KHEOPS
ARCHITECTURE, ENGINEERING & SURVEY, DPC

Tel (716) 849-8739
Fax (716) 856-0981
www.kheopsdpc.com

300 Pearl Street
Suite 100
Buffalo, NY 14202

2012.0428.02
December 20, 2013

Erie County Industrial Development Agency
95 Perry Street, Suite 403
Buffalo, NY 14203

Attn: Mr. Philip Riggs
Facilities, Rail & Site Management

Re: River Road Well Decommissioning
3445 River Road, Tonawanda, NY 14150

Dear Mr. Riggs:

This letter report presents information relating to the decommissioning of the remaining groundwater monitoring wells (a total of 7) at 3445 River Road, Tonawanda, NY (Project Site). KHEOPS Architecture, Engineering & Survey, DPC (KHEOPS) performed inspection services on behalf of the Erie County Industrial Development Agency (ECIDA). The well decommissioning activities were performed on December 4 and 5, 2013.

GROUNDWATER MONITORING WELL DECOMMISSIONING PROCEDURE

Groundwater monitoring well decommissioning was performed in accordance with the New York State Department of Environmental Conservation's (NYSDEC) *CP-43: Groundwater Monitoring Well Decommissioning Policy* issued November 3, 2009. The following is a summary of the policy as it relates to the decommissioning activities performed at the Project Site:

Preparation

Prior to commencement of work at the site, all available historical well information should be obtained and reviewed. Well construction details including, but not limited to, depth of well and screening interval should be identified, if possible. GPS coordinates and pertinent labeling may aid in field identification of the wells to be decommissioned.

Prior to decommissioning activities, a field inspection should be completed in order to verify the construction and condition of each well. The inspection should include a documentation of the existing conditions of the wells. The Monitoring Well Field Inspection Logs completed during this well decommissioning are included in this report as Attachment 1.

Decommissioning Method

The wells documented in this report were all decommissioned by grouting in-place. Grouting in-place is the simplest and most frequently used well decommissioning method and grouting itself is the essential component of all decommissioning methods. The grout seals the borehole and any portion of the monitoring well that may be left in the ground. Grouting in-place involves filling the casing with grout to

a level of five feet below land surface, cutting the well casing at a five-foot depth, and removing the top portion of casing and associated well materials from the ground. The standard grout mixture consists of one 94-pound bag Type I Portland cement, 3.9 pounds powdered bentonite, and 7.8 gallons potable water.

Locating and Setting-Up on the Well

Prior to mobilization to the site, the property owner and other interested parties were notified. Once at the site, the proposed well decommissioning procedures were reviewed and all well locations were verified. Well identification included measurement of the depth of each well to verify that the well depth matched the depth recorded on the well construction log (if available).

Removing the Protective Casing

Generally, unless the protective casing was loose and could be safely lifted off my hand, the monitoring well was filled with grout before removing the outer protective casing. This ensured that the wells were properly sealed regardless of any problems encountered during removal of the protective casing. Steel well casings were removed approximately five feet below land surface so as to be below the frost line and out of the way of any subsequent shallow digging.

Grouting Mixture Procedure

To begin the grout-mixing procedure, the volume of grout required to fill the borehole was calculated. When possible, all of the grout needed for the borehole was mixed at the same time. The grout was mixed until a smooth, homogeneous mixture was achieved.

Grout Placement

Grout was placed in the well from the bottom to the top by the means of a "tremie". A tremie is a pipe, a hose or a tube extending from the grout supply to the bottom of the well. The tremie delivered the grout all the way down through the water column without its being diluted and mixed with the water that was present in the well. The tremie pipe was withdrawn as the well was filled with grout.

After the grout was pumped into the well, the casing remained in the hole. The outer protective casing "stick-up" was removed only after the well had been properly filled with grout. Without allowing the grout to dry, the driller pulled the casing or over-drilled the well.

Backfilling and Site Restoration

The uppermost five feet of the borehole at the land surface was filled with material physically similar to the natural soils. The surface of the borehole was restored to the condition of the area surrounding the borehole.

Documentation and Field Oversight

Copies of the forms used in the field to record the decommissioning construction are included in this report as Attachment 2.

GROUNDWATER MONITORING WELL DETAILS

A total of seven wells were decommissioned at the Project Site on December 4 & 5, 2013. Earth Dimensions, Inc. (ED) was subcontracted by the ECIDA to perform the decommissioning in accordance with the NYSDEC's Groundwater Monitoring Well Decommissioning Policy document. Figure 3-1 shows

the locations of each of the seven wells. It should be noted that one additional well was pulled; however, it had been previously decommissioned and was only pulled by ED. KHEOPS personnel provided supervision and inspection services and documented all activities at the Project Site. Photographs taken during decommissioning activities are included as Attachment 3.

Table 1 (below) summarizes the details of each of the seven wells that were decommissioned at the Project Site.

Table 1: Decommissioned Monitoring Well Details

Well ID	MW-12S	MW-06S	MW-06DD	MW-04S	MW-03D	MW-06D	MW-05S
Location (Coordinates)	17726306E, 4739495N	17669132E, 4759513N	14669127E, 4759513N	17669217E, 4759565N	17669214E, 4759565N	17669153E, 4759660N	17669153E, 4759662N
Well Depth (Feet)	12	22	56.2	10.3	18	23.7	8
Approximate Stick-up (Feet)	1.5	0.5	At ground surface	2	3	3	3.5

Additionally, the well that was pulled that had previously been decommissioned was located on the northeastern property line within a clay berm. The GPS coordinates for this monitoring well are 17669264N, 4759662N.

FIELD CONDITIONS

December 4, 2013

ED personnel, Mr. Phil Riggs of the ECIDA, and KHEOPS personnel met at the Project Site to identify all of the wells on the property and to obtain the well depths and stick-up heights. The Project Site was fairly muddy; therefore, the drilling rig was stuck before work could begin. ED personnel left the Project Site to pick up a smaller drilling rig. KHEOPS personnel performed a detailed inspection of each of the wells at the Project Site. Copies of the Monitoring Well Field Inspection Logs are included as Attachment 1.

All wells were then filled with grout according to the "Grouting in-place" method discussed previously from the NYSDEC's CP-43: Groundwater Monitoring Well Decommissioning Policy. Approximately 25 gallons of the grout material were used to fill the seven monitoring wells on the Project Site according to ED personnel.

Wells MW-06D and MW-05S were the first to be pulled and were located within a small berm along the northeastern property line. MW-05S was too close to overhead power lines and could not be reached with the drilling rig; however, MW-06D was successfully pulled. Mr. Riggs indicated that well MW-05S would have to be removed using an excavator so that the well would be five feet below ground surface.

Well MW-12S was then pulled, along with four bollards that were surrounding the well.

Well MW-06S had a bollard and a large shrub surrounding it that were both removed prior to pulling the well. Well MW-06S was removed successfully.

An Inspector's Daily Report completed by KHEOPS personnel on December 4, 2013 that details the work performed at the Project Site is included in Attachment 4.

December 5, 2013

ED personnel, Mr. Riggs, and KHEOPS personnel met at the Project Site. ED personnel brought a small excavator to dig out well MW-05S. MW-05S was successfully removed along with some debris (scrap metal and some orange fencing material). ED personnel used the excavator to restore the area to the condition of the area surrounding both former wells (MW-06D and MW-05S). ED personnel decided to use the excavator to remove the remaining wells on the Project Site and Mr. Phil Riggs approved this.

Well MW-06DD had a bollard surrounding the well that was removed. During excavation, several pieces of concrete were removed and a concrete slab was discovered. The excavator broke up the concrete and dug around the well until it was approximately five feet below ground surface. ED personnel torched the protective casing and used the excavator to remove it.

Wells MW-04S and MW-03D were removed successfully, as well as three bollards surrounding them.

Finally, ED personnel used the excavator to pull the one remaining well that had been previously decommissioned.

An Inspector's Daily Report completed by KHEOPS personnel on December 5, 2013 that details the work performed at the Project Site is included in Attachment 4.

ED personnel used the excavator to restore the areas where each of the wells were pulled to the condition of the area surrounding them. All debris that was excavated or removed during the decommissioning process was put into one designated pile near the entrance to the Project Site along River Road.

Should you have any questions concerning this submittal, please contact us at your earliest convenience.

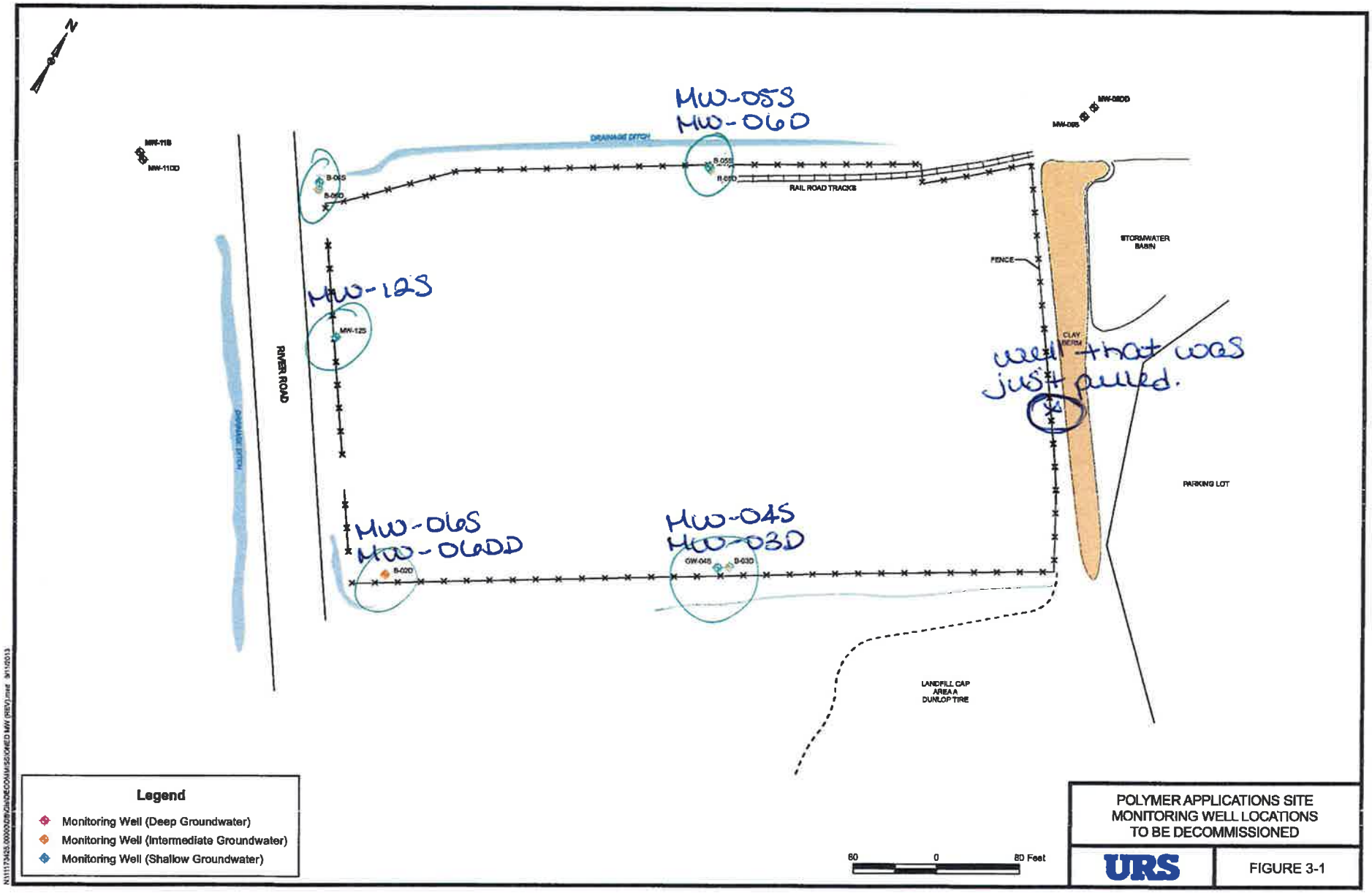
Very truly yours,

KHEOPS, Architecture, Engineering & Survey, DPC

Michelle L. Bodewes, PE, ENV SP
Project Manager

FIGURE 3-1

MONITORING WELL LOCATIONS


N
MW-05S
MW-06D
MW-06DD
MW-11S
MW-11DD
DRAINAGE DITCH
B-05S
B-06D
B-05D
RAIL ROAD TRACKS
STORMWATER BASIN
FENCE
MW-12S
MW-12S
RIVER ROAD
SWAMP DITCH
CLAY BERM
well that was just pulled.
PARKING LOT
MW-06S
MW-06DD
B-02D
MW-04S
MW-03D
GW-04S
B-03D
LANDFILL CAP AREA A DUNLOP TIRE
Legend
Monitoring Well (Deep Groundwater)
Monitoring Well (Intermediate Groundwater)
Monitoring Well (Shallow Groundwater)
60
0
80 Feet
POLYMER APPLICATIONS SITE
MONITORING WELL LOCATIONS
TO BE DECOMMISSIONED
URS
FIGURE 3-1

ATTACHMENT 1

MONITORING WELL FIELD INSPECTION LOGS

FIGURE 1

SITE NAME:

SITE ID.:
INSPECTOR: JG
DATE/TIME: 12/4/13/810
WELL ID.: MW-12S

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-12S

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED:
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): Metal / 1.4'
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 12'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches): 2 inch
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Fair
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: 10'

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Open area near road (River Rd); however a fence is located about 5 feet from well and the area is muddy.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located in an industrial area; however the property itself is currently vacant.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Industrial facilities are on each side of the property.

REMARKS:

FIGURE 1

SITE NAME:

SITE ID.:
INSPECTOR: JLG
DATE/TIME: 12/4/13/0900
WELL ID.: MW-610S

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL I.D. VISIBLE?	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: B-02D

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: N/A
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): Metal/0.5'
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 22'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches): 2"
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Fair
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: 3' from overhead utilities

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Large yellow metal marker around well as well as shrubbery that would make it hard to find in the warm months. Power lines to the South/Southwest.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Located in an industrial area.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Industry/surrounding property.

REMARKS:

FIGURE 1

SITE NAME:

SITE ID.:
INSPECTOR: JLG
DATE/TIME: 12/4/13/915
WELL ID.: MW-26DD

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL I.D. VISIBLE?	~~X~~	X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: N/A

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: N/A
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): @ ground surface
PROTECTIVE CASING MATERIAL TYPE: steel
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 56.2'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches): 2"
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Fair
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: within 10' of overhead utilities

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Corner of property near River Rd - fence along road and overhead utilities. Yellow protector around well to keep it visible since there is no stick-up.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Industrial Area

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Industry around property.

REMARKS:

FIGURE 1

SITE NAME:

SITE ID.:
INSPECTOR: JLG
DATE/TIME: 12/4/13/940
WELL ID.: MW-04S

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: N/A
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): 2'
PROTECTIVE CASING MATERIAL TYPE: Metal/2"
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 103'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches): 2"
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Fair
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Open area near other wells - powerlines within a few feet of location & powerlines and a fence nearby.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Industrial but property is currently vacant.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Industrial

REMARKS:

FIGURE 1

SITE NAME:

SITE ID.:
INSPECTOR: JLG
DATE/TIME: 12/4/13/950
WELl ID.: MW-03D

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL I.D. VISIBLE?		
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: N/A
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): Heton/3'
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 18'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches): 2"
WELL CASING MATERIAL: Four PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: within 5'

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Open area, however fence along property line and powerlines. Middle area - rig could get stuck.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Industrial but currently vacant property.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Industrial

REMARKS:

FIGURE 1

SITE NAME:

SITE ID.:
INSPECTOR: JG
DATE/TIME: 04/13/2010
WELL ID.: MW-01D

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL I.D. VISIBLE?		
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: N/A
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): Metal/3'
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 23.71'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches): 2"
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Fair
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: Within a few feet.

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Wells base on a small mound of dirt, overhead power lines run behind them as well as a fence.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Industrial but currently vacant property.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Industrial

REMARKS:

FIGURE 1

SITE NAME:

SITE ID.:
INSPECTOR: JL
DATE/TIME: 12/4/13
WEll ID.: MW-05S

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-05S

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: NA
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable): Metal/3.5'
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 8'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches): 2inch
WELL CASING MATERIAL:
PHYSICAL CONDITION OF VISIBLE WELL CASING: Fair
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES: 3'

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Close to fence and is located within a berm. Overhead powerlines are very close as well.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Industrial but currently vacant property.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Industrial

REMARKS:

ATTACHMENT 2

WELL DECOMMISSIONING RECORDS

FIGURE 3

WELL DECOMMISSIONING RECORD

Site Name: River Road	Well I.D.: MW-125
Site Location: 3445 River Road, Tonawanda NY	Driller: Andy / Andy - Earth Dimensions
Drilling Co.: Earth Dimensions	Inspector: Jessica Gostomski
	Date: 12/4/13

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	Pulled using
Casing retrieved (feet)	5'
Casing type/dia. (in)	2"

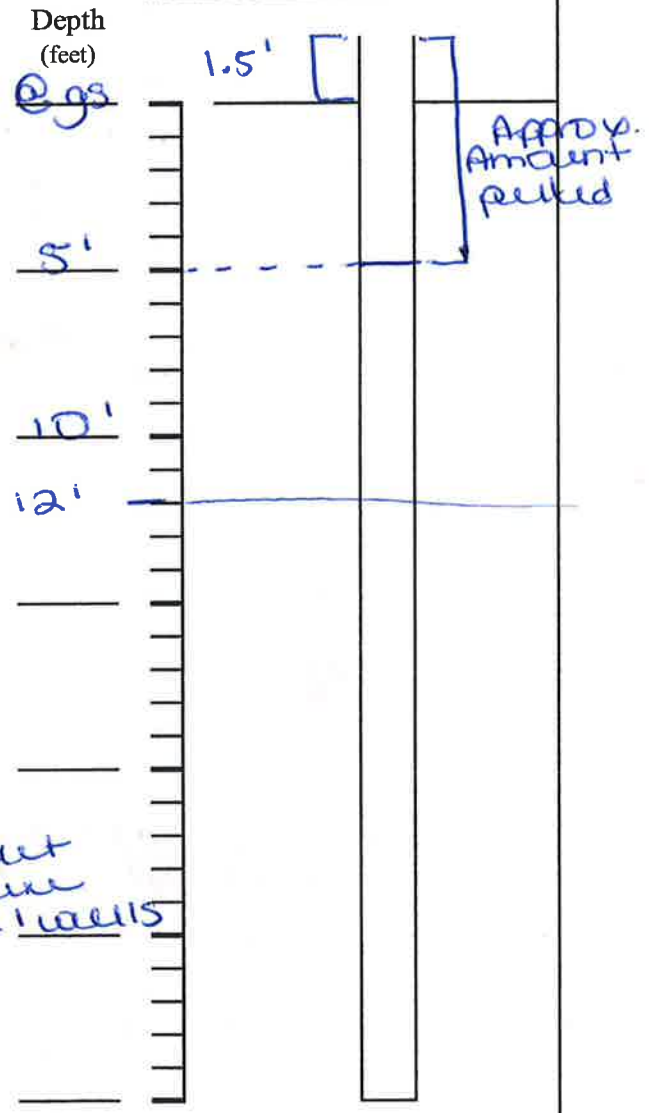
CASING PERFORATING

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

GROUTING

Interval grouted (FBLS)	
# of batches prepared	
For each batch record:	* Total of 25 gal. grout mixture for all wells
Quantity of water used (gal.)	
Quantity of cement used (lbs.)	
Cement type	
Quantity of bentonite used (lbs.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	

WELL SCHEMATIC*



COMMENTS: Four bollards located surrounding well that were also pulled.

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

Drilling Contractor

Department Representative

FIGURE 3

WELL DECOMMISSIONING RECORD

Site Name: River Road	Well I.D.: MW-01S
Site Location: 3445 River Rd. Tonawanda, NY	Driller: Andy / Andy - Earth Dimensions
Drilling Co.: Earth Dimensions	Inspector: Jessica Krasiewski
	Date: 12/4/13

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

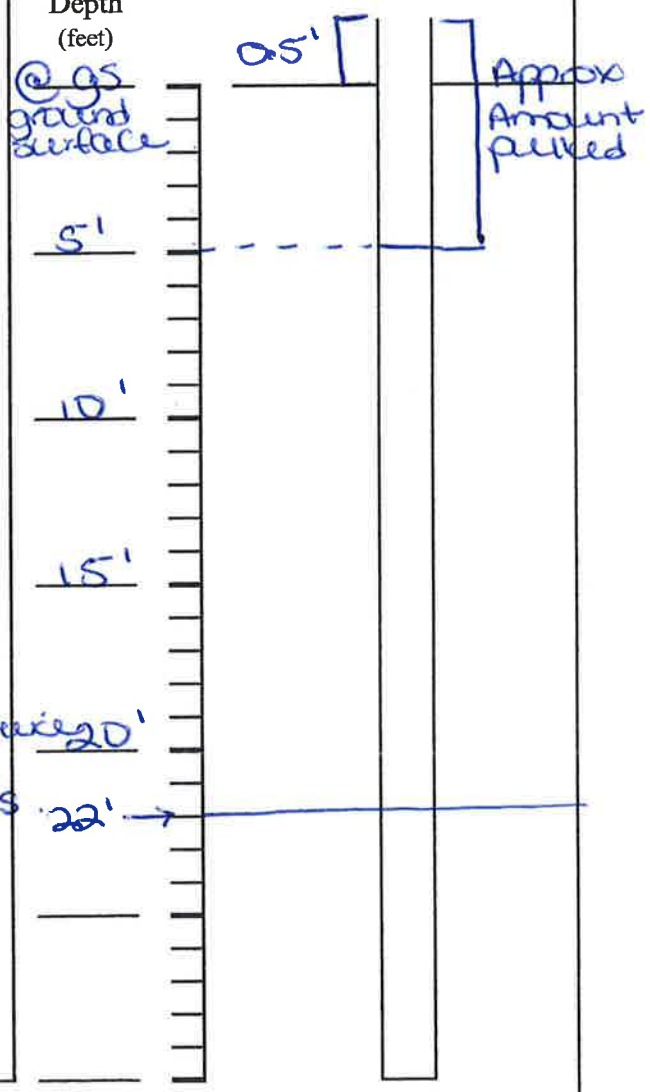
CASING PULLING
- Method employed: Pulled w/ rig
- Casing retrieved (feet): 5.5'
- Casing type/dia. (in): 2"

CASING PERFORATING
- Equipment used
- Number of perforations/foot
- Size of perforations
- Interval perforated

GROUTING * Total of 25 gal grout mixture for all wells
- 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 calcium chloride used (lbs.)
- Volume of grout prepared (gal.)
- Volume of grout used (gal.)

WELL SCHEMATIC*



COMMENTS: A Bollard and large shrub were removed from around the well prior to pulling.

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

Drilling Contractor

Department Representative

FIGURE 3

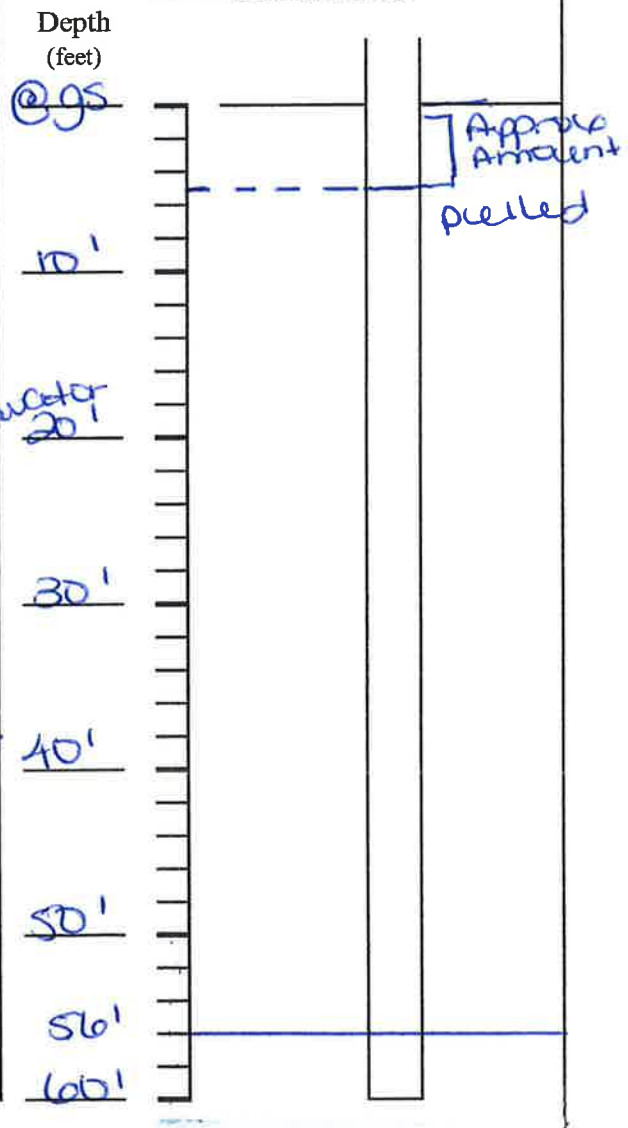
WELL DECOMMISSIONING RECORD

Site Name: River Road	Well I.D.: MW-06DD
Site Location: 845 River Rd Tonawanda, NY	Driller: Andy/Andy
Drilling Co.: Earth Dimensions	Inspector: Jessica Gostomski
	Date: 12/4/13

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	Pulled w/ Excavator
Casing retrieved (feet)	5'
Casing type/dia. (in)	2"
CASING PERFORATING	
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	
GROUTING *Total of 25 gal grout mixture for all wells	
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 calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	

WELL SCHEMATIC*



COMMENTS: A Bollard was removed prior to excavation and pulling of well. Well had to be torched off due to depth.

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

Drilling Contractor

Department Representative

FIGURE 3

WELL DECOMMISSIONING RECORD

Site Name: River Road	Well I.D.: GW-04S
Site Location: 3445 River Rd. Tonawanda, NY	Driller: Andy / Andy - Earth Dimension
Drilling Co.: Earth Dimensions, Inc.	Inspector: Jessica Gostomski
	Date: 12/4/13

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	Pulled w/ Excavator
Casing retrieved (feet)	7'
Casing type/dia. (in)	2"

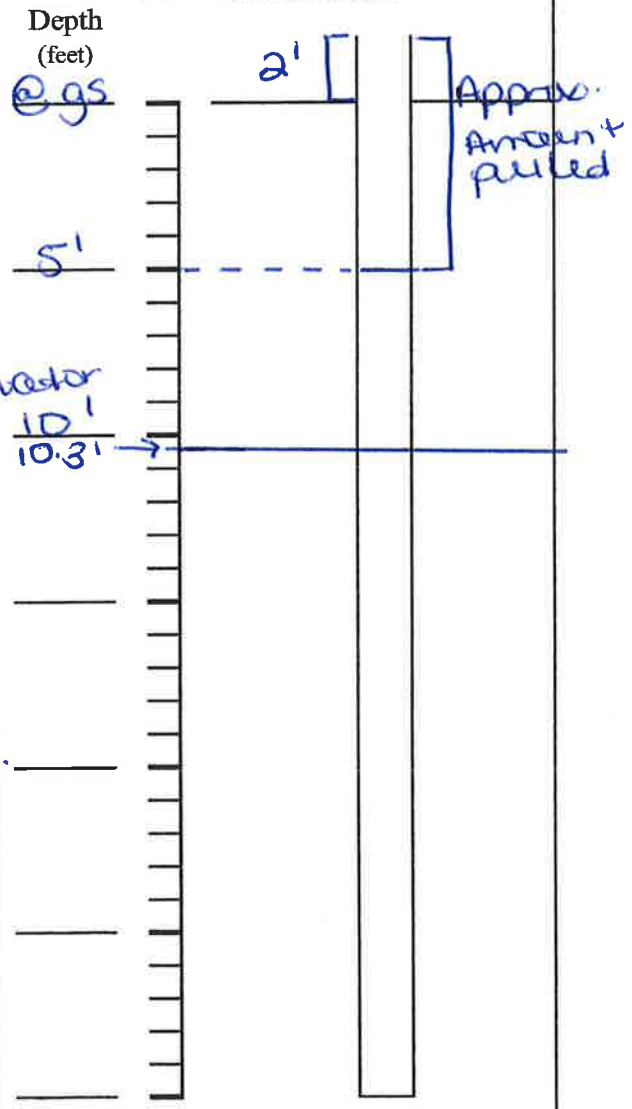
CASING PERFORATING

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

GROUTING * 25 gal grout used for all wells.

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 calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	

WELL SCHEMATIC*



COMMENTS: Mice were living within this well.

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

Drilling Contractor

Department Representative

FIGURE 3

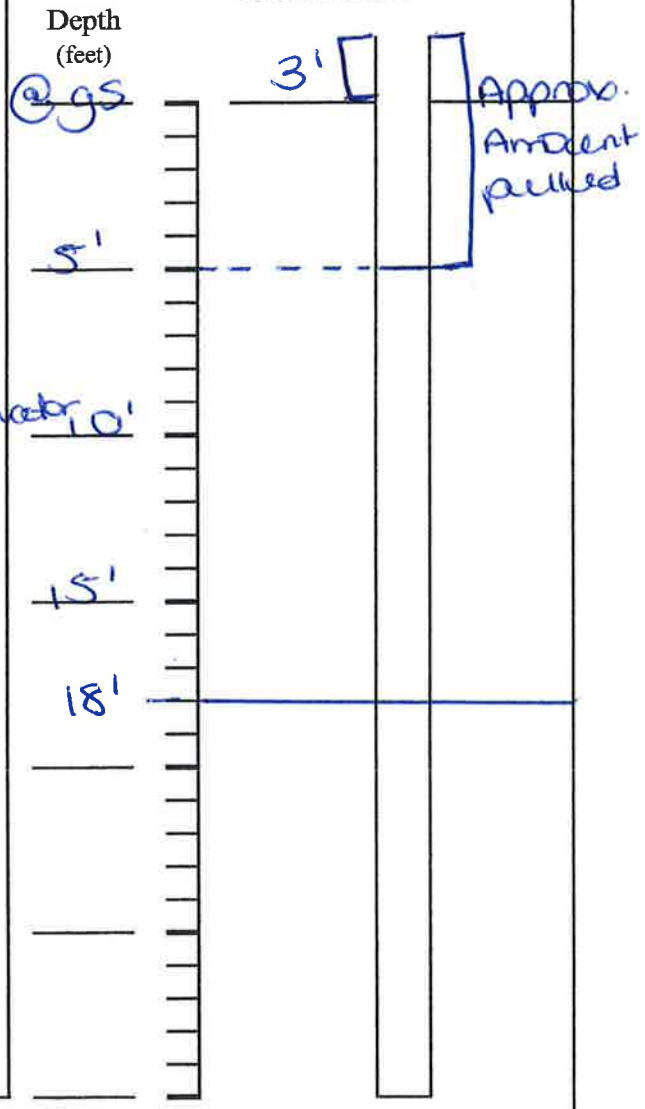
WELL DECOMMISSIONING RECORD

Site Name: River Road	Well I.D.: MW-03D
Site Location: 3745 River Rd: Tonawanda NY	Driller: Andy / Andy
Drilling Co.: Earth Dimensions, Inc.	Inspector: Jessica Gostomski
	Date: 12/4/13

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	Pulled w/ Excavator
Casing retrieved (feet)	8'
Casing type/dia. (in)	2"
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.)	
Quantity of calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	

WELL SCHEMATIC*



COMMENTS: Boards removed from around well as well.

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

Drilling Contractor

Department Representative

FIGURE 3

WELL DECOMMISSIONING RECORD

Site Name: River Road	Well I.D.: MW-06D
Site Location: 3448 River Rd Tonawanda, NY	Driller: Andy / Andy
Drilling Co.: Earth Dimensions	Inspector: Jessica Gostomski
	Date: 12/4/13

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	Pulled w/ ~~Excavator~~ Rig.
Casing retrieved (feet)	8'
Casing type/dia. (in)	2"

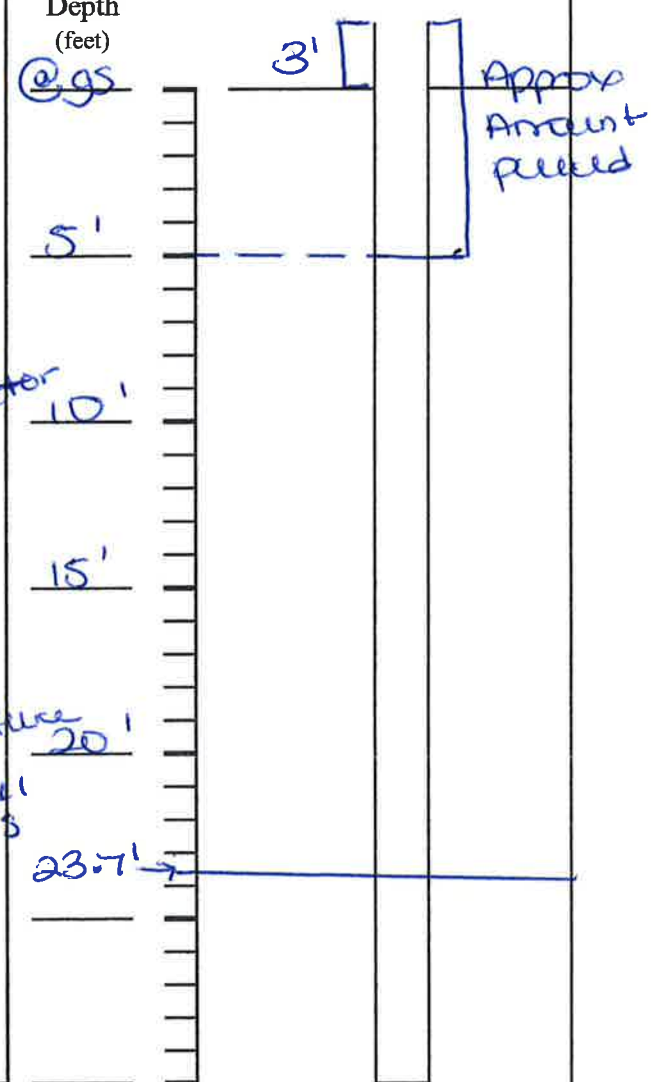
CASING PERFORATING

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

GROUTING * Total of 25 gal of grout mixture used for all wells

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 calcium chloride used (lbs.)	
Volume of grout prepared (gal.)	
Volume of grout used (gal.)	

WELL SCHEMATIC*



COMMENTS: Tried to pull w/ Rig but too close to power lines. Pulled with rig - MW-05S could not be pulled with Rig.

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

Drilling Contractor ____________________

Department Representative ____________________

FIGURE 3

WELL DECOMMISSIONING RECORD

Site Name: River Rd.	Well I.D.: MW-OSS
Site Location: 3445 River Rd Tonawanda, NY	Driller: Andy / Andy
Drilling Co.: Earth Dimensions	Inspector: Jessica Gostomski
	Date: 12/5/13

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

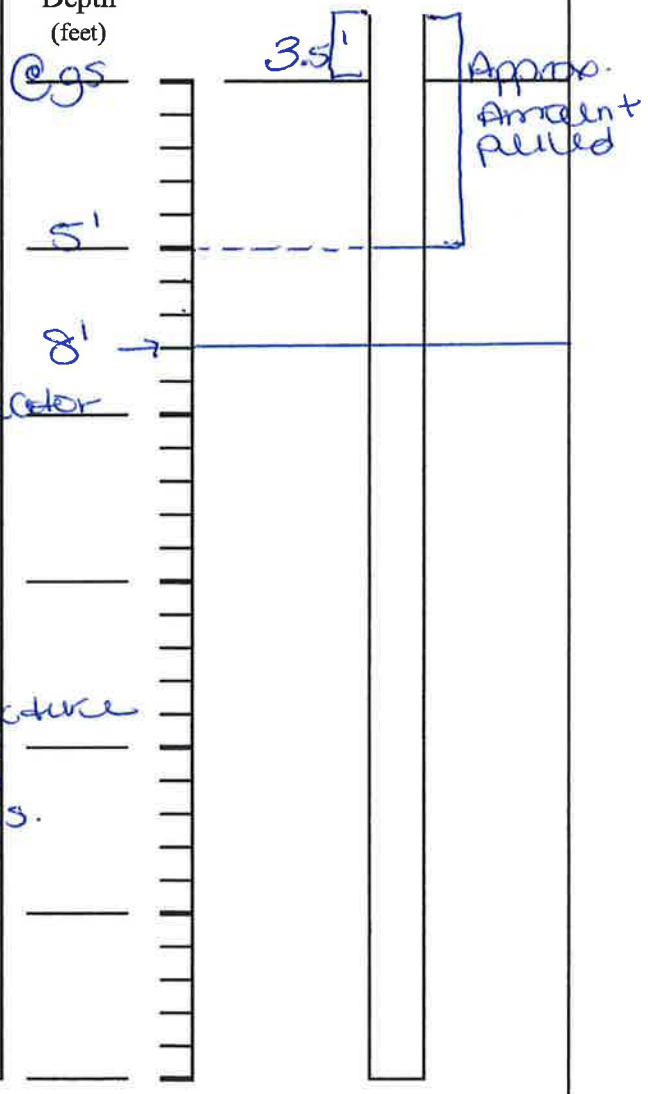
CASING PULLING
- Method employed: Pulled w/ Excavator
- Casing retrieved (feet): 8.5'
- Casing type/dia. (in): 2"

CASING PERFORATING
- Equipment used
- Number of perforations/foot
- Size of perforations
- Interval perforated

GROUTING *Total of 25 gal of grout mixture used for all wells.
- 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 calcium chloride used (lbs.)
- Volume of grout prepared (gal.)
- Volume of grout used (gal.)

WELL SCHEMATIC*



COMMENTS: Well could not be accessed with rig - dug out with excavator and pulled.

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

Drilling Contractor

Department Representative

ATTACHMENT 3

INSPECTOR'S DAILY REPORTS

Appendix A1

Inspector's Daily Report

CONTRACTOR:
ADDRESS:

TELEPHONE:
LOCATION 3445 River Rd. Tonawanda, NY FROM 8:00 am TO
WEATHER Sunny - 35°F TEMP 35° A.M. 8 P.M. 3 DATE 12/4/13

CONTRACTOR'S WORK FORCE AND EQUIPMENT

DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#
Field Engineer						Equipment			Front Loader Ton		
Superintendent			Ironworker			Generators			Bulldozer		
						Welding Equip.					
Laborer Foreman			Carpenter								
Laborer									Backhoe		
Operating Engineer			Concrete Finisher								
Carpenter						Paving Equip. & Roller					
						Air compressor					

SEE REVERSE SIDE FOR SKETCH YES ☐ NO ☑ See attached Map

WORK PERFORMED: JLG onsite @ 8:00am
- Identified all wells on the property, depths and stick-up information.
- Earth Dimensions Rig got stuck in the mud and they had to go pick up new one.
- Identified wells and updated their locations
- Started with MW-06D & MW-05S - got MW-06D all after using the auger. MW-05S still needs to be pulled - too close to pipeline and located on a berm.
- Removed MW-12S and Bollards (4)
- Removed MW-06S and Bollard surrounding it & Shrub.

JLG offsite @ 3:00pm
Drillers offsite @ 3:00pm
Phil offsite after.

PAY ITEMS

CONTRACT Number	ITEM	STA FROM	STA TO	DESCRIPTION	QUANTITY	REMARKS

TEST PERFORMED:
PICTURES TAKEN:
VISITORS: Phil Riggs (ECIDA) 7:50am - 8:30am 2:15pm - after 3:00pm
Paul B. Kranz, P.E. 10:00am - 10:15am

QA PERSONNEL SIGNATURE
REPORT NUMBER
SHEET Of

Appendix A1

Inspector's Daily Report

CONTRACTOR:
ADDRESS:

TELEPHONE:
LOCATION 3445 River Rd. Tonawanda, NY FROM _____ TO _____
WEATHER Cloudy TEMP 50°F A.M. 830 P.M. _____ DATE 12/5/13

CONTRACTOR'S WORK FORCE AND EQUIPMENT

DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#	DESCRIPTION	H	#
Field Engineer						Equipment			Front Loader Ton		
Superintendent			Ironworker			Generators			Bulldozer		
						Welding Equip.					
Laborer Foreman			Carpenter						Backhoe		
Laborer											
Operating Engineer			Concrete Finisher								
Carpenter						Paving Equip. & Roller					
						Air compressor					

SEE REVERSE SIDE FOR SKETCH YES ☐ NO ☐

WORK PERFORMED:

JLG onsite @ 8:30am
- Excavator onsite today - took out NO. 7, NO. 3, NO. 4, NO. 5
- Phil found another pipe and we will be removing it - already grouted.
- Pulled out NO. 8 (found by Phil) - Already grouted
- Removed bollards around NO. 4 & NO. 5
- Had to torch NO. 3 (56ft well) due to concrete slab.
- All areas were smoothed out w/ excavator and debris was put into one large pile

JLG offsite @
Drillers offsite @
Phil offsite @ 10:00am

PAY ITEMS

CONTRACT Number	ITEM	STA FROM	STA TO	DESCRIPTION	QUANTITY	REMARKS

TEST PERFORMED:
PICTURES TAKEN:

VISITORS: Phil Riggs (ECIDA) Prior to 8:30am - D

QA PERSONNEL
SIGNATURE
REPORT NUMBER
SHEET _____ Of _____

ATTACHMENT 4
PHOTOGRAPHS

Photo #1: MW-12S with one of the four bollards is pictured to the west of the well.

Photo #2: MW-06S with bollard and shrub.

Photo #3: MW-06DD with bollard.

Photo #4: MW-04S.

Photo #5: MW-03D.

Photo #6: MW-06D.

Photo #7: MW-05S.

Photo #8: MW-06D and MW-05S pictured together.

Photo #9: View of the well that was already decommissioned on the Project Site.

Photo #10: Drilling rig pulling MW-06D.

Photo #11: View of the drilling rig near MW-06D and MW-05S and how close it was to the overhead power lines.

Photo #12: View of MW-05S before it was removed with excavator.

Photo #13: View of MW-06S when they removed the shrub.

Photo #14: Excavator removing the remaining portion of MW-05S.

Photo #15: Excavator removing MW-06DD.

Photo #16: Excavator continuing to dig to remove MW-06DD.

Photo #17: View of MW-06DD – casing has been torched. Waiting on excavator to remove.

Photo # 18: Close-up of the previous photograph.

Photo #19: View of the removal of wells MW-04S and MW-03D.

Photo #20: View of the well that had been previously decommissioned that was pulled.

EARTH DIMENSIONS, INC.

Soil and Hydrogeologic Investigations ◦ Wetland Delineations
1091 Jamison Road ◦ Elma, NY 14059
(716) 655-1717 ◦ FAX (716) 655-2915

LETTER OF TRANSMITTAL

EDI Project Code: 8K13
To: ECIDA
Attention: Philip Riggs
Date: December 12, 2013

Re: Decommission five (5) 2-inch PVC monitoring wells, to be grouted in place, Polymer Applications Site, River Road, Town of Tonawanda, Erie County, NY

We Are Sending You The Following Items For Your Use:

Date	Project	Description
12/12/13	8K13	Well Decommissioning Records
12/12/13	8K13	PO# 9888
12/12/13	8K13	Invoice

Sent Via:
- ☐ email
- ☐ fax
- ☒ USPS

If enclosures/attachments are not as noted, please notify EDI at once.

MaryJo

WELL DECOMMISSIONING RECORD
NYSDEC NPL Sites

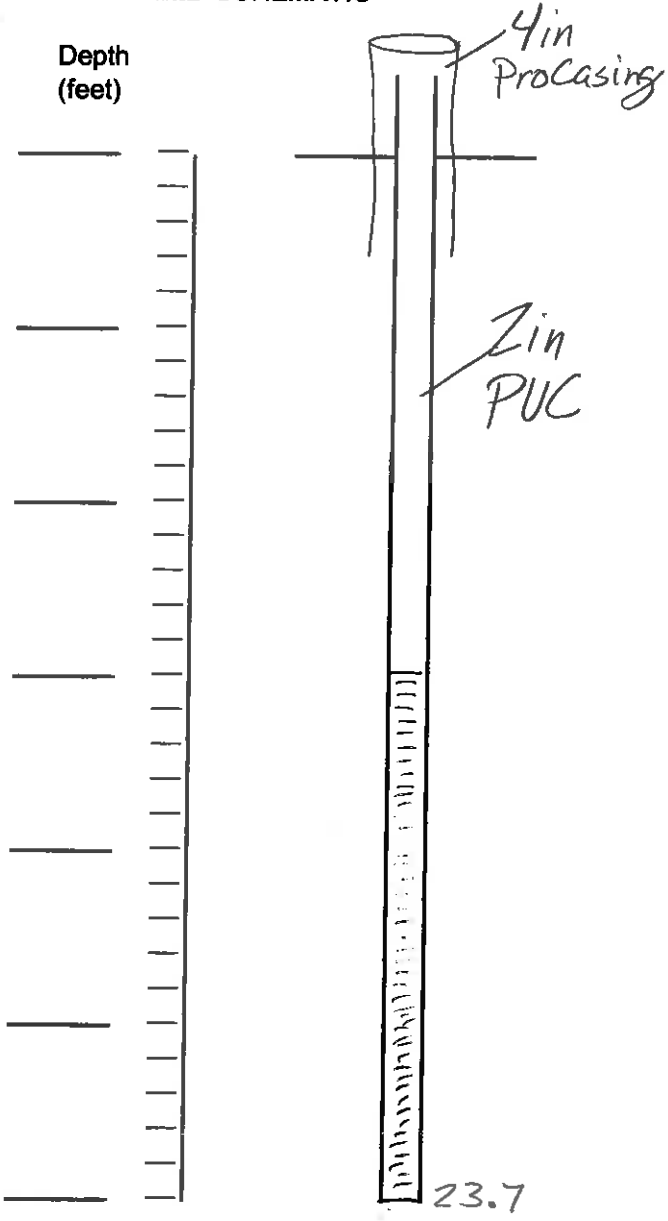
EARTH DIMENSIONS, INC.
1091 Jamison Road • Elma, NY 14059

Site Name: River Rd ECIDA	Well I.D. B-05D
Site Location: River Rd Tonawanda NY	Driller: Andrew Morris
Drilling Co: Earth Dimensions	Inspector:
	Date: 12-5-13

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)	23.7 to 0.0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7 gals
Quantity of cement used (lbs.)	94 lbs.
Cement type	Type I/II
Quantity of bentonite used (lbs.)	3 lbs.
Quantity of calcium chloride used (lbs.)	–
Volume of grout prepared (gal.)	11.0 gals
Volume of grout used (gal.)	4.1 gals.

WELL SCHEMATIC*



COMMENTS: Placed Tremme pipe to the Bottom of the Hole (23.7 FT) + Grouted. Then we pulled out Processing + Drilled well out with Auger and topped off Grout + Back Filled Surface.

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

Drilling Contractor

Dept Representative

WELL DECOMMISSIONING RECORD
NYSDEC NPL Sites

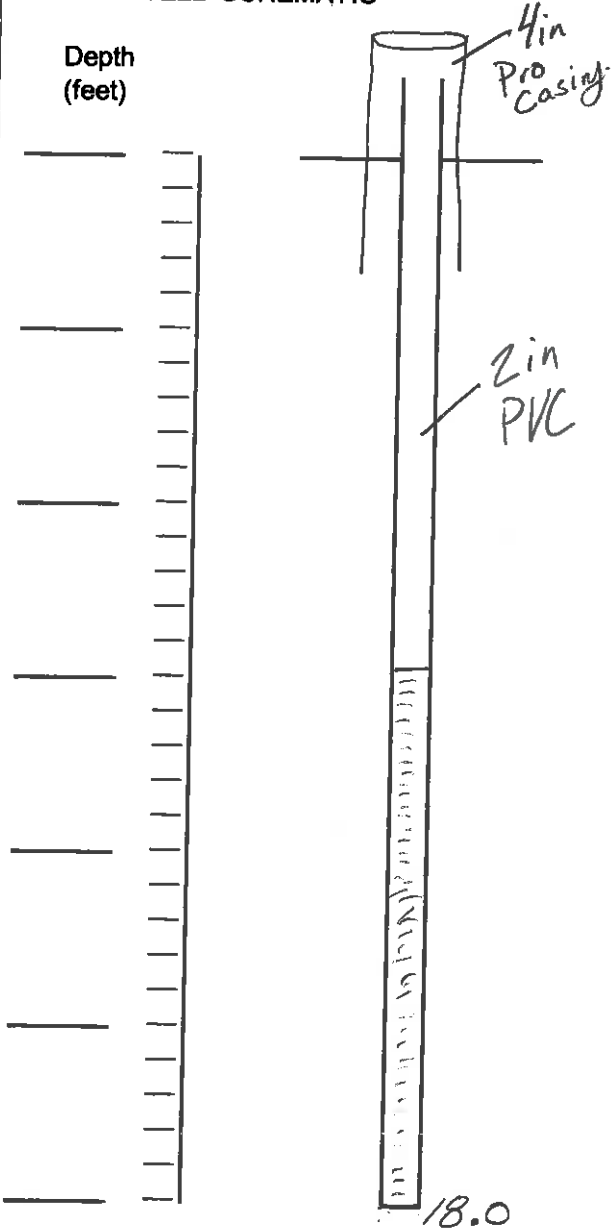
EARTH DIMENSIONS, INC.
1091 Jamison Road • Elma, NY 14059

Site Name: River Rd ECIDA	Well I.D. B-03D
Site Location: River Rd Tonawanda NY	Driller: Andrew Morris
Drilling Co: Earth Dimensions Inc	Inspector:
	Date: 12-5-13 / 12-6-13

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)	18.0 to 0.0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7 gals
Quantity of cement used (lbs.)	94 lbs.
Cement type	Type I/II
Quantity of bentonite used (lbs.)	31 lbs.
Quantity of calcium chloride used (lbs.)	—
Volume of grout prepared (gal.)	11 gals
Volume of grout used (gal.)	3.1

WELL SCHEMATIC*



COMMENTS: Played Tremmie pipe to the bottom of the hole (18.0) + Grouted. Then Removed procasing with Excavator Below 4 FT + Backfilled Surface.

Drilling Contractor

Dept Representative

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

WELL DECOMMISSIONING RECORD
NYSDEC NPL Sites

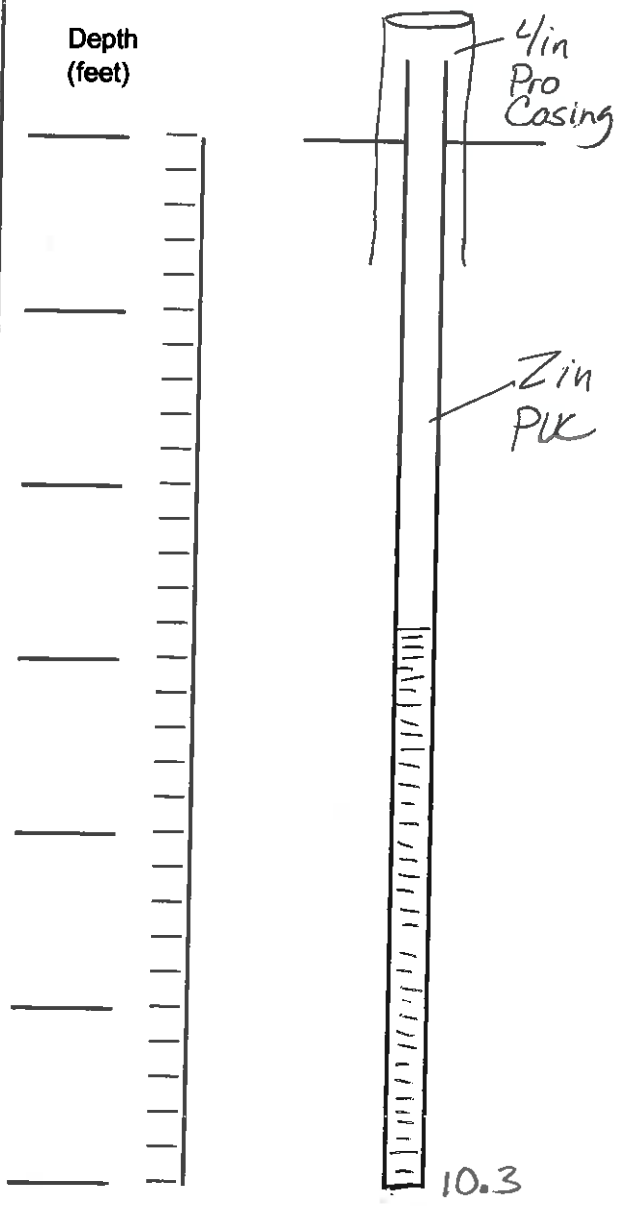
EARTH DIMENSIONS, INC.
1091 Jamison Road • Elma, NY 14059

Site Name: River Rd ECIDA	Well I.D. GW-045
Site Location: River Rd Tonawanda NY	Driller: Andrew Morris
Drilling Co: Earth Dimension Inc	Inspector:
	Date: 12-5-13

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)	10.3 to 0.0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7gals
Quantity of cement used (lbs.)	94lbs.
Cement type	Type I/II
Quantity of bentonite used (lbs.)	3lbs.
Quantity of calcium chloride used (lbs.)	—
Volume of grout prepared (gal.)	11gal
Volume of grout used (gal.)	1.75gal

WELL SCHEMATIC*



COMMENTS: Placed Tremmie pipe to the bottom of the Hole. (10.3) + Grouted. Then removed pro casing with Excavator Below 4FT + Back filled surface

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

Drilling Contractor

Dept Representative

WELL DECOMMISSIONING RECORD
NYSDEC NPL Sites

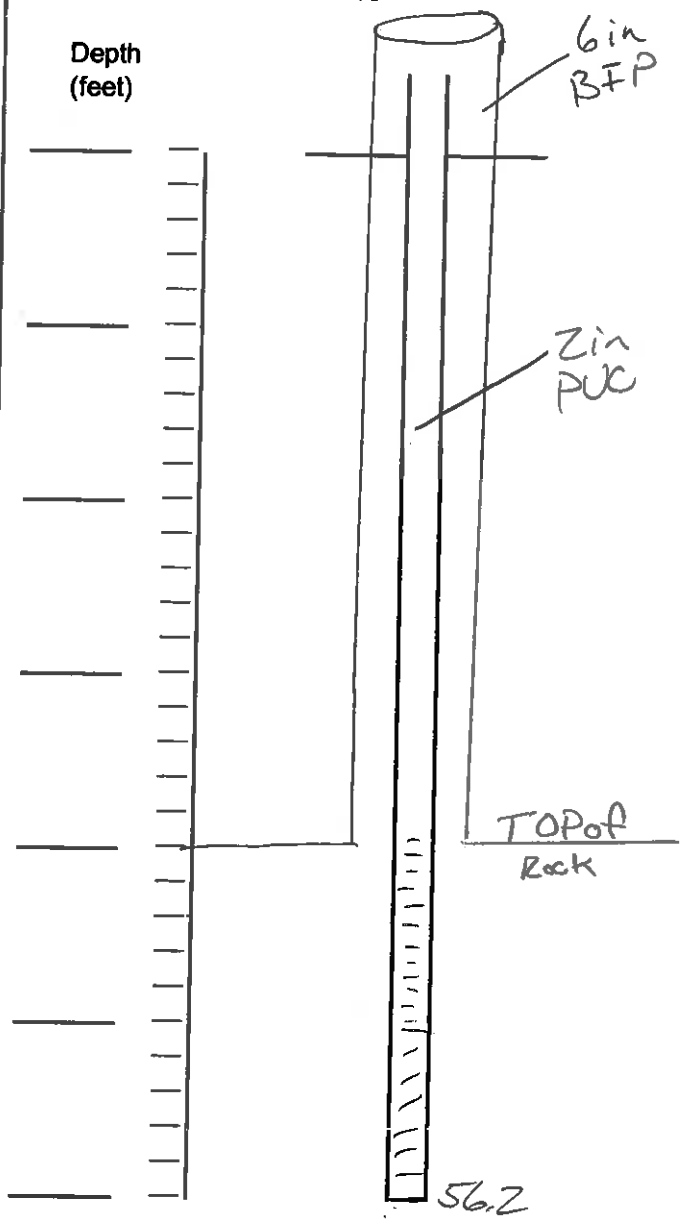
EARTH DIMENSIONS, INC.
1891 Jamison Road • Elma, NY 14059

Site Name: River Rd ECIDA	Well I.D. MW-06DD
Site Location: River Rd Tonawanda NY	Driller: Andrew Morris
Drilling Co: Earth Dimensions Inc	Inspector:
	Date: 12-5-13

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)	56.2 to 0.0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7 gal
Quantity of cement used (lbs.)	94 lbs.
Cement type	Type I/II
Quantity of bentonite used (lbs.)	13 lbs.
Quantity of calcium chloride used (lbs.)	—
Volume of grout prepared (gal.)	11 gal
Volume of grout used (gal.)	9.6 gal

WELL SCHEMATIC*



COMMENTS: Placed Tremmie pipe to the bottom of the hole (56.2) + Grouted. Dug out around 6in BTP + Torched off pipe Below 4FT and Back filled. Surface.

Drilling Contractor

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

Dept Representative

WELL DECOMMISSIONING RECORD
NYSDEC NPL Sites

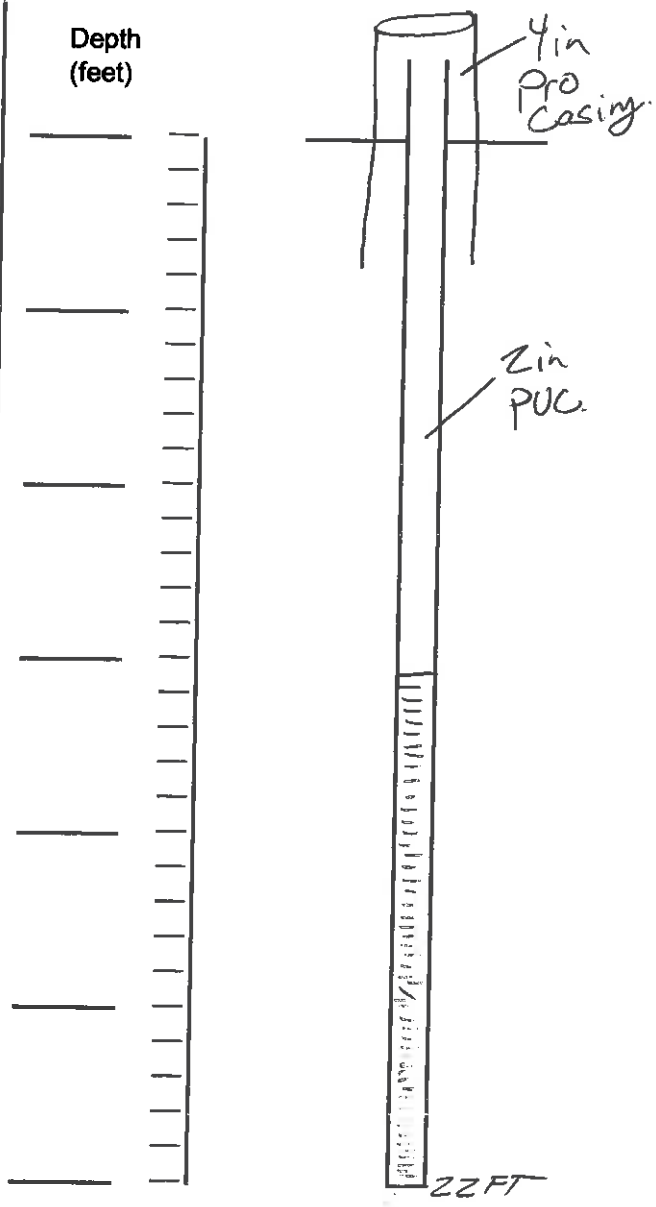
EARTH DIMENSIONS, INC.
1091 Jamison Road • Elma, NY 14059

Site Name: River Rd ECIDA	Well I.D. B-02D
Site Location: River Rd Tonawanda NY	Driller: Andrew Morris
Drilling Co: Earth Dimension Inc	Inspector:
	Date: 12-4-13

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)	22 to 0.0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7gal
Quantity of cement used (lbs.)	94 lbs.
Cement type	Type I/II
Quantity of bentonite used (lbs.)	3 lbs.
Quantity of calcium chloride used (lbs.)	—
Volume of grout prepared (gal.)	11gals
Volume of grout used (gal.)	3.75gal

WELL SCHEMATIC*



COMMENTS: Placed Tremmie pipe to the bottom of the Hole (22FT) + Grouted. Pulled out Pro Casing 4 well then over drilled w/ Auger to Below 4FT and Topped off w/ Chip and Backfilled Surface.

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

Drilling Contractor

Dept Representative

WELL DECOMMISSIONING RECORD
NYSDEC NPL Sites

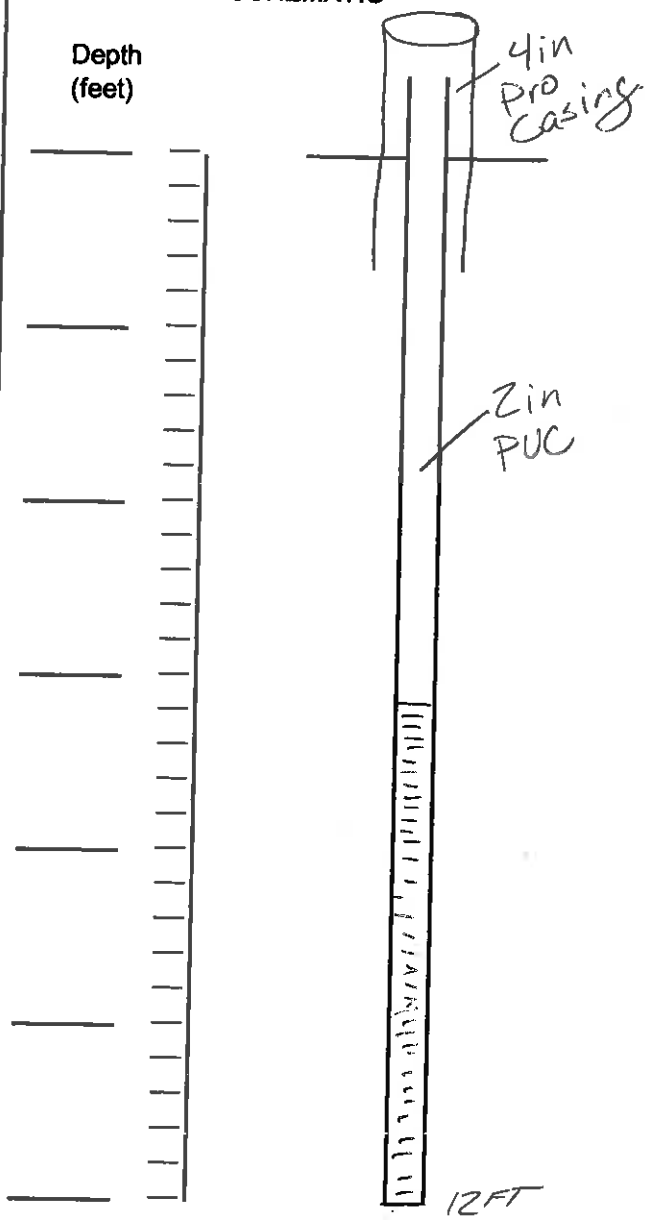
EARTH DIMENSIONS, INC.
1091 Jamison Road • Elma, NY 14059

Site Name: River Rd ECIDA	Well I.D. MW12S
Site Location: River Rd.	Driller: Andrew Morris
Drilling Co: Earth Dimension Inc.	Inspector:
	Date: 12-4-13

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)	12 to 0.0
# of batches prepared	1
For each batch record:	
Quantity of water used (gal.)	7 gals
Quantity of cement used (lbs.)	94 lbs.
Cement type	Type I/II
Quantity of bentonite used (lbs.)	3 lbs.
Quantity of calcium chloride used (lbs.)	—
Volume of grout prepared (gal.)	11 gal
Volume of grout used (gal.)	2.1 gals.

WELL SCHEMATIC*



COMMENTS: Placed Tremmie pipe to the bottom of the Hole (12 FT) + Grouted. Then Pulled out Pro Casing + Well out, then overdrilled to Below 4FT + Topped of w/ Chips, and Back filled surface.

Drilling Contractor

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

Dept Representative