Status Call Agenda

Pre-Design Investigation
OU3 – TCE, PVGCS Site

STATUS CALL NO. 4 (April 9, 2018)

INVITEES:

- U.S. Environmental Protection Agency (USEPA): Kim O'Connell, Michelle Granger
- U.S. Army Corps of Engineers (USACE): Paul Garnier, Neal Kolb, Joshua Watts, Wendy Stonestreet, Erin Hauber
- Rio Tinto - Luis Hidalgo, Roy Duckett, Charles Masson
- Ramboll US Corporation (Ramboll): Bruce Kennington, David Heidlauf, Stan Popelar, Mike Eddings, Scott Tarmann

1. OUTSTANDING ITEMS FROM PREVIOUS STATUS CALL

- None

2. INVESTIGATION ACTIVITIES PERFORMED LAST WEEK (April 2-April 8, 2018)

- Drilling activities were conducted at borings PDI-SB04 (in progress), PDI-SB12 (completed), PDI-SB17 (completed), PDI-SB-18 (in progress), and PDI-SB20 (complete).
- USEPA inspection of Cascade's mobile lab took place on April 4, 2018.
- Analyzed collected soil samples for VOCs and summarized data.

3. CONSTRUCTION ACTIVITIES SCHEDULED FOR THIS WEEK (week of April 2-April 8, 2018)

- Only three work days during the next week including Monday, Tuesday, and Wednesday; the next 10-day work interval begins, Monday, April 16.
- Complete sampling at borings PDI-SB04 and PDI-SB18.
- Conduct drilling and sampling activities at borings PDI-SB05 and PDI-SB23.
- Analyze collected soil samples for VOCs and update EVS model.

4. HEALTH AND SAFETY

- No First Aid or OSHA Recordable incidents were reported to date.

5. FIELD MODIFICATIONS

- None this week.

6. DIFFICULTIES ENCOUNTERED

- Various sonic rig repairs were needed during this period; currently one of the sonic rigs is not operational and is being assessed for needed repair or replacement. A core barrel got stuck downhole at 124 feet bgs at PDI-SB20, resulting in approximately 1 day of lost time for that drill rig.

7. INVESTIGATION SCHEDULE

- No changes to the overall schedule are proposed at this time.

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8. UPCOMING INSPECTIONS

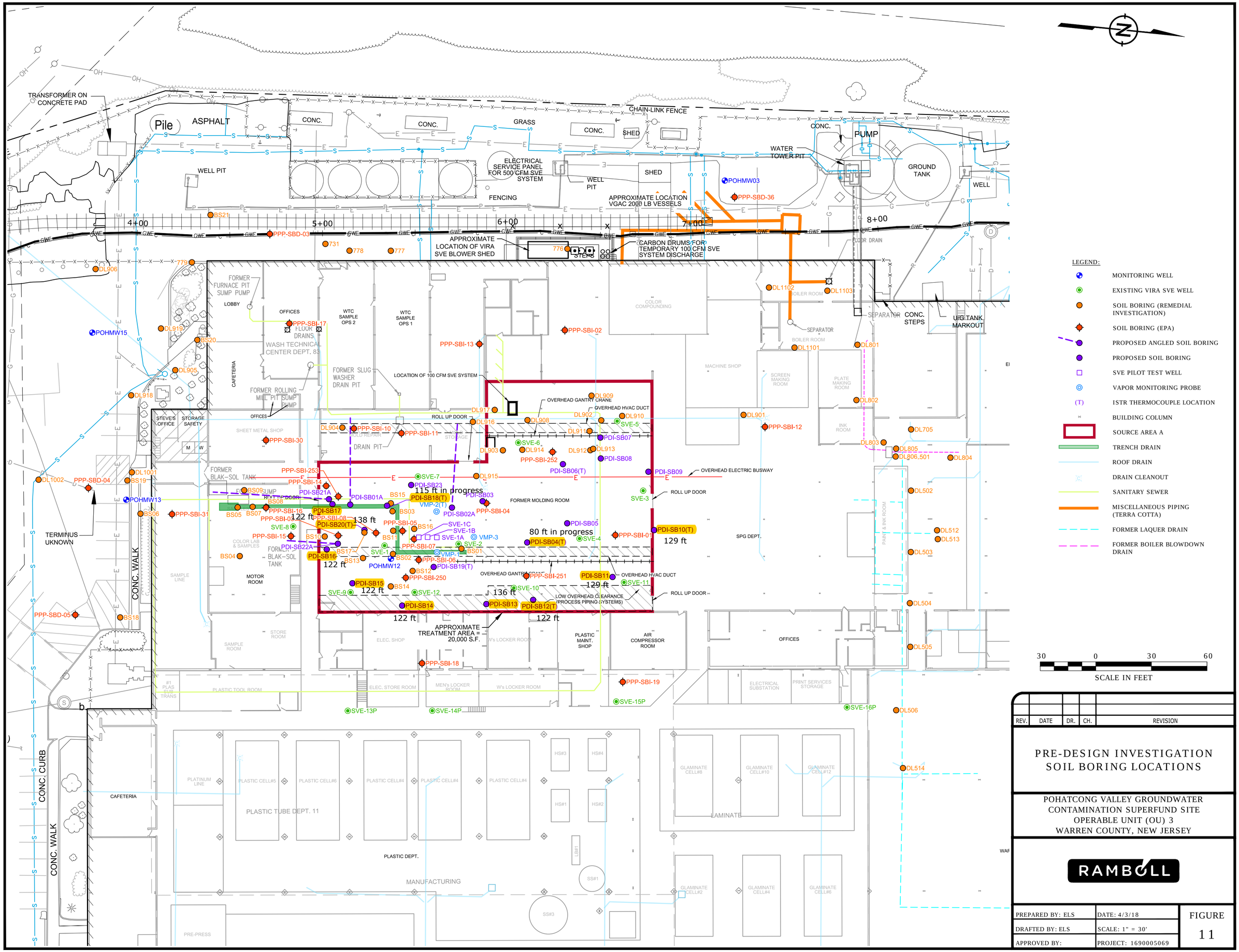
- None scheduled.

9. RECENT AND UPCOMING SUBMITTALS

- None scheduled.

10. OTHER ACTIVITIES SCHEDULED FOR DISCUSSION

- Review of draft (unvalidated) preliminary TCE soil results (see attach table and figure).


TRANSFORMER ON CONCRETE PAD
Pile
ASPHALT
CONC.
GRASS
CHAIN-LINK FENCE
SHED
PUMP
WATER TOWER PIT
GROUND TANK
WELL
WELL PIT
ELECTRICAL SERVICE PANEL FOR 500 CFM SVE SYSTEM
FENCING
APPROXIMATE LOCATION VGAC 2000 LB VESSELS
POHMW03
PPP-SBD-36
4+00
5+00
6+00
7+00
8+00
BS21
PPP-SBD-03
731
778
777
776
STEPS
APPROXIMATE LOCATION OF VIRA SVE BLOWER SHED
CARBON DRUMS FOR TEMPORARY 100 CFM SVE SYSTEM DISCHARGE
FLOOR DRAIN
DL906
FORMER FURNACE PIT SUMP PUMP
LOBBY
OFFICES
WTC SAMPLE OPS 2
WTC SAMPLE OPS 1
COLOR COMPOUNDING
DL1102
BOILER ROOM
DL1103
SEPARATOR
CONC. STEPS
U/G TANK MARKOUT
POHMW15
DL919
BS20
PPP-SBI-17
FLOOR DRAINS
WASH TECHNICAL CENTER DEPT. 83
PPP-SBI-02
PPP-SBI-13
DL1101
DL801
DL905
CAFETERIA
FORMER SLUG WASHER DRAIN PIT
LOCATION OF 100 CFM SVE SYSTEM
MACHINE SHOP
SCREEN MAKING ROOM
PLATE MAKING ROOM
DL918
FORMER ROLLING MILL PIT SUMP PUMP
OVERHEAD GANTRY CRANE
DL909
OVERHEAD HVAC DUCT
DL917
DL902
DL910
SVE-5
DL901
DL802
STEVE'S OFFICE
STORAGE SAFETY
ROLL UP DOOR
DL916
DL908
PPP-SBI-12
INK ROOM
DL705
SHEET METAL SHOP
DL904
PPP-SBI-10
PPP-SBI-11
DL911
PDI-SB07
PPP-SBI-30
DRAIN PIT
SVE-6
DL903
DL914
DL912
DL913
DL803
DL805
DL806.501
DL804
PPP-SBI-252
PDI-SB08
DL1002
PPP-SBD-04
DL1001
BS19
FORMER BLAK-SOL TANK
PPP-SBI-253
PPP-SBI-14
SVE-7
DL915
PDI-SB06(T)
PDI-SB09
OVERHEAD ELECTRIC BUSWAY
PDI-SB23
115 ft in progress
PDI-SB21A
PDI-SB01A
BS15
PDI-SB18(T)
PDI-SB03
FORMER MOLDING ROOM
SVE-3
ROLL UP DOOR
POHMW13
BS09
BS08
VMP-2(T)
PDI-SB02A
PPP-SBI-04
BS06
PPP-SBI-31
BS05
BS07
PPP-SBI-16
PPP-SBI-03
PDI-SB17
122 ft
PPP-SBI-08
138 ft
BS03
PDI-SB20(T)
PPP-SBI-05
BS16
SVE-1C
PDI-SB05
PDI-SB10(T)
129 ft
SVE-8
SVE-1B
80 ft in progress
PPP-SBI-01
TERMINUS UKNOWN
PPP-SBI-15
BS10
BS11
SVE-1A
VMP-3
PDI-SB04(T)
SVE-4
SPG DEPT.
PAINT & INK ROOM
DL512
DL513
COLOR LAB & SAMPLES
PDI-SB22A
PPP-SBI-07
SVE-2
DL503
BS04
FORMER BLAK-SOL TANK
PDI-SB16
BS17
SVE-1
BS01
BS13
BS02
VMP-1
122 ft
POHMW12
PPP-SBI-06
PDI-SB19(T)
CONC. WALK
SAMPLE LINE
MOTOR ROOM
BS12
PPP-SBI-250
OVERHEAD GANTRY CRANE
PPP-SBI-251
PDI-SB11
OVERHEAD HVAC DUCT
129 ft
SVE-11
PDI-SB15
122 ft
BS14
SVE-9
SVE-12
SVE-10
136 ft
LOW OVERHEAD CLEARANCE (PROCESS PIPING SYSTEMS)
ROLL UP DOOR
DL504
PPP-SBD-05
BS18
PDI-SB14
PDI-SB13
PDI-SB12(T)
122 ft
122 ft
APPROXIMATE TREATMENT AREA = 20,000 S.F.
SAMPLE ROOM
STORE ROOM
ELEC. SHOP
W's LOCKER ROOM
PLASTIC MAINT. SHOP
AIR COMPRESSOR ROOM
OFFICES
DL505
PPP-SBI-18
#1 PLAS SUB TRANS
PLASTIC TOOL ROOM
ELEC. STORE ROOM
MEN's LOCKER ROOM
W's LOCKER ROOM
PPP-SBI-19
ELECTRICAL SUBSTATION
PRINT SERVICES STORAGE
SVE-13P
SVE-14P
SVE-15P
SVE-16P
DL506
CONC. CURB
CAFETERIA
PLATINUM LINE
PLASTIC CELL#5
PLASTIC CELL#6
PLASTIC CELL#4
HS#3
HS#4
HS#1
HS#2
GLAMINATE CELL#8
GLAMINATE CELL#10
GLAMINATE CELL#12
DL514
PLASTIC TUBE DEPT. 11
LAMINATE
PLASTIC DEPT.
MANUFACTURING
SS#1
SS#3
GLAMINATE CELL#2
GLAMINATE CELL#4
GLAMINATE CELL#6
PRE-PRESS
LEGEND:
MONITORING WELL
EXISTING VIRA SVE WELL
SOIL BORING (REMEDIAL INVESTIGATION)
SOIL BORING (EPA)
PROPOSED ANGLED SOIL BORING
PROPOSED SOIL BORING
SVE PILOT TEST WELL
VAPOR MONITORING PROBE
(T) ISTR THERMOCOUPLE LOCATION
BUILDING COLUMN
SOURCE AREA A
TRENCH DRAIN
ROOF DRAIN
DRAIN CLEANOUT
SANITARY SEWER
MISCELLANEOUS PIPING (TERRA COTTA)
FORMER LAQUER DRAIN
FORMER BOILER BLOWDOWN DRAIN
30 0 30 60
SCALE IN FEET
REV. DATE DR. CH. REVISION
PRE-DESIGN INVESTIGATION
SOIL BORING LOCATIONS
POHATCONG VALLEY GROUNDWATER
CONTAMINATION SUPERFUND SITE
OPERABLE UNIT (OU) 3
WARREN COUNTY, NEW JERSEY
RAMBOLL
PREPARED BY: ELS
DATE: 4/3/18
DRAFTED BY: ELS
SCALE: 1" = 30'
APPROVED BY:
PROJECT: 1690005069
FIGURE
11
L:\Loop Project Files_CAD\1690005069 Rio Tinto\PVGCS_Acad\11_Pre-Design Investigation SB Locations.dwg

Pre-Design Investigation
DRAFT Preliminary TCE Soil Results
OU3, PVGCS Site, Washington, New Jersey

Boring	PDI-SB01A		PDI-SB04		PDI-SB10		PDI-SB11		PDI-SB12		PDI-SB13		PDI-SB14		PDI-SB15		PDI-SB16		PDI-SB17		PDI-SB18		PDI-SB20	
Angle	67°		90°		90°		90°		90°		90°		90°		90°		90°		90°		90°		90°	
Result type	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
2-2.5'									35.4 U	40.1 U	37.9 U	43.2 U			39.6 U	45.6 U			28.2 U	33.0 U	33.4 U		28.4 U	34.4 U
4.5-5'									34.7 U	38.7 U	37.0 U	42.6 U			31.1 U	36.1 U			28.3 U	32.3 U	28.2 U		30.0 U	35.2 U
7-7.5'									33.2 U	37.6 U	38.6 U	45.0 U			31.9 U	35.2 U			32.8 U	39.2 U	27.3 U		32.9 U	39.5 U
9.5-10'									35.3 U	39.0 U	35.1 U	40.7 U			28.2 U	31.0 U			27.8 U	31.9 U	28.7 U		30.1 U	34.9 U
12-12.5'									34.8 U	40.4 U	37.4 U	41.3 U			28.2 U	32.7 U			30.7 U	36.0 U	28.3 U		28.8 U	33.4 U
14.5-15'									33.5 U	36.7 U	39.6 U	45.3 U			28.8 U	34.6 U			32.0 U	37.8 U	29.5 U		29.6 U	34.7 U
17-17.5'									29.6 U	32.3 U	37.0 U	43.7 U			31.3 U	33.4 U			33.8 U	37.1 U	28.4 U		36.1 U	42.6 U
19.5-20'									33.6 U	39.2 U	38.1 U	43.4 U			27.3 U	32.8 U			32.7 U	37.9 U	31.4 U		28.4 U	33.6 U
22-22.5'									36.9 U	43.6 U	36.2 U	41.4 U			29.6 U	35.0 U			31.7 U	37.4 U	29.1 U		27.6 U	32.3 U
24.5-25'									32.7 U	37.2 U									32.4 U	37.1 U	27.4 U		27.9 U	32.5 U
27-27.5'									34.3 U	38.7 U					31.5 U	36.4 U			32.5 U	36.5 U	26.6 U			
29.5-30'									26.8 U	31.5 U	27.6 U	32.1 U			29.0 U	31.7 U			35.7 U	38.9 U	26.8 U		27.2 U	32.4 U
32-32.5'									32.9 U	37.3 U	13.2 J	15.2 J			28.6 U	30.9 U			27.4 U	31.8 U	33.3 U		27.1 U	31.0 U
34.5-35'									33.8 U	39.3 U	28.5 U	32.9 U			29.5 U	32.5 U			27.0 U	31.1 U	18.9 J		29.6 U	33.6 U
37-37.5'									33.2 U	37.9 U	26.0 U	28.2 U			29.5 U	34.3 U					31.0 U		28.2 U	31.1 U
39.5-40'									35.1 U	38.6 U	26.9 U	29.3 U							29.0 U	32.6 U	28.3 U		28.2 U	31.0 U
42-42.5'					34.1 U	39.6 U	36.6 U	40.6 U	31.1 U	35.3 U	19.9 J	21.7 J					26.9 U	30.4 U	35.9 U	37.9 U	27.0 U		28.9 U	32.5 U
44.5-45'					32.7 U	37.7 U	29.0 U	31.4 U	31.6 U	37.6 U	30.9 U	34.4 U	35.9 U	40.6 U			27.4 U	29.9 U	32.4 U	33.3 U	32.2 U		28.2 U	31.7 U
47-47.5'					32.9 U	37.3 U	30.5 U	34.4 U	32.9 U	38.6 U	31.4 U	37.1 U	32.7 U	35.9 U			28.0 U	30.3 U	32.0 U	34.7 U	30.8 U		30.4 U	34.1 U
49.5-50'					32.7 U	36.6 U	28.0 U	29.8 U	32.8 U	36.4 U	29.9 U	33.1 U			29.8 U	32.1 U	31.9 U	32.9 U	30.6 U	33.0 U	28.4 U		26.8 U	31.4 U
52-52.5'					31.9 U	36.3 U	28.8 U	31.5 U	30.7 U	35.4 U	29.8 U	32.9 U	32.9 U	37.5 U	31.1 U	34.1 U	29.0 U	32.3 U	31.6 U	35.1 U			28.5 U	31.3 U
54.5-55'					40.7	49.2	26.9 U	30.2 U	31.7 U	34.3 U	27.5 U	29.2 U	33.2 U	37.3 U	27.1 U	29.4 U	32.0 U	36.1 U	31.1 U	35.2 U			27.4 U	31.3 U
57-57.5'					23.3 J	27.9 J	28.8 U	31.9 U	33.1 U	36.1 U	28.4 U	29.5 U			28.1 U	31.2 U	34.9 U	40.7 U	28.4 U	32.0 U			30.9 U	34.3 U
59.5-60'					40.7	48.5	35.4 U	38.1 U	33.3 U	35.0 U	12.3 J	13.4 J	17.1 J	19.8 J			27.5 U	30.5 U	27.9 U	30.9 U			23.6 J	26.4 J
62-62.5'					36.3 U	42.2 U	27.7 U	30.8 U			25.7 U	28.1 U	26.9 U	29.5 U	27.1 U	29.1 U	48.4	54.7					21.8 J	23.4 J
64.5-65'					28.8 U	32.5 U	27.9 U	29.4 U			28.6 U	31.8 U	34.5 U	38.5 U	33.0 U	36.6 U	28.3 U	32.5 U	33.9 U	38.1 U			30.8	34.1
67-67.5'					31.1 U	32.9 U	30.6 U	33.6 U			11.2 J	12.7 J	33.5 U	37.9 U	24.3 U	27.0 U	32.9 U	38.3 U	35.5 U	38.6 U			4600	5290
69.5-70'					10.3 J	11.8 J	27.8 U	30.4 U			278	310	25.8 J	28.3 J			29.0 U	33.7 U	51.6	58.9			240	265
72-72.5'					61.7	73.8	30.2 U	33.1 U	34.9 U	35.9 U	2970	3370	448	507			1510	1720	160	183			41.6	46
74.5-75'					38.4 U	43.6 U	30.2 U	33.4 U	3940	4680	3090	3500	1650	1880	36.0 U	40.8 U	1730	1960	391	445			8900	10200
77-77.5'					36.0 U	40.9 U	28.1 U	30.6 U			5960	6880			12.7 J	14.2 J	1660	1870	134	151			7140	7980
79.5-80'					34.9 U	38.9 U	50.1	56	5360	6160	3470	4020	2150	2450			4780	5730	193	219			37400	44100
82-82.5'					24.8 U	26.5 U	71.1	79.6	4740	5380	6630	7640	396	448			4670	5630	703	859			24300	28300
83-83.5'									1070	1170														
84.5-85'					120	137	59.1	66.3	7280	8400	1460	1730	2500	2840	264	294	5430	6310	165	194			6680	7830
87-87.5'					310	372	42.9	47.6	5170	5890	477	571	2630	3000			1670	1990	210	268			314	377
88.5-89'													4330	5120	343	370							30.9 U	33.4 U
89.5-90'					127	145	302	332	2350	2800	29.3 J	33.0 J	3460	4080			951	1190	22.2 J	25.7 J				
92-92.5'					75.5	84.1	104	120	1090	1320	656	676	5440	6450			93.6	111	33.6 U	35.7 U				
94.5-95'							74.9	92.4	20.9 J	22.8 J			1240	1410	13.4 J	15.1 J	39	45.3	31.9 U	33.5 U				
97-97.5'					28.2	31.5	81.5	96.1	66.7	76.6			387	474	202	254	58.7	65.1	28.2 U	30.8 U			429	521
99.5-100'					132	148	22.1 J	27.6 J	35.4 U	38.0 U	294	320	2290	3100	27.3 U	29.3 U	123	141	29.3 U	31.1 U			49.6	58.8
102-102.5'					19.8 J	22.7 J	46.7 U	56.0 U	32.5 U	34.7 U	148	182	1170	1720	28.3 U	29.7 U	112	137	42.1	52.4			865	1170
104.5-105'					84	106	129	167	27.1 U	29.3 U			84.6	97.5			16.0 J	17.8 J	11.3 J	14.5 J			171	217
107-107.5'					74.3	92.4	35.7 U	39.9 U	33.3 U	34.4 U			54.9	62.2			29.3 U	32.3 U	21.9 J	30.9 J			30.1 U	34.6 U
109.5-110'					52.1	63.9	23.9 J	29.9 J	26.3 U	26.8 U	28.0 J	32.4 J			29.3 U	31.9 U	30.1 U	35.2 U	29.5 J	39.4 J			28.2 U	29.7 U
112-112.5'					14.0 J	16.5 J	29.8 U	33.6 U	29.4 U	30.7 U	30.7 U	32.6 U	14.4 J	17.2 J					10.8 J	12.5 J			27.8 U	30.3 U
114.5-115'							19.0 J	22.2 J	33.8 U	39.4 U	32.7 U	37.3 U	32.3 U	36.8 U	27.7 U	28.6 U	31.1 U	35.9 U	32.5 U	35.6 U			31.4 U	33.8 U
117-117.5'					54.7	69.1	435	574	34.2 U	37.6 U	33.2 U	37.6 U	36.3 U		29.6 U	30.8 U	31.7 U	34.1 U	37.1 U	40.3 U			29.1 U	31.2 U
119.5-120'					97.8	124	154	197	32.4 U	36.9 U	42.0 U	46.4 U	32.7 U		28.4 U	31.4 U	28.1 U	30.6 U	10.1 J	11.8 J			27.3 U	29.4 U
122-122.5'					38.2	45.4	28.4 U	30.1 U	27.8 U	29.8 U	29.7 U	35.7 U	33.3 U		26.9 U	32.1 U	34.0 U	36.6 U	35.8 U	38.6 U			28.4 U	31.2 U
124.5-125'					30.5 U	36.0 U	30.3 U	32.8 U			35.7 U	47.3 U												
127-127.5					36.5 U	44.8 U	30.6 U	33.7 U			34.8 U	43.3 U											34.8 U	39.3 U
128.5-129'							31.6 U	34.6 U																
134.5-135																							27.5 U	30.2 U
137.5-138																							30.1 U	33.5 U

= Not designated for sampling in work plan, No sample collected.
= No recovery, no sample collected.
= <1,000 ug/kg
= 1,000 - 10,000 ug/kg
= 10,000 - 100,000 ug/kg
U = Non detect below the RL
J = Detected below lab detection limit
E = Estimated value, exceeds calibration range

Prepared/Reviewed by: MG/SP
April 9, 2018

RAMBOLL