Appendix A

Site Superviser Field Notes

CONTENTS

PAGE	REFERENCE	DATE

Location NFSS Date 11/5/12

Project / Client NFSS BOP FIELD INVESTIGATION

MOBILIZATION ACTIVITIES SEE [redacted] NOTEBOOK FOR DETAILS

[redacted]

Location NFSS Date 11/6/12

Project / Client NFSS- BOP FIELD INVESTIGATION

MOBILIZATION ACTIVITIES SEE [redacted] NOTEBOOK FOR DETAILS

[redacted]

Location NFSS Date 11/7/12

Project / Client NFSS - BOP FIELD INVESTIGATION

0700 ARRIVE ONSITE

[redacted] ONSITE.

[redacted] w/HR for Day

Performing Geophysics on South + SE Corner of LANDFILL (FWCS) AREA.

[redacted] WORKS WITH [redacted]

TO PERFORM GAMMA SCANS OF REMAINING AREAS.

SCANS @ new 957, 958, 944, 945, 946, PE2, 948, 949, 947.

DISCUSS UTILITIES LOCATIONS WITH, [redacted] SOME WELL LOCATIONS are close to water lines AND THAT WAS IMPORTANT.

Location NFSS Date 11/8/12

Project / Client BOP FIELD INVESTIGATION

0700 - URS ONSITE NX 30's clear, breezy

0705 - HR ONSITE

- GEOPHYSICS @ PE-2 + PE 3 This morning

[redacted] scanning

TABLES, WILL SCAN SOUTH EAST SIDE OF IRS

- ONSITE PERSONNEL ASSIST w/ [redacted]

[redacted] @ MW 41 LOCATION AND MW947 location

- Coolers won't arrive till this afternoon

1042 - [redacted] WASTEWETS AND [redacted]

- SHOW THEM MARKOUTS @ PE1 plan to DO.

PE1 where picked @ site walk.

- GO TO MW 41 location. Located Manhole

Now that brush is cleared.

1245 - [redacted] depart site.

- [redacted] working @ MW946 location.

will clear both potential locations

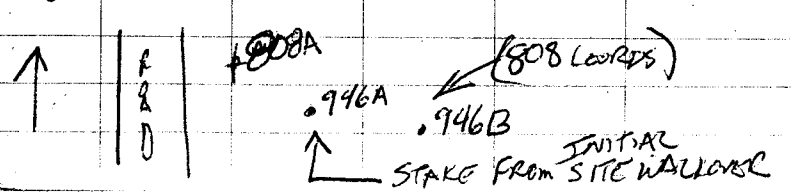
MW946A as staked @ initial site visit.

AND MW 946B @ COORDS FOR 808 AS

STAKED w/ [redacted] ON MONDAY

Most likely location is 946B / former

808 location.



Location NFSS Date 11/8/12

Project / Client BOP FIELD INVESTIGATION

1250 - [redacted] DEPART FOR LUNCH

1325 - HR MOVES TO MW 948 / MW 949 cluster

- SET UP GRID @ 948 / 949

- THEN TO 947 to set up.

~1345 [redacted] are back

[redacted] ONSITE.

1430 - PE1 GAMMA WALK w/ [redacted]

1530 - TEST [redacted] ONSITE w/ COOLERS

+ SAMPLE BOTTLES —.

1545 [redacted] start scanning coolers

1650 - STOP SCANNING ~ 1/2 of coolers scanned

- [redacted] finishing up.

~1735 - EVERYONE DEPARTS SITE

[redacted]

Location NFSS Date 11/9/12

Project / Client BOP FIELD INVESTIGATION

800 - RADIATION SAFETY TRAINING @ WRS BUFFALO OFFICE

ALL DAY

[redacted]

Location NFSS Date 11/10/12

Project / Client NFSS - BOP FIELD INVESTIGATION

0708 - [redacted] ONSITE

- [redacted], [redacted] ONSITE / WRS

- [redacted] (USACE) ONSITE

0730 - [redacted] ONSITE.

- [redacted] DOES SAFETY BRIEFING

BLY Begins unloading/staging equipment and setting up decon pad.

HP's Scanning all BLY equipment.

1200 - [redacted] BL personel leave site for lunch.

~1300 - BLY Back from lunch.

Mobilize equipment to MW951 location and stage area

1345 - START HAND AUGERING MW951

1425 - START SONIC DRILLING

1530 - START DOWNHOLE SCAN

1620 - FINISH DOWN HOLE SCAN

1400 - SAMPLED MW951SS 0.0-0.5-0001 FOR GAMMASPEC, ISO U, ISO Th, TAL Metals, TOTAL U

1628 MW951SB15.0-15.5 - 0002

1635 MW951SB17.5-18.0 - 0003

1600 MW951SB18.5-19.0 - 0004

1700 - SET CASING BACK IN HOLE

Location NFSS Date 11/10/12

Project / Client NFSS - BOP FIELD INVESTIGATION

1700-1715 - BL CLEANS UP - STAGES PIPE
Decon. Departs site.
1715-1740 - URS CLEAN UP / PAPERWORK
DEPART SITE.

[redacted]

Location NFSS Date 11/11/12

Project / Client NFSS - BOP FIELD INVESTIGATION

0700 - [redacted] (URS) ONSITE, [redacted]
(USACE) ONSITE.
0705 - [redacted] ONSITE.
WX - CLEAR 60 - ~70°F.
0730 - BLY ONSITE.
[redacted] H+S Meeting
BLY - SETUP SUPPLIES FOR WELL CONSTRUCTION
@ MW951.
DISCUSS WELL CONST. W/ [redacted] (USACE)
BBP says WATER TABLE WILL BE STRADDLED
WATER TABLE TYPICALLY ONLY few feet
bgs based on measurements from
nearby wells, will not be able to straddle
water table that shallow (ie 2-3' bgs)
will mimic temporary well point 831
that went to 20', Construct well
w/ screen from 10-20, 2' sand above
screen.
830 - BLY begins cleaning casing to set well
- set well to 20' screen 20-10 w/ sand to
7'10" bgs. chip to ~3' bgs
- REALIZE we mimicked 831 construction
when 833 was actually nearest deep pt.
may have to install shallower boring to more
accurately mimic 833.

Location NFSS Date 11/11/12

Project / Client NFSS BOP FIELD INVESTIGATION

930 START HAND CLEARING MW950
1000 HANDCLEARING COMPLETE.
1005 - SAMPLE MW950SS0.0-0.5-0005 for reg'd parameters
BLY - Clearing first 5' w/ casing -
- SAMPLED to 20' AND INSTALLED 4" PVC
- Drillers Break for lunch during Scans.
1200 - Down hole gamma log complete.
1225 MW950SB10.5-11.0-0006
1220 MW950SB2.0-2.5-0007
1228 MW950SB15.0-15.5-0008
1225 MW950SB10.5-11.0D-9001
- BLY goes to Decon
- URS BREAKS FOR LUNCH
315 - BLY - Returns to well location to Setup MW960
1400 - START HAND AUGERING MW960
First refusal @ 3.5', Then 2.0', Then 2.5'
USE 6" CASING to GRAB 3.5-5.0
SAMPLE TO 15'
1420 - Set 4" casing to 15'
1630 MW960SS0.0-0.5-0009
1635 MW960SB2.0-3.0-0010 PLUS MS/MSD*
1640 MW960SB9.5-10.0-0011 9002 + 9003 w/ MS and MSD suffix
1645 MW960SB12.0-12.5-0012
BL - SET well MW960 to 15' - 2" PVC, 10' Screen.

Location NFSS Date 11/11/12

Project / Client NFSS - BOP FIELD INVESTIGATION

1700 - BLY + URS DEPART ZONE
1710 - BLY + [redacted] DEPART SITE
1730 - [redacted]
AND [redacted] DEPART SITE

[redacted]

Location NFSS Date 11/12/12

Project / Client NFSS - BOP FIELD INVESTIGATION

0700 [redacted] ONSITE

[redacted] ONSITE

[redacted] ONSITE. (USACE)

0730 - [redacted] ONSITE.

[redacted]

0800-0830 BLY DECONS PIPE.

~~0830~~ URS Packing Cooler for lab pickup

0745 - [redacted] onsite

830-910 BLY set up on MW959

0910 - START HAND AUGERING FIRST 5'.

0945 - Collect MW959SS 0.0-0.5-0013

0950 - BLY STARTS USING RIG TO ADVANCE/Collect SAMPLES.

- Scan Cores -

1055 - Start Downhole Scan

1135 - Sample MW959SB 8.0-8.5-0014 high downhole

1140 - Sample MW959SB 13.0-13.5-0015 mud pt screen (wet spot)

1145 - Sample MW959SB 14.0-14.5-0016 Core high

MOB + Setup @ MW956

1155 - [redacted] FOR LUNCH

1315 - START HAND CLEAR @ MW956

- TAKE Photo ~30' NW of well location facing SE

1350 - MOVE RIG ONTO HOLE START SONIC SAMPLING

1355 - SAMPLE MW956SB 0.0-0.5-0017

Location NFSS Date 11/12/12

Project / Client NFSS - BOP FIELD INVESTIGATION

1430 - DOWNHOLE GAMMA SCAN TO 20'

1525 - Figure out Sample interval.

1530 - MW956SB 2.5-3.0-0018

1540 - MW956SB 15.5-16.0-0019

1545 - MW956SB 16.5-17.0-0020

BLY GOES TO DECON AFTER SETTING WELL MW956

- Go Discuss Bottle Sets w/ [redacted]

PLUS DUPLICATE MW956SB15.5-16.0D-9004

CLEANUP / PAPERWORK

1725 - DEPART SITE.

[redacted]

Location NPSS Date 11/13/12

Project / Client NPSS BOP FIELD INVESTIGATION

0700 [redacted] onsite

[redacted] onsite -

0710 [redacted] onsite Perform daily calchecks

- MOB TO MW957 + Setup

HAND CLEAR TO 5'

SONIC TO 15' stop @ 15' into Gray Clay

[redacted] (USACE) onsite, does not want screens straddling gray clay to extent possible wants to set inlet for GW sample ABOVE Gray Clay IN BROWN TILL ZONE AND TO set sand to cover wells if advanced to deep for sampling. 930 - Sample MW957SS0.0-0.5-0021

GAMMA SCAN DOWNHOLE, SCAN CORES

1035 sample MW957SB2.0-2.5-0022

1040 MW957SB4.0-4.5-0023

1045 MW957SB7.0-7.5-0024

- Pick up + MOB TO MW958

1125 START HAND CLEAR

1155 - BLY Breaks for lunch

1305 - BLY Returns

1320 - SAMPLING 5-10'

- STOP @ 10' - into top gray clay

Scan cores + Downhole

Location NPSS Date 11/13/12

Project / Client NPSS BOP FIELD INVESTIGATION

1450 Sample - MW958SS0.0-0.5-0025

1435 MW958SB4.5-5.0-0026

1440 MW958SB7.5-8.0-0027

1440 MW958SB7.5-8.0D-9005

1445 MW958SB8.5-9.0-0028

BLY Goes to Decon

MOB TO MW946 -

1600 START HAND AUGERING -

1635 - END HAND AUGER REFUSAL @ 4'

1640 - SAMPLE 0-0.5

MW946SS0.0-0.5-0029

FOR TOTAL U, GAMMA SPEC, ISO U/TH, TOC FIELDS

Clean up -

1700 ~~Depart~~ BOART LONGYEAR OFFSITE

URS DOES END OF DAY PAPERWORK

1750 - [redacted] Depart Site

[redacted]

Location NPSS Date 11/14/12

Project / Client NPSS BOP FIELD INVESTIGATION

0700 - URS ONSITE
- SETUP LAST SEVERAL DAYS OF SAMPLES FOR COURIER PICK UP.
0755 - Collect EB1-111412 - Rinse blank over Sampling Bowl + Spoons.
BLY - ADVANCES / Samples to 15' @ MW946
Top Gray Clay @ 12'.
- [redacted] (USACE) SPOKE W/ [redacted]
WANT BTM OF SCREEN 0.5' INTO GRAY Clay, so will set to 12.5'.
Collect Samples for Gamma Spec, Iso U, Iso Th, TAL Metals, TOTAL U.
1120 MW946SB6.0-6.5-0030
1125 MW946SB8.0-8.5-0031
1130 MW946 SB 12.0-12.5-0032
1200 ~~[illegible]~~ MOBED TO MW947
BLY BREAKS FOR LUNCH.
1345 START HAND AUGER @ MW947
[redacted] onsite to observe.
1355 Collect Rinse Blank over Reg 4" Core Pipe.
~~[illegible]~~ EB2-111412, for Gamma Spec, Iso U, Iso Th, Tal Metals, Total U, TCL VOCs.
1420 Collect Surface Soil
MW947SS0.0-0.5-0033

Location NPSS Date 11/14/12

Project / Client NPSS BOP FIELD INVESTIGATION

1450 - Recover 5-10' Sample Run, SAMPLES 7-20'
1655 MW947SB2.0-2.5-0034
1700 MW947 SB 14.0-14.5-0035
1705 MW947SB18.0-18.5-0036

Perform Borehole + Core Scans -
USACE ONSITE collecting Encore samples + Conventional samples from each 1' interval.
- Clean up + Depart Boring Site.
1750 - URS OFF SITE

[redacted]

Location NFSS Date 11/15/12

Project / Client NFSS - BOP FIELD INVESTIGATION

0700 - URS - [redacted] onsite, morning Paperwork + calibrations, label yesterdays samples

0730 - BART LONGYEAR ONSITE, ~~DROP OFF~~ MORNING H&S Meeting. Then they go to hydrate bentonite @ wells inside Secure cell fence. and drop off Pro casings. Then will Mob Rig to MW948 + MW949 LOCATION.

- MAKE PROCASING FORMS.

- URS BUFFALO CALLS - USACE WANTS TO ~~DEPOTO~~ Development & Sampling @ MW950 + MW951 locations

1000 START SAMPLING MW949

1200 - Collect Sample MW949SS0.0-0.5-0037
MW949SS0.0-0.5MS-9006
MW949SS0.0-0.5MSD-9007

SAMPLED TO 17', Set 4" Temp PVC.
Scan Core, scan Downhole, No elevated PID Readings so using HAD to pick sample intervals USACE TAKING ONCORE + Conventional VOC Samples every 2'.

1300 - Downhole Scan + Core scan complete
- BAGGED HIGHEST INTERVALS UNTIL HOLE IS COMPLETE

R. Murphy goes to Developer / Sampler MW950/951

Location NFSS Date 11/15/12

Project / Client NFSS BOP FIELD INVESTIGATION

1325 [redacted] oversight - Drillers return from lunch. Set up to advance casing (10")

1445 - Changed chuck for larger (12") casing. Begin advancing larger casing to 16'

1455 Clean out larger casing w/ 10" casing

1520 Finish cleaning out large casing

1550 Begin installing permanent casing (8") push to 17'. Drillers drop off grout. Plan is to grout in a.m.

1700 BART OFFSITE

[redacted] Samples GW @ MW950/951

1638 SAMPLED MW951GW0001-0038 (UNFILTERED)
MW951GW0001F-0038 (FILTERED)

1650 SAMPLED MW950GW0001-0039 (UNFILTERED)
MW950GW0001F-0039 (FILTERED)

END OF DAY PAPERWORK

1745 - DEPART SITE, R. MURPHY GOES TO FEDEX.

1840 DROP GW SAMPLES @ FEDEX

END OF DAY [redacted]

Location NFSS Date 11/16/12

Project / Client NFSS BOP FIELD INVESTIGATION

0700 - URS ONSITE
- MORNING PAPER WORK + H&S BRIEFINGS
0730 - BOART LONGYEAR ONSITE.
- BOART MOBS TO MW949 to Grout 8" Casing IN PLACE.
0830 - filling 12" Casing.
25 gwater, 5' bags Type I/II, Some 14 le Bensal Gel.
47 lb bags
- TAKE 12" PIPE TO DECON.
- SWAP OUT JAWSON VICE TABLE.
0930 BEGIN SAMPLING MW948
USACE ONSITE collecting samples every 2'.
AFTER SAMPLING TO 15', BOART LONGYEAR GOES TO FIRST 5 wells, installed to Dig out processing PADS - AND LOAD 12" + 10" PIPE FOR DEMOB FROM SITE. JOEL MAY BE LEAVING CREW TOMORROW.

1125 SAMPLE MW948SS 0.0-0.5- 0040
1135 " MW948SB 5.5-6.5- 0041
1145 " MW948SB 10.0-10.5- 0042
1155 " MW948SB 13.0-13.5- 0043
Plus DUPLICATE MW948SB13.0-13.5D-9008
1330 - BOART LONGYEAR WILL DIG OUT REMAINING WELL PADS + SET PROCASINGS - all finished well
PUT SURFACE SOIL FROM WELL PADS ...

Location NFSS Date 11/16/12

Project / Client NFSS BOP FIELD INVESTIGATION

DEBRIS PILE @ LASALE GROUNDS LAYDOWN AREA ON CONCRETE PAD, AFTER GETTING OK FROM [redacted]
~1400 - [redacted] TO DRUM SOIL FROM WELL PADS FROM NOW ON.
1535-1545 - check on Russo Crew -
Then go to Conex Box to pack yesterdays + todays samples.

BOART LONGYEAR Does Surface Completions @ MW950, MW956, MW951, MW960, MW959 MW957, MW958, MW946
1740 - URS DEPARTS SITE

[redacted]

Location NFSS Date 11/17/12

Project / Client NFSS-BOP FIELD INVESTIGATION

0705- URS ONSITE [redacted]
-MORNING PAPERWORK; H&S MEETING
0730- [redacted] ONSITE
0750- [redacted] ONSITE.
0815- DRILLERS ADVANCE to 40' @ MW 949
- Down + Core scans -
1130 - MW949SB 16.0-16.5 - 0044
1135 MW949 SB 29.5-30.0- 0045
1140 MW949 SB 34.5-35.0 - 0046
Gamma spectra Isotopic Thermal neutron VOCs
DRILLERS - Pull 4" PVC - Then Clean out hole to 40'
1210- BREAK FOR LUNCH. LOAD UP well supplies
1400 - Cleaning out hole to set well
1430 Wellset to 40', 10' Screen Sand 2' Above Screen Bentonite Chip to ~6' Bgs.
BOPT DECONS + WORKS ON WELL PADS + MOVES RIG TWDS MW945/949
1620 DEPART SITE

[redacted]

Location NFSS Date 11/18/12

Project / Client NFSS BOP FIELD INVESTIGATION

0705 - URS ONSITE - Morning Paperwork.
0730 - MORNING H&S Meeting BL onsite.
- BLY MOBS to 944/945
0800 - [redacted] Reports site w/ 10"+12" pipe.
[redacted] / Chips (Down to 2 person crew)
0835 - Nearby Setup @ MW 945
0845 - START SAMPLING MW-945
- SAMPLED TO 20'
1100 - DOWN HOLE + CORE SCANS complete
1110 - Collect MW 945 SS 0.0-0.5-0047
1115 - MW945 SB 3.5-4.0-0048
1120 - MW 945 SB 7.5-8.0-0049
1125 - MW945SB 9.5-10.0-0050
1130 - MW945SB 12.5-13.0D-9009
1140 - BREAK FOR LUNCH
- MOB RIG TO MW 944
1315 - Begin Sampling MW 944
- SAMPLED TO 17'
DOWNSCAN, CORE SCAN, SET WELL TO 12.5' - Top Gray Clay @ 12.0'
1515 SAMPLE MW944SS 0.0-0.5-0051
1520 MW944 SB 2.0-2.5-0052
1525 MW944 SB 10.0-11.0-0053
1525 MW944SB 10.0-11.0MS-9010
MW944 SB 10.0-11.0 MSD-9011

Location NFSS Date 11/18/12

Project / Client NFSS BOP FIELD INVESTIGATION

1530 MW944 SB 13.0-13.5 - 0054
- DRILLERS setting Bollards + Digging PADS.
- BOLLARDS SET TO 4' Bgs - ~3' stick up.
- Move Rig Back inside
1715 - DRILLERS Back from 944/945
- BOLLARDS IN AROUND BOTH LOCATIONS
PADS DUG OUT READY to Be set N Concrete
1725 BOART LONGYEAR OFFSITE -
1730 - URS OFFSITE

Location NFSS Date 11/19/12

Project / Client NFSS BOP FIELD INVESTIGATION

0700 - URS ONSITE - [redacted] USACE - [redacted]
0730 - BOART LONGYEAR ONSITE.
- Decon Pipe From Yesterday - MOB
TO MW952, MW953, MW954, MW955 LOCATION
915 - RIG @ MW952, Ready to Hand Auger
915 OW11B - DTW - 3.83, DTB 15.15'
OW11A DTW - 8.73, DTB 38.10'

0930 - START HANDAUGERING -
1010 - Set up to Sonic Drill, USACE onsite filming, TestAmerica onsite for Pick up

1035 - Sampled to 10', 4" PVC in Place.
- In Gray clay @ 8.5'
Set well to 9', w/ 5' Screen

1150 - Collect Rinse blank over bowl + spoons
ED3 - 111912
1155 MW952 SS 0.0-0.5 - 0055
1200 MW952 SB 4.0-4.5 - 0056
1205 MW952 SB 6.0-6.5 - 0057
1210 MW952 SB 6.5-7.0 - 0058
1210 MW952 SB 6.5-7.0D - 9012

Location NFSS Date 11/19/12

Project / Client NFSS BOP FIELD INVESTIGATION

1315 - START HAND AUGERING @MW953
1340 HAND AUGERED TO 5', NO RIG. Setup to Sample
1420 - Scaning Core + Downhole
1455 - MW953SS 0.0-0.5 - 0059
1500 - MW953SB 1.0-2.0 - 0060
1505 - MW953SB 4.0-4.5 - 0061
1510 - MW953SB 6.0-6.5 - 0062
Clean UP, will not start new hole, BLY Digging tree root out of MW949 well pad area
1630 - BLY OFF SITE.
[redacted] swipe sample tubing from MW950/951 sampling, No Elevated detections
END OF DAY PAPERWORK.
1730 - DEPART SITE

[redacted]

Location NFSS Date 11/20/12

Project / Client NFSS BOP FIELD INVESTIGATION

0700 URS ONSITE, MORNING PAPERWORK Labels, COCS.
0730 - BLY onsite, Morning H+S Mtg.
- Decon Equip from yesterday.
0830 - Collect EB4-11 2012 on COLE PIPE.
845 - START HAND Clear MW954.
0945 - HAND Cleared to 5' start SONIC
- Sampled to 10', Top Gray Clay 9.2' -
- Scan Core Scan Down hole.
- Set well to 10' - 10-5' Screen, 4' w/sand, 3' w/chip
Collected Soil Samples
1110 MW954SS 0.0-0.5 - 0063
1115 MW954SB 2.0-2.5 - 0064
1120 MW954SB 5.5-6.0 - 0065
1125 MW954SB 8.5-9.0 - 0066
1125 MW954SB 8.5-9.0D - 9013
BOART TAKES Lunch -
1245 - START HAND AUGERING MW955
1315 - Refusal on cobble @ 3.5' Advance 6" Casing to Collect 3.5-5.0'
And continue to 15' -
Scan Core + Borehole, Set well to 15'
Collect Soil Samples

Location NFSS Date 11/20/12

Project / Client NFSS BOP FIELD INVESTIGATION

1455 MW955SS0.0-0.5-0067
1500 MW955SB0.5-1.0-0068
1505 MW955SB2.5-3.0-0069
1510 MW955SB7.0-8.0-0070
1510 MW955SB7.0-8.0MS-9014
1510 MW955SB7.0-8.0MSD-9015
1530 - BLY - Goes to Decon +
1600 - BLY offsite
1625 - Rele Fairbanks offsite
1740 - [redacted] + offsite on Route to Lab
1910 - Depart Lab

[redacted]

Location NFSS Date 11/21/12

Project / Client NFSS BOP FIELD INVESTIGATION

0750 - [redacted] onsite, BLY onsite since 0730
- [redacted] H+S meeting.
BLY - to work on Processing Pads @ MW944 + MW945, AND TOPPING OFF BOLLARDS w/ Concrete
- Decon Back of pickup + General cleanup -
- [redacted] Surveys back of pickup
1100 - BOARD LONG YEAR OFFSITE
- DQCR forms + paperwork.
1145 - [redacted] Depart site.
1210 - [redacted] Depart site.
1230 - [redacted] Depart site

[redacted]

Location NFSS - Date 11/27/12

Project / Client NFSS BOP FIELD INVESTIGATION

0720- [redacted] onsite. [redacted], [redacted]
[redacted] onsite.

0730- [redacted] ONSITE.

0830- BLY- welded hasp back on Processing @ MW944
- Place PVC GAUGE POST SLEEVES OVER BOLLARDS @ MW944 + MW945
- WORK ON FORMS FOR REMAINING GAUGE PADS

0910- [redacted] CONDUCTS WL ROUND.

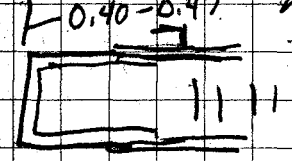
MW944	DRY @ 15.15'	Stickup tube added later today
MW945	DRY @ 17.58	
MW946	15.01	15.21 DTB
MW947	21.06	21.22 DTB.
MW948	DRY @ 17.79	
MW949	13.10'	30.50 DTB (SOFT)
MW950	6.24	22.90 DTB
MW951	6.98	22.75 DTB
MW952	7.04	12.08 DTB
MW953	9.56	12.70 DTB
MW954	11.80	12.89 DTB
MW955	5.88	18.01 DTB
MW956	9.49	22.60 DTB
MW957	9.77	17.70 DTB
MW958	12.23	12.82 DTB
MW959	8.73	18.10 DTB
MW960	7.20	18.18 DTB

Location NFSS Date 11/27/12

Project / Client NFSS BOP FIELD INVESTIGATION

7' PROCASINGS @ All locations except -
5' ANODIZED PROCASINGS @ MW952, MW953, MW954

* ADD 0.28 TO DTB Measurements (PROBE TIP)



Depending on male or female threads -

BLY - DID WELL PROCASINGS + PADS @ MW952 MW953, MW954, MW955, MW948, MW949, MW947. PAINTED PROCASINGS Yellow @ these locations. DRILLED weepholes and added sand between Processing + Riser @ these locations.

BROOK DEVELOPMENT EQUIPMENT FOR ARRIVAL @ URS BUFFALO Tomorrow

1700 BLY OFFSITE
1730 URS OFFSITE.

Location NFSS Date 11/28/12

Project / Client NFSS BOP FIELD INVESTIGATION

0700 ARRIVE ONSITE.

0730 BLY ONSITE, H+S BRIEFING,
BLY to complete Painting @ Procasings
Drilling weep holes, Adding Sand to
between Riser + Procasing.

0830 - Pushed 3 Bollard Pipes (7' long) to 4' bgs
w/ 3' stick up @ MW957 location. Filled
w/ Portland, and set PVC Bollard Sleeves over
them.

- LOAD UP / DEMOBILIZED ALL EQUIP
- BREAK DOWN + DRUM Decon Pad
- CONSOLIDATE TRASH.
- PAINT PROCASINGS INSIDE Fenceline
south of cap and Southeast of cap.
Drill remaining weep holes, File procasing
tops for safety.

Location NFSS Date 11/28/12

Project / Client NFSS BOP FIELD INVESTIGATION

16 TOTAL DRUMS GENERATED FROM DRILLING

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

1 - MW950 + MW951 Development water
2 MW954 + MW955 SOIL + LINERS + Surface soil
3 MW955 SOIL + LINERS + Surface soils from pads
4 MW944 SOIL + LINERS + Surface Soil (PADS)
5 MW945 + MW-944 SOIL + LINERS
6 MW952 + MW953 SOIL + LINERS
7 MW949 SOIL
8 MW949 + MW948 SOIL + LINERS
9 MW949 SOIL + LINERS
10 MW949 SOIL
11 MW957 + MW958 SOIL + LINERS
12 MW950 + MW960 SOIL + LINERS
13 MW951 + MW950 SOIL + LINERS
14 MW959 + MW956 SOIL + LINERS
15 MW946 + MW947 Soil + Liners
16 DECON PAD

1600 BLY OFF SITE
1630 - [redacted] off site enroute to URS BUF

Location NFSS Date 11/29/12

Project / Client NFSS BOP FIELD INVESTIGATION

0700 [redacted] ONSITE

0730 - BLT ONSITE, HITCH TO TRAILER

0820 - BLT OFFSITE, DEMOBED -

- [redacted] setting up for well Development

- All EQUIP Being Scanned.

0945 @ MW 949 - setup to develop

PINE SENT WRONG Diameter tubing for WATERA - setup submersible whole pump.

- Purge 15g. then WL to low for Submersible.

Allow Recharge and slowly purge

1200 - Leave site to pickup correct size tubing in NF from IFKOVICH.

1250 - Return to site

- Return to MW949 Remove total of 25g well dry. but clear, pH is elevated @9.70 after development.

Move to MW 947 too little water to purge

SAME Result @ MW946, MW944, MW945 AND MW 948

MOB TO WATER STORAGE AREA AND TRANSFER WATER TO ~~450g~~ 55 gallon Drum.

Took water from that drum (from 950+951 devel.) and Transferred to 450g Poly tank.

Location NFSS Date 11/29/12

Project / Client NFSS BOP FIELD INVESTIGATION

- Will put water from DNAPL wells in Drum

- WATER FROM Known elevated Rad wells - in 450g TANK

- WATER FROM REMAINING wells will be added To 1500g poly which as Drilling Decon water + some water from PE3/PIPE3.

- Go To MW950, Purge Dry @ 5 gallons,

- Go To MW960 Purge Dry @ 5 gallons

- Go To MW959, Purge Dry @ 4 gallons.

1630 - Return to Water storage Area TRANSFER all water.

1645 - [redacted] departs Site

[redacted]

Location NNSS Date 11/30/12

Project / Client NNSS BOP FIELD INVESTIGATION

0800 [redacted] ONSITE, STOPPED @ OFFICE TO pick up tubing on way finish paperwork from yesterday.

1000 - @ MW954 Develop additional 15g Removed - Consider Developed, pH ranges from 8.9-9.6 today MOB TO TRANSFER WATER

~1230 @ MW951, use submersible pump to develop well. Surge + Pump, add'l 25g Removed

1350 GOTO TRANSFER Purge water - EAT LUNCH.

1430 - @ MW956 START Development

1452 - MW956 Dry

1520 - MW958 Purged Dry (only 0.25)

1540 - MW957 Purged Dry (3g)

1558 - MW960 Purge Dry (2nd time)

1615 - MW959 Purged Dry (2nd time)

1635 - MW950 Purge Dry (2nd time) - TRANSFER All Purge WATER

1700 - All NNS Personell Depart site.

Location NNSS Date 12/3/12

Project / Client NNSS BOP FIELD INVESTIGATION.

0830 - [redacted] onsite, stopped @ WALMART AND OFFICE ENROUTE TO SITE.

0925 - Purged MW952 Dry

945 - Purged MW953 Dry

1002 - Purged MW954 Dry

1040 Purged MW955 Dry - TRANSFER PURGE WATER

1145 - Purged MW950 Dry (3rd time)

1158 - Purged MW960 Dry (3rd time)

1218 - Purged MW959 Dry (3rd time)

1230 - Purged MW956 Dry (2nd time)

1320 - Purged MW957 Dry (2nd time)

1333 - Purged MW958 Dry (2nd time — Very little water Recovered. (0.35g)

Check WLs @ All wells developed today Only MW953 has come back >80%.

1450 - Purge MW953 Dry 2ND TIME. Monitor Recovery @ other wells

TRANSFER PURGE WATER, ORDER EQUIPMENT FROM PINE. FILL OUT DQCRS

1715 - All personell depart site

[redacted]

Location NFSS Date 12/4/12

Project / Client NFSS BOP FIELD INVESTIGATION

0720 [redacted] onsite, Morning paperwork,
Scan Docs + Email to office.
- Setup for Development,
0907 Purged MW956 dry (3RD Time)
0927 Purged MW957 to dryness (3rd time)
0932 - Purged MW958 Dry (0.5L) (3RD Time
1030 - Purged MW 952 Dry (2nd Time)
1040 - Purged MW 953 Dry (3RD Time), Comp 100% Developed
1100 - Purged MW 954 Dry (2nd time)
1115 - Purge MW955 Dry (2nd time)
- TRANSFER PURGE WATER
1255 - 4g Distilled water ADDED SURGED + Pumped
AND 3.75g Recovered @ MW948.
AS PER USACE Direction.
1320 Added 4g Distilled water to MW947
Surge + Pumpout. 2.5gallons Recovered.
1420 Added 4g Distilled water to MW944, Surged
And Pumped out. 3.5gallons Recovered.
1450 Added 4g Distilled water to MW945. Surged
and pumped out 2gallons Recovered out.
1600 - Added 4gallons of Distilled water to MW946
Surged + Pumped out. 3.5gallons Recovered.
- TRANSFER Purge water.
1700 - URS OFFSITE

Location NFSS Date 12/5/12

Project / Client NFSS BOP FIELD INVESTIGATION

0715 [redacted] ONSITE. ASSIST [redacted]
with Labeling taping yesterdays samples
- Do DQCR for 12/4/12, Scan + email to
office. Cal/check cal on YSI probe
1040 - Purged MW952 dry (3RD time)
1102 - Purged MW954 dry (3RD time)
1120 - Purged MW955 dry (3RD time)
- Go Around to All wells And
full development tubing + cutting
in to Pieces for disposal.
Assist [redacted] w/ sample
collection @ Excavation locations.
- Setup for GW Sampling.
1630 - [redacted] departs Site

[redacted]

Location NFSS Date 12/6/12

Project / Client NFSS BOP FIELD INVESTIGATION

0705 - [redacted] onsite
- Setup for GW sampling
Calibrate YSI meter to 4/10 pH, 240mv ORP
AND 1.413 mS/cm.
1120 - START PURGE @ MW949
1215 - START SAMPLE - MW949.
MW949GW0001F-0071
MW949GW0001-0071
MW949GW0001D-9016
MW949GW0001DF-9016 } Duplicate
For TPH VOCs, Tal metals, Anions/Alk/TDS, TOTAL U, Ra-226,
ISO U, ISO Th, Ra228.
1400 - All bottles Filled
- Clean up, depart well.
1430 - 1600 - ASSIST [redacted] of incoming
Cooler Scans.
1600-1630 - Discussing Addl work/schedule
w/ Christy, Steve, Shawn, Kevin, USACE, Rasco.
1630 - [redacted] Departs Site

[redacted]

Location NFSS Date 12/7/12

Project / Client NFSS BOP FIELD INVESTIGATION

0730 - [redacted] Arrives onsite.
- Write up DQCR for yesterday
- Scan + email to office, Check cal on
YSI Probe, OK.
1000 - START PURGE @ MW951
1055 - Collect Sample MW951GW0002-0072
MW951GW0002F-0072
MW951GW0002MS-9017
MW951GW0002MSF-9017
MW951GW0002MSD-9018
MW951GW0002MSDF-9018
1312 - START Purge MW960
1347 Collect Sample MW960GW0001F-0073
MW960GW0001-0073
1620 - All Bottles Filled.
- Pack up coolers, assist [redacted]
w/ outbound scans.
1700 - Departs site.
1745 - Drop Samples @ Test America - Amherst
- Depart for home

[redacted]

Location NFSS Date 12/10/12

Project / Client NFSS- BOP Field Investigation

0720 [redacted] Arrives onsite

- Morning Paperwork, scan documents/email.
- Check Calibration on YSI.

0918 - START PURGE @ MW959

1008 - START SAMPLING MW959

- Well goes dry during sampling (1.5L remaining)

1314 - START PURGE @ MW950

1404 - START Sampling MW950 @ 125 ml/min.

1613 - Return to MW959 fill add'l volume

SAMPLE IDS

MW959GW0001 - 0074

MW959GW0001F - 0074

MW950GW0001 - 0075

MW950GW0001F - 0075.

1730 - Depart Site

[redacted]

Location NFSS Date 12/11/12

Project / Client NFSS BOP FIELD INVESTIGATION

0730 - [redacted] onsite

- Morning Paperwork, scan documents/email
- YSI Calibration Check

0950 - START PURGE @ MW956

1030 - START SAMPLING MW956

MW956GW0001 - 0076

MW956GW0001F - 0076

For Alk/TDS/Anions, Total U, Ra 226, Tot Metals, Iso U/Iso Th/Ra 228, Filtered and UNFILTERED

1150 - Well goes dry w/ 3.5L Remaining to be filled (filtered volume)

1206 - START PURGING MW957

1246 - Well stable start sampling for parameters listed above

MW957GW0001 - 0077

MW957GW0001F - 0077.

1438 Well goes dry while filling sample volume 1.1 Liters needed.

1445 - Collected Remaining 3.5L @ MW956

1515 - Collect Remaining 1.1 Liters @ MW957

1600 - 1604 - Purged MW958, well goes dry during purge. Allow Recovery over night.

1610 - 1740 - End of day Activities, Clean up/Pack up. Set up bottles for tomorrow. Depart site.

Location NFSS Date 12/12/12

Project / Client NFSS BOP FIELD INVESTIGATION

0730 [redacted] onsite
- Fillout DQCR for 12/11/12, scan + email.
- ~~Fillout~~ COCs from 12/11/12 pickup + email.
- Morning H+S meeting.
- Check calibration on YSI multiparameter OK
- Assisted steve with labels from yesterdays samples
- Repacked all coolers for pickup
- Load up for GW sampling
~~0941 - [illegible] ~ sampling MW953~~
1000 - START PURGE @ MW952
1045 - START Sampling MW952. Well goes dry during sampling @ 1138. (After 4.5L of sample)
1152 START PURGE @ MW953
1227 START SAMPLING MW953
1352 - Well dry after fill 5.75L of sample bottles
1411 START PURGE @ MW954.
1431 Well goes dry during purge, will allow recovery overnight + collect sample 12/13/12
1500 - Check DTW @ MW952 and 953
1504 - Recover 0.4L add'l volume from 952
1515 Recovered 1.0L add'l volume from 953.
1558 Pump Add'l 0.4L from well 953
1612 Pump last 0.1L needed for Unfiltered Volume from 953
1630 check DTW @ 958, not Measurable ~0.10'
1720 - Depart Site

Location NFSS Date 12/13/12

Project / Client NFSS BOP FIELD INVESTIGATION

0725 - [redacted] onsite.
- Fill out DQCR for 12/12/12, scan + email
- [redacted] from 12/12/12 + email
Morning H+S meeting.
- Check cal on YSI water quality probe OK
- Assisted Steve w/ labels from yesterday.
- Repacked coolers for pickup.
- Load up for GW sampling.
840 Fill Remaining Volume needed for Unfiltered Analyses @ MW952
0925-0945 Collect filtered volume from MW953 that went dry yesterday.
1038 - Start Purge @ MW955
1143 - Start Sampling MW955
Well goes dry while filling filtered portion of bottle set @ 1320
1320-1430 - Assist Steve w/ labels @ PE4 Location.
1430 - Pumped add'l ~1L from MW955
Assist [redacted] w/ [redacted] in today and organize put away bottles.
1600 Check on MW955 Recovered 0.75L.
Clean up
1620 - Depart Site

Location NFSS Date 12/14/12

Project / Client NFSS BOP FIELD INVESTIGATION

0730 - [redacted] arrives onsite
- Fill out DQCR for yest, scan + email.
- SCAN COCs for yesterday, email
- Morning H & S meeting
- ~~Check~~ Load coolers for GW sampling

915 - Collect additional volume needed to complete bottles filtered volume @ MW955.. Complete

930 - Begin pumping filtered volume from MW952, Dry after 2.25 L, Need add'l 4 L. to complete set.

0958 Begin filling unfiltered analytes @ MW954, Dry after 1.2 L

1030 - Recovered 1/6 L from MW958 1/2 L total to date.

1030 - 1600 - Assist Steve w/ Labels @ PE5.

1600 - 1700 - Packing coolers

1700 - 1800 - TAKE coolers to Lab

1805 - Relinquish coolers.

1830 - END OF DAY

[redacted]

Location NFSS Date 12/15/12

Project / Client NFSS BOP FIELD INVESTIGATION

0715 - [redacted] arrives onsite
- Paper work from yesterday.
- Morning H + S.

0930 - Assist [redacted] w/ post excavation Gamma walkovers @ PE 4/5/6.

1010 - 1100 Purge add'l sample volume from MW952, MW954, MW958.

1100 - 1200 - Go around + place locks on all 17 new wells.
Check DTW @ 944, 945, 946, 947, 948
Trace water @ 944 and 948, insufficient to sample, < 0.5'!!

1200 - [redacted] Depart site

[redacted]

Location NFSS Date 12/17/12

Project / Client NFSS BOP FIELD INVESTIGATION

0730 [redacted] onsite

- Morning Paperwork

0950 - Collect add'l sample volume @ MW952

1000 - Collect add'l sample volume @ MW954

~~1115~~ 1113 collect add'l volume @ MW958

- Labels, COCs, Assist w/ Demob. activities. For Bulk of day

1645 Depart site.

1723 - Drop samples @ lab

[redacted]

Location NFSS Date 12/20/12

Project / Client NFSS BOP FIELD INVESTIGATION

0730 - [redacted] + [redacted] ONSITE.

- [redacted] Assists [redacted] w/ Survey activities throughout the day.

- Repack / Label / take IDW samples collected w/ [redacted] the yesterday.

FREARS surveys All test trenches for horizontal location, All wells for vertical + horizontal.

1420 - [redacted] OFFSITE

~1500 - [redacted] OFFSITE AFTER DEMOBING FINAL OFFICE Mt'ls

1545 - DROPPED SAMPLES FROM PREVIOUS DAY @ TA-Amherst

[redacted]