

**2013 ANNUAL REPORT**

**VANCHLOR Inc.  
LOCKPORT, NEW YORK**

**Date : March 31, 2014**

A handwritten signature in black ink, appearing to read "C. Banch". The signature is stylized and cursive.

**Chris Banch - EHSQ Manager, VanDeMark Chemical Inc  
(Technical Contact for VanChlor Inc)**

**2013 ANNUAL REPORT  
FOR  
VANCHLOR LANDFILL**

***I. BACKGROUND***

VANCHLOR (successor of VanDeMark) Landfill is located between Mill Street and Eighteen Mile Creek in Lockport, New York. The landfill consists of a 2.5 acre plateau located on a bluff approximately 80 feet above Eighteen Mile Creek.

The landfill was closed during the summer of 1988 in accordance with the NYSDEC-approved closure plan. Closure was designed to minimize the potential for hazardous constituents to be leached from the wastes and released to the groundwater. Van De Mark is now required to monitor the effectiveness of the final cover system, inspect and maintain the integrity of the final cover, and continue to conduct groundwater monitoring for a minimum of 30 years from the date of closure.

Groundwater monitoring is performed on a semiannual basis in accordance with Module IV of VDM's RCRA permit. The groundwater monitoring program has been designed to assess groundwater quality impacts at the landfill site. The groundwater monitoring program consists of sample collection and analysis of groundwater from monitoring wells VDM-9, VDM-10, VDM-11, VDM-14 and D-55 (background) for volatile organic compounds and select inorganic parameters. Samples are also collected from Eighteen Mile Creek just downstream of the site. Groundwater and surface water from Eighteen Mile Creek is analyzed for volatile organic compounds, metals and pH. In addition, water level measurements are taken during each sampling event at all wells prior to purging. The groundwater quality for each analytical parameter at each well location is compared to background water quality data for down gradient monitoring wells having compounds with concentrations exceeding groundwater protection standards. A statistical method is used to evaluate long-term changes in groundwater quality by plotting the life of the well trend for wells for each the compounds in the groundwater protection standards.

## **II. DATA PRESENTATION**

Analytical data for quarterly sampling events prior to 1996 and semiannually since the first event of 1997 is summarized on computerized spreadsheets in Attachment A. The analytical laboratory data report for the October 2013 monitoring event is provided as Attachment B along with water level data, well construction data, and field parameters.

## **III. RESULTS**

Analytical results of the sampling are provided for wells VDM9, -10, -11, and -14 (see Attachment B). The trend analysis results are summarized in Table 1. The trend is presented as increasing, decreasing, or neutral trend based on the latest four years of data.

The data generated at IsleChem trended well with previously collected data.

- Well VDM-9 was not performing as required; it had less water than is generally acceptable, and with excessive sediment. The bailer kept getting hung up in piping during sampling. This may indicate a clamping pipe. The well is slated to be replaced in spring 2014 as a result. Results captured for the well are not trended this sampling..
- Well VDM-10 has all parameters either neutral or decreasing. Most parameters have been testing at, or very near the methodology detection limit since 1991. All parameters below the exceedance values.
- Well VDM-11 has all parameters either neutral or decreasing. All parameters below the exceedance values.
- Well VDM-14 historically has been the highest of the wells monitored. However, close study of the data demonstrates recent trends, (last 8 - 12 samplings) are generally neutral relative to the last 6 years of data. Results for trans-1,2-Dichloroethene, Methylene Chloride, Vinyl Chloride, Toluene, Copper and Chromium are below the method detection limits.

Analytical results for 18-Mile Creek indicate that there has been no increase in concentrations of any parameters at 18 mile creek. (Refer to analytical laboratory data)

**TABLE 1**

**VANCHLOR (successor of VanDeMark Group)  
POST-CLOSURE MONITORING MOVING AVERAGE TREND TEST** □

Parameter	FOUR-YEAR TREND ANALYSIS <sup>(1)</sup>			
	Well VDM-9	Well VDM-10	Well VDM-11	Well VDM-14
Chloroform	Decreasing	Decreasing	Neutral <sup>(4)</sup>	Decreasing
1,2-Dichloroethane	Decreasing	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral <sup>(3)</sup>
Trans-1,2-Dichloroethene	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral <sup>(2,4)</sup>
Methylene Chloride	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral	Neutral <sup>(3)</sup>
1,1,2,2-Tetrachloroethane	Decreasing	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral
Tetrachloroethene	Decreasing	Neutral <sup>(4)</sup>	Neutral	Neutral <sup>(2)</sup>
Trichloroethene	Decreasing	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral <sup>(2)</sup>
Vinyl Chloride	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral <sup>(3)</sup>
Toluene	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral <sup>(4)</sup>	Neutral <sup>(3)</sup>
Chromium	Neutral	Neutral	Decreasing	Decreasing
Copper	Neutral	Decreasing	Neutral	Neutral
Zinc	Neutral	Neutral	Neutral	Neutral

**Notes:**

- (1) *Increasing - significant increasing trend identified on the plot for that parameter.  
Decreasing - significant decreasing trend identified on the plot for that parameter.  
Neutral - no significant increasing or decreasing trend identified on the plot for that parameter.*
- (2) *The most recent semi-annual monitoring data is greater than the NYSDEC Exceedance Value for that parameter.*
- (3) *Not detected, detection limit elevated above NYSDEC Exceedance Value*
- (4) *Latest 3 – 5 years (or more) have been non-detect for parameter.*

**ATTACHMENT A  
 POST-CLOSURE MONITORING  
 SUMMARY OF MOVING TREND ANALYSIS CHECKLIST**

Parameter	Monitoring Location									
	Upgradient		Downgradient							
	D-55		VDM-9		VDM-10		VDM-11		VDM-14	
	table	chart	table	chart	table	chart	table	chart	table	chart
Chloroform	(1)	NA	x	x	x	x	x	x	x	x
1,2-Dichloroethane	(1)	NA	x	x	x	x	x	x	x	x
trans-1.2-Dichloroethene	(1)	NA	x	x	x	x	x	x	x	x
Methylene Chloride	(1)	NA	x	x	x	x	x	x	x	x
1,1,2,2-Tetrachloroethane	(1)	NA	x	x	x	x	x	x	x	x
Tetrachloroethene	(1)	NA	x	x	x	x	x	x	x	x
Trichloroethene	(1)	NA	x	x	x	x	x	x	x	x
Vinyl Chloride	(1)	NA	x	x	x	x	x	x	x	x
Toluene	(1)	NA	x	x	x	x	x	x	x	x
Chromium	(1)	NA	x	x	x	x	x	x	x	x
Copper	(1)	NA	x	x	x	x	x	x	x	x
Zinc	(1)	NA	x	x	x	x	x	x	x	x

*Notes:*

*(1) Analytical data submitted.*

*NA Not applicable.*

**ANALYTICAL DATA**



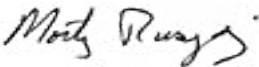
2801 Long Road  
Grand Island, NY 14072  
(716) 773-8401  
(800) 699-8606  
(716) 773-8517 (fax)  
[www.islechem.com](http://www.islechem.com)

## Analysis Report

Client VandeMark Chemical, Inc. Project Water Samples For Analysis  
One North Transit Road Semi-Annual Groundwater Monitoring  
Lockport, NY 14094-2399

Report Date 10/28/2013 Contact Chris Banach  
Status Final  
ID **NY310116.0.36772**

Batch Date 10/11/2013  
Time 13:45  
Description --  
Received 10/11/2013  
15:00  
Batch Contact Chris Banach

Authorized Signature 

Martin Ruszaj, Director of Chemical Testing

*The following result table is for 8 samples received by IsleChem LLC on 10/11/2013 sampled by Daniel Janish on 10/11/2013 and submitted by Daniel Janish*

*Also enclosed are the Chain of Custody and Sample Receipt check list for this project.*

### Narrative:

*Analyses were performed within the required holding times unless otherwise noted below. All quality control results were within acceptable limits unless specifically noted in the report. Quality control analyses were performed on the samples in this report or samples of similar matrix that were analyzed in the analytical batch on the dates indicated in the report.*

### Notes:

**Sample Results**

Report ID NY310116.0.36772

Sample ID	Location	Client VandeMark Chemical, Inc.					
Method							
Analyte	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date	
<b>116-1011-1</b>							
VDM-10 - Ground Water Sampled 10/11/2013							
<b>Inorganics</b>							
EPA 300.0 Rev 2.1							
Field Grab							
Chloride	8800	mg/L	D	DJD	262367	2013-10-17	
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	< 0.2	mg/L	D	RVF	262366	2013-10-24	
Copper, Total	3.18	mg/L	D	RVF	262366	2013-10-24	
Iron, Total	123	mg/L	D	RVF	262366	2013-10-24	
Zinc, Total	6.96	mg/L	D	RVF	262366	2013-10-24	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	< 2.0	ug/L		RRS	262364-262365	2013-10-15	
Methylene chloride	< 2.0	ug/L		RRS	262364-262365	2013-10-15	
trans-1,2-Dichloroethene	< 2.0	ug/L		RRS	262364-262365	2013-10-15	
Chloroform	4.5	ug/L		RRS	262364-262365	2013-10-15	
1,2-Dichloroethane	< 2.0	ug/L		RRS	262364-262365	2013-10-15	
Trichloroethene	< 2.0	ug/L		RRS	262364-262365	2013-10-15	
Toluene	< 2.0	ug/L		RRS	262364-262365	2013-10-15	
Tetrachloroethene	< 2.0	ug/L	C7	RRS	262364-262365	2013-10-15	
1,1,2,2-Tetrachloroethane	< 2.0	ug/L		RRS	262364-262365	2013-10-15	
<b>116-1011-2</b>							
VDM-11 - Ground Water Sampled 10/11/2013							
<b>Inorganics</b>							
EPA 300.0 Rev 2.1							
Field Grab							
Chloride	1300	mg/L	D	DJD	262371	2013-10-17	
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	< 0.1	mg/L	D	RVF	262370	2013-10-24	
Copper, Total	2.97	mg/L	D	RVF	262370	2013-10-24	
Iron, Total	12.4	mg/L	D	RVF	262370	2013-10-24	
Zinc, Total	0.78	mg/L	D	RVF	262370	2013-10-24	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	< 2.0	ug/L		RRS	262368-262369	2013-10-16	
Methylene chloride	< 2.0	ug/L		RRS	262368-262369	2013-10-16	
trans-1,2-Dichloroethene	< 2.0	ug/L		RRS	262368-262369	2013-10-16	
Chloroform	4.3	ug/L		RRS	262368-262369	2013-10-16	
1,2-Dichloroethane	< 2.0	ug/L		RRS	262368-262369	2013-10-16	
Trichloroethene	< 2.0	ug/L		RRS	262368-262369	2013-10-16	
Toluene	< 2.0	ug/L		RRS	262368-262369	2013-10-16	
Tetrachloroethene	8.6	ug/L	C7	RRS	262368-262369	2013-10-16	
1,1,2,2-Tetrachloroethane	< 2.0	ug/L		RRS	262368-262369	2013-10-16	



**Sample Results**

Report ID NY310116.0.36772

Sample ID	Location	Client VandeMark Chemical, Inc.					
Method							
Analyte	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date	
<b>116-1011-3</b>							
VDM-14 - Ground Water Sampled 10/11/2013							
<b>Inorganics</b>							
EPA 300.0 Rev 2.1							
Field Grab							
Chloride	5800	mg/L	D	DJD	262375	2013-10-17	
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	< 0.2	mg/L	D	RVF	262374	2013-10-24	
Copper, Total	< 0.2	mg/L	D	RVF	262374	2013-10-24	
Iron, Total	540	mg/L	D	RVF	262374	2013-10-24	
Zinc, Total	0.86	mg/L	D	RVF	262374	2013-10-24	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	27.4	ug/L		RRS	262372-262373	2013-10-15	
Methylene chloride	6.4	ug/L		RRS	262372-262373	2013-10-15	
trans-1,2-Dichloroethene	20.0	ug/L		RRS	262372-262373	2013-10-15	
Chloroform	58.6	ug/L		RRS	262372-262373	2013-10-15	
1,2-Dichloroethane	8.7	ug/L		RRS	262372-262373	2013-10-15	
Trichloroethene	66.7	ug/L		RRS	262372-262373	2013-10-15	
Toluene	< 2.0	ug/L		RRS	262372-262373	2013-10-15	
Tetrachloroethene	484	ug/L	C7,D1,S5	RRS	262372-262373	2013-10-15	
1,1,2,2-Tetrachloroethane	88.7	ug/L	S5	RRS	262372-262373	2013-10-15	

<b>116-1011-4</b>							
Eighteen Mile Creek - Ground Water Sampled 10/11/2013							
<b>Inorganics</b>							
EPA 300.0 Rev 2.1							
Field Grab							
Chloride	47.6	mg/L	D	DJD	262379	2013-10-17	
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	< 0.01	mg/L		RVF	262378	2013-10-24	
Copper, Total	0.016	mg/L		RVF	262378	2013-10-24	
Iron, Total	1.17	mg/L		RVF	262378	2013-10-24	
Zinc, Total	0.024	mg/L		RVF	262378	2013-10-24	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	< 2.0	ug/L		RRS	262376-262377	2013-10-15	
Methylene chloride	< 2.0	ug/L		RRS	262376-262377	2013-10-15	
trans-1,2-Dichloroethene	< 2.0	ug/L		RRS	262376-262377	2013-10-15	
Chloroform	< 2.0	ug/L		RRS	262376-262377	2013-10-15	
1,2-Dichloroethane	< 2.0	ug/L		RRS	262376-262377	2013-10-15	
Trichloroethene	< 2.0	ug/L		RRS	262376-262377	2013-10-15	
Toluene	< 2.0	ug/L		RRS	262376-262377	2013-10-15	
Tetrachloroethene	< 2.0	ug/L	C7,S1	RRS	262376-262377	2013-10-15	
1,1,2,2-Tetrachloroethane	< 2.0	ug/L	S1	RRS	262376-262377	2013-10-15	

**Sample Results**

Report ID NY310116.0.36772

Sample ID	Location	Client VandeMark Chemical, Inc.					
Method							
Analyte	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date	
<b>116-1011-5</b>							
D-55 - Ground Water Sampled 10/11/2013							
<b>Inorganics</b>							
EPA 300.0 Rev 2.1							
Field Grab							
Chloride	21.7	mg/L	D	DJD	262383	2013-10-17	
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	0.015	mg/L		RVF	262382	2013-10-24	
Copper, Total	0.024	mg/L		RVF	262382	2013-10-24	
Iron, Total	2.31	mg/L		RVF	262382	2013-10-24	
Zinc, Total	0.077	mg/L		RVF	262382	2013-10-24	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	< 2.0	ug/L		RRS	262380-262381	2013-10-15	
Methylene chloride	< 2.0	ug/L		RRS	262380-262381	2013-10-15	
trans-1,2-Dichloroethene	< 2.0	ug/L		RRS	262380-262381	2013-10-15	
Chloroform	< 2.0	ug/L		RRS	262380-262381	2013-10-15	
1,2-Dichloroethane	< 2.0	ug/L		RRS	262380-262381	2013-10-15	
Trichloroethene	< 2.0	ug/L		RRS	262380-262381	2013-10-15	
Toluene	< 2.0	ug/L		RRS	262380-262381	2013-10-15	
Tetrachloroethene	< 2.0	ug/L	C7,S1	RRS	262380-262381	2013-10-15	
1,1,2,2-Tetrachloroethane	< 2.0	ug/L	S1	RRS	262380-262381	2013-10-15	
<b>116-1011-6</b>							
VDM-9 - Ground Water Sampled 10/11/2013							
<b>Inorganics</b>							
EPA 300.0 Rev 2.1							
Field Grab							
Chloride	2200	mg/L	D	DJD	262387	2013-10-17	
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	0.016	mg/L		RVF	262386	2013-10-24	
Copper, Total	0.075	mg/L		RVF	262386	2013-10-24	
Iron, Total	12.1	mg/L		RVF	262386	2013-10-24	
Zinc, Total	0.090	mg/L		RVF	262386	2013-10-24	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	< 2.0	ug/L		RRS	262384-262385	2013-10-15	
Methylene chloride	< 2.0	ug/L		RRS	262384-262385	2013-10-15	
trans-1,2-Dichloroethene	< 2.0	ug/L		RRS	262384-262385	2013-10-15	
Chloroform	15.7	ug/L		RRS	262384-262385	2013-10-15	
1,2-Dichloroethane	< 2.0	ug/L		RRS	262384-262385	2013-10-15	
Trichloroethene	30.1	ug/L		RRS	262384-262385	2013-10-15	
Toluene	< 2.0	ug/L		RRS	262384-262385	2013-10-15	
Tetrachloroethene	52.1	ug/L	C7	RRS	262384-262385	2013-10-15	
1,1,2,2-Tetrachloroethane	10.3	ug/L		RRS	262384-262385	2013-10-15	

**Sample Results**

Report ID NY310116.0.36772

Sample ID	Location	Client VandeMark Chemical, Inc.				
Method						
Analyte	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date
<b>116-1011-7</b>	Trip Blank - DI Water Sampled 10/11/2013					
<b>Volatiles</b>						
EPA 8260C						
Trip Blank						
Vinyl chloride	< 2.0	ug/L		RRS	262388	2013-10-15
Methylene chloride	< 2.0	ug/L		RRS	262388	2013-10-15
trans-1,2-Dichloroethene	< 2.0	ug/L		RRS	262388	2013-10-15
Chloroform	< 2.0	ug/L		RRS	262388	2013-10-15
1,2-Dichloroethane	< 2.0	ug/L	S3	RRS	262388	2013-10-15
Trichloroethene	< 2.0	ug/L	S3	RRS	262388	2013-10-15
Toluene	< 2.0	ug/L		RRS	262388	2013-10-15
Tetrachloroethene	< 2.0	ug/L		RRS	262388	2013-10-15
1,1,2,2-Tetrachloroethane	< 2.0	ug/L		RRS	262388	2013-10-15

<b>116-1011-8</b>	Field QA/QC Dup of VDM-14 - Ground Water Sampled 10/11/2013					
<b>Inorganics</b>						
EPA 300.0 Rev 2.1						
Field Grab						
Chloride	5500	mg/L	D	DJD	262392	2013-10-17

<b>Metals</b>						
EPA 200.7 Rev 4.4						
Field Grab						
Chromium, Total	< 0.02	mg/L	D	RVF	262391	2013-10-24
Copper, Total	< 0.02	mg/L	D	RVF	262391	2013-10-24
Iron, Total	540	mg/L	D	RVF	262391	2013-10-24
Zinc, Total	0.88	mg/L	D	RVF	262391	2013-10-24

<b>Volatiles</b>						
EPA 8260C						
Field Grab						
Vinyl chloride	22.4	ug/L		RRS	262389-262390	2013-10-15
Methylene chloride	5.9	ug/L		RRS	262389-262390	2013-10-15
trans-1,2-Dichloroethene	17.6	ug/L		RRS	262389-262390	2013-10-15
Chloroform	53.4	ug/L		RRS	262389-262390	2013-10-15
1,2-Dichloroethane	7.8	ug/L		RRS	262389-262390	2013-10-15
Trichloroethene	59.9	ug/L		RRS	262389-262390	2013-10-15
Toluene	< 2.0	ug/L		RRS	262389-262390	2013-10-15
Tetrachloroethene	384	ug/L	C7,D1	RRS	262389-262390	2013-10-15
1,1,2,2-Tetrachloroethane	78.9	ug/L		RRS	262389-262390	2013-10-15

**Data Qualifiers and Definitions:**

- C7** Initial Calibration Verification (ICV) recovery was below acceptable limits. Result is estimated.
- D** Sample initially diluted due to sample matrix.
- D1** Sample diluted due to initial result outside of linear calibrated range of the instrument.
- S1** Surrogate recovery was above acceptable limits. No analytes detected. No Negative impact on data.
- S3** Surrogate recovery was below acceptable limits. Result is estimated.
- S5** Surrogate recovery was above acceptable limits. Result is estimated.

## Sample Results

Report ID NY310116.0.36772

Sample ID

Location

Client VandeMark Chemical, Inc.

Method

Analyte

Sample Results Units

Data Qualifiers Analyst

Vessel ID

Date

### General Disclaimer

- The test results are submitted pursuant to IsleChem LLC's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted.
- This report is issued for the benefit of and may be relied upon by the client named above. The client bears full responsibility for deciding the level of testing for sample submitted to IsleChem LLC.
- These results pertain only to the items tested.
- This report shall not be reproduced except in full.
- If the sample(s) represented by these test results were not collected by IsleChem LLC then the test results are limited to the reported values determine by the analytical testing process. IsleChem LLC makes no representation regarding the sample's collection technique, condition, volume, homogeneity or any other aspect of the sample(s) prior to IsleChem LLC taking possession of the sample(s) and the influence it may have on the results.
- Unless notified in writing to return the samples covered by this report IsleChem LLC will store what remains of the sample(s), if anything, for a period of thirty (30) days, sixty (60) days for asbestos samples, before discarding, unless otherwise required by law. A shipping and handling fee with be charged for the return of any sample(s).
- Certain analytes may not be covered by the NYS DOH or NELAP fields of accreditation. Results for those analytes are generated by the cited method using QA/QC guidelines from IsleChem's Quality Control Manual, where applicable.

The test results in this report meet all NELAP requirements for parameters that are within IsleChem's field of accreditation. Any exceptions to NELAP requirements are noted in the comments field.

All results for solid samples are reported on a dry weight basis unless otherwise noted.

**Visit us on the web at [www.islechem.com](http://www.islechem.com)**



# CHAIN OF CUSTODY / REQUEST FOR LABORATORY ANALYSIS

2801 Long Road, Grand Island, NY 14072 (716)773-8401 (716)773-8517 (Fax)

<b>VandelMark Chemical, Inc.</b> Organization Name One North Transit Road Street Address Lockport, NY 14094 City, State, Zip Chris Banach Contact Person 716-433-6764 / 716-433-2850 Phone# / Fax#	Semi-Annual Groundwater Monitoring Project Name Client PO / Release # NY 310116 036772	4 Samples / 16 Bottles # of Samples / # of Bottles Standard Turnaround Time/Date Results Needed 10/11/13 03:00	
Sample ID: 262364, 262365, 262366, 262367, 262368, 262369, 262370, 262371, 262372, 262373, 262374, 262375		Sample Location: VDM-10, VDM-11, VDM-14, VDM-12	
For electronic report please provide e-mail address: c.banach@vdmchemical.com		Rush Work Performed at Priority Rate (see below) Approved by Client: Yes No Initials Approved by Lab: Yes No Initials	
Matrix: GW Volatiles - Method: 624 (2172) Metals - (2620) Chloride (622)		Bottle Type / Preservative: (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3)	
Date Sampled: 10/11/13 1430 Date: 10/11/13 1430		Received by: [Signature] Relinquished by: [Signature]	
Time: 1430 Time: 1430		Date: 10/11/13 Date: 10/11/13	
Time: 1430 Time: 1430		Date: 10/11/13 Date: 10/11/13	

**Comments:**  
 Final report to be e-mailed to Chris Banach (e-mail above), Brian Law (b.law@vdmchemical.com) and Angela Muir (a.muir@vdmchemical.com).  
 Volatiles - Chloroform, 1,2-Dichloromethane, trans-1,2-Dichloroethene, Methylene Chloride, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Trichloroethene, Toluene, & Vinyl Chloride.  
 Metals - Cr, Cu, Fe, & Zn.

Standard turnaround time is 10 days.  
 RUSH WORK CHARGES: 3-6 times the standard cost for same day depending on the time needed ~ 2.5 times the standard cost for next day ~ 1.75 times the standard cost for 3 day.  
 By relinquishing these samples to IsleChem, LLC, you are accepting the current IsleChem, LLC terms and conditions for the sale of services.



# CHAIN OF CUSTODY / REQUEST FOR LABORATORY ANALYSIS

2801 Long Road, Grand Island, NY 14072 (716)773-8401 (716)773-8517 (Fax)

<b>Vandemark Chemical, Inc.</b> Organization Name One North Transit Road Street Address Lockport, NY 14094 City, State, Zip Chris Banach Contact Person 716-433-6764 / 716-433-2850 Phone# / Fax#		Semi-Annual Groundwater Monitoring Project Name Client PO / Release # Date Sampled For electronic report please provide e-mail address: c.banach@vdmchemical.com Matrix Comp Grab GW X X GW X X GW X X GW X X GW X X GW X X GW X X GW X X Trip Blank		4 Samples / 13 Bottles # of Samples / # of Bottles Standard Turnaround Time/ Date Results Needed NY-31016.0.36772 isChem Project # Rush Work Performed at Priority Rate (see below) Approved by Client Yes No Initials Approved by Lab: Yes No Initials Bottle Type / Preservative (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (1) - 40 ml Vial (HCl)	
Sample ID 262376 262378 262379 262380 262382 262383 262384 262385 262386 262387 262388	Sample Location Eighteen Mile Creek D-55 VDM-9	Volatiles - Method 624 (2172) Metals - (2620) Chloride (622)	Field pH: 8.2 Field Temp: 15.2 °C Field pH: 7.42 Field Temp: 12.2 °C Field pH: 6.22 Field Temp: 13.7 °C	Received by: Date: 10/11/13 Time: 1345 Relinquished by: Date: 10/11/13 Time: 1430	Received by: Date: 10/11/13 Time: 3:00

Final report to be e-mailed to Chris Banach (e-mail above), Brian Law (b.law@vdmchemical.com) and Angela Muir (a.muir@vdmchemical.com).

Volatiles - Chloroform, 1,2-Dichloromethane, trans-1,2-Dichloroethene, Methylene Chloride, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Trichloroethene, Toluene, & Vinyl Chloride.

Metals - Cr, Cu, Fe, & Zn.

Standard turnaround time is 10 days.

RUSH WORK CHARGES: 3-6 times the standard cost for same day depending on the time needed ~ 2.5 times the standard cost for next day ~ 1.75 times the standard cost for 3 day.

By relinquishing these samples to IsleChem, LLC, you are accepting the current IsleChem, LLC terms and conditions for the sale of services.



# CHAIN OF CUSTODY / REQUEST FOR LABORATORY ANALYSIS

<b>VandeMark Chemical, Inc.</b> Organization Name One North Transit Road Street Address Lockport, NY 14094 City, State, Zip Chris Banach Contact Person 716-433-6764 / 716-433-2850 Phone# / Fax# Sample Location Field QA/QC Dup of <u>VDM 14</u>	Semi-Annual Groundwater Monitoring Project Name Client PO / Release # Date Sampled For electronic report please provide e-mail address: c.banach@vdmchemical.com E-mail Matrix GW GW GW	1 Sample / 4 Bottles # of Samples / # of Bottles Standard Turnaround Time/ Date Results Needed NY 310116.0.36.773 isleChem Project # Rush Work Performed at Priority Rate (see below) Approved by Client Yes No Initials Approved by Lab Yes No Initials Bottle Type / Preservative (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None)	Field pH: <u>5.56</u> Field Temp: <u>17°C</u> Chloride (622) Metals - (2620) Volatiles - Method 624 (2172) X X X
Sample # 262389 262391 262392	Date 10/10/13 Date 10/10/13 Date 10/10/13	Time 1345 Time 1430	Received by:  Relinquished by: 

**Comments:** Final report to be e-mailed to Chris Banach (e-mail above), Brian Law (b.law@vdmchemical.com) and Angela Muir (a.muir@vdmchemical.com).  
 Volatiles - Chloroform, 1,2-Dichloromethane, trans-1,2-Dichloroethene, Methylene Chloride, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Trichloroethene, Toluene, & Vinyl Chloride.  
 Metals - Cr, Cu, Fe, & Zn

Standard turnaround time is 10 days.  
 RUSH WORK CHARGES: 3-6 times the standard cost for same day depending on the time needed ~ 2.5 times the standard cost for next day ~ 1.75 times the standard cost for 3 day.  
 By relinquishing these samples to IsleChem, LLC, you are accepting the current IsleChem, LLC terms and conditions for the sale of services.



Client Name: Vandemark

IsleChem, LLC Job Number: NY-310116

Sample(s) received by: [Signature] Date: 10/11/13 Time: 3:00

Is the chain of custody identified clearly with complete documentation including:

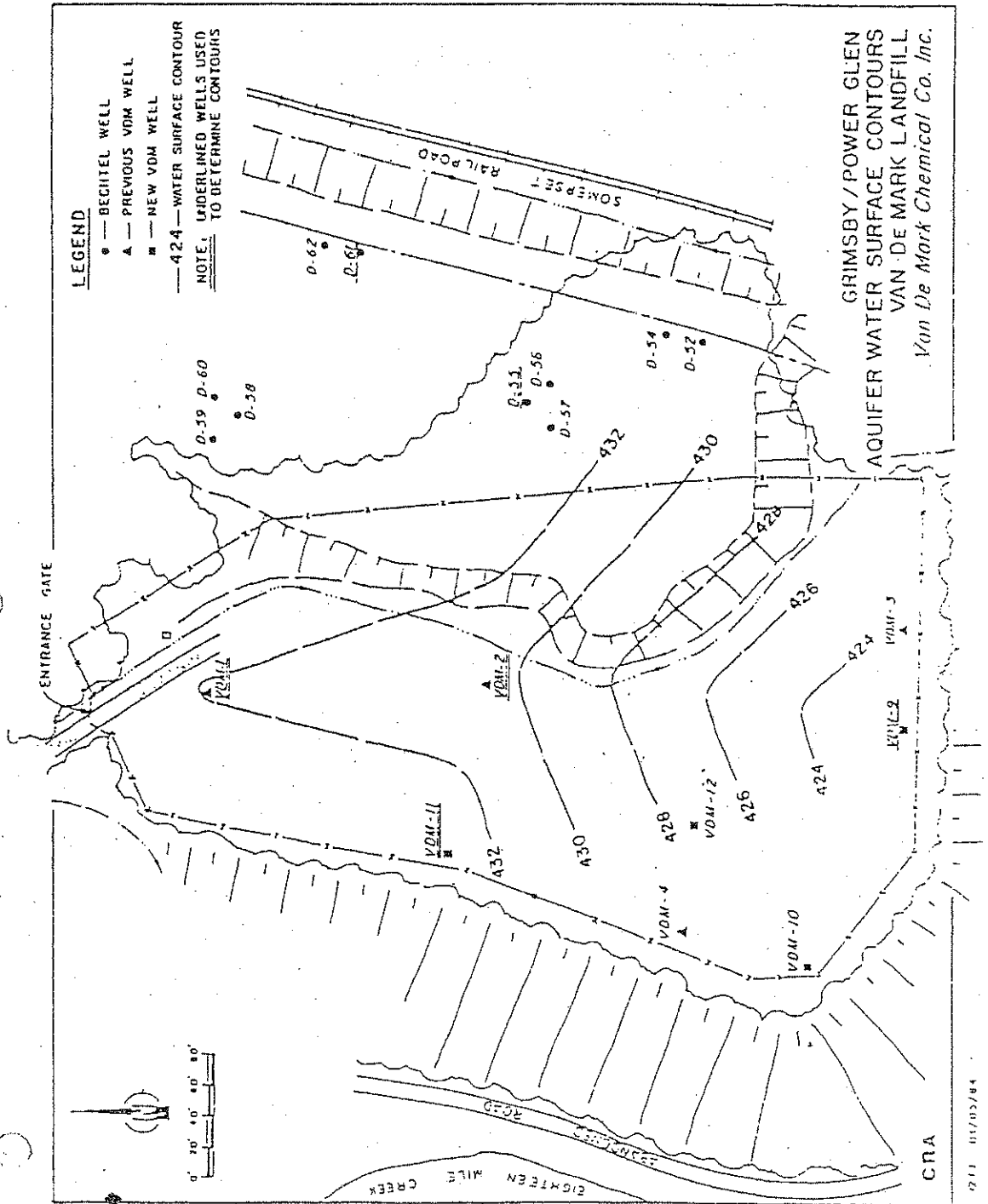
Sample location/Identification	<u>YES</u>	NO	N/A	Corrected
Sample date	<u>YES</u>	NO	N/A	Corrected
Sample time	<u>YES</u>	NO	N/A	Corrected
Client name	<u>YES</u>	NO	N/A	Corrected
Preservation type	<u>YES</u>	NO	N/A	Corrected
Required analysis is listed on each bottle	<u>YES</u>	NO	N/A	Corrected
Are the sample labels clear and do they provide a unique identification of the sample linked to COC?	<u>YES</u>	NO	N/A	Corrected
Are the sample containers appropriate?	<u>YES</u>	NO	N/A	Corrected
Is the sample date within the required hold times?	<u>YES</u>	NO	N/A	Corrected
Is there adequate volume available for requested analysis?	<u>YES</u>	NO	N/A	Corrected
Did the customer list what sample analysis is required?	<u>YES</u>	NO	N/A	Corrected
Is a chain of custody included?	<u>YES</u>	NO	N/A	Corrected
Is the chain of custody complete?	<u>YES</u>	NO	N/A	Corrected
Are the sample(s) free of apparent damage?	<u>YES</u>	NO	N/A	Corrected
Temperature <u>12°C</u> Has cooling begun?	<u>YES</u>	NO	N/A	-
Is temperature 6° C or less if sample(s) were held prior to delivery date?	YES	NO	<u>N/A</u>	-
Are samples appropriately preserved if necessary?	<u>YES</u>	NO	N/A	Corrected
VOA sample vials do not have headspace or visible "pea-sized" air bubbles > (1/4") in diameter.	<u>YES</u>	NO	N/A	Corrected
If necessary, lab management has been notified of any short hold or quick TAT samples.	YES	NO	<u>N/A</u>	-
If necessary, lab has been notified of any attached comments.	YES	NO	<u>N/A</u>	-

Comments/Actions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# WELL LOCATION MAP

## Figure 1



Attachment II-B  
Well Purging / Sampling Data

WELL D-55:

WELL PURGING DATA:

START TIME: 830 FINISH TIME: 840 DATE: 10/11/13  
A: MP ELEVATION 469.45 FEET  
B: DEPTH TO WATER: 36. FEET  
C: DEPTH OF WELL INSTALLED: 422.40  
D: STATIC WATER LEVEL: C - D = 12.3. FEET  
E: WELL VOLUME:  $E * 0.1636 =$  2.01 GALLONS  
F: DEPTH OF WELL AS MEASURED: 48.3 FEET

WELL SAMPLING DATA:

START TIME: 1201 FINISH TIME: 1213  
A: MP ELEVATION 469.45 FEET  
B: DEPTH TO WATER: 37.1 FEET  
C: DEPTH OF WELL INSTALLED: 422.40  
D: STATIC WATER LEVEL: C - D = 11.2 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  1.832 GALLONS  
F: DEPTH OF WELL AS MEASURED: 48.3 FEET  
G: pH OF SAMPLE: 7.42 pH  
H: pH METER CALIBRATED? YES  NO   
I: SAMPLES OBTAINED:  
1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's  
J: WEATHER CONDITIONS: clear/sunny  
K: SAMPLER(S): Denik Janak / Rob Moore  
L: COMMENTS: Temp 12.2°C

Temp 12.2°C

Well Purging / Sampling Data

WELL VDM-9:

WELL PURGING DATA:

START TIME: 850 FINISH TIME: 900

DATE: 10/11/17

- A: MP ELEVATION 447.37 FEET
- B: DEPTH TO WATER: 25.2 FEET
- C: DEPTH OF WELL INSTALLED: 416.40
- D: STATIC WATER LEVEL: C - D = 5.4 FEET
- E: WELL VOLUME:  $E * 0.1636 =$  0.88 GALLONS
- F: DEPTH OF WELL AS MEASURED: 30.6 FEET

WELL SAMPLING DATA:

2.8 - (2.5) DATE: 10/11/13

START TIME: 1228 FINISH TIME: 1237

- A: MP ELEVATION 447.37 FEET
- B: DEPTH TO WATER: 26.1 FEET
- C: DEPTH OF WELL INSTALLED: 416.40
- D: STATIC WATER LEVEL: C - D = 4.5 FEET
- E: WELL VOLUME:  $E * 0.1636 =$  0.7362 GALLONS
- F: DEPTH OF WELL AS MEASURED: 30.6 FEET
- G: pH OF SAMPLE: 6.22 pH
- H: pH METER CALIBRATED? YES  NO
- I: SAMPLES OBTAINED:

I - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: clear/sunny

K: SAMPLER(S): Daniel Jansik / Rob Moore

L: COMMENTS: Temp 13.7 °C

Temp 13.7

Well Purging / Sampling Data

WELL VDM-10

WELL PURGING DATA:

START TIME: 9:05 FINISH TIME: 9:20

DATE: 10/11/13

- A: MP ELEVATION 444.89 FEET
- B: DEPTH TO WATER: 32.6 FEET
- C: DEPTH OF WELL INSTALLED: 398.70
- D: STATIC WATER LEVEL: C - D = 13.8 FEET
- E: WELL VOLUME: E \* 0.1636 = 2.26 GALLONS
- F: DEPTH OF WELL AS MEASURED: 46.4 FEET

WELL SAMPLING DATA:

6.78 - (4.0)

DATE: 10/11/13

START TIME: 1310 FINISH TIME: 1320

- A: MP ELEVATION 444.89 FEET
- B: DEPTH TO WATER: 43.3 FEET
- C: DEPTH OF WELL INSTALLED: 398.70
- D: STATIC WATER LEVEL: C - D = 3.1 FEET
- E: WELL VOLUME: E \* 0.1636 = 0.50716 GALLONS
- F: DEPTH OF WELL AS MEASURED: 46.4 FEET
- G: pH OF SAMPLE: 5.98 pH
- H: pH METER CALIBRATED? YES  NO
- I: SAMPLES OBTAINED:

1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: clear/sunny

K: SAMPLER(S): Daniel Jarvis/Rob Moore

L: COMMENTS: Temp 12.8°C  
T = 12.8°C

Well Purging / Sampling Data

WELL VDM-11

WELL PURGING DATA:

START TIME: 9:40 FINISH TIME: 9:50

DATE: 10/11/12

A: MP ELEVATION 450.74 FEET  
B: DEPTH TO WATER: 23.4 FEET  
C: DEPTH OF WELL INSTALLED: 427.70  
D: STATIC WATER LEVEL: C - D = 3.6 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  0.58 GALLONS  
F: DEPTH OF WELL AS MEASURED: 27 FEET

WELL SAMPLING DATA:

1.77 - (0.5) DATE: 10/10/13

START TIME: 1324 FINISH TIME: 1333

A: MP ELEVATION 450.74 FEET  
B: DEPTH TO WATER: 20.9 FEET  
C: DEPTH OF WELL INSTALLED: 427.70  
D: STATIC WATER LEVEL: C - D = 6.1 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  0.99796 GALLONS  
F: DEPTH OF WELL AS MEASURED: 27 FEET  
G: pH OF SAMPLE: 6.26 pH  
H: pH METER CALIBRATED? YES  NO   
I: SAMPLES OBTAINED:

1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: clear / sunny

K: SAMPLER(S): Daniel Janish / Rob Mow

L: COMMENTS: Temp 14.9

Well Purging / Sampling Data

WELL VDM-12

*04*

WELL PURGING DATA:

DATE: \_\_\_\_\_

START TIME: \_\_\_\_\_ FINISH TIME: \_\_\_\_\_

- A: MP ELEVATION 451.52 FEET
- B: DEPTH TO WATER: \_\_\_\_\_ FEET
- C: DEPTH OF WELL INSTALLED: 436.10
- D: STATIC WATER LEVEL: C - D = \_\_\_\_\_ FEET
- E: WELL VOLUME:  $E * 0.1636 =$  \_\_\_\_\_ GALLONS
- F: DEPTH OF WELL AS MEASURED: \_\_\_\_\_ FEET

WELL SAMPLING DATA:

DATE: \_\_\_\_\_

START TIME: \_\_\_\_\_ FINISH TIME: \_\_\_\_\_

- A: MP ELEVATION 451.52 FEET
- B: DEPTH TO WATER: \_\_\_\_\_ FEET
- C: DEPTH OF WELL INSTALLED: 436.10
- D: STATIC WATER LEVEL: C - D = \_\_\_\_\_ FEET
- E: WELL VOLUME:  $E * 0.1636 =$  \_\_\_\_\_ GALLONS
- F: DEPTH OF WELL AS MEASURED: \_\_\_\_\_ FEET
- G: pH OF SAMPLE: \_\_\_\_\_ pH
- H: pH METER CALIBRATED? YES  N
- I: SAMPLES OBTAINED:

1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: \_\_\_\_\_

K: SAMPLER(S): \_\_\_\_\_

L: COMMENTS: \_\_\_\_\_

Well Purging / Sampling Data

WELL VDM-14

WELL PURGING DATA:

DATE: 10/11/13

START TIME: 952 FINISH TIME: 1003

- A: MP ELEVATION 446.31 FEET
- B: DEPTH TO WATER: 9.2 FEET
- C: DEPTH OF WELL INSTALLED: 434.00
- D: STATIC WATER LEVEL: C - D = 1.8 FEET
- E: WELL VOLUME:  $E * 0.1636 =$  .29 GALLONS
- F: DEPTH OF WELL AS MEASURED: 11 FEET

WELL SAMPLING DATA:

DATE: 10/11/13

START TIME: 1243 FINISH TIME: 1306

- A: MP ELEVATION 446.31 FEET
- B: DEPTH TO WATER: 6.2 FEET
- C: DEPTH OF WELL INSTALLED: 434.00
- D: STATIC WATER LEVEL: C - D = 4.8 FEET
- E: WELL VOLUME:  $E * 0.1636 =$  0.78528 GALLONS
- F: DEPTH OF WELL AS MEASURED: 11 FEET
- G: pH OF SAMPLE: 5.50 pH
- H: pH METER CALIBRATED? YES  NO
- I: SAMPLES OBTAINED:

1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: clear / sunny

K: SAMPLER(S): Daniel Janish / Rob Moore

L: COMMENTS: Did duplicate sample

Temp 16.7 °C

1300  
1306

Attachment II-C

9  
5.50 pH  
17

Groundwater Monitoring System Inspection Plan and Form

- A. Inspections of the groundwater monitoring system shall be performed on a semi-annual basis to conform with the post-closure monitoring schedule. Personnel trained in groundwater sampling, collection and sample preservation techniques will be used. The inspection form located below or an equivalent form shall be used. The original inspection forms shall be maintained by the permittee in an inspection log book or file for the full term of the post-closure care period. Copies of the inspections shall be submitted with the semi-annual monitoring reports.
  
- B. The well inspection will include visual inspection of the security cap and lock, condition of the surface grout, and the condition of the inner casing and cap. During well purging, the relative rate of recharge should be noted for comparison with the previous data to insure that the well screen is not plugged. Also during purging and sampling, the integrity of the well shall be inspected by measuring the total well depth and noting the presence of any obstructions such as casing bends, foreign objects or siltation. The measured well depth shall be compared to the "as built" well depth.
  
- C. If it becomes apparent that a well is not capable of providing representative samples, the permittee shall respond in accordance with **Condition E.1** of this permit Module.

Landfill/Groundwater Monitoring System Inspection Form

- 1. Is the integrity of the cover and ditch lining satisfactory?  YES  NO
  - 1.1 Any sink holes or depressions *Small n by 12*  YES  NO
  - 1.2 Significant erosion of the banks.  YES  NO
  - 1.3 Any visible problems.  YES  NO
  
- 2. Is the integrity of the vegetative cover satisfactory?  YES  NO
  - 2.1 Is the grass healthy looking?  YES  NO
  - 2.2 Are there any bare spots?  YES  NO
  - 2.3 Is the grass less than 8" tall?  YES  NO
  - 2.4 Are there trees or bushes growing in the cover? *Side by #9*  YES  NO
  
- 3. Is drainage from the site satisfactory?  YES  NO
  - 3.1 Is there any ponding or puddling?  YES  NO
  
- 4. Is the fence surrounding the site secure?  YES  NO



- 4.1 Any holes or damage? YES  NO
- 4.2 Signs in place every 50'? YES  NO
- 4.3 Accessible entry to the site? *port to well should be widening.* YES  NO
- 4.4 Property "Posted Signs" visible and in tact? YES  NO
- 5. Are all of the covers on the monitoring wells locked? YES  NO
- 5.1 Caps on all of the risers? *# 55 missing* YES  NO
- 6. Is there any iron staining in the drainage ditch? YES  NO
- 7. Are there any visible seeps in the cliff face? YES  NO
- 8. Are the wells in good condition? *# 9 bailer get stuck* YES  NO
- 8.1 Any damage to the outer casing? YES  NO
- 8.2 Obstructions in the riser? YES  NO
- 8.3 Excessive sediment buildup in any wells? YES  NO

Name of inspector: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

*10/11/12*

**Attachment II-D**

**Laboratory QA/QC Deliverables**

COMPONENTS REQUIRED FOR RCRA ANALYTICAL DATA SUBMITTED TO  
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



2801 Long Road  
Grand Island, NY 14072  
(716) 773-8401  
(800) 699-8606  
(716) 773-8517 (fax)  
www.islechem.com

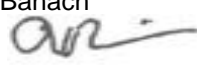
## Analysis Report

Client VandeMark Chemical, Inc. Project Water Samples For Analysis  
One North Transit Road Semi-Annual OCPSF POTW  
Lockport, NY 14094-2399

Report Date 6/3/2013 Contact Chris Banach  
Status Final  
ID **NY305172.0.34772**

Batch Date 5/17/2013  
Time 13:15  
Description --  
Received 5/17/2013  
15:45

Batch Contact Chris Banach

Authorized Signature 

---

Richard V. Finn, Manager of Chemical Testing

*The following result table is for 8 samples received by IsleChem LLC on 5/17/2013 sampled by Client on 5/17/2013 and submitted by Client*

*Also enclosed are the Chain of Custody and Sample Receipt check list for this project.*

**Narrative:**

*Analyses were performed within the required holding times unless otherwise noted below. All quality control results were within acceptable limits unless specifically noted in the report. Quality control analyses were performed on the samples in this report or samples of similar matrix that were analyzed in the analytical batch on the dates indicated in the report.*

**Notes:**

**Sample Results**

Report ID NY305172.0.34772

Sample ID	Location	Client VandeMark Chemical, Inc.					
Method							
Analyte	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date	
<b>172-0517-1</b>							
VDM-10 - Ground Water Sampled 5/17/2013							
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	< 0.05	mg/L	D	RVF	251171	2013-05-23	
Copper, Total	1.25	mg/L	D	RVF	251171	2013-05-23	
Iron, Total	37.5	mg/L	D	RVF	251171	2013-05-23	
Zinc, Total	2.65	mg/L	D	RVF	251171	2013-05-23	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	< 2	ug/L		RS	251169-251170	2013-05-31	
Methylene chloride	< 2	ug/L		RS	251169-251170	2013-05-31	
trans-1,2-Dichloroethene	< 2	ug/L		RS	251169-251170	2013-05-31	
Chloroform	3.5	ug/L		RS	251169-251170	2013-05-31	
1,2-Dichloroethane	< 2	ug/L		RS	251169-251170	2013-05-31	
Trichloroethene	< 2	ug/L		RS	251169-251170	2013-05-31	
Toluene	2.1	ug/L		RS	251169-251170	2013-05-31	
Tetrachloroethene	< 2	ug/L		RS	251169-251170	2013-05-31	
1,1,2,2-Tetrachloroethane	< 2	ug/L		RS	251169-251170	2013-05-31	
<b>WetChem</b>							
SM 18-21 4500-CI- B (97)							
Field Grab							
Chloride	6900	mg/L	D2	ME	251172	2013-05-31	

<b>172-0517-2</b>							
VDM-11 - Ground Water Sampled 5/17/2013							
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	< 0.2	mg/L	D	RVF	251175	2013-05-24	
Copper, Total	0.52	mg/L	D	RVF	251175	2013-05-24	
Iron, Total	10.2	mg/L	D	RVF	251175	2013-05-24	
Zinc, Total	0.050	mg/L	D	RVF	251175	2013-05-24	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	< 2	ug/L		RS	251173-251174	2013-05-31	
Methylene chloride	< 2	ug/L		RS	251173-251174	2013-05-31	
trans-1,2-Dichloroethene	< 2	ug/L		RS	251173-251174	2013-05-31	
Chloroform	< 2	ug/L		RS	251173-251174	2013-05-31	
1,2-Dichloroethane	< 2	ug/L		RS	251173-251174	2013-05-31	
Trichloroethene	< 2	ug/L		RS	251173-251174	2013-05-31	
Toluene	< 2	ug/L		RS	251173-251174	2013-05-31	
Tetrachloroethene	< 3.8	ug/L		RS	251173-251174	2013-05-31	
1,1,2,2-Tetrachloroethane	< 2	ug/L		RS	251173-251174	2013-05-31	

**Sample Results**

Report ID NY305172.0.34772

Sample ID	Location	Client VandeMark Chemical, Inc.					
Method							
Analyte	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date	
<b>172-0517-2</b>							
VDM-11 - Ground Water Sampled 5/17/2013							
<b>WetChem</b>							
SM 18-21 4500-CI- B (97)							
Field Grab							
Chloride	1040	mg/L	D2	ME	251176	2013-05-31	
<b>172-0517-3</b>							
VDM-14 - Ground Water Sampled 5/17/2013							
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	< 0.4	mg/L	D	RVF	251179	1900-01-01	
Copper, Total	< 0.4	mg/L	D	RVF	251179	1900-01-01	
Iron, Total	370	mg/L	D1	RVF	251179	1900-01-01	
Zinc, Total	0.88	mg/L	D	RVF	251179	1900-01-01	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	25.9	ug/L		RS	251177-251178	2013-05-31	
Methylene chloride	4.6	ug/L		RS	251177-251178	2013-05-31	
trans-1,2-Dichloroethene	17.2	ug/L		RS	251177-251178	2013-05-31	
Chloroform	50.3	ug/L		RS	251177-251178	2013-05-31	
1,2-Dichloroethane	8.1	ug/L		RS	251177-251178	2013-05-31	
Trichloroethene	53.7	ug/L		RS	251177-251178	2013-05-31	
Toluene	< 2	ug/L		RS	251177-251178	2013-05-31	
Tetrachloroethene	162	ug/L	D1	RS	251177-251178	2013-05-31	
1,1,2,2-Tetrachloroethane	101	ug/L	D1	RS	251177-251178	2013-05-31	
<b>WetChem</b>							
SM 18-21 4500-CI- B (97)							
Field Grab							
Chloride	4400	mg/L	D2	ME	251880	2013-05-31	
<b>172-0517-4</b>							
Eighteen Mile Creek - Ground Water Sampled 5/17/2013							
<b>Metals</b>							
EPA 200.7 Rev 4.4							
Field Grab							
Chromium, Total	< 0.01	mg/L		RVF	251183	2013-05-23	
Copper, Total	0.011	mg/L		RVF	251183	2013-05-23	
Iron, Total	0.765	mg/L		RVF	251183	2013-05-23	
Zinc, Total	0.016	mg/L		RVF	251183	2013-05-23	
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	< 2	ug/L		RS	251181-251182	2013-05-31	
Methylene chloride	< 2	ug/L		RS	251181-251182	2013-05-31	
trans-1,2-Dichloroethene	< 2	ug/L		RS	251181-251182	2013-05-31	

**Sample Results**

Report ID NY305172.0.34772

Sample ID	Location	Client VandeMark Chemical, Inc.				
Method						
Analyte	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date
<b>172-0517-4</b>	Eighteen Mile Creek - Ground Water Sampled 5/17/2013					
<b>Volatiles</b>						
EPA 8260C						
Field Grab						
Chloroform	< 2	ug/L		RS	251181-251182	2013-05-31
1,2-Dichloroethane	< 2	ug/L		RS	251181-251182	2013-05-31
Trichloroethene	< 2	ug/L		RS	251181-251182	2013-05-31
Toluene	< 2	ug/L		RS	251181-251182	2013-05-31
Tetrachloroethene	< 2	ug/L		RS	251181-251182	2013-05-31
1,1,2,2-Tetrachloroethane	< 2	ug/L		RS	251181-251182	2013-05-31
<b>WetChem</b>						
SM 18-21 4500-CI- B (97)						
Field Grab						
Chloride	67	mg/L	D2	ME	251184	2013-05-31
<b>172-0517-5</b>	D-55 - Ground Water Sampled 5/17/2013					
<b>Metals</b>						
EPA 200.7 Rev 4.4						
Field Grab						
Chromium, Total	< 0.01	mg/L		RVF	251187	2013-05-23
Copper, Total	0.019	mg/L		RVF	251187	2013-05-23
Iron, Total	0.628	mg/L		RVF	251187	2013-05-23
Zinc, Total	0.036	mg/L		RVF	251187	2013-05-23
<b>Volatiles</b>						
EPA 8260C						
Field Grab						
Vinyl chloride	< 2	ug/L		RS	251185-251186	2013-05-31
Methylene chloride	< 2	ug/L		RS	251185-251186	2013-05-31
trans-1,2-Dichloroethene	< 2	ug/L		RS	251185-251186	2013-05-31
Chloroform	< 2	ug/L		RS	251185-251186	2013-05-31
1,2-Dichloroethane	< 2	ug/L		RS	251185-251186	2013-05-31
Trichloroethene	< 2	ug/L		RS	251185-251186	2013-05-31
Toluene	< 2	ug/L		RS	251185-251186	2013-05-31
Tetrachloroethene	< 2	ug/L		RS	251185-251186	2013-05-31
1,1,2,2-Tetrachloroethane	< 2	ug/L		RS	251185-251186	2013-05-31
<b>WetChem</b>						
SM 18-21 4500-CI- B (97)						
Field Grab						
Chloride	25	mg/L		ME	251188	2013-05-31
<b>172-0517-6</b>	VDM-9 - Ground Water Sampled 5/17/2013					
<b>Metals</b>						
EPA 200.7 Rev 4.4						
Field Grab						
Chromium, Total	0.010	mg/L		RVF	251191	2013-05-23

# Sample Results

Report ID NY305172.0.34772

Sample ID	Location	Client VandeMark Chemical, Inc.				
Method	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date
Analyte						

**172-0517-6** VDM-9 - Ground Water Sampled 5/17/2013

## Metals

EPA 200.7 Rev 4.4

Field Grab

Copper, Total	0.047	mg/L		RVF	251191	2013-05-23
Iron, Total	6.49	mg/L		RVF	251191	2013-05-23
Zinc, Total	0.116	mg/L		RVF	251191	2013-05-23

## Volatiles

EPA 8260C

Field Grab

Vinyl chloride	< 2	ug/L		RS	251189-251190	2013-05-31
Methylene chloride	< 2	ug/L		RS	251189-251190	2013-05-31
trans-1,2-Dichloroethene	< 2	ug/L		RS	251189-251190	2013-05-31
Chloroform	10.8	ug/L		RS	251189-251190	2013-05-31
1,2-Dichloroethane	< 2	ug/L		RS	251189-251190	2013-05-31
Trichloroethene	23.2	ug/L		RS	251189-251190	2013-05-31
Toluene	4.3	ug/L		RS	251189-251190	2013-05-31
Tetrachloroethene	26.8	ug/L		RS	251189-251190	2013-05-31
1,1,2,2-Tetrachloroethane	12.7	ug/L		RS	251189-251190	2013-05-31

## WetChem

SM 18-21 4500-Cl- B (97)

Field Grab

Chloride	900	mg/L	D2	ME	251192	2013-05-31
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**172-0517-7** Trip Blank - DI Water Sampled 5/17/2013

## Volatiles

EPA 8260C

Trip Blank

Vinyl chloride	< 2	ug/L		RS	251193	2013-05-30
Methylene chloride	< 2	ug/L		RS	251193	2013-05-30
trans-1,2-Dichloroethene	< 2	ug/L		RS	251193	2013-05-30
Chloroform	< 2	ug/L		RS	251193	2013-05-30
1,2-Dichloroethane	< 2	ug/L		RS	251193	2013-05-30
Trichloroethene	< 2	ug/L		RS	251193	2013-05-30
Toluene	< 2	ug/L		RS	251193	2013-05-30
Tetrachloroethene	< 2	ug/L		RS	251193	2013-05-30
1,1,2,2-Tetrachloroethane	< 2	ug/L		RS	251193	2013-05-30

**172-0517-8** Fild QA/QC Dup of - Ground Water Sampled 5/17/2013

## Metals

EPA 200.7 Rev 4.4

Field Grab

Chromium, Total	< 0.4	mg/L	D	RVF	251196	2013-05-24
Copper, Total	< 0.4	mg/L	D	RVF	251196	2013-05-24
Iron, Total	400	mg/L	D1	RVF	251196	2013-05-24
Zinc, Total	1.00	mg/L	D	RVF	251196	2013-05-24

**Sample Results**

Report ID NY305172.0.34772

Sample ID	Location	Client VandeMark Chemical, Inc.					
Method							
Analyte	Sample Results	Units	Data Qualifiers	Analyst	Vessel ID	Date	
<b>172-0517-8</b>	Fild QA/QC Dup of - Ground Water Sampled 5/17/2013						
<b>Volatiles</b>							
EPA 8260C							
Field Grab							
Vinyl chloride	18.2	ug/L	D	RS	251194-251195	2013-05-31	
Methylene chloride	< 2	ug/L	D	RS	251194-251195	2013-05-31	
trans-1,2-Dichloroethene	10.3	ug/L	D	RS	251194-251195	2013-05-31	
Chloroform	41.7	ug/L	D	RS	251194-251195	2013-05-31	
1,2-Dichloroethane	6.3	ug/L	D	RS	251194-251195	2013-05-31	
Trichloroethene	38.6	ug/L	D	RS	251194-251195	2013-05-31	
Toluene	16.5	ug/L	D	RS	251194-251195	2013-05-31	
Tetrachloroethene	147	ug/L	D	RS	251194-251195	2013-05-31	
1,1,2,2-Tetrachloroethane	96.3	ug/L	D	RS	251194-251195	2013-05-31	
<b>WetChem</b>							
SM 18-21 4500-CI- B (97)							
Field Grab							
Chloride	4200	mg/L	D2	ME	251197	2013-05-31	

**Data Qualifiers and Definitions:**

- D Sample initially diluted due to sample matrix.
- D1 Sample diluted due to initial result outside of linear calibrated range of the instrument.
- D2 Sample initially diluted based on historical data.

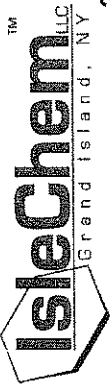
## General Disclaimer

- The test results are submitted pursuant to IsleChem LLC's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted.
- This report is issued for the benefit of and may be relied upon by the client named above. The client bears full responsibility for deciding the level of testing for sample submitted to IsleChem LLC.
- These results pertain only to the items tested.
- This report shall not be reproduced except in full.
- If the sample(s) represented by these test results were not collected by IsleChem LLC then the test results are limited to the reported values determine by the analytical testing process. IsleChem LLC makes no representation regarding the sample's collection technique, condition, volume, homogeneity or any other aspect of the sample(s) prior to IsleChem LLC taking possession of the sample(s) and the influence it may have on the results.
- Unless notified in writing to return the samples covered by this report IsleChem LLC will store what remains of the sample(s), if anything, for a period of thirty (30) days, sixty (60) days for asbestos samples, before discarding, unless otherwise required by law. A shipping and handling fee with be charged for the return of any sample(s).
- Certain analytes may not be covered by the NYS DOH or NELAP fields of accreditation. Results for those analytes are generated by the cited method using QA/QC guidelines from IsleChem's Quality Control Manual, where applicable.

The test results in this report meet all NELAP requirements for parameters that are within IsleChem's field of accreditation. Any exceptions to NELAP requirements are noted in the comments field.

All results for solid samples are reported on a dry weight basis unless otherwise noted.

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CHAIN OF CUSTODY / REQUEST FOR LABORATORY ANALYSIS

VandeMark Chemical, Inc. Organization Name		Semi-Annual OCPSF POTW Project Name		4 Samples / 16 Bottles # of Samples / # of Bottles	
One North Transit Road Street Address		Client PO / Release # 5/17/17		Standard Turnaround Time/ Date Results Needed NY-305173.0.34773	
Lockport, NY 14094 City, State, Zip		Date Sampled 5/17/17		IsleChem Project #	
Chris Banach Contact Person		For electronic report please provide e-mail address: c.banach@vdmchemical.com		Rush Work Performed at Priority Rate (see below)	
716-433-6764 / 716-433-2850 Phone# / Fax#		E-mail		Approved by Client Yes No Initials Approved by Lab Yes No Initials	
Sample ID		Sample Location		Bottle Type / Preservative	
251169	251170	VDM-10	GW	X	(2) - 40 ml Vials (HCl)
251171			GW	X	250 ml Poly (HNO3)
251172			GW	X	250 ml Poly (None)
251173	251174	VDM-11	GW	X	(2) - 40 ml Vials (HCl)
251175			GW	X	250 ml Poly (HNO3)
251176			GW	X	250 ml Poly (None)
251177	251178	VDM-14	GW	X	(2) - 40 ml Vials (HCl)
251179			GW	X	250 ml Poly (HNO3)
251180			GW	X	250 ml Poly (None)
NO Sample		VDM-12	GW	X	(2) - 40 ml Vials (HCl)
			GW	X	250 ml Poly (HNO3)
			GW	X	250 ml Poly (None)

Comments: Final report to be e-mailed to Chris Banach (e-mail above), Brian Law (b.law@vdmchemical.com) and Angela Muir (a.muir@vdmchemical.com).

Volatiles - Chloroform, 1,2-Dichloromethane, trans-1,2-Dichloroethene, Methylene Chloride, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Trichloroethene, Toluene, & Vinyl Chloride.

Metals - Cr, Cu, Fe, & Zn.

Received By:	Date	Time	Received by:	Date	Time
	5/17/17	1300		5/17/17	3:45
Relinquished by:	Date	Time	Relinquished by:	Date	Time
	5/17/17	1500			

Standard turnaround time is 10 days.  
RUSH WORK CHARGES: 3-6 times the standard cost for same day depending on the time needed ~ 2.5 times the standard cost for next day ~ 4.75 times the standard cost for 3 day.  
By relinquishing these samples to IsleChem, LLC, you are accepting the current IsleChem, LLC terms and conditions for the sale of services.





# CHAIN OF CUSTODY / REQUEST FOR LABORATORY ANALYSIS

2801 Long Road, Grand Island, NY 14072 (716)773-8401 (716)773-8517 (Fax)

Vandemark Chemical, Inc. Organization Name One North Transit Road Street Address Lookport, NY 14094 City, State, Zip Chris Banach Contact Person 716-433-6764 / 716-433-2850 Phone# / Fax#		Semi-Annual OCPSF POTW Project Name Client PO / Release # Date Sampled For electronic report please provide e-mail address: c.banach@vdmchemical.com E-mail Matrix Comp Grab		4 Samples / 13 Bottles # of Samples / # of Bottles Standard Turnaround Time/Date Results Needed NY 305172 .0. 34772 IsleChem Project # Rush Work Performed at Priority Rate (see below) Approved by Client Yes No Initials Approved by Lab Yes No Initials Bottle Type / Preservative (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None) (2) - 40 ml Vial (HCl)	
Sample ID	Sample Location	Volatiles - Method 624 (see comments below)	Metals - see comments below	Chloride	Field pH:
251181	Eighteen Mile Creek	X	X		Field Temp:
251183		X	X		
251184		X	X		
251185	D-55	X	X		
251187		X	X		
251188		X	X		
251189	VDM-9	X	X		
251191		X	X		
251192		X	X		
251193	Trip Blank	X	X		
Comments: Final report to be e-mailed to Chris Banach (e-mail above), Brian Law (b.law@vdmchemical.com) and Angela Muir (a.muir@vdmchemical.com). Volatiles - Chloroform, 1,2-Dichloromethane, trans-1,2-Dichloroethene, Methylene Chloride, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Trichloroethene, Toluene, & Vinyl Chloride. Metals - Cr, Cu, Fe, & Zn.					
Sampled by: Relinquished by:		Received by: Relinquished by:		Date: 5/17/10 Date: 5/17/10 Time: 17:00 Time: 15:30	
		Received by: Relinquished by:		Date: 5/17/10 Date: 5/17/10 Time: 3:45 Time: 3:45	

Standard turnaround time is 10 days.  
 RUSH WORK CHARGES: 3-6 times the standard cost for same day depending on the time needed ~ 2.5 times the standard cost for next day ~ 1.75 times the standard cost for 3 day.  
 By relinquishing these samples to IsleChem, LLC, you are accepting the current IsleChem, LLC terms and conditions for the sale of services.



# CHAIN OF CUSTODY / REQUEST FOR LABORATORY ANALYSIS

2801 Long Road, Grand Island, NY 14072 (716)773-8401 (716)773-8517 (Fax)

VandeMark Chemical, Inc. Organization Name  One North Transit Road Street Address  Lockport, NY 14094 City, State, Zip  Chris Banach Contact Person  716-433-6764 / 716-433-2850 Phone# / Fax#	Semi-Annual OCPSF POTW Project Name  Client PO / Release # <i>5/17/14</i> Date Sampled  For electronic report please provide e-mail address: c.banach@vdmchemical.com E-mail Matrix     Comp     Grab GW             X             X GW             X             X GW             X             X	1 Sample / 4 Bottles # of Samples / # of Bottles  Standard  Turnaround Time/ Date Results Needed <b>NY 305172, 0.34772</b>	Rush Work Performed at Priority Rate (see below) Approved by Client    Yes    No    Initials Approved by Lab        Yes    No    Initials  Bottle Type / Preservative (2) - 40 ml Vials (HCl) 250 ml Poly (HNO3) 250 ml Poly (None)
Sample# 251194 251196 251197	Volatiles - Method 624 (see comments below) X X X	Metals - see comments below Chloride	Field pH: Field Temp:

Final report to be e-mailed to Chris Banach (e-mail above), Brian Law (b.law@vdmchemical.com) and Angela Muir (a.muir@vdmchemical.com).

**Volatiles - Chloroform, 1,2-Dichloromethane, trans-1,2-Dichloroethene, Methylene Chloride, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Trichloroethene, Toluene, & Vinyl Chloride.**

Metals - Cr, Cu, Fe, & Zn.

Sampled By:		Received by:	
Date	Time	Date	Time
5/17/14	12:16		
5/17/14	17:35		

Standard turnaround time is 10 days.  
 RUSH WORK CHARGES: 3-6 times the standard cost for same day depending on the time needed ~ 2.5 times the standard cost for next day ~ 1.75 times the standard cost for 3 day.  
 By relinquishing these samples to IsleChem, LLC, you are accepting the current IsleChem, LLC terms and conditions for the sale of services.



Client Name: Vande Mark

IsleChem, LLC Job Number: NH-305172

Sample(s) received by: [Signature] Date: 5/17/13 Time: 3:45

Is the chain of custody identified clearly with complete documentation including:

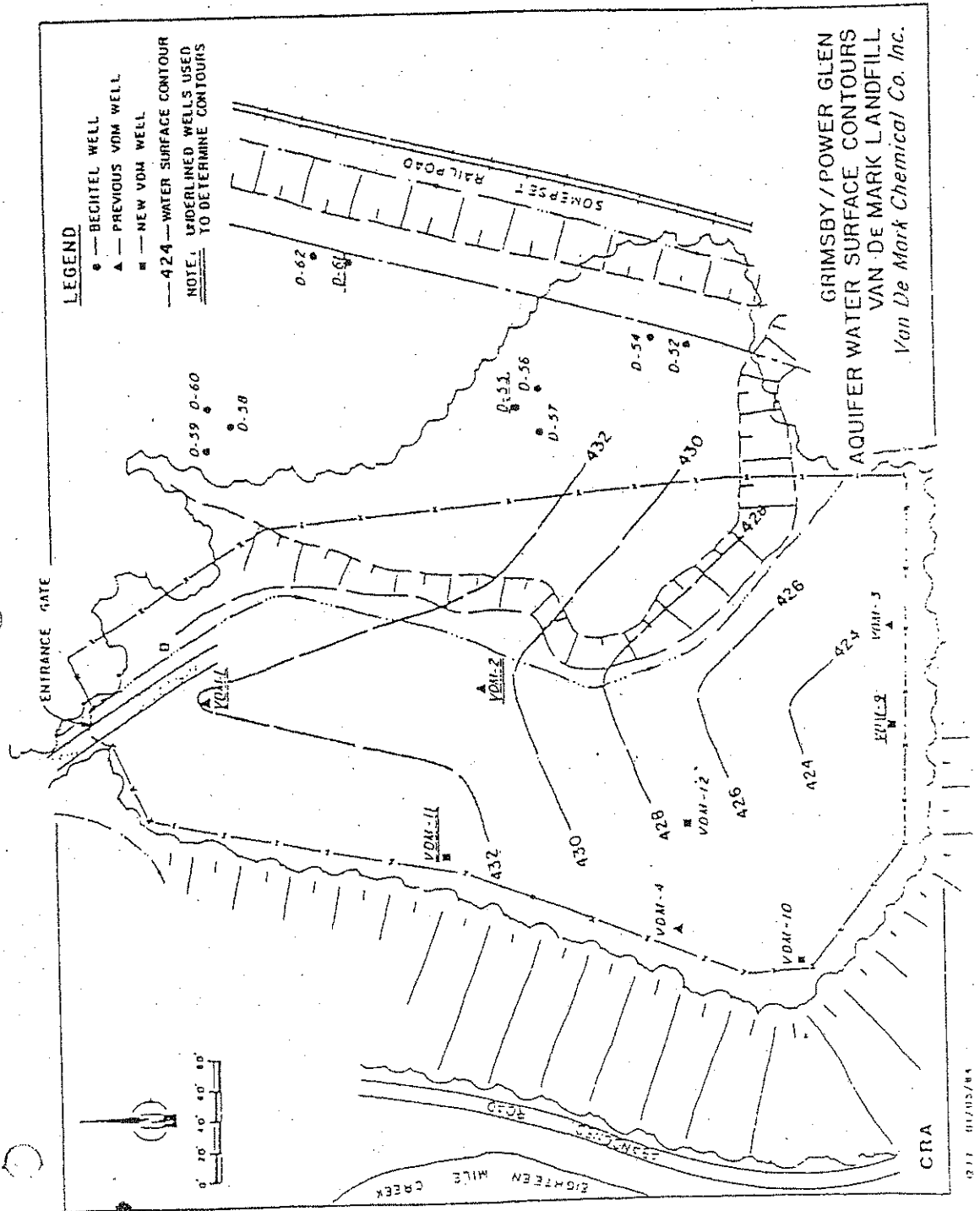
Sample location/Identification	<u>YES</u>	NO	N/A	Corrected
Sample date	<u>YES</u>	NO	N/A	Corrected
Sample time	<u>YES</u>	NO	N/A	Corrected
Client name	<u>YES</u>	NO	N/A	Corrected
Preservation type	<u>YES</u>	NO	N/A	Corrected
Required analysis is listed on each bottle	<u>YES</u>	NO	N/A	Corrected
Are the sample labels clear and do they provide a unique identification of the sample linked to COC?	<u>YES</u>	NO	N/A	Corrected
Are the sample containers appropriate?	<u>YES</u>	NO	N/A	Corrected
Is the sample date within the required hold times?	<u>YES</u>	NO	N/A	Corrected
Is there adequate volume available for requested analysis?	<u>YES</u>	NO	N/A	Corrected
Did the customer list what sample analysis is required?	<u>YES</u>	NO	N/A	Corrected
Is a chain of custody included?	<u>YES</u>	NO	N/A	Corrected
Is the chain of custody complete?	<u>YES</u>	NO	N/A	Corrected
Are the sample(s) free of apparent damage?	<u>YES</u>	NO	N/A	Corrected
Temperature <u>6°C</u> Has cooling begun?	<u>YES</u>	NO	N/A	-
Is temperature 6° C or less if sample(s) were held prior to delivery date?	YES	NO	<u>N/A</u>	-
Are samples appropriately preserved if necessary?	<u>YES</u>	NO	N/A	Corrected
VOA sample vials do not have headspace or visible "pea-sized" air bubbles > (1/4") in diameter.	<u>YES</u>	NO	N/A	Corrected
If necessary, lab management has been notified of any short hold or quick TAT samples.	YES	NO	<u>N/A</u>	Corrected

Comments/Actions: \_\_\_\_\_

\_\_\_\_\_

# WELL LOCATION MAP

## Figure 1



Attachment II-B  
Well Purging / Sampling Data

WELL D-55:

WELL PURGING DATA:

START TIME: 8:40 FINISH TIME: 8:55 DATE: 5/17

- A: MP ELEVATION 469.45 FEET
- B: DEPTH TO WATER: 36.3 FEET
- C: DEPTH OF WELL INSTALLED: 422.40
- D: STATIC WATER LEVEL: C - D = 10.7 FEET
- E: WELL VOLUME:  $E * 0.1636 =$  1.75 GALLONS
- F: DEPTH OF WELL AS MEASURED: 47 FEET

5.25 = 4.0 pulled

WELL SAMPLING DATA:

DATE: \_\_\_\_\_

START TIME: 12:00 FINISH TIME: 12:05

- A: MP ELEVATION 469.45 FEET
- B: DEPTH TO WATER: 38.2 FEET
- C: DEPTH OF WELL INSTALLED: 422.40
- D: STATIC WATER LEVEL: C - D = 5.8 FEET
- E: WELL VOLUME:  $E * 0.1636 =$  1.45 GALLONS
- F: DEPTH OF WELL AS MEASURED: 47 FEET
- G: pH OF SAMPLE: 7.09 pH @ 8°C
- H: pH METER CALIBRATED? YES  NO
- I: SAMPLES OBTAINED:

1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: \_\_\_\_\_

K: SAMPLER(S): S Hand M. Reagent

L: COMMENTS: No Cap on well

1/8" npl  
Creell 11.40 7.90 5°C

Well Purging / Sampling Data

WELL VDM-9:

WELL PURGING DATA:

START TIME: 9:05 FINISH TIME: 9:15 DATE: 5/17/03  
A: MP ELEVATION 447.37 FEET  
B: DEPTH TO WATER: 23.2 FEET  
C: DEPTH OF WELL INSTALLED: 416.40  
D: STATIC WATER LEVEL: C - D = 6.8 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  1.11 GALLONS  
F: DEPTH OF WELL AS MEASURED: 30 FEET

WELL SAMPLING DATA:

START TIME: 10:00 FINISH TIME: 12:30 DATE: \_\_\_\_\_  
A: MP ELEVATION 447.37 FEET  
B: DEPTH TO WATER: 26.2 FEET  
C: DEPTH OF WELL INSTALLED: 416.40  
D: STATIC WATER LEVEL: C - D = 3.8 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  .61 GALLONS  
F: DEPTH OF WELL AS MEASURED: 30 FEET  
G: pH OF SAMPLE: 7.46 pH K<sub>0</sub>  
H: pH METER CALIBRATED? YES  NO   
I: SAMPLES OBTAINED:  
1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's  
J: WEATHER CONDITIONS: \_\_\_\_\_

K: SAMPLER(S): \_\_\_\_\_

L: COMMENTS: \_\_\_\_\_

Well Purging / Sampling Data

WELL VDM-10

WELL PURGING DATA:

DATE: 5/17/13

START TIME: 9:45 FINISH TIME: 9:40

A: MP ELEVATION 444.89 FEET  
B: DEPTH TO WATER: 32 FEET  
C: DEPTH OF WELL INSTALLED: 398.70  
D: STATIC WATER LEVEL: C - D = 14 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  2.29 GALLONS  
F: DEPTH OF WELL AS MEASURED: 46 FEET

*dirty*

WELL SAMPLING DATA:

*0.8 5.5 pulled*

DATE: \_\_\_\_\_

START TIME: 12:30 FINISH TIME: 12:40

A: MP ELEVATION 444.89 FEET  
B: DEPTH TO WATER: 44.3 FEET  
C: DEPTH OF WELL INSTALLED: 398.70  
D: STATIC WATER LEVEL: C - D = 1.7 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  .27 GALLONS  
F: DEPTH OF WELL AS MEASURED: 46 FEET  
G: pH OF SAMPLE: 6.04 pH *102*  
H: pH METER CALIBRATED? YES  NO

*Dirty*

I: SAMPLES OBTAINED:

1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: \_\_\_\_\_

K: SAMPLER(S): \_\_\_\_\_

L: COMMENTS: \_\_\_\_\_

Well Purging / Sampling Data

WELL VDM-11

WELL PURGING DATA:

DATE: 5/17/11

START TIME: 9:50 FINISH TIME: 10:00

A: MP ELEVATION 450.74 FEET  
B: DEPTH TO WATER: 19.5 FEET  
C: DEPTH OF WELL INSTALLED: 427.70  
D: STATIC WATER LEVEL: C - D = 2.4 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  .39 GALLONS  
F: DEPTH OF WELL AS MEASURED: 22 FEET

WELL SAMPLING DATA:

1.1 1.1

DATE: \_\_\_\_\_

START TIME: 12:45 FINISH TIME: 12:50

A: MP ELEVATION 450.74 FEET  
B: DEPTH TO WATER: 21.1 FEET  
C: DEPTH OF WELL INSTALLED: 427.70  
D: STATIC WATER LEVEL: C - D = .9 FEET  
E: WELL VOLUME:  $E * 0.1636 =$  .14 GALLONS  
F: DEPTH OF WELL AS MEASURED: 22 FEET  
G: pH OF SAMPLE: 6.06 pH 14°C  
H: pH METER CALIBRATED? YES  NO   
I: SAMPLES OBTAINED:

1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: \_\_\_\_\_

K: SAMPLER(S): \_\_\_\_\_

L: COMMENTS: \_\_\_\_\_

*Dirty*



Well Purging / Sampling Data

WELL VDM-12

09

WELL PURGING DATA:

DATE: \_\_\_\_\_

START TIME: \_\_\_\_\_ FINISH TIME: \_\_\_\_\_

- A: MP ELEVATION 451.52 FEET
- B: DEPTH TO WATER: \_\_\_\_\_ FEET
- C: DEPTH OF WELL INSTALLED: 436.10
- D: STATIC WATER LEVEL: C - D = \_\_\_\_\_ FEET
- E: WELL VOLUME:  $E * 0.1636 =$  \_\_\_\_\_ GALLONS
- F: DEPTH OF WELL AS MEASURED: \_\_\_\_\_ FEET

WELL SAMPLING DATA:

DATE: \_\_\_\_\_

START TIME: \_\_\_\_\_ FINISH TIME: \_\_\_\_\_

- A: MP ELEVATION 451.52 FEET
- B: DEPTH TO WATER: \_\_\_\_\_ FEET
- C: DEPTH OF WELL INSTALLED: 436.10
- D: STATIC WATER LEVEL: C - D = \_\_\_\_\_ FEET
- E: WELL VOLUME:  $E * 0.1636 =$  \_\_\_\_\_ GALLONS
- F: DEPTH OF WELL AS MEASURED: \_\_\_\_\_ FEET
- G: pH OF SAMPLE: \_\_\_\_\_ pH
- H: pH METER CALIBRATED? YES  N
- I: SAMPLES OBTAINED:  
1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's
- J: WEATHER CONDITIONS: \_\_\_\_\_

K: SAMPLER(S): \_\_\_\_\_

L: COMMENTS: \_\_\_\_\_

Well Purging / Sampling Data

WELL VDM-14

WELL PURGING DATA:

DATE: 8/17/11

START TIME: 1000 FINISH TIME: 1005

- A: MP ELEVATION 446.31 FEET
- B: DEPTH TO WATER: 9.3 FEET
- C: DEPTH OF WELL INSTALLED: 434.00
- D: STATIC WATER LEVEL: C - D = 2.3 FEET
- E: WELL VOLUME:  $E * 0.1636 =$  1.3 GALLONS
- F: DEPTH OF WELL AS MEASURED: 11.6 FEET

WELL SAMPLING DATA: Dug 1.12 DATE: \_\_\_\_\_

START TIME: 1255 FINISH TIME: \_\_\_\_\_

- A: MP ELEVATION 446.31 FEET
- B: DEPTH TO WATER: 9.9 FEET
- C: DEPTH OF WELL INSTALLED: 434.00
- D: STATIC WATER LEVEL: C - D = 1.7 FEET
- E: WELL VOLUME:  $E * 0.1636 =$  1.27 GALLONS
- F: DEPTH OF WELL AS MEASURED: 11.6 FEET

G: pH OF SAMPLE: 5.42 pH

H: pH METER CALIBRATED? YES  NO  10°C Dug

I: SAMPLES OBTAINED:

1 - TOTAL METALS, 1 - TOTAL CHLORIDES, 2 - VOA's

J: WEATHER CONDITIONS: \_\_\_\_\_

K: SAMPLER(S): \_\_\_\_\_

L: COMMENTS: \_\_\_\_\_

Attachment II-C

Groundwater Monitoring System Inspection Plan and Form

- A. Inspections of the groundwater monitoring system shall be performed on a semi-annual basis to conform with the post-closure monitoring schedule. Personnel trained in groundwater sampling, collection and sample preservation techniques will be used. The inspection form located below or an equivalent form shall be used. The original inspection forms shall be maintained by the permittee in an inspection log book or file for the full term of the post-closure care period. Copies of the inspections shall be submitted with the semi-annual monitoring reports.
  
- B. The well inspection will include visual inspection of the security cap and lock, condition of the surface grout, and the condition of the inner casing and cap. During well purging, the relative rate of recharge should be noted for comparison with the previous data to insure that the well screen is not plugged. Also during purging and sampling, the integrity of the well shall be inspected by measuring the total well depth and noting the presence of any obstructions such as casing bends, foreign objects or siltation. The measured well depth shall be compared to the "as built" well depth.
  
- C. If it becomes apparent that a well is not capable of providing representative samples, the permittee shall respond in accordance with **Condition E.1** of this permit Module.

Landfill/Groundwater Monitoring System Inspection Form

- 1. Is the integrity of the cover and ditch lining satisfactory?  YES  NO
  - 1.1 Any sink holes or depressions  YES  NO
  - 1.2 Significant erosion of the banks.  YES  NO
  - 1.3 Any visible problems.  YES  NO
  
- 2. Is the integrity of the vegetative cover satisfactory?  YES  NO
  - 2.1 Is the grass healthy looking? *low*  YES  NO
  - 2.2 Are there any bare spots?  YES  NO
  - 2.3 Is the grass less than 8" tall?  YES  NO
  - 2.4 Are there trees or bushes growing in the cover?  YES  NO
  
- 3. Is drainage from the site satisfactory?  YES  NO

*tree's growing thru fence - bushes blocking the drive in*

  - 3.1 Is there any ponding or puddling?  YES  NO
  
- 4. Is the fence surrounding the site secure?  YES  NO

- 4.1 Any holes or damage? YES  NO
- 4.2 Signs in place every 50'? YES  NO
- 4.3 Accessible entry to the site? - *Downway has been* YES  NO
- 4.4 Property "Posted Signs" visible and in tact? YES  NO
- 5. Are all of the covers on the monitoring wells locked? YES  NO
- 5.1 Caps on all of the risers? *55 no caps* YES  NO
- 6. Is there any iron staining in the drainage ditch? YES  NO
- 7. Are there any visible seeps in the cliff face? YES  NO
- 8. Are the wells in good condition? YES  NO
- 8.1 Any damage to the outer casing? YES  NO
- 8.2 Obstructions in the riser? YES  NO
- 8.3 Excessive sediment buildup in any wells? *9/10/11* YES  NO

Name of inspector: *Scott Wood*

Signature: \_\_\_\_\_ Date: *5/17/13*

**Attachment II-D**  
**Laboratory QA/OC Deliverables**  
COMPONENTS REQUIRED FOR RCRA ANALYTICAL DATA SUBMITTED TO  
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION