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FIRST QUARTER 2014 MONITORING REPORT

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Prairie Ronde Realty Company

Dowagiac, Michigan

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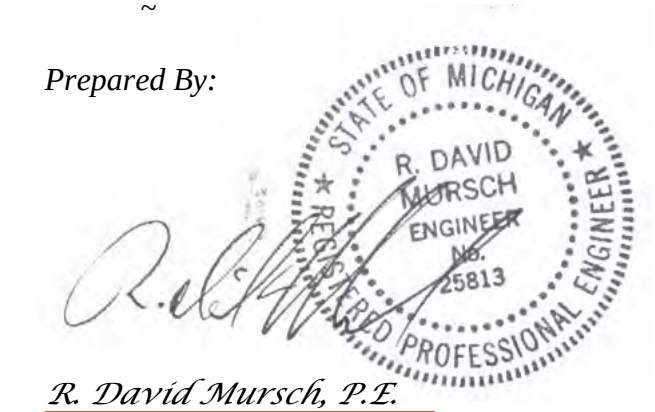

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1.0 INTRODUCTION

An industrial property at 415 Prairie Ronde Street in Dowagiac, Michigan was acquired by Prairie Ronde Realty Company (PRR) from the Sundstrand Corporation (UTC/Sundstrand) in 1995. The property was formerly used for manufacturing operations such as casting and re-drawing copper tubes. The shallow soil and groundwater beneath this plant were impacted by volatile organic compounds (VOCs), primarily trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) prior to acquisition of the property by PRR. The contamination was discovered in 1983, and the impacted soil and groundwater have been undergoing active remediation since 1984.

The plant is underlain by glacial outwash deposits. In general, there is an upper layer of medium to fine sand grading to sandy gravel. This upper layer is typically 50 to 60 feet thick within the main plant area, and groundwater in this layer occurs under water table conditions. Underlying this upper layer is a variable but persistent aquitard layer consisting of inter-bedded clay, fine silty sand, clayey silt and clayey sand, which has sometimes been referred to as the "clay layer". The aquitard is typically several feet thick but in some areas it is tens of feet thick. The soil below the aquitard consists of inter-bedded sand and gravel that together form a semi-confined aquifer, and there is an upward hydraulic gradient across the aquitard. There is VOC impact to the groundwater below the aquitard layer, but the area of impact is limited to the primary source area in the plant.

In 1984 a groundwater remediation system consisting of twelve purge wells was installed and put into operation under the terms of a Consent Judgment between UTC/Sundstrand (formerly Sundstrand Heat Transfer, Inc.) and the Michigan Department Environmental Quality (MDEQ). In 2004, MDEQ requested that the US Environmental Protection Agency (EPA) assume the regulatory lead for this site and PRR subsequently entered into a voluntary Consent Agreement with EPA for completion of the site's environmental assessment and remediation.

Beginning in 1994, the plant voluntarily installed air sparging and soil vapor extraction (SVE) systems to expedite the remediation. During the last quarter of 2008, these systems were determined to have accomplished their design objectives and were shut down after notice to the EPA.

In 2008 PRR initiated a pilot test of enhanced reductive dechlorination technology, which involved injecting a solution of Anaerobic BioChem plus zero-valent iron (ABC+) into the groundwater at the Oil and Solvent Room (OSR) inside the plant. The pilot testing demonstrated that ABC+ is effective at degrading chlorinated solvents at this site. In the fall of 2013 ABC+ injections were made at the "Backdoor Area" (BDA) and the "Old Borrow Pit" (OBP) as reported in the *Fourth Quarter 2013 Monitoring Report*. The BDA and OBP locations are shown in Figure 1.

During 2012 testing showed TCE levels in the PRR building's indoor air that exceeded USEPA Regional Screening Levels (RSLs). PRR subsequently installed a sub-slab depressurization system (SSDPS) to reduce TCE levels in the sub-slab soil vapors and control migration of vapors into the building's occupied indoor air space.

The 1984 Consent Judgment requires periodic monitoring of the site's groundwater by sampling designated monitoring wells for analysis of VOCs. The monitoring program has been modified from time to time based on evolving site conditions and newly-installed sampling locations. The monitoring results for the first quarter of 2014 are presented in this report.

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2.0 MONITORING SCOPE OF WORK AND PROCEDURES

The current monitoring program for the PRR site is outlined in the *Final Corrective Action Monitoring Plan* dated April 10, 2013 (the CAMP). The specific monitoring activities completed and reported for this quarter included:

- Sampling groundwater-surface water interface (GSI) compliance monitoring wells for VOC analysis.
- Sampling wells at the BDA and OBP for analyses of parameters related to ABC+ injection.
- Monitoring SSDPS emissions and sub-slab vacuum.
- Sampling indoor air and sub-slab soil vapors for VOC analysis.
- Documentation of purge well operation and maintenance.

The following sections describe the work procedures for this quarter's monitoring. Figure 1 shows a plan of the PRR site including the sampling locations.

2.1 GSI Compliance Groundwater Sampling

Groundwater samples were obtained from twelve of the twenty GSI compliance monitoring wells designated in the CAMP. Wells 06-20/1, 06-20/2, 83-17A, 83-17B, 83-21A, 83-21B, 05-15 and 05-16 could not be sampled because deep snow drifts and plowed snow banks prevented access to these locations. The analytical data for the GSI wells are shown on Table 1 and Figure 2. A time-trend plot of TCE concentrations in the GSI compliance monitoring wells is shown in Figure 3.

The monitoring wells were generally purged using low-flow methods as described in *Low Flow (Minimal Drawdown) Ground-Water Sampling Procedures*, by Puls and Barcelona, EPA Ground Water issue September 1996. Most of the wells were purged using a peristaltic pump and ¼-inch polyethylene tubing. The tubing was set to the approximate midpoint of the screen in each well. The wells were purged by pumping through the tubing at a low flow rate (less than 500 milliliters per minute) with continuous monitoring of water quality parameters, including pH, conductivity, turbidity, dissolved oxygen and temperature. The flow rate was adjusted as necessary to minimize drawdown of the water level in the well; this ensures that the pumped water is being drawn through the well screen and is not standing water from inside the well. When the monitored water quality parameters stabilized, a groundwater sample was collected directly from the dedicated pump discharge tubing.

The samples for VOC analysis were collected in 40-milliliter (ml) septum-lid vials with laboratory-added hydrochloric acid as a preservative, packed in coolers with ice and delivered to Trimatrix Laboratories, Inc. in Grand Rapids to be analyzed for VOCs using EPA Method 8260. The field sampling data forms, chain-of-custody forms and laboratory analytical reports are appended in Acrobat (*.pdf) format.

For quality assurance/quality control (QA/QC) purposes, a laboratory-prepared trip blank accompanied each of the VOC sample sets. The data for the trip blanks are included in the laboratory reports. The laboratory's internal QA/QC program includes analyses of laboratory-prepared matrix and surrogate spikes and replicates; these data are also included in the laboratory reports.

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2.2 Groundwater Sampling at ABC+ Injection Area

As part of the ABC+ injection program at the BDA and OBP, PRR is sampling seven wells for parameters used for evaluation of the ABC+ effectiveness. During this quarter these wells were sampled for analyses in accordance with the second revision of the *Work Plan for ABC Injection – Oil Storage Room, Back Door Area, Old Borrow Pit and Former Cupples Pond* dated August 1, 2011 (ABC+ Work Plan).

The seven wells were sampled in January and March using the low-flow procedures described above. The samples were analyzed for VOCs as described above, and also for chemical parameters including dissolved gases ethane, methane and ethene by Method RSK-175; total organic carbon (TOC) by Method SM 5310; total iron and arsenic by EPA Method 6010; nitrate by Method SM 4500 NO3 F-2000; and sulfate by EPA Method 9038. These samples were collected into laboratory-supplied containers, packed on ice and sent to Trimatrix Laboratories Inc. for analysis. The data are summarized in Table 2.

The January samples were also analyzed for dechlorinating bacteria census. These samples were obtained by pumping water through laboratory-supplied filters, which were packed on ice and sent to Microbial Insights, Inc. in Rockford, Tennessee for analysis. The data are included in Table 2.

The field sampling records and laboratory reports are appended in *.pdf format.

2.3 Sub-Slab Depressurization System Monitoring

The plant began operation of a SSDPS in the summer of 2012 and has been monitoring sub-slab vacuum and air emissions related to this system. The SSDPS is designed to reduce VOC levels in the sub-slab soil vapors and to control migration of vapors through the floor slab into the building.

The air emissions from the SSDPS are monitored for compliance with the MDEQ air permit. The emissions are estimated by analyzing the concentrations of VOCs in the soil vapor recovered through the system. These samples are obtained at a port in the 8-inch discharge pipe downstream from the SSDPS blower using a syringe. The syringe needle is inserted into the airstream in the discharge pipe and a 40-ml sample of air is extracted into the syringe. The 40-ml sample is then injected under pressure into a 20-ml septum vial. The sample is sent to Microseeps Inc., in Pittsburgh for analysis of chlorinated VOCs by Method AM 4.02. The Microseeps Inc. laboratory reports are included in Acrobat (*.pdf) format on the enclosed data CD. In conjunction with the air sample analysis, the air flow rate is measured with a digital anemometer that is inserted into the airstream in the discharge pipe; the air flow rate and VOC concentrations are used to calculate the VOC emissions rate. The emissions data for this quarter are shown on Table 3 and the laboratory report is appended in *.pdf format.

The CAMP monitoring program includes measuring the differential pressure between the indoor air of the plant and the sub-slab soil vapor using a differential digital manometer on a monthly basis. These measurements are intended to verify that the system is maintaining a net vacuum beneath the slab so that sub-slab vapors cannot migrate upward into the indoor air of the building. The data for this quarter are shown on Table 4.

2.4 Indoor Air and Sub-Slab Soil Vapor Monitoring

Paired indoor air/sub-slab soil vapor samples are obtained on a quarterly basis for VOC analysis as outlined in the CAMP. The indoor air samples are collected using 6-liter Summa canisters equipped

with critical orifice flow regulators sized to collect the air sample over a 24-hour period. Each canister is pre-labeled by the laboratory with a canister designation number. The canister number and sample location were recorded on the chain of custody (COC). The canister vacuum is measured in the field at deployment using an integrated vacuum gauge and recorded on the COC. The canister is opened fully, and the start time and initial vacuum are recorded. The canister valve is closed at the end of the sampling period and the end time and final canister vacuum are recorded. A safety cap is placed on the canister inlet.

The sub-slab soil vapor samples are collected using 6-Liter Summa canisters as described above, except that the canister inlets were connected to the VMPs via laboratory-supplied tubing.

The samples for this quarter were sent to PACE Analytical Services, Inc. in Minneapolis, Minnesota for analysis of chlorinated VOCs using Method TO-15. The data are summarized in Tables 5 and 6 and are shown on Figure 4. The laboratory reports are appended in *.pdf format.

2.5 Operation and Maintenance Documentation

The purge well system is inspected and tested periodically by Peerless Midwest Inc. The purge well operating data for this quarter are summarized in Table 7.

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3.0 MONITORING RESULTS AND EVALUATION

The results of the monitoring for this quarter are summarized in the tables and figures in this report, and are discussed in the following sections.

3.1 GSI Compliance Groundwater Monitoring

The GSI compliance monitoring data are summarized on Table 1 and Figures 2 and 3. GSI compliance monitoring wells 98-245A and 02-02 had TCE concentrations above the Part 201 generic GSI criterion of 200 µg/l.

In accordance with the criteria outlined in the *Revised Purge Well Shutdown Criteria* document dated February 6, 2012 PRR has previously shut down purge wells PW-1, PW-8, PW-9, PW-10, and PW-12. However, GSI compliance well 02-02 had TCE concentrations above the GSI in the third quarter of 2013 as well as in this quarter. Therefore, in accordance with the criteria outlined in the *Revised Purge Well Shutdown Criteria* PRR has returned purge well PW-10 to operation.

A review of the GSI monitoring data indicates that purge well PW-14 has met the criteria for shutdown for over three years. Therefore PRR plans to shut down this well during the second quarter of 2014. PW-14 has been kept in operation during this winter in order to maintain sufficient water flow into the air stripper so that the stripper does not freeze.

In the fall of 2013 PRR installed a new GSI monitoring well designated as 13-224A. The new well is intended to be one of the monitoring points for evaluation of purge well PW-16. This new well has not have any VOCs above the GSI criteria in three sampling events; in addition, the other three GSI compliance wells associated with PW-16 have not had any VOCs above the GSI criteria for at least six years. If this new well continues to show no GSI exceedence in the second quarter 2014 sampling PRR plans to shut down PW-16 also.

3.2 ABC+ Injection Area Monitoring

During this quarter PRR performed monitoring related to an injection of ABC+ at the BDA and the OBP, as outlined in the ABC+ Work Plan. The seven ABC+ area monitoring wells in these two locations were sampled in January and March 2014 and the data are shown in Table 2.

These data generally show that the injection was successful in promoting reducing conditions at the BDA. Wels 98-220A, 98-225B and 98-220A show suppressed nitrate and sulfate levels, reduction of TCE and presence of TCE degradations products such as cis-1,2-dichloroethene, trans-1,2-dichloroethene and vinyl chloride; degradation products have rarely been detected in these wells previously. In addition, these three wells have elevated levels of iron, TOC and methane compared to well IW-9, which is outside of the injection zone. However the data suggest that the TOC substrate is being depleted and the sulfate level at 98-226A has rebounded. Based on these data it may be necessary to make an additional, booster injection of the ABC+ material at this location in the future. The next sampling event for this area is scheduled for May 2014 and a decision regarding supplemental injections will be made after review of that data.

At the OBP, the data do not show an impact from the injections except for an apparent increase in iron content at well 96-203A. This injection was made entirely into the upper fine sand layer and it is expected that migration of the injected material to the monitoring wells will be very slow. This location is also scheduled to be re-sampled in May 2014.

3.3 Sub-Slab Depressurization System Monitoring Results

The SSDPS monitoring included measuring vacuum beneath the building slab and analyzing the air emissions from the system's blower.

During this quarter the air emissions from the SSDPS were measured as summarized on Table 3. The data showed a TCE concentration of 2.5 milligrams per cubic meter (mg/m^3) and an air flow rate (corrected to standard temperature) of 492 cubic feet per minute (cfm). The total VOC emissions rate was calculated from these data as 0.007 pounds per hour (pph), which is well below the limits allowed in the air permit for this system. In accordance with the revised MDEQ air permit, PRR will continue to measure air emissions on a quarterly basis.

The vacuum measurements obtained in this quarter are shown on Table 4 and demonstrate that the SSDPS is maintaining a net vacuum beneath the slab, which should control migration of vapors from the soil into the building through the slab.

3.4 Indoor Air and Sub-Slab Soil Vapor Monitoring Results

The indoor air and sub-slab soil vapor were sampled in March and the analytical data are summarized on Tables 5 and 6 respectively. For reference these tables include Regional Screening Levels (RSL) published by the USEPA in November, 2012 for indoor air and sub-slab soil vapors at industrial sites.

The concentration of All of the analyzed VOCs in indoor air (Table 5) were below the respective indoor air RSL in all ten sample points.

In the sub-slab soil vapor samples (Table 6), the sub-slab RSL for TCE (293 $\mu g/m^3$) was exceeded in two of the eight monitored VMPs. No other analyzed VOCs were reported above the USEPA RSLs in any sample.

3.5 Operation and Maintenance

The purge well operational data are summarized on Table 7.

The ductwork for the airflow from the blower to the air stripper was severely damaged by falling ice sometime in mid-to late January. The damage was discovered on February 3. The ductwork was repaired on February 5 and the system was returned to normal operation.

There were no other non-routine maintenance or operational issues for the purge or SSDPS systems in this quarter.

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4.0 CONCLUSIONS

This report presents the results of the regular quarterly monitoring at the PRR site for the first quarter of 2014.

The data demonstrate that VOC concentrations in the groundwater at the designated GSI compliance monitoring wells are below the GSI at all but two of the GSI monitoring wells, 98-245A and 02-02. Because the GSI value for TCE was exceeded in two consecutive quarters at 02-02, purge well PW-10 has been returned to operation as of April 18, 2014.

The GSI monitoring data demonstrate that purge well PW-14 meets the agreed criteria for shutdown and PRR intends to shut down this well during the second quarter of 2014. This well has been kept in operation during the winter months to minimize the risk of freezing of the stripper tower. In addition, it appears that purge well PW-16 may meet shutdown criteria pending the second quarter data from the new GSI monitoring well 13-224A; after receipt and review of the next sample set from this well PRR will evaluate the possibility of shutting down PW-16.

The SSDPS monitoring continues to demonstrate that the SSDPS is operating as intended; the system is reducing VOC concentrations in the sub-slab soil vapor and is maintaining a net vacuum beneath the building's floor slab. Emissions from the SSDPS are in compliance with the system's air permit.

Monitoring of the indoor air and sub-slab soil vapors demonstrate that the TCE levels in the building's indoor air were below the RSL at all locations in this quarter and only two sub-slab vapor monitoring points had TCE values above the sub-slab RSL.

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TABLE 1: SUMMARY OF VOLATILE ORGANIC COMPOUNDS IN GSI COMPLIANCE MONITORING WELLS - MARCH 2014

WELL	DEPTH, FEET	TRICHLORO ETHENE	1,1,1-TRICHLOROETHANE	CIS-1,2 DICHLOROETHENE	TRANS-1,2-DICHLOROETHENE	VINYL CHLORIDE	11-DICHLOROETHENE	11-DICHLOROETHANE
Part 201 GSI		**200**	**89**	**620**	**1,500**	**13**	**130**	**740**
MONITORING WELLS SCREENED ABOVE THE AQUITARD ZONE:								
83-19A	15	8.5	< 1	< 1	< 1	< 1	< 1	< 1
83-19B	41	170	1.2	36	2.8	7.7	< 1	< 1
83-28A	20	< 1	< 1	100	13	< 1	< 1	< 1
83-28B	53	5.1	< 1	19	< 1	3.9	< 1	< 1
13-224A	24	36	< 1	20	1.9	< 1	< 1	< 1
98-224B	42	110	< 1	15	1.9	< 1	< 1	< 1
98-245A	33	**230**	< 2	24	2.2	< 2	< 2	< 2
02-02	32	**240**	4.3	< 2	< 2	9.5	< 2	< 2
02-02 (Dup)	32	**240**	4.6	2.0	< 2	10	< 2	< 2
02-03	64	1.8	< 1	< 1	< 1	< 1	< 1	< 1
02-04	42	110	< 1	25	5.0	< 1	< 1	< 1
06-17 / 1	30	99	4.8	9.8	< 1	1.7	< 1	< 1
06-17 / 2	50	110	5.7	17	< 1	< 1	< 1	< 1

NOTES:

All samples were analyzed by EPA Method 8260; results are micrograms per liter
Samples were obtained using low flow procedures
< = Less than
Bold = Exceeds GSI criterion

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TABLE 2: ABC+ DATA AT BACK DOOR AREA AND OLD BORROW PIT - JANUARY AND MARCH 2014

LOCATION	BACKDOOR AREA								OLD BORROW PIT					
	98-220A		98-225B		98-226A		IW-9		96-203A		98-223A		98-223B	
	1/22/14	3/19/14	1/22/14	3/19/14	1/22/14	3/19/14	1/22/14	3/19/14	1/22/14	3/19/14	1/22/14	3/19/14	1/22/14	3/19/14
Ethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Ethylene	<1	<1	1.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methane	0.85	6.5	9.4	110	<0.5	<0.5	1.0	4.7	3.5	3.5	1.4	<0.5	2.1	2.3
Trichloroethene	420	250	210	78	580	380	180	160	470	500	190	170	190	210
cis-1,2 Dichloroethene	<5	33	2,400	1,900	<5	61	2.7	<2	24	23	49	120	25	20
trans-1,2 Dichloroethene	<5	<2	53	19	<5	<5	<1	<2	<5	<5	1.4	104.0	<2	<2
Vinyl Chloride	<5	<2	<2.5	4.4	<5	<5	<1	<2	<5	<5	<1	<1	<2	<2
1,1,1-Trichloroethane	<5	<2	<2.5	<2.5	<5	<5	2.0	<2	<5	<5	<1	<1	<2	<2
1,1-Dichloroethene	<5	<2	6.2	2.7	<5	<5	<1	<2	<5	<5	<1	<1	<2	<2
1,1-Dichloroethane	<5	<2	<2.5	<2.5	<5	<5	<1	<2	<5	<5	<1	<1	<2	<2
Iron	5,600	7,500	5,600	3,700	960	1,200	41	250	800	420	11	16	92	73
Manganese	--	2,000	--	690	--	340	--	190	--	190	--	<10	--	73
Arsenic	5.1	--	3.2	--	4.5	--	<1	--	<1	--	<1	--	<1	--
Nitrate	1,400	340	<50	<50	200	420	660	300	<50	<50	96	960	<50	<50
Sulfate	11,000	7,600	14,000	18	8,500	22,000	19,000	22,000	27,000	24,000	25,000	24,000	28,000	28,000
Total Organic Carbon	190,000	79,000	75,000	31,000	68,000	3,100	950	610	800	670	860	960	620	660
pH (standard units)	6.8	6.5	6.8	6.6	7.0	6.6	7.3	6.8	7.3	6.8	7.0	6.5	7.2	6.7
Dissolved Oxygen	--	0.21	--	0.23	--	0.26	--	0.26	--	0.61	--	2.80	--	0.40
DHC (cells per milliliter)	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
DHC / tceA	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
DHC / bvcA	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--

NOTES: All units are in micrograms per liter unless otherwise shown
DHC = Dehalococcoiddes
< = Less than
-- = Not sampled

TABLE 3: EMISSIONS FROM SUB-SLAB DEPRESSURIZATION SYSTEM

	March 4, 2014
Trichloroethene, mg/m^3	2.5
cis-1,2-dichloroethene, mg/m^3	1.3
1,1,1-trichloroethane, mg/m^3	0.2
Total VOCs, mg/m^3	4.0
Total VOCs, pcf	2.51E-07
Air velocity, fpm	1,382
Pipe area, square feet	0.35
Air flow rate, acfm	482
Temperature, °C	19
Air flow rate, cfm	492
VOC emission rate, pph	0.007

Notes:

mg/m^3 = milligrams per cubic meter
VOC = Volatile organic compounds; sum of trichloroethene, cis-1,2-dichloroethene, and 1,1,1-trichloroethane
pcf = Pounds per cubic foot
fpm = Feet per minute (measured)
acfm = Actual cubic feet per minute (not corrected
cfm = Cubic feet per minute (corrected to standard temperature)
pph = Pounds per hour

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TABLE 4: SUB-SLAB VACUUM MEASUREMENTS

	January 24, 2014	February 14, 2014	March 5, 2014
VMP-1	-0.01	-0.01	-0.01
VMP-2	-0.01	-0.01	-0.01
VMP-3	-0.03	-0.01	-0.01
VMP-10	-0.01	-0.01	-0.02
VMP-11	-0.01	-0.01	-0.01
VMP-12	-0.03	-0.01	-0.01
VMP-13	-0.01	-0.01	-0.01
VMP-14	-0.01	-0.01	-0.01
VMP-15	-0.01	-0.01	-0.02
VMP-16	-0.02	-0.01	-0.01
VMP-17	-0.02	-0.02	-0.02
VMP-18	-0.01	-0.01	-0.02

NOTES:

Measurements are in inches of water
Negative values indicate a gradient down from the building to the sub-slab soil
Positive values indicate a gradient up from the sub-slab soil into the building

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TABLE 5: INDOOR AIR ANALYTICAL DATA - MARCH 4, 2014

Compound	Indoor Air Screening Level*	PRR Office	JMT	Velthouse Antiques	Michigan Precision	Lower Level - NE
Chloroethane	44,000	<0.94	<0.91	<0.72	<0.72	<0.72
1,1-Dichloroethane	77	<1.4	<1.4	<1.1	<1.1	<1.1
cis-1,2-Dichloroethene	260	<1.4	<1.4	<1.1	<1.1	<1.1
t-1,2-Dichloroethene	260	<1.4	<1.4	<1.1	<1.1	<1.1
Tetrachloroethene	180	<1.2	<1.2	**1.3**	<0.92	**1.2**
1,1,1-Trichloroethane	22,000	<1.9	<1.9	<1.5	<1.5	<1.5
Trichloroethene	8.8	<0.96	**4.1**	**4.1**	<0.74	**1.3**
Vinyl Chloride	28	<0.46	<0.44	<0.35	<0.35	<0.35

Compound	Indoor Air Screening Level*	South Rec. Park	Quality Trucking	North Rec. Park 1	North Rec. Park 2	Lower Level - SW
Chloroethane	44,000	<0.72	<0.78	<0.72	<0.75	<0.72
1,1-Dichloroethane	77	<1.1	<1.2	<1.1	<1.1	<1.1
cis-1,2-Dichloroethene	260	<1.1	<1.2	<1.1	<1.1	<1.1
t-1,2-Dichloroethene	260	<1.1	<1.2	<1.1	<1.1	<1.1
Tetrachloroethene	180	<0.92	**2.8**	**1.0**	**1.3**	**0.97**
1,1,1-Trichloroethane	22,000	<1.5	<1.6	<1.5	<1.5	<1.5
Trichloroethene	8.8	<0.74	<0.79	**2.5**	**0.82**	<0.76
Vinyl Chloride	28	<0.35	<0.37	<0.35	<0.36	<0.36

Notes:
All data presented in micrograms per cubic meter
Compounds analyzed by USEPA Method TO-15
Bold indicates a detection above reporting limit; yellow highlighted results exceed industrial indoor air screening levels
< - Not detected at or above the reported detection limit.
*USEPA Regional Screening Level for Industrial Air (USEPA, November 2012), adjusted for target risk of 1x10-5 and target hazard quotient of 1.

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TABLE 6: SUB-SLAB SOIL VAPOR ANALYTICAL DATA - MARCH 4, 2014

Compound	Sub-Slab Soil Vapor Screening Level*	PRR Office / VMP-11	JMT / VMP-12	Velthouse Antiques / VMP-13	Michigan Precision / VMP-14
Chloroethane	1,466,667	<0.72	<0.78	<15	<3.8
1,1-Dichloroethane	2,567	<1.1	<1.2	<22.8	<5.7
cis-1,2-Dichloroethene	8,667	<1.1	<1.2	<22.5	<5.6
t-1,2-Dichloroethene	8,667	<1.1	<1.2	<22.5	<5.6
Tetrachloroethene	6,000	**3.9**	<0.99	<19.2	**5.5**
1,1,1-Trichloroethane	733,333	**5.0**	<1.6	**96.1**	<7.7
Trichloroethene	293	**117**	<0.79	**1,920**	**132**
Vinyl Chloride	933	<0.35	<0.37	<7.2	<1.8

Compound	Sub-Slab Soil Vapor Screening Level*	South Rec. Park / VMP-15	Quality Trucking / VMP-16	North Rec. Park 1 / VMP-17	North Rec. Park 2 / VMP-18
Chloroethane	1,466,667	<0.72	**0.91**	<0.72	<0.72
1,1-Dichloroethane	2,567	<1.1	**12.8**	<1.1	<1.1
cis-1,2-Dichloroethene	8,667	<1.1	**47.4**	**1.9**	<1.1
t-1,2-Dichloroethene	8,667	<1.1	<1.3	<1.1	<1.1
Tetrachloroethene	6,000	**51.6**	**76.9**	**22.6**	**1.4**
1,1,1-Trichloroethane	733,333	<1.5	**178**	**2.5**	<1.5
Trichloroethene	293	**58.7**	**2,240**	**45.4**	<0.74
Vinyl Chloride	933	<0.35	<0.40	<0.35	<0.35

Notes:
All data presented in micrograms per cubic meter
Compounds analyzed by USEPA Method TO-15.
Bold indicates detection above reporting limit: yellow highlighted results exceed industrial sub-slab screening levels.
< - Not detected at or above the reported detection limit.
*USEPA Regional Screening Level for Industrial Air (USEPA, November 2012), adjusted for target risk of 1x10-5 and target hazard quotient of 1, divided by USEPA-recommended attenuation factor of 0.03.

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TABLE 7: PURGE WELL PUMPING DATA - FIRST QUARTER 2014

Purge Well	Initial Meter Total: December 23, 2013	January 31, 2014 Flow Rate, GPM	January 31, 2014 Total Gallons (x1,000)	February 26, 2014 Flow Rate, GPM	February 26, 2014 Total Gallons (x1,000)	Period Summary Net Gallons (x1000)	Period Summary Average Pumping Rate, GPM[1]
PW-5	157,482	77	163,299	75	166,362	8,880	95
PW-14	294,133	178	303,960	140	308,911	14,778	158
PW-15	[2]	[2]	[2]	[2]	[2]	[2]	[2]
PW-16	251,325	117	257,190	115	258,109	6,784	72
TOTAL PUMPING RATE, GPM		372	--	330	--	--	325

AVERAGE TOTAL PUMPING RATE, GPM: 325

ESTIMATE OF TOTAL WATER PUMPED IN QUARTER, GALLONS: 42,150,462

-- = Not measured or not applicable
GPM = Gallons per minute
[1] = Based on 65 days from December 23, 2013 to February 26, 2014
[2] = PW-15 was left off this quarter to avoid biologic growth plugging the stripper tower

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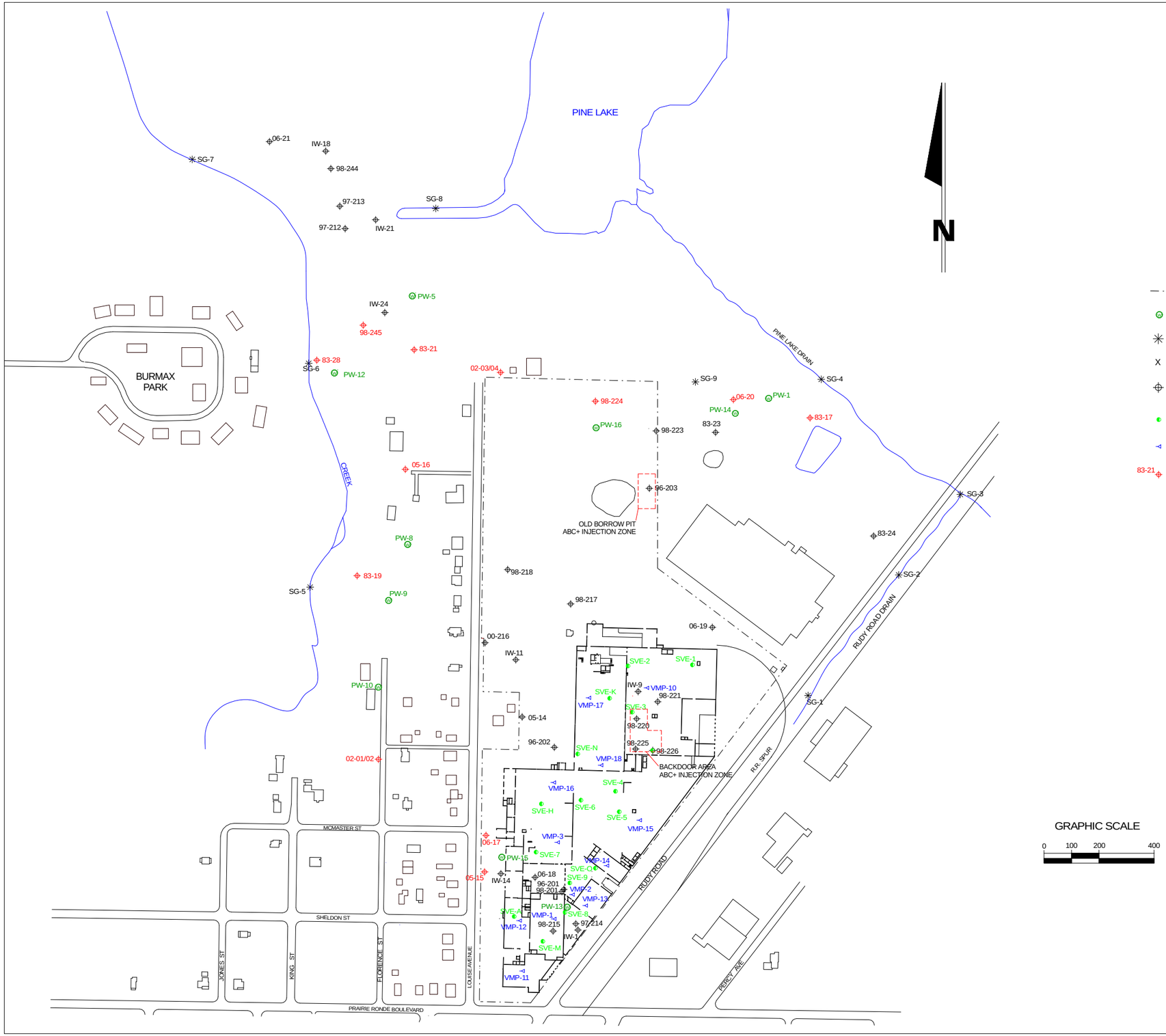

LEGEND:

- PRAIRIE RONDE REALTY PROPERTY LINE
- PURGE WELLS
- STAFF GAUGE
- X SURFACE WATER SEEP SAMPLING POINT
- MONITORING WELL LOCATION: SOME LOCATIONS HAVE MULTIPLE WELLS
- SUBSLAB DEPRESSURIZATION VAPOR EXTRACTION WELLS
- SOIL VAPOR MONITORING POINT
- 83-21 GSI COMPLIANCE MONITORING POINT

GRAPHIC SCALE

0 100 200 400

Prepared By:

R. David Mursch, P.E.

Geotechnical and Environmental Engineer

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FIRST QUARTER 2014 MONITORING REPORT

FOR:

PRAIRIE RONDE REALTY COMPANY
415 East Prairie Ronde, Dowagiac, Michigan 49047

Figure 1:

SITE PLAN

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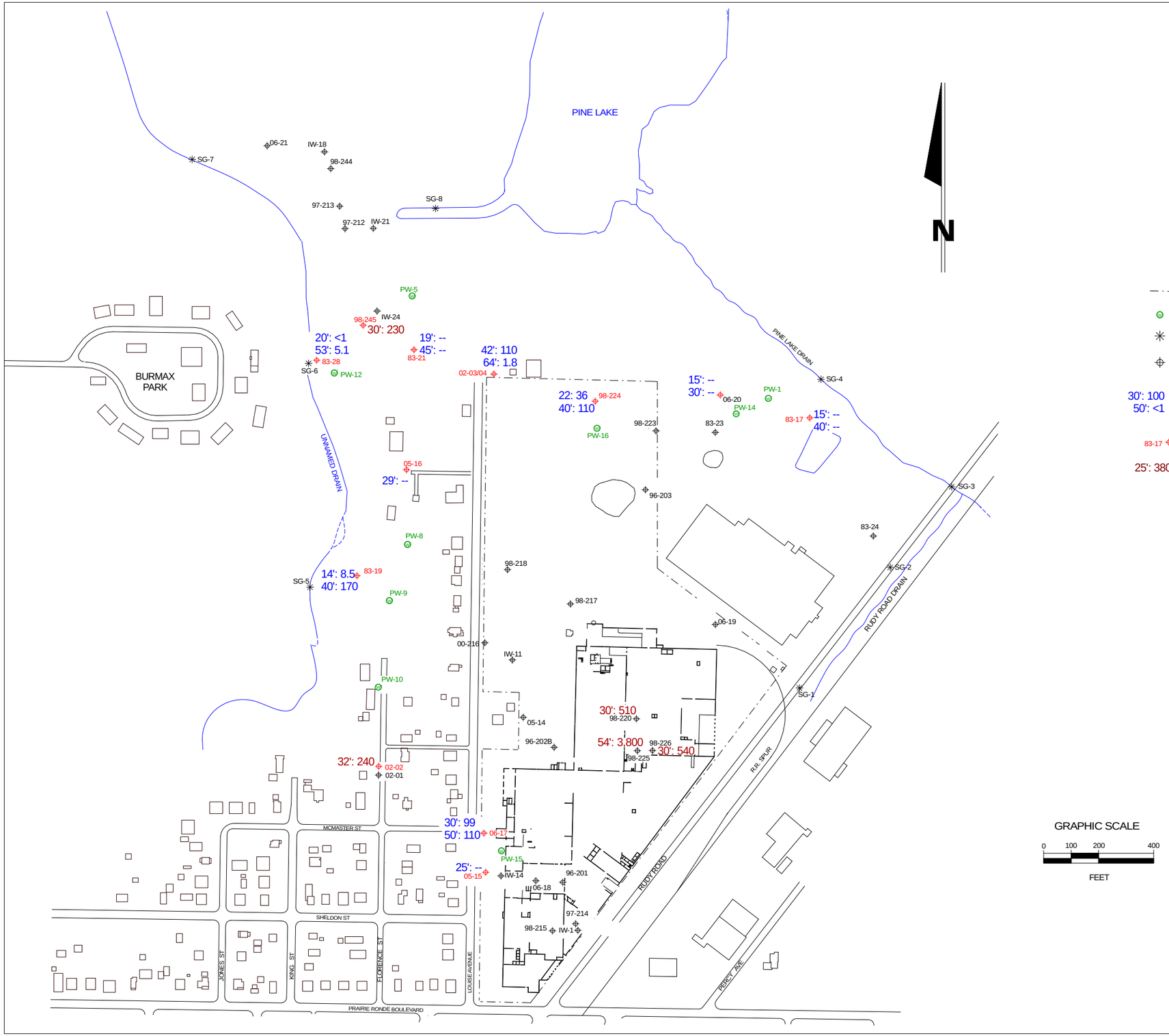

LEGEND:

— · -	PRAIRIE RONDE REALTY PROPERTY LINE
⊙	PURGE WELLS
✳	STAFF GAUGE
⊕	MONITORING WELL LOCATION: SOME LOCATIONS HAVE MULTIPLE WELLS
30': 100 50': <1	TRICHLOROETHENE CONCENTRATION, MICROGRAMS PER LITER; INDICATED DEPTHS ARE TO BOTTOM OF WELL SCREEN; < = LESS THAN
83-17 ⊕	GROUNDWATER-SURFACE WATER INTERFACE (GSI) COMPLIANCE MONITORING WELL
25': 380	EXCEEDS GSI CRITERION FOR TRICHLOROETHENE (200 MICROGRAMS PER LITER)

GRAPHIC SCALE

0 100 200 400

FEET

Prepared By:

R. David Mursch, P.E.

Geotechnical and Environmental Engineer

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FIRST QUARTER 2014 MONITORING REPORT

FOR:

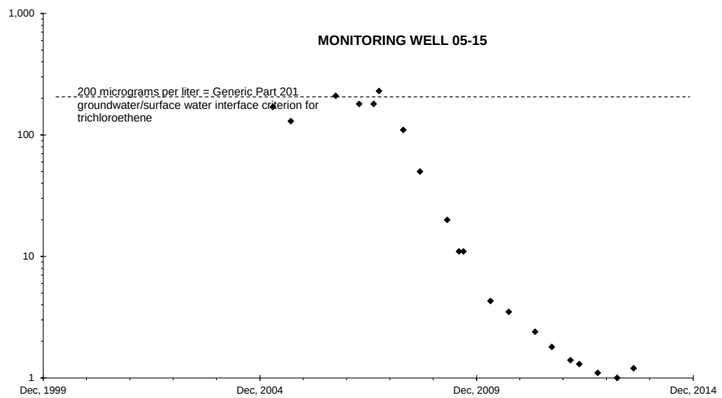
PRAIRIE RONDE REALTY COMPANY
415 East Prairie Ronde, Dowagiac, Michigan 49047

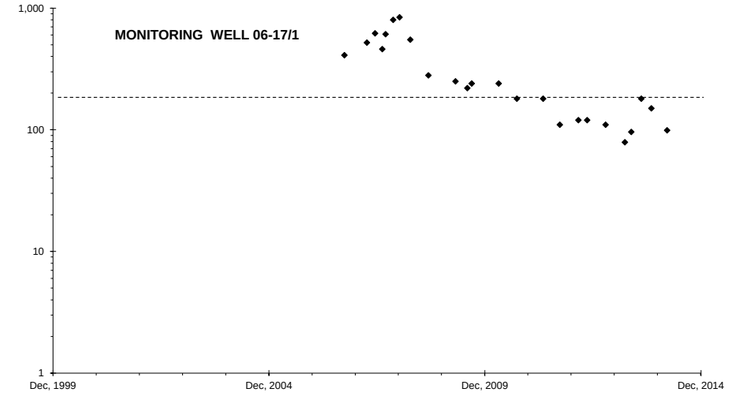
Figure 2:

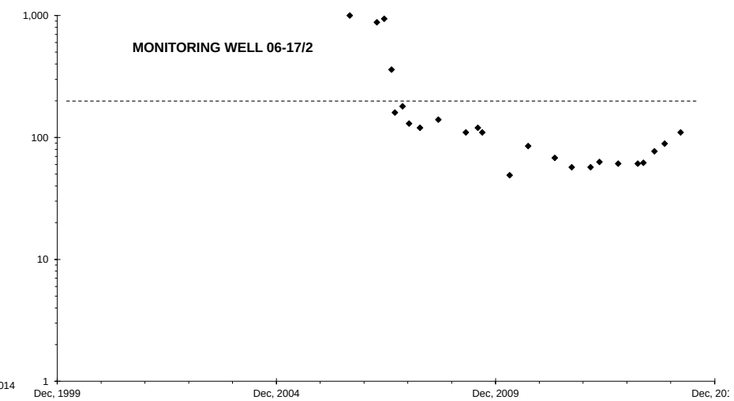
TRICHLOROETHENE AT GSI COMPLIANCE MONITORING WELLS - MARCH 2014

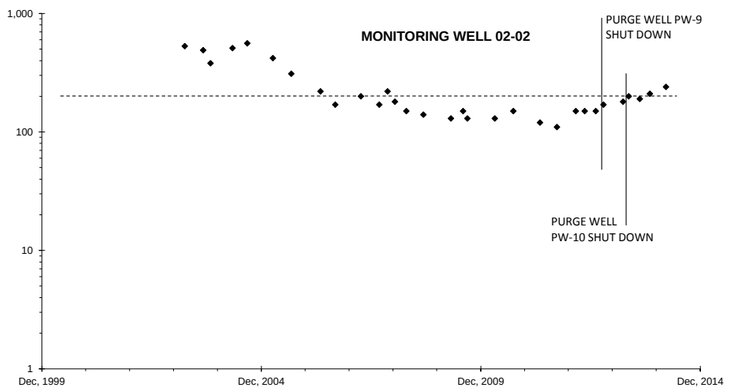
FIGURE 3: TRICHLOROETHENE CONCENTRATION TIME TRENDS IN GSI COMPLIANCE MONITORING WELLS (PAGE 1 OF 2)

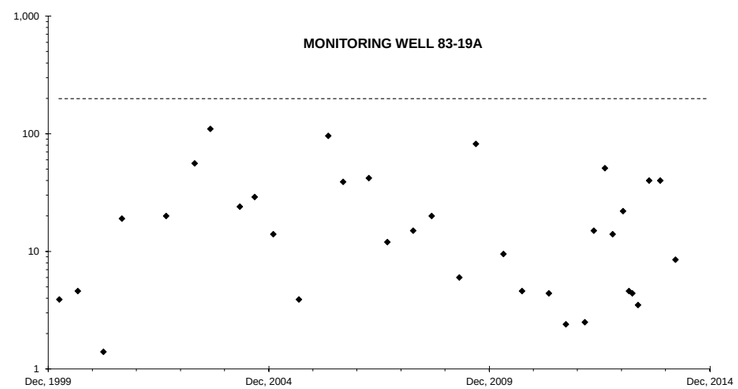
TRICHLOROETHENE CONCENTRATION, MICROGRAMS PER LITER

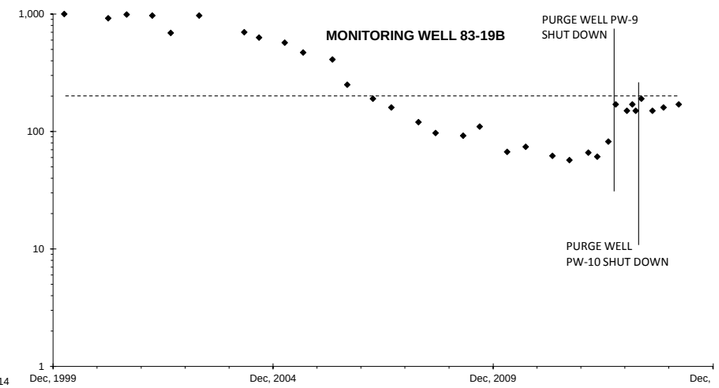


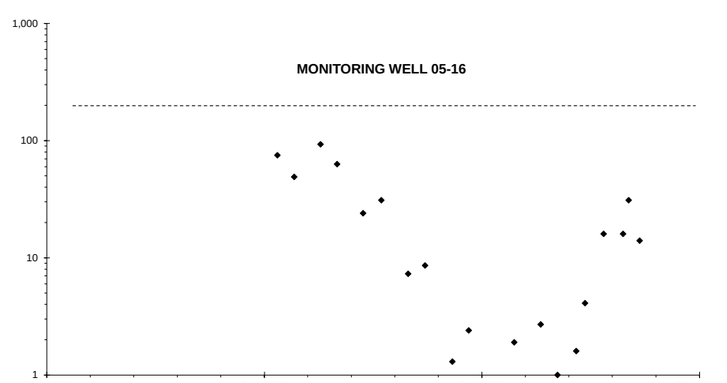


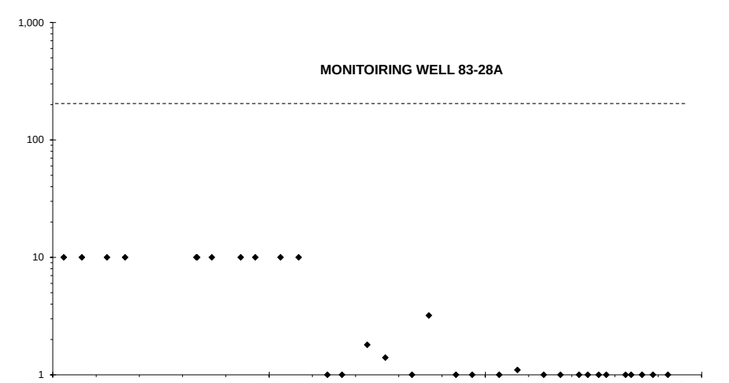












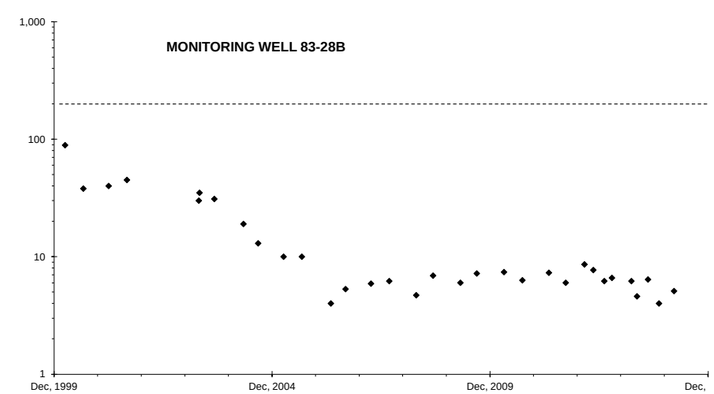


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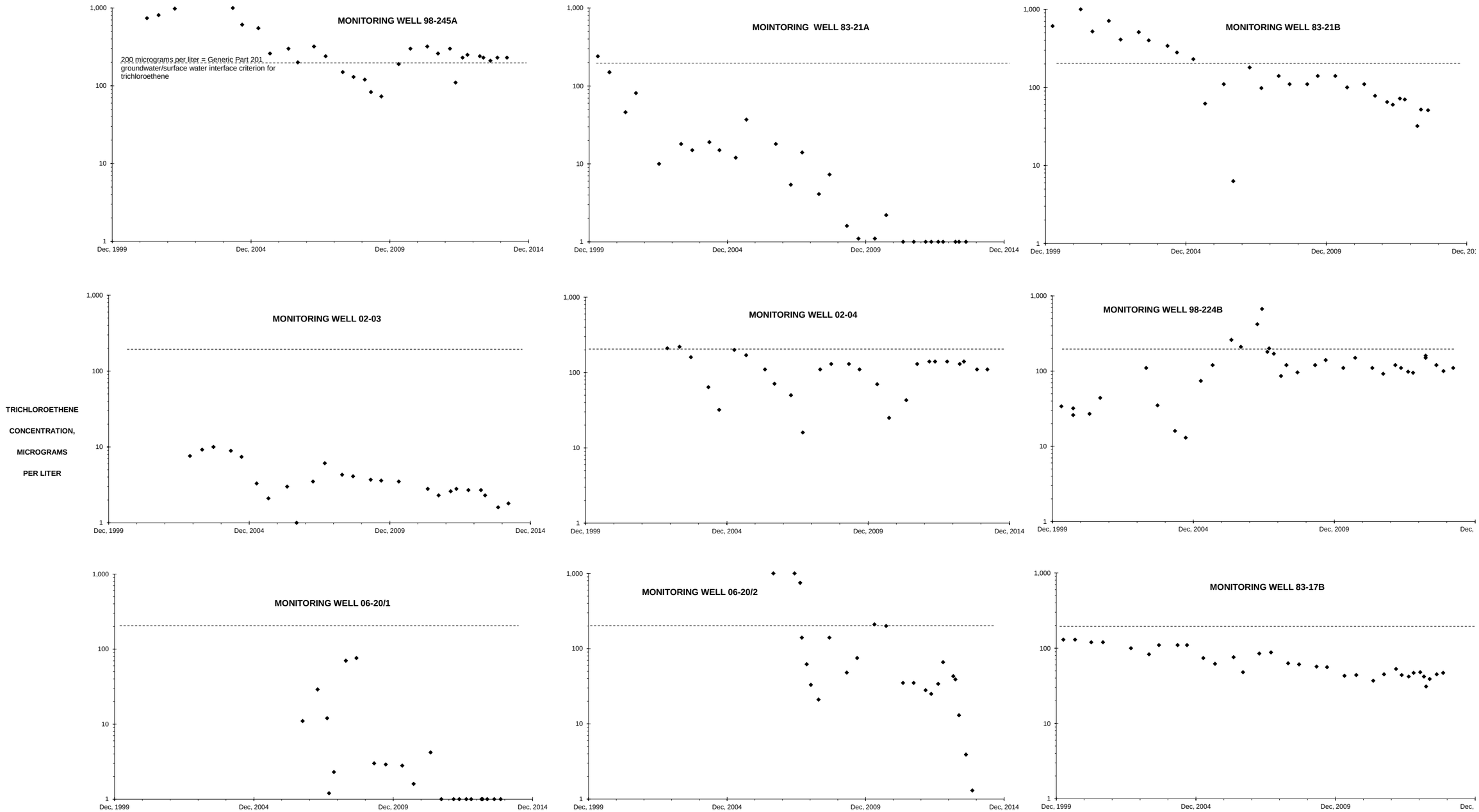
FIGURE 3: TRICHLOROETHENE CONCENTRATION TIME TRENDS IN GSI COMPLIANCE MONITORING WELLS (page 2 of 2)



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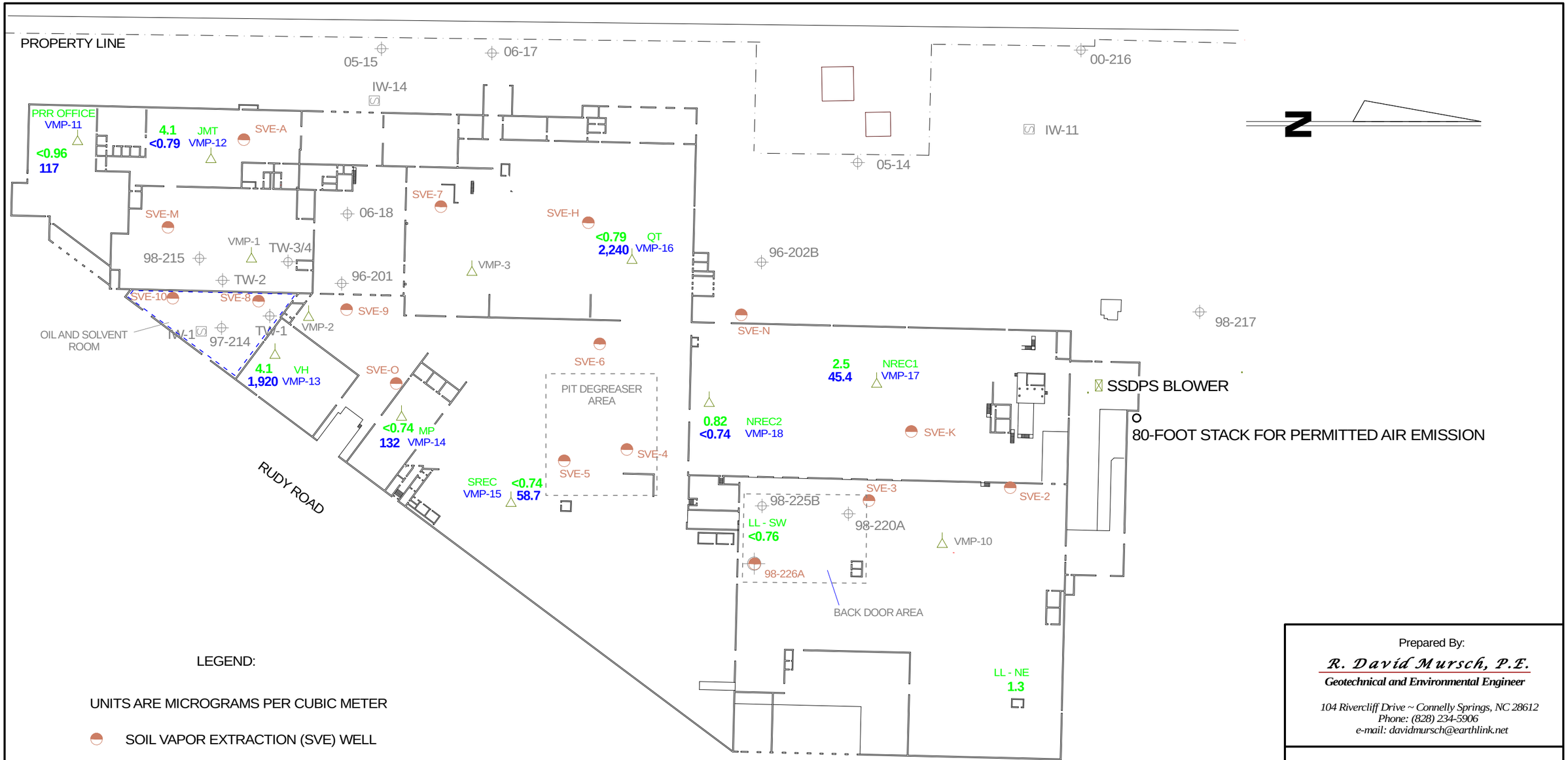

LEGEND:

UNITS ARE MICROGRAMS PER CUBIC METER

- SOIL VAPOR EXTRACTION (SVE) WELL
- SUB-SLAB VACUUM MONITORING POINT (VMP)
- GROUNDWATER MONITORING WELL
- SOURCE AREA OF TCE RELEASE TO SOIL AND GROUNDWATER
- 1.5 TRICHLOROETHENE IN INDOOR AIR - MARCH 2014
- 2.1 TRICHLOROETHENE IN SUBSLAB SOIL VAPOR - MARCH 2014

Prepared By:

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FIRST QUARTER 2014 MONITORING REPORT

FOR:

PRAIRIE RONDE REALTY COMPANY

415 East Prairie Ronde, Dowagiac, Michigan 49047

Figure 4:

TRICHLOROETHENE IN INDOOR AIR AND SUB-SLAB SOIL VAPOR - MARCH 2014

February 06, 2014

Prairie Ronde Realty Company
Attn: Mr. R. David Mursch
104 Rivercliff Drive
Connelly Springs, NC 28612

Project: NCP Dowagiac, MI

Dear Mr. R. David Mursch,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	**Received**	**Description**
1401295	01/24/2014	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/12-056-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003059); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#83658); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-13-3); Virginia DCLS (#460153/1622); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Gary L. Wood
Project Chemist

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PROJECT TECHNICAL NARRATIVE(s)

Volatile Organic Compounds by EPA Method 8260B

Narrative: The MS or MSD recovery, but not both, was outside the control limit. The RPD is within the control limit.

Analysis: USEPA-8260B

Sample/Analyte: 1401295-01 98-203A Trichloroethene

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PROJECT TECHNICAL NARRATIVE(s)

Total Metals by EPA 6000/7000 Series Methods

Narrative: The analyte concentration in the associated MB was greater than or equal to the RL. The positive sample result, which was greater than 5 times the MB value, is not qualified.

Analysis: USEPA-6010C

Sample/Analyte:	1401295-01	98-203A	Iron
	1401295-03	98-223B	Iron
	1401295-04	98-225B	Iron
	1401295-05	98-226A	Iron
	1401295-06	98-220A	Iron

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PROJECT TECHNICAL NARRATIVE(s)

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Narrative: The CRL recovery for this analyte was outside of the laboratory control limits.

Analysis: SM 4500-NO3 F-2011

4A27032-CRL1 Nitrogen, Nitrate

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STATEMENT OF DATA QUALIFICATIONS

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Qualification: The MS and/or MSD recovery was outside the laboratory or method control limit.

Analysis: SM 4500-NO3 F-2011

Sample/Analyte: 1401295-01 98-203A Nitrogen, Nitrate

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-203A**	Sampled:	1/22/14 15:30
Lab Sample ID:	**1401295-01**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	01/31/14 12:58	JMF	1400764
Methane	**3.5**	0.50	ug/L	1	RSK-175	01/31/14 12:58	JMF	1400764
Ethylene	<1.0	1.0	ug/L	1	RSK-175	01/31/14 12:58	JMF	1400764

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-203A**	Sampled:	1/22/14 15:30		
Lab Sample ID:	**1401295-01**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	2/3/14 8:00	By:	LEW
Dilution Factor:	5	Analyzed:	2/3/14 17:07	By:	LEW
QC Batch:	1400825	Analytical Batch:	4B03023		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<25	25
71-43-2	Benzene	<5.0	5.0
75-27-4	Bromodichloromethane	<1.2	1.2
75-15-0	Carbon Disulfide	<25	25
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
110-75-8	2-Chloroethyl Vinyl Ether	<25	25
67-66-3	Chloroform	<1.2	1.2
74-87-3	Chloromethane	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	**24**	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
591-78-6	2-Hexanone	<25	25
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<25	25
100-42-5	Styrene	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<5.0	5.0
108-88-3	Toluene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	**470**	5.0
75-01-4	Vinyl Chloride	<5.0	5.0

Continued on next page

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-203A**	Sampled:	1/22/14 15:30		
Lab Sample ID:	**1401295-01**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	2/3/14 8:00	By:	LEW
Dilution Factor:	5	Analyzed:	2/3/14 17:07	By:	LEW
QC Batch:	1400825	Analytical Batch:	4B03023		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<15	15

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*105*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*100*	*85-113*
4-Bromofluorobenzene	*96*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-203A**	Sampled:	1/22/14 15:30
Lab Sample ID:	**1401295-01**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Arsenic	<1.0	1.0	ug/L	1	USEPA-6020A	02/04/14 11:35	MSM	1400597
***Iron**	**800**	10	ug/L	1	USEPA-6010C	01/29/14 13:05	CKD	1400596

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-203A**	Sampled:	1/22/14 15:30
Lab Sample ID:	**1401295-01**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
*Nitrogen, Nitrate	<0.050	0.050	mg/L	1	SM 4500-NO3 F-2011	01/24/14 14:31	CAC	1400614
Sulfate	**27**	5.0	mg/L	1	USEPA-9038	01/29/14 11:31	LMA	1400695
Carbon, Total Organic	**0.80**	0.50	mg/L	1	SM 5310 C-2011	02/01/14 00:53	KAR	1400816

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223A**	Sampled:	1/22/14 16:10
Lab Sample ID:	**1401295-02**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:02	JMF	1400764
Methane	**1.4**	0.50	ug/L	1	RSK-175	01/31/14 13:02	JMF	1400764
Ethylene	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:02	JMF	1400764

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-223A**	Sampled:	1/22/14 16:10		
Lab Sample ID:	**1401295-02**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	1	Analyzed:	2/1/14 4:41	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**49**	1.0
156-60-5	trans-1,2-Dichloroethene	**1.4**	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**190**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-223A**	Sampled:	1/22/14 16:10		
Lab Sample ID:	**1401295-02**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	1	Analyzed:	2/1/14 4:41	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<3.0	3.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*100*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*97*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223A**	Sampled:	1/22/14 16:10
Lab Sample ID:	**1401295-02**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Arsenic	<1.0	1.0	ug/L	1	USEPA-6020A	02/04/14 11:41	MSM	1400597
Iron	**11**	10	ug/L	1	USEPA-6010C	02/05/14 08:45	KLV	1400820

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223A**	Sampled:	1/22/14 16:10
Lab Sample ID:	**1401295-02**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	**0.096**	0.050	mg/L	1	SM 4500-NO3 F-2011	01/24/14 14:37	CAC	1400614
Sulfate	**25**	5.0	mg/L	1	USEPA-9038	01/29/14 11:31	LMA	1400695
Carbon, Total Organic	**0.86**	0.50	mg/L	1	SM 5310 C-2011	02/01/14 01:04	KAR	1400816

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223B**	Sampled:	1/22/14 16:30
Lab Sample ID:	**1401295-03**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:06	JMF	1400764
Methane	**2.1**	0.50	ug/L	1	RSK-175	01/31/14 13:06	JMF	1400764
Ethylene	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:06	JMF	1400764

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-223B**	Sampled:	1/22/14 16:30		
Lab Sample ID:	**1401295-03**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	2	Analyzed:	2/1/14 6:02	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<10	10
71-43-2	Benzene	<2.0	2.0
75-27-4	Bromodichloromethane	<0.50	0.50
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
110-75-8	2-Chloroethyl Vinyl Ether	<10	10
67-66-3	Chloroform	<0.50	0.50
74-87-3	Chloromethane	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	**25**	2.0
156-60-5	trans-1,2-Dichloroethene	<2.0	2.0
78-87-5	1,2-Dichloropropane	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
591-78-6	2-Hexanone	<10	10
75-09-2	Methylene Chloride	<2.0	2.0
78-93-3	2-Butanone (MEK)	<10	10
100-42-5	Styrene	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<2.0	2.0
108-88-3	Toluene	<2.0	2.0
71-55-6	1,1,1-Trichloroethane	<2.0	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	**190**	2.0
75-01-4	Vinyl Chloride	<2.0	2.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-223B**	Sampled:	1/22/14 16:30		
Lab Sample ID:	**1401295-03**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	2	Analyzed:	2/1/14 6:02	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<6.0	6.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*102*	*85-118*
1,2-Dichloroethane-d4	*99*	*87-122*
Toluene-d8	*97*	*85-113*
4-Bromofluorobenzene	*93*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223B**	Sampled:	1/22/14 16:30
Lab Sample ID:	**1401295-03**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Arsenic	<1.0	1.0	ug/L	1	USEPA-6020A	02/04/14 11:42	MSM	1400597
***Iron**	**92**	10	ug/L	1	USEPA-6010C	01/29/14 13:25	CKD	1400596

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223B**	Sampled:	1/22/14 16:30
Lab Sample ID:	**1401295-03**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Sulfate	**28**	5.0	mg/L	1	USEPA-9038	01/29/14 11:31	LMA	1400695
Carbon, Total Organic	**0.62**	0.50	mg/L	1	SM 5310 C-2011	02/01/14 01:44	KAR	1400816
Nitrogen, Nitrate	<0.050	0.050	mg/L	1	SM 4500-NO3 F-2011	01/24/14 14:37	CAC	1400614

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-225B**	Sampled:	1/22/14 18:00
Lab Sample ID:	**1401295-04**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:10	JMF	1400764
Methane	**9.4**	0.50	ug/L	1	RSK-175	01/31/14 13:10	JMF	1400764
Ethylene	**1.6**	1.0	ug/L	1	RSK-175	01/31/14 13:10	JMF	1400764

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-225B**	Sampled:	1/22/14 18:00		
Lab Sample ID:	**1401295-04**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	25	Analyzed:	2/1/14 6:30	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<120	120
71-43-2	Benzene	<25	25
75-27-4	Bromodichloromethane	<6.2	6.2
75-15-0	Carbon Disulfide	<120	120
56-23-5	Carbon Tetrachloride	<25	25
108-90-7	Chlorobenzene	<25	25
110-75-8	2-Chloroethyl Vinyl Ether	<120	120
67-66-3	Chloroform	<6.2	6.2
74-87-3	Chloromethane	<25	25
95-50-1	1,2-Dichlorobenzene	<25	25
106-46-7	1,4-Dichlorobenzene	<25	25
75-34-3	1,1-Dichloroethane	<25	25
107-06-2	1,2-Dichloroethane	<25	25
75-35-4	1,1-Dichloroethene	<25	25
156-59-2	cis-1,2-Dichloroethene	**2400**	25
156-60-5	trans-1,2-Dichloroethene	**26**	25
78-87-5	1,2-Dichloropropane	<25	25
100-41-4	Ethylbenzene	<25	25
591-78-6	2-Hexanone	<120	120
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<120	120
100-42-5	Styrene	<25	25
79-34-5	1,1,2,2-Tetrachloroethane	<12	12
127-18-4	Tetrachloroethene	<25	25
108-88-3	Toluene	<25	25
71-55-6	1,1,1-Trichloroethane	<25	25
79-00-5	1,1,2-Trichloroethane	<25	25
79-01-6	Trichloroethene	**230**	25
75-01-4	Vinyl Chloride	<25	25

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-225B**	Sampled:	1/22/14 18:00		
Lab Sample ID:	**1401295-04**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	25	Analyzed:	2/1/14 6:30	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<75	75

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*101*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*97*	*85-113*
4-Bromofluorobenzene	*95*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-225B**	Sampled:	1/22/14 18:00
Lab Sample ID:	**1401295-04**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Arsenic	**3.2**	1.0	ug/L	1	USEPA-6020A	02/04/14 11:46	MSM	1400597
***Iron**	**5600**	10	ug/L	1	USEPA-6010C	01/29/14 13:29	CKD	1400596

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-225B**	Sampled:	1/22/14 18:00
Lab Sample ID:	**1401295-04**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	<0.050	0.050	mg/L	1	SM 4500-NO3 F-2011	01/24/14 14:38	CAC	1400614
Sulfate	**14**	5.0	mg/L	1	USEPA-9038	01/29/14 11:34	LMA	1400695
Carbon, Total Organic	**75**	5.0	mg/L	10	SM 5310 C-2011	02/03/14 19:41	KAR	1400844

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-225B**	Sampled:	1/22/14 18:00		
Lab Sample ID:	**1401295-04RE1**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	2.5	Analyzed:	2/3/14 18:56	By:	LEW
QC Batch:	1400825	Analytical Batch:	4B03023		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<12	12
71-43-2	Benzene	<2.5	2.5
75-27-4	Bromodichloromethane	<0.62	0.62
75-15-0	Carbon Disulfide	<12	12
56-23-5	Carbon Tetrachloride	<2.5	2.5
108-90-7	Chlorobenzene	<2.5	2.5
110-75-8	2-Chloroethyl Vinyl Ether	<12	12
67-66-3	Chloroform	<0.62	0.62
74-87-3	Chloromethane	<2.5	2.5
95-50-1	1,2-Dichlorobenzene	<2.5	2.5
106-46-7	1,4-Dichlorobenzene	<2.5	2.5
75-34-3	1,1-Dichloroethane	<2.5	2.5
107-06-2	1,2-Dichloroethane	<2.5	2.5
75-35-4	1,1-Dichloroethene	**6.2**	2.5
156-59-2	cis-1,2-Dichloroethene	**2400**	2.5
156-60-5	trans-1,2-Dichloroethene	**53**	2.5
78-87-5	1,2-Dichloropropane	<2.5	2.5
100-41-4	Ethylbenzene	<2.5	2.5
591-78-6	2-Hexanone	<12	12
75-09-2	Methylene Chloride	<2.5	2.5
78-93-3	2-Butanone (MEK)	<12	12
100-42-5	Styrene	<2.5	2.5
79-34-5	1,1,2,2-Tetrachloroethane	<1.2	1.2
127-18-4	Tetrachloroethene	<2.5	2.5
108-88-3	Toluene	<2.5	2.5
71-55-6	1,1,1-Trichloroethane	<2.5	2.5
79-00-5	1,1,2-Trichloroethane	<2.5	2.5
79-01-6	Trichloroethene	**210**	2.5
75-01-4	Vinyl Chloride	<2.5	2.5
1330-20-7	Xylene (Total)	<7.5	7.5

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-225B**	Sampled:	1/22/14 18:00		
Lab Sample ID:	**1401295-04RE1**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	2.5	Analyzed:	2/3/14 18:56	By:	LEW
QC Batch:	1400825	Analytical Batch:	4B03023		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*100*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*96*	*85-113*
4-Bromofluorobenzene	*95*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-226A**	Sampled:	1/22/14 18:35
Lab Sample ID:	**1401295-05**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:15	JMF	1400764
Methane	<0.50	0.50	ug/L	1	RSK-175	01/31/14 13:15	JMF	1400764
Ethylene	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:15	JMF	1400764

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-226A**	Sampled:	1/22/14 18:35		
Lab Sample ID:	**1401295-05**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	5	Analyzed:	2/1/14 6:57	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<25	25
71-43-2	Benzene	<5.0	5.0
75-27-4	Bromodichloromethane	<1.2	1.2
75-15-0	Carbon Disulfide	<25	25
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
110-75-8	2-Chloroethyl Vinyl Ether	<25	25
67-66-3	Chloroform	<1.2	1.2
74-87-3	Chloromethane	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
591-78-6	2-Hexanone	<25	25
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<25	25
100-42-5	Styrene	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<5.0	5.0
108-88-3	Toluene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	**580**	5.0
75-01-4	Vinyl Chloride	<5.0	5.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-226A**	Sampled:	1/22/14 18:35		
Lab Sample ID:	**1401295-05**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	5	Analyzed:	2/1/14 6:57	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<15	15

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*103*	*85-118*
1,2-Dichloroethane-d4	*101*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*95*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-226A**	Sampled:	1/22/14 18:35
Lab Sample ID:	**1401295-05**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Arsenic	**4.5**	1.0	ug/L	1	USEPA-6020A	02/04/14 11:55	MSM	1400597
***Iron**	**960**	10	ug/L	1	USEPA-6010C	01/29/14 13:32	CKD	1400596

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-226A**	Sampled:	1/22/14 18:35
Lab Sample ID:	**1401295-05**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	**0.20**	0.050	mg/L	1	SM 4500-NO3 F-2011	01/24/14 14:39	CAC	1400614
Sulfate	**8.5**	5.0	mg/L	1	USEPA-9038	01/29/14 11:34	LMA	1400695
Carbon, Total Organic	**68**	5.0	mg/L	10	SM 5310 C-2011	02/03/14 19:52	KAR	1400844

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-220A**	Sampled:	1/23/14 8:00
Lab Sample ID:	**1401295-06**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:19	JMF	1400764
Methane	**0.85**	0.50	ug/L	1	RSK-175	01/31/14 13:19	JMF	1400764
Ethylene	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:19	JMF	1400764

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-220A**	Sampled:	1/23/14 8:00		
Lab Sample ID:	**1401295-06**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	5	Analyzed:	2/1/14 7:24	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<25	25
71-43-2	Benzene	<5.0	5.0
75-27-4	Bromodichloromethane	<1.2	1.2
75-15-0	Carbon Disulfide	<25	25
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
110-75-8	2-Chloroethyl Vinyl Ether	<25	25
67-66-3	Chloroform	<1.2	1.2
74-87-3	Chloromethane	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
591-78-6	2-Hexanone	<25	25
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<25	25
100-42-5	Styrene	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<5.0	5.0
108-88-3	Toluene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	**420**	5.0
75-01-4	Vinyl Chloride	<5.0	5.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-220A**	Sampled:	1/23/14 8:00		
Lab Sample ID:	**1401295-06**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	5	Analyzed:	2/1/14 7:24	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<15	15

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*101*	*85-118*
1,2-Dichloroethane-d4	*101*	*87-122*
Toluene-d8	*97*	*85-113*
4-Bromofluorobenzene	*96*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-220A**	Sampled:	1/23/14 8:00
Lab Sample ID:	**1401295-06**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Arsenic	**5.1**	1.0	ug/L	1	USEPA-6020A	02/04/14 11:49	MSM	1400597
***Iron**	**5600**	10	ug/L	1	USEPA-6010C	01/29/14 13:35	CKD	1400596

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-220A**	Sampled:	1/23/14 8:00
Lab Sample ID:	**1401295-06**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Carbon, Total Organic	**190**	25	mg/L	50	SM 5310 C-2011	02/03/14 20:03	KAR	1400844
Nitrogen, Nitrate	**1.4**	0.25	mg/L	5	SM 4500-NO3 F-2011	01/24/14 16:40	CAC	1400614
Sulfate	**11**	5.0	mg/L	1	USEPA-9038	01/29/14 11:34	LMA	1400695

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**IW-9**	Sampled:	1/23/14 8:25
Lab Sample ID:	**1401295-07**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:23	JMF	1400764
Methane	**1.0**	0.50	ug/L	1	RSK-175	01/31/14 13:23	JMF	1400764
Ethylene	<1.0	1.0	ug/L	1	RSK-175	01/31/14 13:23	JMF	1400764

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**IW-9**	Sampled:	1/23/14 8:25		
Lab Sample ID:	**1401295-07**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	1	Analyzed:	2/1/14 5:08	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**2.7**	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	**2.0**	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**180**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**IW-9**	Sampled:	1/23/14 8:25		
Lab Sample ID:	**1401295-07**	Sampled By:	RDM		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	1	Analyzed:	2/1/14 5:08	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<3.0	3.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*101*	*85-118*
1,2-Dichloroethane-d4	*98*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*95*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**IW-9**	Sampled:	1/23/14 8:25
Lab Sample ID:	**1401295-07**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Arsenic	<1.0	1.0	ug/L	1	USEPA-6020A	02/04/14 11:56	MSM	1400597
Iron	**41**	10	ug/L	1	USEPA-6010C	02/05/14 09:01	KLV	1400820

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**IW-9**	Sampled:	1/23/14 8:25
Lab Sample ID:	**1401295-07**	Sampled By:	RDM
Matrix:	Water	Received:	1/24/14 9:15

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	**0.66**	0.050	mg/L	1	SM 4500-NO3 F-2011	01/24/14 14:40	CAC	1400614
Sulfate	**19**	5.0	mg/L	1	USEPA-9038	01/29/14 11:34	LMA	1400695
Carbon, Total Organic	**0.95**	0.50	mg/L	1	SM 5310 C-2011	02/01/14 02:31	KAR	1400816

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**Trip Blank TM3295**	Sampled:	1/23/14 0:00		
Lab Sample ID:	**1401295-08**	Sampled By:	TML		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	1	Analyzed:	2/1/14 4:13	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1401295**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**Trip Blank TM3295**	Sampled:	1/23/14 0:00		
Lab Sample ID:	**1401295-08**	Sampled By:	TML		
Matrix:	Water	Received:	1/24/14 9:15		
Unit:	ug/L	Prepared:	1/31/14 15:00	By:	LEW
Dilution Factor:	1	Analyzed:	2/1/14 4:13	By:	LEW
QC Batch:	1400806	Analytical Batch:	4B03011		

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*99*	*85-118*
1,2-Dichloroethane-d4	*99*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*97*	*82-110*

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Dissolved Gases in Water by RSK-175 Headspace Analysis

QC Batch: 1400764 Method-Specific Extraction/RSK-175

Method Blank Analyzed: 01/31/2014 By: JMF

Unit: ug/L Analytical Batch: 4A31041

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Ethane			<1.0					1.0
Methane			<0.50			--		0.50
Ethylene			<1.0					1.0

Laboratory Control Sample Analyzed: 01/31/2014 By: JMF

Unit: ug/L Analytical Batch: 4A31041

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Ethane		58.7	**44.5**	76	67-122	--		1.0
Methane		35.8	**27.7**	77	70-116	--		0.50
Ethylene		58.1	**43.6**	75	67-121	--		1.0

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL

QC Batch: 1400806 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank Analyzed: 01/31/2014 By: LEW

Unit: ug/L Analytical Batch: 4B03011

Acetone	<5.0		--	5.0
Benzene	<1.0			1.0
Bromodichloromethane	<0.25			0.25
Carbon Disulfide	<5.0		--	5.0
Carbon Tetrachloride	<1.0			1.0
Chlorobenzene	<1.0			1.0
2-Chloroethyl Vinyl Ether	<5.0			5.0
Chloroform	<0.25			0.25
Chloromethane	<1.0			1.0
1,2-Dichlorobenzene	<1.0			1.0
1,4-Dichlorobenzene	<1.0		--	1.0
1,1-Dichloroethane	<1.0			1.0
1,2-Dichloroethane	<1.0			1.0
1,1-Dichloroethene	<1.0			1.0
cis-1,2-Dichloroethene	<1.0			1.0
trans-1,2-Dichloroethene	<1.0			1.0
1,2-Dichloropropane	<1.0			1.0
Ethylbenzene	<1.0		--	1.0
2-Hexanone	<5.0			5.0
Methylene Chloride	<1.0			1.0
2-Butanone (MEK)	<5.0			5.0
Styrene	<1.0			1.0
1,1,2,2-Tetrachloroethane	<0.50			0.50
Tetrachloroethene	<1.0			1.0
Toluene	<1.0			1.0
1,1,1-Trichloroethane	<1.0			1.0
1,1,2-Trichloroethane	<1.0			1.0
Trichloroethene	<1.0			1.0
Vinyl Chloride	<1.0			1.0
Xylene (Total)	<3.0			3.0
Surrogates:				
Dibromofluoromethane		*100*	*85-118*	
1,2-Dichloroethane-d4		*100*	*87-122*	

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Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL

QC Batch: 1400806 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued) Analyzed: 01/31/2014 By: LEW

Unit: ug/L Analytical Batch: 4B03011

Surrogates (Continued):						
Toluene-d8			*97*	*85-113*		
4-Bromofluorobenzene			*95*	*82-110*		

Laboratory Control Sample Analyzed: 01/31/2014 By: LEW

Unit: ug/L Analytical Batch: 4B03011

Benzene	40.0	**39.6**	99	84-119	--	1.0
Chlorobenzene	40.0	**39.8**	100	84-118	--	1.0
1,1-Dichloroethene	40.0	**39.1**	98	77-123	--	1.0
Toluene	40.0	**39.2**	98	85-118	--	1.0
Trichloroethene	40.0	**41.8**	104	82-119	--	1.0
Surrogates:						
Dibromofluoromethane			*101*	*85-118*		
1,2-Dichloroethane-d4			*98*	*87-122*		
Toluene-d8			*100*	*85-113*		
4-Bromofluorobenzene			*100*	*82-110*		

QC Batch: 1400825 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank Analyzed: 02/03/2014 By: LEW

Unit: ug/L Analytical Batch: 4B03023

Acetone		<5.0			--	5.0
Benzene		<1.0				1.0
Bromodichloromethane		<0.25				0.25
Carbon Disulfide		<5.0			--	5.0
Carbon Tetrachloride		<1.0				1.0
Chlorobenzene		<1.0				1.0
2-Chloroethyl Vinyl Ether		<5.0				5.0
Chloroform		<0.25				0.25
Chloromethane		<1.0			--	1.0
1,2-Dichlorobenzene		<1.0				1.0
1,4-Dichlorobenzene		<1.0			--	1.0
1,1-Dichloroethane		<1.0				1.0
1,2-Dichloroethane		<1.0				1.0

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Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL

QC Batch: 1400825 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued) Analyzed: 02/03/2014 By: LEW

Unit: ug/L Analytical Batch: 4B03023

1,1-Dichloroethene			<1.0				1.0
cis-1,2-Dichloroethene			<1.0				1.0
trans-1,2-Dichloroethene			<1.0				1.0
1,2-Dichloropropane			<1.0				1.0
Ethylbenzene			<1.0			--	1.0
2-Hexanone			<5.0				5.0
Methylene Chloride			<1.0				1.0
2-Butanone (MEK)			<5.0				5.0
Styrene			<1.0				1.0
1,1,2,2-Tetrachloroethane			<0.50				0.50
Tetrachloroethene			<1.0				1.0
Toluene			<1.0			--	1.0
1,1,1-Trichloroethane			<1.0				1.0
1,1,2-Trichloroethane			<1.0				1.0
Trichloroethene			<1.0				1.0
Vinyl Chloride			<1.0				1.0
Xylene (Total)			<3.0				3.0
Surrogates:							
Dibromofluoromethane				*102*	*85-118*		
1,2-Dichloroethane-d4				*101*	*87-122*		
Toluene-d8				*95*	*85-113*		
4-Bromofluorobenzene				*95*	*82-110*		

Laboratory Control Sample Analyzed: 02/03/2014 By: LEW

Unit: ug/L Analytical Batch: 4B03023

Benzene	40.0	**41.6**		104	84-119	--	1.0
Chlorobenzene	40.0	**41.1**		103	84-118	--	1.0
1,1-Dichloroethene	40.0	**41.0**		102	77-123	--	1.0
Toluene	40.0	**41.7**		104	85-118	--	1.0
Trichloroethene	40.0	**38.2**		95	82-119	--	1.0

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Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1400825 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued) Analyzed: 02/03/2014 By: LEW
Unit: ug/L Analytical Batch: 4B03023

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Surrogates:								
Dibromofluoromethane				*103*	*85-118*			
1,2-Dichloroethane-d4				*96*	*87-122*			
Toluene-d8				*101*	*85-113*			
4-Bromofluorobenzene				*101*	*82-110*			

Matrix Spike 1401295-01 98-203A Analyzed: 02/03/2014 By: LEW
Unit: ug/L Analytical Batch: 4B03023

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Benzene	<5.0	200	**219**	110	80-129	--		5.0
Chlorobenzene	<5.0	200	**211**	106	80-121	--		5.0
1,1-Dichloroethene	<5.0	200	**219**	110	74-134	--		5.0
Toluene	<5.0	200	**215**	107	79-129	--		5.0
Trichloroethene	467	200	**659**	96	75-127	--		5.0
Surrogates:								
Dibromofluoromethane				*105*	*85-118*			
1,2-Dichloroethane-d4				*98*	*87-122*			
Toluene-d8				*99*	*85-113*			
4-Bromofluorobenzene				*98*	*82-110*			

Matrix Spike Duplicate 1401295-01 98-203A Analyzed: 02/03/2014 By: LEW
Unit: ug/L Analytical Batch: 4B03023

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Benzene	<5.0	200	**201**	101	80-129	9	9	5.0
Chlorobenzene	<5.0	200	**203**	102	80-121	4	8	5.0
1,1-Dichloroethene	<5.0	200	**200**	100	74-134	9	11	5.0
Toluene	<5.0	200	**198**	99	79-129	8	9	5.0
Trichloroethene	467	200	**610**	**72**	75-127	8	10	5.0
Surrogates:								
Dibromofluoromethane				*102*	*85-118*			
1,2-Dichloroethane-d4				*97*	*87-122*			
Toluene-d8				*98*	*85-113*			

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Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL

QC Batch: 1400825 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike Duplicate (Continued) 1401295-01 98-203A — Analyzed: 02/03/2014 — By: LEW

Unit: ug/L — Analytical Batch: 4B03023

Surrogates (Continued):

4-Bromofluorobenzene	*102*	*82-110*

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Total Metals by EPA 6000/7000 Series Methods

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Analyte: **Arsenic**/USEPA-6020A									
QC Batch: 1400597 (3020A Digestion)							Analyzed:	02/04/2014	By: MSM
Method Blank			<1.0	ug/L					1.0
Laboratory Control Sample		50.0	**42.7**	ug/L	85	80-120			1.0
1401295-01 [98-203A]									
Matrix Spike	0.308	50.0	**45.6**	ug/L	91	75-125			1.0
Matrix Spike Duplicate	0.308	50.0	**46.8**	ug/L	93	75-125	2	20	1.0
Analyte: **Iron**/USEPA-6010C									
QC Batch: 1400820 (3010A Digestion)							Analyzed:	02/05/2014	By: KLV
Method Blank			<10	ug/L					10
Laboratory Control Sample		400	**357**	ug/L	89	80-120			10
1401295-02 [98-223A]									
Matrix Spike	11.1	400	**362**	ug/L	88	75-125			10
Matrix Spike Duplicate	11.1	400	**368**	ug/L	89	75-125	2	20	10
QC Batch: 1400596 (3010A Digestion)							Analyzed:	01/29/2014	By: CKD
Method Blank			**13**	ug/L					10
*Laboratory Control Sample		400	**381**	ug/L	95	80-120			10
1401295-01 [98-203A]									
*Matrix Spike	802	400	**1190**	ug/L	96	75-125			10
*Matrix Spike Duplicate	802	400	**1200**	ug/L	100	75-125	1	20	10

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Analyte: Carbon, Total Organic/SM 5310 C-2011									
QC Batch: 1400844 (Method Specific Preparation)							Analyzed:	02/03/2014	By: KAR
Method Blank			<0.50	mg/L					0.50
Laboratory Control Sample		2.00	**2.06**	mg/L	103	84-118			0.50
QC Batch: 1400816 (Method Specific Preparation)							Analyzed:	01/31/2014	By: KAR
Method Blank			<0.50	mg/L					0.50
Laboratory Control Sample		2.00	**2.01**	mg/L	100	84-118			0.50
Analyte: Nitrogen, Nitrate/SM 4500-NO3 F-2011									
QC Batch: 1400614 (General Inorganic Prep)							Analyzed:	01/24/2014	By: CAC
Method Blank			<0.050	mg/L					0.050
Laboratory Control Sample		0.500	**0.456**	mg/L	91	90-110			0.050
1401295-01 [98-203A]									
Matrix Spike	0.0385	0.500	**0.457**	mg/L	**84**	90-110			0.050
Matrix Spike Duplicate	0.0385	0.500	**0.476**	mg/L	**87**	90-110	4	20	0.050
Analyte: Sulfate/USEPA-9038									
QC Batch: 1400695 (General Inorganic Prep)							Analyzed:	01/29/2014	By: LMA
Method Blank			<5.0	mg/L					5.0
Method Blank			<5.0	mg/L					5.0
Laboratory Control Sample		10.0	**9.03**	mg/L	90	85-115			5.0
Laboratory Control Sample		20.0	**18.7**	mg/L	93	85-115			5.0

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Chain of Custody Record

COC No. 147362

Pg. 1 of 1

For Lab Use Only

Cart: 4

VOA Rack/Tray: 568G-362G (Rack)

Receipt Log No.: 21.3

Project Chemist:

Work Order No.: 1401295

Client Name: R. David Murseth

Address: 104 Riverclift Dr

City, State Zip: Connelly Springs NC 28612

Phone/Fax: 828 234 5906

Email: davidmurseth@earthlink.net

Project Name: PRR

Client Project No. / P.O. No.: 96-01

Invoice To: PRR ☐ Client ☒ Other (comments)

Contact/Report To: TDM

Analyses Requested

PRESERVATIVES
A NONE pH~7
B HNO_3 pH<2
C H_2SO_4 pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAc/NaOH pH>9
G MeOH
H Other (note below)

Schedule	Matrix Code	Sample Number		Field Sample ID	Cooler ID	Sample Date	Sample Time	COMP	GRAB	Matrix	VOA	VOA	RKU	As, Hg, Mn, Na, SO4					Total	Sample Comments
				Container Type (corresponds to Container Packing List)							D	D	C	B	A					
				Number of Containers Submitted							1	1	11	6	3					
		01	1	98-203A		1-22-14	1530		✓	W	2	2	3	1	1					
		02	2	98-223A			1610		✓	W	2	2	3	1	1					
		03	3	98-223B			1630		✓	W	2	2	3	1	1					
		04	4	98-225 B			1800		✓	W	2	2	3	1	1					
		05	5	98-226 A			1835		✓	W	2	2	3	1	1					
		06	6	98-220A		1-23-14	0800		✓	W	2	2	3	1	1					
		07	7	FW-9			0825		✓	W	2	2	3	1	1					
		08	8	Trip BLANK 1			—			W	1	-	-	-	-					
			9	Trip BLANK 2			—			W	1	-	-	-	-					
			10																	

Sampled By (print): R. David Murseth

Sampler's Signature:

Company:

How Shipped? Hand ___ Carrier Fed Ex

Tracking No.

Comments

1. Relinquished By	Date	Time	2. Relinquished By	Date	Time	3. Relinquished By	Date	Time
1. Received By	**Date**	**Time**	**2. Received By**	**Date**	**Time**	**3. Received For Lab By**	**Date**	**Time**
							1-24-14	0915

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD

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TRIMATRIX LABORATORIES

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TRIMATRIX LABORATORIES

SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: R. David Mursch
Receipt Record Page/Line #: 21.3
Work Order #: 1401295
New / Add To
Project Chemist
Sample #s

Recorded by (initials/date): WC 1.24.14

☑ Cooler ☐ Box ☐ Other_____ Qty Received: 2

Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (#_____) ☐ See Additional Cooler Information Form

Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via	Recorded °C	Correction Factor °C	Actual °C	Average °C	Cooler ID on COC?	VOC Trip Blank received?
Tm 3295	0935	☑ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☑ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers	☑ Temperature Blank (TB) ☐ 1 Container	Temp Blank: –		1.8	2.7	☐	☑ (1)
						TB location: Representative / Not Representative					
						1 2.5	–	2.5			
						2 2.5	–	2.5			
						3 3.1	–	3.1			
Tm 2919	0940	☑ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☑ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers	☑ Temperature Blank (TB) ☐ 1 Container	Temp Blank: –		2.0	2.5	☐	☐
						TB location: Representative / Not Representative					
						1 2.2	–	2.2			
						2 3.0	–	3.0			
						3 2.3	–	2.3			
						Temp Blank:					
						TB location: Representative / Not Representative					
						1					
						2					
						3					
						Temp Blank:					
						TB location: Representative / Not Representative					
						1					
						2					
						3					

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes / No
- ☐ ☐ Chain of Custody record(s)? If No, Initiated By _____
- ☐ Received for Lab Signed/Date/Time?
- ☐ ☐ Shipping document?
- ☐ ☐ Other _____

COC Information

☑ TriMatrix COC ☐ Other_____

COC ID Numbers: 147362

Check COC for Accuracy

Yes / No
- ☐ Analysis Requested?
- ☐ ☐ Sample ID matches COC?
- ☐ ☐ Sample Date and Time matches COC?
- ☐ Container type completed on COC?
- ☐ ☐ All container types indicated are received?

Check Sample Preservation

N/A / Yes / No
- ☐ ☐ Average sample temperature ≤6° C?
- ☐ ☐ Was thermal preservation required?
- ☐ If "No", Project Chemist Approval Intials:_____
- ☐ If "Yes" Completed Non Con Cooler - Cont Inventory Form?
- ☐ Completed Sample Preservation Verification Form?
- ☐ ☐ Samples chemically preserved correctly?
- ☐ If "No", added orange tag?
- ☐ Received pre-preserved VOC soils?
  - ☐ MeOH ☐ Na_2SO_4

Check for Short Hold-Time Prep/Analyses

- ☐ Bacteriological
- ☐ Air Bags
- ☐ EnCores / Methanol Pre-Preserved
- ☐ Formaldehyde/Aldehyde
- ☑ Green-tagged containers
- ☐ Yellow/White-tagged 1L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
- ☐ NONE RECEIVED
- ☑ RECEIVED, COCs TO LAB(S)

Sample Condition Summary

N/A / Yes / No
- ☐ ☐ Broken containers/lids?
- ☐ ☐ Missing or incomplete labels?
- ☐ ☐ Illegible information on labels?
- ☐ ☐ Low volume received?
- ☐ ☐ Inappropriate or non-TriMatrix containers received?
- ☐ ☐ ☐ VOC vials / TOX containers have headspace?
- ☐ ☐ ☐ Extra sample locations / containers not listed on COC?

Notes

☑ Trip Blank received (1) ☐ Trip Blank not listed on COC

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
1.24.14 0915	1.24.14 1000	(Yes) / No

Log In Forms.xls - Receiving.Log-In_Checklist revision: 3.4

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TRIMATRIX LABORATORIES

SAMPLE PRESERVATION VERIFICATION FORM

page 1 of 1

Client: R. David Mursch	Work Order #: 1401295
Receipt Log #: 21.3	Completed By (initials/date): NC 1.24.14
	Project Chemist:

COC ID #: 147362

Adjusted by: _____ Date: _____

DO NOT ADJUST pH FOR THESE CONTAINER TYPES

Container Type	5 / 23	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		6-8	<2	<2	
COC Line #1					✓	✓		
COC Line #2					✓	✓		
COC Line #3					✓	✓		
COC Line #4					✓	✓		
COC Line #5					✓	✓		
COC Line #6					✓	✓		
COC Line #7					✓	✓		
COC Line #8								
COC Line #9								
COC Line #10								

Comments

Ph Strip Lot #: HC378115

Aqueous Samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container, record pH in box, and note on Sample Receiving Checklist and on Sample Receiving Non-Conformance Form. If approved by Project Chemist, add acid or base to the sample to achieve the correct pH. Add up to, but do not exceed 2x the volume initially added at container prep (see table below for initial volumes used). Add orange pH tag to sample container and record information requested. Record adjusted pH on this form. Do not adjust pH for container types 3, 6, and 15.

COC ID #: _____

Adjusted by: _____ Date: _____

DO NOT ADJUST pH FOR THESE CONTAINER TYPES

Container Type	5 / 23	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		6-8	<2	<2	
COC Line #1								
COC Line #2								
COC Line #3								
COC Line #4								
COC Line #5								
COC Line #6								
COC Line #7								
COC Line #8								
COC Line #9								
COC Line #10								

Comments

Container Size (mL)	Original Vol. of Preservative (mL)
Container Type 5	NaOH
500	2.5
1000	5.0
Container Type 4	H_2SO_4
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H_2SO_4
500	2.5

Log In Forms.xls -- Sample_Preserve_Verification

version: 3.0

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April 07, 2014

Prairie Ronde Realty Company
Attn: Mr. R. David Mursch
104 Rivercliff Drive
Connelly Springs, NC 28612

Project: NCP Dowagiac, MI

Dear Mr. R. David Mursch,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	**Received**	**Description**
1403250	03/20/2014	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003329); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#103068); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-14-4); Virginia DCLS (#460153/2592); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Gary L. Wood
Project Chemist

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PROJECT TECHNICAL NARRATIVE(s)

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Narrative: The concentration of analyte found in the MS and/or MSD exceeded the upper end of the calibration curve due to native analyte concentration found in the sample. Matrix quality control results are not available.

Analysis: SM 4500-NO3 F-2011

Sample/Analyte: 1403250-01 98-226A — Nitrogen, Nitrate

Analysis: USEPA-9038

Sample/Analyte: 1403250-01 98-226A — Sulfate

Narrative: The CRL recovery for this analyte was outside of the laboratory control limits.

Analysis: SM 4500-NO3 F-2011

4C31020-CRL1 — Nitrogen, Nitrate

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STATEMENT OF DATA QUALIFICATIONS

Volatile Organic Compounds by EPA Method 8260B

Qualification: The result for this analyte was above the linear range of the initial calibration curve and must be considered as estimated "E".

Analysis: USEPA-8260B

Sample/Analyte:	1403250-02RE1	98-225B	cis-1,2-Dichloroethene

Qualification: The chemical utilized to preserve this sample has the potential to degrade 2-chloroethyl vinyl ether through polymerization or other rapid chemical reaction. The reporting limit and/or any positive result must be considered estimated.

Analysis: USEPA-8260B

Sample:		
	1403250-01	98-226A
	1403250-02	98-225B
	1403250-02RE1	98-225B
	1403250-03	98-220A
	1403250-04	IW-9
	1403250-05	96-203A
	1403250-06	98-223A
	1403250-07	98-223B
	1403250-08	Trip Blank TM2413

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-226A**	Sampled:	3/19/14 7:35
Lab Sample ID:	**1403250-01**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	03/25/14 12:33	JMF	1402492
Methane	<0.50	0.50	ug/L	1	RSK-175	03/25/14 12:33	JMF	1402492
Ethylene	<1.0	1.0	ug/L	1	RSK-175	03/25/14 12:33	JMF	1402492

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-226A**	Sampled:	3/19/14 7:35		
Lab Sample ID:	**1403250-01**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	5	Analyzed:	3/26/14 18:44	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<25	25
71-43-2	Benzene	<5.0	5.0
75-27-4	Bromodichloromethane	<1.2	1.2
75-15-0	Carbon Disulfide	<25	25
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
110-75-8	2-Chloroethyl Vinyl Ether	<25	25
67-66-3	Chloroform	<1.2	1.2
74-87-3	Chloromethane	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	**61**	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
591-78-6	2-Hexanone	<25	25
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<25	25
100-42-5	Styrene	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<5.0	5.0
108-88-3	Toluene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	**380**	5.0
75-01-4	Vinyl Chloride	<5.0	5.0

Continued on next page

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-226A**	Sampled:	3/19/14 7:35		
Lab Sample ID:	**1403250-01**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	5	Analyzed:	3/26/14 18:44	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<15	15

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*96*	*85-118*
1,2-Dichloroethane-d4	*102*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*97*	*82-110*

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-226A**	Sampled:	3/19/14 7:35
Lab Sample ID:	**1403250-01**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Iron	**1200**	10	ug/L	1	USEPA-6010C	03/27/14 11:33	KLV	1402498
Manganese	**340**	10	ug/L	1	USEPA-6010C	03/27/14 11:33	KLV	1402498

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-226A**	Sampled:	3/19/14 7:35
Lab Sample ID:	**1403250-01**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	**0.42**	0.050	mg/L	1	SM 4500-NO3 F-2011	03/20/14 13:22	CAC	1402376
Sulfate	**22**	5.0	mg/L	1	USEPA-9038	03/24/14 09:31	LMA	1402470
Carbon, Total Organic	**3.1**	1.0	mg/L	1	SM 5310 C-2011	03/21/14 21:38	KAR	1402461

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-225B**	Sampled:	3/19/14 8:05
Lab Sample ID:	**1403250-02**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	03/25/14 12:37	JMF	1402492
Methane	**110**	2.0	ug/L	4	RSK-175	03/25/14 12:41	JMF	1402492
Ethylene	<1.0	1.0	ug/L	1	RSK-175	03/25/14 12:37	JMF	1402492

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-225B**	Sampled:	3/19/14 8:05		
Lab Sample ID:	**1403250-02**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	25	Analyzed:	3/26/14 19:12	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<120	120
71-43-2	Benzene	<25	25
75-27-4	Bromodichloromethane	<6.2	6.2
75-15-0	Carbon Disulfide	<120	120
56-23-5	Carbon Tetrachloride	<25	25
108-90-7	Chlorobenzene	<25	25
110-75-8	2-Chloroethyl Vinyl Ether	<120	120
67-66-3	Chloroform	<6.2	6.2
74-87-3	Chloromethane	<25	25
95-50-1	1,2-Dichlorobenzene	<25	25
106-46-7	1,4-Dichlorobenzene	<25	25
75-34-3	1,1-Dichloroethane	<25	25
107-06-2	1,2-Dichloroethane	<25	25
75-35-4	1,1-Dichloroethene	<25	25
156-59-2	cis-1,2-Dichloroethene	**1800**	25
156-60-5	trans-1,2-Dichloroethene	<25	25
78-87-5	1,2-Dichloropropane	<25	25
100-41-4	Ethylbenzene	<25	25
591-78-6	2-Hexanone	<120	120
75-09-2	Methylene Chloride	**29**	25
78-93-3	2-Butanone (MEK)	<120	120
100-42-5	Styrene	<25	25
79-34-5	1,1,2,2-Tetrachloroethane	<12	12
127-18-4	Tetrachloroethene	<25	25
108-88-3	Toluene	<25	25
71-55-6	1,1,1-Trichloroethane	<25	25
79-00-5	1,1,2-Trichloroethane	<25	25
79-01-6	Trichloroethene	**78**	25
75-01-4	Vinyl Chloride	<25	25

Continued on next page

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-225B**	Sampled:	3/19/14 8:05		
Lab Sample ID:	**1403250-02**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	25	Analyzed:	3/26/14 19:12	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<75	75

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*94*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*99*	*85-113*
4-Bromofluorobenzene	*98*	*82-110*

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-225B**	Sampled:	3/19/14 8:05
Lab Sample ID:	**1403250-02**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Iron	**3700**	10	ug/L	1	USEPA-6010C	03/27/14 11:52	KLV	1402498
Manganese	**690**	10	ug/L	1	USEPA-6010C	03/27/14 11:52	KLV	1402498

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-225B**	Sampled:	3/19/14 8:05
Lab Sample ID:	**1403250-02**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	<0.050	0.050	mg/L	1	SM 4500-NO3 F-2011	03/20/14 13:24	CAC	1402376
Sulfate	**18**	5.0	mg/L	1	USEPA-9038	03/24/14 09:34	LMA	1402470
Carbon, Total Organic	**31**	1.0	mg/L	1	SM 5310 C-2011	03/21/14 21:49	KAR	1402461

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-225B**	Sampled:	3/19/14 8:05		
Lab Sample ID:	**1403250-02RE1**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	2.5	Analyzed:	3/26/14 22:24	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<12	12
71-43-2	Benzene	<2.5	2.5
75-27-4	Bromodichloromethane	<0.62	0.62
75-15-0	Carbon Disulfide	<12	12
56-23-5	Carbon Tetrachloride	<2.5	2.5
108-90-7	Chlorobenzene	<2.5	2.5
110-75-8	2-Chloroethyl Vinyl Ether	<12	12
67-66-3	Chloroform	<0.62	0.62
74-87-3	Chloromethane	<2.5	2.5
95-50-1	1,2-Dichlorobenzene	<2.5	2.5
106-46-7	1,4-Dichlorobenzene	<2.5	2.5
75-34-3	1,1-Dichloroethane	<2.5	2.5
107-06-2	1,2-Dichloroethane	<2.5	2.5
75-35-4	1,1-Dichloroethene	**2.7**	2.5
*156-59-2	cis-1,2-Dichloroethene	**1900**	2.5
156-60-5	trans-1,2-Dichloroethene	**19**	2.5
78-87-5	1,2-Dichloropropane	<2.5	2.5
100-41-4	Ethylbenzene	<2.5	2.5
591-78-6	2-Hexanone	<12	12
75-09-2	Methylene Chloride	**2.8**	2.5
78-93-3	2-Butanone (MEK)	<12	12
100-42-5	Styrene	<2.5	2.5
79-34-5	1,1,2,2-Tetrachloroethane	<1.2	1.2
127-18-4	Tetrachloroethene	<2.5	2.5
108-88-3	Toluene	<2.5	2.5
71-55-6	1,1,1-Trichloroethane	<2.5	2.5
79-00-5	1,1,2-Trichloroethane	<2.5	2.5
79-01-6	Trichloroethene	**78**	2.5
75-01-4	Vinyl Chloride	**4.4**	2.5
1330-20-7	Xylene (Total)	<7.5	7.5

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-225B**	Sampled:	3/19/14 8:05		
Lab Sample ID:	**1403250-02RE1**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	2.5	Analyzed:	3/26/14 22:24	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*97*	*85-118*
1,2-Dichloroethane-d4	*101*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*98*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-220A**	Sampled:	3/19/14 8:35
Lab Sample ID:	**1403250-03**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	03/25/14 12:54	JMF	1402492
Methane	**6.5**	0.50	ug/L	1	RSK-175	03/25/14 12:54	JMF	1402492
Ethylene	<1.0	1.0	ug/L	1	RSK-175	03/25/14 12:54	JMF	1402492

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-220A**	Sampled:	3/19/14 8:35		
Lab Sample ID:	**1403250-03**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	2	Analyzed:	3/26/14 19:39	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<10	10
71-43-2	Benzene	<2.0	2.0
75-27-4	Bromodichloromethane	<0.50	0.50
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
110-75-8	2-Chloroethyl Vinyl Ether	<10	10
67-66-3	Chloroform	<0.50	0.50
74-87-3	Chloromethane	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	**33**	2.0
156-60-5	trans-1,2-Dichloroethene	<2.0	2.0
78-87-5	1,2-Dichloropropane	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
591-78-6	2-Hexanone	<10	10
75-09-2	Methylene Chloride	**2.8**	2.0
78-93-3	2-Butanone (MEK)	<10	10
100-42-5	Styrene	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<2.0	2.0
108-88-3	Toluene	<2.0	2.0
71-55-6	1,1,1-Trichloroethane	<2.0	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	**250**	2.0
75-01-4	Vinyl Chloride	<2.0	2.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-220A**	Sampled:	3/19/14 8:35		
Lab Sample ID:	**1403250-03**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	2	Analyzed:	3/26/14 19:39	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<6.0	6.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*95*	*85-118*
1,2-Dichloroethane-d4	*102*	*87-122*
Toluene-d8	*99*	*85-113*
4-Bromofluorobenzene	*98*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-220A**	Sampled:	3/19/14 8:35
Lab Sample ID:	**1403250-03**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Iron	**7500**	10	ug/L	1	USEPA-6010C	03/27/14 11:56	KLV	1402498
Manganese	**2000**	10	ug/L	1	USEPA-6010C	03/27/14 11:56	KLV	1402498

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-220A**	Sampled:	3/19/14 8:35
Lab Sample ID:	**1403250-03**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	**0.34**	0.050	mg/L	1	SM 4500-NO3 F-2011	03/20/14 13:25	CAC	1402376
Sulfate	**7.6**	5.0	mg/L	1	USEPA-9038	03/24/14 09:34	LMA	1402470
Carbon, Total Organic	**79**	5.0	mg/L	5	SM 5310 C-2011	03/21/14 21:59	KAR	1402461

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**IW-9**	Sampled:	3/19/14 9:00
Lab Sample ID:	**1403250-04**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	03/25/14 12:57	JMF	1402492
Methane	**4.7**	0.50	ug/L	1	RSK-175	03/25/14 12:57	JMF	1402492
Ethylene	<1.0	1.0	ug/L	1	RSK-175	03/25/14 12:57	JMF	1402492

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**IW-9**	Sampled:	3/19/14 9:00		
Lab Sample ID:	**1403250-04**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	2	Analyzed:	3/26/14 20:07	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<10	10
71-43-2	Benzene	<2.0	2.0
75-27-4	Bromodichloromethane	<0.50	0.50
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
110-75-8	2-Chloroethyl Vinyl Ether	<10	10
67-66-3	Chloroform	<0.50	0.50
74-87-3	Chloromethane	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	**2.3**	2.0
156-60-5	trans-1,2-Dichloroethene	<2.0	2.0
78-87-5	1,2-Dichloropropane	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
591-78-6	2-Hexanone	<10	10
75-09-2	Methylene Chloride	**2.2**	2.0
78-93-3	2-Butanone (MEK)	<10	10
100-42-5	Styrene	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<2.0	2.0
108-88-3	Toluene	<2.0	2.0
71-55-6	1,1,1-Trichloroethane	<2.0	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	**160**	2.0
75-01-4	Vinyl Chloride	<2.0	2.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**IW-9**	Sampled:	3/19/14 9:00		
Lab Sample ID:	**1403250-04**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	2	Analyzed:	3/26/14 20:07	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<6.0	6.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*94*	*85-118*
1,2-Dichloroethane-d4	*101*	*87-122*
Toluene-d8	*99*	*85-113*
4-Bromofluorobenzene	*97*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**IW-9**	Sampled:	3/19/14 9:00
Lab Sample ID:	**1403250-04**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Iron	**250**	10	ug/L	1	USEPA-6010C	03/27/14 12:00	KLV	1402498
Manganese	**190**	10	ug/L	1	USEPA-6010C	03/27/14 12:00	KLV	1402498

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**IW-9**	Sampled:	3/19/14 9:00
Lab Sample ID:	**1403250-04**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Carbon, Total Organic	**0.61**	0.50	mg/L	1	SM 5310 C-2011	03/21/14 15:25	KAR	1402460
Nitrogen, Nitrate	**0.30**	0.050	mg/L	1	SM 4500-NO3 F-2011	03/20/14 13:25	CAC	1402376
Sulfate	**22**	5.0	mg/L	1	USEPA-9038	03/24/14 09:37	LMA	1402470

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**96-203A**	Sampled:	3/19/14 10:10
Lab Sample ID:	**1403250-05**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	03/25/14 13:01	JMF	1402492
Methane	**3.5**	0.50	ug/L	1	RSK-175	03/25/14 13:01	JMF	1402492
Ethylene	<1.0	1.0	ug/L	1	RSK-175	03/25/14 13:01	JMF	1402492

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**96-203A**	Sampled:	3/19/14 10:10		
Lab Sample ID:	**1403250-05**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	5	Analyzed:	3/26/14 20:34	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<25	25
71-43-2	Benzene	<5.0	5.0
75-27-4	Bromodichloromethane	<1.2	1.2
75-15-0	Carbon Disulfide	<25	25
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
110-75-8	2-Chloroethyl Vinyl Ether	<25	25
67-66-3	Chloroform	<1.2	1.2
74-87-3	Chloromethane	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	**23**	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
591-78-6	2-Hexanone	<25	25
75-09-2	Methylene Chloride	**5.8**	5.0
78-93-3	2-Butanone (MEK)	<25	25
100-42-5	Styrene	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<5.0	5.0
108-88-3	Toluene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	**500**	5.0
75-01-4	Vinyl Chloride	<5.0	5.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**96-203A**	Sampled:	3/19/14 10:10		
Lab Sample ID:	**1403250-05**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	5	Analyzed:	3/26/14 20:34	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<15	15

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*94*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*99*	*85-113*
4-Bromofluorobenzene	*98*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**96-203A**	Sampled:	3/19/14 10:10
Lab Sample ID:	**1403250-05**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Iron	**420**	10	ug/L	1	USEPA-6010C	03/27/14 12:04	KLV	1402498
Manganese	**190**	10	ug/L	1	USEPA-6010C	03/27/14 12:04	KLV	1402498

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**96-203A**	Sampled:	3/19/14 10:10
Lab Sample ID:	**1403250-05**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	<0.050	0.050	mg/L	1	SM 4500-NO3 F-2011	03/20/14 13:26	CAC	1402376
Sulfate	**24**	5.0	mg/L	1	USEPA-9038	03/24/14 09:37	LMA	1402470
Carbon, Total Organic	**0.67**	0.50	mg/L	1	SM 5310 C-2011	03/21/14 15:36	KAR	1402460

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223A**	Sampled:	3/19/14 10:40
Lab Sample ID:	**1403250-06**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	03/25/14 13:09	JMF	1402492
Methane	<0.50	0.50	ug/L	1	RSK-175	03/25/14 13:09	JMF	1402492
Ethylene	<1.0	1.0	ug/L	1	RSK-175	03/25/14 13:09	JMF	1402492

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-223A**	Sampled:	3/19/14 10:40		
Lab Sample ID:	**1403250-06**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/27/14 12:00	By:	LEW
Dilution Factor:	1	Analyzed:	3/27/14 20:47	By:	LEW
QC Batch:	1402652	Analytical Batch:	4C28026		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**120**	1.0
156-60-5	trans-1,2-Dichloroethene	**1.4**	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**170**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-223A**	Sampled:	3/19/14 10:40		
Lab Sample ID:	**1403250-06**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/27/14 12:00	By:	LEW
Dilution Factor:	1	Analyzed:	3/27/14 20:47	By:	LEW
QC Batch:	1402652	Analytical Batch:	4C28026		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<3.0	3.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*96*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*99*	*85-113*
4-Bromofluorobenzene	*98*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223A**	Sampled:	3/19/14 10:40
Lab Sample ID:	**1403250-06**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Iron	**16**	10	ug/L	1	USEPA-6010C	03/27/14 12:08	KLV	1402498
Manganese	<10	10	ug/L	1	USEPA-6010C	03/27/14 12:08	KLV	1402498

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223A**	Sampled:	3/19/14 10:40
Lab Sample ID:	**1403250-06**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Carbon, Total Organic	**0.96**	0.50	mg/L	1	SM 5310 C-2011	03/21/14 15:47	KAR	1402460
Nitrogen, Nitrate	**0.18**	0.050	mg/L	1	SM 4500-NO3 F-2011	03/20/14 13:27	CAC	1402376
Sulfate	**24**	5.0	mg/L	1	USEPA-9038	03/24/14 09:37	LMA	1402470

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223B**	Sampled:	3/19/14 11:05
Lab Sample ID:	**1403250-07**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	03/25/14 13:14	JMF	1402492
Methane	**2.3**	0.50	ug/L	1	RSK-175	03/25/14 13:14	JMF	1402492
Ethylene	<1.0	1.0	ug/L	1	RSK-175	03/25/14 13:14	JMF	1402492

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-223B**	Sampled:	3/19/14 11:05		
Lab Sample ID:	**1403250-07**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/27/14 12:00	By:	LEW
Dilution Factor:	2	Analyzed:	3/27/14 21:15	By:	LEW
QC Batch:	1402652	Analytical Batch:	4C28026		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<10	10
71-43-2	Benzene	<2.0	2.0
75-27-4	Bromodichloromethane	<0.50	0.50
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
110-75-8	2-Chloroethyl Vinyl Ether	<10	10
67-66-3	Chloroform	<0.50	0.50
74-87-3	Chloromethane	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	**20**	2.0
156-60-5	trans-1,2-Dichloroethene	<2.0	2.0
78-87-5	1,2-Dichloropropane	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
591-78-6	2-Hexanone	<10	10
75-09-2	Methylene Chloride	<2.0	2.0
78-93-3	2-Butanone (MEK)	<10	10
100-42-5	Styrene	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<2.0	2.0
108-88-3	Toluene	<2.0	2.0
71-55-6	1,1,1-Trichloroethane	<2.0	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	**210**	2.0
75-01-4	Vinyl Chloride	<2.0	2.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-223B**	Sampled:	3/19/14 11:05		
Lab Sample ID:	**1403250-07**	Sampled By:	RDM		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/27/14 12:00	By:	LEW
Dilution Factor:	2	Analyzed:	3/27/14 21:15	By:	LEW
QC Batch:	1402652	Analytical Batch:	4C28026		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
1330-20-7	Xylene (Total)	<6.0	6.0

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*95*	*85-118*
1,2-Dichloroethane-d4	*99*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*98*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223B**	Sampled:	3/19/14 11:05
Lab Sample ID:	**1403250-07**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Total Metals by EPA 6000/7000 Series Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Iron	**73**	10	ug/L	1	USEPA-6010C	03/27/14 12:19	KLV	1402498
Manganese	**73**	10	ug/L	1	USEPA-6010C	03/27/14 12:19	KLV	1402498

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**
Project:	NCP Dowagiac, MI	Description:	Laboratory Services
Client Sample ID:	**98-223B**	Sampled:	3/19/14 11:05
Lab Sample ID:	**1403250-07**	Sampled By:	RDM
Matrix:	Water	Received:	3/20/14 8:50

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Nitrogen, Nitrate	<0.050	0.050	mg/L	1	SM 4500-NO3 F-2011	03/20/14 13:27	CAC	1402376
Sulfate	**28**	5.0	mg/L	1	USEPA-9038	03/24/14 09:37	LMA	1402470
Carbon, Total Organic	**0.66**	0.50	mg/L	1	SM 5310 C-2011	03/21/14 15:58	KAR	1402460

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**Trip Blank TM2413**	Sampled:	3/19/14 0:00		
Lab Sample ID:	**1403250-08**	Sampled By:	TML		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	1	Analyzed:	3/26/14 16:54	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	**7.3**	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

Continued on next page

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403250**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**Trip Blank TM2413**	Sampled:	3/19/14 0:00		
Lab Sample ID:	**1403250-08**	Sampled By:	TML		
Matrix:	Water	Received:	3/20/14 8:50		
Unit:	ug/L	Prepared:	3/26/14 13:00	By:	LEW
Dilution Factor:	1	Analyzed:	3/26/14 16:54	By:	LEW
QC Batch:	1402603	Analytical Batch:	4C27030		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*94*	*85-118*
1,2-Dichloroethane-d4	*99*	*87-122*
Toluene-d8	*98*	*85-113*
4-Bromofluorobenzene	*98*	*82-110*

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Dissolved Gases in Water by RSK-175 Headspace Analysis

QC Batch: 1402492 Method-Specific Extraction/RSK-175

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Method Blank					Analyzed:		03/25/2014	By: JMF
Unit: ug/L					Analytical Batch:		4C25046	
Ethane			<1.0					1.0
Methane			<0.50			--		0.50
Ethylene			<1.0					1.0
Laboratory Control Sample					Analyzed:		03/25/2014	By: JMF
Unit: ug/L					Analytical Batch:		4C25046	
Ethane		58.7	**48.0**	82	67-122	--		1.0
Methane		35.8	**29.8**	83	70-116	--		0.50
Ethylene		58.1	**46.6**	80	67-121	--		1.0

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL

QC Batch: 1402603 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank Analyzed: 03/26/2014 By: LEW

Unit: ug/L Analytical Batch: 4C27030

Acetone	<5.0		--	5.0
Benzene	<1.0			1.0
Bromodichloromethane	<0.25			0.25
Carbon Disulfide	<5.0			5.0
Carbon Tetrachloride	<1.0			1.0
Chlorobenzene	<1.0			1.0
2-Chloroethyl Vinyl Ether	<5.0			5.0
Chloroform	<0.25			0.25
Chloromethane	<1.0			1.0
1,2-Dichlorobenzene	<1.0		--	1.0
1,4-Dichlorobenzene	<1.0		--	1.0
1,1-Dichloroethane	<1.0			1.0
1,2-Dichloroethane	<1.0			1.0
1,1-Dichloroethene	<1.0			1.0
cis-1,2-Dichloroethene	<1.0			1.0
trans-1,2-Dichloroethene	<1.0			1.0
1,2-Dichloropropane	<1.0			1.0
Ethylbenzene	<1.0		--	1.0
2-Hexanone	<5.0			5.0
Methylene Chloride	<1.0		--	1.0
2-Butanone (MEK)	<5.0			5.0
Styrene	<1.0			1.0
1,1,2,2-Tetrachloroethane	<0.50			0.50
Tetrachloroethene	<1.0			1.0
Toluene	<1.0			1.0
1,1,1-Trichloroethane	<1.0			1.0
1,1,2-Trichloroethane	<1.0			1.0
Trichloroethene	<1.0			1.0
Vinyl Chloride	<1.0			1.0
Xylene (Total)	<3.0			3.0
Surrogates:				
Dibromofluoromethane		*96*	*85-118*	
1,2-Dichloroethane-d4		*100*	*87-122*	

Continued on next page

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Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL

QC Batch: 1402603 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued) Analyzed: 03/26/2014 By: LEW

Unit: ug/L Analytical Batch: 4C27030

Surrogates (Continued):							
Toluene-d8				*99*	*85-113*		
4-Bromofluorobenzene				*99*	*82-110*		

Laboratory Control Sample Analyzed: 03/26/2014 By: LEW

Unit: ug/L Analytical Batch: 4C27030

Benzene	40.0	**40.7**		102	84-119	--	1.0
Chlorobenzene	40.0	**40.1**		100	84-118	--	1.0
1,1-Dichloroethene	40.0	**41.7**		104	77-123	--	1.0
Toluene	40.0	**40.0**		100	85-118	--	1.0
Trichloroethene	40.0	**40.5**		101	82-119	--	1.0
Surrogates:							
Dibromofluoromethane				*102*	*85-118*		
1,2-Dichloroethane-d4				*101*	*87-122*		
Toluene-d8				*100*	*85-113*		
4-Bromofluorobenzene				*100*	*82-110*		

QC Batch: 1402652 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank Analyzed: 03/27/2014 By: LEW

Unit: ug/L Analytical Batch: 4C28026

Acetone			<5.0			--	5.0
Benzene			<1.0				1.0
Bromodichloromethane			<0.25				0.25
Carbon Disulfide			<5.0				5.0
Carbon Tetrachloride			<1.0				1.0
Chlorobenzene			<1.0				1.0
2-Chloroethyl Vinyl Ether			<5.0				5.0
Chloroform			<0.25				0.25
Chloromethane			<1.0				1.0
1,2-Dichlorobenzene			<1.0				1.0
1,4-Dichlorobenzene			<1.0			--	1.0
1,1-Dichloroethane			<1.0				1.0
1,2-Dichloroethane			<1.0				1.0

Continued on next page

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US EPA ARCHIVE DOCUMENT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1402652 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued) Analyzed: 03/27/2014 By: LEW

Unit: ug/L Analytical Batch: 4C28026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
Ethylbenzene			<1.0			--		1.0
2-Hexanone			<5.0					5.0
Methylene Chloride			<1.0			--		1.0
2-Butanone (MEK)			<5.0					5.0
Styrene			<1.0					1.0
1,1,2,2-Tetrachloroethane			<0.50					0.50
Tetrachloroethene			<1.0					1.0
Toluene			<1.0					1.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene (Total)			<3.0					3.0
Surrogates:								
Dibromofluoromethane				*95*	*85-118*			
1,2-Dichloroethane-d4				*100*	*87-122*			
Toluene-d8				*99*	*85-113*			
4-Bromofluorobenzene				*98*	*82-110*			

Laboratory Control Sample Analyzed: 03/27/2014 By: LEW

Unit: ug/L Analytical Batch: 4C28026

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Benzene		40.0	**40.5**	101	84-119	--		1.0
Chlorobenzene		40.0	**40.0**	100	84-118	--		1.0
1,1-Dichloroethene		40.0	**36.3**	91	77-123	--		1.0
Toluene		40.0	**40.0**	100	85-118	--		1.0
Trichloroethene		40.0	**39.8**	100	82-119	--		1.0

Continued on next page

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Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL

QC Batch: 1402652 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued) Analyzed: 03/27/2014 By: LEW

Unit: ug/L Analytical Batch: 4C28026

Surrogates:		
Dibromofluoromethane	*102*	*85-118*
1,2-Dichloroethane-d4	*99*	*87-122*
Toluene-d8	*100*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Total Metals by EPA 6000/7000 Series Methods

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Analyte: **Iron**/USEPA-6010C									
QC Batch: 1402498 (3010A Digestion)							Analyzed:	03/26/2014	By: CKD
Method Blank			<10	ug/L					10
Laboratory Control Sample		400	**390**	ug/L	97	80-120			10
QC Batch: 1402498 (3010A Digestion)							Analyzed:	03/27/2014	By: KLV
1403250-01 [98-226A]									
Matrix Spike	1160	400	**1590**	ug/L	106	75-125			10
Matrix Spike Duplicate	1160	400	**1570**	ug/L	103	75-125	0.8	20	10
Analyte: **Manganese**/USEPA-6010C									
QC Batch: 1402498 (3010A Digestion)							Analyzed:	03/26/2014	By: CKD
Method Blank			<10	ug/L					10
Laboratory Control Sample		400	**390**	ug/L	97	80-120			10
QC Batch: 1402498 (3010A Digestion)							Analyzed:	03/27/2014	By: KLV
1403250-01 [98-226A]									
Matrix Spike	341	400	**760**	ug/L	105	75-125			10
Matrix Spike Duplicate	341	400	**768**	ug/L	107	75-125	1	20	10

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TRIMATRIX LABORATORIES

QUALITY CONTROL REPORT

Physical/Chemical Parameters by EPA/APHA/ASTM Methods

QC Type	Sample Conc.	Spike Qty.	Result	Unit	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Analyte: Carbon, Total Organic/SM 5310 C-2011									
QC Batch: 1402460 (Method Specific Preparation)							Analyzed:	03/21/2014	By: KAR
Method Blank			<0.50	mg/L					0.50
Laboratory Control Sample		2.00	**2.01**	mg/L	101	84-118			0.50
QC Batch: 1402461 (Method Specific Preparation)							Analyzed:	03/21/2014	By: KAR
Method Blank			<0.50	mg/L					0.50
Laboratory Control Sample		40.0	**40.0**	mg/L	100	84-118			0.50
Analyte: Nitrogen, Nitrate/SM 4500-NO3 F-2011									
QC Batch: 1402376 (General Inorganic Prep)							Analyzed:	03/20/2014	By: CAC
Method Blank			<0.010	mg/L					0.010
Laboratory Control Sample		0.500	**0.460**	mg/L	92	90-110			0.010
Analyte: Sulfate/USEPA-9038									
QC Batch: 1402470 (General Inorganic Prep)							Analyzed:	03/24/2014	By: LMA
Method Blank			<5.0	mg/L					5.0
Laboratory Control Sample		20.0	**19.8**	mg/L	99	85-115			5.0

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Chain of Custody Record

COC No. 147508

Pg. 1 of 1

For Lab Use Only

Cart: 9
VOA Rack/Tray: 306G, 573G
Receipt Log No.: 13.3
Project Chemist:
Work Order No.: 1403250

Client Name: R. DAVID MURSCH
Address: 104 RIVERCLIFF
City, State Zip: CONNELLY SPRINGS NC 28612
Phone/Fax:
Email:

Project Name: PRR
Client Project No. / P.O. No.: 96-01
Invoice To: PRR ☐ Client ☒ Other (comments)
Contact/Report To: RDM

Analyses Requested: 8260, RSK, TCL, Nitrate/Nitrite, Fe/Mn

Container Type (corresponds to Container Packing List): D D C B A

PRESERVATIVES
A NONE pH~7
B HNO_3 pH<2
C H_2SO_4 pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAc/NaOH pH>9
G MeOH
H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	COMP	GRAB	Matrix	Number of Containers Submitted					Total	Sample Comments
		01	98-226A		3-19-14	0735		C	W	2	2	3	1	1		
		02	98-225B			0805		C	W	2	2	3	1	1		
		03	98-220A			0835		C	W	2	2	3	1	1		
		04	IW-9			0900		C	W	2	2	3	1	1		
		05	96-203A			1010		C	W	2	2	3	1	1		
		06	98-223A			1040		C	W	2	2	3	1	1		
		07	98-223B			1105		C	W	2	2	3	1	1		
		08	TRIP BLANK		—	—		C	W	2	—	—	—	—		
		09														
		10														

Sampled By (print): R. DAVID MURSCH
Sampler's Signature:
Company:

How Shipped? Hand ___ Carrier: Fed Ex
Tracking No.

Comments

1. Relinquished By	Date	Time	2. Relinquished By	Date	Time	3. Relinquished By	Date	Time

1. Received By	Date	Time	2. Received By	Date	Time	3. Received For Lab By	Date	Time
							3-20-14	0850

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD

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TRIMATRIX LABORATORIES

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SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: R. David Mursch
Work Order #: 1403250
New / Add To
Receipt Record Page/Line #: 13.3
Project Chemist
Sample #s

Recorded by (initials/date): WC 3.20.14

☑ Cooler ☐ Box ☐ Other_____
Qty Received: 1

Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (#_____)

☐ See Additional Cooler Information Form

Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via
Tm 2413	0940	☑ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☑ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers	☑ Temperature Blank (TB) ☐ 1 Container
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container
		☐ None ☐ Present / Intact ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers ☐ Bagged Ice / Avg 2-3 containers ☐ Blue Ice / Avg 2-3 containers ☐ None / Avg 2-3 containers	☐ Temperature Blank (TB) ☐ 1 Container

Cooler #	Recorded °C	Correction Factor °C	Actual °C
Temp Blank	—		4.0
TB location: (Representative) / Not Representative			
1	5.2	-	5.2
2	4.6	-	4.6
3	5.2	-	5.2
Average °C			5.0
☐ Cooler ID on COC?			
☑ VOC Trip Blank received?			

Cooler #	Recorded °C	Correction Factor °C	Actual °C
Temp Blank			
TB location: Representative / Not Representative			
1			
2			
3			
Average °C			
☐ Cooler ID on COC?			
☐ VOC Trip Blank received?			

Cooler #	Recorded °C	Correction Factor °C	Actual °C
Temp Blank			
TB location: Representative / Not Representative			
1			
2			
3			
Average °C			
☐ Cooler ID on COC?			
☐ VOC Trip Blank received?			

Cooler #	Recorded °C	Correction Factor °C	Actual °C
Temp Blank			
TB location: Representative / Not Representative			
1			
2			
3			
Average °C			
☐ Cooler ID on COC?			
☐ VOC Trip Blank received?			

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes	No	
☑	☐	Chain of Custody record(s)? If No, Initiated By _____
☑		Received for Lab Signed/Date/Time?
☑	☐	Shipping document?
☐	☑	Other _____

COC Information

☑ TriMatrix COC ☐ Other_____

COC ID Numbers:

Check Sample Preservation

N/A	Yes	No	
	☑	☐	Average sample temperature ≤6° C?
☑	☐	☐	Was thermal preservation required?
☑	☐		If "No", Project Chemist Approval Intials:_____
☑	☐		If "Yes" Completed Non Con Cooler - Cont Inventory Form?
☐	☐		Completed Sample Preservation Verification Form?
☐	☐	☐	Samples chemically preserved correctly?
☑	☐		If "No", added orange tag?
	☐	☐	Received pre-preserved VOC soils?
		☐	MeOH ☐ Na_2SO_4

Check COC for Accuracy

Yes	No	
☑	☐	Analysis Requested?
☑	☐	Sample ID matches COC?
☑	☐	Sample Date and Time matches COC?
☑		Container type completed on COC?
☑	☐	All container types indicated are received?

Check for Short Hold-Time Prep/Analyses

☐ Bacteriological
☐ Air Bags
☐ EnCores / Methanol Pre-Preserved
☐ Formaldehyde/Aldehyde
☑ Green-tagged containers
☐ Yellow/White-tagged 1L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
☐ NONE RECEIVED
☑ RECEIVED, COCs TO LAB(S)

Sample Condition Summary

N/A	Yes	No	
	☐	☑	Broken containers/lids?
	☐	☑	Missing or incomplete labels?
	☐	☑	Illegible information on labels?
	☐	☑	Low volume received?
	☐	☑	Inappropriate or non-TriMatrix containers received?
☐	☐	☑	VOC vials / TOX containers have headspace?
☐	☐	☑	Extra sample locations / containers not listed on COC?

Notes

☑ Trip Blank received ☐ Trip Blank not listed on COC

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
3.20.14 0950	3.20.14 0945	(Yes) / No

Sample Receiving Log In Forms.xls - Receiving.Log-In_Checklist

revision: 3.4

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TRIMATRIX LABORATORIES

SAMPLE PRESERVATION VERIFICATION FORM

page 1 of 1

Client: R. David Mursch	Work Order #: 1403250
Receipt Log #: 13.3	Completed By (initials/date): NC 3.20.14
	Project Chemist:

COC ID #: 147508

Adjusted by: _____ Date: _____

DO NOT ADJUST pH FOR THESE CONTAINER TYPES

Container Type	5 / 23	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		6-8	<2	<2	
COC Line #1					✓	✓		
COC Line #2					✓	✓		
COC Line #3					✓	✓		
COC Line #4					✓	✓		
COC Line #5					✓	✓		
COC Line #6					✓	✓		
COC Line #7					✓	✓		
COC Line #8								
COC Line #9								
COC Line #10								

Comments

Ph Strip Lot #: HC378115

Aqueous Samples: For each sample and container type, check the box if pH is acceptable. If pH is not acceptable for any sample container, record pH in box, and note on Sample Receiving Checklist and on Sample Receiving Non-Conformance Form. If approved by Project Chemist, add acid or base to the sample to achieve the correct pH. Add up to, but do not exceed 2x the volume initially added at container prep (see table below for initial volumes used). Add orange pH tag to sample container and record information requested. Record adjusted pH on this form. Do not adjust pH for container types 3, 6, and 15.

COC ID #: _____

Adjusted by: _____ Date: _____

DO NOT ADJUST pH FOR THESE CONTAINER TYPES

Container Type	5 / 23	4	13		3	6	15	
Tag Color	Lt. Blue	Blue	Brown		Green	Red	Red Stripe	
Preservative	NaOH	H_2SO_4	H_2SO_4		None	HNO_3	HNO_3	
Expected pH	>12	<2	<2		6-8	<2	<2	
COC Line #1								
COC Line #2								
COC Line #3								
COC Line #4								
COC Line #5								
COC Line #6								
COC Line #7								
COC Line #8								
COC Line #9								
COC Line #10								

Comments

Container Size (mL)	Original Vol. of Preservative (mL)
Container Type 5	NaOH
500	2.5
1000	5.0
Container Type 4	H_2SO_4
125	0.5
250	1.0
500	2.0
1000	4.0
Container Type 13	H_2SO_4
500	2.5

Sample Receiving Log In Forms.xls -- Sample_Preserve_Verification

version: 3.0

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April 07, 2014

Prairie Ronde Realty Company
Attn: Mr. R. David Mursch
104 Rivercliff Drive
Connelly Springs, NC 28612

Project: NCP Dowagiac, MI

Dear Mr. R. David Mursch,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	**Received**	**Description**
1403280	03/21/2014	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003329); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#103068); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-14-4); Virginia DCLS (#460153/2592); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Gary L. Wood
Project Chemist

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PROJECT TECHNICAL NARRATIVE(s)

No Project Narrative is associated with this report.

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STATEMENT OF DATA QUALIFICATIONS

Volatile Organic Compounds by EPA Method 8260B

Qualification: The chemical utilized to preserve this sample has the potential to degrade 2-chloroethyl vinyl ether through polymerization or other rapid chemical reaction. The reporting limit and/or any positive result must be considered estimated.

Analysis: USEPA-8260B

Sample:		
	1403280-01	13-224A
	1403280-02	98-224B
	1403280-03	83-28A
	1403280-04	83-28B
	1403280-05	98-245A
	1403280-06	06-17/1
	1403280-07	06-17/2
	1403280-08	02-03
	1403280-09	02-04
	1403280-10	Trip Blank TM3323
	1403280-11	33-19A
	1403280-12	33-19B
	1403280-13	02-02
	1403280-14	Dup#1

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**13-224A**	Sampled:	3/19/14 0:00		
Lab Sample ID:	**1403280-01**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 12:15	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**20**	1.0
156-60-5	trans-1,2-Dichloroethene	**1.9**	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**36**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

Continued on next page

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**13-224A**	Sampled:	3/19/14 0:00		
Lab Sample ID:	**1403280-01**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 12:15	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*99*	*85-118*
1,2-Dichloroethane-d4	*95*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-224B**	Sampled:	3/19/14 0:00		
Lab Sample ID:	**1403280-02**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 12:42	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**15**	1.0
156-60-5	trans-1,2-Dichloroethene	**1.9**	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**110**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

Continued on next page

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-224B**	Sampled:	3/19/14 0:00		
Lab Sample ID:	**1403280-02**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 12:42	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*99*	*85-118*
1,2-Dichloroethane-d4	*96*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**83-28A**	Sampled:	3/19/14 12:50		
Lab Sample ID:	**1403280-03**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 13:09	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**100**	1.0
156-60-5	trans-1,2-Dichloroethene	**13**	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**83-28A**	Sampled:	3/19/14 12:50		
Lab Sample ID:	**1403280-03**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 13:09	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*99*	*85-118*
1,2-Dichloroethane-d4	*96*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**83-28B**	Sampled:	3/19/14 13:10		
Lab Sample ID:	**1403280-04**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 13:36	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**19**	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**5.1**	1.0
75-01-4	Vinyl Chloride	**3.9**	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**83-28B**	Sampled:	3/19/14 13:10		
Lab Sample ID:	**1403280-04**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 13:36	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*99*	*85-118*
1,2-Dichloroethane-d4	*96*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

*See Statement of Data Qualifications

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-245A**	Sampled:	3/19/14 13:25		
Lab Sample ID:	**1403280-05**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	2	Analyzed:	3/25/14 14:03	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<10	10
71-43-2	Benzene	<2.0	2.0
75-27-4	Bromodichloromethane	<0.50	0.50
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
110-75-8	2-Chloroethyl Vinyl Ether	<10	10
67-66-3	Chloroform	<0.50	0.50
74-87-3	Chloromethane	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	**24**	2.0
156-60-5	trans-1,2-Dichloroethene	**2.2**	2.0
78-87-5	1,2-Dichloropropane	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
591-78-6	2-Hexanone	<10	10
75-09-2	Methylene Chloride	<2.0	2.0
78-93-3	2-Butanone (MEK)	<10	10
100-42-5	Styrene	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<2.0	2.0
108-88-3	Toluene	<2.0	2.0
71-55-6	1,1,1-Trichloroethane	<2.0	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	**230**	2.0
75-01-4	Vinyl Chloride	<2.0	2.0
1330-20-7	Xylene (Total)	<6.0	6.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**98-245A**	Sampled:	3/19/14 13:25		
Lab Sample ID:	**1403280-05**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	2	Analyzed:	3/25/14 14:03	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*99*	*85-118*
1,2-Dichloroethane-d4	*96*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**06-17/1**	Sampled:	3/20/14 7:15		
Lab Sample ID:	**1403280-06**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 14:29	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**9.8**	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	**1.1**	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	**4.8**	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**99**	1.0
75-01-4	Vinyl Chloride	**1.7**	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**06-17/1**	Sampled:	3/20/14 7:15		
Lab Sample ID:	**1403280-06**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 14:29	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*100*	*85-118*
1,2-Dichloroethane-d4	*97*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*98*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**06-17/2**	Sampled:	3/20/14 7:30		
Lab Sample ID:	**1403280-07**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 14:56	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**17**	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	**5.7**	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**110**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**06-17/2**	Sampled:	3/20/14 7:30		
Lab Sample ID:	**1403280-07**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 14:56	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*99*	*85-118*
1,2-Dichloroethane-d4	*97*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**02-03**	Sampled:	3/20/14 8:00		
Lab Sample ID:	**1403280-08**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 15:24	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**1.8**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**02-03**	Sampled:	3/20/14 8:00		
Lab Sample ID:	**1403280-08**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 15:24	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*99*	*85-118*
1,2-Dichloroethane-d4	*97*	*87-122*
Toluene-d8	*100*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**02-04**	Sampled:	3/20/14 8:20		
Lab Sample ID:	**1403280-09**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 15:50	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**25**	1.0
156-60-5	trans-1,2-Dichloroethene	**5.0**	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**110**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**02-04**	Sampled:	3/20/14 8:20		
Lab Sample ID:	**1403280-09**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 15:50	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*98*	*85-118*
1,2-Dichloroethane-d4	*97*	*87-122*
Toluene-d8	*100*	*85-113*
4-Bromofluorobenzene	*100*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**Trip Blank TM3323**	Sampled:	3/20/14 0:00		
Lab Sample ID:	**1403280-10**	Sampled By:	TML		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/26/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/26/14 12:03	By:	DLV
QC Batch:	1402562	Analytical Batch:	4C27002		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**Trip Blank TM3323**	Sampled:	3/20/14 0:00		
Lab Sample ID:	**1403280-10**	Sampled By:	TML		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/26/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/26/14 12:03	By:	DLV
QC Batch:	1402562	Analytical Batch:	4C27002		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*98*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*100*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**33-19A**	Sampled:	3/20/14 9:10		
Lab Sample ID:	**1403280-11**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 16:17	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**8.5**	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

Continued on next page

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**33-19A**	Sampled:	3/20/14 9:10		
Lab Sample ID:	**1403280-11**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 16:17	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*98*	*85-118*
1,2-Dichloroethane-d4	*98*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*99*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**33-19B**	Sampled:	3/20/14 8:45		
Lab Sample ID:	**1403280-12**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 16:44	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<5.0	5.0
71-43-2	Benzene	<1.0	1.0
75-27-4	Bromodichloromethane	<0.25	0.25
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
110-75-8	2-Chloroethyl Vinyl Ether	<5.0	5.0
67-66-3	Chloroform	<0.25	0.25
74-87-3	Chloromethane	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	**36**	1.0
156-60-5	trans-1,2-Dichloroethene	**2.8**	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
591-78-6	2-Hexanone	<5.0	5.0
75-09-2	Methylene Chloride	<1.0	1.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
100-42-5	Styrene	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<0.50	0.50
127-18-4	Tetrachloroethene	<1.0	1.0
108-88-3	Toluene	<1.0	1.0
71-55-6	1,1,1-Trichloroethane	**1.2**	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	**170**	1.0
75-01-4	Vinyl Chloride	**7.7**	1.0
1330-20-7	Xylene (Total)	<3.0	3.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**33-19B**	Sampled:	3/20/14 8:45		
Lab Sample ID:	**1403280-12**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	1	Analyzed:	3/25/14 16:44	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*98*	*85-118*
1,2-Dichloroethane-d4	*96*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*100*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**02-02**	Sampled:	3/20/14 9:50		
Lab Sample ID:	**1403280-13**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	2	Analyzed:	3/25/14 17:11	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<10	10
71-43-2	Benzene	<2.0	2.0
75-27-4	Bromodichloromethane	<0.50	0.50
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
110-75-8	2-Chloroethyl Vinyl Ether	<10	10
67-66-3	Chloroform	<0.50	0.50
74-87-3	Chloromethane	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	<2.0	2.0
156-60-5	trans-1,2-Dichloroethene	<2.0	2.0
78-87-5	1,2-Dichloropropane	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
591-78-6	2-Hexanone	<10	10
75-09-2	Methylene Chloride	**2.8**	2.0
78-93-3	2-Butanone (MEK)	<10	10
100-42-5	Styrene	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<2.0	2.0
108-88-3	Toluene	<2.0	2.0
71-55-6	1,1,1-Trichloroethane	**4.3**	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	**240**	2.0
75-01-4	Vinyl Chloride	**9.5**	2.0
1330-20-7	Xylene (Total)	<6.0	6.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**02-02**	Sampled:	3/20/14 9:50		
Lab Sample ID:	**1403280-13**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/25/14 6:00	By:	DLV
Dilution Factor:	2	Analyzed:	3/25/14 17:11	By:	DLV
QC Batch:	1402530	Analytical Batch:	4C26011		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*98*	*85-118*
1,2-Dichloroethane-d4	*98*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*100*	*82-110*

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**Dup#1**	Sampled:	3/20/14 9:50		
Lab Sample ID:	**1403280-14**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/26/14 6:00	By:	DLV
Dilution Factor:	2	Analyzed:	3/26/14 12:30	By:	DLV
QC Batch:	1402562	Analytical Batch:	4C27002		

*Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<10	10
71-43-2	Benzene	<2.0	2.0
75-27-4	Bromodichloromethane	<0.50	0.50
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
110-75-8	2-Chloroethyl Vinyl Ether	<10	10
67-66-3	Chloroform	<0.50	0.50
74-87-3	Chloromethane	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	**2.0**	2.0
156-60-5	trans-1,2-Dichloroethene	<2.0	2.0
78-87-5	1,2-Dichloropropane	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
591-78-6	2-Hexanone	<10	10
75-09-2	Methylene Chloride	**3.7**	2.0
78-93-3	2-Butanone (MEK)	**17**	10
100-42-5	Styrene	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<2.0	2.0
108-88-3	Toluene	<2.0	2.0
71-55-6	1,1,1-Trichloroethane	**4.6**	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	**240**	2.0
75-01-4	Vinyl Chloride	**10**	2.0
1330-20-7	Xylene (Total)	<6.0	6.0

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TRIMATRIX LABORATORIES

ANALYTICAL REPORT

Client:	**Prairie Ronde Realty Company**	Work Order:	**1403280**		
Project:	NCP Dowagiac, MI	Description:	Laboratory Services		
Client Sample ID:	**Dup#1**	Sampled:	3/20/14 9:50		
Lab Sample ID:	**1403280-14**	Sampled By:	RDM		
Matrix:	Water	Received:	3/21/14 8:30		
Unit:	ug/L	Prepared:	3/26/14 6:00	By:	DLV
Dilution Factor:	2	Analyzed:	3/26/14 12:30	By:	DLV
QC Batch:	1402562	Analytical Batch:	4C27002		

*Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL

Surrogates:	***% Recovery***	***Control Limits***
Dibromofluoromethane	*98*	*85-118*
1,2-Dichloroethane-d4	*100*	*87-122*
Toluene-d8	*101*	*85-113*
4-Bromofluorobenzene	*101*	*82-110*

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL

QC Batch: 1402530 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank Analyzed: 03/25/2014 By: DLV

Unit: ug/L Analytical Batch: 4C26011

Acetone	<5.0				5.0
Benzene	<1.0				1.0
Bromodichloromethane	<0.25				0.25
Carbon Disulfide	<5.0			--	5.0
Carbon Tetrachloride	<1.0				1.0
Chlorobenzene	<1.0				1.0
2-Chloroethyl Vinyl Ether	<5.0				5.0
Chloroform	<0.25				0.25
Chloromethane	<1.0				1.0
1,2-Dichlorobenzene	<1.0				1.0
1,4-Dichlorobenzene	<1.0			--	1.0
1,1-Dichloroethane	<1.0				1.0
1,2-Dichloroethane	<1.0				1.0
1,1-Dichloroethene	<1.0				1.0
cis-1,2-Dichloroethene	<1.0				1.0
trans-1,2-Dichloroethene	<1.0				1.0
1,2-Dichloropropane	<1.0				1.0
Ethylbenzene	<1.0				1.0
2-Hexanone	<5.0				5.0
Methylene Chloride	<1.0				1.0
2-Butanone (MEK)	<5.0				5.0
Styrene	<1.0				1.0
1,1,2,2-Tetrachloroethane	<0.50				0.50
Tetrachloroethene	<1.0				1.0
Toluene	<1.0				1.0
1,1,1-Trichloroethane	<1.0				1.0
1,1,2-Trichloroethane	<1.0				1.0
Trichloroethene	<1.0				1.0
Vinyl Chloride	<1.0				1.0
Xylene (Total)	<3.0				3.0
Surrogates:					
Dibromofluoromethane			*98*	*85-118*	
1,2-Dichloroethane-d4			*93*	*87-122*	

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Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
QC Batch: 1402530 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B								
Method Blank (Continued)					Analyzed:		03/25/2014	By: DLV
Unit: ug/L					Analytical Batch:		4C26011	
Surrogates (Continued):								
Toluene-d8				*100*	*85-113*			
4-Bromofluorobenzene				*98*	*82-110*			
Laboratory Control Sample					Analyzed:		03/25/2014	By: DLV
Unit: ug/L					Analytical Batch:		4C26011	
Benzene		40.0	**45.3**	113	84-119	--		1.0
Chlorobenzene		40.0	**43.3**	108	84-118	--		1.0
1,1-Dichloroethene		40.0	**47.7**	119	77-123	--		1.0
Toluene		40.0	**45.1**	113	85-118	--		1.0
Trichloroethene		40.0	**45.4**	114	82-119	--		1.0
Surrogates:								
Dibromofluoromethane				*99*	*85-118*			
1,2-Dichloroethane-d4				*93*	*87-122*			
Toluene-d8				*102*	*85-113*			
4-Bromofluorobenzene				*97*	*82-110*			
Matrix Spike 1403280-05 98-245A					Analyzed:		03/25/2014	By: DLV
Unit: ug/L					Analytical Batch:		4C26011	
Benzene	<2.0	80.0	**87.0**	109	80-129	--		2.0
Chlorobenzene	<2.0	80.0	**84.2**	105	80-121	--		2.0
1,1-Dichloroethene	<2.0	80.0	**86.8**	108	74-134	--		2.0
Toluene	<2.0	80.0	**86.4**	108	79-129	--		2.0
Trichloroethene	232	80.0	**309**	96	75-127	--		2.0
Surrogates:								
Dibromofluoromethane				*100*	*85-118*			
1,2-Dichloroethane-d4				*98*	*87-122*			
Toluene-d8				*101*	*85-113*			
4-Bromofluorobenzene				*100*	*82-110*			
Matrix Spike Duplicate 1403280-05 98-245A					Analyzed:		03/25/2014	By: DLV
Unit: ug/L					Analytical Batch:		4C26011	
Benzene	<2.0	80.0	**90.3**	113	80-129	4	9	2.0

Continued on next page

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US EPA ARCHIVE DOCUMENT

Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1402530 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike Duplicate (Continued) 1403280-05 98-245A — Analyzed: 03/25/2014 — By: DLV

Unit: ug/L — Analytical Batch: 4C26011

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Chlorobenzene	<2.0	80.0	**87.0**	109	80-121	3	8	2.0
1,1-Dichloroethene	<2.0	80.0	**90.3**	113	74-134	4	11	2.0
Toluene	<2.0	80.0	**89.4**	112	79-129	3	9	2.0
Trichloroethene	232	80.0	**320**	110	75-127	4	10	2.0
Surrogates:								
Dibromofluoromethane				*100*	*85-118*			
1,2-Dichloroethane-d4				*98*	*87-122*			
Toluene-d8				*101*	*85-113*			
4-Bromofluorobenzene				*99*	*82-110*			

QC Batch: 1402562 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank — Analyzed: 03/26/2014 — By: DLV

Unit: ug/L — Analytical Batch: 4C27002

Acetone	<5.0		5.0
Benzene	<1.0		1.0
Bromodichloromethane	<0.25		0.25
Carbon Disulfide	<5.0	--	5.0
Carbon Tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
2-Chloroethyl Vinyl Ether	<5.0		5.0
Chloroform	<0.25		0.25
Chloromethane	<1.0		1.0
1,2-Dichlorobenzene	<1.0		1.0
1,4-Dichlorobenzene	<1.0	--	1.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
Ethylbenzene	<1.0		1.0
2-Hexanone	<5.0		5.0
Methylene Chloride	<1.0		1.0

Continued on next page

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Volatile Organic Compounds by EPA Method 8260B (Continued)

QC Batch: 1402562 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued) Analyzed: 03/26/2014 By: DLV

Unit: ug/L Analytical Batch: 4C27002

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
2-Butanone (MEK)			<5.0					5.0
Styrene			<1.0					1.0
1,1,2,2-Tetrachloroethane			<0.50					0.50
Tetrachloroethene			<1.0					1.0
Toluene			<1.0					1.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene (Total)			<3.0					3.0
Surrogates:								
Dibromofluoromethane				*98*	*85-118*			
1,2-Dichloroethane-d4				*98*	*87-122*			
Toluene-d8				*100*	*85-113*			
4-Bromofluorobenzene				*100*	*82-110*			

Laboratory Control Sample Analyzed: 03/26/2014 By: DLV

Unit: ug/L Analytical Batch: 4C27002

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
Benzene		40.0	**44.7**	112	84-119	--		1.0
Chlorobenzene		40.0	**42.9**	107	84-118	--		1.0
1,1-Dichloroethene		40.0	**47.2**	118	77-123	--		1.0
Toluene		40.0	**44.4**	111	85-118	--		1.0
Trichloroethene		40.0	**43.7**	109	82-119	--		1.0
Surrogates:								
Dibromofluoromethane				*99*	*85-118*			
1,2-Dichloroethane-d4				*97*	*87-122*			
Toluene-d8				*101*	*85-113*			
4-Bromofluorobenzene				*100*	*82-110*			

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TRIMATRIX LABORATORIES

5560 Corporate Exchange Court SE
Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Chain of Custody Record

COC No. 147509

Pg. 1 of 2

For Lab Use Only

Cart: 10
VOA Rack/Tray: 556, 498 W.
Receipt Log No.: 15-4
Project Chemist:
Work Order No.: 1403280

Client Name: Dr DAVID MUSCH
Address: 109 RIVERCLIFF DR
City, State Zip: CONNELLY SPRINGS NC 28612
Phone/Fax:
Email:

Project Name: PIL - GIS
Client Project No. / P.O. No.: 96-0
Invoice To: PIL ☐ Client ☑ Other (comments)
Contact/Report To: RDM

Analyses Requested: D, 8260

Container Type (corresponds to Container Packing List): 1

Number of Containers Submitted

PRESERVATIVES
A NONE pH~7
B HNO_3 pH<2
C H_2SO_4 pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAc/NaOH pH>9
G MeOH
H Other (note below)

Schedule	Matrix Code	Sample Number		Field Sample ID	Cooler ID	Sample Date	Sample Time	COMP	GRAB	Matrix	Total	Sample Comments
06		01	1	B-224A		3-19-14 ~~3/19/14~~			✓	W	2	
		02	2	98-224B					✓	W	2	
		03	3	83-28A			1250		✓	W	2	
		04	4	83-28B			1310		✓	W	2	
		05	5	98-245A			1325		✓	W	2	
		06	6	04-17/1		3/20/14	0715		✓	W	2	
		07	7	04-17/2			0730		✓	W	2	
		08	8	02-03			0800		✓	W	2	
		09	9	02-04			0820		✓	W	2	
07		10	10	TRIP BLANK		—	—		✓	W	1	

Sampled By (print): DAVID MUSCH
Sampler's Signature:
Company:

How Shipped? Hand ___ Carrier Fed Ex
Tracking No.

Comments

1. Relinquished By	Date	Time	2. Relinquished By	Date	Time	3. Relinquished By	Date	Time
1. Received By	**Date**	**Time**	**2. Received By**	**Date**	**Time**	**3. Received For Lab By**	**Date**	**Time**
						[signature]	3/21/14	0830

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TRIMATRIX LABORATORIES

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Phone (616) 975-4500 Fax (616) 942-7463
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Chain of Custody Record

COC No. 147510

Pg. 2 of 2

For Lab Use Only

Cart: 10
VOA Rack/Tray: 556, 498 W
Receipt Log No.: 154
Project Chemist:
Work Order No.: 1403280

Client Name: R. DAVID MURSCH
Address: 104 RIVERCLIFF DR
City, State Zip: CONNELLY SPRINGS NC 28612
Phone/Fax:
Email:

Project Name: PRR-GSI
Client Project No. / P.O. No.: 96-01
Invoice To: ☐ Client ☒ Other (comments) PRR
Contact/Report To: RDM

Analyses Requested: D, 8260

Container Type (corresponds to Container Packing List): 1

Number of Containers Submitted

PRESERVATIVES
A NONE pH~7
B HNO_3 pH<2
C H_2SO_4 pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAc/NaOH pH>9
G MeOH
H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	COMP	GRAB	Matrix	Total	Sample Comments
06		11	1 33-19A		3-20-14	0910		✓	W	2	
		12	2 53-19B			0845		✓	W	2	
		13	3 02-02			0950		✓	W	2	
FD		14	4 DUP#1			0950		✓	W	2	
			5								
			6								
			7								
			8								
			9								
			10								

Sampled By (print): R. DAVID MURSCH
Sampler's Signature:
Company:

How Shipped? Hand ___ Carrier Fed EX
Tracking No.

Comments

1. Relinquished By	Date	Time	2. Relinquished By	Date	Time	3. Relinquished By	Date	Time

1. Received By	Date	Time	2. Received By	Date	Time	3. Received For Lab By	Date	Time
							3/21/14	0830

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SAMPLE RECEIVING / LOG-IN CHECKLIST

TRIMATRIX LABORATORIES

Client: R. David Mursch
Work Order #: 1403280
Receipt Record Page/Line #: 15-4
New / Add To
Project Chemist
Sample #s

Recorded by (initials/date): LR 3/21/14
☑ Cooler ☐ Box ☐ Other
Qty Received: 1
Thermometer Used: ☑ IR Gun (#202) ☐ Digital Thermometer (#54) ☐ Other (#_____) ☐ See Additional Cooler Information Form

Cooler #	Time	Custody Seals	Coolant Location	Coolant/Temperature Taken Via	Alternate Temperature Taken Via
3323	0855	☑ None; ☐ Present / Intact; ☐ Present / Not Intact	Dispersed / Top / Middle / (Bottom)	☐ Loose Ice / Avg 2-3 containers; ☑ Bagged Ice / Avg 2-3 containers; ☐ Blue Ice / Avg 2-3 containers; ☐ None / Avg 2-3 containers	☑ Temperature Blank (TB); ☐ 1 Container
		☐ None; ☐ Present / Intact; ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers; ☐ Bagged Ice / Avg 2-3 containers; ☐ Blue Ice / Avg 2-3 containers; ☐ None / Avg 2-3 containers	☐ Temperature Blank (TB); ☐ 1 Container
		☐ None; ☐ Present / Intact; ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers; ☐ Bagged Ice / Avg 2-3 containers; ☐ Blue Ice / Avg 2-3 containers; ☐ None / Avg 2-3 containers	☐ Temperature Blank (TB); ☐ 1 Container
		☐ None; ☐ Present / Intact; ☐ Present / Not Intact	Dispersed / Top / Middle / Bottom	☐ Loose Ice / Avg 2-3 containers; ☐ Bagged Ice / Avg 2-3 containers; ☐ Blue Ice / Avg 2-3 containers; ☐ None / Avg 2-3 containers	☐ Temperature Blank (TB); ☐ 1 Container

Cooler #	Recorded °C	Correction Factor °C	Actual °C
3323	Temp Blank:	—	3.5
	TB location: (Representative) / Not Representative		
	1: 7.8	—	7.8
	2: 7.7	—	7.7
	3: 5.4	—	5.4
	Average °C		7.0
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		

Cooler #	Recorded °C	Correction Factor °C	Actual °C
	Temp Blank:		
	TB location: Representative / Not Representative		
	1		
	2		
	3		
	Average °C		
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		

Cooler #	Recorded °C	Correction Factor °C	Actual °C
	Temp Blank:		
	TB location: Representative / Not Representative		
	1		
	2		
	3		
	Average °C		
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		

Cooler #	Recorded °C	Correction Factor °C	Actual °C
	Temp Blank:		
	TB location: Representative / Not Representative		
	1		
	2		
	3		
	Average °C		
	☐ Cooler ID on COC?		
	☐ VOC Trip Blank received?		

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes	No	
☑	☐	Chain of Custody record(s)? If No, Initiated By _____
☑		Received for Lab Signed/Date/Time?
☑	☐	Shipping document?
☐	☑	Other _____

COC Information

☑ TriMatrix COC ☐ Other 147509

COC ID Numbers:

Check COC for Accuracy

Yes	No	
☑	☐	Analysis Requested?
☑	☐	Sample ID matches COC?
☑	☐	Sample Date and Time matches COC?
☑		Container type completed on COC?
☑	☐	All container types indicated are received?

Check Sample Preservation

N/A	Yes	No	
	☐	☑	Average sample temperature ≤6° C?
☑	☐	☐	Was thermal preservation required?
☑	☐		If "No", Project Chemist Approval Intials: _____
☑	☐		If "Yes" Completed Non Con Cooler - Cont Inventory Form?
☑	☐		Completed Sample Preservation Verification Form?
☑	☐	☐	Samples chemically preserved correctly?
☑	☐		If "No", added orange tag?
	☐	☐	Received pre-preserved VOC soils? ☐ MeOH ☐ Na_2SO_4

Check for Short Hold-Time Prep/Analyses

- ☐ Bacteriological
- ☐ Air Bags
- ☐ EnCores / Methanol Pre-Preserved
- ☐ Formaldehyde/Aldehyde
- ☐ Green-tagged containers
- ☐ Yellow/White-tagged 1L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)
☑ NONE RECEIVED
☐ RECEIVED, COCs TO LAB(S)

Sample Condition Summary

N/A	Yes	No	
	☐	☑	Broken containers/lids?
	☐	☑	Missing or incomplete labels?
	☐	☑	Illegible information on labels?
	☐	☑	Low volume received?
	☐	☑	Inappropriate or non-TriMatrix containers received?
☐	☐	☑	VOC vials / TOX containers have headspace?
☐	☐	☑	Extra sample locations / containers not listed on COC?

Notes

☐ Trip Blank received ☐ Trip Blank not listed on COC

Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?
3/21/14 0830	3/21/14 0908	(Yes) / No

Sample Receiving Log In Forms.xls - Receiving.Log-In_Checklist

revision: 3.4

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

March 24, 2014

R. David Mursch
Prairie Ronde Realty Co.
415 E. Prairie Ronde St.
New Baltimore, MI 48047

RE: Project: PRR
Pace Project No.: 10259824

Dear R. Mursch:
Enclosed are the analytical results for sample(s) received by the laboratory on March 10, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Nicole Benjamin for
Carolynne Trout
carolynne.trout@pacelabs.com
Project Manager

Enclosures

cc: Brian DeLong, Prairie Ronde Realty

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Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: PRR
Pace Project No.: 10259824

Minnesota Certification IDs
1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Certification #40770
Alabama Certification #40770
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #: Pace
Georgia Certification #: 959
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nebraska Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
Wisconsin Certification #: 999407970
West Virginia Certification #: 382
West Virginia TO-15 Approval
West Virginia DHHR #:9952C

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SAMPLE SUMMARY

Project: PRR
Pace Project No.: 10259824

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10259824001	**NREC1 (VMP-17)**	Air	03/05/14 12:26	03/10/14 09:09
10259824002	**NREC1a (IA)**	Air	03/05/14 12:27	03/10/14 09:09
10259824003	**NREC2 (VMP-18)**	Air	03/05/14 12:30	03/10/14 09:09
10259824004	**NREC2a (IA)**	Air	03/05/14 12:31	03/10/14 09:09
10259824005	**LL-NE (IA)**	Air	03/05/14 12:35	03/10/14 09:09
10259824006	**LL-SW (IA)**	Air	03/05/14 12:37	03/10/14 09:09
10259824007	**SREC 1 (VMP-15)**	Air	03/05/14 12:38	03/10/14 09:09
10259824008	**SREC 1a (IA)**	Air	03/05/14 12:39	03/10/14 09:09
10259824009	**QT (VMP-16)**	Air	03/05/14 12:43	03/10/14 09:09
10259824010	**QT Office (IA)**	Air	03/05/14 12:45	03/10/14 09:09
10259824011	**MP (VMP-14)**	Air	03/05/14 08:07	03/10/14 09:09
10259824012	**MP 2 (IA)**	Air	03/05/14 08:08	03/10/14 09:09
10259824013	**VH (VMP-13)**	Air	03/05/14 12:51	03/10/14 09:09
10259824014	**VH 2 (IA)**	Air	03/05/14 12:52	03/10/14 09:09
10259824015	**JMT (VMP-12)**	Air	03/05/14 12:56	03/10/14 09:09
10259824016	**JMT 2 (IA)**	Air	03/05/14 12:57	03/10/14 09:09
10259824017	**PRR Office (VMP-11)**	Air	03/05/14 01:03	03/10/14 09:09
10259824018	**PRR Office 2 (IA)**	Air	03/05/14 01:09	03/10/14 09:09
10259824019	**Unused Can#0691**	Air	03/05/14 00:00	03/10/14 09:09

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SAMPLE ANALYTE COUNT

Project: PRR
Pace Project No.: 10259824

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10259824001	**NREC1 (VMP-17)**	TO-15	JAM	8
10259824002	**NREC1a (IA)**	TO-15	JAM	8
10259824003	**NREC2 (VMP-18)**	TO-15	JAM	8
10259824004	**NREC2a (IA)**	TO-15	JAM	8
10259824005	**LL-NE (IA)**	TO-15	JAM	8
10259824006	**LL-SW (IA)**	TO-15	JAM	8
10259824007	**SREC 1 (VMP-15)**	TO-15	JAM	8
10259824008	**SREC 1a (IA)**	TO-15	JAM	8
10259824009	**QT (VMP-16)**	TO-15	JAM	8
10259824010	**QT Office (IA)**	TO-15	JAM	8
10259824011	**MP (VMP-14)**	TO-15	JAM	8
10259824012	**MP 2 (IA)**	TO-15	JAM	8
10259824013	**VH (VMP-13)**	TO-15	JAM	8
10259824014	**VH 2 (IA)**	TO-15	JAM	8
10259824015	**JMT (VMP-12)**	TO-15	JAM	8
10259824016	**JMT 2 (IA)**	TO-15	JAM	8
10259824017	**PRR Office (VMP-11)**	TO-15	JAM	8
10259824018	**PRR Office 2 (IA)**	TO-15	JAM	8

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: NREC1 (VMP-17) **Lab ID: 10259824001** Collected: 03/05/14 12:26 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/19/14 20:53	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/19/14 20:53	75-34-3	
cis-1,2-Dichloroethene	**1.9**	ug/m3	1.1	1.34		03/19/14 20:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 20:53	156-60-5	
Tetrachloroethene	**22.6**	ug/m3	0.92	1.34		03/19/14 20:53	127-18-4	
1,1,1-Trichloroethane	**2.5**	ug/m3	1.5	1.34		03/19/14 20:53	71-55-6	
Trichloroethene	**45.4**	ug/m3	0.74	1.34		03/19/14 20:53	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/19/14 20:53	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: NREC1a (IA) **Lab ID: 10259824002** Collected: 03/05/14 12:27 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/19/14 23:40	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/19/14 23:40	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 23:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 23:40	156-60-5	
Tetrachloroethene	**1.0**	ug/m3	0.92	1.34		03/19/14 23:40	127-18-4	IS
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		03/19/14 23:40	71-55-6	
Trichloroethene	**2.5**	ug/m3	0.74	1.34		03/19/14 23:40	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/19/14 23:40	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: NREC2 (VMP-18) **Lab ID: 10259824003** Collected: 03/05/14 12:30 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/20/14 13:01	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/20/14 13:01	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/20/14 13:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/20/14 13:01	156-60-5	
Tetrachloroethene	**1.4**	ug/m3	0.92	1.34		03/20/14 13:01	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		03/20/14 13:01	71-55-6	
Trichloroethene	ND	ug/m3	0.74	1.34		03/20/14 13:01	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/20/14 13:01	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: NREC2a (IA) **Lab ID: 10259824004** Collected: 03/05/14 12:31 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.75	1.39		03/20/14 01:04	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.39		03/20/14 01:04	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		03/20/14 01:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		03/20/14 01:04	156-60-5	
Tetrachloroethene	**1.3**	ug/m3	0.96	1.39		03/20/14 01:04	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.39		03/20/14 01:04	71-55-6	
Trichloroethene	**0.82**	ug/m3	0.76	1.39		03/20/14 01:04	79-01-6	
Vinyl chloride	ND	ug/m3	0.36	1.39		03/20/14 01:04	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: LL-NE (IA) **Lab ID: 10259824005** Collected: 03/05/14 12:35 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/19/14 22:17	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/19/14 22:17	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 22:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 22:17	156-60-5	
Tetrachloroethene	**1.2**	ug/m3	0.92	1.34		03/19/14 22:17	127-18-4	IS
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		03/19/14 22:17	71-55-6	
Trichloroethene	**1.3**	ug/m3	0.74	1.34		03/19/14 22:17	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/19/14 22:17	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: LL-SW (IA) **Lab ID: 10259824006** Collected: 03/05/14 12:37 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.75	1.39		03/19/14 20:27	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.39		03/19/14 20:27	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		03/19/14 20:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		03/19/14 20:27	156-60-5	
Tetrachloroethene	**0.97**	ug/m3	0.96	1.39		03/19/14 20:27	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.39		03/19/14 20:27	71-55-6	
Trichloroethene	ND	ug/m3	0.76	1.39		03/19/14 20:27	79-01-6	
Vinyl chloride	ND	ug/m3	0.36	1.39		03/19/14 20:27	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: SREC 1 (VMP-15) **Lab ID: 10259824007** Collected: 03/05/14 12:38 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/20/14 00:07	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/20/14 00:07	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/20/14 00:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/20/14 00:07	156-60-5	
Tetrachloroethene	**51.6**	ug/m3	0.92	1.34		03/20/14 00:07	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		03/20/14 00:07	71-55-6	
Trichloroethene	**58.7**	ug/m3	0.74	1.34		03/20/14 00:07	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/20/14 00:07	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: SREC 1a (IA) **Lab ID: 10259824008** Collected: 03/05/14 12:39 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/19/14 22:48	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/19/14 22:48	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 22:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 22:48	156-60-5	
Tetrachloroethene	ND	ug/m3	0.92	1.34		03/19/14 22:48	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		03/19/14 22:48	71-55-6	
Trichloroethene	ND	ug/m3	0.74	1.34		03/19/14 22:48	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/19/14 22:48	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: QT (VMP-16) **Lab ID: 10259824009** Collected: 03/05/14 12:43 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	**0.91**	ug/m3	0.84	1.55		03/19/14 20:01	75-00-3	
1,1-Dichloroethane	**12.8**	ug/m3	1.3	1.55		03/19/14 20:01	75-34-3	
cis-1,2-Dichloroethene	**47.4**	ug/m3	1.3	1.55		03/19/14 20:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.3	1.55		03/19/14 20:01	156-60-5	
Tetrachloroethene	**76.9**	ug/m3	1.1	1.55		03/19/14 20:01	127-18-4	
1,1,1-Trichloroethane	**178**	ug/m3	1.7	1.55		03/19/14 20:01	71-55-6	
Trichloroethene	**2240**	ug/m3	68.2	124		03/20/14 13:26	79-01-6	A3,IS
Vinyl chloride	ND	ug/m3	0.40	1.55		03/19/14 20:01	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: QT Office (IA) **Lab ID: 10259824010** Collected: 03/05/14 12:45 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.78	1.44		03/20/14 00:38	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.2	1.44		03/20/14 00:38	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		03/20/14 00:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		03/20/14 00:38	156-60-5	
Tetrachloroethene	**2.8**	ug/m3	0.99	1.44		03/20/14 00:38	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.6	1.44		03/20/14 00:38	71-55-6	
Trichloroethene	ND	ug/m3	0.79	1.44		03/20/14 00:38	79-01-6	
Vinyl chloride	ND	ug/m3	0.37	1.44		03/20/14 00:38	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: MP (VMP-14) **Lab ID: 10259824011** Collected: 03/05/14 08:07 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	3.8	6.95		03/20/14 01:28	75-00-3	
1,1-Dichloroethane	ND	ug/m3	5.7	6.95		03/20/14 01:28	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	5.6	6.95		03/20/14 01:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	5.6	6.95		03/20/14 01:28	156-60-5	
Tetrachloroethene	**5.5**	ug/m3	4.8	6.95		03/20/14 01:28	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	7.7	6.95		03/20/14 01:28	71-55-6	
Trichloroethene	**132**	ug/m3	3.8	6.95		03/20/14 01:28	79-01-6	
Vinyl chloride	ND	ug/m3	1.8	6.95		03/20/14 01:28	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: MP 2 (IA) **Lab ID: 10259824012** Collected: 03/05/14 08:08 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/19/14 18:06	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/19/14 18:06	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 18:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 18:06	156-60-5	
Tetrachloroethene	ND	ug/m3	0.92	1.34		03/19/14 18:06	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		03/19/14 18:06	71-55-6	
Trichloroethene	ND	ug/m3	0.74	1.34		03/19/14 18:06	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/19/14 18:06	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: VH (VMP-13) **Lab ID: 10259824013** Collected: 03/05/14 12:51 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Vinyl chloride	ND	ug/m3	7.2	27.8		03/20/14 01:53	75-01-4	
Chloroethane	ND	ug/m3	15.0	27.8		03/20/14 01:53	75-00-3	
1,1-Dichloroethane	ND	ug/m3	22.8	27.8		03/20/14 01:53	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	22.5	27.8		03/20/14 01:53	156-59-2	
1,1,1-Trichloroethane	**96.1**	ug/m3	30.9	27.8		03/20/14 01:53	71-55-6	
Trichloroethene	**1920**	ug/m3	15.3	27.8		03/20/14 01:53	79-01-6	
Tetrachloroethene	ND	ug/m3	19.2	27.8		03/20/14 01:53	127-18-4	
trans-1,2-Dichloroethene	ND	ug/m3	22.5	27.8		03/20/14 01:53	156-60-5	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: VH 2 (IA) **Lab ID: 10259824014** Collected: 03/05/14 12:52 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/19/14 18:33	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/19/14 18:33	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 18:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 18:33	156-60-5	
Tetrachloroethene	**1.3**	ug/m3	0.92	1.34		03/19/14 18:33	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.5	1.34		03/19/14 18:33	71-55-6	
Trichloroethene	**4.1**	ug/m3	0.74	1.34		03/19/14 18:33	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/19/14 18:33	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: JMT (VMP-12) **Lab ID: 10259824015** Collected: 03/05/14 12:56 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.78	1.44		03/19/14 21:51	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.2	1.44		03/19/14 21:51	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		03/19/14 21:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		03/19/14 21:51	156-60-5	
Tetrachloroethene	ND	ug/m3	0.99	1.44		03/19/14 21:51	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.6	1.44		03/19/14 21:51	71-55-6	
Trichloroethene	ND	ug/m3	0.79	1.44		03/19/14 21:51	79-01-6	
Vinyl chloride	ND	ug/m3	0.37	1.44		03/19/14 21:51	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: JMT 2 (IA) **Lab ID: 10259824016** Collected: 03/05/14 12:57 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.91	1.68		03/19/14 23:14	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.4	1.68		03/19/14 23:14	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		03/19/14 23:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.68		03/19/14 23:14	156-60-5	
Tetrachloroethene	ND	ug/m3	1.2	1.68		03/19/14 23:14	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.68		03/19/14 23:14	71-55-6	
Trichloroethene	**4.1**	ug/m3	0.92	1.68		03/19/14 23:14	79-01-6	
Vinyl chloride	ND	ug/m3	0.44	1.68		03/19/14 23:14	75-01-4	

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ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: PRR Office (VMP-11) **Lab ID: 10259824017** Collected: 03/05/14 01:03 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.72	1.34		03/19/14 19:04	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.1	1.34		03/19/14 19:04	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 19:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		03/19/14 19:04	156-60-5	
Tetrachloroethene	**3.9**	ug/m3	0.92	1.34		03/19/14 19:04	127-18-4	
1,1,1-Trichloroethane	**5.0**	ug/m3	1.5	1.34		03/19/14 19:04	71-55-6	
Trichloroethene	**117**	ug/m3	0.74	1.34		03/19/14 19:04	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		03/19/14 19:04	75-01-4	

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: PRR
Pace Project No.: 10259824

Sample: PRR Office 2 (IA) **Lab ID: 10259824018** Collected: 03/05/14 01:09 Received: 03/10/14 09:09 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Chloroethane	ND	ug/m3	0.94	1.75		03/19/14 21:20	75-00-3	
1,1-Dichloroethane	ND	ug/m3	1.4	1.75		03/19/14 21:20	75-34-3	
cis-1,2-Dichloroethene	ND	ug/m3	1.4	1.75		03/19/14 21:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.75		03/19/14 21:20	156-60-5	
Tetrachloroethene	ND	ug/m3	1.2	1.75		03/19/14 21:20	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	1.9	1.75		03/19/14 21:20	71-55-6	
Trichloroethene	ND	ug/m3	0.96	1.75		03/19/14 21:20	79-01-6	
Vinyl chloride	ND	ug/m3	0.46	1.75		03/19/14 21:20	75-01-4	

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QUALITY CONTROL DATA

Project: PRR
Pace Project No.: 10259824

QC Batch: AIR/19719 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10259824001, 10259824002, 10259824004, 10259824005, 10259824006, 10259824007, 10259824008, 10259824009, 10259824010, 10259824011, 10259824012, 10259824014, 10259824015, 10259824016, 10259824017, 10259824018

METHOD BLANK: 1641749 Matrix: Air
Associated Lab Samples: 10259824001, 10259824002, 10259824004, 10259824005, 10259824006, 10259824007, 10259824008, 10259824009, 10259824010, 10259824011, 10259824012, 10259824014, 10259824015, 10259824016, 10259824017, 10259824018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	03/19/14 11:26	
1,1-Dichloroethane	ug/m3	ND	0.82	03/19/14 11:26	
Chloroethane	ug/m3	ND	0.54	03/19/14 11:26	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	03/19/14 11:26	
Tetrachloroethene	ug/m3	ND	0.69	03/19/14 11:26	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	03/19/14 11:26	
Trichloroethene	ug/m3	ND	0.55	03/19/14 11:26	
Vinyl chloride	ug/m3	ND	0.26	03/19/14 11:26	

LABORATORY CONTROL SAMPLE: 1641750

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	54.4	98	72-128	
1,1-Dichloroethane	ug/m3	41.2	40.6	99	68-128	
Chloroethane	ug/m3	26.8	27.2	101	69-128	
cis-1,2-Dichloroethene	ug/m3	40.3	42.2	105	71-135	
Tetrachloroethene	ug/m3	69	68.1	99	69-136	
trans-1,2-Dichloroethene	ug/m3	40.3	43.9	109	70-131	
Trichloroethene	ug/m3	54.6	56.3	103	70-135	
Vinyl chloride	ug/m3	26	26.2	101	69-132	

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(612)607-1700

QUALITY CONTROL DATA

Project: PRR
Pace Project No.: 10259824

QC Batch: AIR/19724 | Analysis Method: TO-15
QC Batch Method: TO-15 | Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10259824013

METHOD BLANK: 1642082 | Matrix: Air
Associated Lab Samples: 10259824013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	03/19/14 11:26	
1,1-Dichloroethane	ug/m3	ND	0.82	03/19/14 11:26	
Chloroethane	ug/m3	ND	0.54	03/19/14 11:26	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	03/19/14 11:26	
Tetrachloroethene	ug/m3	ND	0.69	03/19/14 11:26	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	03/19/14 11:26	
Trichloroethene	ug/m3	ND	0.55	03/19/14 11:26	
Vinyl chloride	ug/m3	ND	0.26	03/19/14 11:26	

LABORATORY CONTROL SAMPLE: 1642083

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	54.4	98	72-128	
1,1-Dichloroethane	ug/m3	41.2	40.6	99	68-128	
Chloroethane	ug/m3	26.8	27.2	101	69-128	
cis-1,2-Dichloroethene	ug/m3	40.3	42.2	105	71-135	
Tetrachloroethene	ug/m3	69	68.1	99	69-136	
trans-1,2-Dichloroethene	ug/m3	40.3	43.9	109	70-131	
Trichloroethene	ug/m3	54.6	56.3	103	70-135	
Vinyl chloride	ug/m3	26	26.2	101	69-132	

SAMPLE DUPLICATE: 1642126

Parameter	Units	10259824013 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	96.1	97.9	2	25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
Tetrachloroethene	ug/m3	ND	ND		25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	1920	1950	2	25	
Vinyl chloride	ug/m3	ND	ND		25	

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QUALITY CONTROL DATA

Project: PRR
Pace Project No.: 10259824

QC Batch: AIR/19727
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 10259824003

METHOD BLANK: 1642394
Matrix: Air
Associated Lab Samples: 10259824003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	03/20/14 11:47	
1,1-Dichloroethane	ug/m3	ND	0.82	03/20/14 11:47	
Chloroethane	ug/m3	ND	0.54	03/20/14 11:47	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	03/20/14 11:47	
Tetrachloroethene	ug/m3	ND	0.69	03/20/14 11:47	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	03/20/14 11:47	
Trichloroethene	ug/m3	ND	0.55	03/20/14 11:47	
Vinyl chloride	ug/m3	ND	0.26	03/20/14 11:47	

LABORATORY CONTROL SAMPLE: 1642395

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	67.9	122	72-128	
1,1-Dichloroethane	ug/m3	41.2	45.5	111	68-128	
Chloroethane	ug/m3	26.8	26.2	98	69-128	
cis-1,2-Dichloroethene	ug/m3	40.3	45.3	112	71-135	
Tetrachloroethene	ug/m3	69	73.1	106	69-136	
trans-1,2-Dichloroethene	ug/m3	40.3	46.6	116	70-131	
Trichloroethene	ug/m3	54.6	59.7	109	70-135	
Vinyl chloride	ug/m3	26	25.8	99	69-132	

SAMPLE DUPLICATE: 1642934

Parameter	Units	10259811001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
Tetrachloroethene	ug/m3	ND	ND		25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

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QUALIFIERS

Project: PRR
Pace Project No.: 10259824

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 10259824003

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

Sample: 10259824004

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

Sample: 10259824007

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

Sample: 10259824010

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

Sample: 10259824011

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

Sample: 10259824013

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

Sample: 10259824017

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

Sample: 1642126

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

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Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: PRR
Pace Project No.: 10259824

SAMPLE QUALIFIERS

Sample: 1642934

[1] The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.

ANALYTE QUALIFIERS

A3 The sample was analyzed by serial dilution.

IS The internal standard recovery associated with this result exceeds the lower control limit. The reported result should be considered an estimated value.

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PRR
Pace Project No.: 10259824

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10259824001	**NREC1 (VMP-17)**	TO-15	AIR/19719		
10259824002	**NREC1a (IA)**	TO-15	AIR/19719		
10259824003	**NREC2 (VMP-18)**	TO-15	AIR/19727		
10259824004	**NREC2a (IA)**	TO-15	AIR/19719		
10259824005	**LL-NE (IA)**	TO-15	AIR/19719		
10259824006	**LL-SW (IA)**	TO-15	AIR/19719		
10259824007	**SREC 1 (VMP-15)**	TO-15	AIR/19719		
10259824008	**SREC 1a (IA)**	TO-15	AIR/19719		
10259824009	**QT (VMP-16)**	TO-15	AIR/19719		
10259824010	**QT Office (IA)**	TO-15	AIR/19719		
10259824011	**MP (VMP-14)**	TO-15	AIR/19719		
10259824012	**MP 2 (IA)**	TO-15	AIR/19719		
10259824013	**VH (VMP-13)**	TO-15	AIR/19724		
10259824014	**VH 2 (IA)**	TO-15	AIR/19719		
10259824015	**JMT (VMP-12)**	TO-15	AIR/19719		
10259824016	**JMT 2 (IA)**	TO-15	AIR/19719		
10259824017	**PRR Office (VMP-11)**	TO-15	AIR/19719		
10259824018	**PRR Office 2 (IA)**	TO-15	AIR/19719		

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US EPA ARCHIVE DOCUMENT

10L5704

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

14833

Section A Required Client Information:

Company: Prairie Ronde Realty Co
Address: 415 E Prairie Ronde ST
Dowagiac, MI 49047
Email To: davidmursch@earthlink.net
Phone: 269-782-2141 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: R. David Mursch
Copy To: Brian DeLong
Purchase Order No.: NA
Project Name: PRR
Project Number: NA

Section C Invoice Information:

Attention: BRIAN DELONG
Company Name: Prairie Ronde Realty Co.
Address: 415 E Prairie Ronde St, Dowagiac MI 49047
Pace Quote Reference:
Pace Project Manager/Sales Rep. Carolynne Trout
Pace Profile #:

Program: UST / Superfund / Emissions / Clean Air Act / ✓ Voluntary Clean Up / Dry Clean / RCRA / Other____

Location of Sampling by State MI

Reporting Units: ug/m³ X / mg/m³ ___ / PPBV ___ / PPMV ___ / Other ___

Report Level II.___ III.___ IV.___ Other____

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	'Section D Required Client Information AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START END/GRAB DATE	TIME	COMPOSITE - DATE	TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	NREC 1 (VMP-17)			3-4-14	1:11p	3-5-14	12:26p	-30	-05	1582	0314							X			001
2	NREC 1a (IA)			3-4-14	1:13	3-5-14	12:27	-28	0	0707	0339							X			002
3	NREC 2 (VMP-18)			3-4-14	1:27	3-5-14	12:30	-26	0	1234	0038							X			003
4	NREC 2a (IA)			3-4-14	1:29	3-5-14	12:31	-28	-03	1086	0290							X			004
5	LL-NE (IA)			3-4-14	1:32	3-5-14	12:35	-29	0	0967	0336							X			005
6	LL-SW (IA)			3-4-14	1:36	3-5-14	12:37	-28	-04	1077	0057							X			006
7	SREC 1 (VMP-15)			3-4-14	1:40	3-5-14	12:38	-27	0	2045	0216							X			007
8	SREC 1a (IA)			3-4-14	1:42	3-5-14	12:39	-29	-01	0410	0317							X			008
9	QT (VMP-16)			3-4-14	1:49	3-5-14	12:43	-30	-08	1658	0254							X			009
10	QT OFFICE (IA)			3-4-14	1:52	3-5-14	12:45	-28	-02	1220	0128							X			010
11	MP (VMP-14)			3-4-14	8:42a	3-5-14	8:07a	-30	-10	1288	0124							X			011
12	MP 2 (IA)			3-4-14	8:44a	3-5-14	8:08a	-30	-02	2378	0394							X			012

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Brian DeLong / PRR	3-5-14		[signature]	3/5/14	0909

SAMPLE CONDITIONS

	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
AMB		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brian DeLong

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY) 3-5-14

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

US EPA ARCHIVE DOCUMENT

10257824

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

14834

Section A Required Client Information:

Company: Prairie Ronde Realty Co
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Dowagiac Mi 49047
Email To: davidmursch@earthlink.net
Phone: 269-782-2141 Fax:
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Report To: R. David Mursch
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Company Name: Prairie Ronde Realty Co
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Pace Quote Reference:
Pace Project Manager/Sales Rep. Carolyne Trout
Pace Profile #:

Program: UST / Superfund / Emissions / Clean Air Act / ✓ Voluntary Clean Up / Dry Clean / RCRA / Other____

Location of Sampling by State MI

Reporting Units: ug/m³ X / mg/m³ ___ / PPBV ___ / PPMV ___ / Other ___

Report Level II.___ III.___ IV.___ Other_____

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	Section D Required Client Information: AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED: COMPOSITE START END/GRAB DATE	TIME	COMPOSITE - DATE	TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	Method: PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	VH (VMP-13)			3-4-14	1:56p	3-5-14	12:51p	-29	-02	0981	0219							X			013
2	VH 2 (IA)			3-4-14	1:58	3-5-14	12:52	-29	-01	2313	0055							X			014
3	JMT (VMP-12)			3-4-14	2:03	3-5-14	12:56	-29	-02	2037	0277							X			015
4	JMT 2 (IA)			3-4-14	2:04	3-5-14	12:57	-28	-06	2336	0370							X			016
5	PRR OFFICE (VMP-11)			3-4-14	2:10	3-5-14	1:03	-26	-01	2381	0070							X			017
6	PRR OFFICE 2 (IA)			3-4-14	2:15	3-5-14	1:09	-30	-10	0825	0047							X			018
7																					019
8																					
9																					
10																					
11																					
12																					

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Brian DeLong / PRR	3-5-14		[signature]	3/5/14	0909

SAMPLE CONDITIONS

	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
AMB	Y/N	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Brian DeLong

SIGNATURE of SAMPLER: [signature] DATE Signed (MM / DD / YY): 3-5-14

ORIGINAL

Pace Analytical	Document Name: Air Sample Condition Upon Receipt	Document Revised: 26Dec2013 Page 1 of 1
	Document No.: F-MN-A-106-rev.09	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt

Client Name: Prairie Ronde Realty Co.

Project #: WO#: 10259824

10259824

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other: _____

Tracking Number: on other sheet

Custody Seal on Cooler/Box Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other: _____ **Temp Blank rec:** ☐ Yes ☑ No

Temp. (TO17 and TO13 samples only) (°C): — **Corrected Temp (°C):** — **Thermom. Used:** ☐ B88A912167504 ☐ B88A9132521491 ☐ 72337080 ☐ 80512447

Temp should be above freezing to 6°C **Correction Factor:** — **Date & Initials of Person Examining Contents:** 6 23 13 14

Type of ice Received ☐ Blue ☐ Wet ☑ None

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Media: Air Can				11.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	12.

Samples Received:

Canisters		Flow Controllers		Stand Alone G	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
NREC 1	1582		0314	mp	1288 / 0124
NREC 1a	0707		0339	mp2	2378 / 0394
NREC 2	1234		0038	VH	0981 / 0219
NREC 2a	1086		0290	VH2	2313 / 0055
LC-NE	0967		0336	JMT	2037 / 0277
LL-SW	1077		0057	JMT 2	2336 / 0370
SREC 1	2045		0216	PRR office	2381 / 0070
SREC 1a	0410		0317	PRR office 2	0825 / 0047
QT	1658		0254	unused	0691 / 0309
QT office	1220		0123		

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

US EPA ARCHIVE DOCUMENT

Pace Analytical	Document Name: **SCUR Exceptions Form**	Document Revised: 16Apr2012 Page 1 of 1
	Document No.: **F-MN-L-220-Rev.00**	Issuing Authority: Pace Minnesota Quality Office

Workorder #: 10259824

Issue	Sample ID	Container Type/#
5979 6579 7971		
5979 6579 7950		
5979 6579 7938		
5979 6579 7949		
5979 6579 7960		

US EPA ARCHIVE DOCUMENT

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 94-203A
Date: 1-22-14

WELL INFORMATION:

1530

Total well depth (feet): 26
- Depth to water in well (feet): 14.58
= Water column (feet):
Screen length (feet):

Well diameter (inches): 1 2 4 CMT
Volume factor (gallons per foot): 0.01 0.16 0.65 Port

Pump intake depth (feet): 24 All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color:

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1407	0	14.02	0	—	7.54	472	52	—	10.3
1512	5	14.63	1700		7.39	416	19	—	10.3
1517	5	14.62	1700	340	7.34	614	7	—	10.3
1522	5	14.61	1700	[illegible]	7.34	614	7	—	10.3
1527	5	14.61	1700	340	7.30	614	7	—	10.4
			1500						
						DO Probe Failed			
			Purge Rate 1L = 3 min						
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	
DHC Filter	1	None	

GENERAL

Weather: 15° Snow

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: [signature]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 95-220A
Date: 1-22-14

WELL INFORMATION:

Total well depth (feet): 30
- Depth to water in well (feet): 18.22
= Water column (feet):
Screen length (feet): 10
Pump intake depth (feet): 25

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color:

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0735	0	18.22	0	—	6.89	832	11	—	12.4
0740	5	18.25	—	340	6.80	858	9	—	12.6
0745	5	18.24	—	340	6.76	884	9	—	12.7
0750	5	—	—	—	6.77	880	10	—	12.8
					DO Probe Leak				
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	
DHC Filter	1	None	

GENERAL

Weather: 9°, snow

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: [signature]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 98-223A
Date: 1-28-14

WELL INFORMATION:

Total well depth (feet): 21
- Depth to water in well (feet): 8.75
= Water column (feet):
Screen length (feet):

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet): 18 All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1550 ~~1500~~	0	8.80	—	0	9.02	422	2	—	9.3
1555 ~~1505~~	5	8.80	—	340	6.99	442	0	—	9.5
1558 ~~1508~~	3	—	—	320	6.99	444	0	—	9.5
1601 ~~1511~~	3	—	—	320	6.97	446	0	—	9.5
						DO Meter failed			
				1600					
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	
DHC Filter	1	None	

GENERAL

Weather: 15° Cloud, wind

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature:

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 98-228
Date: 1-22-14

WELL INFORMATION:

Total well depth (feet): 47
- Depth to water in well (feet): 8.81
= Water column (feet):
Screen length (feet): 10
Pump intake depth (feet): 47

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1615	0	8.82	0	320	7.16	624	4	—	10.0
1620	5	8.82	—		7.22	628	0	—	10.0
1625	3	8.82	—		7.23	627	0		10.1
1626	7	8.82	—		7.24	625	0		10.[illegible]
						DO PROBE FAILED			
					1630				
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	
DHC Filter	1	None	

GENERAL

Weather: 15°, snow

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: [signature]

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SAMPLING REPORT

Sampling Point: 48-22SR
Date: 1-22-17
1800

WELL INFORMATION:

Total well depth (feet): 54
- Depth to water in well (feet):
= Water column (feet):
Screen length (feet): 5

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet): 52 All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1742	0	18.42	0	—	6.81	663	14	—	11.4
1747	5	18.43	—	340	6.77	697	22	—	11.7
1752	5	18.43	—	340	6.78	714	21	—	12.0
1757	5	18.43	—	340	6.79	721	20	—	12.1
						DO Probe failed			
		1 L @	3 m						
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	
DHC Filter	1	None	

GENERAL

Weather: 15° Sunny

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature:

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 98-2264
Date: 1-22-14
1835

WELL INFORMATION:

Total well depth (feet): 30
- Depth to water in well (feet):
= Water column (feet): 20
Screen length (feet):

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet): 25

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1815	0	18.23	—	340	6.94	674	23	—	12.1
1820	5	18.22	—	340	6.94	678	15	—	12.8
1825	5	18.22	—	340	6.94	684	22	—	12.8
1830	5	—	—	340	6.95	687	20	—	12.9
					DO Probe failed				
		1L =	~~340~~	3M					
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	
DHC Filter	1	None	

GENERAL

Weather: 15° Snow

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: R. [illegible]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: IW2-9
Date: 1-23-14
0825

WELL INFORMATION:

Total well depth (feet):
- Depth to water in well (feet): 18.24
= Water column (feet):
Screen length (feet):

Pump intake depth (feet):

All depths are from top of well riser.

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0808	0	18.24	0	—	7.37	596	5	—	12.0
0813	5	18.23	—	340	7.32	592	0	—	12.1
0818	5	—	—	340	7.31	593	0	—	12.1
0823	5	—	—	—	7.31	593	0	—	12.1
					DO Probe failed				
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	
DHC Filter	1	None	

GENERAL

Weather: 9°, snow

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: R. Mursch

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Re
Location: Dowagiac, MI
Sampling Point: 96-203A
Date: 3-19-14

WELL INFORMATION:

Total well depth (feet): 26
- Depth to water in well (feet): 14.42
= Water column (feet): 5
Screen length (feet): 15
Pump intake depth (feet): 24

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | ~~0.16~~ | 0.65 | Port

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0952		—	0	—	6.87	598	11	1.89	9.9
0957	5	1450	1,400	280	6.79	594	8	0.75	9.9
1002	5	1450	2,600	320	6.80	601	2	0.68	9.9
1007	5	—	4,200	320	6.76	602	0	0.61	9.9
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 41° Rain

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan
Comments:
Sampler(s)/Signature: R. Mursch

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 98-223A
Date: 8-19-14

WELL INFORMATION:

Total well depth (feet): 23
- Depth to water in well (feet): 8.85
= Water column (feet):
Screen length (feet): 10
Pump intake depth (feet): 18

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1020	0	8.65	0	—	6.79	228	0	2.38	8.6
1025	5	8.64	1,500	300	6.40	322	0	3.79	8.8
1030	5	8.64	3,100	320	6.49	361	0	2.72	9.0
1035	5	—	4,000		6.48	382	0	2.80	9.1
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: [illegible]
Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan
Comments:
Sampler(s)/Signature: [signature]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: **Prairie Ronde Realty**
Location: **Dowagiac, MI**
Sampling Point: [illegible]
Date: [illegible]

WELL INFORMATION:

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Total well depth (feet): 47
- Depth to water in well (feet): 8.65
= Water column (feet):
Screen length (feet): 10
Pump intake depth (feet): 42

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1045	0	8.67	0	—	6.77	612	9	[illegible]	10.6
1050	5	8.67	1500	300	6.72	617	[illegible]	[illegible]	[illegible]
1055	5	8.68	[illegible]	300	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1100	5	8.68			6.72	610	[illegible]		
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	

GENERAL

Weather: [illegible]

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: [illegible]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: **Prairie Ronde Realty**
Location: **Dowagiac, MI**
Sampling Point: 98-220A
Date: 3-19-14
0835

WELL INFORMATION:

Total well depth (feet): 30
- Depth to water in well (feet): 18.05
= Water column (feet):
Screen length (feet): 10
Pump intake depth (feet): 25

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0815	0	18.07	0	–	6.47	746	10	1.34	12.5
0820	5	18.07	1,800	360	6.48	752	7	0.30	12.7
0825	5	18.07	3,700	380	6.49	750	6	0.24	12.7
0830	5	–	5,300	320	6.49	762	7	0.21	12.7
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	

GENERAL

Weather: 40° clear

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: [signature]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: **Prairie Ronde Realty**
Location: **Dowagiac, MI**
Sampling Point: 98-225 B
Date: 3-19-14
0805

WELL INFORMATION:

Total well depth (feet): 54
- Depth to water in well (feet): 18.24
= Water column (feet):
Screen length (feet): 5

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet): 52 All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0748	0	18.28	0	—	6.59	665	2	1.00	12.2
0753	5	18.28	1,700	340	6.59	648	1	0.35	12.3
0758	5	18.28	3,400	340	6.58	669	1	0.27	12.3
0803	5	—	4,800	270	6.59	679	1	0.23	12.3
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	

GENERAL

Weather: 40° clear

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: R. Mursch

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: **Prairie Ronde Realty**
Location: **Dowagiac, MI**
Sampling Point: 98-22~~6~~A
Date: 3-14-14
0735

WELL INFORMATION:

Total well depth (feet): 30
- Depth to water in well (feet): 18.06
= Water column (feet):
Screen length (feet): 10
Pump intake depth (feet): 25

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0719	0	18.09	0	—	6.51	639	21	1.09	11.8
0724	5	18.09	1,600	320	6.63	627	16	0.38	12.2
0729	5	18.09	3,200	320	6.64	629	16	0.30	12.4
0734	5	—			6.61	634	13	0.26	12.5
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	

GENERAL

Weather: 40° clear

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan
Comments:
Sampler(s)/Signature:

R. David Mursch, P.E.
Geotechnical and Environmental Engineer
104 Rivercliff Drive Connelly Springs, NC 28612
davidmursch@earthlink.net (828) 234-5906

GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: IW-9
Date: 3-14-14
0900

WELL INFORMATION:

Total well depth (feet): 59.6
- Depth to water in well (feet): 18.05
= Water column (feet):
Screen length (feet): 5
Pump intake depth (feet): 57.5

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0842	0	18.07	0	—	6.85	580	0	1.11	11.9
0847	5	18.07	1,600	320	6.77	581	0	0.45	11.9
0852	5	18.07	3,200	320	6.77	581	0	0.32	11.9
0857	5	—	4,400		6.75	581	0	0.26	11.9
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	4	HCL	
40 - Milliliter VOA	3	H_2SO_4	
500 Milliliter HDPE	1	HNO_3	
1,000 Milliliter Glass	1	None	

GENERAL

Weather: 40° clear
Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan
Comments:
Sampler(s)/Signature: [signature]

R. David Mursch, P.E.
Geotechnical and Environmental Engineer
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phone (828) 234-5906

GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 02-02
Date: 3-20-
0950

WELL INFORMATION:

Total well depth (feet): 32
- Depth to water in well (feet): 15.75
= Water column (feet):
Screen length (feet): 5

Pump intake depth (feet): 29.5 All depths are from top of well riser.

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0934	0	15.85	0	—	6.91	615	0	1.32	9.6
0939	5	15.85	1,500	300	6.86	618	0	0.43	9.4
0942	3	—	2,400	300	6.84	618	0	0.33	10.1
0945	3	15.85	3,300	300	6.84	619	0	0.26	10.1
0948	3	—	4,100	275	6.83	618	0	0.25	10.2
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 32P clear

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan
Comments: DUP
Sampler(s)/Signature:

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: S3-14A
Date: 3-20-14

WELL INFORMATION:

Total well depth (feet):
- Depth to water in well (feet): 7.54
= Water column (feet):
Screen length (feet):

Pump intake depth (feet):

All depths are from top of well riser.

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0855	0	7.78	0	—	8.19	295	2	2.14	6.6
0900	5	7.77	1,500	300	8.23	296	2	0.40	6.9
0903	3	7.77	2,400	300	8.10	295	18	0.43	7.0
0906	3	7.76	3,500	365	7.95	296	13	0.59	7.3
0909	3	7.76	4,400	300	7.82	300	10	0.28	7.3
0912	3	—	5,400	335	7.68	304	5	0.97	7.4
0915	3	7.75	6,300	300	7.63	308	0	1.17	7.4
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 34° clear

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature:

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 83-19 [illegible]
Date: 3-20-[illegible]

0845

WELL INFORMATION:

Total well depth (feet): 40
- Depth to water in well (feet): 6.48
= Water column (feet):
Screen length (feet): 3
Pump intake depth (feet): 38.5

Well diameter (inches): 1 (2) 4 CMT
Volume factor (gallons per foot): 0.01 (0.16) 0.65 Port

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0833	0	6.73	0	—	7.27	512	1	4.15	9.6
0838	5	6.71	1,700	340	7.11	525	0	1.58	9.6
0841	3	6.71	2,700	335	7.16	553	6	0.95	9.6
0844	3	—	3,800	365	7.15	580	5	0.56	9.7
0847	3	—	4,800	335	7.03	596	0	0.33	9.7
0850	3	6.72	5,800	335	6.97	602	0	0.29	9.7
				Criteria Range, ±:	0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 34° Clear

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: [signature]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 02-01
Date: 3-20-11

WELL INFORMATION:

0810

Total well depth (feet): 47
- Depth to water in well (feet): 24.29
= Water column (feet):
Screen length (feet): 5

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet): 39.5 All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0806	0	24.29	0	-	4.85	592	0	2.61	10.1
0811	5	24.29	1,400	280	4.80	594	0	0.54	10.4
0814	8	24.29	2,200	275	6.79	593	0	0.44	10.5
0817	3	—	3,000	275	6.79	593	0	0.40	10.5
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 32° clear

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: R. [signature]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 02-03
Date: 3-20-14

0800

WELL INFORMATION:

Total well depth (feet): 44
- Depth to water in well (feet): 23.72
= Water column (feet):
Screen length (feet): 5

Pump intake depth (feet): 41.5

All depths are from top of well riser.

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0747	0	23.73	0	-	4.92	602	0	3.51	10.1
0752	5	23.74	1,300	260	4.86	603	0	1.01	10.3
0755	3	23.74	2,000	235	6.85	603	0	0.64	10.4
0758	3	23.74	2,900	300	6.85	603	0	0.51	10.5
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 33° clear

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: R. David Mursch

104 Rivercliff Drive Connelly Springs, NC 28612
phone (828) 234-5906

SAMPLING REPORT

Sampling Point: 06-17
Date: 3-20-

0720

WELL INFORMATION:

Total well depth (feet): 60
- Depth to water in well (feet): —
= Water column (feet):
Screen length (feet): —

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet): 60

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
0719	0	—	0	—	4.85	624	1	0.91	11.2
0722	3	—	1,300	260	4.85	631	0	0.39	11.1
0727	3	—	2,100	275	4.85	632	0	0.34	11.1
0730	3	—	2,900	275	4.83	633	0	0.30	11.1
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: clear, 38

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: [signature]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 06-17
Date: 3-20-10

WELL INFORMATION:

Total well depth (feet): 30
- Depth to water in well (feet):
= Water column (feet):
Screen length (feet): —

Pump intake depth (feet): 30

Well diameter (inches): 1 | 2 | 4 | CMT Port
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
7:04	0	—	0	—	6.92	626	48	1.48	12.1
0209	5	—	1,500	300	6.90	623	0	0.043	11.8
0212	3	—	2,200	275	6.89	624	0	0.036	11.6
0215	3	—	3,100	275	6.88	624	0	0.031	11.6
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: clear 32°

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: R. David Mursch

R. David Mursch, P.E.
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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 83-28A
Date: 3-19-
1250

WELL INFORMATION:

Total well depth (feet): 21
- Depth to water in well (feet): 3.32
= Water column (feet):
Screen length (feet): 3

Pump intake depth (feet): 14.5 All depths are from top of well riser.

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Purge Method and Materials: Low-flow purging with peristaltic pump
Purge Water Color: Clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1237	0	3.83	0	—	8.02	487	0	1.12	8.2
1242	5	3.80	1,500	300	7.51	525	0	0.39	8.1
1245	3	3.78	2,300	275	7.20	540	0	0.30	8.1
1248	3	3.77	3,200	300	7.06	55[illegible]	0	0.24	8.2
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 40° Rain

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan
Comments:
Sampler(s)/Signature:

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: D3-28B
Date: 3-19-11

1310

WELL INFORMATION:

Total well depth (feet): 57
- Depth to water in well (feet): 3.50
= Water column (feet):
Screen length (feet): 2

Pump intake depth (feet): 53.0 All depths are from top of well riser.

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color:

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1252	0	5.11	0	—	7.16	541	0	1.45	9.1
1258	5	5.49	1,500	300	7.10	560	1	0.55	9.3
1301	3	5.98	2,800	435	7.14	562	0	0.37	9.0
1304	3	5.84	3,700		7.07	564	0	0.29	8.9
			Criteria Range, ±:		0.1	3%	10%	10%	

12.0

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather:

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature:

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: Prairie Ronde Realty
Location: Dowagiac, MI
Sampling Point: 98-24SA
Date: 3-17-11

WELL INFORMATION:

Total well depth (feet): 22
- Depth to water in well (feet): 6.82
= Water column (feet):
Screen length (feet): 10

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet): 27 All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1312	0	6.83	0	—	6.91	479	0	0.73	9.3
1316	4	6.82	1100	275	6.80	[illegible]	0	0.46	9.3
1319	8	[illegible]	2100	225	6.82	[illegible]	0	0.35	9.3
1322	3	6.83							
			Battery low - took sample.						
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 40° RAIN

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature:

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: **Prairie Ronde Realty**
Location: **Dowagiac, MI**
Sampling Point: 98-227B
Date: 3-19-

WELL INFORMATION:

Total well depth (feet):
- Depth to water in well (feet):
= Water column (feet):
Screen length (feet):

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet): 37

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1137	0	[illegible]	0	—	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1142	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]
1145			[illegible]				[illegible]	[illegible]	[illegible]
1148			[illegible]				[illegible]	[illegible]	[illegible]
Criteria Range, ±:					0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 40 Rain

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature: [illegible]

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GROUNDWATER FIELD SAMPLING REPORT

Site Name: **Prairie Ronde Realty**
Location: **Dowagiac, MI**
Sampling Point: 15-021A
Date: 3-19-14
1125

WELL INFORMATION:

Total well depth (feet):
- Depth to water in well (feet): 18.25
= Water column (feet):
Screen length (feet):

Well diameter (inches): 1 | 2 | 4 | CMT
Volume factor (gallons per foot): 0.01 | 0.16 | 0.65 | Port

Pump intake depth (feet):

All depths are from top of well riser.

Purge Method and Materials: Low-flow purging with peristaltic pump

Purge Water Color: Clear

FIELD MEASUREMENTS

Measuring Equipment: Horiba U-10, SN 404014

Time	Elapsed Time	Water Depth, ft	Total Volume Purged, ml	Purge Rate, ml/min	pH	Conductivity, µS/cm	Turbidity, NTU	Dissolved oxygen, mg/l	Temperature °C
1121	0	18.25	0	—	6.48	[illegible]	0	1.37	[illegible]
[illegible]	[illegible]	18.24	[illegible]	[illegible]	6.55	[illegible]	0	0.72	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	0.61	[illegible]
[illegible]			[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
			Criteria Range, ±:		0.1	3%	10%	10%	

SAMPLES OBTAINED

CONTAINER TYPE AND VOLUME	NUMBER	PRESERVATIVE	OTHER (FILTERING, ETC.)
40 - Milliliter VOA	2	HCL	

GENERAL

Weather: 40° Rain

Sample Handling/Shipment: To Trimatrix Laboratories in Grand Rapids, Michigan

Comments:

Sampler(s)/Signature:

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133
Email: info@microbe.com

Client: R. David Mursch
R. David Mursch
104 Rivercliff Drive
Connelly Springs, NC 28612

Phone: 828-234-5906

Fax:

Identifier: 066LA **Date Rec:** 01/24/2014 **Report Date:** 02/04/2014

Client Project #: 96-01 **Client Project Name:** PRR

Purchase Order #:

Analysis Requested: CENSUS

Reviewed By:

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MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **R. David Mursch**
Project: PRR

MI Project Number: **066LA**
Date Received: 01/24/2014

Sample Information

Client Sample ID:		**96-203A**	**98-223A**	**98-223B**	**98-225B**	**98-226A**
Sample Date:		01/22/2014	01/22/2014	01/22/2014	01/22/2014	01/22/2014
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		CS	CS	CS	CS	CS
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

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CENSUS

Client: **R. David Mursch**
Project: PRR

MI Project Number: **066LA**
Date Received: 01/24/2014

Sample Information

Client Sample ID:	**98-220A**	**IW-9**
Sample Date:	01/23/2014	01/23/2014
Units:	cells/mL	cells/mL
Analyst:	CS	CS

Dechlorinating Bacteria

Dehalococcoides	*DHC*	<5.00E-01	<5.00E-01
tceA Reductase	TCE	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected