Location NFSS Date 12-12-13

Project / Client NFSS - BOP Field Investigation 2013

Clear, cold. 9°

0715 arrive onsite: [redacted]

0730 safety meeting. [redacted] performs rad equipment source checks

0815 mobilize to location 3B003-2

Freezing temps - warm up equipment, hydraulic lines freezing

0910 sample 0.0-0.5 3B003-2SS0.0-0.5-1000

0910 0.5-2.0 3B003-2SB0.5-2.0-1001

0910 dup 0.5-2.0 3B003-2SB0.5-2.0D-9187

0915 2.0-3.0 3B003-2SB2.0-3.0-1002

0940 move to location 3B003-1

0945 sample 0.0-0.5 3B003-1SS0.0-0.5-1003

0950 0.5-2.0 3B003-1SB0.5-2.0-1004

0950 MS 0.5-2.0 3B003-1SB0.5-2.0MS-9188

0950 MSD 0.5-2.0 3B003-1SB0.5-2.0MSD-9189

0955 2.0-3.0 3B003-1SB2.0-3.0-1005

1000 move to location 3B011-1

1005 sample 0.0-0.5 3B011-1SS0.0-0.5-1006

1010 0.5-2.0 3B011-1SB0.5-2.0-1007

1015 2.0-3.0 3B011-1SB2.0-3.0-1008

1020 move to location 3B011-2

1025 sample 0.0-0.5 3B011-2SS0.0-0.5-1009

1030 0.5-2.0 3B011-2SB0.5-2.0-1010

Location NFSS Date 12-12-13

Project / Client NFSS - BOP Field Investigation

3B011-2

1035 sample 2.0-3.0 3B011-2SB2.0-3.0-1011

1110 move to location TB301-01-1

1115 Sample 0.0-0.5 TB301-01-1SS0.0-0.5-1012

1120 0.5-2.0 TB301-01-1SB0.5-2.0-1013

1125 2.0-3.0 TB301-01-1SB2.0-3.0-1014

1130 move to location TB301-01-2

1135 sample 0.0-0.5 TB301-01-2SS0.0-0.5-1015

1140 0.5-2.0 TB301-01-2SB0.5-2.0-1016

1140 dup 0.5-2.0 TB301-01-2SB0.5-2.0D-9190

1145 2.0-3.0 TB301-01-2SB2.0-3.0-1017

1200 move to location TB301-01-3

1205 sample 0.0-0.5 TB301-01-3SS0.0-0.5-1018

1210 0.5-2.0 TB301-01-3SB0.5-2.0-1019

1215 2.0-3.0 TB301-01-3SB2.0-3.0-1020

1220 move to location 3B013-1

1225 sample 0.0-0.5 3B013-1SS0.0-0.5-1021

1230 0.5-2.0 3B013-1SB0.5-2.0-1022

1230 dup 0.5-2.0 3B013-1SB0.5-2.0D-9191

1235 2.0-3.0 3B013-1SB2.0-3.0-1023

1240 move to location 3B013-2, move 2's due to branches

1245 sample 0.0-0.5 3B013-2SS0.0-0.5-1024

1250 0.5-2.0 3B013-2SB0.5-2.0-1025

1255 2.0-3.0 3B013-2SB2.0-3.0-1026

1310 move to location 3B013-3

Location NFSJ Date 12-12-13

Project / Client NFSJ - BOP Field Investigation 2013

3B013-3

1315 Sample 0.0-0.5 3B013-3SS00-0.5-1027

1320 0.5-2.0 3B013-3SB0.5-2.0-1028

1320 MS 0.5-2.0 3B013-3SB0.5-2.0MS-9192

1320 MSD 0.5-2.0 3B013-3SB0.5-2.0MSD-9193

1325 2.0-3.0 3B013-3SB2.0-3.0-1029

1340 move to location 3B013-4

1345 sample 0.0-0.5 3B013-4SS0.0-0.5-1030

1350 0.5-2.0 3B013-4SB0.5-2.0-1031

1355 2.0-3.0 3B013-4SB2.0-3.0-1032

1415 collect rinse blank off sampling tools EB1-1212B

1430 Clean up area, complete C-O-Cs. [redacted] perform end of day rad equipment source checks.

1500 end day early due to freezing temps, equipment freezing.

[redacted]

Location NFSJ Date 12-13-13

Project / Client NFSJ BOP Field Investigation 2013

Snow, 23°

0715 arrive on site! [redacted]

0730 safety mtg [redacted] performed rad equipment source checks

0900 mobilize to EU8, location 3B015-1

0915 sample 0.0-0.5 3B015-1SS0.0-0.5-1033

0920 0.5-2.0 3B015-1SB0.5-2.0-1034

0920 dup 0.5-2.0 3B015-1SB0.5-2.0D-9194

0925 2.0-3.0 3B015-1SB2.0-3.0-1035

0930 move to location 3B015-2

0935 sample 0.0-0.5 3B015-2SS0.0-0.5-1036

0940 0.5-2.0 3B015-2SB0.5-2.0-1037

0945 2.0-3.0 3B015-2SB2.0-3.0-1038

1000 move to location 3B015-4

1010 sample 0.0-0.5 3B015-4SS0.0-0.5-1039

1015 0.5-2.0 3B015-4SB0.5-2.0-1040

1015 MS 0.5-2.0 3B015-4SB0.5-2.0MS-9195

1015 MSD 0.5-2.0 3B015-4SB0.5-2.0MSD-9196

1020 2.0-3.0 3B015-4SB2.0-3.0-1041

1030 move to location 3B015-3

1040 sample 0.0-0.5 3B015-3SS0.0-0.5-1042

1045 0.5-2.0 3B015-3SB0.5-2.0-1043

1050 2.0-3.0 3B015-3SB2.0-3.0-1044

1300 mobilize to location SP18

Location NFSS Date 12-13-13

Project / Client NFSS BOP Fild Investigation 2013

SP18

1320 sample 0.0-0.5 SP18SS0.0-0.5- 1045

1325 0.5-2.0 SP18SB0.5-2.0- 1046

1330 2.0-3.0 SP18SB2.0-3.0- 1047

1345 move to location GWS-15

1350 sample 0.0-0.5 GWS-15SS0.0-0.5- 1048

1355 0.5-2.0 GWS-15SB0.5-2.0-1049

1355 dup 0.5-2.0 GWS-15SB0.5-2.0D- 9192

1400 2.0-3.0 GWS-15SB2.0-3.0-1050

1430 mobilize to EU12, location 219-1

1435 Sample 0.0-0.5 219-1SS0.0-0.5-1051

1440 0.5-2.0 219-1SB0.5-2.0-1052

1445 MS 2.0-3.0 219-1SB2.0-3.0-1053

1500 move to location 219-2, moved 56' due to ditch

1505 sample 0.0-0.5 219-2SS0.0-0.5-1054

1510 0.5-2.0 219-2SB0.5-2.0-1055

1515 2.0-3.0 219-2SB2.0-3.0-1056

1530 move to location 219-3

1535 sample 0.0-0.5 219-3SS0.0-0.5-1057

1540 0.5-2.0 219-3SB0.5-2.0-1058

1540 MS 0.5-2.0 219-3SB0.5-2.0MS-9193

1540 MSD 0.5-2.0 219-3SB0.5-2.0MSD-9194

1545 2.0-3.0 219-3SB2.0-3.0-1059

1550 move to location 219-4

1555 sample 0.0-0.5 219-4SS0.0-0.5-1060

Location NFSS Date 12-13-13

Project / Client NFSS - BOP Field Investigation 2013

219-4

1600 Sample 0.5-2.0 219-4SB0.5-2.0-1061

1605 2.0-3.0 219-4SB2.0-3.0-1062

1630 collect rinse blank off field tools EB1-121313

1700 clean up area, complete C-O-C [redacted] performed end of day rad equipment source checks, A Jones leave site

[redacted]

Location NFSS Date 12-16-13

Project / Client NFSS - BOP Field Investigation 2013

clear, cold, 12°, light snow

0715 arrive on site: [redacted]

0730 safety meeting [redacted]

rad equipment source check

0800 maintenance snow plows are to be sampled today

0900 hand clear snow from sample area

0930 mobilize to EU 14 location 8B001-2

0940 sample 0.0-0.5 8B001-2SS0.0-0.5-1063

0945 0.5-2.0 8B001-2SB0.5-2.0-1064

0945 dup 0.5-2.0 8B001-2SB0.5-2.0D-9195

0950 2.0-3.0 8B001-2SB2.0-3.0-1065

1000 move to location 8B001-3

1010 sample 0.0-0.5 8B001-3SS0.0-0.5-1066

1015 0.5-2.0 8B001-3SB0.5-2.0-1067

1020 2.0-3.0 8B001-3SB2.0-3.0-1068

1030 move to location 8B001-1

1030 Sample 0.0-0.5 8B001-1SS0.0-0.5-1069

1035 0.5-2.0 8B001-1SB0.5-2.0-1070

1035 MS 0.5-2.0 8B001-1SB0.5-2.0MS-9196

1035 MSD 0.5-2.0 8B001-1SB0.5-2.0MSD-9197

1040 2.0-3.0 8B001-1SB2.0-3.0-1071

1045 move to location 8B001-4

1050 sample 0.0-0.5 8B001-1SS0.0-0.5-1072

Location NFSS Date 12-16-13

Project / Client NFSS - BOP Field Investigation 2013

8B001-4

1055 Sample 0.5-2.0 8B001-4SB0.5-2.0-1073

1100 2.0-3.0 8B001-4SB2.0-3.0-1074

1105 move to location 816-1

1110 sample 0.0-0.5 816-1SS0.0-0.5-1075

1115 0.5-2.0 816-1SB0.5-2.0-1076

1120 2.0-3.0 816-1SB2.0-3.0-1077

1125 move to location 816-2

1130 sample 0.0-0.5 816-2SS0.0-0.5-1078

1135 0.5-2.0 816-2SB0.5-2.0-1079

1135 dup 0.5-2.0 816-2SB0.5-2.0D-9198

1140 2.0-3.0 816-2SB2.0-3.0-1080

1300 move to location 816-3

1305 sample 0.0-0.5 816-3SS0.0-0.5-1081

1310 0.5-2.0 816-3SB0.5-2.0-1082

1315 2.0-3.0 816-3SB2.0-3.0-1083

1320 move to location 816-4

1325 sample 0.0-0.5 816-4SS0.0-0.5-1084

1330 0.5-2.0 816-4SB0.5-2.0-1085

1335 2.0-3.0 816-4SB2.0-3.0-1086

1345 mobilize to EU12, location 205-1

1350 sample 0.0-0.5 205-1SS0.0-0.5-1087

1355 0.5-2.0 205-1SB0.5-2.0-1088

~~1400 2.0-3.0 205-1SB2.0-3.0-1089~~

1355 dup 0.5-2.0 205-1SB0.5-2.0D-9199

Location NFSS Date 12-16-13

Project / Client NFSS BOP Field Investigation 2013

205-1

1400 sample 2.0-3.0 205-15B2.0-3.0-1089

1410 move to location 205-2

1415 sample 0.0-0.5 205-25S0.0-0.5-1090

1420 0.5-2.0 205-25B0.5-2.0-1091

1425 2.0-3.0 205-25B2.0-3.0-1092

1430 move to location 205-3

1440 sample 0.0-0.5 205-35S0.0-0.5-1093

1445 0.5-2.0 205-35B0.5-2.0-1094

1450 2.0-3.0 205-35B2.0-3.0-1095

1500 move to location 205-4

1505 sample 0.0-0.5 205-45S0.0-0.5-1096

1510 0.5-2.0 205-45B0.5-2.0-1097

1510 MS 0.5-2.0 205-45B0.5-2.0MS 9200

1510 MSD 0.5-2.0 205-45B0.5-2.0MSD-9201

1515 2.0-3.0 205-45B2.0-3.0-1098

1520 move to location 2B002-2 (chem only)

1525 sample 0.0-0.5 2B002-2S0.0-0.5-1099

1530 0.5-2.0 2B002-2SB0.5-2.0-1100

1535 2.0-3.0 2B002-2SB2.0-3.0-1101

1545 move to location 2B002-1 (chem only)

1550 sample 0.0-0.5 2B002-1S0.0-0.5-1102

1555 0.5-2.0 2B002-1SB0.5-2.0-1103

1600 2.0-3.0 2B002-1SB2.0-3.0-1104

1630 collect rinse blank off sample tools
EB1-121613

Location NFSS Date 12-16-13

Project / Client NFSS - BOP Field Investigation 2013

1700 Clean-up area, complete
[redacted] performs end of day
rad equipment source check.

[redacted]

Location NFSS Date 12-17-13

Project / Client NFSS - BOP Field Investigation 2013

cold, snow, 12°

[redacted]

0730 safety meeting. [redacted]

performs rad equipment source checks

0800 clear snow from sample locations in EU12

0900 mobilize to location 2D012-1

0910 sample 0.0-0.5 2D012-1SS0.0-0.5-1105

0915 0.5-2.0 2D012-1SB0.5-2.0-1106

0915 dup 0.5-2.0 2D012-1SB0.5-2.0D-9202

0920 2.0-3.0 2D012-1SB2.0-3.0-1107

0930 move to location 2D012-2

0935 sample 0.0-0.5 2D012-2SS0.0-0.5-1108

0940 0.5-2.0 2D002-2SB0.5-2.0-1109

0945 2.0-3.0 2D002-2SB2.0-3.0-1110

0950 move to location 2D012-4

0955 sample 0.0-0.5 2D012-4SS0.0-0.5-1111

1000 0.5-2.0 2D012-4SB0.5-2.0-1112

1005 2.0-3.0 2D012-4SB2.0-3.0-1113

1010 move to location 2D013-4

1015 sample 0.0-0.5 2D013-4SS0.0-0.5-1114

1020 0.5-2.0 2D013-4SB0.5-2.0-1115

1020 MS 0.5-2.0 2D013-4SB0.5-2.0MS-9203

1020 MSD 0.5-2.0 2D013-4SB0.5-2.0MSD-9204

Location NFSS Date 12-17-13

Project / Client NFSS - BOP Field Investigation 2013

2D013-4, elevated readings at 2-3', refusal at 4'

1025 sample 2.0-3.0 2D013-4SB2.0-3.0-1116

1040 mobilize to location 2D013-2

1045 sample 0.0-0.5 2D013-2SS0.0-0.5-1117

1050 0.5-2.0 2D013-2SB0.5-2.0-1118

1055 2.0-3.0 2D013-2SB2.0-3.0-1119

1100 mobilize location 2D013-1

refusal, road material, move location 3.5' to the east, inside fence, per consult with [redacted] Location 2D013-3 was eliminated per consult with [redacted] due to location in ditch with standing water

JTK 12-17-13

1110 ~~sample 0.0-0.5 2D013-1SS0.0-0.5-1120~~

2nd attempt, refusal at 2D013-1, road material, move location east 2'. Refusal at ~24", sample 24" (2.0')

1115 sample 0.0-0.5 2D013-1SS0.0-0.5-1120

1120 0.5-2.0 2D013-1SB0.5-2.0-1121

(+ split sample for USACE)

1315 mobilize to location 3D001-4

Clear snow from boring locations

1330 sample 0.0-0.5 3D001-4SS0.0-0.5-1122

1335 0.5-2.0 3D001-4SB0.5-2.0-1123

1335 dup 0.5-2.0 3D001-4SB0.5-2.0D-9205

Location NFSS Date 12-17-13

Project / Client NFSS- BOP Field Investigation 2013

3D001-4

1340 sample 2.0-3.0 3D001-4SB2.0-3.0-1124

1345 move to location 3D001-2

1350 sample 0.0-0.5 3D001-2SS0.0-0.5-1125

1355 0.5-2.0 3D001-2SB0.5-2.0-1126

1400 2.0-3.0 3D001-2SB2.0-3.0-1127

1405 move to location 3D001-1

1410 sample 0.0-0.5 3D001-1SS0.0-0.5-1128

1415 0.5-2.0 3D001-1SB0.5-2.0-1129

1420 2.0-3.0 3D001-1SB2.0-3.0-1130

1430 move to location 3D004-1

1435 sample 0.0-0.5 3D004-1SS0.0-0.5-1131

1440 0.5-2.0 3D004-1SB0.5-2.0-1132

1445 2.0-3.0 3D004-1SB2.0-3.0-1133

1450 move to location 3D001-3

1455 sample 0.0-0.5 3D001-3SS0.0-0.5-1134

1500 0.5-2.0 3D001-3SB0.5-2.0-1135

1505 2.0-3.0 3D001-3SB2.0-3.0-1136

1510 move to location 3D004-3

1520 sample 0.0-0.5 3D004-3SS0.0-0.5-1137

1525 0.5-2.0 3D004-3SB0.5-2.0-1138

1525 dup 0.5-2.0 3D004-3SB0.5-2.0D-9206

1530 2.0-3.0 3D004-3SB2.0-3.0-1139

1535 move to location 3D004-4

refusal at 2.0', sample 0.0-2.0'

Location NFSS Date 12-17-13

Project / Client NFSS- BOP Field Investigation 2013

3D004-4

1540 sample 0.0-0.5 3D004-4SS0.0-0.5-1140

1545 0.5-2.0 3D004-4SB0.5-2.0-1141

1550 move to location 3D004-2

1555 sample 0.0-0.5 3D004-2SS0.0-0.5-1142

1600 0.5-2.0 3D004-2SB0.5-2.0-1143

1600 MS 0.5-2.0 3D004-2SB0.5-2.0MS-9207

1600 MSD 0.5-2.0 3D004-2SB0.5-2.0MSD 9208

1605 2.0-3.0 3D004-2SB2.0-3.0-1144

1630 collect rinse blank off of sampling tools EB1-121713

1700 clean-up, complete C-O-Cs, [redacted] perform end of day rad equipment source checks

[redacted]

Location NFSS Date 12-18-13

Project / Client NFSS - BOP Field Investigation 2013

cold, cloudy, light snow 28° [redacted]

0715 arrive on site: [redacted]

0730 safety meeting, [redacted] to perform rad equipment safety checks

0830 mobilize equipment from EU8 to EU14, location 2B014-3

Per consult with WACE ([redacted]), will hand dig surface sample for location 2B014-1 and 2B014 due to location near ditches/ruts, equipment unable to access locations

0930 set-up at location 2B014-3

0935 sample 00-0.5 2B014-3SS00-0.5-1145

0940 0.5-2.0 2B014-3SB0.5-2.0-1146

0940 dup 0.5-2.0 2B014-3SB0.5-2.0D-9209

0945 2.0-3.0 2B014-3SB2.0-3.0-1147

1000 move to location 2B014-2

1005 sample 00-0.5 2B014-2SS00-0.5-1148

1010 0.5-2.0 2B014-2SB0.5-2.0-1149

1015 2.0-3.0 2B014-2SB2.0-3.0-1150

1030 hand auger location 2B014-4, able to auger to 1.0'

1040 sample 0.0-0.5' 2B014-4SS00-0.5-1151

1050 0.5-1.0' 2B014-4SB0.5-1.0-1152

Location NFSS Date 12-18-13

Project / Client NFSS - BOP Field Investigation 2013

1100 hand auger location 2B014-1 ground all gravel, frozen, had to use heat to thaw ground, able to sample to 1.0' bgs.

1110 sample 00-0.5 2B014-1SS00-0.5-1153

1120 0.5-1.0 2B014-1SB0.5-1.0-1154

1130 collect rinse blank off sample tools EB1-121813

1330 break ice in frac tank to prepare for samples

1400 backfill locations between old + new fence (road-o street) that we were unable to get to when previously sampled

1430 Clean-up, perform rad equipment source checks, depart site

[redacted]

Location NFSS Date 12-19-13

Project / Client NFSS - BOP Field Investigation 2013

0715 amlr onsite; [redacted]

[redacted]

0730 safety meeting.

[redacted] begins preparing rad equipment to send offsite

0800 D schunk begins to decon probe and tools

0900 break ice in frac tank and prepare to sample.

1030 collect frac tank samples

IEFT-1-2034

- VOCs
- SVOCs
- Pesticides
- Herbicides
- ICP metals
- mercury
- pH
- Oil and Grease
- Total Organic carbon
- TSS
- Iso Uranium
- Iso Thorium
- Gamma Spec

Location NFSS Date 12-19-13

Project / Client NFSS - BOP Field Investigation 2013

- TCLP VOCs
- TCLP SVOCs
- TCLP Pesticides
- TCLP Herbicides
- TCLP ICP Metals
- TCLP Mercury

1200 complete decon of probe and Russo tools, cleaned out connex

1330 [redacted] rad survey of geoprobe

1400 test america onsite to pick up outgoing sample coolers and all unused bottles

1700 pack up equipment in office, P. Armani

STK 12-19-13

~~pr~~ preparing rad equipment to ship back to Salt Lake

1730 [redacted] to return to site tomorrow to pick up all remaining equipment

[redacted]

Location NFSS Date 6/16/14

Project / Client NFSS-BOP Field Investigation 2014

WX - partly cloudy, humid 78°

0730 pick up rad equipment from Buffalo office

0845 [redacted] amber onsite

[redacted] held safety meeting

0900 unpack equipment, set up rad instruments

1015 TA onsite to drop off 3 boxes 16 oz sample jars/lids, 4 boxes amber 1 liter jars, DI water, coolers. TA will drop off more sample jars when they get them

1030 check out sample locations, make note of locations needing clearing

1100 K. Connare onsite

1315 complete sample location check

Having issues with activating GPS unit, A Jones working on clarifying issue, having new GPS units sent FedEx and Cable tomorrow morning.

[redacted]

Location NFSS Date 6/17/14

Project / Client NFSS - BOP Field Investigation 2014

WX - overcast, humid 78°

1030 [redacted] amber onsite

[redacted] held safety meeting

[redacted] activating new GPS unit,

[redacted] perform daily rad instrument checks, incoming coolers were surveyed

1130 [redacted] does trial run with GPS unit, not working properly

1200 thunderstorms, wait for storm to pass before attempting another run with GPS

1230 [redacted] review locations in need of clearing and document in table, email to USACE

[redacted] location 6B005-6 in EU 6 will be moved to south side of ditch

Location 3D006-6 in EU8 will be moved off concrete pad and ~20' west of 3D006-5

1305 thunderstorms passed [redacted] performing trial run with GPS in EU11 area

[redacted]

Location NFSS Date 6-17-14

Project / Client NFSS · BOP Field Investigation 2014

1400 GPS working, collect data for EU11
2A006-6 and 2A006-5
[redacted] mark 2A006-6 out of
ditch
1430 call [redacted] to verify labeling
system and parameters on labels.
1455 Set-up on 2A006-5
1505 collect surface sample 2A006-5550.0-0.5-1200
1515 Collect sample 0.5-2.0 2A006-5550.5-2.0-1201
1520 sample 2.0-3.0' 2A006-5582.0-3.0-1202
1525 move to location 2A006-6 (moved ~5' W of original location) out of ditch
1530 hand dig surface sample 0.0-0.5'
collect sample 2A006-6550.0-0.5-1203 (2 jars)
1535 sample 0.5-2.0' 2A006-6580.5-2.0-1204
1540 2.0-3.0 2A006-6582.0-3.0-1205
1605 collect equipment blank off of
trowels EB-061714
1630 clean up area
[redacted] performed gamma survey on 10
locations in EU11. [redacted]
end of day rad
1700 depart site

[redacted]

Location NFSS Date 6/18/14

Project / Client NFSS - BOP Field Investigation 2014

wx- cloudy, humid, ~75°
0730 arrive onsite [redacted]
onsite, safety meeting
[redacted] performing rad equipment source
checks
0800 [redacted] begin gamma walk-over
survey
0815 Set-up in EU11, location 8A004-5
and 8A004-6 located near sewer line,
[redacted] relocating points
[redacted]25 move location 8A004-5 ~3' south
~~0830~~ sample 0.0-0.5 8A004-5550.0-0.5-1206
0830 sample 0.5-2.0 8A004-5580.5-2.0-1207
0835 sample 2.0-3.0 8A004-5582.0-3.0-1208
0840 set-up at location 8A004-6
(moved ~3' N of original location)
sample 8A004-6550.0-0.5-1209
0845 sample 0.5-2.0' 8A004-6580.5-2.0-1210
0850 sample 2.0-3.0 8A004-6582.0-3.0-1211
0850 2.0-3.0 dup 8A004-6582.0-3.0-9300
0855 set up at location 8A004-7
0900 sample 0.0-0.5 8A004-7550.0-0.5-1212
0905 0.5-2.0 8A004-7580.5-2.0-1213
0905 collect MS/MSD 8A004-7580.5-2.0MS 9301

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8A004-7 (Continued)

0905 collect MSD 8A004-7SB0.5-2.0MSD - 9302
0910 collect 2.0-3.0 8A004-7SB2.0-3.0 - 1214
0920 Set-up in E012 at location 2A008-6
0925 collect surface sample 2A008-6SS00-0.5 -1215
0930 collect 0.5-2.0 2A008-6SB0.5-2.0 - 1216
0935 collect 2.0-3.0 2A008-6SB2.0-3.0 -1217
0940 Set-up at location 2A008-5
0945 collect 0.0-0.5 2A008-5SS0.0-0.5 - 1218
0950 collect 0.5-2.0 2A008-5SB0.5-2.0 1219
0955 collect 2.0-3.0 2A008-5SB2.0-3.0 -1220
1000 set-up at location 2A008-8 (E011)
1010 collect 0.0-0.5 2A008-8SS0.0-0.5 -1221
1010 collect dup 0.0-0.5 2A008-8SS0.0-0.5D- 9303
1015 collect 0.5-2.0 2A008-8SB0.5-2.0 - 1222
1020 2.0-3.0 2A008-8SB2.0-3.0 - 1223
1025 move to location 2A008-7 (E012)
1030 collect surface sample 2A008-7SS00-0.5- 1224
1035 collect 0.5-2.0 2A008-7SB0.5-2.0 - 1225
1040 collect 2.0-3.0 2A008-7SB2.0-3.0 - 1226
1100 clean up location
1130 leave site to get ice
1300 set up at location 2A003-4 (chem only)
call P. Fairbanks to verify no need for duplicate amount of surface sample

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2A003-4 (Continued)

1310 box of instrument 2221 (attached 4410) not working, switch out instruments
1330 collect surface sample 2A003-4SS00-0.5-1227
1335 sample 0.5-2.0 2A003-4SB0.5-2.0-1228
1340 dup 0.5-2.0 2A003-4SB0.5-2.0D-9304
1345 sample 2.0-3.0 2A003-4SB2.0-3.0-1229
1400 set-up at location 2A003-5 (chem only)
1405 sample 0.0-0.5 2A003-5SS0.0-0.5-1230
1410 0.5-2.0 2A003-5SB0.5-2.0-1231
1410 MS 0.5-2.0 2A003-5SB0.5-2.0MS - 9305
1410 MSD 0.5-2.0 2A003-5SB0.5-2.0MSD - 9306
1415 sample 2.0-3.0 2A003-5SB2.0-3.0 - 1232
1430 set-up at location 2B002-3 (chem only)
sample 0.0-0.5 2B002-3SS00-0.5-1233
1435 sample 0.5-2.0 2B002-3SB0.5-2.0-1234
1440 2.0-3.0 2B002-3SB2.0-3.0-1235
1500 set-up at location 2B002-4
1515 sample 0.0-0.5 2B002-4SS00-0.5-1236
1520 0.5-2.0 2B002-4SB0.5-2.0-1237
1525 2.0-3.0 2B002-4SB2.0-3.0-1238
1530 move to location GWS-27
1545 sample 0.0-0.5 GWS-27SS0.0-0.5-1239
1550 0.5-2.0 GWS-27SB0.5-2.0-1240
1555 2.0-3.0 GWS-27SB2.0-3.0-1241

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GWS-27 (continued)

1555 drop 2.0-3.0 GWS-27SB2.0-3.0D-9307

1600 clean up area

1615 collect rinse blank EB1-061814 off shoe + trowel (1-liter amber, 2-1 liter plastic)

1630 [redacted] performs end of day rad equipment source checks

1715 depart site

[redacted]

Location NFSS Date 6/19/14

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WX: overcast, light breeze, ~75°

0730 arrive on site [redacted] safety meeting [redacted] performs rad equipment source checks, scans outgoing coolers

0800 calibrate PID

0815 set-up at location GWS-11-1 in EU11

0830 collect surface sample by hand digging

0840 GWS-11-1SS0.0-0.5-1242

0845 sample 0.5-2.0 GWS-11-1SB0.5-2.0-1243

0850 2.0-3.0 GWS-11-1SB2.0-3.0-1244

0915 set-up in EU14 at location 8B001-5

0930 sample 0.0-0.5 8B001-5SS0.0-0.5-1245

0935 0.5-2.0 8B001-5SB0.5-2.0-1246

0935 ms 0.5-2.0 8B001-5SB0.5-2.0MS-9308

0935 msD 0.5-2.0 8B001-5SB0.5-2.0MSD-9309

0940 sample 2.0-3.0 8B001-5SB2.0-3.0-1247

~~0950 set-up at location 8B001-6~~

~~0955 sample 0.0-0.5 8B001-6SS0.0-0.5-1248~~ JTK 6-19-14

0945 sample 3.0-4.0 8B001-5SB3.0-4.0-1248

0950 sample 4.0-5.0 8B001-5SB4.0-5.0-1249

0955 set-up at location 8B001-6

sample 0.0-0.5 8B001-6SS0.0-0.5-1250

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SB001-6 (continued)

1000 sample 0.5-2.0 SB001-6SB0.5-2.0-1251
Poor recovery, soil very soft, compressed
1005 sample 2.0-3.0 SB001-6SB2.0-3.0-1252
1010 sample 3.0-4.0 SB001-6SB3.0-4.0-1253
1015 sample 4.0-5.0 SB001-6SB4.0-5.0-1254
1030 D. Miller, M. Legera stop out at location
1115 Set-up at location SB001-7
sample 0.0-0.5 SB001-7SS0.0-0.5-1255
1120 0.5-2.0 SB001-7SB0.5-2.0-1256
1120 dup 0.5-2.0 SB001-7SB0.5-2.0D - 9310
1125 2.0-3.0 SB001-7SB2.0-3.0-1257
1130 3.0-4.0 SB001-7SB3.0-4.0-1258
1135 4.0-5.0 SB001-7SB4.0-5.0-1259
1145 mobilize probe to next location in EU8
1230 break for lunch
1300 Set-up at location SP-18-1
using new meter Ludlum 2221 with 44-10
(full instrument change-out)
1320 sample 0.0-0.5 SP-18-1SS0.0-0.5-1260
1335 0.5-2.0 SP-18-1SB0.5-2.0-1261
1340 2.0-3.0 SP-18-1SB2.0-3.0-1262
1345 3.0-4.0 SP-18-1SB3.0-4.0-1263
1350 4.0-5.0 SP-18-1SB4.0-5.0-1264
Insufficient volume at 4-5', push down adjacent

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SP-18-1 (continued)

to SP-18-1 to aquire additional 4-5' volume
1420 Set-up at location SP-18-2
1430 sample 0.0-0.5 SP-18-2SS0.0-0.5-1265
1435 0.5-2.0 SP-18-2SB0.5-2.0-1266
1435 dup 0.5-2.0 SP-18-2SB0.5-2.0D - ~~1267~~ 9311
1440 sample 2.0-3.0 SP-18-2SB2.0-3.0 - 1267
1445 sample 3.0-4.0 SP-18-2SB3.0-4.0 - 1268
1450 sample 4.0-5.0 SP-18-2SB4.0-5.0 - 1269
push down adjacent to hole to obtain additional 4-5.0' volume
1530 Set up at location SP-18-3
1530 sample 0.0-0.5 SP-18-3SS0.0-0.5-1270
1535 sample 0.5-2.0 SP-18-3SB0.5-2.0-1271
1535 sample dup 0.5-2.0 SP-18-3SB0.5-2.0D-9312
1540 sample 2.0-3.0 SP-18-3SB2.0-3.0-1272
1545 sample 3.0-4.0 SP-18-3SB3.0-4.0-1273
1550 sample 4.0-5.0 SP-18-3SB4.0-5.0-1274
1600 clean-up site
1630 collect equipment rinse blank off of sampling tools EBI-061914
1645 [redacted] perform end of day rad equipment source check
1710 depart site [redacted]

Location NFSI Date 6/20/14

Project / Client NFSI - BOP Field Investigation 2014

WX: sunny

0720 [redacted]

[redacted] perform rad source check,

scan outgoing coolers

0800 set up in EU 8 at location

SP-18-4 for sampling

0830 sample 0.0-0.5 SP-18-4SS00-0.4-1275

0835 sample 0.5-2.0 SP-18-4SB0.5-2.0-1276

0840 sample 2.0-3.0 SP-18-4SB2.0-3.0-1277

0845 sample 3.0-4.0 SP-18-4SB3.0-4.0-1278

0850 sample 4.0-5.0 SP-18-4SB4.0-5.0-1279

no need to collect additional volume for 4-5' interval

0900 set-up at location GWS-26

0920 sample 0.0-0.5 GWS-26SS00-0.5-1280

0925 sample 0.5-2.0 GWS-26SB0.5-2.0-1281

0925 dup 0.5-2.0 GWS-26SBGT-2.0D-9313

0930 sample 2.0-3.0 GWS-26SB2.0-3.0-1282

Spoke with K connors regarding sleeve diameter 2 3/4" - 3 1/2" tooling, 1 1/2" - 2 7/8" tooling

[redacted] move to EU 8, locations 312-4 + 312-5,

[redacted] donning Tyvek as precaution for Dalton IVU

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312-5

1030 sample 0.0-0.5 312-5SS00-0.5-1283

1030 MS 0.0-0.5 312-5SS00-0.5MS-9314

1030 MSD 0.0-0.5 312-5SS00-0.5MSD-9315

1035 sample 0.5-2.0 312-5SB0.5-2.0-1284

1040 sample 2.0-3.0 312-5SB2.0-3.0-1285

1050 set-up at location 312-4

1100 sample 0.0-0.5 312-4SS00-0.5-1286

1100 dup 0.0-0.5 312-4SS00-0.5D-9316

1105 sample 0.5-2.0 312-4SB0.5-2.0-1287

1110 sample 2.0-3.0 312-4SB2.0-3.0-1288

1120 move to location 3A020-5

1130 sample 0.0-0.5 3A020-5SS00-0.5-1289

1130 0.5-2.0 3A020-5SB0.5-2.0-1290

1135 2.0-3.0 3A020-5SB2.0-3.0-1291

1205 clean up area, mobilize to 3A017-7, break for lunch

1300 collect surface sample 0.0-0.5

3A017-7SS00-0.5-1292

1305 sample 0.5-2.0 3A017-7SB0.5-2.0-1293

1310 sample 2.0-3.0 3A017-7SB2.0-3.0-1294

1320 set-up at location 3A017-5

1330 sample 0.0-0.5 3A017-5SS00-0.5-1295

1335 sample 0.5-2.0 3A017-5SB0.5-2.0-1296

1335 dup 0.5-2.0 3A017-5SB0.5-2.0D-9317

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1340 sample 2.0-3.0' 3A017-5SB2.0-3.0-1297
1350 move to location 3A017-6
1400 sample 0.0-0.5 3A017-6SS0.0-0.5-1298
1405 sample 0.5-2.0 3A017-6SB0.5-2.0-1299
1410 sample 2.0-3.0 3A017-6SB2.0-3.0-1300
1430 move to location 3B011-4
1435 sample 0.0-0.5 3B011-4SS0.0-0.5-1301
1440 sample 0.5-2.0 3B011-4SB0.5-2.0-1302
1445 sample 2.0-3.0-3B011-4SB2.0-3.0-1303
1450 set-up at location 3B011-3
1455 mylar broke on rad instrument 2360
[redacted] has mylar replacement, instrument
needs to sit 24 hrs. Bagged all intervals
of 3B011-3
1455 0.0-0.5 3B011-3SS0.0-0.5-1304
1455 MS 0.0-0.5 3B011-3SB0.0-0.5MS9308
1455 MSD 0.0-0.5 3B011-3SB0.0-0.5MSD-9319
1500 0.5-2.0 3B011-3SB0.5-2.0-1305
1505 2.0-3.0 3B011-3SB2.0-3.0-1306
1515 clean up area
1600 collect rinse blank off shoe and
sampling tools EB1-062014
1616 K. Gill performs end of
day rad equipment source check

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1630 mylar replacement on meter
2360 will be set-up on Monday to
verify ready to use.
1700 depart site

[redacted]

Location NFSS Date 6/23/14

Project / Client NFSS BOP Field Investigation 2014

wx: sunny, 63°

0715 arrive onsite [redacted]

0730 safety meeting, [redacted] perform instrumentation set-up on 2360 due to replacement of mylar on 6/20/14., performs rad equipment source check

0800 [redacted] will not be onsite today, [redacted] will be onsite for today

0830 Complete instrumentation set-up

0840 set up at location 3B003-4, EVB [redacted] obtains rad readings from bagged samples 3B003-3

0900 meter 2360 not working properly, [redacted] taking meter to inspect, will bag all samples

0845 sample 0.0-0.5 3B003-4SS00-0.5 - 1307

0850 0.5-2.0 3B003-4SB0.5-2.0 - 1308

0855 2.0-3.0 3B003-4SB2.0-3.0 - 1309

0900 move to location 3B003-3 - bag all samples

0915 sample 0.0-0.5 3B003-3SS0.0-0.5 - 1310

0920 0.5-2.0 3B003-3SB0.5-2.0 - 1311

0925 2.0-3.0 3B003-3SB2.0-3.0 - 1312

0930 mobilize to 3C014-5 bag samples

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3C014-5 (continued)

0940 sample 0.0-0.5 3C014-5SS0.0-0.5 - 1313

0945 0.5-2.0 3C014-5SB0.5-2.0 - 1314

0950 2.0-3.0 3C014-5SB2.0-3.0 - 1315

1000 move to location 3C014-6 [redacted] onsite (WACE)

~~[redacted] 3C014~~

1005 sample 0.0-0.5 3C014-6SS0.0-0.5 - 1316

1010 0.5-2.0 3C014-6SB0.5-2.0 - 1317

1010 dup 0.5-2.0 3C014-6SB0.5-2.0D - 9320

1015 2.0-3.0 3C014-6SB2.0-3.0 - 1318

1030 mobilize to location 3D006-5 - chem only bag samples

Location 3D006-6 in concrete, per previous conversation with [redacted], moved location off concrete, ~20' W of 3D006-5, confirmed with [redacted]

1035 sample 0.0-0.5 3D006-5SS0.0-0.5 - 1319

1040 0.5-2.0 3D006-5SB0.5-2.0 - 1320

1045 2.0-3.0 3D006-5SB2.0-3.0 - 1321

1050 move to location 3D006-6 (~20' W of 3D006-5), chem only

1100 Sample 0.0-0.5 3D006-6SS0.0-0.5 - 1322

1105 0.5-2.0 3D006-6SB0.5-2.0 - 1323

1110 2.0-3.0 3D006-6SB2.0-3.0 - 1324

1120 move to location 3C006-4, chem only

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3C006-4 (Continued), bagged sample

1130 sample 0.0-0.5 3C006-4SS0.0-0.5-1325

1135 0.5-2.0 3C006-4SB0.5-2.0-1326

1135 dup 0.5-2.0 3C006-4SB0.5-2.0D-9321

1140 2.0-3.0 3C006-4SB2.0-3.0-1327

1200 clean up area, break for lunch

[redacted] (URS) onsite

130[redacted] onsite to recon restoration areas and check out baker tank.

1310 mobilize to location 3D004-5, located in EU8, inbetween fences (bagged sample)

1320 sample 0.0-0.5 3D004-5SS0.0-0.5-1328

1325 0.5-2.0 3D004-5SB0.5-2.0-1329

1330 2.0-3.0 3D004-5SB2.0-3.0-1330

1400 mobilize geoprobe to EU1, location 5A016-7 (bag samples)

1415 sample 0.0-0.5 5A016-7SS0.0-0.5 -1331

1420 0.5-2.0 5A016-5B0.5-2.0 -1332

1425 2.0-3.0 5A016-5B2.0-3.0 -1333

1445 set-up at location 5A016-8, bag sample

1500 sample 0.0-0.5 5A016-8SS0.0-0.5-1334

1505 0.5-2.0 5A016-8SB0.5-2.0-1335

1510 2.0-3.0 5A016-8SB2.0-3.0-1336

1530 set-up at location 5A016-5, bag samples

1535 sample 0.0-0.5 5A016-5SS0.0-0.5-1337

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5A016-5 (Continued)

1535 MS 5A016-5SS0.0-0.5MS-9322

1535 MSD 5A016-5SS0.0-0.5MSD-9323

1540 0.5-2.0 5A016-5SB0.5-2.0-1338

1545 2.0-3.0 5A016-5SB2.0-3.0-1339

1550 clean-up area

1600 collect rinse blank off sampling tools EB1-062314

^ Jonw ordered new 2360 meter to arrive tomorrow morning. We will scan and jar all bagged samples when [redacted] arrives

1615 [redacted] perform end of day rad equipment source checks

1715 depart site

[redacted]

Location NFSS - BOP Field Investigation Date 6/24/14

Project / Client

wx, cloudy, light rain

0720 arrive on site [redacted]

0730 [redacted] onsite, [redacted] onsite [redacted] performs rad equipment source checks, scans incoming coolers

0800 set-up at location SA016-6, bag sample

0830 bag samples until replacement meter arrives

sample 0.0-0.5 SA016-6SS0.0-0.5-1340

0835 0.5-2.0 SA016-6SB0.5-2.0-1341

0840 2.0-3.0 SA016-6SB2.0-3.0-1342

0845 move to location SA016-9, bag sample

0850 sample 0.0-0.5 SA016-9SS0.0-0.5-1343

0855 0.5-2.0 SA016-9SB0.5-2.0-1344

0855 dup 0.5-2.0 SA016-9SB0.5-2.0D-9324

0900 2.0-3.0 SA016-9SB2.0-3.0-1345

0930 mobilize to location SA010-4

[redacted] at location to move SA010-5 ~ 15 ft. west of original point based on gamma walkover

0935 [redacted] down truck to obtain surface reading at SA010-4 due to poison ivy in area

0940 sample SA010-4 0.0-0.5 SA010-4SS0.0-0.5-1346

0945 0.5-2.0 SA010-4SB0.5-2.0-1347

0950 2.0-3.0 SA010-4SB2.0-3.0-1348

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1000 set-up at location SA010-5

Attempt to collect surface sample by hand, all large slag, unable to hand collect surface sample, call [redacted] and will move location back to original location

1010 sample SA010-5 0.0-0.5 SA010-5SS0.0-0.5-1349

1015 0.5-2.0 SA010-5SB0.5-2.0-1350

1020 2.0-3.0 SA010-5SB2.0-3.0-1351

1030 set-up at location SA021-5

1035 sample 0.0-0.5 SA021-5SS0.0-0.5-1352

1040 0.5-2.0 SA021-5SB0.5-2.0-1353

1045 2.0-3.0 SA021-5SB2.0-3.0-1354

1130 mobilize to location SF003-8

1200 break for lunch

1300 new 2360 meter arrived and A. Jones performed set-up

1300 collect sample SF003-8 0.0-0.5 SF003-8SS0.0-0.5-1355

1300 collect ms SF003-8SS0.0-0.5MS-9325

1300 MSD SF003-8SS0.0-0.5-MSD-9326

1305 0.5-2.0 SF003-8SB0.5-2.0-1356

1310 2.0-3.0 SF003-8SB2.0-3.0 1357

1320 move to location SF003-5

1325 collect 0.0-0.5 SF003-5SS0.0-0.5-1358

1330 0.5-2.0 SF003-5SB0.5-2.0-1359

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8F003-5 (continued)

1335 2.0-3.0 8F003-5SB2.0-3.0-1360
1345 move to location 8F003-6
1350 sample 0.0-0.5 8F003-6SS0.5-2.0-1361
1355 0.5-2.0 8F003-6SB0.5-2.0-1362
1400 2.0-3.0 8F003-6SB2.0-3.0-1363
1400 dup 2.0-3.0 8F003-6SB2.0-3.0D-9327
1415 Set-up at location 8F003-7
1420 sample 0.0-0.5 8F003-7SS0.0-0.5-~~9328~~ 1364
1425 0.5-2.0 8F003-7SB0.5-2.0-~~9329~~ 1365
1430 2.0-3.0 8F003-7SB2.0-3.0-~~9330~~ 1366
1445 Set-up at location 8D006-6 in EU7
(organic burial ground area)
1500 sample 0.0-0.5 8D006-6SS0.0-0.5-1367
1505 0.5-2.0 8D006-6SB0.5-2.0-1368
1510 2.0-3.0 8D006-6SB2.0-3.0-1369
1520 move to location 8D006-5
1525 sample 0.0-0.5 8D006-5SS0.0-0.5-1370
1530 0.5-2.0 8D006-5SB0.5-2.0-1371
1530 dup 0.5-2.0 8D006-5SB0.5-2.0D-9328
1535 2.0-3.0 8D006-5SB2.0-3.0-1372
1545 set-up at location 8D006-7
1550 sample 0.0-0.5 8D006-7SS0.0-0.5-1373
1555 0.5-2.0 8D006-7SB0.5-2.0-1374
1600 2.0-3.0 8D006-7SB2.0-3.0-1375

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Project / Client NFSS - BOP Field Investigation
20N

[redacted] scanning and jarring bagged samples from when meter was inoperable.
1700 collect rinse blank off of sampling tools EB1-0624-14
1730 completed scanning [redacted] jarring of bagged samples. [redacted]
perform end of day rad instrument source checks
1755 depart site

[redacted]