<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0700</td>
<td>Arrive at site.</td>
</tr>
<tr>
<td>08:15</td>
<td>Site walkthrough to scope out planned work elements.</td>
</tr>
<tr>
<td></td>
<td>Identified 1-2’ water depth in South St ditch.</td>
</tr>
<tr>
<td></td>
<td>Identified minor discrepancies between lab and field data sampling and sample logistics.</td>
</tr>
<tr>
<td>11:25</td>
<td>Assisted soil/GW bottles.</td>
</tr>
<tr>
<td></td>
<td>Pump to be scanned prior to use.</td>
</tr>
<tr>
<td></td>
<td>Consensus trench sample will be numbered.</td>
</tr>
<tr>
<td></td>
<td>Northwest samples to begin 9/20/04.</td>
</tr>
<tr>
<td></td>
<td>Northwest samples to begin 9/20/04 (cont).</td>
</tr>
</tbody>
</table>

Read and Understood By: [Redacted]
12:00 Lunch, discussed and saw off trenches and excavation
- Anticipate scan of excavation will be completed tomorrow prior to mobilizing for assistance on Module MH-6 and investigation on the South Bluff
15:00 depart NFSS site

11/19

Read and Understood By

11/13/13

[Signature]
URS personnel: [Redacted]

Weather: Clear, cold 25°, calm winds <5 mph

0700 arrive NSS site

0700 Arrive NSS site

- Start surveying (Russian) prior to starring work tasks at South ditch

0800 Russian contractors (Italians) arrive on site and hand over equipment required for surveying tasks

- 0900 Scour equipment, excavate

0800 pers. Safe measurements depth to water & manhole
MH-06 & MH-07 Depths measured to approx 6.0' BTOG and 6.3' BTOG

Est. elevation calculated is based on 1999 Topo

Contractors provided by U.S. Corps

Manhole No. Grid Elevation Appr. Water Depth
MH-6 316.23 316.63 6.4 310.23
MH-7 317.2 317.2 2.3 314.9

Based on estimated elevation data, a significant hydraulic head (+4.4') is identified between MH-6 and MH-7

0900 [Redacted] on site

- Discussed proposed scope of work at MH-6 location

0930 [Redacted] outlining SOD with Russo contractors

- Initial plan was to use 6" pump to drive water from South 31 ditch. Due to size of discharge hose [Redacted] opted to use 3" pump and hose to facilitate running hose across access road and over in perimeter fence

[Redacted]

11/20/13
10:45 Wait for Russo equipment in pump, hose, sandbags etc.
11:05 Russo survey arrives with supplies & equipment
- Photo document equipment & hold, red scan
11:45 Russo breaks for lunch
12:30 Start sandbag emplacement on upstream side of culvert & ditch
13:20 Completed barricade on East (upstream) culverts
- Prep to barricade downstream culverts
13:45 Pulled security grates to access both downstream culverts

Note:
- Culverts measure 5' in diameter, partially obstructed with approx. 2' of sediment
- Began sandbag emplacement
14:10 Completed sandbag barricade on E West (downstream culverts)
14:20 Started pumping South 3 citad, 6" pump
- Discharge hose to empty purge water into above barricade & eastmost downstream culvert
- Unable to prime pump due to cracks identified in pump suction hose
15:15 Russo personnel continue troubleshooting pump problems

Note: NYSDEC personnel present on site for site visit.
15:35 Russo personnel unable to prime pumps, called hose
- Meyer hose to be on site tomorrow morning with intent to pump ditch thru excavate south
16:00 Depart NFSS

Continued on Page

Read and Understood By

Signed 11/28/13
NASS BOP Field Investigation

Project: Sewer Investigation

Weather: Cloudy, 35-40mph light SW wind 5-10 mph

0700 Arrive NEB prep to begin purification ops and sewer investigation (Subsequent to arrival of NASS personnel)

- Pending replacement of compromised suction hose (1" rubber) 4" pump will purge water from South B1 ditch

- Trench will be advanced between M4-060 and the South B1 ditch to ascertain the presence and condition of the NE-SW trending sewer

0800 NASS personnel arrive, prep to begin purification and sewer investigation ops. Waiting for arrival of 6" suction hose

0930 NASS starts pumping w/ 3" trash dump

10:15 VSAAC personnel arrive on site

10:30 NAAP arrives w/ 6" such. pipe

11:10 Start pump, pumped ditch w/ 6" pipe

11:20 Start excavation ops

12:05 Identified and exposed clogged/plugged southermost component of sewer. Top of concrete exposed (approx 6'x6'). Exposed concrete appears as a normal pour. Concrete slab measuring approx 4' wide x 3' thick. No evidence of open sewer pipe was observed

- USACE requested and collected soil samples (3) from sidewalk and beneath concrete slab

- RAD tech completed RAD scan of soil excavated from trench

12:30 Crew breaks for lunch

Continued on Page...
13 53 Continued MIT-06 removal and sewer investigation
- Russell pumped water from MIT-06 into 1500 gal poly tank
- Dyes and chemicals excavated to southernmost edge of manhole
14 35 (Rad Tech) prep to scan excavation extents - checked where USA/CRI removed excavation and added additional 12' on either side on concrete enclosed sewer
14 45 Russell advanced excavation to approx. 10' N.of of MIT-06. Boer or manhole appears to be greater depth/set at bedded gravel
- Gravel appears to be intermittent, reaching GW into 12' deep excavation
15 50 Break through top of sewer on northern edge
- Hydraulic head in sewer resulted in discharge into excavation. Plugged breach in sewer with temporary clay/plug
16 30 Suspended work activities for today
16 45 Russell personnel depart site

Note: USA/CRI personnel collected water sample from excavation and subsequent to release from breached sewer

1/21

Continued on Page

Read and Understood By

[Signature] 1/21/13

Date

Sinned

Date
0700 Arrive NFSS site

0910 Russo personnel arrive on site
- Instructed Russo to pump ditch water that had risen overnight due to rain/mall event
- Currently water elevation in ditch is equal to and
  had rised excavation
- Photos taken on existing condition and emailed to
  Kevin Canare
- Plan is to purge water from ditch into demonstration culverts
  and then purge water in excavation into 1,500 gal poly
  tank
0930 Started pumping and purging ops in both South ditch
  and MH-06 excavation
1010 Russo stops pumping in excavation to pump out
  1,500 gal poly tank
- Prepared cross-section drawing, MH-06 trench
1125 Russo returns with empty 1,500 gal poly tank
- Continue pumping w/in excavation

1230 Filled additional 1,500 gal poly tank, continued pumping
1330 Filled 1,500 tank (1,500 total)
- Russo breaks for lunch

1440 Purged additional 1,500 gal now total of 6,000
  gal purged to poly tanks
1500 Distributed Russo to dress excavation south
  on manhole and emplace sail in existing sump
  to facilitate RAD scan in southwest area
- Intent is to backfill part of excavation to

Read and Understood By

11/22/13
Ensure that water will not enter or exit trench from the ditch.

1600 Russo completes benching w/ muck excavation, partial filled sump

- HAD tech (Mike) performs complete RAD scan of trench sidewall and bottom in southernmost part of trench adjacent to South 31 ditch.

1630 Russo installs soil berm at southermost end of trench.

- Removed sandbags from both downhill ditch curvets.

Note: Collected surface soil and duplicate sample (0 manholes)

Sample ID      Time
IEMH-6 T1      10.00-0.5T 2000 1430
IEMH-6 T1      10.00-0.5T 9200 1430

Soil samples submitted to Test Authority for Total Uranium (2 ppm)

1700 Trench activities suspended, Russo & JPH depart site

11/22

Read and Understood By

11/22/13
12:45 - Started cutting top of sewer
13:20 - Bored sewer, ACCC collects water sample from
       sewer pipe installed in 6" core hole
14:00 - Collected surface soil sample(s)
        - IEGT10.0-6.5-2002 Total 1
        - IEGT10.0-6.5-2002 7th width, 2m-226 (5'10"
14:45 - Sidewall sample along Eastern wall IEGT1.5-9.0-2003
15:00 - Sidewall sample along Western wall IEGT3.60-4.5-2004
15:30 - BMT sample, soil beneath sewer/gravel layer IEGT13.0-10.5-2005
        - currently waiting for cement truck to plug sewer
        - continued with paperwork
16:15 - Cement truck arrives, mixed large clump of concrete in
        - attempted to pour concrete mix into 6" riser/concrete
        on top of sewer
        - unable to pour requisite amount of concrete into sewer
        - maximum volume poured = 55 gal
        - Pulled riser pipe and attempted to open sewer core hole
        1700 - Pouring ball valve on concrete load into excavation
        - attempted to break concrete encased sewer with excavator
        bucket
        - will continue attempt to collapse/break sewer tomorrow
1730 - Suspended work activities for today
1745 - AM depart NFSS

11/25

Read and Understood By
Continued from Page 15

0700 AM/ Arrive at NFSS site.
0800 Russo personnel arrive, prep to pump water from 15 ft. lift in tanks to 20,000 gal frac tank.
- Subsequent to RAD scan continuation.
0805 Discuss plans to install to seal plug sewer.
- Russo will fill both manholes, excavating MN-06 and TE-9 excavation to facilitate smaller concrete volume pour.
0900 Complete RAD scan at Baker frac tank.
- RAD tech to scan MH-06 excavation.
- Russo purge/expels water from holding tanks to frac tank.
1030-11:30 Poured water from excavation TE-9 and backfilled excavation leaving area to pour concrete over breached sewer.
12:00 Prep to mobilize excavation and front-end loader to excavation MH-06.
- Russo will remove manhole and backfill excavation similar to TE-9.
12:30 RAD tech scans MH-06 excavation side walls.
13:30-13:30 Removed MH-06 in one unit piece.
- Front-end loader transferred brick mortar manhole to milltown.
- N&S sewer lines measured 18" in dia. 1-1/8" trench line on west side.
13:30-14:30 Backfilled (partial) excavation to facilitate concrete pour.
14:30 Collected sidewall soil samples from east & west walls of manhole excavation MH-06.
- Sample IE-MH-06 T2-3.0-3.5 2008 collected 3.0-3.5 by 1 cm mid point of west sidewall.

Read and Understood By}

Date
- Sample designated IE-MH-673 2.0-3.0' bgs - NE corner of the east sidewall

14:30 - Collected sample IE-MH-674 6.5-7.0' bgs from bottom of excavation

15:00 - Wait for cement trucks

15:15 - 15:45 - Poured approx 23rd concrete mix (2500 psi) into IE-9 excavation

15:45 - 16:00 - Poured approx 8 yd³ into excavation MH-06

- Reuse prewired secure tape used to conceal collars

- Stop work activities for today

Note:
- Subsequent to concrete pour in MH-06, water level in the excavation was pumped down to approx 2.9-3.0' bgs
- Water level in excavations IE-9 was approx 3.2' bgs

16:45 - Depart NFSS site
** PROJECT: Trench Excavation (TE-9) **

<table>
<thead>
<tr>
<th>GPS Grid Coordinates for Trench Excavation Corners</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN-06N</td>
</tr>
<tr>
<td>NW Corner</td>
</tr>
<tr>
<td>SW Corner</td>
</tr>
<tr>
<td>NE Corner</td>
</tr>
<tr>
<td>SE Corner</td>
</tr>
</tbody>
</table>

| TE-9 |
| NW Corner | 431248.8764 | 785905.4889 | |
| SW Corner | 431248.7413 | 785905.5503 | |
| NE Corner | 431248.8164 | 785905.2345 | |
| SE Corner | 431248.6843 | 785905.3072 | |

Extended:

- NW: 431248.2716 785905.4820
- NE: 431248.7003 785905.3721
- SW: 431248.7413 785905.5503
- SE: NA |

*0815* Purged water in excavation in MH-06A down to bottom and exposed gravel/cancer/cour cement. Pour Jenn's.

- Hydraulic head rises, new broken sewer continues to seep water through concrete aggregate into excavation.

- Not hired. [Redacted] of seep estimated E.

---

Read and Understood By: [Redacted] 11/27/13
PROJECT: Trench Excavations (IF-9)

Notebook No. 3

2-3 p.m.:
- Current volume pumped from MH-06 is approx. 1500 gal (11/27/)
10:30 Spoke w/ USAC, recommended removal of all loose
- Apparent in MH-06 excavation; then minimize area
  to be disturbed and encased within concrete pour.
- May consider pouring short lean (1-2 yd^3) into MH-09 to
  seal independent sewer.
- Concrete truck ordered w/ 9½ yd^3, onsite 11:30-12 p.m.
11:00 Spoke w/ USAC gave permission to pull MH-09
- Concrete.
- Instructed Russo to backfill excavation IF-9 as no leak
  was observed subsequent to pumping out the excavation.

11:20 Measured levels in MH-09:
  - Water level < 4' BSL
  - Soft Bottom Level < 9½' BSL
  - Sewer Rim @ 10½' BSL

Note petroleum sheen in water when sediment was disturbed.

12:05 Large truck arrives w/ 9½ yd^3 load.
12:25 - 12:40 Poured 1-2 yd^3 into MH-09
- Russo pumps out and cleans MH-06 excavation.
12:50 - 13:30 Poured approx. 8 yd^3 of concrete mix
  (4,000 psi mix) into MH-06 excavation.
- Showed mix in to end point of sewer.
14:00 Prep to move excavation south of south 31 ditch
  to investigate southern extent of sewer.
- Will ascertain presence or absence of 18" sewer. P. P. 1415 - 1500先进excavation trench excavation south of MH-1.
TBS-1 to total depth of approx 8½ - 9½' has dropped to

- No evidence of 18" dia sewer observed in the excavate.

Discussed apparent results with USAC and confirmed that excavation was
advanced within the assumed sewer alignment.
- USAC reps agreed that no further excavation was
  needed, raid scan was not performed per USAC
15:00 - 15:20 Excavation: TBS-1 was back filled and
  equipment demobilized from south side of ditch.

Russo personnel and 4/22/13

11/22/13
**NESS CDP**

**PROJECT**  

**Trench Excavation** (TE-10)

**Notebook No.** 3

**Weather**  
Clouidy, 30-40° calm

**0700** Arrive NESS site, prep for day's activities to include:
- Purge water for MH-06 excavation
- Backfill IE MH-06 excavation
- Advance TE-06 excavation

**07:45** Preparations/examined corner of TE-10

**08:05** Russo personnel arrive, prep to begin pumping and backfill in activities.

**08:30** Start backfilling and grading activities at TE-9/IE MH-06.

**10:20** Started excavation at TE-10.

**11:20** Completed advancement of TE-10 to maximum depth of 10'5" BGS.

- Top of concrete encased sewer identified at 7'6".

**12:30** Started groundwater sample collection.
- Sample collected from strip area in NW corner of excavation.
- Split samples w/USAC.

**Collected samples as shown below:**

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Sample ID</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/11</td>
<td>TE 06W 13.0 -18.0 F 2009</td>
<td>Filtered 12:30 - 13:00</td>
</tr>
<tr>
<td>11/2</td>
<td>TE 06W 13.0 -18.0 FD 2009</td>
<td>Duplicate, Filtered</td>
</tr>
<tr>
<td>12/3/09</td>
<td>TE 06W 10.0 -18.0 F 2009</td>
<td>Filtered 12:30 - 13:00</td>
</tr>
<tr>
<td>12/3/09</td>
<td>TE 06W 10.0 -18.0 FD 2009</td>
<td>Filtered 12:30 - 13:00</td>
</tr>
<tr>
<td>12/04</td>
<td>10:00 - 10:30 2009</td>
<td>Duplicate 10:00 - 10:30</td>
</tr>
<tr>
<td>12/04</td>
<td>IE 06W 10.0 -18.0 2009</td>
<td>Duplicate 10:00 - 10:30</td>
</tr>
<tr>
<td>12/04</td>
<td>IE 06W 10.0 -18.0 2009</td>
<td>Duplicate 10:00 - 10:30</td>
</tr>
<tr>
<td>13:04</td>
<td>RAD tech starts RND scan on trench TE-10</td>
<td></td>
</tr>
<tr>
<td>14:45</td>
<td>Collected surface soil sample TE-10: 11:00 - 11:50 2010</td>
<td></td>
</tr>
</tbody>
</table>
- RAD tech completes trench, RAD scan.
- Start collection of sidewall and bottom soil samples.

**15:45** Collected sidewall sample from South wall, southeast corner.

**Sample ID**

<table>
<thead>
<tr>
<th>Date/Time</th>
<th>Sample ID</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:45</td>
<td>TE 10 -12 -3.0 -4.0 2011</td>
<td></td>
</tr>
</tbody>
</table>

**Continued on Page**

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**Read and Understood By**

<table>
<thead>
<tr>
<th>Date</th>
<th>Signed</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/2/13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
15:55 Collected bottom soil sample in NW corner
Sample ID: IE-10 T4 10.0/0.5 2013

16:10 Collected sidewall soil sample from West wall, NW corner
Sample ID: IE-10 T3-3 0.4 0 2012

16:15 - 16:30 Partially backfilled IE-10 to top of concrete

- Per request from [redacted], total estimated volume currently
  in Race Tank is approx 16,700 gal
  1/25/0

- Russ departs site

17:00 - JFP departs NFSS
URS personnel: NSAC

Notes: Clean, sunny, 32-40°, calm

0700 Arrive at NSS site
- Complete preproject paperwork to TE-10
- Release personnel at site

0800 Request to complete backfilling excavation TE-10

0830-0915 Excavated TE-10 backfill to grade elevation

0930 Positioned/located proposed trench TE-11 immediately north of NW-SE aligned electric utility. Trench located approx. 20' south of TE-10 and < 5' from utility.

0935 Started excavation activities

10:05 trench will be skewed to east direction due to
- Top of sewer identified at 6.5' BGL

10:30 excavation TE-11 advanced to total depth OF 10.5'

11:00 collected ground water sample TE-11 on 4/5/2014
- NSAC splits ground water sample
- Ground water sample emanating along top and sidewall of
- Concrete sewer (confirmed prior to excavation)

11:15 RAD tech starts RAD scan on TE-11

13:30 Continue RAD scan in East Bunker

13:30 Completed surface soil sample TE-11-T1 (1-6-2015)

14:15 collected bottom soil sample TE-11-T2 (1-6-2015)

14:20 collected sidewall sample TE-11-T3 (1-6-2015)

14:45 collected 3 b/s soil sample TE-11-T4 (1-6-2015)

12/3/13

Read and Understood By

Date

Signed

Date
12/03/16 - Russo quantifying loose material and grading Trench 11 to ground surface
- Russo personnel policing pickup trash plastic
- Final trench work areas
12/03/16 Russo / JPH depart NFSS site

12.3

Read and Understood By

12/3/17

Date Signed Date
Weather - Cloudy, 40-50°F, light SW wind 5-10 mph

0700 arrive NFS site, completed process paperwork for IE-11
0745 started IE-12 trench excavation activities
0945 collected surface soil sample IE-12-T1-05-05-2016
0955 completed excavation to approx 15' length, distance extending trench an additional 10' to total length of 25'. Top in concrete encased sewer identified at 7.5' hgt.

- USAC proceeds to extension on IE-12 vs. a second small trench
- Will double number of soil samples to be collected i.e.
  * 2 surface soil samples
  * 2 bottom soil samples
  * 4 sidewall samples

1015 collected 2nd surface soil sample IE-12-T2-05-05-2016
1045 excavation IE-12 completed, dimensions 13'W x 25'L x 12' HD

- USAC starts completing groundwater samplings
- Sewer located on top bend along west side of sewer (SW corner of excavation), east flow < 25 gpm

- Excavation is generally "dry" when compared to previous trenches

1105 - East wall in trench collapses, followed by 2nd collapse
- Collapse due to combination of dry, silty, desiccation fractures and decreased clay content and silt matrix

1130 Crew breaks for lunch to allow trench to "stabilize"

1230 Collected groundwater sample from SW corner sewer
- Sample ID no IE-12-GW-7.0-7.5FMS-2016
- Collected groundwater MS/MSD sample ID as:
  * IE-12-GW-7.0-7.5FMS-9203
  * IE-12-GW-7.0-7.5FMSD-9204

Continued on Page
13:30 Collected bottom soil sample along west side SW corner
TF-12 - 12/10/2025
13:45 Collected bottom soil sample along east side NE corner
TF-12 - 12/10/2025
- Continued RAD scan w/in excavation, unable to scan
bottom and sidewalls (East & West) with any reliability
due to sloughing and safety concerns
14:45 Collected sidewall soil sample along NE trench wall
Sample located in NE corner is designated:
TF-12 - 12/3.0-4.0-2021
15:00 Collected sidewall soil sample along South trench wall
sample collected in SE corner at depth 1' above sensor
elevation. Sample designated TF-12-TG-6.0-1.0-2022
15:15 Collected sidewall sample along North wall, collected
in NE corner sample designated TF-12-TG-6.0-1.0-2022
15:30 Collected sidewall sample along West wall, sample
designated TF-12.15-5.0-6.0-2023
15:45-16:30 Russian personnel begin backfilling excavation.
TF-12
- Based on conversation w/K. Conner & USAC rep,
Russian personnel will regarde stockpile soil materials
generated during the excavation or trenches:
TF-10, TF-11 and TF-12
- Note: soil materials stockpiled excavation TF-0,
and TF-11-0-0 will be covered w/plastic sheeting
and remain until a determination can be made based
on sampling results
16:30 Russian and JPH depart NFSS site.
0700 Arrive NFSS site, process & complete paperwork

- Sample preparation

0800 Russo personnel arrives on site

unable to work today due to family emergency
will transport Paul back to shop

- To remain on site to complete backfilling, regression
- Weir disposal and soil protection

11:30
- Called the status report requested
- Collection of soil samples from stockpile and materials
- Generated & Excavations JEM2-06 & IEC-9

- Soil piles to be scanned prior to sample and subsequent volume calculations

Soil Pile calc/sect

\[ V = \frac{1}{3} \pi r^2 h \]

12.6' x 24' x 24' = 1888 ft³
Total yd³ = 10.6

Read and Understood By

14-5-13
12:00 - 12:10 Crew breaks for lunch
12:10 Resume demolition activity (Trench excavation)
14:30 - 14:45 Collected soil samples in 2 stockpile areas
- Collected sample JESP-1 A - 2028
  JESP-2a - 2029
  JESP-2b - 2030
  JESP-2c - 2031
15:00 Per discussion, collected 2 additional samples in each sample from each stockpile.
15:25 Collected soil sample JESP-1b - 2032
15:30 Collected soil sample JESP-2d - 2033 (dupl. M5/M5D)
- Russo personnel continue demolition activity w/ removing soil from excavation coverage until piles consolation/ hole
16:30 Still depecting NFSS site.
0700 Arrive NISS, process paperwork from 7:45
0800 RSS personal arrive to replace
0930 Collect MS/med soil sample < soil stockpile
Sample ID as IESP-2d MS-9206
IESP-2d MSD-9207
- RSS personal to address demo tasks including
  * Purse & transport water currently in decant pan
to frac tank (per USAC request)
  * Subsequent to pumping existing rainwater, a decant pan
will be collected and transported to the frac tank.
- Note: Decant pan will be covered with plastic
prior to decanting heavy equipment.
- RSS personal all water from manhole
MH-O9. All water transported to the frac tank.
Water purges down to concrete - indicating that
the sewer is plugged.

11:30 departs NISS