# Periodic Review Report

Scott Rotary Seals Site Olean, New York BCP Site No. C905036

June 2017 0189-016-001

Prepared For: DST Properties NY, LLC Scott Rotary Seals



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### PERIODIC REVIEW REPORT

# SCOTT ROTARY SEALS SITE (BCP SITE No. C905036)

OLEAN, NEW YORK

June 2017 0189-016-001

Prepared for:

### **DST Properties NY, LLC**

Prepared By:



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In Association With:



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### PERIODIC REVIEW REPORT

### Scott Rotary Seals Site

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#### PERIODIC REVIEW REPORT

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#### 1.0 Introduction

Benchmark Environmental Engineering and Science, PLLC (Benchmark) in association with TurnKey Environmental Restoration, LLC (TurnKey) has prepared this Periodic Review Report (PRR), on behalf of DST Properties NY, LLC (DST) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C905036, located in Olean, Cattaraugus County, New York (Site; see Figure 1), commonly referred to as the Scott Rotary Seals Site.

This PRR has been prepared for the Scott Rotary Seals Site in accordance with NYSDEC DER-10/*Technical Guidance for Site Investigation and Remediation* (May 3, 2010). The NYSDEC's Institutional and Engineering Controls (IC/EC) Certification Form has been completed for the Site (see Appendix A).

This PRR and the associated inspections form has been completed for the post-remedial activities at the Site for the period from June 1, 2016 to May 31, 2017.

#### 1.1 Site Description and Background

The Scott Rotary Seals Site, identified as SBL 94.040-1-29.02, is bounded by Franklin Street to the north, railroad tracks to the south and east, and commercial and former industrial properties to the west (see Figures 1 and 3). The Site was redeveloped as an approximately 15,000-sf facility for the manufacture of rotating unions and rotary timing valves along with commercial office space in Olean, New York (see Figure 1). The Site was formerly a portion of a larger refinery and petroleum bulk storage facility commonly known as the former Socony-Vacuum facility situated in a heavily industrialized area of Olean. Figure 2 is an aerial view of the Site prior to remediation and redevelopment (April 2007). Figure 3 is an aerial view of the Site following remediation and redevelopment (August 2016).

Grossly contaminated petroleum soils (GCPS) were observed site-wide during a Phase II Investigation completed by TurnKey in 2009. The investigation also identified the presence of volatile organic compounds (VOC) tentatively identified compounds (TICs) and semi-volatile organic compounds (SVOC) TICs in soil, and sec-butylbenzene and phenanthrene in groundwater above NYSDEC GWQS. Groundwater was also impacted by Light Non-Aqueous Phase Liquids (LNAPL) on at least one occasion in monitoring wells

MW-2, MW-4 and MW-6. It was concluded that, based on visual/olfactory observations, PID measurements, and analytical results, significant site-wide petroleum-VOC and -SVOC impacts were evident, with grossly contaminated soils present in some areas, and that the confirmed presence of contamination in site groundwater and soil complicated the planned use of the property.

#### 1.2 Remedial History

After acceptance into the New York State BCP in March 2010, an Interim Remedial Measures (IRM) Work Plan was prepared and subsequently approved by the NYSDEC. IRM activities were completed between March and May 2011 to address the removal of abandoned underground piping (and the contents thereof) and removal of four soil/fill/debris piles. A Remedial Action Work Plan (RAWP) was prepared and submitted by DST and was approved by the NYSDEC to address the residual soil and groundwater remediation.

The remedial activities included:

#### **Interim Remedial Measures**

- Removed, cleaning and recycling of historic piping, collection of solid and liquid pipe contents, and off-site treatment/disposal for pipe contents;
- Excavation and off-site disposal of soil/fill/debris piles;

#### **Remedial Actions**

- Removal of shallow grossly contaminated soil/fill;
- Extraction and treatment of soil/gas using a SVE system consisting of nine extraction wells, treatment of the recovered gas with carbon, prior to discharge to the atmosphere. Carbon usage was suspended as agreed upon with the NYSDEC (refer to Section 1.3 for further detail);
- Implementation of the Excavation Work Plan (EWP) during Site redevelopment;
- Implementation of LNAPL recovery including absorbent socks and a Petrotrap<sup>TM</sup> free product skimmer in selected wells;
- Installation of a vapor barrier and an active sub-slab depressurization (ASD) system beneath the newly constructed manufacturing and commercial office space;
- Semi-annual groundwater monitoring; and
- Placement of a soil cover system.



Remedial activities were completed in July 2012. The Final Engineering Report (FER) and Site Management Plan (SMP) for the Site were approved by the Department in November 2012. The COC was issued for the Site on December 11, 2012.

#### 1.3 Compliance and Recommendations

The site photo log is included in Appendix B. At the time of the most recent Site inspection (April 25, 2017), the Site was fully compliant with the Department's approved SMP.

The original SMP called for soil vapor extraction from 9 SVE wells, semi-annual groundwater quality monitoring from 6 groundwater monitoring wells and light non-aqueous phase liquid monitoring (LNAPL) from 3 wells. On the basis of improved unsaturated soil quality observed after COC issuance, Benchmark/TurnKey proposed in a request to dated January 20, 2016 that the SVE system be terminated; this request was approved by the NYSDEC on March 7, 2016. The 2016 PRR recommended termination of the groundwater quality monitoring and LNAPL monitoring as groundwater quality had greatly improved and LNAPL had not been detected in over two years. This recommendation was approved in a September 8, 2016 letter from the NYSDEC. Well decommissioning for the SVE, groundwater quality and LNAPL monitoring wells is described in Section 2.3.1.

#### 2.0 SITE MANAGEMENT PLAN

A SMP was prepared for the Site, and approved by the Department in November 27, 2012. The SMP includes an Operation, Monitoring and Maintenance (OM&M) Plan, an excavation Work Plan (EWP), and a copy of the Environmental Easements. A brief description of the components of the SMP is presented below.

#### 2.1 Operation, Monitoring and Maintenance Plan

The OM&M Plan consists of four major components, including the Active Sub-Slab Depressurization System (ASD); LNAPL Recovery System; the SVE system; and the Annual Inspection & Certification Program. As discussed in Section 1.3, LNAPL recovery, the SVE system, and groundwater monitoring components of the SMP have been terminated (as approved by the NYSDEC); and as such, these aspects of the OMM are not discussed further.

#### 2.1.1 Active Sub-slab Depressurization System

An ASD system was installed within the newly-constructed manufacturing and commercial office space building. As required by the Department-approved SMP, the ASD system must: (1) be operated continuously to maintain a negative pressure (below ambient atmospheric) under the floor slab; (2) be visually inspected periodically to verify proper operation; and (3) annually inspected and certified that the system is performing properly and remains an effective engineering control (EC).

During the annual Site Inspection, the inspector verified that the ASD system was operating properly, as indicated by the readings on the vacuum gauges. A summary of the ASD periodic inspection readings are included in Appendix C.

### 2.2 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines the requirements for the Site, to certify and attest that the institutional controls and/or engineering controls employed at the Site are unchanged from the previous certification. The Annual Certification consists of an annual Site Inspection to complete the NYSDEC's IC/EC Certification Form. The Site inspection verifies that the IC/ECs:

- Are in place and effective.
- Are performing as designed.
- That nothing has occurred that would impair the ability of the controls to protect the public health and environment.
- That nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls.
- Access is available to the Site to evaluate continued maintenance of such controls.

A Site inspection of the property was conducted by a Benchmark scientist who meets the requirements of a Qualified Environmental Professional (QEP) on April 25, 2017. At the time of the inspection, the property was being used as for the manufacture of rotary seals and unions (Scott Rotary Seals) with surface parking and landscaped areas. No observable indication of intrusive activities was noted during the Site inspection. Scott Rotary Seals utilizes the local municipal water supply, and no observable use of groundwater was noted during the Site inspection.

The completed Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Form is included in Appendix A. A photolog of the Site inspection is included in Appendix B.

#### 2.3 Excavation Work Plan (EWP)

The EWP was included in the approved-SMP for the Site. The EWP provides guidelines for the management of soil and fill material during any future intrusive actives.

No intrusive activities requiring management of on-Site soil or fill material; or the placement of backfill materials were reported or observed to have occurred during the monitoring period.

#### 2.3.1 Well Decommissioning

The SVE wells, SVE-1 through SVE-9, and monitoring wells, MW-1 through MW-6, were decommissioned on October 17 and 18, 2016. Well decommissioning logs are contained in Appendix D.



#### 2.4 Engineering and Institutional Control Requirements and Compliance

As detailed in the Environmental Easements, several IC/ECs need to be maintained as a requirement of the BCAs for the Site.

#### 2.4.1 Institutional Controls

- Groundwater-Use Restriction the use of groundwater for potable and non-potable purposes is prohibited; and
- Land-Use Restriction: The controlled property may be used for commercial and/or industrial use; and
- Implementation of the SMP including the OM&M Plan and EWP.

#### 2.4.2 Engineering Controls

- Vapor Mitigation ASD System has been operated continuously and properly maintained.
- Cover System The cover system, including building foundations, concrete sidewalks, asphalt and gravel driveways and parking areas, and landscaped vegetated areas are all being maintained in compliance with the SMP.



#### 3.0 CONCLUSIONS AND RECOMMENDATIONS

At the time of the Site inspection, the Site was in compliance with the SMP. Specifically, the Site is fully compliant with the Institutional Controls including land-use restrictions, groundwater-use restrictions, and the Excavation Work Plan component; and fully compliant with the Engineering Controls (continuous operation of the ASD system). The cover system is compliant with the Cover System Engineering Control.

#### **Recommendations**

The Periodic Review Report, currently completed annually, is hereby recommended to be put on a triennial (3 year) cycle.



#### 4.0 DECLARATION/LIMITATION

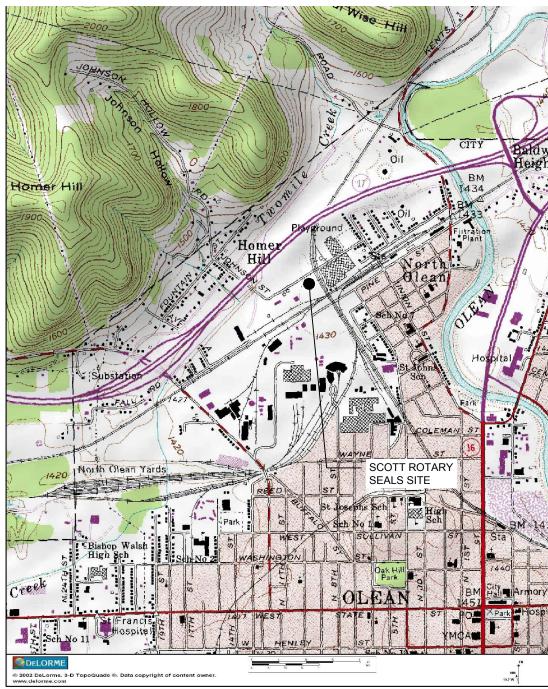
Benchmark Environmental Engineering and Science, PLLC, personnel conducted the annual site inspections for Brownfield Cleanup Program Site No. C905036, Olean, New York, according to generally accepted practices. This report complied with the scope of work provided to DST Properties NY, LLC by Benchmark Environmental Engineering and Science, PLLC and TurnKey Environmental Restoration, LLC.

This report has been prepared for the exclusive use of DST Properties NY, LLC. The contents of this report are limited to information available at the time of the site inspection. The findings herein may be relied upon only at the discretion of DST Properties NY, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering and Science, PLLC and TurnKey Environmental Restoration, LLC.

### **FIGURES**



#### FIGURE 1







2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0189-016-001

Environmental Engineering 8

SCIENCE, PLLC

DATE: MAY 2017

DRAFTED BY: RFL

#### SITE LOCATION AND VICINITY MAP

PERIODIC REVIEW REPORT SCOTT ROTARY SEALS SITE

OLEAN, NEW YORK
PREPARED FOR

DST PROPERTIES NY, LLC

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. & TURNKEY ENVIRONMENTAL RESTORATION, LLC IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC & TURNKEY ENVIRONMENTAL RESTORATION, LLC.



APPROXIMATE SCALE 1" = 100'

Property Boundary (Approximate)

Base Image Google Earth April 2007





2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0189-016-001

DATE: MAY 2017

DRAFTED BY: RFL

#### SITE PLAN PRE-REMEDIATION

PERIODIC REVIEW REPORT SCOTT ROTARY SEALS SITE OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

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Approximate Scale 1" = 100'

Property Boundary (Approximate)

Base Image Google Earth August 2016





2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0189-016-001

DATE: MAY 2017

DRAFTED BY: RFL

#### SITE PLAN POST-REMEDIATION

PERIODIC REVIEW REPORT SCOTT ROTARY SEALS SITE OLEAN, NEW YORK

PREPARED FOR

DST PROPERTIES NY, LLC

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**FIGURE** 

### **APPENDIX A**

**INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORM** 





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



Si	Site Details ite No. C905036	Box 1							
Si	Site Name Scott Rotary Seals								
Ci Co Si	Site Address: 301 Franklin Street Zip Code: 14760 City/Town: Olean County: Cattaraugus Site Acreage: 2.0  Reporting Period: May 92, 2016 to May 92, 2017								
		YES	NO						
1.	Is the information above correct?		×						
	If NO, include handwritten above or on a separate sheet.								
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		ι <b>Σ</b> Κ						
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		Ø						
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<b>/</b>						
	If you answered YES to questions 2 thru 4, include documentation or evidence								
	that documentation has been previously submitted with this certification form								
5.			R						
5.	that documentation has been previously submitted with this certification form		R						
5.	that documentation has been previously submitted with this certification form		₽ NO						
	that documentation has been previously submitted with this certification form								
6.	that documentation has been previously submitted with this certification form Is the site currently undergoing development?  Is the current site use consistent with the use(s) listed below?	Box 2	NO _						
6.	Is the site currently undergoing development?  Is the current site use consistent with the use(s) listed below?  Commercial and Industrial	Box 2 YES	NO -						
6. 7.	Is the current site use consistent with the use(s) listed below?  Commercial and Industrial  Are all ICs/ECs in place and functioning as designed?  IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below as the site current site use consistent with the use(s) listed below?	Box 2 YES	NO						
6. 7.	Is the currently undergoing development?  Is the current site use consistent with the use(s) listed below?  Commercial and Industrial  Are all ICs/ECs in place and functioning as designed?  IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below a DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.	Box 2 YES	NO						

		Box 2	A
		YES	NO
8.	Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?		×
	If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.		
9.	Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	×	
	If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.		

SITE NO. C905036 Box 3

#### **Description of Institutional Controls**

Parcel

Owner

94.040-1-29.02

DST Properties NY, LLC

The engineering controls shown stricken out in Boxes 3 and 4 (red strike-out line) are no longer part of the SMP as approved by the NYSDEC

Institutional Control

Ground Water Use Restriction Landuse Restriction Monitoring Plan Site Management Plan

O&M Plan

Soil Management Plan IC/EC Plan

The Environmental Easement filed on 08/15/2012 requires compliance with the approved Site Management Plan (SMP) dated November 2012. Controls required under the SMP include:

- Property may only be used for commercial or industrial uses. Lower uses (residential/restricted residential), farming and vegetable gardens prohibited.
- Groundwater use restriction.
- soil and hardscape cover system covering the entire surface of the site (approximately 2 acres)
- Active subslab depressurization system to mitigate potential vapor intrusion into the existing on-site building. Future on-site buildings require vapor intrusion assessment or mitigation.
- -Continued operation of a soil vapor extraction system to remediate soil contaminated with petroleum related VOCs and SVOCs from 6 feet below ground surface to the water table.
- -Groundwater treatment to remove LNAPL.
- -Semi-annual groundwater monitoring.
- Monthly system monitoring. Annual site inspection and certifications.

Box 4

#### **Description of Engineering Controls**

Parcel

**Engineering Control** 

94.040-1-29.02

Vapor Mitigation Cover System

Groundwater Treatment System Air Sparging/Soil Vapor Extraction

	Periodic Review Report (PRR) Certification Statements
1.	I certify by checking "YES" below that:
	<ul> <li>a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;</li> </ul>
	b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted
	engineering practices; and the information presented is accurate and compete.  YES NO
	<b>X</b> -
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:
	(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
	(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
	(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
	(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
	(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.
	YES NO
	<b>X</b> □
	IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.
	A Corrective Measures Work Plan must be submitted along with this form to address these issues.
	Signature of Owner, Remedial Party or Designated Representative Date
	and the second s

#### IC CERTIFICATIONS SITE NO. C905036

Box 6

#### SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

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

1 Sett Meis	N	at >	ST Proport	es N	Y. LCC.		
print nar	ne		print business	s address	,		
am certifying as	testiens	k	owner		_(Owner or Remedial Party		
for the Site named in	the Site Details Se	ection	of this form.				
Ce/12/2017							
Signature of Owner, Rendering Certificati		Desi	gnated Representative	e	Date		

#### IC/EC CERTIFICATIONS

Box 7

#### **Professional Engineer Signature**

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

print name at 2558 +	AMBURG-TURNPIKE, SUITE 300 siness address ) ACCOUNTY NY 14218
am certifying as a Professional Engineer for the	(Owner or Remedial Party)
OF NEW WERTH	(c.m.c. c. nomentality)
120 War	•
The state of the s	6/2/17
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification	Stamp Date (Required for PE)

### **APPENDIX B**

SITE PHOTOGRAPHIC LOG



#### **SITE PHOTOGRAPHS**

#### Photo 1:



Photo 3:



Photo 2:



Photo 4:



Photo 1: Manometer gauge (1.6 inches WC indicated – Fan 6)

Photo 2: Photohelic gauge (1.85 inches WC indicated – Fan 3)

Photo 3: Front of SRS Building (North looking northeast).

Photo 4: Scott Rotary Seals (SRS) Bldg. (looking southeast).



#### **SITE PHOTOGRAPHS**

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: Rear Side (south) of SRS Building; (looking east).

Photo 6: East side of site detention basin (looking south).

Photo 7: Northwest side of SRS Building (looking southeast).

Photo 8: West side of Site (looking southeast).



### **APPENDIX C**

### **ASD PERIODIC INSPECTION LOGS**





#### TABLE 1 Scott Rotary Seals Site (C905036) ASD System Inspection Log

Date	Time	Inspector's Initials	ASD-1 (in.WC)	ASD-2 (in.WC)	ASD-3 (in.WC)	ASD-4 (in.WC)	ASD-5 (in.WC)	ASD-6 (in.WC)	ASD-7 (in.WC)
7/10/14	8:00	PWW	2.4	1.75	1.85	2.0	1.25	1.6	1.5
8/4/14	10:30	PWW	2.4	1.75	1.85	2.0	1.35	1.6	1.5
9/22/14	12:45	PWW	2.3	1.75	1.95	2.0	1.35	1.6	1.5
10/9/14	12:00	PWW	2.3	1.75	1.95	2.0	1.35	1.6	1.5
11/3/14	10:30	PWW	2.3	1.75	1.95	2.0	1.35	1.6	1.5
12/4/14	16:00	PWW	2.2	1.75	1.9	2.0	1.3	1.6	1.5
1/6/15	16:00	PWW	2.3	1.75	1.9	2.0	1.3	1.6	1.5
2/23/15	13:25	PWW	2.3	1.75	1.9	2.0	1.3	1.6	1.5
3/12/15	10:22	ML	2.3	1.75	1.85	2.0	1.3	1.6	1.5
4/15/15	12:37	ML	2.2	1.75	1.85	2.0	1.3	1.6	1.5
5/29/15	12:30	PWW	2.2	1.75	1.85	2.0	1.3	1.6	1.5
6/19/15	16:00	PWW	2.2	1.75	1.85	2.0	1.3	1.6	1.5
7/15/15	12:51	ML	2.2	1.8	1.9	2.0	1.35	1.6	1.4
8/17/15	12:37	ML	2.1	1.8	1.9	2.0	1.35	1.6	1.4
9/2/15	13:40	PWW	2.1	1.75	1.9	2.0	1.35	1.6	1.5
10/6/15	13:10	ML	2.2	1.8	1.9	2.0	1.35	1.6	1.5
11/11/15	9:07	ML	2.2	1.8	1.9	2.0	1.3	1.7	1.5
12/2/15	10:53	ML	2.2	1.8	1.9	2.0	1.35	1.7	1.4
1/5/16	9:12	ML	2.3	1.8	1.9	2.0	1.3	1.6	1.4
2/2/16	9:10	ML	2.3	1.8	1.85	1.9	1.3	1.6	1.4
3/1/16	9:07	ML	2.2	1.75	1.85	1.9	1.3	1.6	1.4
4/14/16	9:15	ML	2.2	1.8	1.85	1.9	1.3	1.6	1.4
5/6/16	10:19	ML	2.2	1.8	1.85	2.0	1.3	1.7	1.4
6/2/16	10:49	ML	2.2	1.75	1.85	2.0	1.3	1.6	1.4
6/29/16	10:08	ML	2.2	1.8	1.9	2.0	1.35	1.6	1.4
8/15/16	11:15	BMG	2.2	1.8	1.9	2.0	1.35	1.6	1.4
9/1/16	15:30	BMG	2.2	1.85	1.9	2.0	1.35	1.6	1.4
10/18/16	16:00	BMG	2.2	1.85	1.9	2.0	1.4	1.6	1.4
11/16/16	14:30	BMG	2.2	1.85	1.85	2.0	1.35	1.6	1.4
12/6/16	10:50	BMG	2.2	1.85	1.85	2.0	1.35	1.6	1.4
1/4/17	8:30	BMG	2.2	1.8	1.8	1.9	1.35	1.6	1.4
2/14/17	8:30	BMG	2.2	1.8	1.8	1.9	1.35	1.6	1.4
3/6/17	13:40	BMG	2.2	1.8	1.8	1.9	1.35	1.6	1.4
4/11/17	15:00	BMG	2.2	1.8	1.8	1.9	1.35	1.6	1.4

#### Notes:

Date

Date							
8/4/14	ASD-1 Fan has bad bearing, but is still operational. Order replacement fan.						
8/22/14	ASD-1 Fan replaced by Mitigation Tech.						

### **APPENDIX D**

WELL DECOMMISSIONING LOGS





Site Name:Scott Rotary Seal	Well I.D.: MW 1
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING	DATA		WELL SCHEMA	TIC*	
(Fill in all that appl	(y)	Depth			
OVERBRAY I BYO		(feet)			
OVERDRILLING		0	_		
Interval Drilled				7	
Drilling Method(s)			Soil	T-	0.8'
Borehole Dia. (in.)			Backfill	191	<b>F</b>
Temporary Casing Installed? (y/n)		_		6	'\2" PVC
Depth temporary casing installed		5	_	a	2 1 00
Casing type/dia. (in.)				텉	
Method of installing				Cement/Bentonite Grout	
			$\Box$	등	
CASING PULLING		10		ě	
Method employed		10	_	ξ	
Casing retrieved (feet)				<u> </u>	
Casing type/dia. (in)				ᡖ	
C. Chic Person Land				O	
CASING PERFORATING		15			
Equipment used		15	_		
Number of perforations/foot			_		
Size of perforations			_	1 1	
Interval perforated			$\dashv$	1 1	
CROUTING		20	$\dashv$		
GROUTING			$\dashv$	1 1	
Interval grouted (FBLS)	0 to 31.2		_		
# of batches prepared	1		_		
For each batch record:	7.0		_		
Quantity of water used (gal.) Quantity of cement used (lbs.)	7.8	25	_		
Cement type	94 Tuna 1 8 II		$\dashv$		
Quantity of bentonite used (lbs.)	Type I & II				
Quantity of bentonite used (lbs.)	3.9 lbs		<b>27.27</b> '	.	
Volume of grout prepared (gal.)	10		-		
Volume of grout used (gal.)	6.0	30	$\dashv$		
volume of grout used (gai.)	10.0		_		31.2'
COMMENTS. Crouted in place Dier	place and remove 0.7	1			1.1
COMMENTS: Grouted in place. Disp	nace and remove 0.7		II relevant decommissioning		
gallons of water.			rdrilled, interval grouted, ca	sing left	in hole,
		well stickup	, etc.		

11-8-16

fing Contractor



Site Name: Scott Rotary Seal	Well I.D.: MW 2
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING		Donth	WELL SCHEMATIC*	
(Fill in all that app	iy)	Depth (feet)		
OVERDRILLING Interval Drilled Drilling Method(s)		0	Cement	1.6'
Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed		5	to surface	2" PVC
Casing type/dia. (in.) Method of installing				
CASING PULLING Method employed Casing retrieved (feet)		10		
Casing type/dia. (in)			luton	
CASING PERFORATING Equipment used		15	It/Be	
Number of perforations/foot Size of perforations Interval perforated			T.1.1.	
GROUTING		20		
Interval grouted (FBLS) # of batches prepared For each batch record:	0 to 28.0 1			
Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type	7.8 94 Type I & II	25		
Quantity of bentonite used (lbs.) Quantity of calcium chloride used (lbs.) Volume of grout prepared (gal.)	3.9 lbs			
Volume of grout used (gal.)	5.1	30		28.4'
COMMENTS: Grouted in place. Disp	place and remove	* Sketch in all	l relevant decommissioning data, inc	luding:
1.9 gallons of water.		Time Sec. of	drilled, interval grouted, casing left	in hole,
		well stickup,	etc.	

11-8-16

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: MW 3
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING	DATA		WELL SCHEMA	TIC*	
(Fill in all that app	ly)	Depth			
CLUDDDDLLL DVC		(feet)			
OVERDRILLING		0	_		
Interval Drilled			Soil /	7	
Drilling Method(s)			backfill		1.0'
Borehole Dia. (in.)			- Dackiiii		.
Temporary Casing Installed? (y/n) Depth temporary casing installed		5	_		2" PVC
		—	-		
Casing type/dia. (in.) Method of installing			_		
Nethod of instaning			$\dashv$	닉	
CASING PULLING			-	Grout	
Method employed		10		ত	
Casing retrieved (feet)			-	t e	
Casing type/dia. (in)			$\dashv$	宣	
Cusing type dia (iii)			$\neg$	월	
CASING PERFORATING			$\neg$	Cement/Bentonite	
Equipment used		15		8	
Number of perforations/foot				급	1
Size of perforations				Ĕ	
Interval perforated		ļ		8	
		00	18.9'		
GROUTING		20			
Interval grouted (FBLS)	0 to 27.5	-			
# of batches prepared	1				
For each batch record:					
Quantity of water used (gal.)	7.8	25	_		
Quantity of cement used (lbs.)	94	25	_		
Cement type	Type I & II		$\dashv$		
Quantity of bentonite used (lbs.)	3.9 lbs		$\rightarrow$		07.51
Quantity of calcium chloride used (lbs.)	10		_		27.5'
Volume of grout prepared (gal.) Volume of grout used (gal.)	10	30	_		
volume of grout used (gai.)	5.0		_		
COMMENTS: Grouted in place. Disp	place and remove 1.5	* Cleatab i= =11	ralayant dagammigaii		lina
gallons of water.	5.455 4114 151110 10 1.0	1	relevant decommissioning		
gallotis of water.		1	drilled, interval grouted, cas	sing fert I	ii noie,
$\wedge$		well stickup,	eic.		
		I			- 1

11-8-16

Drilling/Contractor



Site Name: Scott Rotary Seal	Well I.D.: MW 4
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING	DATA		WELL SCHEMA	TIC*
(Fill in all that app	y)	Depth		
OMEDDAM I DIG		(feet)		
<u>OVERDRILLING</u>		0	_	
Interval Drilled Drilling Method(s)			Soil /	1.0'
Borehole Dia. (in.)			backfill	1.0
Temporary Casing Installed? (y/n)				K
Depth temporary casing installed		5	-	2" PVC
Casing type/dia. (in.)			_	
Method of installing			7	
				ㅂ
CASING PULLING		40		Grout
Method employed	Pull & Rem	10		9
Casing retrieved (feet)	3.5'		_	불
Casing type/dia. (in)	2"		$\dashv$	[ <u>5</u>
CASING DEDEOD ATING			_	Cement/Bentonite
CASING PERFORATING Equipment used		15	$\dashv$	<u>8</u>
Number of perforations/foot			-	t'l
Size of perforations			<b>16.8</b> '	e
Interval perforated			_	اقرا
- Francisco				
GROUTING		20		
Interval grouted (FBLS)	0 to 25.5	10.7		
# of batches prepared	1			
For each batch record:				
Quantity of water used (gal.)	7.8	25	_	
Quantity of cement used (lbs.)	94		-	
Cement type Quantity of bentonite used (lbs.)	Type I & II		$\dashv$	
Quantity of bentomic used (lbs.)	3.9 lbs		_	<sub>25.5'</sub>
Volume of grout prepared (gal.)	10		_	20.0
Volume of grout used (gal.)	4.8	30	$\neg$	
	14.0			
COMMENTS: Grouted in place. Disp	place and remove 1.5	* Sketch in a	Il relevant decommissioning	uata, including:
gallons of water.		interval ove	rdrilled, interval grouted, cas	sing left in hole,
		well stickup	o, etc.	

11-8-16

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: MW 5
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING	DATA		WELL SCHEM	IATIC'	k
(Fill in all that apply)		Depth			
		(feet)			
OVERDRILLING		0			
Interval Drilled			0.1	7	
Drilling Method(s)			Soil	1	0.67'
Borehole Dia. (in.)			backfill		
Temporary Casing Installed? (y/n)		_			0" 5" (0
Depth temporary casing installed		5	$\neg$		`2" PVC
Casing type/dia. (in.)			$\neg$		
Method of installing			$\neg$		
The tribute of motioning			$\neg$	5	
CASING PULLING				ō	
Method employed		10	$\dashv$	ত	
Casing retrieved (feet)			-	t e	
Casing type/dia. (in)	2"		$\dashv$	12	
Casing type dia. (iii)			$\dashv$	무	
CASING PERFORATING			$\dashv$	Cement/Bentonite Grout	
Equipment used		15	$\dashv$	18	
Number of perforations/foot			-	E	
Size of perforations			$\dashv$	<u>و</u>	
Interval perforated			$\dashv$	l e	
Interval perforated		1	$\dashv$	0	
GROUTING		20	-		
Interval grouted (FBLS)	0 += 00 4		-		
	0 to 28.4		$\dashv$		
# of batches prepared	1		$\dashv$		
For each batch record:	[7.0		24.0'		
Quantity of water used (gal.)	7.8	25			
Quantity of cement used (lbs.)	94	20	$\dashv$		
Cement type	Type I & II		_		
Quantity of bentonite used (lbs.)	3.9 lbs		_		
Quantity of calcium chloride used (lbs.)					
Volume of grout prepared (gal.)	10	30	_		28.4'
Volume of grout used (gal.)	6	30			
		1			
COMMENTS: Grouted in place. Disp	lace and remove 1.0	* Sketch in a	all relevant decommission	ing data, i	ncluding:
gallons of water.		interval ove	erdrilled, interval grouted	, casing let	ft in hole,
		well stickup	p, etc.		
		1 '			

11-8-16

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: MW 6
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING	DATA		WELL SCHEMA	TIC*
(Fill in all that app	ly)	Depth		
OVERDRILL DIC		(feet)		
OVERDRILLING		0	_	
Interval Drilled			Soil /	1.0'
Drilling Method(s) Borehole Dia. (in.)			- backfill	1.0
Temporary Casing Installed? (y/n)				
Depth temporary casing installed		5	-	2" PVC
Casing type/dia. (in.)			$\dashv$	
Method of installing			s <del>-  </del>	
Trouted of mounting			_	님님
CASING PULLING		W7552	$\neg$	0
Method employed		10		9
Casing retrieved (feet)				Cement/Bentonite Grout
Casing type/dia. (in)				5
	*			[분]
CASING PERFORATING		15		B B
Equipment used		15	_	<u></u>
Number of perforations/foot			-	<u>a</u>
Size of perforations			_	1
Interval perforated			1—	ŭ
GROUTING		20	<b>19.7</b> '	
Interval grouted (FBLS)	0.5 to 27.2'			1
# of batches prepared	1		-	
For each batch record:	1		$\dashv$	
Quantity of water used (gal.)	7.8		$\neg$	
Quantity of cement used (lbs.)	94	25	s <del></del>	
Cement type	Type I & II		$\neg$	
Quantity of bentonite used (lbs.)	3.9 lbs			
Quantity of calcium chloride used (lbs.)				└─ <b> 27.2</b> "
Volume of grout prepared (gal.)	10	20		
Volume of grout used (gal.)	6	30		
		,		
COMMENTS: Grouted in place. Disp	place and remove 1.3	* Sketch in a	Il relevant decommissioning	data, including:
gallons of water.		interval ove	rdrilled, interval grouted, ca	sing left in hole,
A		well stickup	o, etc.	
		I		

11-8-16

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: SVE 1
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

(Fill in all that apply)  OVERDRILLING Interval Drilled Drilling Method(s) Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing retrieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  Jay by  Concrete To concrete	DECOMMISSIONING	DATA		WELL SCHEMATIC*
OVERDRILLING Interval Drilled Drilling Method(s) Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing trieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of weter used (gal.) Quantity of bentonite used (lbs.) 3.9 lbs	(Fill in all that appl	y)	Depth	
OVERDRILLING Interval Drilled Drilling Method(s) Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing retrieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Quantity of bentonite used (lbs.) Quantity of bentonite used (lbs.) Quantity of bentonite used (lbs.)  Jay 1.3'  1.3'  10  To surface  11  10  11  12  14.5'  14.5'	, , , , , , , , , , , , , , , , , , , ,	• 1		
Interval Drilled Drilling Method(s) Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing retrieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Quantity of bentonite used (lbs.) Quantity of bentonite used (lbs.) Quantity of bentonite used (lbs.)  Interval provided (los.)  Interval provided (los.)  Interval provided (gal.)  Quantity of bentonite used (lbs.)  Interval provided (los.)  Interval provided (gal.)  Interval provid	OVERDRILLING			
Drilling Method(s) Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing retrieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (lbs.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) 3,9 lbs				Congrete 3
Borehole Dia. (in.) Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Quantity of bentonite used (lbs.) Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.) 3,9 lbs				1 1.3
Temporary Casing Installed? (y/n) Depth temporary casing installed Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.)  3.9 lbs				
Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing retrieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of water used (lbs.)  Cement type Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  3.9 lbs				₹   <b>_</b>
Casing type/dia. (in.) Method of installing  CASING PULLING Method employed Casing retrieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of water used (lbs.)  Cement type Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  3.9 lbs			5	<u>    2</u>   2 PVC
Method of installing  CASING PULLING Method employed Casing retrieved (feet) Casing type/dia. (in)  CASING PERFORATING Equipment used Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  Japan  10  15  15  20  14.5'		<u> </u>		
Equipment used  Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  15  14.5'  16  20  20  31  40  40  40  40  40  40  40  40  40  4				<u>   #</u>
Equipment used  Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  15  14.5'  16  20  20  31  40  40  40  40  40  40  40  40  40  4	Wethod of histanning			-   5
Equipment used  Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  15  14.5'  16  20  20  31  40  40  40  40  40  40  40  40  40  4	CASING DULLING			-   ĕ
Equipment used  Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  15  14.5'  16  20  20  31  40  40  40  40  40  40  40  40  40  4			10	<u>   ™</u>
Equipment used  Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  15  14.5'  16  20  20  31  40  40  40  40  40  40  40  40  40  4	1	<u> </u>		<b>⊣</b>  \$
Equipment used  Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  15  14.5'  16  20  20  31  40  40  40  40  40  40  40  40  40  4				<u> </u>
Equipment used  Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  15  14.5'  16  20  20  31  40  40  40  40  40  40  40  40  40  4	Casing type/dia. (iii)			⊢ ا <u>ڐ</u> ا
Equipment used  Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  15  14.5'  16  20  20  31  40  40  40  40  40  40  40  40  40  4	CASING DEDEODATING			<u> </u>
Number of perforations/foot Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of bentonite used (lbs.)  Type I & II  Quantity of bentonite used (lbs.)	Equipment used		15	
Size of perforations Interval perforated  GROUTING Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) Quantity of bentonite used (lbs.) 3.9 lbs				14.5
Interval perforated  GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)				$\rightarrow$
GROUTING Interval grouted (FBLS)  # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.)  Cement type Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  3.9 lbs				$\dashv$
Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) 3.9 lbs	Interval perforated		1	_
Interval grouted (FBLS) # of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.) 3.9 lbs	CROLITING		20	_
# of batches prepared For each batch record: Quantity of water used (gal.) Quantity of cement used (lbs.) Cement type Quantity of bentonite used (lbs.)  Quantity of bentonite used (lbs.)  3.9 lbs		[a	20	_
For each batch record:  Quantity of water used (gal.)  Quantity of cement used (lbs.)  Cement type  Quantity of bentonite used (lbs.)  3.9 lbs		0 to 14.5		_
Quantity of water used (gal.)  Quantity of cement used (lbs.)  Cement type  Quantity of bentonite used (lbs.)  3.9 lbs		1		_
Quantity of cement used (lbs.)  Cement type  Quantity of bentonite used (lbs.)  3.9 lbs				$\dashv$
Cement type Quantity of bentonite used (lbs.)  Type I & II  3.9 lbs				_
Quantity of bentonite used (lbs.) 3.9 lbs				-
				_
		3.9 lbs		$\dashv$
Quantity of calcium chloride used (lbs.)				$\dashv$
Volume of grout prepared (gal.)				
Volume of grout used (gal.) 2.8	Volume of grout used (gal.)	2.8	J	
			1	
COMMENTS: Grouted in place. SVE well. Dry. No water. * Sketch in all relevant decommissioning data, including:	COMMENTS: Grouted in place. SVE	well. Dry. No water.	* Sketch in a	all relevant decommissioning data, including:
interval overdrilled, interval grouted, casing left in hole,		925F	interval ove	erdrilled, interval grouted, casing left in hole,
well stickup, etc.	A		well stickup	p, etc.

11-8-11

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: SVE 2
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING	DATA		WELL SCHEMA	ATIC*
(Fill in all that appl	y)	Depth		
		(feet)		
<u>OVERDRILLING</u>		0		
Interval Drilled			Concrete	7 11
Drilling Method(s)			_	1.4'
Borehole Dia. (in.)			to surface	
Temporary Casing Installed? (y/n)			$\neg$	3 /
Depth temporary casing installed		5	$\neg$	2" PVC
Casing type/dia. (in.)				
Method of installing			$\neg$	<del> </del>
			$\neg$	5
CASING PULLING		9	7	=
Method employed		10	$\neg$	M M
Casing retrieved (feet)				Cement/Bentonite
Casing type/dia. (in)			$\neg$	<u>  a</u>
				<del>[</del> . ]
CASING PERFORATING				७
Equipment used		15		
Number of perforations/foot				15.3'
Size of perforations				
Interval perforated			$\neg$	
GROUTING		20		
Interval grouted (FBLS)	0 to 15.3			
# of batches prepared	1			
For each batch record:				
Quantity of water used (gal.)	7.8			
Quantity of cement used (lbs.)	94			
Cement type	Type I & II			
Quantity of bentonite used (lbs.)	3.9 lbs			
Quantity of calcium chloride used (lbs.)				
Volume of grout prepared (gal.)	10			
Volume of grout used (gal.)	2.9			
		_		
COMMENTS: Grouted in place. SVE	well. Dry. No water.	* Sketch in a	all relevant decommissioning	g data, including:
		interval ove	erdrilled, interval grouted, ca	asing left in hole,
		well stickup		3.55
		1	r,	

Department Representative

11-8-16



Site Name: Scott Rotary Seal	Well I.D.: SVE 3
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING	DATA		WELL SCHEMA	TIC*
(Fill in all that appl	y)	Depth		
		(feet)		
OVERDRILLING		0		
Interval Drilled			Concrete	7 1 21
Drilling Method(s)				1.2'
Borehole Dia. (in.)			to surface	L_L
Temporary Casing Installed? (y/n)			$\neg$	Ja K
Depth temporary casing installed		5		2" PVC
Casing type/dia. (in.)			-	
Method of installing			-	[분]
The time of mistanning			$\dashv$	5
CASING PULLING			$\dashv$	=
Method employed		10	$\dashv$	8
Casing retrieved (feet)			$\dashv$	Cement/Bentonite
Casing type/dia. (in)			$\dashv$	<del> </del>
cusing type dia. (iii)			$\dashv$	Ε
CASING PERFORATING			$\dashv$	8
Equipment used		15	-	
Number of perforations/foot			$\dashv$	15.3'
Size of perforations			$\dashv$	10.0
Interval perforated			$\dashv$	
mervar periorated			$\dashv$	
GROUTING		20	$\dashv$	
Interval grouted (FBLS)	0 to 15.3		-	
# of batches prepared	1		$\dashv$	
For each batch record:			-	
Quantity of water used (gal.)	7.8		$\exists$	
Quantity of cement used (lbs.)	94			
Cement type	Type I & II		7	
Quantity of bentonite used (lbs.)	3.9 lbs		$\neg$	
Quantity of calcium chloride used (lbs.)	0.0 120		$\neg$	
Volume of grout prepared (gal.)	10		$\neg$	
Volume of grout used (gal.)	2.8		$\neg$	
	12.0		_	
COMMENTS: Grouted in place. SVE	well Dry No water	* Sketch in a	all relevant decommissioning	data including
Glouted III place, SVE	well. Dry. NO Water.	1		
		2000 2000 20	erdrilled, interval grouted, ca	ising left in noie,
		well stickup	p, etc.	

Department Representative

11-8-16



Site Name: Scott Rotary Seal	Well I.D.: SVE 4
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
-	Date: 10/18/16

DECOMMISSIONING	DATA		WELL SCHEMAT	TC*
(Fill in all that appl	y)	Depth		
		(feet)		
OVERDRILLING		0		
Interval Drilled			Concrete	7
Drilling Method(s)			1	1.6'
Borehole Dia. (in.)			to surface	1 ST 5554,755
Temporary Casing Installed? (y/n)			<b>–</b> 1	ž K
Depth temporary casing installed		5	- 1	2" PVC
Casing type/dia. (in.)		ss	<b>–</b> 1	0
Method of installing			-	. <u>≅</u>
Wiethod of mistaring			$\dashv$ $\mid$	P
CASING PULLING			$\dashv$ $\mid$	힏
Method employed		10	$\dashv$ $\mid$	Se Se
Casing retrieved (feet)	<u> </u>	<del></del>	- 1	5
Casing type/dia. (in)			<b>⊣</b>	[ ]
Casing type/dia. (in)			$\dashv$ $\mid$	ř
CASING DEDECT ATING			-	Cement/Bentonite
CASING PERFORATING Equipment used		15	$\dashv$ $\mid$	~
1 * *			-	
Number of perforations/foot			→ '	15.6'
Size of perforations			_	
Interval perforated		1		
CROLIER IC		20		
GROUTING		20	_	
Interval grouted (FBLS)	0 to 15.6			
# of batches prepared	1			
For each batch record:				
Quantity of water used (gal.)	7.8			
Quantity of cement used (lbs.)	94			
Cement type	Type I & II			
Quantity of bentonite used (lbs.)	3.9 lbs			
Quantity of calcium chloride used (lbs.)				
Volume of grout prepared (gal.)	10			
Volume of grout used (gal.)	2.8			
	•	-		
COMMENTS: Grouted in place. SVE	well Dry No water	* Sketch in a	all relevant decommissioning d	lata_including:
Crodica in place. OVE	Woll. Dry. 140 Water.	1	erdrilled, interval grouted, casi	
		1		ing rett in note,
$\wedge$		well stickup	p, etc.	

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: SVE 5
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING	DATA		WELL SCHEMATIC*	
(Fill in all that appl	y)	Depth		
		(feet)		
OVERDRILLING		0		
Interval Drilled			0 11 7	
Drilling Method(s)			Soil 10.8'	
Borehole Dia. (in.)			backfill	
Temporary Casing Installed? (y/n)				
Depth temporary casing installed		5	2" P	VC
Casing type/dia. (in.)				
Method of installing			-    <u>#</u>	
Wethod of mistaning			-   5	
CASING PULLING			⊢ [[1]	
Method employed		10	- I&I	
Casing retrieved (feet)			· <b>-</b>    \$	
Casing type/dia. (in)			<u>[</u>	
Casing type/dia. (iii)			-    <u>ĕ</u>	
CASING PERFORATING			Cement/Bentonite	
Equipment used		15	$\dashv$ $ $ $ $	
Number of perforations/foot			· <b>-</b>       <sub>45.01</sub>	
Size of perforations			15.8'	
Interval perforated			$\dashv$	
Interval perforated			$\dashv$	
GROUTING		20	$\dashv$	
Interval grouted (FBLS)	0 to 15.8		· <del>- </del>	
# of batches prepared	1		$\dashv$	
For each batch record:			-	
Quantity of water used (gal.)	7.8		$\dashv$	
Quantity of cement used (lbs.)	94		$\dashv$	
Cement type	Type I & II		· <del>- </del>	
Quantity of bentonite used (lbs.)	3.9 lbs		_	
Quantity of calcium chloride used (lbs.)	0.0 100		_	
Volume of grout prepared (gal.)	10		-	
Volume of grout used (gal.)	3		-	
(8411)	10		. <b>_</b>	
COMMENTS: Grouted in place SVF	well Day Newster	* Skatab in	all salayant decommissioning data including	
COMMENTS: Grouted in place. SVE	well. Dry. No water.	1	all relevant decommissioning data, including:	
		1	verdrilled, interval grouted, casing left in hole,	
A /		well sticku	ıp, etc.	

11-2-16

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: SVE 6
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING	DATA		WELL	SCHEMA'	TIC;	k
(Fill in all that appl	y)	Depth				
		(feet)				
<u>OVERDRILLING</u>		0				
Interval Drilled			7	0 - 11	7	
Drilling Method(s)		- T		Soil /	-	1.1'
Borehole Dia. (in.)				backfill	ᆚ	
Temporary Casing Installed? (y/n)					ΙŽ	
Depth temporary casing installed		5	$\neg$		Grout	`2" PVC
Casing type/dia. (in.)			$\neg$			
Method of installing					#	
Triculou of mistaring			$\neg$		6	
CASING PULLING			-		Ħ	
Method employed		10	$\neg$		Be	
Casing retrieved (feet)			_		Cement/Bentonite	
Casing type/dia. (in)			-		l	1
casing type aid. (iii)		[	$\dashv$		E	
CASING PERFORATING			$\dashv$		ပ္ပ	
Equipment used		15	$\dashv$		_	
Number of perforations/foot			-			14.7'
Size of perforations			-			14.7
Interval perforated			$\dashv$			
Interval periorated			$\dashv$			
GROUTING		20	$\dashv$			
Interval grouted (FBLS)	0 to 14.7		-			
# of batches prepared	1		-			
For each batch record:	L		-			
Quantity of water used (gal.)	7.8		-			
Quantity of cement used (lbs.)	94		-			
Cement type	Type I & II		-			
Quantity of bentonite used (lbs.)	3.9 lbs		-			
Quantity of calcium chloride used (lbs.)	0.5 105		$\dashv$			
Volume of grout prepared (gal.)	10		$\dashv$			
Volume of grout used (gal.)	2.5		-			
er Brear and (Barr)	L.J		_			
COMMENTS: Organization along OVE	well Day Nester	* Cleatab :-	II rolovent d	laaammi!!	dot-	naludina
COMMENTS: Grouted in place. SVE	weil. Dry. No water.	1		lecommissioning		
		interval ove	erdrilled, into	erval grouted, cas	sing lef	tt in hole,
A		well stickup	o, etc.			

11-8-16

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: SVE 7
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/17/16

DECOMMISSIONING DATA (Fill in all that apply)		Depth	WELL SCHEMA	ATIC*
OVERDRILLING		0 (feet)	_	
Interval Drilled			Soil	7
Drilling Method(s)			backfill	0.8'
Borehole Dia. (in.)			Dackilli	19/
Temporary Casing Installed? (y/n)		5	$\dashv$	ច់ \_2" PVC
Depth temporary casing installed			-	a l
Casing type/dia. (in.) Method of installing			-	=
Wethod of histaring			$\dashv$	Cement/Bentonite Grout
CASING PULLING			$\dashv$	l ge
Method employed		10	$\neg$	=
Casing retrieved (feet)			7	<del> </del>
Casing type/dia. (in)				Ę
				8
CASING PERFORATING		4.5		└── <sup></sup> 13.5'
Equipment used		15		
Number of perforations/foot				
Size of perforations				
Interval perforated		1	4	
GROUTING		20	$\dashv$	
Interval grouted (FBLS)	0 +- 40 5		-	
# of batches prepared	0 to 13.5		$\dashv$	
For each batch record:			1	
Quantity of water used (gal.)	7.8		$\dashv$	
Quantity of cement used (lbs.)	94		$\neg$	
Cement type	Type I & II		_	
Quantity of bentonite used (lbs.)	3.9 lbs		$\neg$	
Quantity of calcium chloride used (lbs.)				
Volume of grout prepared (gal.)	10			
Volume of grout used (gal.)	2.6			
		•		
COMMENTS: Grouted in place. SVE	well. Dry. No water.	* Sketch in al	l relevant decommissio	uding:
		interval over	drilled, interval grouter	ı hole,
Λ ,		well stickup,	etc.	
		1		

Drilling Contractor

11-8-16



Site Name: Scott Rotary Seal	Well I.D.: SVE 8
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA			WELL SCHEMA	TIC*
(Fill in all that apply)		Depth		
		(feet)		
OVERDRILLING		0		
Interval Drilled			Cail	7
Drilling Method(s)			Soil /	1.2'
Borehole Dia. (in.)			backfill	12
Temporary Casing Installed? (y/n)		_		2" PVC
Depth temporary casing installed		5		2" PVC
Casing type/dia. (in.)			$\neg$	∰
Method of installing			$\neg$	6
			$\neg$	본
CASING PULLING			$\neg$	e
Method employed		10		\$
Casing retrieved (feet)			_	8
Casing type/dia. (in)				ΙĒΙ
(,				Cement/Bentonite
CASING PERFORATING				14.7'
Equipment used		15		
Number of perforations/foot			_	
Size of perforations			$\neg$	
Interval perforated				
GROUTING		20		
Interval grouted (FBLS)	0 to 14.7		_	
# of batches prepared	1			
For each batch record:				
Quantity of water used (gal.)	7.8		_	
Quantity of cement used (lbs.)	94		_	
Cement type	Type I & II		$\neg$	
Quantity of bentonite used (lbs.)	3.9 lbs		$\neg$	
Quantity of calcium chloride used (lbs.)	0.0 103		$\neg$	
Volume of grout prepared (gal.)	10		$\neg$	
Volume of grout used (gal.)	2.6		_	
5 (6)	12.0			
COMMENTS: Crouted in place SVE	well Dry Ne water	* Skatch in a	ill relevant decommission	ding:
COMMENTS: Grouted in place. SVE well. Dry. No water.				
		1	erdrilled, interval grouted,	hole,
Λ ,		well stickup	o, etc.	
Hill Fren 11-	8-16			
1/ / / / /	_			

Drilling Contractor



Site Name: Scott Rotary Seal	Well I.D.: SVE 9
Site Location: Olean, NY	Driller: Dale Gramza
Drilling Co.: Nature's Way Environmental	Inspector:
	Date: 10/18/16

DECOMMISSIONING DATA			WELL SCHEMA	TIC*
(Fill in all that apply)		Depth		
, , , , , , , , , , , , , , , , , , , ,		(feet)		
OVERDRILLING		0		
Interval Drilled				7
Drilling Method(s)			Concrete ~	1.4'
Borehole Dia. (in.)			to surface	<u> </u>
Temporary Casing Installed? (y/n)				5
Depth temporary casing installed		5		2" PVC
Casing type/dia. (in.)				<u>¥</u>
Method of installing				6
			$\neg$	본
CASING PULLING			$\neg$	Be
Method employed		10		≩
Casing retrieved (feet)				H
Casing type/dia. (in)				Cement/Bentonite Grout
				ပြီ
CASING PERFORATING		4.5		1 1 4 61
Equipment used		15		└── 14.6'
Number of perforations/foot				
Size of perforations				
Interval perforated				
		20		
GROUTING		20		
Interval grouted (FBLS)	0 to 14.6			
# of batches prepared	1			
For each batch record:				
Quantity of water used (gal.)	7.8			
Quantity of cement used (lbs.)	94		_	
Cement type	Type I & II		_	
Quantity of bentonite used (lbs.)	3.9 lbs		_	
Quantity of calcium chloride used (lbs.)				
Volume of grout prepared (gal.)	10			
Volume of grout used (gal.)	2.9			
COLOR FENTE		1		
COMMENTS: Grouted in place. SVE	well. Dry. No water.	* Sketch in a	Ill relevant decommissio	uding:
		interval ove	erdrilled, interval grouted	ı hole,
,		well stickup	o, etc.	

Drilling Ortfactor