TETRA TECH

August 29, 2022

Ms. Rachel K. Savarie, PE
New York State Department of Environmental Conservation (NYSDEC)
625 Broadway
Albany, New York 12233-7014

Re: Monitoring Well Decommissioning Report
Former Union Fork & Hoe Site
253 East Main Street
Frankfort, New York 13340
NYSDEC Site No. 6-2-011
Tetra Tech Project #194-1197-0002

Dear Rachel:

On behalf of AMES Companies, Tetra Tech, Inc. (Tetra Tech) has completed the decommissioning of 15 monitoring wells in accordance with New York State Department of Environmental Conservation (NYSDEC), Division of Environmental Remediation *CP-43: Groundwater Monitoring Well Decommissioning Policy, November 2009*. These wells were either damaged or not part of the routine sampling program (last sampled in 2013). This letter summarizes monitoring well decommissioning activities.

SITE BACKGROUND

The former Union Fork & Hoe (UFH) facility is located at 253 East Main Street in Frankfort, New York. As shown in **Figure 1,** the Site is approximately rectangular in shape, and bounded by East Orchard Street to the northwest, East Main Street to the southwest, residential and commercial uses to the northwest, a former railroad easement on the northeast side, and industrial and commercial uses on the southeast side. The Site was historically used for manufacturing of hoes, shovels, forks and other hand tools by Union Tools (purchased by Ames True Temper in 2006) for more than 100 years. Manufacturing processes conducted at the Site included forging, stamping, painting, varnishing and milling. Operations ceased in December 2006 and all remaining Site buildings were demolished in 2012.

WELL DECOMMISSIONING

The decommissioning method to be employed was Grouting In-Place, as described in Section 2.1 of CP-43. The wells were abandoned by pulling the casing and grouting via tremie pipe with a cement/bentonite mix into the well, from the bottom up. The well decommissioning was conducted by Cascade Environmental (a licensed NY driller) and overseen by geologists from Tetra Tech. The wells that were decommissioned are discussed below and are shown on **Figure 2**.

Tetra Tech, Inc
One Oxford Valley, Suite 200A, Langhorne, PA 19047
Tel (215)-702-4000 I Fax (215) 702-4045 I www.tetratech.com

On June 28, 2021, the following wells were decommissioned:

- 22-SB-02, DEC-DW-01, DEC-SW-05 and DEC-IW-02.

On June 29, 2021, the following wells were decommissioned:

- DEC-SW-13, DEC-DW-02, 212-SB-02, 214-SB-4 and DEC-IW-01.

On July 19, 2022, the following off-site wells and one on-site well were decommissioned:

- DEC-SW-09, DEC-SW-04, MW-101D, 215-SB-03, DEC-IW-04 and MW-103D.

Of the remaining wells planned for decommissioning, one well (DEC-SW-02) is beneath a pile of debris and could not be accessed, one well (DEC-SW-12) was determined to have been previously decommissioned, and five wells (OW-07, OW-06, RW-2, OW-05, and OW-04) are located beneath the site cover and are not accessible.

See **Attachment 1** for the Monitoring Well Closure Logs.

Thank you for the opportunity to support the monitoring well decommissioning work. Please feel free to contact me at (973) 630-8132 or via email at Robert.Cantagallo@tetratech.com, should you have questions or require additional information.

Sincerely,

Tetra Tech, Inc.

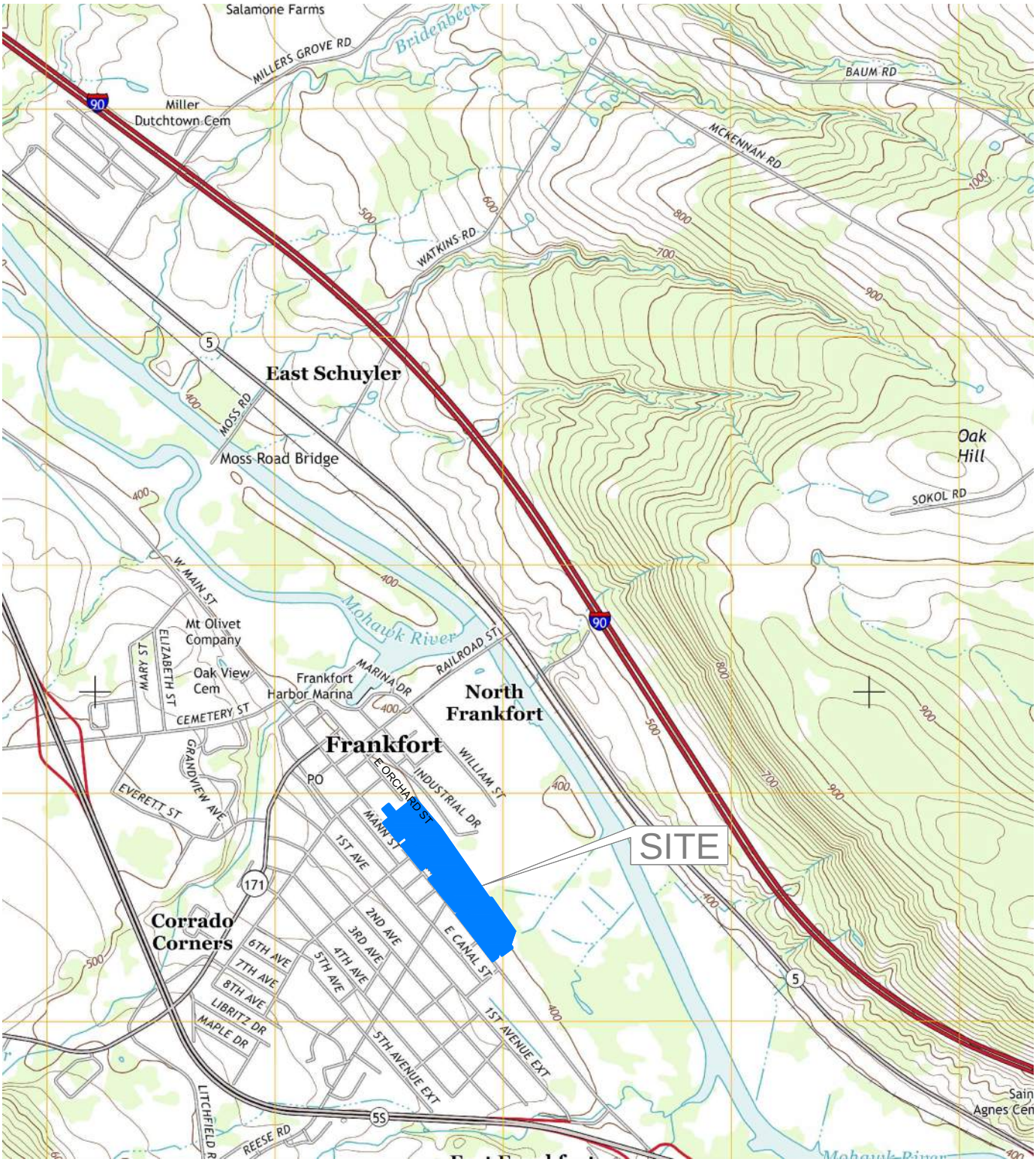
Robert C. Cantagallo

Robert Cantagallo, CHMM
Senior Project Manager

CC: Mr. David Sweet, Griffon Corporation
Mr. Arul Ayyaswami, Tetra Tech

Enclosures

Figure 1 – Site Location Map
Figure 2 – Monitoring Wells Plan
Attachment 1 – Monitoring Well Closure Logs



N

APPROXIMATE SCALE IN FEET

0 2,000 4,000

SOURCE: THE USGS STORE; ILION, NY, QUADRANGLE; 2013

FORMER UNION FORK AND HOE FACILITY

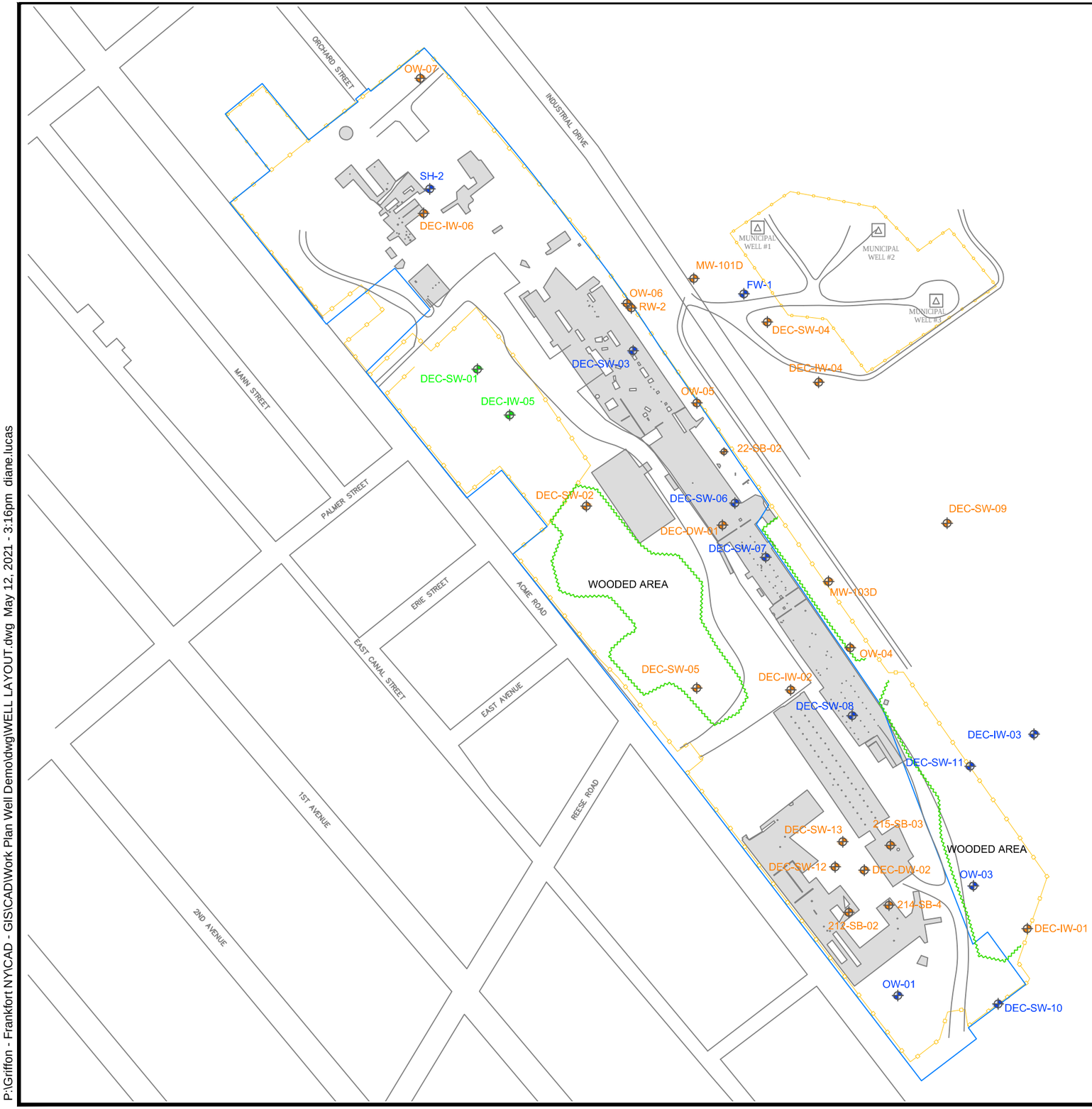
SITE LOCATION MAP

253 EAST MAIN STREET FRANKFORT, NEW YORK

PREPARED BY:
TETRA TECH, INC.

PROJECT NUMBER	APPROVED BY	DRAWN BY	DATE	FIGURE
194-7317	GN	WRI	JULY 2020	1

P:\5382-Griffon - Frankfort NY\CAD\FIGURE I - SITE LOCATION.dwg Sep 29, 2015 - 5:08pm rick.ikemoto



LEGEND

- PROPERTY BOUNDARY
- FENCE LINE
- TREE LINE
- MUNICIPAL WELL
- EXISTING CONCRETE PAD
- WELL ID — WELL LOCATION
- WELL ID — WELLS PROPOSED TO BE ABANDONED
- WELL ID — WELLS ABANDONED IN 2019

N

APPROXIMATE SCALE IN FEET

0 250 500

NOTES:
1. ALL LOCATIONS ARE APPROXIMATE.

SOURCES:
1. BASE MAP FROM BRADBURNE, BRILLER & JOHNSON, LLC (2011).
2. SITE BOUNDARY FROM "REAL PROPERTY TAX MAP", PREPARED FOR COUNTY OF HERKIMER UNDER SUPERVISION OF ASSESSMENT AND REAL PROPERTY TAX SERVICE, JAMES SPANFELNER, DIRECTOR. PREPARED BY L. ROBERT KIMBALL, CONSULTING ENGINEERS, EBENSBURG, PA.

FORMER UNION FORK AND HOE FACILITY

MONITORING WELLS PLAN

253 EAST MAIN STREET — FRANKFORT, NEW YORK

PREPARED BY:
TETRA TECH, INC.

PROJECT NUMBER	APPROVED BY	DRAWN BY	DATE	FIGURE
194-5382	RC	JRL/DL	MAY 2021	2

P:\Griffon - Frankfort NY\CAD - GIS\CAD\Work Plan Well Demo\dwg\WELL LAYOUT.dwg May 12, 2021 - 3:16pm diane.lucas

ATTACHMENT 1
MONITORING WELL CLOSURE LOGS

FIGURE 3

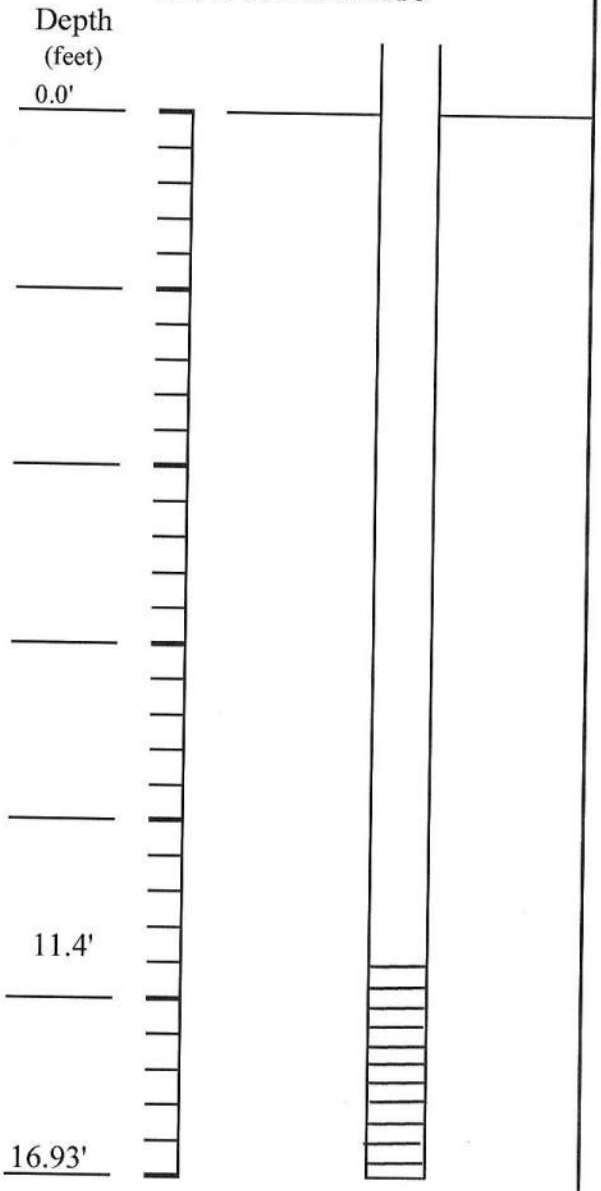
WELL DECOMMISSIONING RECORD

Site Name: Former Union Fork & Hoe Site	Well I.D.: MW-101D
Site Location: Frankfort, New York	Driller: Roger Buley
Drilling Co.: Cascade	Inspector: B. Kudla-Williams
	Date: July 18, 2022

DECOMMISSIONING DATA
(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)	16.93'
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	8 gallons
Quantity of cement used (lbs.)	94 lbs
Cement type	Type III Portland
Quantity of bentonite used (lbs.)	4 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	1 gallon

WELL SCHEMATIC*



COMMENTS: Well filled with grout to just below ground surface. pvc casing left in ground. Topsoil and grass seed added at ground surface.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

CR
Drilling Contractor

Roger Buley
Department Representative

FIGURE 3

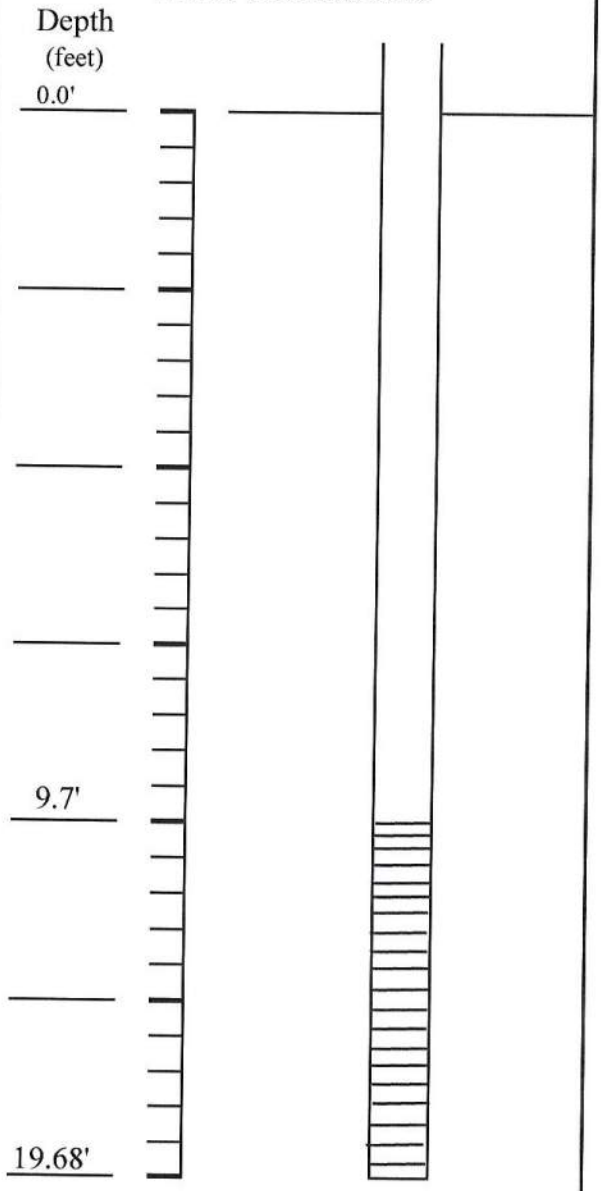
WELL DECOMMISSIONING RECORD

Site Name: Former Union Fork & Hoe Site	Well I.D.: DEC-SW-09
Site Location: Frankfort, New York	Driller: Roger Buley
Drilling Co.: Cascade	Inspector: B. Kudla-Williams
	Date: July 18, 2022

DECOMMISSIONING DATA
(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)	19.68'
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	8 gallons
Quantity of cement used (lbs.)	94 lbs
Cement type	Type III Portland
Quantity of bentonite used (lbs.)	4 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	3.5 gallons

WELL SCHEMATIC*



COMMENTS: Well filled with grout to just below ground surface. pvc casing left in ground. Topsoil and grass seed added at ground surface.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

CRS
Drilling Contractor

Department Representative

FIGURE 3

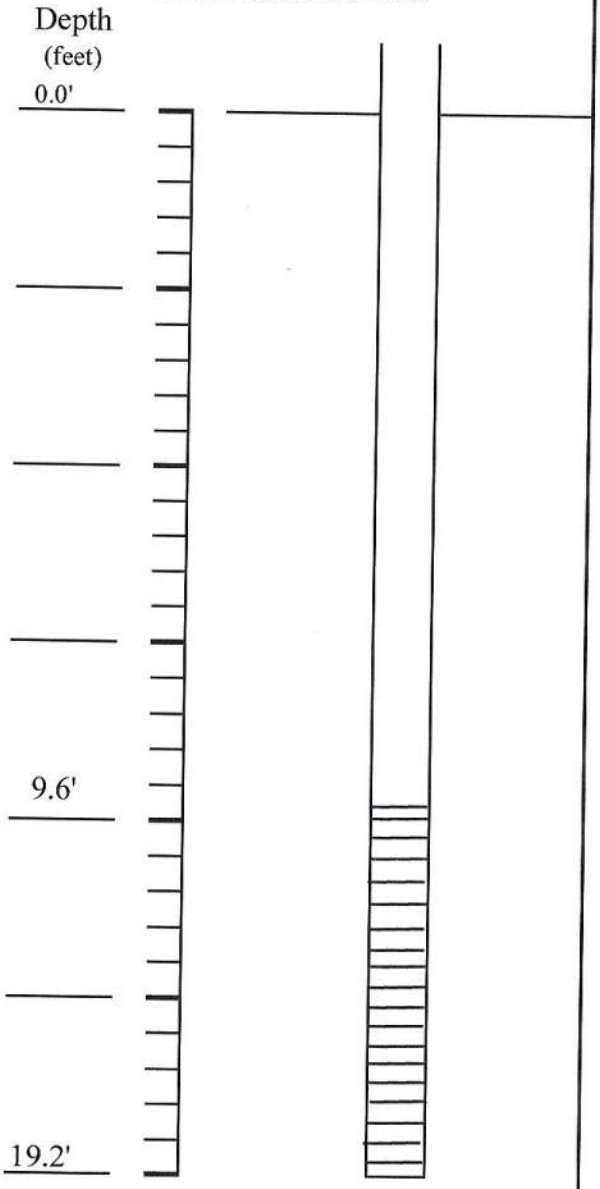
WELL DECOMMISSIONING RECORD

Site Name: Former Union Fork & Hoe Site	Well I.D.: DEC-SW-04
Site Location: Frankfort, New York	Driller: Roger Buley
Drilling Co.: Cascade	Inspector: B. Kudla-Williams
	Date: July 18, 2022

DECOMMISSIONING DATA
(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)	19.2'
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	8 gallons
Quantity of cement used (lbs.)	94 lbs
Cement type	Type III Portland
Quantity of bentonite used (lbs.)	4 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	3.5 gallons

WELL SCHEMATIC*



COMMENTS: Well filled with grout to just below ground surface. pvc casing left in ground. Topsoil and grass seed added at ground surface.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

CRS
Drilling Contractor

Roger Buley
Department Representative

FIGURE 3

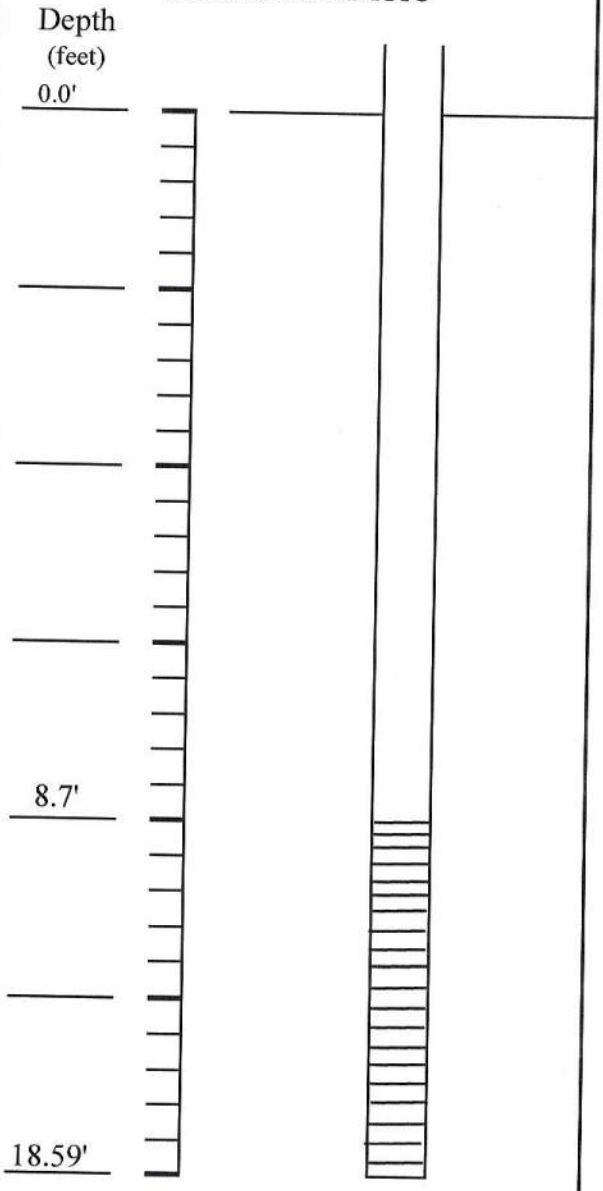
WELL DECOMMISSIONING RECORD

Site Name: Former Union Fork & Hoe Site	Well I.D.: 215-SB-03
Site Location: Frankfort, New York	Driller: Roger Buley
Drilling Co.: Cascade	Inspector: B. Kudla-Williams
	Date: July 19, 2022

DECOMMISSIONING DATA
(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)	18.59'
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	8 gallons
Quantity of cement used (lbs.)	94 lbs
Cement type	Type III Portland
Quantity of bentonite used (lbs.)	4 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	1 gallon

WELL SCHEMATIC*



COMMENTS: Well filled with grout to ground surface. Well located in cement pad (former building).

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

CRS
Drilling Contractor

Roger Buley
Department Representative

FIGURE 3

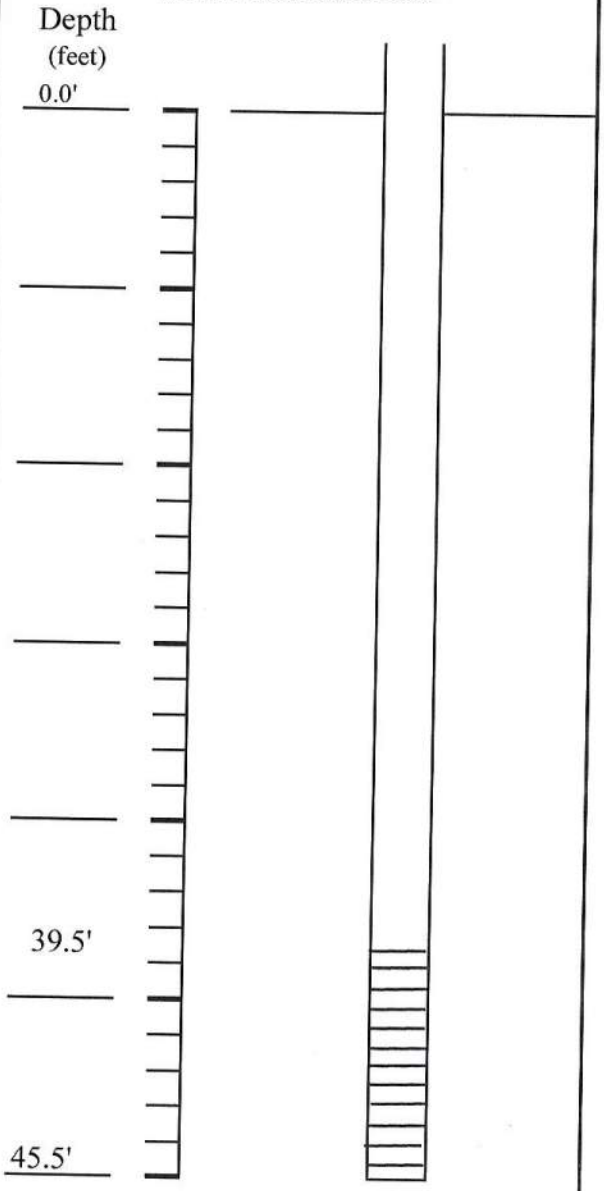
WELL DECOMMISSIONING RECORD

Site Name: Former Union Fork & Hoe Site	Well I.D.: DEC-IW-04
Site Location: Frankfort, New York	Driller: Roger Buley
Drilling Co.: Cascade	Inspector: B. Kudla-Williams
	Date: July 18, 2022

DECOMMISSIONING DATA
(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)	45.5'
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	8 gallons
Quantity of cement used (lbs.)	94 lbs
Cement type	Type III Portland
Quantity of bentonite used (lbs.)	4 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	7.4 gallons

WELL SCHEMATIC*



COMMENTS: Well filled with grout to just below ground surface. pvc casing left in ground. Topsoil and grass seed added at ground surface.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

CGS
Drilling Contractor

Department Representative

FIGURE 3

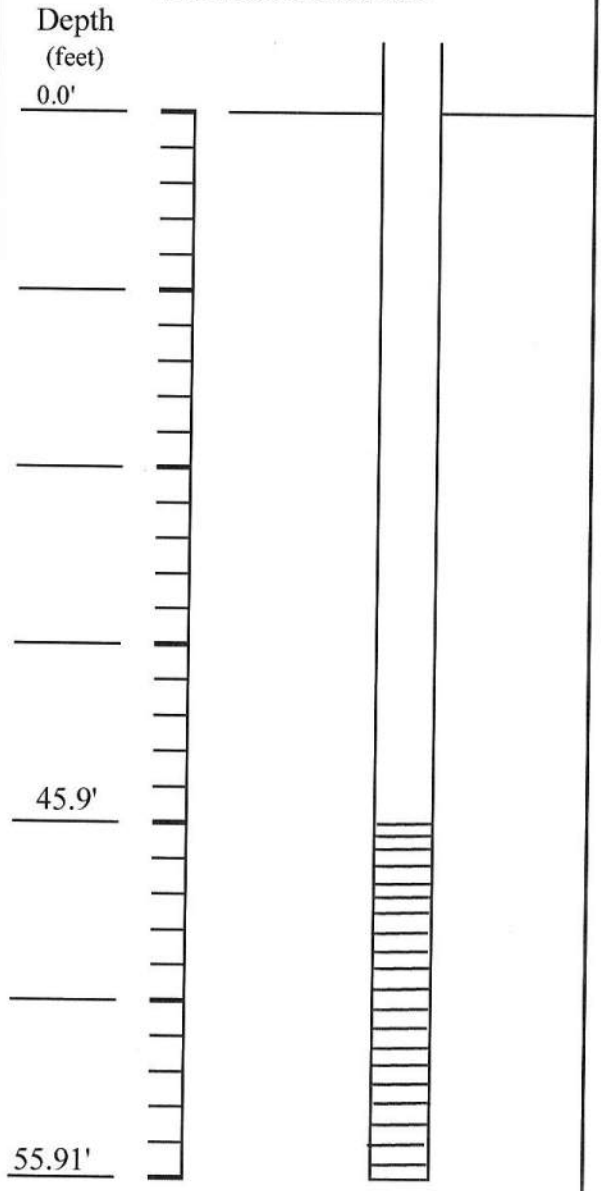
WELL DECOMMISSIONING RECORD

Site Name: Former Union Fork & Hoe Site	Well I.D.: MW-103D
Site Location: Frankfort, New York	Driller: Roger Buley
Drilling Co.: Cascade	Inspector: B. Kudla-Williams
	Date: July 19, 2022

DECOMMISSIONING DATA
(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)	55.91'
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	8 gallons
Quantity of cement used (lbs.)	94 lbs
Cement type	Type III Portland
Quantity of bentonite used (lbs.)	4 lbs
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	9 gallons

WELL SCHEMATIC*



COMMENTS: Well filled with grout to just below ground surface. pvc casing left in ground. Filled to ground surface with surrounding soil. Well located in vegetated field.

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

CRS

Drilling Contractor

Roger Buley

Department Representative

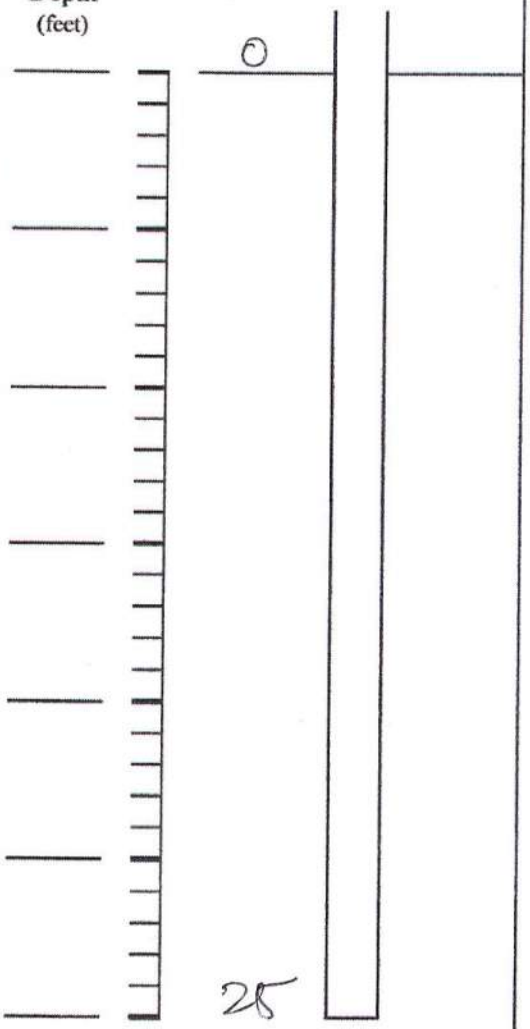
FIGURE 3
WELL DECOMMISSIONING RECORD

Site Name:	Well I.D.: dec - sw - 13
Site Location: Frank Road	Driller: Blake Pasky
Drilling Co.: Cascade	Inspector:
	Date: 6/29/21

DECOMMISSIONING DATA
(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	Tool
Number of perforations/foot	3
Size of perforations	1"
Interval perforated	0-5
GROUTING	
Interval grouted (FBLS)	0-25
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	4
Quantity of cement used (lbs.)	47
Cement type	Portland
Quantity of bentonite used (lbs.)	1.5
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	7
Volume of grout used (gal.)	5

WELL SCHEMATIC*



COMMENTS:

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Cascade
Drilling Contractor

Blake Pasky
Department Representative

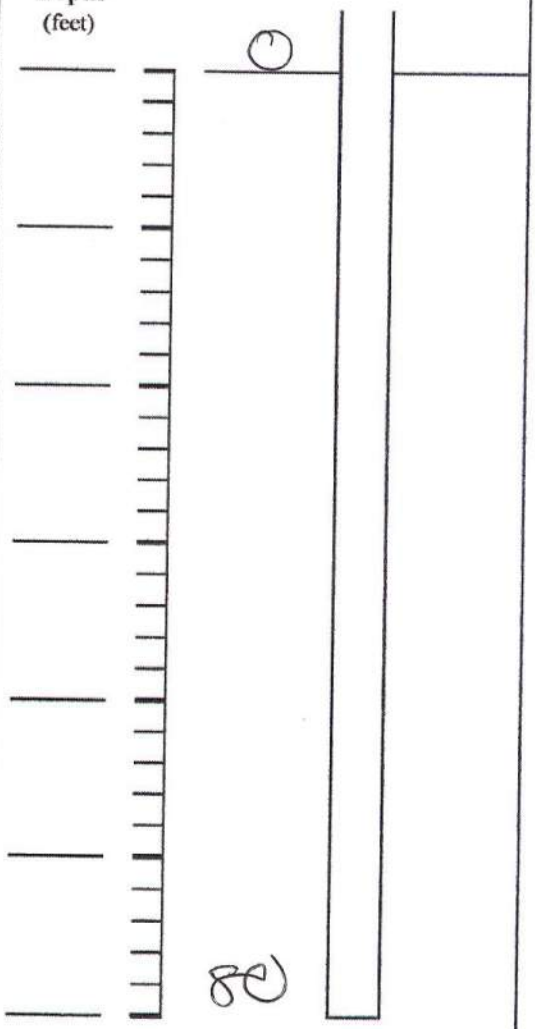
FIGURE 3
WELL DECOMMISSIONING RECORD

Site Name:	Well I.D.: TOC - dw - 02
Site Location: Frank Ford.	Driller: Blake
Drilling Co.: Cascade	Inspector:
	Date: 6/29/21

DECOMMISSIONING DATA
(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	Tool
Number of perforations/foot	3
Size of perforations	7"
Interval perforated	0-5
GROUTING	
Interval grouted (FBLS)	0-80
# of batches prepared	3
For each batch record:	
Quantity of water used (gal.)	4
Quantity of cement used (lbs.)	47
Cement type	Portland
Quantity of bentonite used (lbs.)	10
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	21
Volume of grout used (gal.)	16

WELL SCHEMATIC*



COMMENTS:

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Cascade
Drilling Contractor

Blake Purky
Drilling Representative

FIGURE 3

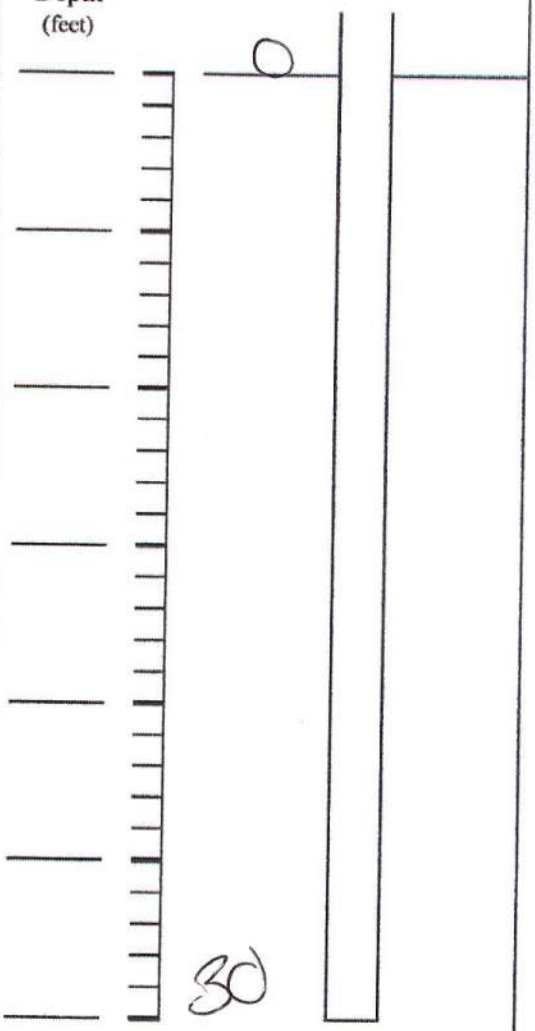
WELL DECOMMISSIONING RECORD

Site Name:	Well I.D.: 212-55-02
Site Location: Fort Fort	Driller: Blake Purdy
Drilling Co.: Cascade	Inspector:
	Date: 6/29/21

DECOMMISSIONING DATA
(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	Tool
Number of perforations/foot	3
Size of perforations	1"
Interval perforated	0-5
GROUTING	
Interval grouted (FBLS)	0-30
# of batches prepared	2
For each batch record:	
Quantity of water used (gal.)	7
Quantity of cement used (lbs.)	47
Cement type	Portland
Quantity of bentonite used (lbs.)	5
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	13
Volume of grout used (gal.)	8

WELL SCHEMATIC*



COMMENTS:

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Cascade
Drilling Contractor

Blake Purdy
Department Representative

FIGURE 3

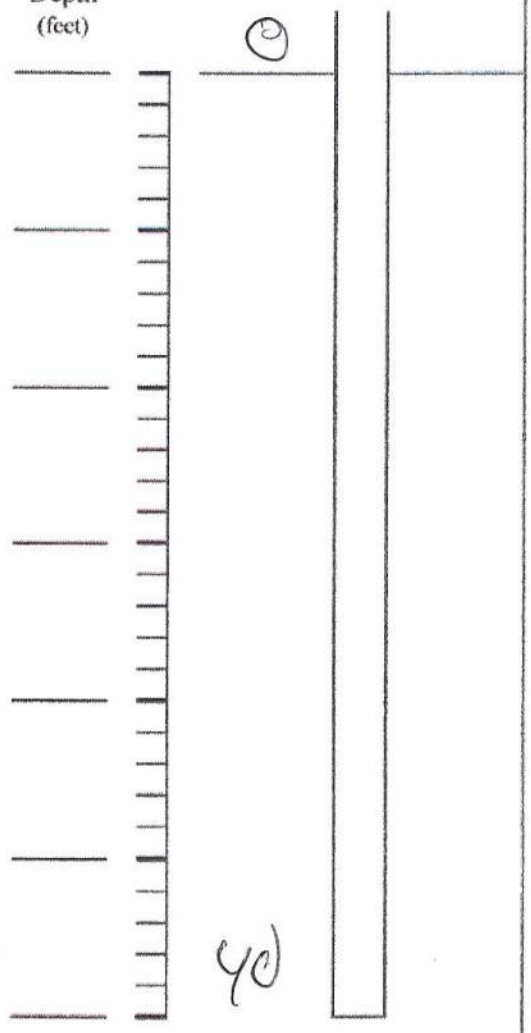
WELL DECOMMISSIONING RECORD

Site Name:	Well I.D.: 214 SS 4
Site Location: Frank Ent	Driller: Blake Purdy
Drilling Co.: Cascade	Inspector:
	Date: 6/29/21

DECOMMISSIONING DATA
(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	Rod
Number of perforations/foot	3
Size of perforations	1"
Interval perforated	0-5
GROUTING	
Interval grouted (FBLS)	0-40
# of batches prepared	3
For each batch record:	
Quantity of water used (gal.)	4
Quantity of cement used (lbs.)	47
Cement type	Portland
Quantity of bentonite used (lbs.)	18
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	16
Volume of grout used (gal.)	9

WELL SCHEMATIC*



COMMENTS:

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Cascade
Drilling Contractor

Blake Purdy
Department Representative

FIGURE 3

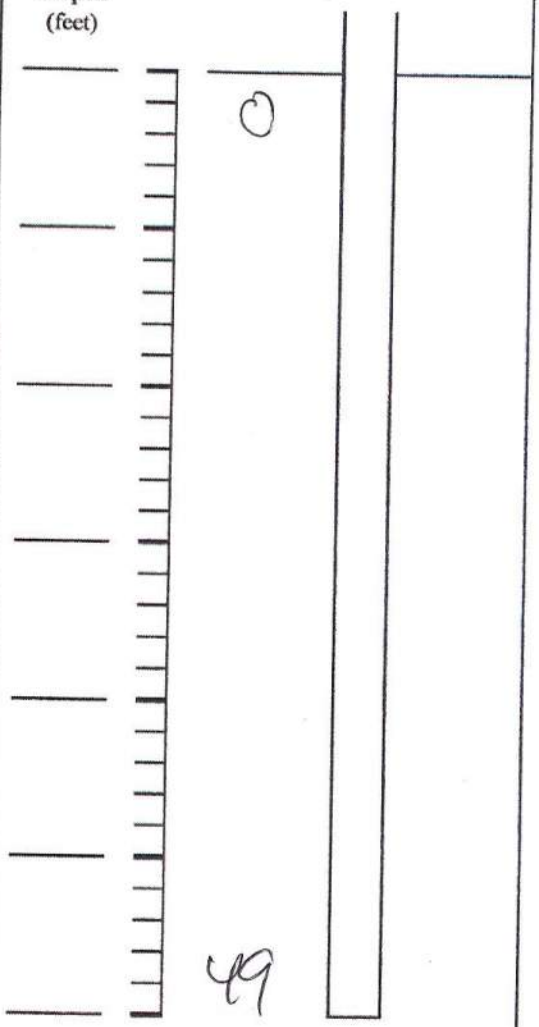
WELL DECOMMISSIONING RECORD

Site Name:	Well I.D.: dec-mw-01
Site Location: Bellevue	Driller: Blake
Drilling Co.: Cascade	Inspector:
	Date: 6/29/21

DECOMMISSIONING DATA
(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	Tool
Number of perforations/foot	3
Size of perforations	1/1
Interval perforated	0-5
GROUTING	
Interval grouted (FBLS)	0-49
# of batches prepared	3
For each batch record:	
Quantity of water used (gal.)	4
Quantity of cement used (lbs.)	47
Cement type	Portland
Quantity of bentonite used (lbs.)	1.5
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	1.9
Volume of grout used (gal.)	1.2

WELL SCHEMATIC*



COMMENTS:

* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Cascade
Drilling Contractor

Department Representative