	ug/L		6/19/2013
1,4-dioxane	< 500	ug/L		6/19/2013
2-Butanone	< 250	ug/L		6/19/2013
2-Hexanone	< 125	ug/L		6/19/2013
4-Methyl-2-pentanone	< 125	ug/L		6/19/2013
Acetone	**314**	ug/L	B	6/19/2013
Benzene	< 17.5	ug/L		6/19/2013
Bromochloromethane	< 125	ug/L		6/19/2013
Bromodichloromethane	< 50.0	ug/L		6/19/2013
Bromoform	< 125	ug/L		6/19/2013
Bromomethane	< 50.0	ug/L		6/19/2013
Carbon disulfide	< 50.0	ug/L		6/19/2013
Carbon Tetrachloride	< 50.0	ug/L		6/19/2013
Chlorobenzene	< 50.0	ug/L		6/19/2013

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-JCL-02_06-14-13
Lab Sample ID: 132206-02 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Chloroethane	< 50.0	ug/L		6/19/2013
Chloroform	< 50.0	ug/L		6/19/2013
Chloromethane	< 50.0	ug/L		6/19/2013
cis-1,2-Dichloroethene	**2410**	ug/L		6/19/2013
cis-1,3-Dichloropropene	< 50.0	ug/L		6/19/2013
Cyclohexane	< 250	ug/L		6/19/2013
Dibromochloromethane	< 50.0	ug/L		6/19/2013
Dichlorodifluoromethane	< 50.0	ug/L		6/19/2013
Ethylbenzene	< 50.0	ug/L		6/19/2013
Freon 113	< 50.0	ug/L		6/19/2013
Isopropylbenzene	< 50.0	ug/L		6/19/2013
m,p-Xylene	< 50.0	ug/L		6/19/2013
Methyl acetate	< 50.0	ug/L		6/19/2013
Methyl tert-butyl Ether	< 50.0	ug/L		6/19/2013
Methylcyclohexane	< 50.0	ug/L		6/19/2013
Methylene chloride	< 125	ug/L	J	6/19/2013
o-Xylene	< 50.0	ug/L		6/19/2013
Styrene	< 125	ug/L		6/19/2013
Tetrachloroethene	**812**	ug/L		6/19/2013
Toluene	< 50.0	ug/L		6/19/2013
trans-1,2-Dichloroethene	< 50.0	ug/L		6/19/2013
trans-1,3-Dichloropropene	< 50.0	ug/L		6/19/2013
Trichloroethene	**2240**	ug/L		6/19/2013
Trichlorofluoromethane	< 50.0	ug/L		6/19/2013
Vinyl chloride	< 50.0	ug/L		6/19/2013

Method Reference(s): EPA 8260B
EPA 5030
Data File: X06143.D

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-13_06-14-13
Lab Sample ID: 132206-03 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**1.80**	mg/L		6/25/2013
Manganese	**0.411**	mg/L		6/25/2013

Method Reference(s): EPA 6010C
EPA 3005
Data File: 062513b

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-13_06-14-13
Lab Sample ID: 132206-03
Matrix: Water

Date Sampled: 6/14/2013
Date Received: 6/14/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/19/2013
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/19/2013
1,1,2-Trichloroethane	< 2.00	ug/L		6/19/2013
1,1-Dichloroethane	< 2.00	ug/L		6/19/2013
1,1-Dichloroethene	< 2.00	ug/L		6/19/2013
1,2,3-Trichlorobenzene	< 5.00	ug/L		6/19/2013
1,2,4-Trichlorobenzene	< 5.00	ug/L		6/19/2013
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		6/19/2013
1,2-Dibromoethane	< 2.00	ug/L		6/19/2013
1,2-Dichlorobenzene	< 2.00	ug/L		6/19/2013
1,2-Dichloroethane	< 2.00	ug/L		6/19/2013
1,2-Dichloropropane	< 2.00	ug/L		6/19/2013
1,3-Dichlorobenzene	< 2.00	ug/L		6/19/2013
1,4-Dichlorobenzene	< 2.00	ug/L		6/19/2013
1,4-dioxane	< 20.0	ug/L		6/19/2013
2-Butanone	< 10.0	ug/L		6/19/2013
2-Hexanone	< 5.00	ug/L		6/19/2013
4-Methyl-2-pentanone	< 5.00	ug/L		6/19/2013
Acetone	< 10.0	ug/L		6/19/2013
Benzene	< 0.700	ug/L		6/19/2013
Bromochloromethane	< 5.00	ug/L		6/19/2013
Bromodichloromethane	< 2.00	ug/L		6/19/2013
Bromoform	< 5.00	ug/L		6/19/2013
Bromomethane	< 2.00	ug/L		6/19/2013
Carbon disulfide	< 2.00	ug/L		6/19/2013
Carbon Tetrachloride	< 2.00	ug/L		6/19/2013
Chlorobenzene	< 2.00	ug/L		6/19/2013

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-13_06-14-13
Lab Sample ID: 132206-03 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Chloroethane	< 2.00	ug/L	6/19/2013
Chloroform	< 2.00	ug/L	6/19/2013
Chloromethane	< 2.00	ug/L	6/19/2013
cis-1,2-Dichloroethene	< 2.00	ug/L	6/19/2013
cis-1,3-Dichloropropene	< 2.00	ug/L	6/19/2013
Cyclohexane	< 10.0	ug/L	6/19/2013
Dibromochloromethane	< 2.00	ug/L	6/19/2013
Dichlorodifluoromethane	< 2.00	ug/L	6/19/2013
Ethylbenzene	< 2.00	ug/L	6/19/2013
Freon 113	< 2.00	ug/L	6/19/2013
Isopropylbenzene	< 2.00	ug/L	6/19/2013
m,p-Xylene	< 2.00	ug/L	6/19/2013
Methyl acetate	< 2.00	ug/L	6/19/2013
Methyl tert-butyl Ether	< 2.00	ug/L	6/19/2013
Methylcyclohexane	< 2.00	ug/L	6/19/2013
Methylene chloride	< 5.00	ug/L	6/19/2013
o-Xylene	< 2.00	ug/L	6/19/2013
Styrene	< 5.00	ug/L	6/19/2013
Tetrachloroethene	< 2.00	ug/L	6/19/2013
Toluene	< 2.00	ug/L	6/19/2013
trans-1,2-Dichloroethene	< 2.00	ug/L	6/19/2013
trans-1,3-Dichloropropene	< 2.00	ug/L	6/19/2013
Trichloroethene	< 2.00	ug/L	6/19/2013
Trichlorofluoromethane	< 2.00	ug/L	6/19/2013
Vinyl chloride	< 2.00	ug/L	6/19/2013

Method Reference(s): EPA 8260B
EPA 5030
Data File: X06140.D

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-06_06-14-13
Lab Sample ID: 132206-04
Matrix: Water
Date Sampled: 6/14/2013
Date Received: 6/14/2013

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**1.34**	mg/L		6/25/2013
Manganese	**1.94**	mg/L		6/25/2013

Method Reference(s): EPA 6010C
EPA 3005
Data File: 062513b

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-06_06-14-13
Lab Sample ID: 132206-04 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/19/2013
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/19/2013
1,1,2-Trichloroethane	< 2.00	ug/L		6/19/2013
1,1-Dichloroethane	< 2.00	ug/L		6/19/2013
1,1-Dichloroethene	< 2.00	ug/L		6/19/2013
1,2,3-Trichlorobenzene	< 5.00	ug/L		6/19/2013
1,2,4-Trichlorobenzene	< 5.00	ug/L		6/19/2013
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		6/19/2013
1,2-Dibromoethane	< 2.00	ug/L		6/19/2013
1,2-Dichlorobenzene	< 2.00	ug/L		6/19/2013
1,2-Dichloroethane	< 2.00	ug/L		6/19/2013
1,2-Dichloropropane	< 2.00	ug/L		6/19/2013
1,3-Dichlorobenzene	< 2.00	ug/L		6/19/2013
1,4-Dichlorobenzene	< 2.00	ug/L		6/19/2013
1,4-dioxane	< 20.0	ug/L		6/19/2013
2-Butanone	< 10.0	ug/L		6/19/2013
2-Hexanone	< 5.00	ug/L		6/19/2013
4-Methyl-2-pentanone	< 5.00	ug/L		6/19/2013
Acetone	< 10.0	ug/L		6/19/2013
Benzene	< 0.700	ug/L		6/19/2013
Bromochloromethane	< 5.00	ug/L		6/19/2013
Bromodichloromethane	< 2.00	ug/L		6/19/2013
Bromoform	< 5.00	ug/L		6/19/2013
Bromomethane	< 2.00	ug/L		6/19/2013
Carbon disulfide	< 2.00	ug/L		6/19/2013
Carbon Tetrachloride	< 2.00	ug/L		6/19/2013
Chlorobenzene	< 2.00	ug/L		6/19/2013

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 132206

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling

Sample Identifier: MW-06_06-14-13
Lab Sample ID: 132206-04 **Date Sampled:** 6/14/2013
Matrix: Water **Date Received:** 6/14/2013

Chloroethane	< 2.00	ug/L		6/19/2013
Chloroform	< 2.00	ug/L		6/19/2013
Chloromethane	< 2.00	ug/L		6/19/2013
cis-1,2-Dichloroethene	< 2.00	ug/L		6/19/2013
cis-1,3-Dichloropropene	< 2.00	ug/L		6/19/2013
Cyclohexane	< 10.0	ug/L		6/19/2013
Dibromochloromethane	< 2.00	ug/L		6/19/2013
Dichlorodifluoromethane	**3.59**	ug/L		6/19/2013
Ethylbenzene	< 2.00	ug/L		6/19/2013
Freon 113	< 2.00	ug/L		6/19/2013
Isopropylbenzene	< 2.00	ug/L		6/19/2013
m,p-Xylene	< 2.00	ug/L		6/19/2013
Methyl acetate	< 2.00	ug/L		6/19/2013
Methyl tert-butyl Ether	< 2.00	ug/L		6/19/2013
Methylcyclohexane	< 2.00	ug/L		6/19/2013
Methylene chloride	< 5.00	ug/L		6/19/2013
o-Xylene	< 2.00	ug/L		6/19/2013
Styrene	< 5.00	ug/L		6/19/2013
Tetrachloroethene	**8.89**	ug/L		6/19/2013
Toluene	< 2.00	ug/L		6/19/2013
trans-1,2-Dichloroethene	< 2.00	ug/L		6/19/2013
trans-1,3-Dichloropropene	< 2.00	ug/L		6/19/2013
Trichloroethene	**1.50**	ug/L	J	6/19/2013
Trichlorofluoromethane	< 2.00	ug/L		6/19/2013
Vinyl chloride	< 2.00	ug/L		6/19/2013

Method Reference(s): EPA 8260B
EPA 5030
Data File: X06141.D

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: Lu Engineers, Inc.
Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling
Lab Project ID: 132206
SDG #: 2206-01
Matrix: Water

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	<2.00	ug/L		6/19/2013
1,1,2,2-Tetrachloroethane	<2.00	ug/L		6/19/2013
1,1,2-Trichloroethane	<2.00	ug/L		6/19/2013
1,1-Dichloroethane	<2.00	ug/L		6/19/2013
1,1-Dichloroethene	<2.00	ug/L		6/19/2013
1,2,3-Trichlorobenzene	<5.00	ug/L		6/19/2013
1,2,4-Trichlorobenzene	<5.00	ug/L		6/19/2013
1,2-Dibromo-3-Chloropropane	<10.0	ug/L		6/19/2013
1,2-Dibromoethane	<2.00	ug/L		6/19/2013
1,2-Dichlorobenzene	<2.00	ug/L		6/19/2013
1,2-Dichloroethane	<2.00	ug/L		6/19/2013
1,2-Dichloropropane	<2.00	ug/L		6/19/2013
1,3-Dichlorobenzene	<2.00	ug/L		6/19/2013
1,4-Dichlorobenzene	<2.00	ug/L		6/19/2013
1,4-dioxane	<20.0	ug/L		6/19/2013
2-Butanone	<10.0	ug/L		6/19/2013
2-Hexanone	<5.00	ug/L		6/19/2013
4-Methyl-2-pentanone	<5.00	ug/L		6/19/2013
Acetone	**6.34**	ug/L	J	6/19/2013
Benzene	<0.700	ug/L		6/19/2013
Bromochloromethane	<5.00	ug/L		6/19/2013
Bromodichloromethane	<2.00	ug/L		6/19/2013
Bromoform	<5.00	ug/L		6/19/2013
Bromomethane	<2.00	ug/L		6/19/2013
Carbon disulfide	<2.00	ug/L		6/19/2013
Carbon Tetrachloride	<2.00	ug/L		6/19/2013
Chlorobenzene	<2.00	ug/L		6/19/2013
Chloroethane	<2.00	ug/L		6/19/2013

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Report Prepared Friday, June 28, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: Lu Engineers, Inc.
Project Reference: Wilkins RV - SMP Semi-Annual GW Sampling
Lab Project ID: 132206
SDG #: 2206-01
Matrix: Water

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Chloroform	<2.00	ug/L		6/19/2013
Chloromethane	<2.00	ug/L		6/19/2013
cis-1,2-Dichloroethene	<2.00	ug/L		6/19/2013
cis-1,3-Dichloropropene	<2.00	ug/L		6/19/2013
Cyclohexane	<10.0	ug/L		6/19/2013
Dibromochloromethane	<2.00	ug/L		6/19/2013
Dichlorodifluoromethane	<2.00	ug/L		6/19/2013
Ethylbenzene	<2.00	ug/L		6/19/2013
Freon 113	<2.00	ug/L		6/19/2013
Isopropylbenzene	<2.00	ug/L		6/19/2013
m,p-Xylene	**1.01**	ug/L	J	6/19/2013
Methyl acetate	<2.00	ug/L		6/19/2013
Methyl tert-butyl Ether	<2.00	ug/L		6/19/2013
Methylcyclohexane	<2.00	ug/L		6/19/2013
Methylene chloride	<5.00	ug/L		6/19/2013
o-Xylene	<2.00	ug/L		6/19/2013
Styrene	<5.00	ug/L		6/19/2013
Tetrachloroethene	<2.00	ug/L		6/19/2013
Toluene	<2.00	ug/L		6/19/2013
trans-1,2-Dichloroethene	<2.00	ug/L		6/19/2013
trans-1,3-Dichloropropene	<2.00	ug/L		6/19/2013
Trichloroethene	<2.00	ug/L		6/19/2013
Trichlorofluoromethane	<2.00	ug/L		6/19/2013
Vinyl chloride	<2.00	ug/L		6/19/2013

Method Reference(s): EPA 8260B
EPA 5030
Data File: X06136.D
QC Batch ID: voaw061913
QC Number: 1

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Report Prepared Friday, June 28, 2013

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 F AX (585) 647-3311

Client: Lu Engineers, Inc.

Client Job Site: Wilkins RV - SMP
Semi-Annual GW Sampling

Client Job No.:

Field Location: N/A
Field ID No.: N/A

Lab Project No.: 132206
Lab Sample No.: ICP LCS 6/24 w

Sample Type: Water

Date Sampled: N/A
Date Received: N/A

Laboratory Report for Metals Analysis in Water

Analyte	Date Analyzed	Method Blank mg/L	LCS Added mg/L	LCS Recovered mg/L	LCS Recovery %	LCS Dup Added mg/L	LCS Dup Recovered mg/L	LCS Dup Recovery %	LCS Dup Percent Difference %	Percent Difference Limits %	% Recovery Limits
Iron		< 0.100	2.50	2.39	95	2.50	2.29	91.6	4.06	20.0%	80.0% - 120%
Manganese		< 0.015	1.00	1.04	104	1.00	0.984	98.4	5.18	20.0%	80.0% - 120%

ELAP ID No.:10958

Comments: * - Outside QC limits

Approved By: _____
Bruce Hoogesteger, Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable Water

Client: Lu Engineers, Inc.

Client Job Site:	Wilkins RV - SMP Semi-Annual GW Sampling	**Lab Project Number:**	132206
		Lab Sample Number:	Blk 6/19
Client Job Number:	N/A		
Field Location:	N/A	**Date Sampled:**	N/A
Field ID Number:	N/A	**Date Received:**	N/A
Sample Type:	Water	**Date Analyzed:**	06/19/2013

Compound	Results in ug / L
Acetone	J B 6.34
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
1,4-Dioxane	< 20.0
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	J B 1.01
o-Xylene	< 2.00

ELAP Number 10958 Analytical Method: EPA 8260B Data File: X06136.D

Prep Method: EPA 5030

Comments: ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

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PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable Water

Client: Lu Engineers, Inc.

Client Job Site: Wilkins RV - SMP
Semi-Annual GW Sampling
Client Job Number: N/A
Field Location: N/A
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 132206
Lab Sample Number: LCS 6/19

Date Sampled: N/A
Date Received: N/A
Date Analyzed: 06/19/2013

SDG# : 2206-01

Spiked Compound	Blank Results in ug / L	LCS Spiked in ug / L	LCS Results in ug / L	LCS Percent Recovery	MSD Spiked in ug / L	MSD Results in ug / L	MSD Percent Recovery	MS / MSD % RPD
1,1-Dichloroethene	< 2.00	50.0	49.4	98.8	N/A	N/A	N/A	N/A
Benzene	< 0.700	50.0	47.6	95.2	N/A	N/A	N/A	N/A
Trichloroethene	< 2.00	50.0	49.2	98.4	N/A	N/A	N/A	N/A
Toluene	< 2.00	50.0	45.4	90.8	N/A	N/A	N/A	N/A
Chlorobenzene	< 2.00	50.0	46.4	92.8	N/A	N/A	N/A	N/A

ELAP Number 10958 Data File: X06136.D Data File: X06135.D Method: EPA 8260B

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Surrogate Recoveries

Client: Lu Engineers, Inc.

Client Job Site: Wilkins RV - SMP
Semi-Annual GW Sampling
Client Job Number: N/A

Lab Project Number: 132206
SDG Group: 2206-01

Date Sampled: 06/14/2013
Date Received: 06/14/2013
Date Analyzed: 06/19/2013

Sample Type: Water

Lab Sample Number	Field Number	Field Location	Pentafluorobenzene % Recovery	1,2-Dichloroethane-d4 % Recovery	Toluene-d8 % Recovery	4-BFB % Recovery
Blk 6/19	N/A	N/A	116	96.8	108	100
LCS 6/19	N/A	N/A	114	96.6	110	102
132206-01	N/A	MW-03_06-14-13	115	98.2	108	99.7
132206-02	N/A	MW-JCL-02_06-14-13	117	97.6	107	101
132206-03	N/A	MW-13_06-14-13	118	98.5	111	100
132206-04	N/A	MW-06_06-14-13	117	96.3	110	99.8

ELAP Number 10958

Method: EPA 8260B

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis QC Limits

Limits effective: May 29,2013
Through: Jun 30,2013

Spiked Compound	Soil Spike Limits		Soil % RPD Limits		Water Spike Limits		Water % RPD Limits	
	Lower %	Upper %	Lower %	Upper %	Lower %	Upper %	Lower %	Upper %
1,1-Dichloroethene	82.0	108	0	15.5	84.8	109	0	14.1
Benzene	83.2	107	0	12.1	84.3	103	0	10.0
Trichloroethene	85.0	105	0	11.8	86.4	103	0	9.77
Toluene	84.1	104	0	11.4	85.7	102	0	10.4
Chlorobenzene	83.5	104	0	13.7	84.4	103	0	10.2

Surrogate*	Soil Surrogate Limits				Water Surrogate Limits			
	Lower %	Upper %			Lower %	Upper %		
Pentafluorobenzene	80.0	120			80.0	120		
1,2-Dichloroethane-d4	80.0	120			80.0	120		
Toluene-D8	80.0	120			80.0	120		
4-Bromofluorobenzene	80.0	120			80.0	120		

ELAP Number 10958

Method: EPA 8260B

Note: When the lower acceptance limit is calculated to be below 10% recovery, a warning limit of 10% is established. Recoveries between the lower acceptance limit and the warning limit will be investigated, but will not invalidate the batch.

*Due to an equipment change, generic limits are being used for surrogates until enough data are collected to generate new limits

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"V" = Sample concentration is >10 times the spike. No meaningful Spike Recovery can be calculated.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

PARADIGM

REPORT TO:		INVOICE TO:		LAB PROJECT ID
CLIENT:	LaEngineers	CLIENT:		132206
ADDRESS:	175 Sullys Trail Suite 202	ADDRESS:	SAME	Quotation #:
CITY:	Pittsford STATE: NY ZIP: 14534	CITY: STATE: ZIP:		Email: edetweiler@laengineers.com
PHONE:		PHONE:		
ATTN:	Eric Detweiler	ATTN:		

PROJECT REFERENCE: Wilkins RV - SMP Semi-Annual GW Sampling

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TCL VOC 8260	Fe, Mn	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	6/14/13	11:40		X	MW-03_06-14-13	WA	3	2	1		01
2	6/14/13	12:00		X	MW-JCL-02_06-14-13	WA	3	2	1		02
3	6/14/13	13:15		X	MW-13_06-14-13	WA	3	2	1		03
4	6/14/13	13:50		X	MW-06_06-14-13	WA	3	2	1		04
5											
6											
7											
8											
9											
10											

Turnaround Time		Report Supplements		
Availability contingent upon lab approval; additional fees may apply.				
Standard 5 day	☐	Batch QC	☐	Basic EDD ☐
Rush 3 day	☐	Category A	☒	NYSDEC EDD ☒
Rush 2 day	☐	Category B	☐	
Rush 1 day	☐			
Other please indicate: 10 day TAT	☒	Other please indicate:	☐	Other EDD please indicate: ☐

Sampled By: Eric Detweiler / Laura Gregor — Date/Time: 6-14-13

Relinquished By: — Date/Time: 3:25 6/14/13

Received By: — Date/Time: 6/14/13 15:25

Received @ Lab By: Elizabeth A Honch — Date/Time: 6/14/13 1747

3°C iced @ 1612 6/14 from samples. Cooler delivered by LA. No custody seals N/A. EAH 6/14

Total Cost: $

P.I.F. ☐

2012

PARADIGM

Chain of Custody Supplement

Client: Lu Engineers **Completed by:** Mail

Lab Project ID: 132206 **Date:** 6/14/13

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		X metals
Comments	3°C iced @ 1612 6/14/13 from samples No custody seals, client delivered		
Sufficient Sample Quantity	X		
Comments			

PARADIGM

ENVIRONMENTAL SERVICES, INC

Analytical Report For

Lu Engineers, Inc.

For Lab Project ID

134478

Referencing

Wilkins RV - SMP Semi-Annual Groundwater Sampling

Prepared

Monday, December 02, 2013

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-JCL-02_11-21-13

Lab Sample ID: 134478-01 **Date Sampled:** 11/21/2013

Matrix: Groundwater **Date Received:** 11/21/2013

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**10.6**	mg/L		11/26/2013
Manganese	**2.71**	mg/L		11/26/2013

Method Reference(s): EPA 6010C
EPA 3005

Data File: 112613a

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-JCL-02_11-21-13
Lab Sample ID: 134478-01 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 100	ug/L		11/22/2013
1,1,2,2-Tetrachloroethane	< 100	ug/L		11/22/2013
1,1,2-Trichloroethane	< 100	ug/L		11/22/2013
1,1-Dichloroethane	< 100	ug/L		11/22/2013
1,1-Dichloroethene	< 100	ug/L		11/22/2013
1,2,3-Trichlorobenzene	< 250	ug/L		11/22/2013
1,2,4-Trichlorobenzene	< 250	ug/L		11/22/2013
1,2-Dibromo-3-Chloropropane	< 500	ug/L		11/22/2013
1,2-Dibromoethane	< 100	ug/L		11/22/2013
1,2-Dichlorobenzene	< 100	ug/L		11/22/2013
1,2-Dichloroethane	< 100	ug/L		11/22/2013
1,2-Dichloropropane	< 100	ug/L		11/22/2013
1,3-Dichlorobenzene	< 100	ug/L		11/22/2013
1,4-Dichlorobenzene	< 100	ug/L		11/22/2013
1,4-dioxane	< 1000	ug/L		11/22/2013
2-Butanone	< 500	ug/L		11/22/2013
2-Hexanone	< 250	ug/L		11/22/2013
4-Methyl-2-pentanone	< 250	ug/L		11/22/2013
Acetone	**626**	ug/L	B	11/22/2013
Benzene	< 35.0	ug/L		11/22/2013
Bromochloromethane	< 250	ug/L		11/22/2013
Bromodichloromethane	< 100	ug/L		11/22/2013
Bromoform	< 250	ug/L		11/22/2013
Bromomethane	< 100	ug/L		11/22/2013
Carbon disulfide	< 100	ug/L		11/22/2013
Carbon Tetrachloride	< 100	ug/L		11/22/2013
Chlorobenzene	< 100	ug/L		11/22/2013

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-JCL-02_11-21-13

Lab Sample ID: 134478-01 **Date Sampled:** 11/21/2013

Matrix: Groundwater **Date Received:** 11/21/2013

Chloroethane	< 100	ug/L	11/22/2013
Chloroform	< 100	ug/L	11/22/2013
Chloromethane	< 100	ug/L	11/22/2013
cis-1,2-Dichloroethene	**1800**	ug/L	11/22/2013
cis-1,3-Dichloropropene	< 100	ug/L	11/22/2013
Cyclohexane	< 500	ug/L	11/22/2013
Dibromochloromethane	< 100	ug/L	11/22/2013
Dichlorodifluoromethane	< 100	ug/L	11/22/2013
Ethylbenzene	< 100	ug/L	11/22/2013
Freon 113	< 100	ug/L	11/22/2013
Isopropylbenzene	< 100	ug/L	11/22/2013
m,p-Xylene	< 100	ug/L	11/22/2013
Methyl acetate	< 100	ug/L	11/22/2013
Methyl tert-butyl Ether	< 100	ug/L	11/22/2013
Methylcyclohexane	< 100	ug/L	11/22/2013
Methylene chloride	< 250	ug/L	11/22/2013
o-Xylene	< 100	ug/L	11/22/2013
Styrene	< 250	ug/L	11/22/2013
Tetrachloroethene	**659**	ug/L	11/22/2013
Toluene	< 100	ug/L	11/22/2013
trans-1,2-Dichloroethene	< 100	ug/L	11/22/2013
trans-1,3-Dichloropropene	< 100	ug/L	11/22/2013
Trichloroethene	**1900**	ug/L	11/22/2013
Trichlorofluoromethane	< 100	ug/L	11/22/2013
Vinyl chloride	< 100	ug/L	11/22/2013

Method Reference(s): EPA 8260C
EPA 5030

Data File: x09908.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-03_11-21-13
Lab Sample ID: 134478-02 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**1.74**	mg/L		11/26/2013
Manganese	**7.35**	mg/L		11/26/2013

Method Reference(s): EPA 6010C
EPA 3005
Data File: 112613a

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Report Prepared Monday, December 02, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-03_11-21-13
Lab Sample ID: 134478-02 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 200	ug/L		11/22/2013
1,1,2,2-Tetrachloroethane	< 200	ug/L		11/22/2013
1,1,2-Trichloroethane	< 200	ug/L		11/22/2013
1,1-Dichloroethane	< 200	ug/L		11/22/2013
1,1-Dichloroethene	< 200	ug/L		11/22/2013
1,2,3-Trichlorobenzene	< 500	ug/L		11/22/2013
1,2,4-Trichlorobenzene	< 500	ug/L		11/22/2013
1,2-Dibromo-3-Chloropropane	< 1000	ug/L		11/22/2013
1,2-Dibromoethane	< 200	ug/L		11/22/2013
1,2-Dichlorobenzene	< 200	ug/L		11/22/2013
1,2-Dichloroethane	< 200	ug/L		11/22/2013
1,2-Dichloropropane	< 200	ug/L		11/22/2013
1,3-Dichlorobenzene	< 200	ug/L		11/22/2013
1,4-Dichlorobenzene	< 200	ug/L		11/22/2013
1,4-dioxane	< 2000	ug/L		11/22/2013
2-Butanone	< 1000	ug/L		11/22/2013
2-Hexanone	< 500	ug/L		11/22/2013
4-Methyl-2-pentanone	< 500	ug/L		11/22/2013
Acetone	**1200**	ug/L	B	11/22/2013
Benzene	< 70.0	ug/L		11/22/2013
Bromochloromethane	< 500	ug/L		11/22/2013
Bromodichloromethane	< 200	ug/L		11/22/2013
Bromoform	< 500	ug/L		11/22/2013
Bromomethane	< 200	ug/L		11/22/2013
Carbon disulfide	< 200	ug/L		11/22/2013
Carbon Tetrachloride	< 200	ug/L		11/22/2013
Chlorobenzene	< 200	ug/L		11/22/2013

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-03_11-21-13

Lab Sample ID: 134478-02 **Date Sampled:** 11/21/2013

Matrix: Groundwater **Date Received:** 11/21/2013

Chloroethane	< 200	ug/L	11/22/2013
Chloroform	< 200	ug/L	11/22/2013
Chloromethane	< 200	ug/L	11/22/2013
cis-1,2-Dichloroethene	**7380**	ug/L	11/22/2013
cis-1,3-Dichloropropene	< 200	ug/L	11/22/2013
Cyclohexane	< 1000	ug/L	11/22/2013
Dibromochloromethane	< 200	ug/L	11/22/2013
Dichlorodifluoromethane	< 200	ug/L	11/22/2013
Ethylbenzene	< 200	ug/L	11/22/2013
Freon 113	< 200	ug/L	11/22/2013
Isopropylbenzene	< 200	ug/L	11/22/2013
m,p-Xylene	< 200	ug/L	11/22/2013
Methyl acetate	< 200	ug/L	11/22/2013
Methyl tert-butyl Ether	< 200	ug/L	11/22/2013
Methylcyclohexane	< 200	ug/L	11/22/2013
Methylene chloride	< 500	ug/L	11/22/2013
o-Xylene	< 200	ug/L	11/22/2013
Styrene	< 500	ug/L	11/22/2013
Tetrachloroethene	**14000**	ug/L	11/22/2013
Toluene	< 200	ug/L	11/22/2013
trans-1,2-Dichloroethene	< 200	ug/L	11/22/2013
trans-1,3-Dichloropropene	< 200	ug/L	11/22/2013
Trichloroethene	**6340**	ug/L	11/22/2013
Trichlorofluoromethane	< 200	ug/L	11/22/2013
Vinyl chloride	< 200	ug/L	11/22/2013

Method Reference(s): EPA 8260C
EPA 5030

Data File: x09909.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-06_11-21-13
Lab Sample ID: 134478-03 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**1.11**	mg/L		11/26/2013
Manganese	**1.47**	mg/L		11/26/2013

Method Reference(s): EPA 6010C
EPA 3005
Data File: 112613a

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-06_11-21-13
Lab Sample ID: 134478-03 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/22/2013
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/22/2013
1,1,2-Trichloroethane	< 2.00	ug/L		11/22/2013
1,1-Dichloroethane	< 2.00	ug/L		11/22/2013
1,1-Dichloroethene	< 2.00	ug/L		11/22/2013
1,2,3-Trichlorobenzene	< 5.00	ug/L		11/22/2013
1,2,4-Trichlorobenzene	< 5.00	ug/L		11/22/2013
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		11/22/2013
1,2-Dibromoethane	< 2.00	ug/L		11/22/2013
1,2-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,2-Dichloroethane	< 2.00	ug/L		11/22/2013
1,2-Dichloropropane	< 2.00	ug/L		11/22/2013
1,3-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,4-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,4-dioxane	< 20.0	ug/L		11/22/2013
2-Butanone	< 10.0	ug/L		11/22/2013
2-Hexanone	< 5.00	ug/L		11/22/2013
4-Methyl-2-pentanone	< 5.00	ug/L		11/22/2013
Acetone	< 10.0	ug/L		11/22/2013
Benzene	< 0.700	ug/L		11/22/2013
Bromochloromethane	< 5.00	ug/L		11/22/2013
Bromodichloromethane	< 2.00	ug/L		11/22/2013
Bromoform	< 5.00	ug/L		11/22/2013
Bromomethane	< 2.00	ug/L		11/22/2013
Carbon disulfide	< 2.00	ug/L		11/22/2013
Carbon Tetrachloride	< 2.00	ug/L		11/22/2013
Chlorobenzene	< 2.00	ug/L		11/22/2013

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-06_11-21-13
Lab Sample ID: 134478-03 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Chloroethane	< 2.00	ug/L		11/22/2013
Chloroform	< 2.00	ug/L		11/22/2013
Chloromethane	< 2.00	ug/L		11/22/2013
cis-1,2-Dichloroethene	< 2.00	ug/L		11/22/2013
cis-1,3-Dichloropropene	< 2.00	ug/L		11/22/2013
Cyclohexane	< 10.0	ug/L		11/22/2013
Dibromochloromethane	< 2.00	ug/L		11/22/2013
Dichlorodifluoromethane	**3.15**	ug/L		11/22/2013
Ethylbenzene	< 2.00	ug/L		11/22/2013
Freon 113	< 2.00	ug/L		11/22/2013
Isopropylbenzene	< 2.00	ug/L		11/22/2013
m,p-Xylene	< 2.00	ug/L		11/22/2013
Methyl acetate	< 2.00	ug/L		11/22/2013
Methyl tert-butyl Ether	< 2.00	ug/L		11/22/2013
Methylcyclohexane	< 2.00	ug/L		11/22/2013
Methylene chloride	< 5.00	ug/L		11/22/2013
o-Xylene	< 2.00	ug/L		11/22/2013
Styrene	< 5.00	ug/L		11/22/2013
Tetrachloroethene	**11.9**	ug/L		11/22/2013
Toluene	< 2.00	ug/L		11/22/2013
trans-1,2-Dichloroethene	< 2.00	ug/L		11/22/2013
trans-1,3-Dichloropropene	< 2.00	ug/L		11/22/2013
Trichloroethene	**1.78**	ug/L	J	11/22/2013
Trichlorofluoromethane	< 2.00	ug/L		11/22/2013
Vinyl chloride	< 2.00	ug/L		11/22/2013

Method Reference(s): EPA 8260C
EPA 5030
Data File: x09910.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-13_11-21-13
Lab Sample ID: 134478-04 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**6.13**	mg/L		11/26/2013
Manganese	**0.655**	mg/L		11/26/2013

Method Reference(s): EPA 6010C
EPA 3005
Data File: 112613a

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Report Prepared Monday, December 02, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-13_11-21-13
Lab Sample ID: 134478-04 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/22/2013
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/22/2013
1,1,2-Trichloroethane	< 2.00	ug/L		11/22/2013
1,1-Dichloroethane	< 2.00	ug/L		11/22/2013
1,1-Dichloroethene	< 2.00	ug/L		11/22/2013
1,2,3-Trichlorobenzene	< 5.00	ug/L		11/22/2013
1,2,4-Trichlorobenzene	< 5.00	ug/L		11/22/2013
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		11/22/2013
1,2-Dibromoethane	< 2.00	ug/L		11/22/2013
1,2-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,2-Dichloroethane	< 2.00	ug/L		11/22/2013
1,2-Dichloropropane	< 2.00	ug/L		11/22/2013
1,3-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,4-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,4-dioxane	< 20.0	ug/L		11/22/2013
2-Butanone	< 10.0	ug/L		11/22/2013
2-Hexanone	< 5.00	ug/L		11/22/2013
4-Methyl-2-pentanone	< 5.00	ug/L		11/22/2013
Acetone	< 10.0	ug/L		11/22/2013
Benzene	< 0.700	ug/L		11/22/2013
Bromochloromethane	< 5.00	ug/L		11/22/2013
Bromodichloromethane	< 2.00	ug/L		11/22/2013
Bromoform	< 5.00	ug/L		11/22/2013
Bromomethane	< 2.00	ug/L		11/22/2013
Carbon disulfide	< 2.00	ug/L		11/22/2013
Carbon Tetrachloride	< 2.00	ug/L		11/22/2013
Chlorobenzene	< 2.00	ug/L		11/22/2013

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: MW-13_11-21-13
Lab Sample ID: 134478-04 **Date Sampled:** 11/21/2013
Matrix: Groundwater **Date Received:** 11/21/2013

Chloroethane	< 2.00	ug/L	11/22/2013
Chloroform	< 2.00	ug/L	11/22/2013
Chloromethane	< 2.00	ug/L	11/22/2013
cis-1,2-Dichloroethene	< 2.00	ug/L	11/22/2013
cis-1,3-Dichloropropene	< 2.00	ug/L	11/22/2013
Cyclohexane	< 10.0	ug/L	11/22/2013
Dibromochloromethane	< 2.00	ug/L	11/22/2013
Dichlorodifluoromethane	< 2.00	ug/L	11/22/2013
Ethylbenzene	< 2.00	ug/L	11/22/2013
Freon 113	< 2.00	ug/L	11/22/2013
Isopropylbenzene	< 2.00	ug/L	11/22/2013
m,p-Xylene	< 2.00	ug/L	11/22/2013
Methyl acetate	< 2.00	ug/L	11/22/2013
Methyl tert-butyl Ether	< 2.00	ug/L	11/22/2013
Methylcyclohexane	< 2.00	ug/L	11/22/2013
Methylene chloride	< 5.00	ug/L	11/22/2013
o-Xylene	< 2.00	ug/L	11/22/2013
Styrene	< 5.00	ug/L	11/22/2013
Tetrachloroethene	< 2.00	ug/L	11/22/2013
Toluene	< 2.00	ug/L	11/22/2013
trans-1,2-Dichloroethene	< 2.00	ug/L	11/22/2013
trans-1,3-Dichloropropene	< 2.00	ug/L	11/22/2013
Trichloroethene	< 2.00	ug/L	11/22/2013
Trichlorofluoromethane	< 2.00	ug/L	11/22/2013
Vinyl chloride	< 2.00	ug/L	11/22/2013

Method Reference(s): EPA 8260C
EPA 5030
Data File: x09911.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: Trip Blank_11-21-13
Lab Sample ID: 134478-05 **Date Sampled:** 11/21/2013
Matrix: Water **Date Received:** 11/21/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		11/22/2013
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		11/22/2013
1,1,2-Trichloroethane	< 2.00	ug/L		11/22/2013
1,1-Dichloroethane	< 2.00	ug/L		11/22/2013
1,1-Dichloroethene	< 2.00	ug/L		11/22/2013
1,2,3-Trichlorobenzene	< 5.00	ug/L		11/22/2013
1,2,4-Trichlorobenzene	< 5.00	ug/L		11/22/2013
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		11/22/2013
1,2-Dibromoethane	< 2.00	ug/L		11/22/2013
1,2-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,2-Dichloroethane	< 2.00	ug/L		11/22/2013
1,2-Dichloropropane	< 2.00	ug/L		11/22/2013
1,3-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,4-Dichlorobenzene	< 2.00	ug/L		11/22/2013
1,4-dioxane	< 20.0	ug/L		11/22/2013
2-Butanone	< 10.0	ug/L		11/22/2013
2-Hexanone	< 5.00	ug/L		11/22/2013
4-Methyl-2-pentanone	< 5.00	ug/L		11/22/2013
Acetone	< 10.0	ug/L		11/22/2013
Benzene	< 0.700	ug/L		11/22/2013
Bromochloromethane	< 5.00	ug/L		11/22/2013
Bromodichloromethane	< 2.00	ug/L		11/22/2013
Bromoform	< 5.00	ug/L		11/22/2013
Bromomethane	< 2.00	ug/L		11/22/2013
Carbon disulfide	< 2.00	ug/L		11/22/2013
Carbon Tetrachloride	< 2.00	ug/L		11/22/2013
Chlorobenzene	< 2.00	ug/L		11/22/2013

Lab Project ID: 134478

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Sample Identifier: Trip Blank_11-21-13
Lab Sample ID: 134478-05 **Date Sampled:** 11/21/2013
Matrix: Water **Date Received:** 11/21/2013

Chloroethane	< 2.00	ug/L	11/22/2013
Chloroform	< 2.00	ug/L	11/22/2013
Chloromethane	< 2.00	ug/L	11/22/2013
cis-1,2-Dichloroethene	< 2.00	ug/L	11/22/2013
cis-1,3-Dichloropropene	< 2.00	ug/L	11/22/2013
Cyclohexane	< 10.0	ug/L	11/22/2013
Dibromochloromethane	< 2.00	ug/L	11/22/2013
Dichlorodifluoromethane	< 2.00	ug/L	11/22/2013
Ethylbenzene	< 2.00	ug/L	11/22/2013
Freon 113	< 2.00	ug/L	11/22/2013
Isopropylbenzene	< 2.00	ug/L	11/22/2013
m,p-Xylene	< 2.00	ug/L	11/22/2013
Methyl acetate	< 2.00	ug/L	11/22/2013
Methyl tert-butyl Ether	< 2.00	ug/L	11/22/2013
Methylcyclohexane	< 2.00	ug/L	11/22/2013
Methylene chloride	< 5.00	ug/L	11/22/2013
o-Xylene	< 2.00	ug/L	11/22/2013
Styrene	< 5.00	ug/L	11/22/2013
Tetrachloroethene	< 2.00	ug/L	11/22/2013
Toluene	< 2.00	ug/L	11/22/2013
trans-1,2-Dichloroethene	< 2.00	ug/L	11/22/2013
trans-1,3-Dichloropropene	< 2.00	ug/L	11/22/2013
Trichloroethene	< 2.00	ug/L	11/22/2013
Trichlorofluoromethane	< 2.00	ug/L	11/22/2013
Vinyl chloride	< 2.00	ug/L	11/22/2013

Method Reference(s): EPA 8260C
EPA 5030
Data File: x09907.D

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Lab Project ID: 134478

SDG #: 4478-01

Matrix: Groundwater

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	<0.100	mg/L		11/26/2013
Manganese	<0.0150	mg/L		11/26/2013

Method Reference(s): EPA 6010C
EPA 3005

Data File: 112613a

QC Batch ID: QC131125waters

QC Number: 1

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, November 27, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Lu Engineers, Inc.
Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling
Lab Project ID: 134478
SDG #: 4478-01
Matrix: Groundwater

Metals

Analyte	LCS Added	LCSD Added	Spike Units	LCS Result	LCSD Result	LCS % Recovery	LCSD % Recovery	% Rec Limits	LCS Outliers	LCSD Outliers	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Iron	2.50	2.50	mg/L	2.45	2.47	98.1	98.9	85 - 115			0.830	20		11/26/2013
Manganese	1.00	1.00	mg/L	0.982	0.979	98.2	97.9	85 - 115			0.347	20		11/26/2013

Method Reference(s): EPA 6010C
EPA 3005
Data File: 112613a
QC Number: 1
QC Batch ID: QC131125waters

Report Prepared Wednesday, November 27, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Sample Spike and Sample Duplicate

SDG #: 4478-01
Lab Project ID: 134478

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Lab Sample ID: 134478-04
Sample Identifier: MW-13_11-21-13
Matrix: Groundwater

Date Sampled: 11/21/2013
Date Received: 11/21/2013

Metals

Analyte	Sample Results	Result Units	Spike Added	Spike Result	Spike % Recovery	% Rec Limits	Spike Outliers	Duplicate Result	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Iron	**6.13**	mg/L	2.50	8.44	92.2	75 - 125		6.13	0.0137	20		11/26/2013
Manganese	**0.655**	mg/L	1.00	1.64	98.9	75 - 125		0.667	1.85	20		11/26/2013

Method Reference(s): EPA 6010C
EPA 3005
112613a

QC Batch ID: QC131125waters

NC = Not Calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added.

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Report Prepared Wednesday, November 27, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Lab Project ID: 134478

SDG #: 4478-01

Matrix: Groundwater

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	<2.00	ug/L		11/22/2013
1,1,2,2-Tetrachloroethane	<2.00	ug/L		11/22/2013
1,1,2-Trichloroethane	<2.00	ug/L		11/22/2013
1,1-Dichloroethane	<2.00	ug/L		11/22/2013
1,1-Dichloroethene	<2.00	ug/L		11/22/2013
1,2,3-Trichlorobenzene	<5.00	ug/L		11/22/2013
1,2,4-Trichlorobenzene	<5.00	ug/L		11/22/2013
1,2-Dibromo-3-Chloropropane	<10.0	ug/L		11/22/2013
1,2-Dibromoethane	<2.00	ug/L		11/22/2013
1,2-Dichlorobenzene	<2.00	ug/L		11/22/2013
1,2-Dichloroethane	<2.00	ug/L		11/22/2013
1,2-Dichloropropane	<2.00	ug/L		11/22/2013
1,3-Dichlorobenzene	<2.00	ug/L		11/22/2013
1,4-Dichlorobenzene	<2.00	ug/L		11/22/2013
1,4-dioxane	<20.0	ug/L		11/22/2013
2-Butanone	<10.0	ug/L		11/22/2013
2-Hexanone	<5.00	ug/L		11/22/2013
4-Methyl-2-pentanone	<5.00	ug/L		11/22/2013
Acetone	**21.2**	ug/L		11/22/2013
Benzene	<0.700	ug/L		11/22/2013
Bromochloromethane	<5.00	ug/L		11/22/2013
Bromodichloromethane	<2.00	ug/L		11/22/2013
Bromoform	<5.00	ug/L		11/22/2013
Bromomethane	<2.00	ug/L		11/22/2013
Carbon disulfide	<2.00	ug/L		11/22/2013
Carbon Tetrachloride	<2.00	ug/L		11/22/2013
Chlorobenzene	<2.00	ug/L		11/22/2013
Chloroethane	<2.00	ug/L		11/22/2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: Lu Engineers, Inc.

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Lab Project ID: 134478

SDG #: 4478-01

Matrix: Groundwater

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Chloroform	<2.00	ug/L		11/22/2013
Chloromethane	<2.00	ug/L		11/22/2013
cis-1,2-Dichloroethene	<2.00	ug/L		11/22/2013
cis-1,3-Dichloropropene	<2.00	ug/L		11/22/2013
Cyclohexane	<10.0	ug/L		11/22/2013
Dibromochloromethane	<2.00	ug/L		11/22/2013
Dichlorodifluoromethane	<2.00	ug/L		11/22/2013
Ethylbenzene	<2.00	ug/L		11/22/2013
Freon 113	<2.00	ug/L		11/22/2013
Isopropylbenzene	<2.00	ug/L		11/22/2013
m,p-Xylene	<2.00	ug/L		11/22/2013
Methyl acetate	<2.00	ug/L		11/22/2013
Methyl tert-butyl Ether	<2.00	ug/L		11/22/2013
Methylcyclohexane	<2.00	ug/L		11/22/2013
Methylene chloride	<5.00	ug/L		11/22/2013
o-Xylene	<2.00	ug/L		11/22/2013
Styrene	<5.00	ug/L		11/22/2013
Tetrachloroethene	<2.00	ug/L		11/22/2013
Toluene	<2.00	ug/L		11/22/2013
trans-1,2-Dichloroethene	<2.00	ug/L		11/22/2013
trans-1,3-Dichloropropene	<2.00	ug/L		11/22/2013
Trichloroethene	<2.00	ug/L		11/22/2013
Trichlorofluoromethane	<2.00	ug/L		11/22/2013
Vinyl chloride	<2.00	ug/L		11/22/2013

Method Reference(s): EPA 8260C
EPA 5030

Data File: x09906.D

QC Batch ID: voaw112213

QC Number: 1

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, December 02, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: Lu Engineers, Inc.
Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling
Lab Project ID: 134478
SDG #: 4478-01
Matrix: Groundwater

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
1,1,1-Trichloroethane	50.0	ug/L	59.8	120	73.8 - 118.4	*	11/22/2013
1,1,2,2-Tetrachloroethane	50.0	ug/L	52.8	106	80.8 - 117.8		11/22/2013
1,1,2-Trichloroethane	50.0	ug/L	49.8	99.6	77.3 - 109.8		11/22/2013
1,1-Dichloroethane	50.0	ug/L	53.9	108	74.6 - 112.3		11/22/2013
1,1-Dichloroethene	50.0	ug/L	58.1	116	66.1 - 117.1		11/22/2013
1,2-Dichlorobenzene	50.0	ug/L	51.9	104	79.5 - 108.2		11/22/2013
1,2-Dichloroethane	50.0	ug/L	58.6	117	71.3 - 120.3		11/22/2013
1,2-Dichloropropane	50.0	ug/L	53.3	107	78.3 - 105.9	*	11/22/2013
1,3-Dichlorobenzene	50.0	ug/L	51.9	104	79.7 - 106.2		11/22/2013
1,4-Dichlorobenzene	50.0	ug/L	51.5	103	77.8 - 103.4		11/22/2013
Benzene	50.0	ug/L	53.8	108	83.8 - 109.8		11/22/2013
Bromodichloromethane	50.0	ug/L	58.4	117	80.7 - 119.8		11/22/2013
Bromoform	50.0	ug/L	55.0	110	76.2 - 121		11/22/2013
Bromomethane	50.0	ug/L	42.0	84.0	41.4 - 156.7		11/22/2013
Carbon Tetrachloride	50.0	ug/L	61.6	123	72.3 - 123.6		11/22/2013

Report Prepared Monday, December 02, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Lab Project ID: 134478

SDG #: 4478-01

Matrix: Groundwater

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Chlorobenzene	50.0	ug/L	51.3	103	80.8 - 104.3		11/22/2013
Chloroethane	50.0	ug/L	55.5	111	77.6 - 121.5		11/22/2013
Chloroform	50.0	ug/L	56.1	112	76.6 - 111.1	*	11/22/2013
Chloromethane	50.0	ug/L	59.8	120	80.6 - 135.8		11/22/2013
cis-1,3-Dichloropropene	50.0	ug/L	56.1	112	85.2 - 114.3		11/22/2013
Dibromochloromethane	50.0	ug/L	56.9	114	80.3 - 125.5		11/22/2013
Ethylbenzene	50.0	ug/L	54.3	109	82.4 - 107.9	*	11/22/2013
Methylene chloride	50.0	ug/L	55.8	112	75.7 - 114.7		11/22/2013
Tetrachloroethene	50.0	ug/L	53.9	108	74.9 - 119.8		11/22/2013
Toluene	50.0	ug/L	53.8	108	81.6 - 110.3		11/22/2013
trans-1,2-Dichloroethene	50.0	ug/L	58.1	116	75.3 - 114.5	*	11/22/2013
trans-1,3-Dichloropropene	50.0	ug/L	58.3	117	76.5 - 124.2		11/22/2013
Trichloroethene	50.0	ug/L	54.4	109	81.7 - 111.6		11/22/2013
Trichlorofluoromethane	50.0	ug/L	61.1	122	69.1 - 131		11/22/2013
Vinyl chloride	50.0	ug/L	53.2	106	63.8 - 132.8		11/22/2013

Report Prepared Monday, December 02, 2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - SMP Semi-Annual Groundwater Sampling

Lab Project ID: 134478

SDG #: 4478-01

Matrix: Groundwater

Volatile Organics

Analyte		Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Method Reference(s):	EPA 8260C EPA 5030							
Data File:	x09905.D							
QC Number:	1							
QC Batch ID:	voaw112213							

Several marginal QC outliers; affected compounds were not detected in samples.

Report Prepared Monday, December 02, 2013

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:

CLIENT: LaEngineers
ADDRESS: 175 Sully's Trail Suite 202
CITY: Pittsford STATE: NY ZIP: 14534
PHONE: 385-7417 ext 227
ATTN: Eric Detweiler

INVOICE TO:

CLIENT:
ADDRESS:
CITY: SAME STATE: ZIP:
PHONE:
ATTN:

LAB PROJECT ID: 134478
Quotation #: MS020310A
Email: edetweiler@laengineers.com

PROJECT REFERENCE: WILKINS RV - SMP
Semi-annual Groundwater Sampling

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TCL VOCs 8260	Fe, Mn	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	11/21/13	11:30		X	MW-JCL-02_11-21-13	WG	3	2	1		01
2	11/21/13	11:10		X	MW-03_11-21-13		3	2	1		02
3	11/21/13	13:25		X	MW-06_11-21-13		3	2	1		03
4	11/21/13	12:10		X	MW-13_11-21-13		3	2	1		04
5					TRIP BLANK_11-21-13	WA	1	X			05
6											
7											
8											
9											
10										5°C iced hand delivered on 11/21/13 @ 1528	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☒	NYSDEC EDD	☒
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate: 10 Day TAT		please indicate:		please indicate:	

Eric Detweiler / Sara Kashtan 11-21-13
Sampled By — Date/Time

Eric Detweiler 11/21/13 3:07
Relinquished By — Date/Time

11/21/13 1507
Received By — Date/Time

11/21/13 1530
Received @ Lab By — Date/Time

Total Cost:

P.I.F.

Chain of Custody Supplement

Client: Lu Eng **Completed by:** SSC

Lab Project ID: 134478 **Date:** 11/21/13

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X		
Comments	P3, 2V		
Transferred to method-compliant container			X
Headspace (<1 mL)	X VOA		X
Comments			
Preservation	X		
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		X Metals
Comments	5°C iced delivd by hand on 11/21/13 @ 1528		
Sufficient Sample Quantity	X		
Comments			

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-JCL-02_06-19-14

Lab Sample ID: 142587-01 **Date Sampled:** 6/19/2014

Matrix: Groundwater **Date Received:** 6/19/2014

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**4.63**	mg/L		6/23/2014
Manganese	**2.19**	mg/L		6/23/2014

Method Reference(s): EPA 6010C
EPA 3005

Data File: 062314b

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, June 30, 2014

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-JCL-02_06-19-14

Lab Sample ID: 142587-01 **Date Sampled:** 6/19/2014

Matrix: Groundwater **Date Received:** 6/19/2014

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 100	ug/L		6/23/2014
1,1,2,2-Tetrachloroethane	< 100	ug/L		6/23/2014
1,1,2-Trichloroethane	< 100	ug/L		6/23/2014
1,1-Dichloroethane	< 100	ug/L		6/23/2014
1,1-Dichloroethene	< 100	ug/L		6/23/2014
1,2,3-Trichlorobenzene	< 250	ug/L		6/23/2014
1,2,4-Trichlorobenzene	< 250	ug/L		6/23/2014
1,2-Dibromo-3-Chloropropane	< 500	ug/L		6/23/2014
1,2-Dibromoethane	< 100	ug/L		6/23/2014
1,2-Dichlorobenzene	< 100	ug/L		6/23/2014
1,2-Dichloroethane	< 100	ug/L		6/23/2014
1,2-Dichloropropane	< 100	ug/L		6/23/2014
1,3-Dichlorobenzene	< 100	ug/L		6/23/2014
1,4-Dichlorobenzene	< 100	ug/L		6/23/2014
1,4-dioxane	< 1000	ug/L		6/23/2014
2-Butanone	< 500	ug/L		6/23/2014
2-Hexanone	< 250	ug/L		6/23/2014
4-Methyl-2-pentanone	< 250	ug/L		6/23/2014
Acetone	< 500	ug/L		6/23/2014
Benzene	< 35.0	ug/L		6/23/2014
Bromochloromethane	< 250	ug/L		6/23/2014
Bromodichloromethane	< 100	ug/L		6/23/2014
Bromoform	< 250	ug/L		6/23/2014
Bromomethane	< 100	ug/L		6/23/2014
Carbon disulfide	< 100	ug/L		6/23/2014
Carbon Tetrachloride	< 100	ug/L		6/23/2014
Chlorobenzene	< 100	ug/L		6/23/2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-JCL-02_06-19-14

Lab Sample ID: 142587-01 **Date Sampled:** 6/19/2014

Matrix: Groundwater **Date Received:** 6/19/2014

Chloroethane	< 100	ug/L	6/23/2014
Chloroform	< 100	ug/L	6/23/2014
Chloromethane	< 100	ug/L	6/23/2014
cis-1,2-Dichloroethene	**3030**	ug/L	6/23/2014
cis-1,3-Dichloropropene	< 100	ug/L	6/23/2014
Cyclohexane	< 500	ug/L	6/23/2014
Dibromochloromethane	< 100	ug/L	6/23/2014
Dichlorodifluoromethane	< 100	ug/L	6/23/2014
Ethylbenzene	< 100	ug/L	6/23/2014
Freon 113	< 100	ug/L	6/23/2014
Isopropylbenzene	< 100	ug/L	6/23/2014
m,p-Xylene	< 100	ug/L	6/23/2014
Methyl acetate	< 100	ug/L	6/23/2014
Methyl tert-butyl Ether	< 100	ug/L	6/23/2014
Methylcyclohexane	< 100	ug/L	6/23/2014
Methylene chloride	< 250	ug/L	6/23/2014
o-Xylene	< 100	ug/L	6/23/2014
Styrene	< 250	ug/L	6/23/2014
Tetrachloroethene	**1910**	ug/L	6/23/2014
Toluene	< 100	ug/L	6/23/2014
trans-1,2-Dichloroethene	< 100	ug/L	6/23/2014
trans-1,3-Dichloropropene	< 100	ug/L	6/23/2014
Trichloroethene	**2770**	ug/L	6/23/2014
Trichlorofluoromethane	< 100	ug/L	6/23/2014
Vinyl chloride	< 100	ug/L	6/23/2014

Method Reference(s): EPA 8260C
EPA 5030

Data File: x14378.D

Report Prepared Monday, June 30, 2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-03_06-19-14
Lab Sample ID: 142587-02 **Date Sampled:** 6/19/2014
Matrix: Groundwater **Date Received:** 6/19/2014

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**0.789**	mg/L		6/23/2014
Manganese	**3.35**	mg/L		6/23/2014

Method Reference(s): EPA 6010C
EPA 3005
Data File: 062314b

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Report Prepared Monday, June 30, 2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-03_06-19-14
Lab Sample ID: 142587-02 **Date Sampled:** 6/19/2014
Matrix: Groundwater **Date Received:** 6/19/2014

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 200	ug/L		6/23/2014
1,1,2,2-Tetrachloroethane	< 200	ug/L		6/23/2014
1,1,2-Trichloroethane	< 200	ug/L		6/23/2014
1,1-Dichloroethane	< 200	ug/L		6/23/2014
1,1-Dichloroethene	< 200	ug/L		6/23/2014
1,2,3-Trichlorobenzene	< 500	ug/L		6/23/2014
1,2,4-Trichlorobenzene	< 500	ug/L		6/23/2014
1,2-Dibromo-3-Chloropropane	< 1000	ug/L		6/23/2014
1,2-Dibromoethane	< 200	ug/L		6/23/2014
1,2-Dichlorobenzene	< 200	ug/L		6/23/2014
1,2-Dichloroethane	< 200	ug/L		6/23/2014
1,2-Dichloropropane	< 200	ug/L		6/23/2014
1,3-Dichlorobenzene	< 200	ug/L		6/23/2014
1,4-Dichlorobenzene	< 200	ug/L		6/23/2014
1,4-dioxane	< 2000	ug/L		6/23/2014
2-Butanone	< 1000	ug/L		6/23/2014
2-Hexanone	< 500	ug/L		6/23/2014
4-Methyl-2-pentanone	< 500	ug/L		6/23/2014
Acetone	< 1000	ug/L		6/23/2014
Benzene	< 70.0	ug/L		6/23/2014
Bromochloromethane	< 500	ug/L		6/23/2014
Bromodichloromethane	< 200	ug/L		6/23/2014
Bromoform	< 500	ug/L		6/23/2014
Bromomethane	< 200	ug/L		6/23/2014
Carbon disulfide	< 200	ug/L		6/23/2014
Carbon Tetrachloride	< 200	ug/L		6/23/2014
Chlorobenzene	< 200	ug/L		6/23/2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-03_06-19-14
Lab Sample ID: 142587-02 **Date Sampled:** 6/19/2014
Matrix: Groundwater **Date Received:** 6/19/2014

Chloroethane	< 200	ug/L	6/23/2014
Chloroform	< 200	ug/L	6/23/2014
Chloromethane	< 200	ug/L	6/23/2014
cis-1,2-Dichloroethene	**6150**	ug/L	6/23/2014
cis-1,3-Dichloropropene	< 200	ug/L	6/23/2014
Cyclohexane	< 1000	ug/L	6/23/2014
Dibromochloromethane	< 200	ug/L	6/23/2014
Dichlorodifluoromethane	< 200	ug/L	6/23/2014
Ethylbenzene	< 200	ug/L	6/23/2014
Freon 113	< 200	ug/L	6/23/2014
Isopropylbenzene	< 200	ug/L	6/23/2014
m,p-Xylene	< 200	ug/L	6/23/2014
Methyl acetate	< 200	ug/L	6/23/2014
Methyl tert-butyl Ether	< 200	ug/L	6/23/2014
Methylcyclohexane	< 200	ug/L	6/23/2014
Methylene chloride	< 500	ug/L	6/23/2014
o-Xylene	< 200	ug/L	6/23/2014
Styrene	< 500	ug/L	6/23/2014
Tetrachloroethene	**7530**	ug/L	6/23/2014
Toluene	< 200	ug/L	6/23/2014
trans-1,2-Dichloroethene	< 200	ug/L	6/23/2014
trans-1,3-Dichloropropene	< 200	ug/L	6/23/2014
Trichloroethene	**6930**	ug/L	6/23/2014
Trichlorofluoromethane	< 200	ug/L	6/23/2014
Vinyl chloride	< 200	ug/L	6/23/2014

Method Reference(s): EPA 8260C
EPA 5030
Data File: x14377.D

Report Prepared Monday, June 30, 2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-13_06-19-14
Lab Sample ID: 142587-03 **Date Sampled:** 6/19/2014
Matrix: Groundwater **Date Received:** 6/19/2014

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**1.39**	mg/L		6/23/2014
Manganese	**0.574**	mg/L		6/23/2014

Method Reference(s): EPA 6010C
EPA 3005
Data File: 062314b

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Report Prepared Monday, June 30, 2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-13_06-19-14

Lab Sample ID: 142587-03 **Date Sampled:** 6/19/2014

Matrix: Groundwater **Date Received:** 6/19/2014

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/23/2014
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/23/2014
1,1,2-Trichloroethane	< 2.00	ug/L		6/23/2014
1,1-Dichloroethane	< 2.00	ug/L		6/23/2014
1,1-Dichloroethene	< 2.00	ug/L		6/23/2014
1,2,3-Trichlorobenzene	< 5.00	ug/L		6/23/2014
1,2,4-Trichlorobenzene	< 5.00	ug/L		6/23/2014
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		6/23/2014
1,2-Dibromoethane	< 2.00	ug/L		6/23/2014
1,2-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,2-Dichloroethane	< 2.00	ug/L		6/23/2014
1,2-Dichloropropane	< 2.00	ug/L		6/23/2014
1,3-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,4-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,4-dioxane	< 20.0	ug/L		6/23/2014
2-Butanone	< 10.0	ug/L		6/23/2014
2-Hexanone	< 5.00	ug/L		6/23/2014
4-Methyl-2-pentanone	< 5.00	ug/L		6/23/2014
Acetone	< 10.0	ug/L		6/23/2014
Benzene	< 0.700	ug/L		6/23/2014
Bromochloromethane	< 5.00	ug/L		6/23/2014
Bromodichloromethane	< 2.00	ug/L		6/23/2014
Bromoform	< 5.00	ug/L		6/23/2014
Bromomethane	< 2.00	ug/L		6/23/2014
Carbon disulfide	< 2.00	ug/L		6/23/2014
Carbon Tetrachloride	< 2.00	ug/L		6/23/2014
Chlorobenzene	< 2.00	ug/L		6/23/2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-13_06-19-14

Lab Sample ID: 142587-03 **Date Sampled:** 6/19/2014

Matrix: Groundwater **Date Received:** 6/19/2014

Chloroethane	< 2.00	ug/L	6/23/2014
Chloroform	< 2.00	ug/L	6/23/2014
Chloromethane	< 2.00	ug/L	6/23/2014
cis-1,2-Dichloroethene	< 2.00	ug/L	6/23/2014
cis-1,3-Dichloropropene	< 2.00	ug/L	6/23/2014
Cyclohexane	< 10.0	ug/L	6/23/2014
Dibromochloromethane	< 2.00	ug/L	6/23/2014
Dichlorodifluoromethane	< 2.00	ug/L	6/23/2014
Ethylbenzene	< 2.00	ug/L	6/23/2014
Freon 113	< 2.00	ug/L	6/23/2014
Isopropylbenzene	< 2.00	ug/L	6/23/2014
m,p-Xylene	< 2.00	ug/L	6/23/2014
Methyl acetate	< 2.00	ug/L	6/23/2014
Methyl tert-butyl Ether	< 2.00	ug/L	6/23/2014
Methylcyclohexane	< 2.00	ug/L	6/23/2014
Methylene chloride	< 5.00	ug/L	6/23/2014
o-Xylene	< 2.00	ug/L	6/23/2014
Styrene	< 5.00	ug/L	6/23/2014
Tetrachloroethene	< 2.00	ug/L	6/23/2014
Toluene	< 2.00	ug/L	6/23/2014
trans-1,2-Dichloroethene	< 2.00	ug/L	6/23/2014
trans-1,3-Dichloropropene	< 2.00	ug/L	6/23/2014
Trichloroethene	< 2.00	ug/L	6/23/2014
Trichlorofluoromethane	< 2.00	ug/L	6/23/2014
Vinyl chloride	< 2.00	ug/L	6/23/2014

Method Reference(s): EPA 8260C
EPA 5030

Data File: x14376.D

Report Prepared Monday, June 30, 2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-06_06-19-14
Lab Sample ID: 142587-04 **Date Sampled:** 6/19/2014
Matrix: Groundwater **Date Received:** 6/19/2014

Metals

Analyte	Result	Units	Qualifier	Date Analyzed
Iron	**0.102**	mg/L	D	6/23/2014
Manganese	**0.160**	mg/L		6/23/2014

Method Reference(s): EPA 6010C
EPA 3005
Data File: 062314b

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Report Prepared Monday, June 30, 2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-06_06-19-14
Lab Sample ID: 142587-04 **Date Sampled:** 6/19/2014
Matrix: Groundwater **Date Received:** 6/19/2014

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/23/2014
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/23/2014
1,1,2-Trichloroethane	< 2.00	ug/L		6/23/2014
1,1-Dichloroethane	< 2.00	ug/L		6/23/2014
1,1-Dichloroethene	< 2.00	ug/L		6/23/2014
1,2,3-Trichlorobenzene	< 5.00	ug/L		6/23/2014
1,2,4-Trichlorobenzene	< 5.00	ug/L		6/23/2014
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		6/23/2014
1,2-Dibromoethane	< 2.00	ug/L		6/23/2014
1,2-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,2-Dichloroethane	< 2.00	ug/L		6/23/2014
1,2-Dichloropropane	< 2.00	ug/L		6/23/2014
1,3-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,4-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,4-dioxane	< 20.0	ug/L		6/23/2014
2-Butanone	< 10.0	ug/L		6/23/2014
2-Hexanone	< 5.00	ug/L		6/23/2014
4-Methyl-2-pentanone	< 5.00	ug/L		6/23/2014
Acetone	< 10.0	ug/L		6/23/2014
Benzene	< 0.700	ug/L		6/23/2014
Bromochloromethane	< 5.00	ug/L		6/23/2014
Bromodichloromethane	< 2.00	ug/L		6/23/2014
Bromoform	< 5.00	ug/L		6/23/2014
Bromomethane	< 2.00	ug/L		6/23/2014
Carbon disulfide	< 2.00	ug/L		6/23/2014
Carbon Tetrachloride	< 2.00	ug/L		6/23/2014
Chlorobenzene	< 2.00	ug/L		6/23/2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: MW-06_06-19-14

Lab Sample ID: 142587-04 **Date Sampled:** 6/19/2014

Matrix: Groundwater **Date Received:** 6/19/2014

Chloroethane	< 2.00	ug/L		6/23/2014
Chloroform	< 2.00	ug/L		6/23/2014
Chloromethane	< 2.00	ug/L		6/23/2014
cis-1,2-Dichloroethene	< 2.00	ug/L		6/23/2014
cis-1,3-Dichloropropene	< 2.00	ug/L		6/23/2014
Cyclohexane	< 10.0	ug/L		6/23/2014
Dibromochloromethane	< 2.00	ug/L		6/23/2014
Dichlorodifluoromethane	**4.01**	ug/L		6/23/2014
Ethylbenzene	< 2.00	ug/L		6/23/2014
Freon 113	< 2.00	ug/L		6/23/2014
Isopropylbenzene	< 2.00	ug/L		6/23/2014
m,p-Xylene	< 2.00	ug/L		6/23/2014
Methyl acetate	< 2.00	ug/L		6/23/2014
Methyl tert-butyl Ether	< 2.00	ug/L		6/23/2014
Methylcyclohexane	< 2.00	ug/L		6/23/2014
Methylene chloride	< 5.00	ug/L		6/23/2014
o-Xylene	< 2.00	ug/L		6/23/2014
Styrene	< 5.00	ug/L		6/23/2014
Tetrachloroethene	**9.01**	ug/L		6/23/2014
Toluene	< 2.00	ug/L		6/23/2014
trans-1,2-Dichloroethene	< 2.00	ug/L		6/23/2014
trans-1,3-Dichloropropene	< 2.00	ug/L		6/23/2014
Trichloroethene	**1.47**	ug/L	J	6/23/2014
Trichlorofluoromethane	< 2.00	ug/L		6/23/2014
Vinyl chloride	< 2.00	ug/L		6/23/2014

Method Reference(s): EPA 8260C
EPA 5030

Data File: x14375.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: Trip Blank T-511
Lab Sample ID: 142587-05 **Date Sampled:** 6/19/2014
Matrix: Water **Date Received:** 6/19/2014

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.00	ug/L		6/23/2014
1,1,2,2-Tetrachloroethane	< 2.00	ug/L		6/23/2014
1,1,2-Trichloroethane	< 2.00	ug/L		6/23/2014
1,1-Dichloroethane	< 2.00	ug/L		6/23/2014
1,1-Dichloroethene	< 2.00	ug/L		6/23/2014
1,2,3-Trichlorobenzene	< 5.00	ug/L		6/23/2014
1,2,4-Trichlorobenzene	< 5.00	ug/L		6/23/2014
1,2-Dibromo-3-Chloropropane	< 10.0	ug/L		6/23/2014
1,2-Dibromoethane	< 2.00	ug/L		6/23/2014
1,2-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,2-Dichloroethane	< 2.00	ug/L		6/23/2014
1,2-Dichloropropane	< 2.00	ug/L		6/23/2014
1,3-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,4-Dichlorobenzene	< 2.00	ug/L		6/23/2014
1,4-dioxane	< 20.0	ug/L		6/23/2014
2-Butanone	< 10.0	ug/L		6/23/2014
2-Hexanone	< 5.00	ug/L		6/23/2014
4-Methyl-2-pentanone	< 5.00	ug/L		6/23/2014
Acetone	< 10.0	ug/L		6/23/2014
Benzene	< 0.700	ug/L		6/23/2014
Bromochloromethane	< 5.00	ug/L		6/23/2014
Bromodichloromethane	< 2.00	ug/L		6/23/2014
Bromoform	< 5.00	ug/L		6/23/2014
Bromomethane	< 2.00	ug/L		6/23/2014
Carbon disulfide	< 2.00	ug/L		6/23/2014
Carbon Tetrachloride	< 2.00	ug/L		6/23/2014
Chlorobenzene	< 2.00	ug/L		6/23/2014

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 142587

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV Semi-Annual Groundwater Sampling

Sample Identifier: Trip Blank T-511
Lab Sample ID: 142587-05 **Date Sampled:** 6/19/2014
Matrix: Water **Date Received:** 6/19/2014

Chloroethane	< 2.00	ug/L	6/23/2014
Chloroform	< 2.00	ug/L	6/23/2014
Chloromethane	< 2.00	ug/L	6/23/2014
cis-1,2-Dichloroethene	< 2.00	ug/L	6/23/2014
cis-1,3-Dichloropropene	< 2.00	ug/L	6/23/2014
Cyclohexane	< 10.0	ug/L	6/23/2014
Dibromochloromethane	< 2.00	ug/L	6/23/2014
Dichlorodifluoromethane	< 2.00	ug/L	6/23/2014
Ethylbenzene	< 2.00	ug/L	6/23/2014
Freon 113	< 2.00	ug/L	6/23/2014
Isopropylbenzene	< 2.00	ug/L	6/23/2014
m,p-Xylene	< 2.00	ug/L	6/23/2014
Methyl acetate	< 2.00	ug/L	6/23/2014
Methyl tert-butyl Ether	< 2.00	ug/L	6/23/2014
Methylcyclohexane	< 2.00	ug/L	6/23/2014
Methylene chloride	< 5.00	ug/L	6/23/2014
o-Xylene	< 2.00	ug/L	6/23/2014
Styrene	< 5.00	ug/L	6/23/2014
Tetrachloroethene	< 2.00	ug/L	6/23/2014
Toluene	< 2.00	ug/L	6/23/2014
trans-1,2-Dichloroethene	< 2.00	ug/L	6/23/2014
trans-1,3-Dichloropropene	< 2.00	ug/L	6/23/2014
Trichloroethene	< 2.00	ug/L	6/23/2014
Trichlorofluoromethane	< 2.00	ug/L	6/23/2014
Vinyl chloride	< 2.00	ug/L	6/23/2014

Method Reference(s): EPA 8260C
EPA 5030
Data File: x14374.D

Report Prepared Monday, June 30, 2014

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Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"V" = Sample concentration is >10 times the spike. No meaningful Spike Recovery can be calculated.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES

REPORT TO:		INVOICE TO:		LAB PROJECT ID
CLIENT:	Lu Engineers	CLIENT:	SAME	142587
ADDRESS:	175 Sullys Trail Suite 202	ADDRESS:		Quotation #:
CITY:	Pittsford STATE: NY ZIP: 14534	CITY: STATE: ZIP:		
PHONE:	385-7417 x227	PHONE:		Email: edetweiler@luengineers.com
ATTN:	Eric Detweiler	ATTN:		

PROJECT REFERENCE
Wilkins RV
semi-annual
Groundwater Sampling

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TCL VOCs 8260	Fe, Mn								REMARKS	PARADIGM LAB SAMPLE NUMBER
1	6/19/14	12:15		X	MW-JCL-02_06-19-14	WG	3	X	X									01
2	6/19/14	12:55		X	MW-03_06-19-14	"	3	X	X									02
3	6/19/14	1:30		X	MW-13_06-19-14	"	3	X	X									03
4	6/19/14	2:30		X	MW-06_06-19-14	"	3	X	X									04
5					TRIP BLANK T-511 per label mr 6/19/14	WA	1	X										05
6																		
7																		
8																	5°C iced hand delivered	
9																	received 6/19/14 @ 1615	
10																		

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☒	NYSDEC EDD	☒
Rush 2 day	☐	Category B	☐		
Rush 1 day	☐				
Other	☒	Other	☐	Other EDD	☐
please indicate:	10 Day TAT	please indicate:		please indicate:	

Eric Detweiler	6/19/14	Total Cost:
Sampled By	Date/Time	
Eric Detweiler	6/19/14 3:52	
Relinquished By	Date/Time	
	6/19/14 1552	P.I.F.
Received By	Date/Time	
L	6/19/14 1625	
Received @ Lab By	Date/Time	

PARADIGM

Chain of Custody Supplement

Client: Lu Eng **Completed by:** Milly Vail

Lab Project ID: 142587 **Date:** 6/19/14

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	*NELAC compliance with the sample condition requirements upon receipt* Yes	No	N/A
Container Type	X		
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)	X		
Comments			
Preservation	X		
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X		X marginally
Comments	5°C; cust hand delivered recvd 6/19/14 @ 1615hrs		
Sufficient Sample Quantity	X		
Comments			

2013 IMPROVEMENTS – ANALYTICAL DATA

SOIL SAMPLE RESULTS (RETAINING WALL TRENCH & WATERLINE TRENCH)

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

Lu Engineers, Inc.

For Lab Project ID

133745

Referencing

Wilkins RV, 50185-02

Prepared

Wednesday, October 02, 2013

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133745

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV, 50185-02

Sample Identifier: Ret. Wall soil
Lab Sample ID: 133745-01
Matrix: Soil

Date/Time Sampled: 9/30/2013 12:20
Date Received: 9/30/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date/Time Analyzed
1,1,1-Trichloroethane	< 8.37	ug/Kg		10/1/2013 19:50
1,1,2,2-Tetrachloroethane	< 8.37	ug/Kg		10/1/2013 19:50
1,1,2-Trichloroethane	< 8.37	ug/Kg		10/1/2013 19:50
1,1-Dichloroethane	< 8.37	ug/Kg		10/1/2013 19:50
1,1-Dichloroethene	< 8.37	ug/Kg		10/1/2013 19:50
1,2,3-Trichlorobenzene	< 20.9	ug/Kg		10/1/2013 19:50
1,2,4-Trichlorobenzene	< 20.9	ug/Kg		10/1/2013 19:50
1,2-Dibromo-3-Chloropropane	< 41.8	ug/Kg		10/1/2013 19:50
1,2-Dibromoethane	< 8.37	ug/Kg		10/1/2013 19:50
1,2-Dichlorobenzene	< 8.37	ug/Kg		10/1/2013 19:50
1,2-Dichloroethane	< 8.37	ug/Kg		10/1/2013 19:50
1,2-Dichloropropane	< 8.37	ug/Kg		10/1/2013 19:50
1,3-Dichlorobenzene	< 8.37	ug/Kg		10/1/2013 19:50
1,4-Dichlorobenzene	< 8.37	ug/Kg		10/1/2013 19:50
1,4-dioxane	< 83.7	ug/Kg		10/1/2013 19:50
2-Butanone	< 41.8	ug/Kg		10/1/2013 19:50
2-Hexanone	< 20.9	ug/Kg		10/1/2013 19:50
4-Methyl-2-pentanone	< 20.9	ug/Kg		10/1/2013 19:50
Acetone	< 41.8	ug/Kg		10/1/2013 19:50
Benzene	< 8.37	ug/Kg		10/1/2013 19:50
Bromochloromethane	< 20.9	ug/Kg		10/1/2013 19:50
Bromodichloromethane	< 8.37	ug/Kg		10/1/2013 19:50
Bromoform	< 20.9	ug/Kg		10/1/2013 19:50
Bromomethane	< 8.37	ug/Kg		10/1/2013 19:50
Carbon disulfide	< 8.37	ug/Kg		10/1/2013 19:50
Carbon Tetrachloride	< 8.37	ug/Kg		10/1/2013 19:50
Chlorobenzene	< 8.37	ug/Kg		10/1/2013 19:50
Chloroethane	< 8.37	ug/Kg		10/1/2013 19:50

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133745

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV, 50185-02

Sample Identifier: Ret. Wall soil
Lab Sample ID: 133745-01
Matrix: Soil

Date/Time Sampled: 9/30/2013 12:20
Date Received: 9/30/2013

Chloroform	< 8.37	ug/Kg	10/1/2013 19:50
Chloromethane	< 8.37	ug/Kg	10/1/2013 19:50
cis-1,2-Dichloroethene	< 8.37	ug/Kg	10/1/2013 19:50
cis-1,3-Dichloropropene	< 8.37	ug/Kg	10/1/2013 19:50
Cyclohexane	< 41.8	ug/Kg	10/1/2013 19:50
Dibromochloromethane	< 8.37	ug/Kg	10/1/2013 19:50
Dichlorodifluoromethane	< 8.37	ug/Kg	10/1/2013 19:50
Ethylbenzene	< 8.37	ug/Kg	10/1/2013 19:50
Freon 113	< 8.37	ug/Kg	10/1/2013 19:50
Isopropylbenzene	< 8.37	ug/Kg	10/1/2013 19:50
m,p-Xylene	< 8.37	ug/Kg	10/1/2013 19:50
Methyl acetate	< 8.37	ug/Kg	10/1/2013 19:50
Methyl tert-butyl Ether	< 8.37	ug/Kg	10/1/2013 19:50
Methylcyclohexane	< 8.37	ug/Kg	10/1/2013 19:50
Methylene chloride	< 20.9	ug/Kg	10/1/2013 19:50
o-Xylene	< 8.37	ug/Kg	10/1/2013 19:50
Styrene	< 20.9	ug/Kg	10/1/2013 19:50
Tetrachloroethene	< 8.37	ug/Kg	10/1/2013 19:50
Toluene	< 8.37	ug/Kg	10/1/2013 19:50
trans-1,2-Dichloroethene	< 8.37	ug/Kg	10/1/2013 19:50
trans-1,3-Dichloropropene	< 8.37	ug/Kg	10/1/2013 19:50
Trichloroethene	< 8.37	ug/Kg	10/1/2013 19:50
Trichlorofluoromethane	< 8.37	ug/Kg	10/1/2013 19:50
Vinyl chloride	< 8.37	ug/Kg	10/1/2013 19:50

Method Reference(s): EPA 8260B
EPA 5035A

Data File: x08668.D

Any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

1 of 2

CHAIN OF CUSTODY

PARADIGM

REPORT TO:		INVOICE TO:			
COMPANY:	Lu Engineers	COMPANY:	Same	LAB PROJECT #: 133745	CLIENT PROJECT #: 50185-02
ADDRESS:	175 Sully's Trail, Suite 202	ADDRESS:			
CITY: Pittsford	STATE: NY ZIP: 14534	CITY:	STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE: 385-7417	FAX:	PHONE:	FAX:	STD / OTHER	
PROJECT NAME/SITE NAME: Wilkins RV	ATTN: Eric Detweiler	ATTN:		☐ 1 ☐ 2 ☐ 3 ☒ 5 ☐	
	COMMENTS:			Quotation #	

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	8260 TCL VOCs										REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	9/30/13	12:20		X	Ret. Wall Soil	Soil	1	✓														0	1
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments:		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature: 5°C iced	Y ☐	N ☐
Comments:		

Laura Neubauer	9/30/13 12:45	Sampled By / Date/Time
Laura Neubauer	9/30/13 13:30	Relinquished By / Date/Time
[illegible]	9/30/13 1330	Received By / Date/Time
[illegible]	9/30/13 1356	Received @ Lab By / Date/Time

Total Cost:

P.I.F.

Chain of Custody Supplement

Client: LU Engineers **Completed by:** MW aid

Lab Project ID: 133745 **Date:** 9/30/13

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt Yes	No	N/A
Container Type	☐	☒ 5035	☐
Comments			
Transferred to method-compliant container	☐	☐	☒
Headspace (<1 mL)	☐	☐	☒
Comments			
Preservation	☐	☐	☒
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☒
Comments			
Holding Time	☒	☐	☐
Comments			
Temperature	☒	☐	☐
Comments	5°C iced		
Sufficient Sample Quantity	☒	☐	☐
Comments			

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133838

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - Churchville SMP Monitoring 50185-02

Sample Identifier: Waterline Excavation - 01
Lab Sample ID: 133838-01 **Date Sampled:** 10/7/2013
Matrix: Soil **Date Received:** 10/7/2013

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 3.75	ug/Kg		10/7/2013
1,1,2,2-Tetrachloroethane	< 3.75	ug/Kg		10/7/2013
1,1,2-Trichloroethane	< 3.75	ug/Kg		10/7/2013
1,1-Dichloroethane	< 3.75	ug/Kg		10/7/2013
1,1-Dichloroethene	< 3.75	ug/Kg		10/7/2013
1,2,3-Trichlorobenzene	< 9.37	ug/Kg		10/7/2013
1,2,4-Trichlorobenzene	< 9.37	ug/Kg		10/7/2013
1,2-Dibromo-3-Chloropropane	< 18.7	ug/Kg		10/7/2013
1,2-Dibromoethane	< 3.75	ug/Kg		10/7/2013
1,2-Dichlorobenzene	< 3.75	ug/Kg		10/7/2013
1,2-Dichloroethane	< 3.75	ug/Kg		10/7/2013
1,2-Dichloropropane	< 3.75	ug/Kg		10/7/2013
1,3-Dichlorobenzene	< 3.75	ug/Kg		10/7/2013
1,4-Dichlorobenzene	< 3.75	ug/Kg		10/7/2013
1,4-dioxane	< 37.5	ug/Kg		10/7/2013
2-Butanone	< 18.7	ug/Kg		10/7/2013
2-Hexanone	< 9.37	ug/Kg		10/7/2013
4-Methyl-2-pentanone	< 9.37	ug/Kg		10/7/2013
Acetone	< 18.7	ug/Kg		10/7/2013
Benzene	< 3.75	ug/Kg		10/7/2013
Bromochloromethane	< 9.37	ug/Kg		10/7/2013
Bromodichloromethane	< 3.75	ug/Kg		10/7/2013
Bromoform	< 9.37	ug/Kg		10/7/2013
Bromomethane	< 3.75	ug/Kg		10/7/2013
Carbon disulfide	< 3.75	ug/Kg		10/7/2013
Carbon Tetrachloride	< 3.75	ug/Kg		10/7/2013
Chlorobenzene	< 3.75	ug/Kg		10/7/2013

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 133838

Client: **Lu Engineers, Inc.**

Project Reference: Wilkins RV - Churchville SMP Monitoring 50185-02

Sample Identifier: Waterline Excavation - 01
Lab Sample ID: 133838-01 **Date Sampled:** 10/7/2013
Matrix: Soil **Date Received:** 10/7/2013

Chloroethane	< 3.75	ug/Kg		10/7/2013
Chloroform	**2.57**	ug/Kg	J	10/7/2013
Chloromethane	< 3.75	ug/Kg		10/7/2013
cis-1,2-Dichloroethene	< 3.75	ug/Kg		10/7/2013
cis-1,3-Dichloropropene	< 3.75	ug/Kg		10/7/2013
Cyclohexane	< 18.7	ug/Kg		10/7/2013
Dibromochloromethane	< 3.75	ug/Kg		10/7/2013
Dichlorodifluoromethane	< 3.75	ug/Kg		10/7/2013
Ethylbenzene	< 3.75	ug/Kg		10/7/2013
Freon 113	< 3.75	ug/Kg		10/7/2013
Isopropylbenzene	< 3.75	ug/Kg		10/7/2013
m,p-Xylene	< 3.75	ug/Kg		10/7/2013
Methyl acetate	< 3.75	ug/Kg		10/7/2013
Methyl tert-butyl Ether	< 3.75	ug/Kg		10/7/2013
Methylcyclohexane	< 3.75	ug/Kg		10/7/2013
Methylene chloride	< 9.37	ug/Kg		10/7/2013
o-Xylene	< 3.75	ug/Kg		10/7/2013
Styrene	< 9.37	ug/Kg		10/7/2013
Tetrachloroethene	< 3.75	ug/Kg		10/7/2013
Toluene	< 3.75	ug/Kg		10/7/2013
trans-1,2-Dichloroethene	< 3.75	ug/Kg		10/7/2013
trans-1,3-Dichloropropene	< 3.75	ug/Kg		10/7/2013
Trichloroethene	< 3.75	ug/Kg		10/7/2013
Trichlorofluoromethane	< 3.75	ug/Kg		10/7/2013
Vinyl chloride	< 3.75	ug/Kg		10/7/2013

Method Reference(s): EPA 8260B
EPA 5035 Modified

Data File: x08764.D

Any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

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"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"V" = Sample concentration is >10 times the spike. No meaningful Spike Recovery can be calculated.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

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PARADIGM ENVIRONMENTAL SERVICES, INC.

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:	
CLIENT:	Lu Eng.	CLIENT:	
ADDRESS:	175 Sully's Trail Suite 202	ADDRESS:	
CITY:	Pittsford STATE: NY ZIP: 14534	CITY: STATE: ZIP:	SAME
PHONE:	278-8202	PHONE:	
ATTN:	Eric Detweiler	ATTN:	

LAB PROJECT ID: 133838

Quotation #:

Email: edetweiler@luengineers.com

PROJECT REFERENCE
Wilkins RV - Curchville
SMP Monitoring
50185-02

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

	DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	TCL VOCs 8260	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	10/7/13	10:30	X		Waterline Excavation-01	SO	1	X	*Please report morning of 10/8/13	01
2										
3										
4										
5										
6										
7										
8										
9										
10									15°C No Custody Seal Hand delivered 10/7@1258	

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	☐	Batch QC	☐	Basic EDD	☐
Rush 3 day	☐	Category A	☒	NYSDEC EDD	☒
Rush 2 day	☐	Category B	☐		
Rush 1 day	☒				
Other please indicate:	☐	Other please indicate:	☐	Other EDD please indicate:	☐

Sampled By: Eric Detweiler	Date/Time: 10/7/13	Total Cost:
Relinquished By: [signature]	Date/Time: 10/7/13 12:15	
Received By: [signature]	Date/Time: 10/7/13 12:15	P.I.F.
Received @ Lab By: [signature]	Date/Time: 10/7/13 1258	

2 of 2

Chain of Custody Supplement

Client: Lu Eng **Completed by:** Mail

Lab Project ID: 133838 **Date:** 10/7/13

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type		X 6035	
Comments			
Transferred to method-compliant container			X
Headspace (<1 mL)			X
Comments			
Preservation			X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature	X taken today		
Comments	15°C No custody seals hand delivered @ 1258 10/7/13		
Sufficient Sample Quantity	X		
Comments			

D - Institutional and Engineering Controls Certification Form

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **V00658**

Site Name Churchville Ford, Inc.

Site Address: 111 South Main Street Zip Code: 14428
City/Town: Churchville
County: Monroe
Site Acreage: 6.0

Reporting Period: January 31, 2013 to July 07, 2014

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. V00658 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
143.17-1-50	BLW Properties of Churchville, LLC.	Ground Water Use Restriction Landuse Restriction Site Management Plan

1. Site use is limited to Commercial and industrial uses.
2. Groundwater use is prohibited.
3. Compliance with a Site Management Plan is required.
4. Periodic certifications are required.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
143.17-1-50	Vapor Mitigation Cover System

1. Cover system consisting primarily of asphalt pavement and the building slab.
2. Sub-slab depressurization system

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00658

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Eric Detweiler (print name) at Lu Engineers - 175 Sullys Trail, Pittsford, NY, (print business address)

am certifying as Remedial Party (Lu Engineers) (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Eric Detweiler — 8/1/14

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification — Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Robert Hutteman at 175 Sullys Trail Pittsford, NY 14534
print name print business address

am certifying as a Professional Engineer for the Remedial Party - LU Engineers
(Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

08-15-14
Date

E – Site Photos (2013 Improvements)

Site Photographs – 2013 Improvements

111 South Main Street, Churchville, NY

Photo 1. View to north, shallow retaining wall trench excavation.

Photo 2. View to south, asphalt cut and shallow trench excavation.

Photo 3. View to southwest, retaining wall construction at N. Sanford Rd. entrance.

Photo 4. View to west, new retaining wall construction.

Photo 5. View to east, asphalt cutting for waterline installation.

Photo 6. View of asphalt removal prior to trenching for waterline.

Photo 7. View of waterline trench excavation.

Photo 8. View of interior concrete coring for waterline access.

Photo 9. View to south, new waterline & spigot installed.

Photo 10. View to south, waterline installation complete with backfilling prior to repaving.

Photo 11. View of new protective curb boxes & new asphalt pavement at MW-3, MW-JCL-02.

Photo 12. View of new pavement & box, MW-13.