



**Environmental
Protection Agency**

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

March 14, 2012

CERTIFIED MAIL

Mr. Larry Riddle
Landfill Manager
Rumpke Consolidated Companies, Inc.
10795 Hughes Road
Cincinnati, Ohio 45251

**RE: Notice of Violation
Rumpke Sanitary Landfill, Hamilton County**

Dear Mr. Riddle:

On Wednesday, February 15, 2012, staff from Hamilton County Public Health (HCPH), Southwest Ohio Air Quality Agency (SWOAQA), and Ohio Environmental Protection Agency (Ohio EPA) conducted an off-site odor investigation and a subsequent on-site inspection of the Rumpke Sanitary Landfill (Facility). The group was escorted by Brian Huffman and John Butler from Rumpke. The weather was 48° F, overcast, with a wind speed of approximately 6 mph from the south by southeast, and a barometric pressure of approximately 30.1 inches. The purpose of the inspection was to follow up on the site inspection conducted on Monday, February 6, 2012 (correspondence regarding the February 6, 2012 inspection results are attached). During the inspection the following were noted:

VIOLATION

Cover soil in the West Buttress Construction Area

Waste was flagging in the cover soil and soil pile of the west buttress construction area. (Picture 1)



Picture 1 Exposed waste in west buttress area

Ohio Administrative Code (OAC) Rule 3745-27-19(G)(2) states in pertinent part, "Intermediate cover material shall be... (a) soil layer, a minimum of twelve inches thick, consisting of well-compacted loam, silt loam, clay loam, silty clay loam, silty clay or some combination thereof, shall be used."

The west buttress construction area has intermediate cover material. The material found in this location was comprised of waste along with cover soil. This material may not be comprised of any material other than what is outlined in 19(G)(2).

Therefore, Rumpke is in violation of (G)(2) for failing to maintain intermediate cover as outlined in OAC Rule 3745-27-19(G)(2).

Please respond in writing within fourteen (14) days from receipt of this correspondence regarding a plan to ensure that intermediate cover areas comply with OAC Rule 3745-27-19(G)(2).

ON-SITE SOURCES OF ODORS

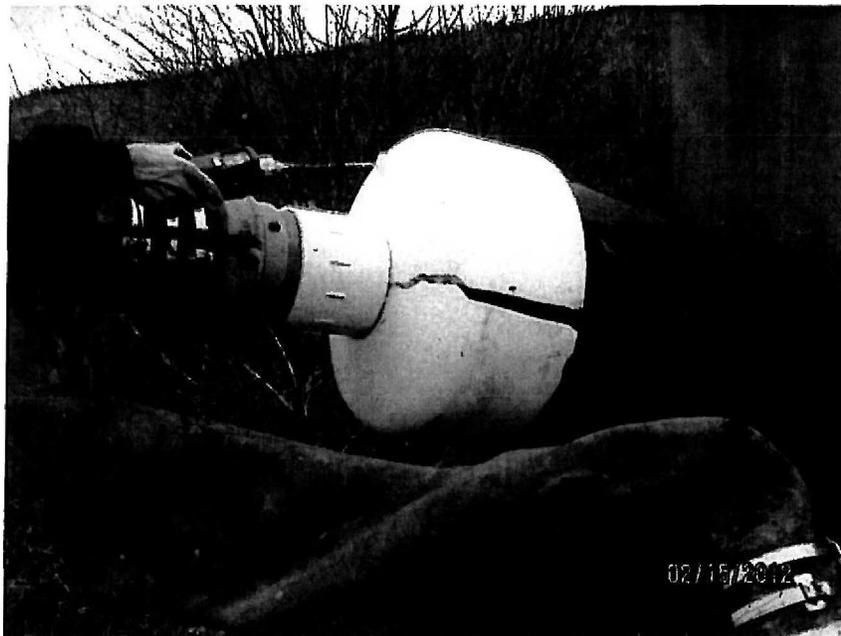
During the on-site inspection we observed several sources of odors. These sources, if left unabated, could lead to odors off site. Please be aware that Ohio Administrative Code Rule 3745-27-19(B)(3) states in part:

"The owner or operator shall operate the facility in such a manner that noise, dust, and odors are strictly controlled so as not to cause a nuisance or a health hazard."

1. Phase II Underdrain Leachate Side Slope Riser

During the February 6, 2012 inspection, this area was noted by HCPH and Ohio EPA as a source of odors.

During the February 15, 2012 inspection, odors were again observed in this area. The group noted that the white cap on the 18 inch side slope riser was cracked, which allowed both odors and visible vapors to escape from the riser. Brian Huffman was not aware of the damage to the cap and made a call to have the cap fixed. (Picture 2)



Picture 2 - Phase II underdrain side slope riser

On February 17, 2012 Joleen Cook from Ohio EPA was on site and observed that the cracked cap had been caulked.

2. East Side Lift Station and Phase II Side Slope Sump Riser

On February 6, 2012, HCPH and Ohio EPA identified this area as a source of odors. During that inspection, a tarp was the only covering on the open lift station and visible vapors were observed escaping from underneath the tarp. Mr. Huffman and Mr. Butler were instructed to abate the odors. In an email dated February 7, 2012 to Ohio EPA, DMWM, SWDO, Mr. Huffman stated that new tarps would be used for this area.

During the February 15, 2012 inspection, the east lift station was being cleaned. Black material, which Rumpke has indicated may clog the pump, was being removed. Additionally, the tarp covering the east lift station had not been replaced. One of the 18 inch leachate riser caps had been repaired with duct tape and plastic. (Picture 3)



Picture 3 - Phase II side slope riser

On February 17, 2012, Joleen Cook from Ohio EPA was on site and observed that the tarp was in place and stabilized with sandbags.

3. NW Lift Station

On February 6, 2012 this area was noted as a source of odors. During that inspection, only tarps were covering the open lift station. The tarps were torn, with discernible holes, and visible vapors were observed escaping from underneath the tarp. At that time, Brian Huffman was instructed to abate the odors. In an email to Ohio EPA DMWM, SWDO dated February 7, 2012; Mr. Huffman stated that new tarps would be used for this area.

During the February 15, 2012 inspection, odors were again identified at this area. The lift station was still covered only by tarps, which were still torn, and vapors were visibly escaping from underneath the tarps. The damaged tarps seemed to be the source of the odors. Neither Mr. Huffman nor Mr. Butler seemed to be aware that new tarps were to have been deployed at the Northwest lift station. Mr. Huffman stated that an odor control mister was operating inside the lift station under the tarps at that time. He called to have the new tarps deployed at the lift station, which occurred while the group was present. (Pictures 4 & 5)



Picture 5 – Northwest lift station



Picture 4 - Northwest lift station

A copy of email and correspondence sent by HCPH to Rumpke regarding the findings of the February 6, 2012 inspection are attached for your convenience.

4. OCB and Gas Extraction Wells

Phase V is currently covered by a thick plastic odor control blanket (OCB). The purpose of the OCB is to collect odorous gases from the north end of the landfill for conveyance to the flares. During the February 15, 2012 on-site inspection, the group walked along the newly installed odor control mister line located at the top ridge between Phase V and Phase VI/VII. Ohio EPA inquired about the frequency at which Rumpke personnel inspect the OCB for rips, tears, or damage that would permit odorous gases to escape and potentially migrate beyond the facility boundary. Rumpke staff stated that the OCB is inspected weekly and that the results of the inspections are documented in a log. During our limited visual inspection of the OCB, no damage was observed. SWOAQA has identified various gas extraction wells that have been documented as sources of odors. Ohio EPA inquired about the frequency at which Rumpke personnel inspect the gas extraction wells for fugitive gases or odor that could migrate beyond the facility boundary. Mr. Huffman stated that either he or Mr. Riddle, Rumpke Landfill Manager, inspect these components daily and document the results of these inspections in a log. **During our inspection, two wells, B26 and W120R3, were identified by SWOAQA staff, and communicated to Rumpke personnel, as on-going sources of odor.**

The results of SWOAQA's February 15, 2012 inspection of the gas extraction wells, with corresponding instrument readings of escaping gases, are attached to this correspondence.

5. Phase 4 Side Slope Riser

During the February 15, 2012 inspection, the group observed that **this was an area of strong odors**. Holes drilled in the leachate cleanout piping seemed to be allowing the odors to escape from the riser.

The results of SWOAQA's February 15, 2012 inspection of the various lift stations, with corresponding instrument readings of escaping gases, are attached to this correspondence.

6. Utility Flares and West Buttress Area

During the February 15, 2012 inspection, HCPH, SWOAQA, Ohio EPA and Rumpke staff inspected the utility flares and west buttress construction areas. In an email sent by Mr. Huffman the morning of February 15th, Mr. Huffman stated that the utility flares had been shut down for maintenance activities and work to shorten a gas line in the area. The gas was being routed to the enclosed flare at the gas plant. However, as of 3:00 pm Rumpke staff was not aware when the utility flares would be operational since they had not received information from the gas plant personnel informing Rumpke of the flares' status. In a follow up email received by Ohio EPA on February 16, 2012, Mr. Huffman stated that the utility flares had been placed back on line before noon on February 15, 2012.

As part of the February 15, 2012 inspection, HCPH, SWOAQA, Ohio EPA and Rumpke staff inspected the construction area for the buttress construction on the northwest side of the landfill next to Phase VI and VII. This area was another source of odors. The odors seemed to be escaping from the surrounding soil in the area of the gas line that was being shortened. Rumpke personnel were not aware that the vacuum for this gas line was not operational due to the repairs until after the inspection group had left the area. Rumpke staff later received confirmation of this information following a call to other personnel.

Furthermore, waste was flagging in the cover soil and soil pile of the buttress construction area. The presence of exposed waste may also be contributing to the odors. No odor control was operating in the area at the time of the inspection.

7. Frac Tanks for Leachate Storage/Rumpke Truck Loading Station

During the February 15, 2012 inspection, HCPH, SWOAQA, Ohio EPA and Mr. Huffman inspected the frac tanks used for leachate storage. Leachate from the storage tank and frac tanks are pumped into Rumpke tanker trucks for disposal into the Metropolitan Sewer District (MSD) sewer system access at Rumpke's Recycling Center in St. Bernard. Ohio EPA inquired about the number of leachate trucks Rumpke was sending to the St. Bernard sewer access. Mr. Huffman stated that

approximately 30 to 50 trucks a day were transporting leachate to St. Bernard; however, this information is maintained at the Norwood location operated by Rumpke. The total number of trucks is emailed to Rumpke personnel once a day from the Norwood location.

During the inspection, no trucks were being filled from the frac tanks. This operation could be a source of odors due to gases escaping from head space in the frac tanks or tanker trailers. These odors may be expelled when the leachate is pumped into or out of either unit.

8. Leachate Pumping Area

During the February 15, 2012 inspection, HCPH, SWOQA, Ohio EPA and Mr. Huffman inspected the leachate storage tank and associated pumping area. The group observed landfill leachate being pumped from two large open metal in-ground tanks to the leachate storage tank. This area was another source of odors. This area's odor was noted at the adjacent frac tank/tanker truck loading station approximately twenty feet above. (Picture 6)



Picture 6 - Leachate pumping area tanks

9. Open Pit at Gas Plant

During the February 15, 2012 inspection, HCPH, SWOAQA, Ohio EPA and Brian Huffman noted a large concrete pit area similar to the tanks used for collecting leachate prior to pumping it to the storage tank. The pit was located on property operated by the on-site gas company GSF. While the pit was predominantly empty, there was a small amount of orange colored liquid present at the bottom. What was most notable was the bubbling/roiling liquid along the northwest wall of the containment. This area was another source of odors. However, since the area was not controlled by Rumpke, Mr. Huffman stated that GSF personnel would have information regarding this situation. GSF personnel were not available at that time to address the situation. (Pictures 7 & 8)



Picture 7 -Concrete pits at gas plant



Picture 8 - Concrete pits at gas plant

Please be aware that several of the locations inspected on February 15, 2012, have been previously identified as sources of on-site odors. These locations continue to be ongoing sources of odors despite repeated communications by various agency staff of the on-going odor problems. Citizen complaints regarding odors continue to be received and odors have been documented beyond the landfill boundary. Each of the above mentioned locations of odors must be managed such that odors are strictly controlled at the facility.

OFF-SITE ODOR INVESTIGATION

Prior to the on-site inspection on February 15, 2012, HCPH and SWOAQA performed an off-site odor investigation by driving around a pre-determined local roadway route consistently used by these agencies to monitor for the presence of odors. Once an odor is detected by the investigating agency personnel, an intensity rating of 1 (slight odor) to 4 (very strong odor) is assigned based on how strong the odor was noticed. HCPH and SWOAQA identified one location at 11285 Bank Road, north of the landfill, with an odor intensity of 2.

Rumpke Sanitary Landfill
March 14, 2012
Page 9

The results of the off-site investigation are included as an attachment to this correspondence.

Compliance with the requirements outlined in this letter shall not relieve you of your obligation to comply with other legal obligations including, but not limited to, Chapters 3704, 3714, 3734, or 6111 of the Ohio Revised Code or under the Federal Clean Water Act, Clean Air Act, Comprehensive Environmental Response, Compensation and Liability Act or Resource Conservation and Recovery Act remedying conditions resulting from any release of contaminants to the environment.

Sincerely,



Holly H. Hillyer
Environmental Specialist
Division of Materials and Waste Management

HHH/tf

Attachments: February 6, 2012 inspection, HCPH correspondence dated February 15, 2012

February 7, 2012 email from Rumpke regarding North-East work activities

February 15, 2012 SWOAQA inspection checklist and gas readings dated February 21, 2012

February 15, 2012 Ohio EPA photos taken during the February 15, 2012 inspection

cc: R. Jay Roberts, Rumpke

ec: Tim Ingram, Hamilton County Public Health
Chuck DeJonckheere, Hamilton County Public Health
Brad Miller, Southwest Ohio Air Quality Agency

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3/14/2012
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Sent To MR LARRY RIDDLE
 Street, Apt. No., or PO Box No. LANDFILL MANAGER
 City, State, ZIP RUMPKE SANITARY LANDFILL
 CINCINNATI, OH 45251

PS Form 3800

Instructions

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- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

MR LARRY RIDDLE
 LANDFILL MANAGER
 RUMPKE SANITARY LANDFILL
 CINCINNATI, OH 45251

2. Article Number
 (Transfer from service label)

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 Sherrie Kuhn Agent
 Addressee

B. Received by (Printed Name)
 Sherrie Kuhn

C. Date of Delivery
 3/19/12

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
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 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

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Via E-mail Only

2-15-12

MR LARRY RIDDLE
RUMPKE SANITARY LANDFILL
10795 HUGHES ROAD
CINCINNATI OHIO 45251
Larry.riddle@rumpke.com

*Timothy I. Ingram
Health Commissioner*

*250 William Howard Taft Road, 2nd Floor
Cincinnati, OH 45219*

*Phone 513.946.7800
Fax 513.946.7890*

hamiltoncountyhealth.org

Re: Rumpke Sanitary Landfill Odor

Dear Mr. Riddle:

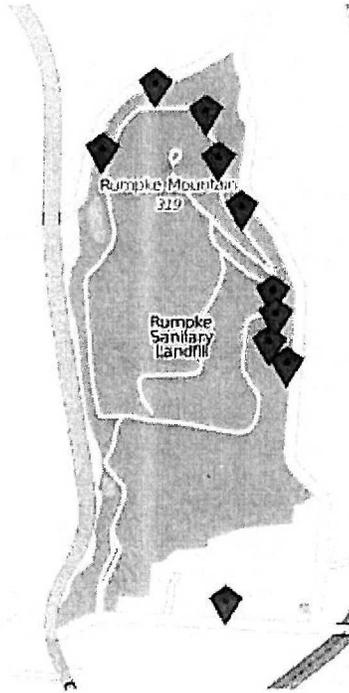
On Monday, February 6, 2012, nine odor complaints were received between 6:45 AM and 10:55 AM. Personnel from Hamilton County Public Health (HCPH) and Ohio EPA Southwest District Office investigated these complaints. Investigations including traveling to the location where the odor was reported to have been experienced, if the odor was detected by the investigator an intensity rating was assigned based on how strong an odor was present. A summary of the complaints and subsequent investigation results are included in the attached Appendix I.

Following the off-site complaint investigations, HCPH and Ohio EPA conducted an on-site investigation of your facility. During the on-site investigation(s) and follow-up correspondence from the facility, it was disclosed that GSF personnel discovered a reduction in flow to utility flare 1 upon arrival Monday morning, 2-6-12. The flame arrestor was serviced at 10:30 AM to correct the problem, during which time the enclosed combustor was brought on-line to maintain vacuum on the north end. It was evident sufficient vacuum was not maintained throughout this process as there was ballooning of the OCB observed by the phase 6 valve pit at approximately 1:50 PM on 2-6-12.

The lift stations on the north end (2 and northwest) have been observed to be a frequent source of odor during past site inspections and during the 2-6-12 morning and afternoon inspections. It was disclosed that corrective measures were in design phase for both lift stations with the concept of a radon-type vapor extraction system including a dry scrubber for the northwest lift station and a wet scrubber for lift station 2. A timeline for implementation of these controls was not provided. It was made clear by HCPH and Ohio EPA that more immediate measures were needed to address these two identified sources of odor. A tabular summary of the on-site odors observed during the 2-6-2012 investigation is included in Appendix II.

A follow-up inspection was made on Wednesday, February 8, 2012, by Chuck DeJonckheere, HCPH, during which both lift stations were investigated and continued to be a source of odors. A new tarp had been added over lift station 2. Rumpke reported that a spray nozzle of odor control solution had been activated inside the northwest lift station, and that a partial vacuum had been applied to both lift stations. Though action has been taken to address these point-sources of odors, additional controls are needed on the short term.

Below is a cursory inventory of north end odors observed on-site during the 2-8-12 follow-up inspection. The locations where odors were observed are indicated on the map and results of handheld instrument readings measured using a ppb Rae are contained in the following table. Results appear clockwise beginning in the northwest corner of the site.



Type of Odor	Odor Intensity	Total VOC (ppb)	Noteworthy Observations
Phase 5 Odor Leachate	3	38,500	NW lift station Odor Control in pit continuous, steam with high VOC's still escaping tarp- 38.5 ppm VOC read at edge of tarp.
	0	111	Phase 6 valve pit full of black liquid no strong odor, low VOC read, doors to pit open.
Phase 5 Odor	1	6,140	Reading from under rain flap east side phase 5/6, Brian H. had marked with orange paint to be addressed. Possible OCB anchor trench blow by.
Phase 5 Odor Leachate	3	1500	Phase 5 valve pit VOC read from pit 1500 ppb.
Phase 5 Odor Leachate	3	3,400	Lift Station 2 (east Lift Station) Up to 10ppm in valve pit door, steam and odor present at 8" line during pump run.
Leachate	2	846	At leachate load-out station, VOC reading from open port on frac tank.
Landfill Gas Gas Plant	2	300	Intermittent odor by gas plant.
Landfill Gas Gas Plant Leachate	2	350	Intermittent odor by service shop/gas plant.
Landfill Gas Gas Plant	1	40	In parking lot of Landfill Office.
Garbage Working Face	1	28	Slight garbage odor noted on Struble, south of phases 8 - 11.

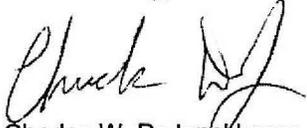
Inspection of the Odor Control Blanket was not conducted due to safety concerns of possible settlement with voids under OCB.

Please document odor control efforts accordingly as detailed in the Odor Management Plan. Focus on ensuring systems are utilized when feasible (especially in the Phase 5 area), along with best management practices to control offsite odors, including rapid incorporation of odorous loads into the working face, the use of alternate daily cover and minimizing the size of the working face to allow the efficient disposal of incoming waste. Utilize portable odor control systems to mitigate point sources of odor. Also, monitor the truck cleanout area regularly for odorous materials that may need to be scraped and incorporated more frequently.

Compliance with the requirements outlined in this letter, or the solid and infectious waste provisions contained in ORC Chapter 3734 and the rules promulgated thereunder, does not relieve you of your obligation to comply with other applicable State and Federal laws and regulations.

If you have any questions, please contact me at (513) 946-7875.

Professionally,

A handwritten signature in black ink, appearing to read "Charles W. DeJonckheere". The signature is fluid and cursive, with a large initial "C" and "W".

Charles W. DeJonckheere, R.S.
Director Waste Management Services

EC: Holly.hillyer@epa.state.oh.us
Russ.brown@epa.state.oh.us
Tracy.buchanan@epa.state.oh.us
Kerri.castlen@hamilton-co.org
Brad.miller@hamilton-co.org

Appendix I

2-6-12 Odor Complaints

Time	Location	Complainant
6:45 AM	5536 Dry Ridge Road	Dave Westrich
7:54 AM	5870 Squirrelsnest Lane	Bill Doll
8:30 AM	I-275 from Hamilton Ave to Colerain Ave and south on Colerain to Stonecreek Blvd	Susan Roschke
8:45 AM	W. Kemper and Pippin Roads	Kim Calangelo
8:49 AM	11937 Huntergreen Drive	Joseph Houck
9:00 AM	Kemper, Pippin, and Lick Roads	Cathy Cahill
10:02 AM	2829 Houston Road	Tracy Grome
10:21 AM	2018 Stapleton Court	Paul Ellis
10:55 AM	10580 Hughes Road	Bill Margrave

Investigation of these complaints by Hamilton County Public Health and Ohio EPA confirmed the presence of both off-site and on-site odor.

Date: 2-6-12 Confirmed Off-Site Odor				
Time	Inspector	Location	Intensity	Description
8:15 AM-9:25 AM	Nick Siefker, R.S - HCPH	Pippin at I-275 Overpass	1	Phase 5
8:15 AM-9:25 AM	Nick Siefker, R.S - HCPH	I-275 from Pippin Overpass to Hamilton Ave. Exit	1	Phase 5
8:15 AM-9:25 AM	Nick Siefker, R.S - HCPH	Bank Road west of Hughes Road	2	Phase 5
8:15 AM-9:25 AM	Nick Siefker, R.S - HCPH	Bank Road north of Crest Road to W. Kemper Road	2	Phase 5
8:15 AM-9:25 AM	Nick Siefker, R.S - HCPH	W. Kemper Road between Bank and Huntergreen	1	Phase 5
8:15 AM-9:25 AM	Nick Siefker, R.S - HCPH	Hughes Road south of Landfill Office	1	Phase 5
8:15 AM-9:25 AM	Nick Siefker, R.S - HCPH	Hughes Road north of Landfill Office	2	Phase 5
10:35 AM-11:15 AM	Nick Siefker, R.S - HCPH	Hughes Road and Bank Road Intersection	2	Phase 5
10:35 AM-11:15 AM	Nick Siefker, R.S - HCPH	Crest Road	1	Phase 5
10:35 AM-11:15 AM	Nick Siefker, R.S - HCPH	Pippin Road between Cranbrook Drive and W. Kemper	1	Phase 5
3:00 PM	Chuck DeJonckheere, R.S – HCPH, Holly Hillyer, R.S - OEPA	11010 to 11164 Hughes Road	2	Phase 5

Appendix II

Date: 2-6-12 Confirmed On-Site Odor				
Time	Inspector	Location	Intensity	Description
9:45 AM	Nick Siefker, R.S - HCPH	Lift Station 2 (east lift station) near	3	Phase 5 /Leachate
9:45 AM	Nick Siefker, R.S - HCPH	Northwest Lift Station near	3	Phase 5 /Leachate
1:15 PM – 2:15 PM	Chuck DeJonckheere, R.S – HCPH, Holly Hillyer, R.S	Lift Station 2 (east lift station) near	3	Phase 5 /Leachate
1:15 PM – 2:15 PM	Chuck DeJonckheere, R.S – HCPH, Holly Hillyer, R.S	Phase 6 Valve Pit	2	Phase 5 /Leachate
1:15 PM – 2:15 PM	Chuck DeJonckheere, R.S – HCPH, Holly Hillyer, R.S	Northwest Lift Station near	3	Phase 5 /Leachate

Hillyer, Holly

From: BRIAN L HUFFMAN <brian.huffman@rumpke.com>
Sent: Tuesday, February 07, 2012 7:40 AM
To: Chuck.DeJonckheere@Hamilton-Co.org; Castlen, Kerri; Miller, Brad; Cook, Joleen; Hillyer, Holly; Brown, Russ; LARRY G RIDDLE; JOHN R BUTLER; RICHARD J ROBERTS; JEFFREY E RUMPKE; BRIAN L HUFFMAN; JENNIFER L HOEHN
Subject: RSL North-End Work Activities 2-3 to 2-6 -2012

02/03/2012

*Gas and leachate extraction trench installation ongoing.

02/04/2012

*No work activities due to weather conditions.

*24 hour coverage ongoing

02/05/2012

*Addressed small out break of leachate from under OCB anchor trench north flume area.

02/06/2012

*Gas and leachate extraction trench ongoing to the north.

*New tarps for North West and East lift station.

*Odor control nozzle re activated at north west lift station.

*Responded to two small out breaks of leachate.

Brian Huffman
Rumpke Sanitary Landfill
Compliance Coordinator
513-623-3648 mobile

Rumpke Weekly Inspection Checklist

Inspector: Joleen Cook, Holly Hillyer, Chuck DeJonckheere, Kerri Castlen, Aaron Morgan, Brad Miller

Date: 02/15/12

Rumpke Personnel Present: Brian Huffman, John Butler, Larry Riddle

Completed

Access

Y/N - Sign-in at Landfill Manager's office or scale house and display identification

Health and Safety

Y/N - Review Health and Safety Plan as needed

Y/N - Don PPE – Hard hat, boots, reflective vest, and personal air monitor (minimum)

Y/N - Discuss current site activities with Rumpke personnel

Notes: Went over the areas of the OCB where it was safe to walk on

Affected Area(Non-OCB)

Y/N Interview/discuss activities or events occurring since previous inspection

Notes: A new gas well/boring may be installed in the vicinity of W120R3. New gas wells/borings may be installed along the bench from W157 to W221. They plan to use stainless steel for these wells.

Y/N - Was air monitoring conducted (if so, attach results) See attached results

Y/N - Inspect gas wells and borings. Look for leaning, sinking, pinching, loss of integrity (note any issues/concerns)

Notes: A gas odor was noted around W120R3. The methane reading around the well was 350 ppm.

Y/N - Inspect cover integrity in the affected without OCB

Notes: No problems were observed in the area around W120R3.

Y/N Is visible gas observed from areas without OCB

Y/N Leachate Structures

- Phase V under drain/lift station

- Northwest Lift Station

- East Lift Station

- Others

Notes: See the attached sheet for monitor readings from the various leachate structures. Visible steam was seen from the Northwest Lift Station. Rumpke personnel fixed the tarp while we were there.

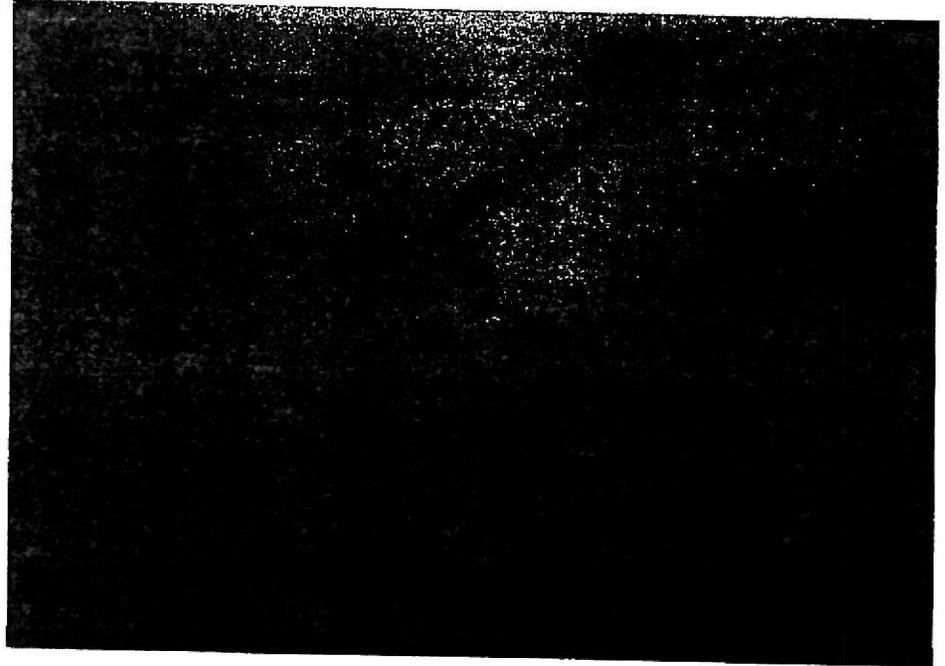
- OCB Integrity**
- Y/N Were any parts of the OCB inspected, if so note sections
Notes: The OCB was inspected along Borings 26, 27, and B28. The southern end by W-137 was also inspected. The OCB along the anchor trench road was checked from the beginning of the southern portion up to the Phase V riser.
- Y/N Were any holes or tears noted in OCB, if so where(document with photos, as needed)
Notes:
- Y/N Inspect for compromised integrity(note locations and document with photos)
Notes:
- Y/N - Was air monitoring conducted (if so, attach results) See attached results
- Y/N - Walk perimeter road and observe bottom OCB area where it ties into liner, note any issues
Notes: The OCB along the anchor trench road from the beginning of the southern portion up to the Phase V riser was inspected.
- Stability/Slope Integrity**
- Y/N - Walk affected area with the most recent settlement/stability pin monitoring results drawing
Notes:
- Y/N Inspection of buttress
- Walk slope toe buttress; inspect for areas of upheaval, surface cracking/compromised integrity(document with photos, if needed)
Notes: Rumpke personnel have installed a large portion of the western buttress. Construction of this buttress is not yet complete.
- Gas Plant Inspection**
- Y/N Was gas plant inspected? If so attach Gas Plant Investigation Form
The pressure drop for Flare #1 (existing) was 1.1 inches and Flare #2 was 0.8 inches

- Phase V Leachate Load-out**
- Y/N Was Phase V Leachate being loaded-out
A Rumpke truck had just filled up and was leaving upon our arrival. It had filled up at the Northern filling station.
- Y/N Were odors noted(note any monitored readings)
Readings: Light Phase V odors were noted but we could not determine the source.
- Construction**
- Y/N Inspect new construction including the following: gas trench installation, known problems (gas wells experiencing reduced flow), additional cover placement. Document/Photo construction changes.
- Odors**
- Y/N Were odors noted off-site. If so, location and type of odor
Notes: See the attached Loop Monitoring sheet.

If site visit is a result of a complaint, complete "Rumpke Complaint Investigation" form.

2/16/12 - Rumpke

#1



#3



#4



2/15/2012 - 1:00 PM

Winds SSW at 4-7 mph

Location	Methane (ppm)	VOC (ppb)	Comments
B28	7	12	No Odor
B27	4.8	8	No Odor
B26	14	28	450 ppm CO, 2 ppm H2S, Phase V Odor, Gas was leaking out from the boot area of the well.
W120R3	350	20	Gas Odor
W223	7	58	No Odor
TP25	10	16	No Odor
Phase II Underdrain	2000+	1100	Sewer Odor, Crack in the white cap on one of the pipes
East Lift Station	2000+	2500	Sewer Odor, Rumpke had just finished up cleaning out lift station.
Phase V Riser	1000	12,500	Phase V odor
NW Lift Station		45,000	Strong Leachate Odor, Steam seen coming from tarps
50 feet South Knockout Tank	2000	10,000	Strong Phase V Odor, There was no vacuum in this area since they were extending this line to the south

Odor Description	<input type="checkbox"/> Landfill Gas <input type="checkbox"/> Chemical <input type="checkbox"/> Smoke <input checked="" type="checkbox"/> Other <u>inspection</u>		
Investigator's Name	<u>Moogan</u>		
Date of Investigation	<u>2/15/12</u>		
Complaint Number			
Rumpke Contact	<u>Rich Wilcox</u>		
Wind Speed			
Wind Direction			
Gas Plant Operation	<input checked="" type="checkbox"/> On <input type="checkbox"/> Off	If off, date last operated:	
Thermal Oxidizer Temp.	<u>1526</u>	Degrees F.	
Gas Flow Rate	_____	Million cu ft/day	<u>3760</u> cubic ft/min
Gas Plant Operation	<input checked="" type="checkbox"/> On <input type="checkbox"/> Off	If off, date last operated:	
Thermal Oxidizer Temp.	<u>1776</u>	Degrees F.	
Gas Flow Rate	<u>•</u>	Million cu ft/day	<u>1918</u> cubic ft/min
Gas Plant Operation	<input type="checkbox"/> On <input checked="" type="checkbox"/> Off	If off, date last operated: <u>1/21/12 2/9/12</u>	
Thermal Oxidizer Temp.	_____	Degrees F.	
Gas Flow Rate	_____	Million cu ft/day	_____ cubic ft/min
Gas Pressure	_____	Psi at well	well # _____
LFG Temperature	_____	Degrees F.	
N ₂ and O ₂ Conc.	N ₂ , % _____	O ₂ , % _____	
Utility Flare #1	<input checked="" type="checkbox"/> On <input type="checkbox"/> Off	Gas flow <u>2680</u> [*] CFM	Flame <input type="checkbox"/> On <input type="checkbox"/> Off Temp. <u>1234</u> ^{°F} *
Utility Flare #2	<input checked="" type="checkbox"/> On <input type="checkbox"/> Off	Gas flow <u>1370</u> [*] CFM	Flame <input type="checkbox"/> On <input type="checkbox"/> Off Temp. <u>1313</u> ^{°F} *
Enclosed Combustor	<input checked="" type="checkbox"/> On <input type="checkbox"/> Off	Gas flow _____ CFM	Flame <input type="checkbox"/> On <input type="checkbox"/> Off Temp. _____

PJS Ver. 1.3, 10/2010, G:\P&E\STURDEV\Forms\Gas Plant Guide.docx

Utility Flare #1 ΔP = 1.1 inches
 Utility Flare #2 ΔP = 0.8 inches

* 8:00 AM Reading

**HAMILTON COUNTY
ENVIRONMENTAL
SERVICES
Air Quality • Solid Waste**

Name of Investigator: Castlen
 Date of Investigation: 2/15/12
 Wind Speed and Direction: SE-SE(Gust)
 Temperature: 44° F

HCDOES conducted surveillance of the area surrounding Rumpke and recorded the following:

Location	VOC (ppb)	H2S (ppm)	CO (ppm)	LEL, %	Methane, ppm	Odor Observations
Struble Rd at PM mon.	0	0	0	0	2.4	Slight garbage
3743 Struble Rd						
Pippin Rd and Stout Rd	0	0	0	0	3.2	No odor
Hughes at Breezy Ac.	0	0	0	0	2.3	No odor
10795 Hughes Rd	5	0	0	0	2.5	No odor
10970 Hughes Rd	0	0	0	0	2.68	No odor
11110 Hughes Rd	0	0	0	0	3.0	No odor
11170 Hughes Rd	0	0	0	0	2.98	No odor
11244 Hughes Rd	0	0	0	0	2.5	No odor
Hughes and Bank Rds	0	0	0	0	3.2	No odor
Bank Rd at Utility Flare	1	0	1	0	10	Phase I ^{gas} odor
Bank Rd under US 27	0	0	0	0	4.8	No odor
10985 Bank Rd	0	0	0	0	3.8	No odor
Old Colerain, Bank Rd	0	0	0	0	2.4	" "
10741 Colerain	0	0	0	0	2.6	" "
Christ TPP Church	0	0	0	0	2.8	" "
US 27 and Colerain Ave	0	0	0	0	2.3	" "
Dry Ridge and Challenger Way	0	0	0	0	2.3	Food

*Stink-phase II
along Bank*

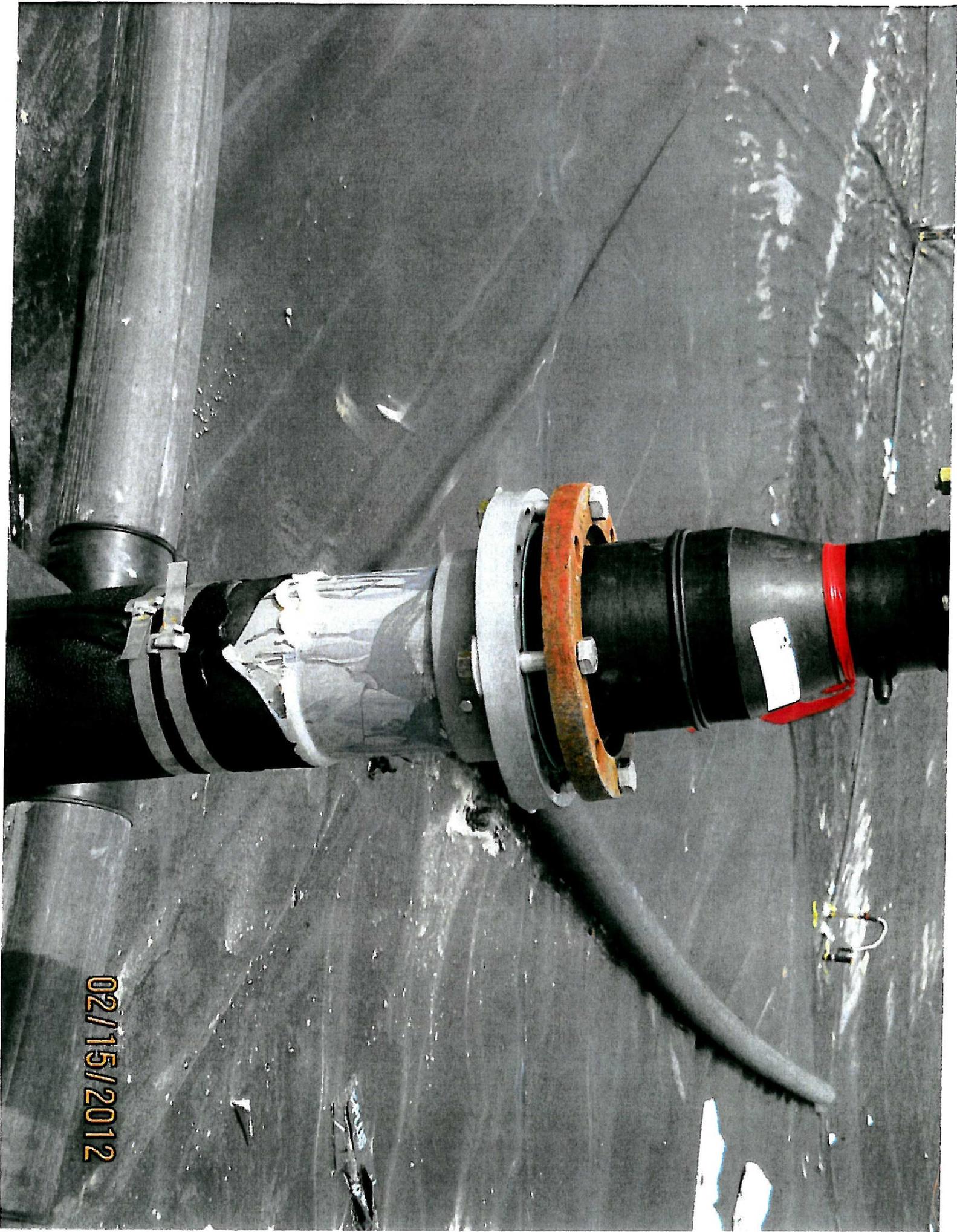
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OCB and Gas Extraction Well inspection Photos

Appendix 1



02/15/2012



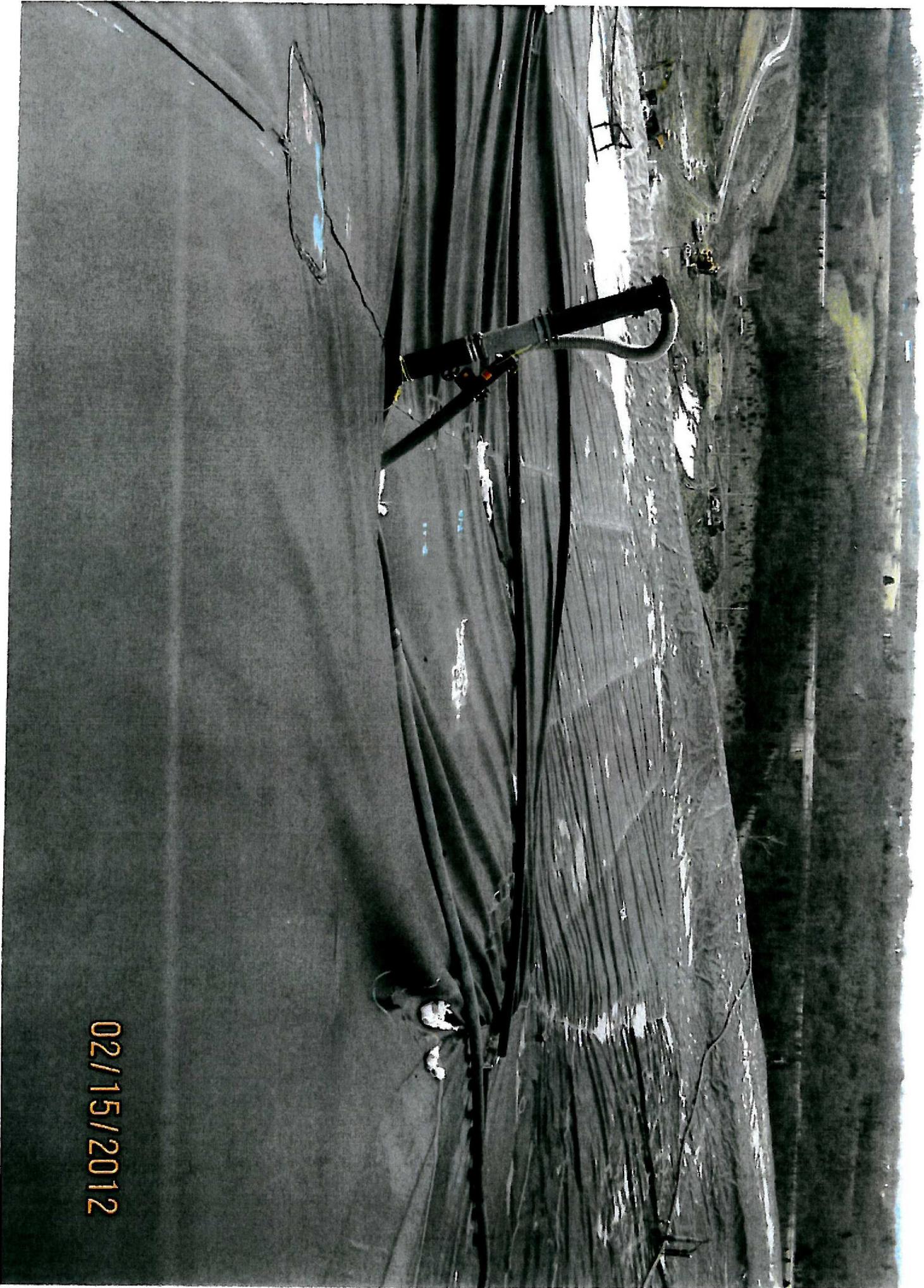
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02/15/2012

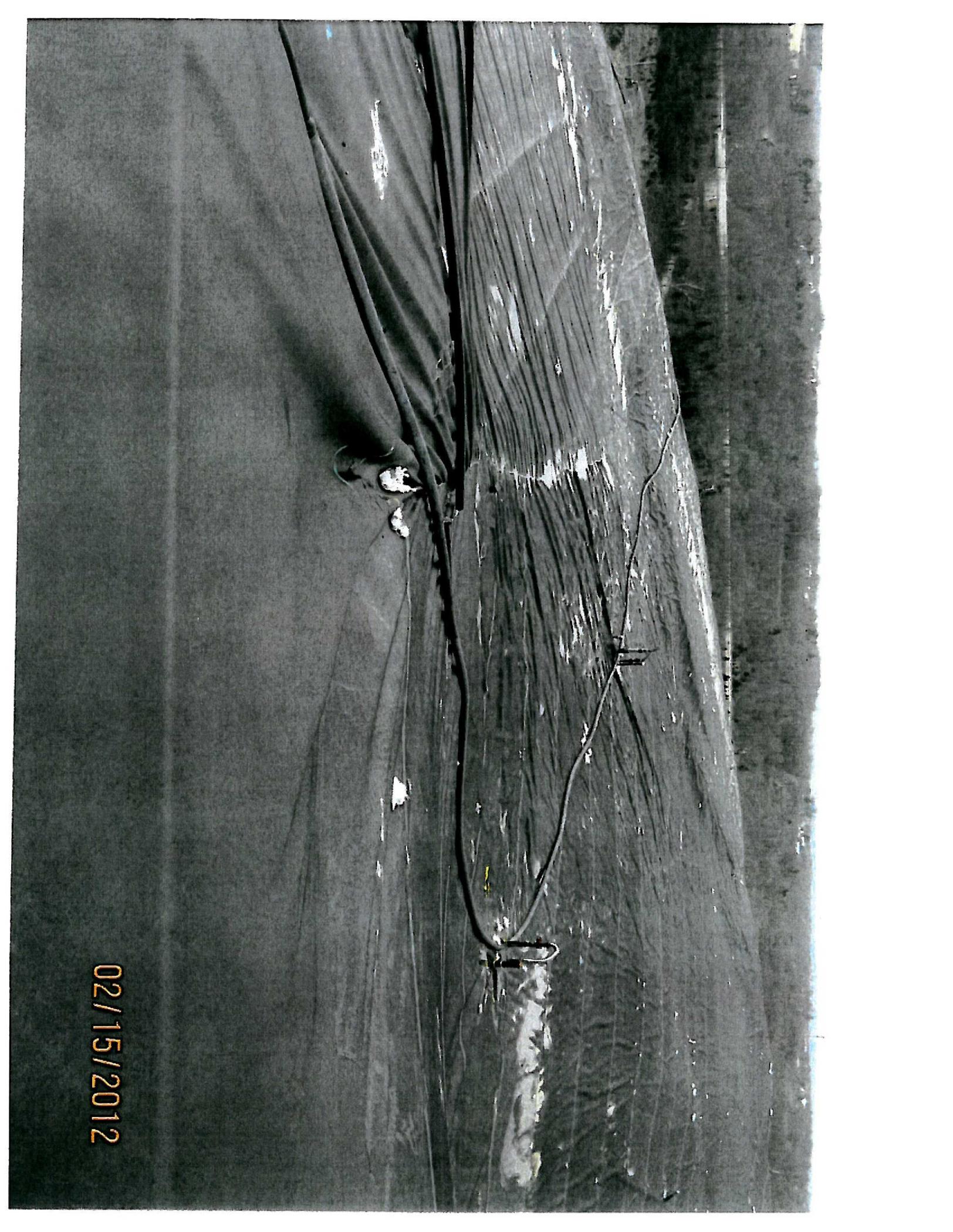
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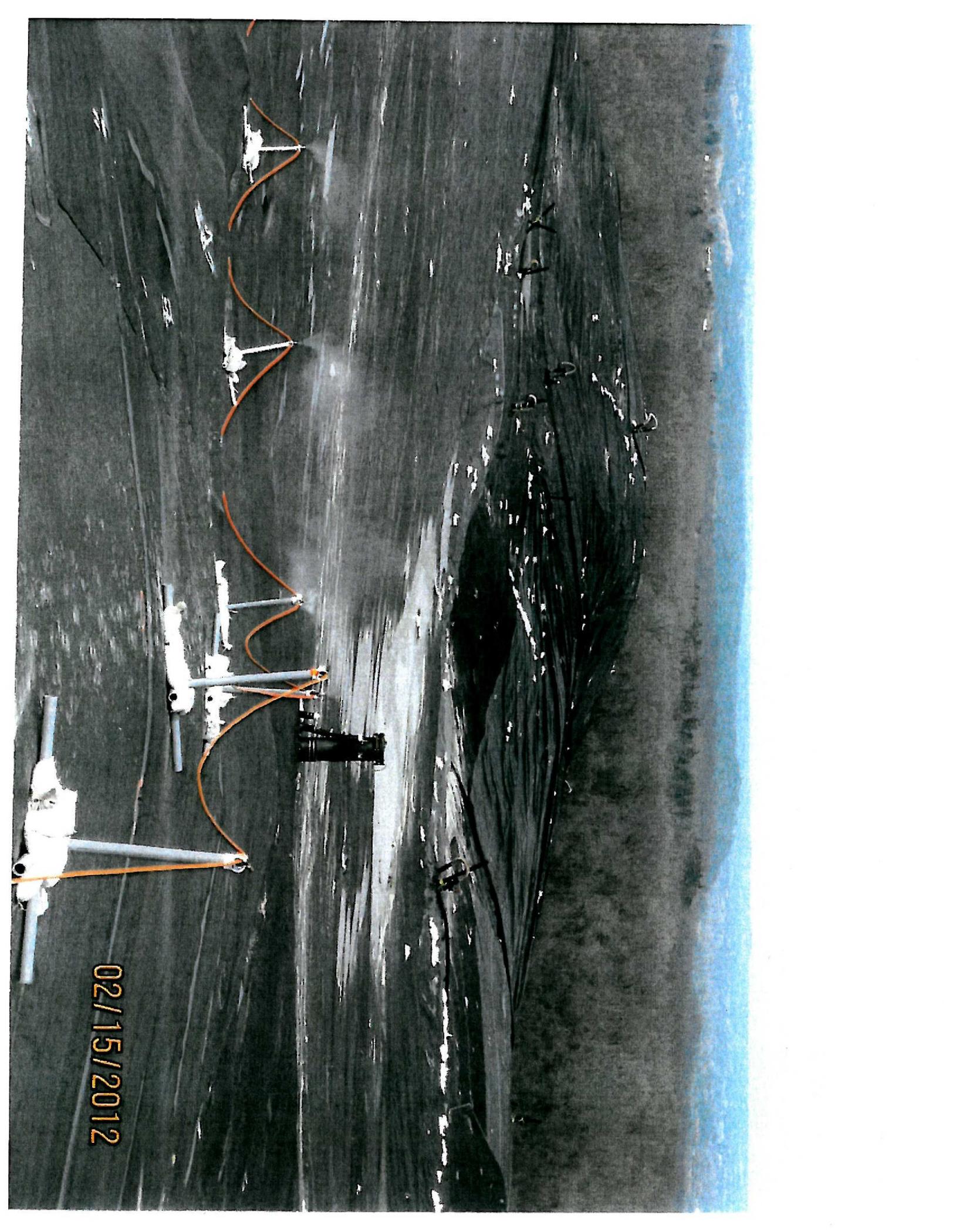
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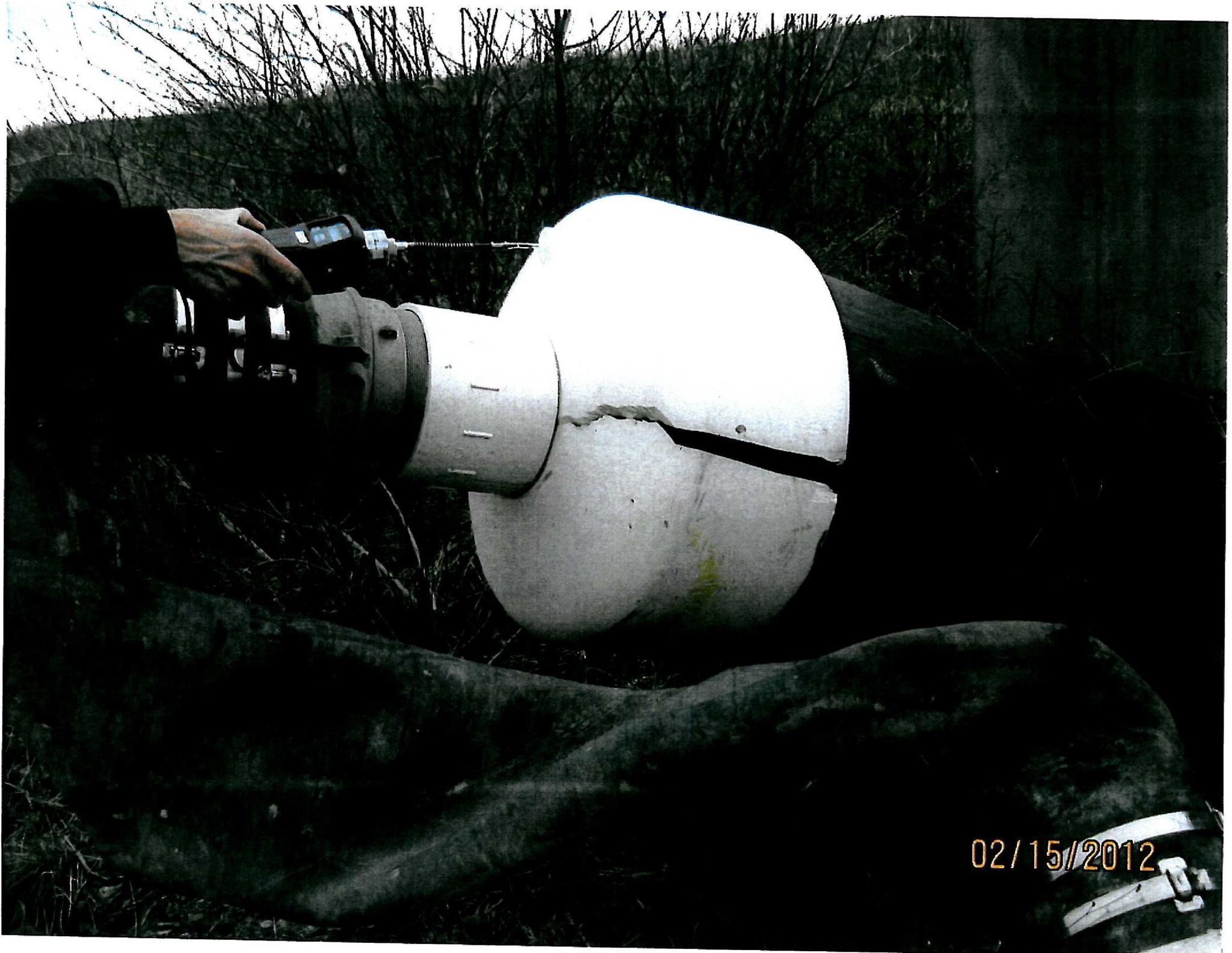
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Lift Stations and Clean out inspection Photos

Appendix 2



02/15/2012



02/15/2012



02/15/2012



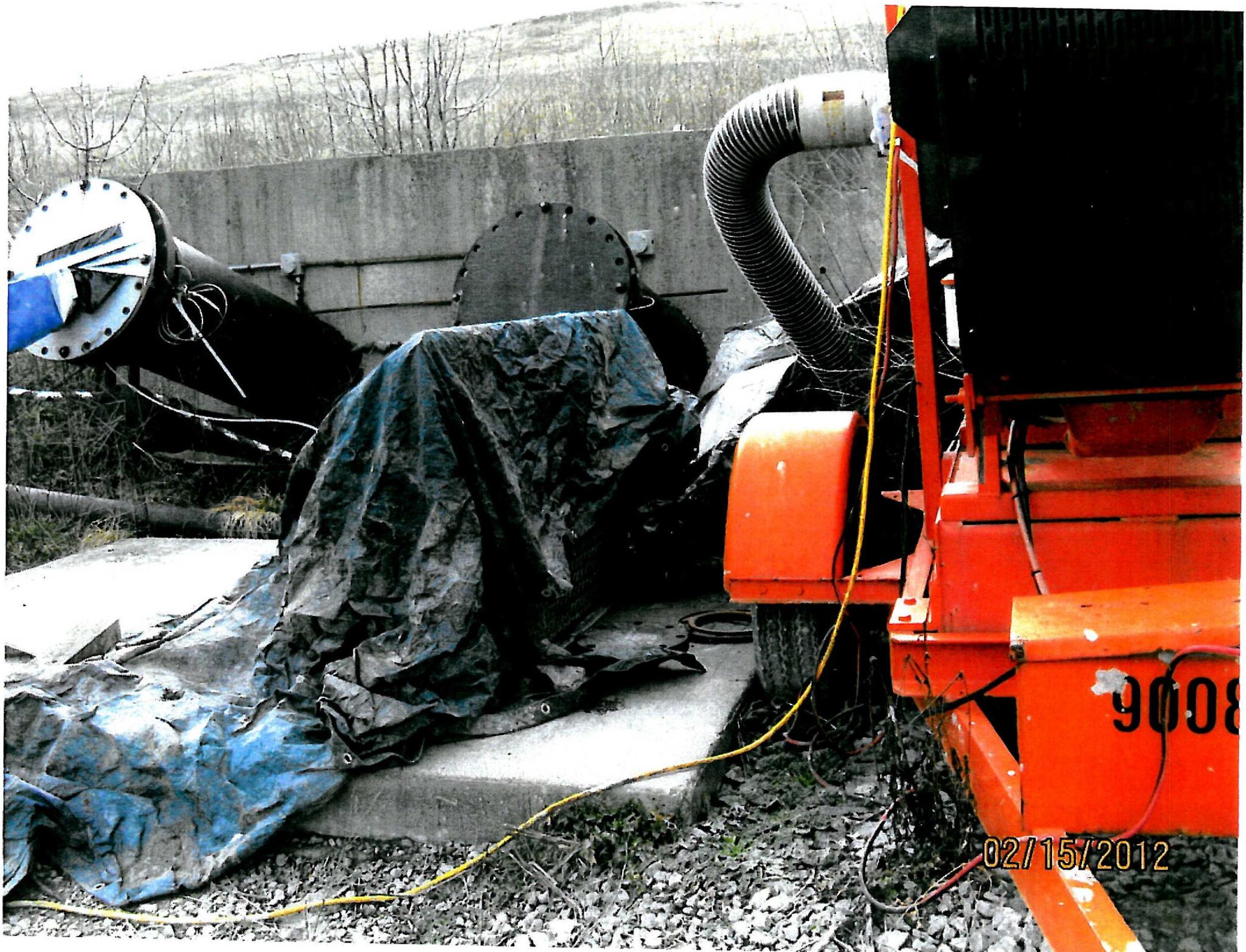
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02/15/2012



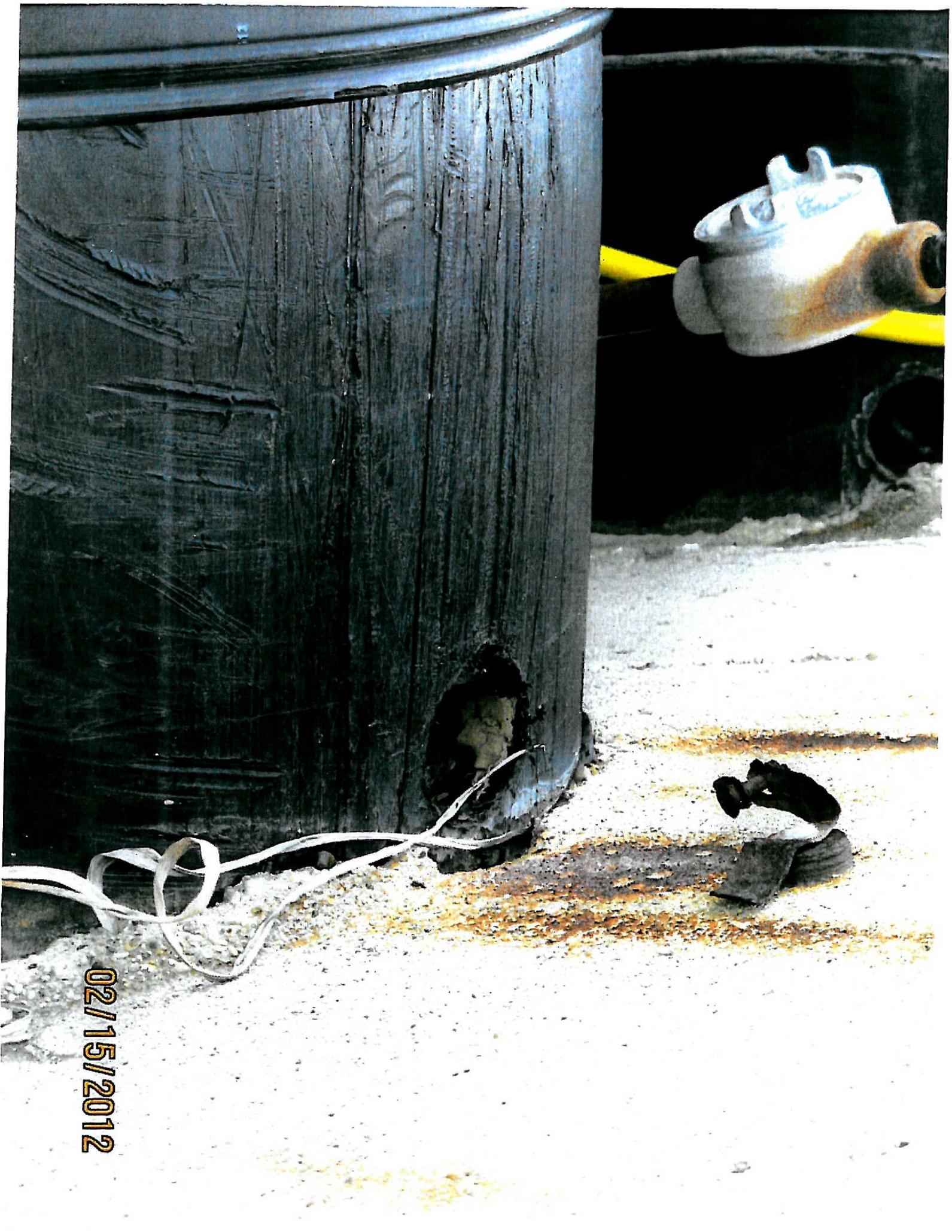
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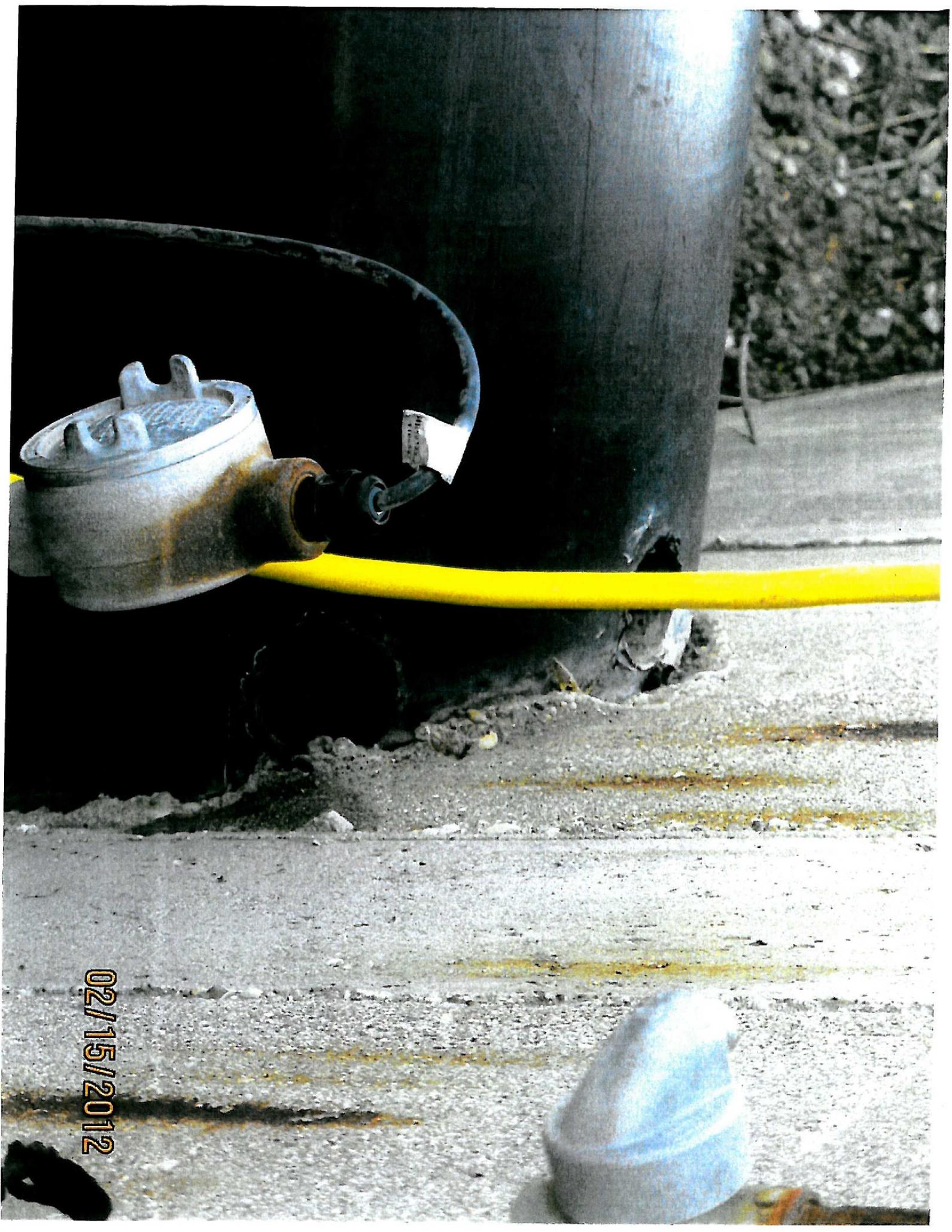
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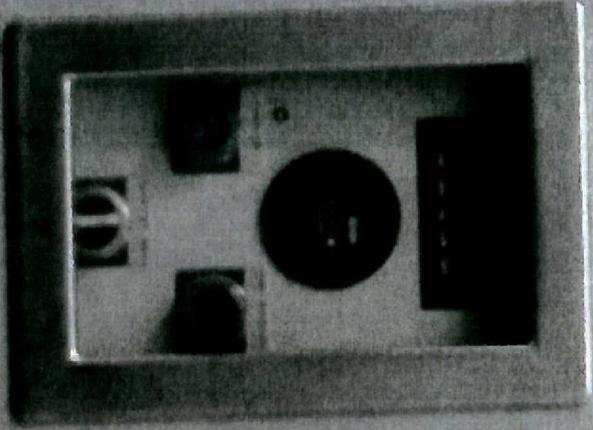
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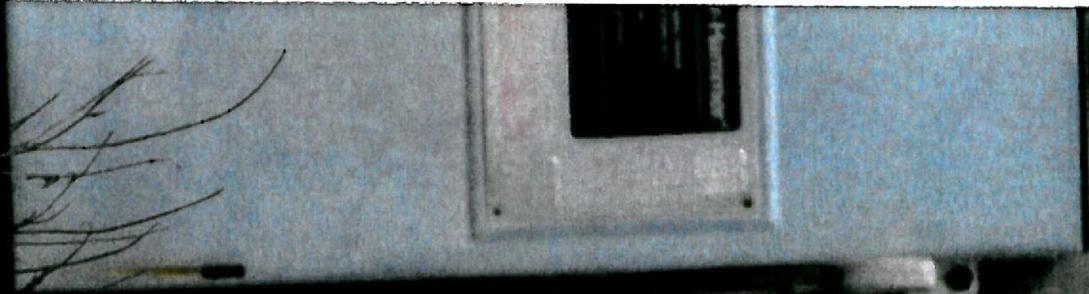


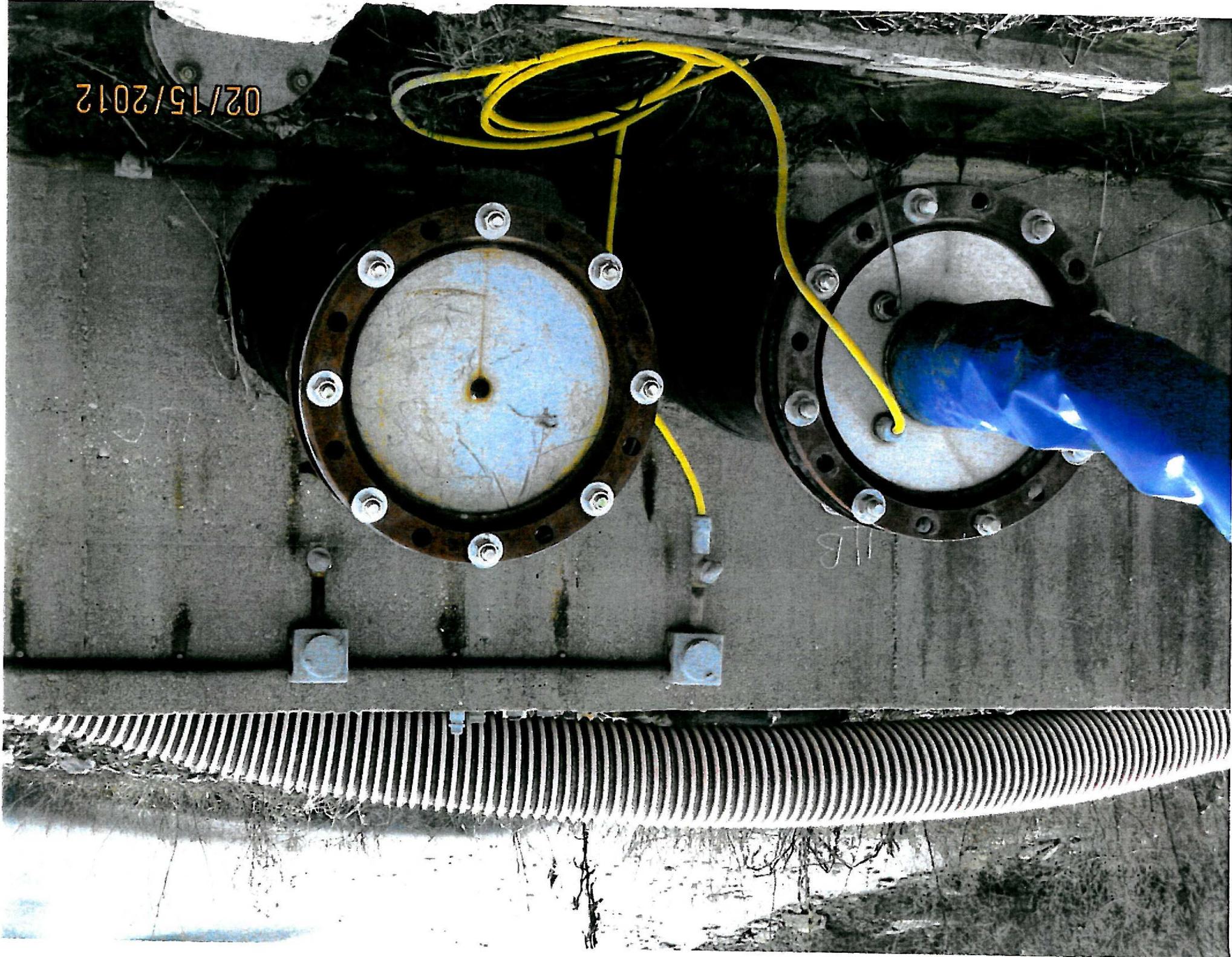
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PHASE 4

02/15/2012

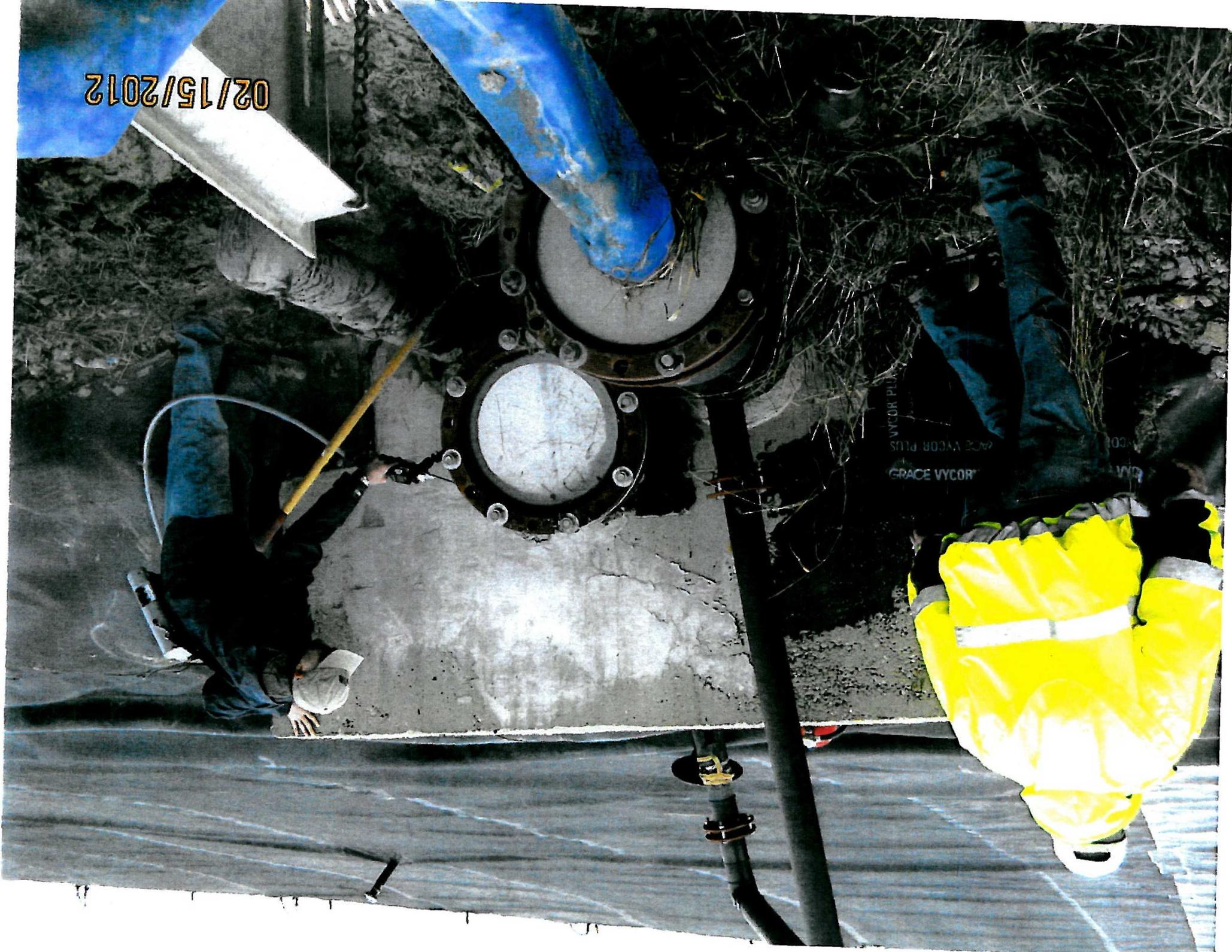




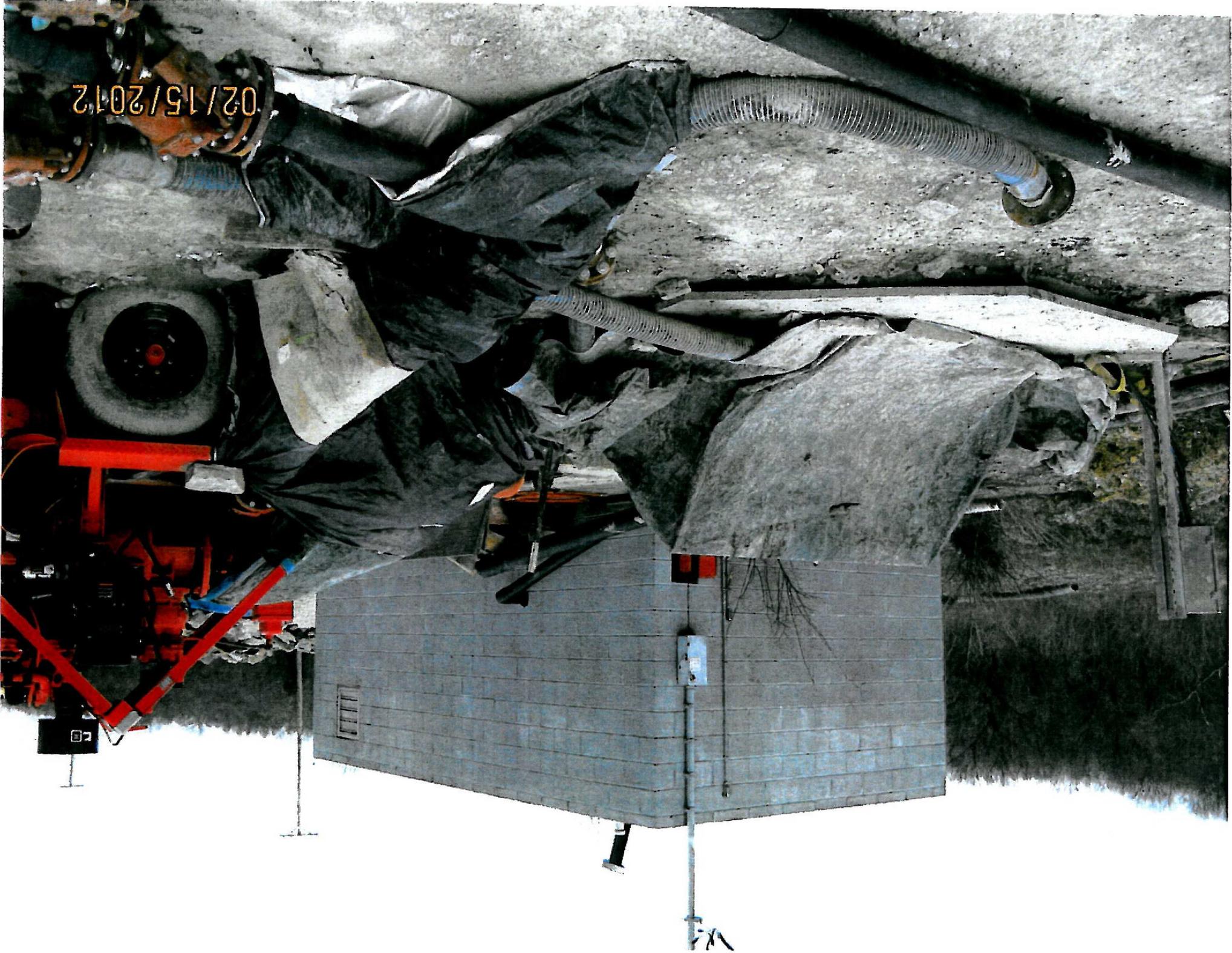
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11B

02/15/2012



VYCOR PLUS
FACE VYCOR PLUS
GRACE VYCOR

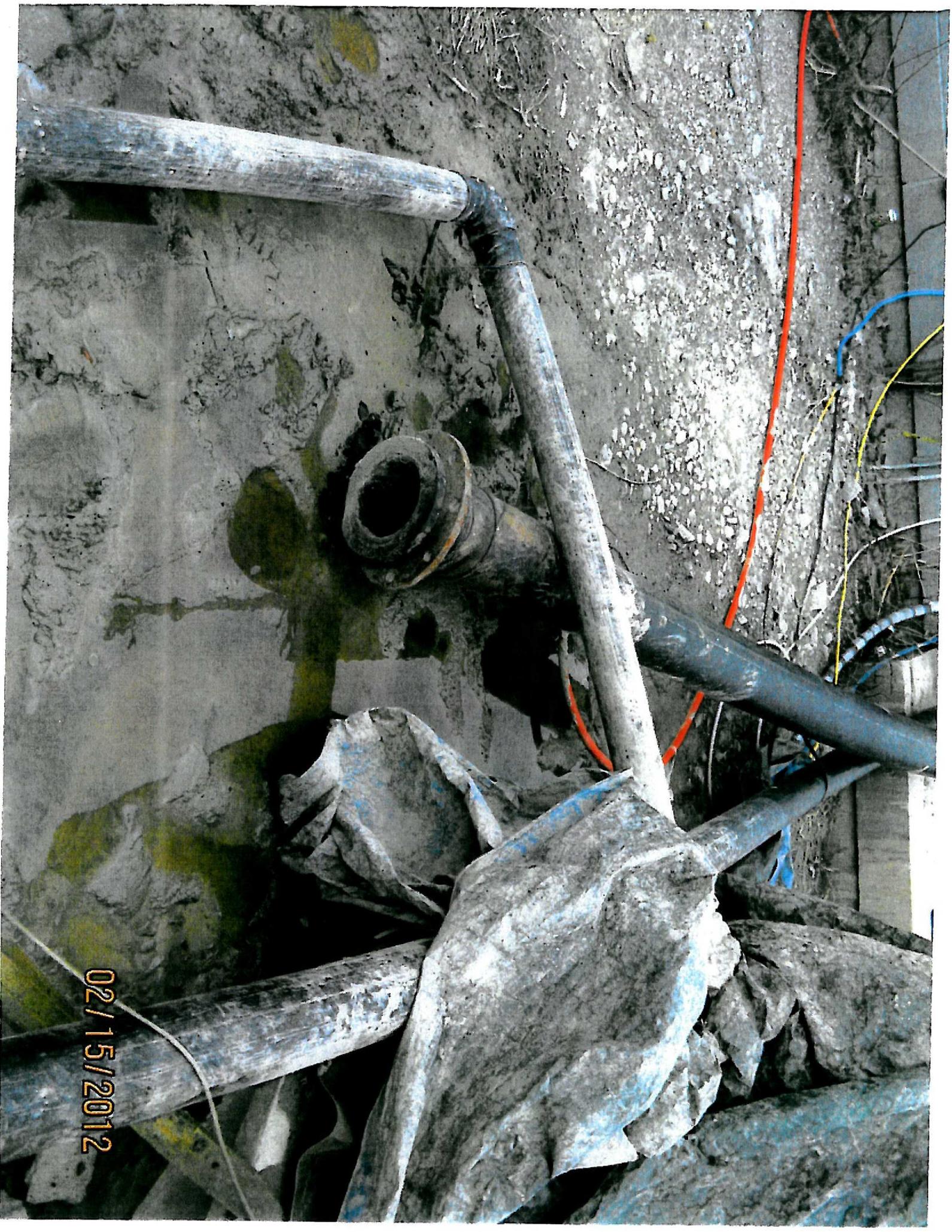


02/15/2012





02/15/2012



02/15/2012



02/15/2012

Utility Flares and Buttress area Photos

Appendix 3



02/15/2012



02/15/2012



02/15/2012



02/15/2012

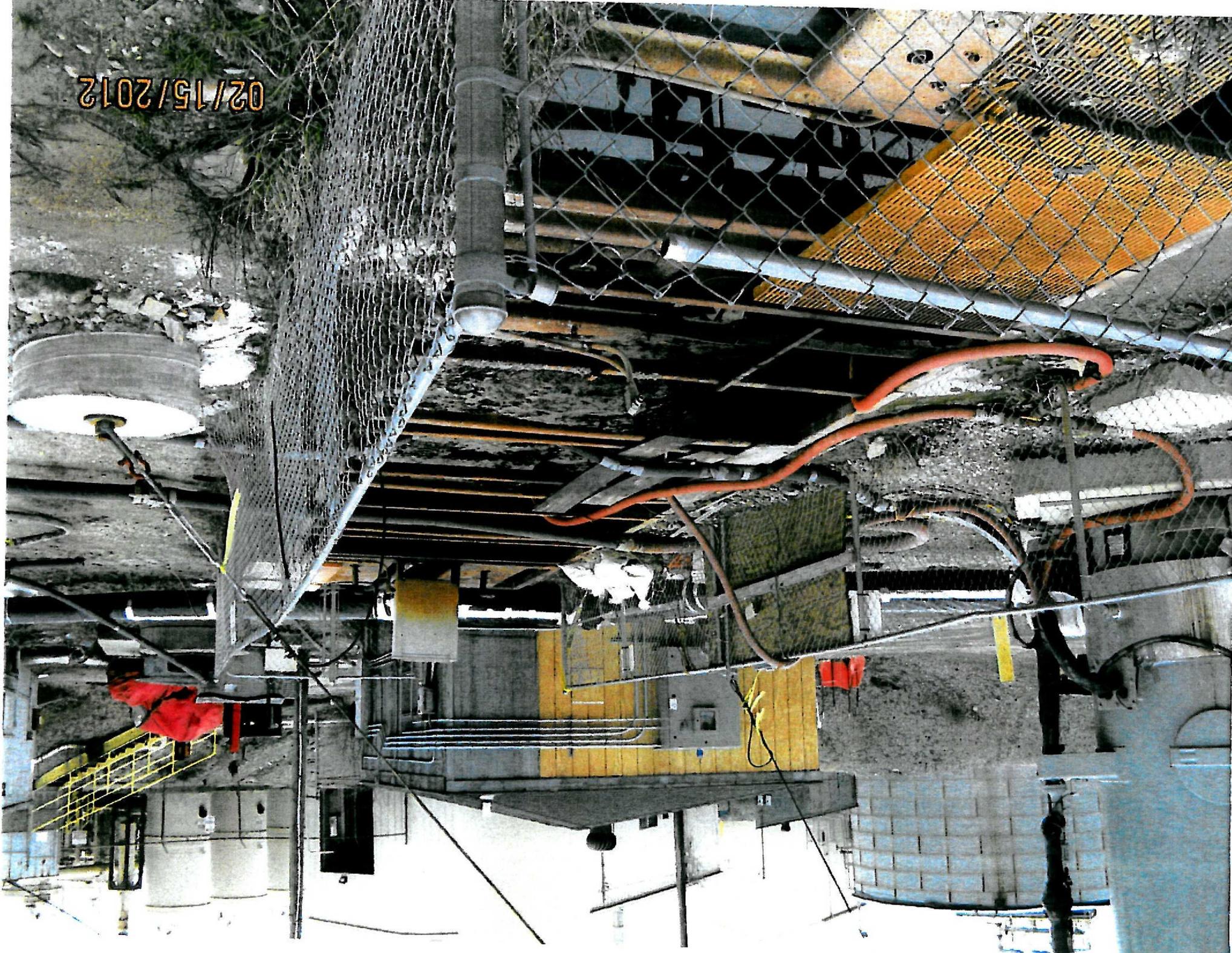


02/15/2012

Leachate Pumping area
Photos

Appendix 4

02/15/2012



02/15/2012

ER
BLE



Open Pit at Gas Plant
Photos

Appendix 5



02/15/2012



02/15/2012