APPENDIX F

BORING LOGS

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-1
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/8/2010	**Location:**	40.82052° N; 96.71756° W
Time:	15:15	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4'/4'	0.0		Silt, brown	< 31 ppm Pb
2					
3					< 26 ppm Pb
4					
5	4'/4'	0.0		Silt, brown/light gray	< 30 ppm Pb
6					
7					< 30 ppm Pb
8					
9	4'/4'	0.0		Silt, brown	< 30 ppm Pb
10					
11			SB-1-10-12'		< 30 ppm Pb
12					
13					< 30 ppm Pb
14	4'/4'	0.0		Sand, wet	
15					
16				Bottom of boring	
17				Collect groundwater sample SB-1-GW from 16 to 20 feet bgs	
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-2
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/8/2010	**Location:**	40.82059° N; 96.71501°W
Time:	14:30	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3'/4'	0.0		Black top soil with red brick fill	< 84 ppm Pb
2				Silt, gray	< 84 ppm Pb
3					
4					
5	3'/4'	0.0		Brown, clayey silt, moist	< 19 ppm Pb
6					< 23 ppm Pb
7					
8					
9	4'/4'	0.0	SB-2-8-10'	Silt, light brown, moist	< 27 ppm Pb
10					
11				Silt, light brown, wet	< 21 ppm Pb
12					
13	4'/4'	0.0		Sand, light brown	NA
14					
15					
16				Bottom of boring	
17					
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-3
Project No:	EPS70901.0015	**Total Depth (ft):**	20'
Date:	3/8/2010	**Location:**	40.82008° N; 9671446° W
Time:	13:10	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1					
2	3'/4'	0.0		Black fill with red brick, sand	< 15 ppm Pb
3					
4					
5					< 23 ppm Pb
6	3'/4'	0.0		Brown, clayey silt, moist	
7					< 24 ppm Pb
8					
9					< 19 ppm Pb
10	3'/4'	0.0		Clayey silt, brown, moist	
11					< 23 ppm Pb
12					
13					< 20 ppm Pb
14	4'/4'	0.0		Silty clay to clay, dark brown, moist	
15					< 20 ppm Pb
16					
17			SB-3-16-18'		< 23 ppm Pb
18	4'/4'	0.0		Clay, gray/black, moist	
19					< 23 ppm Pb
20				Clay with sand, wet --- Bottom of boring Groundwater sample SB-3-GW collected from 26 to 30 feet bgs	

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-4
Project No:	EPS70901.0015	**Total Depth (ft):**	20'
Date:	3/9/2010	**Location:**	40.82023° N; 96.71304° W
Time:	9:45	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3'/4'	0.0		Black fill with red brick, sand	196 ppm Pb
2					
3					145 ppm Pb
4					
5	3'/4'	0.0	SB-4-4-6	Brown, clayey silt with fill material (railroad tie, wood), moist	< 23 ppm Pb
6					
7					< 24 ppm Pb
8					
9	3'/4'	0.0		Clay with silt, brown, moist	< 19 ppm Pb
10					
11					< 23 ppm Pb
12					
13	4'/4'	0.0		Silty clay to clay, dark brown, moist	< 20 ppm Pb
14					
15					< 20 ppm Pb
16					
17	4'/4'	0.0		Clay, gray/black, moist	< 23 ppm Pb
18					
19					< 23 ppm Pb
20				Sand, wet Bottom of boring	

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-5
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/9/2010	**Location:**	40.82056° N; 96.71191° W
Time:	10:00	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4'/4'	0.0		Black top soil	< 25 ppm Pb
2				Silt, some clay, light gray	
3					< 25 ppm Pb
4					
5	4'/4'	0.0		Clayey silt, brown	< 25 ppm Pb
6					
7					< 25 ppm Pb
8					
9	4'/4'	0.0		Clay, some silt, gray/light brown	< 25 ppm Pb
10					
11					< 25 ppm Pb
12					
13	4'/4'	0.0	SB-5-12-14'	Clay, some silt, gray/light brown	< 24 ppm Pb
14					
15				Clay, some silt, gray/light brown, moist	< 24 ppm Pb
16				Bottom of boring	
17				Collect groundwater sample SB-5-GW from 16-20 feet bgs	
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-6
Project No:	EPS70901.0015	**Total Depth (ft):**	12'
Date:	3/8/2010	**Location:**	40.81879° N; 96.71569° W
Time:	10:45	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3/4'	0.0		Topsoil, silt and gravel	< 26 ppm Pb
2					
3				Silt, brown/light gray	< 26 ppm Pb
4					
5	4'/4'	0.0	SB-6-4-6		< 26 ppm Pb
6				Silt, brown	
7					< 34 ppm Pb
8					
9	4'/4'	0.0		Clay, some silt, gray/light brown	< 35 ppm Pb
10					
11				Sand, wet	NA
12				Bottom of boring	
13					
14					
15					
16					
17					
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-7
Project No:	EPS70901.0015	**Total Depth (ft):**	12'
Date:	3/9/2010	**Location:**	40.81866° N; 96.71382° W
Time:	09:20	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3/4'	0.0		Fill, black, fine	480 ppm Pb
2				Silt, brown/light gray	
3					< 20 ppm Pb
4					
5	4'/4'	0.0		Silt, brown, moist	< 20 ppm Pb
6					
7					< 20 ppm Pb
8					
9	4'/4'	0.0	SB-7-8-10'	Silt, light brown, moist	< 20 ppm Pb
10					
11					< 20 ppm Pb
12				Sand, some silt, light brown, wet Bottom of boring	
13					
14					
15					
16					
17					
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-8
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/9/2010	**Location:**	40.81900° N; 96.71250° W
Time:	12:30	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Ryan Lunt	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4'/4'	0.0		Dark fill, some asphalt	144 ppm Pb
2					
3		0.0		Brown silt, some red brick	< 26 ppm Pb
4				Brown silt	
5	4'/4'	0.0	SB-8-4-6'		< 24 ppm Pb
6				Black/brown silt	
7		0.0			< 25 ppm Pb
8					
9	4'/4'	0.0		Clay, some silt,	< 30 ppm Pb
10					
11		0.0			< 28 ppm Pb
12				Clay/silt/sand, light brown, moist	
13	4'/4'	0.0		Clay, some silt, brown, moist	< 28 ppm Pb
14					
15					< 28 ppm Pb
16				Bottom of boring	
17					
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-9
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/9/2010	**Location:**	40.81784° N; 96.71465° W
Time:	08:00	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Ryan Lunt	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4'/4'	0.0		Sand/asphalt fill	< 25 ppm Pb
2					
3				Silt, brown	< 25 ppm Pb
4					
5	4'/4'	0.0		Silt, brown, moist	< 22 ppm Pb
6					
7					< 22 ppm Pb
8					
9	4'/4'	0.0	SB-9-8-10'		< 20 ppm Pb
10					
11					< 22 ppm Pb
12				Silt, brown, wet	
13				Collect groundwater sample SB-9-GW from 16 to 20 feet bgs	
14					
15					
16				Bottom of boring	
17					
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-10
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/9/2010	**Location:**	40.81778° N; 96.71286° N
Time:	13:45	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3'/4'	0.0		Fill/gravel	< 25 ppm Pb
2					
3				Silt, brown	< 23 ppm Pb
4					
5	4'/4'	0.0		Silt, some clay, brown	< 24 ppm Pb
6					
7					< 23 ppm Pb
8					
9	4'/4'	0.0		Silt, some clay, dark brown, moist	< 19 ppm Pb
10					
11					< 19 ppm Pb
12		2.5 ppm		Silt, some clay, dark brown, moist, slight petroleum odor and staining	
13	4'/4'	3 ppm		Clay, some silt, dark brown, moist, petroleum odor and staining	< 19 ppm Pb
14			SB-10-13-15'		
15					< 19 ppm Pb
16				Clay, some silt, dark brown, wet, petroleum odor and staining Bottom of boring	
17				Collect groundwater sample SB-10-GW from 16-20 feet bgs	
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-11
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/9/2010	**Location:**	40.81812° N; 96.71209° W
Time:	13:00	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	4'/4'	0.0		Black topsoil	< 25 ppm Pb
2				Silt/sand, light brown	
3			SB-11-2-4'	Silt, brown	< 23 ppm Pb
4					
5	4'/4'	0.0		Sand, light brown, coarse	< 18 ppm Pb
6					
7					< 22 ppm Pb
8					
9	4'/4'	0.0			< 31 ppm Pb
10					
11				Sand, light brown, coarse, wet	< 34 ppm Pb
12					
13	4'/4'	0.0			< 30 ppm Pb
14					
15					< 30 ppm Pb
16				Bottom of boring	
17					
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-12
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/9/2010	**Location:**	40.81733° N; 96.71249° W
Time:	14:50	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3'/4'	0.0		Silt, fill, brown	< 29 ppm Pb
2					
3					< 81 ppm Pb
4					
5	4'/4'	13.4 ppm		Silt, dark brown, firm	< 22 ppm Pb
6					
7			SB-12-6-8'	Silt, dark brown, petroleum staining and odor	< 22 ppm Pb
8					
9	2.5'/4'	20 ppm		Silt, dark brown, petroleum odor and staining, wet	NR
10					
11					
12				Bottom of boring	
13				Collect groundwater sample from SB-12-GW from 16 to 20 feet bgs	
14					
15					
16					
17					
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-13
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/10/2010	**Location:**	40.81452° N; 96.71422° W
Time:	14:00	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1–2	2'/4'	0.0		Fill, black	<178 ppm Pb
3–4				Silt/fill, black	< 26 ppm Pb
5–6	4'/4'	0.0		Silt, some clay, brown, moist	< 61 ppm Pb
7–8					< 20 ppm Pb
9–10	4'/4'	0.0	SB-13-8-10'	Silt with clay, brown, moist	< 21 ppm Pb
11–12				Silt with clay, dark brown, wet	< 21 ppm Pb
13–16	0'/0'	0.0		Wet soil, no recovery, collect groundwater sample SB-13-GW fromm 24 to 28 feet bgs Bottom of boring	NR
17–20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-14
Project No:	EPS70901.0015	**Total Depth (ft):**	20'
Date:	3/9/2010	**Location:**	40.81527° N; 96.71192° W
Time:	15:50	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	2'/4'	0.0		Fill, asphalt/sand/gravel	< 26 ppm Pb
2					
3				Gravel	< 30 ppm Pb
4					
5	3'/4'	0.0			< 40 ppm Pb
6				Clay, some silt, dark gray, petroleum staining and odor	
7					< 25 ppm Pb
8					
9	4'/4'	32 ppm			< 31 ppm Pb
10				Silt with clay, firm, dark gray, moist/wet, petroleum staining and odor	
11					< 22 ppm Pb
12					
13	4'/4'	20.4 ppm			< 26 ppm Pb
14				Silt with clay, dark gray, petroleum staining and odor	
15					< 26 ppm Pb
16					
17	4'/4'	3.0 ppm			< 26 ppm Pb
18				Silt with clay, firm, dark gray, petroleum stained and odor	
19			SB-14-18-20'	Bottom of boring at 20'	< 26 ppm Pb
20				Collect groundwater sample SB-14-GW from 24 to 28 feet bgs	

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-15
Project No:	EPS70901.0015	**Total Depth (ft):**	16'
Date:	3/10/2010	**Location:**	40.81400° N; 96.71325° W
Time:	09:00	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3'/4'	0.0		Fill/silt/brick	< 28 ppm Pb
2					
3				Gravel	< 92 ppm Pb
4					
5	2.5'/4'	0.0		Silt/fill, light brown, moist	< 25 ppm Pb
6					
7			SB-15-6-8		< 25 ppm Pb
8					
9	4'/4'	0.0		Silt, brown, moist	< 22 ppm Pb
10					
11					< 22 ppm Pb
12					
13	4'/4'	0.0		Silt/clay, brown, wet	< 15 ppm Pb
14					
15					< 15 ppm Pb
16				Sand, some silt, brown, wet -- Bottom of boring	
17				Collect groundwater sample SB-15-GW from 16-20 feet bgs	
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-16
Project No:	EPS70901.0015	**Total Depth (ft):**	12'
Date:	3/10/2010	**Location:**	40.81411° N; 96.71213° W
Time:	09:00	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Ryan Lunt	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	2'/4'	0.0		Fill/asphalt	64 ppm Pb
2					
3					102 ppm Pb
4					
5	4'/4'	0.0		Silt, brown, moist	65 ppm Pb
6					
7				Silt, some clay, brown, moist	< 33 ppm Pb
8					
9	4'/4'	0.0		Clay, some silt, brown, moist	39 ppm Pb
10					
11			SB-16-10-12'		< 24 ppm Pb
12				Bottom of boring	
13				Collect groundwater sample SB-16-GW from 28 to 32 feet bgs	
14					
15					
16					
17					
18					
19					
20					

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-17
Project No:	EPS70901.0015	**Total Depth (ft):**	20'
Date:	3/10/2010	**Location:**	40.81284° N; 96.71423° W
Time:	10:40	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3'/4'	0.0		Fill, with black soil	< 79 ppm Pb
2					
3				Silt, light brown	< 20 ppm Pb
4					
5	4'/4'	0.0		Silt, some clay, brown	< 23 ppm Pb
6					
7				Silt, some clay, brown, moist	< 25 ppm Pb
8					
9	4'/4'	0.0		Silt, little clay, gray	< 26 ppm Pb
10					
11					< 26 ppm Pb
12					
13	4'/4'	0.0		Silty clay, gray/brown, moist	< 25 ppm Pb
14					
15			SB-17-14-16'		< 32 ppm Pb
16					
17	4'/4'	0.0			< 29 ppm Pb
18					
19					< 29 ppm Pb
20				Bottom of boring at 20'	
				Collect groundwater sample SB-17-GW from 24 to 28 feet bgs	

Seagull Environmental Technologies, Inc.

Project:	BNSF Property	**Boring No:**	SB-18
Project No:	EPS70901.0015	**Total Depth (ft):**	20'
Date:	3/10/2010	**Location:**	40.81192° N; 96.71440° W
Time:	12:15	**Drilling Method:**	Truck-mounted direct-push Geoprobe
Logged by:	Jeff Pritchard	**Sampling Method:**	Macro-Core soil sampler

Depth (feet)	Recovery	PID Reading	Laboratory Sample ID	Lithology	Remarks
1	3'/4'	0.0		Fill, with black silty soil	< 577 ppm Pb
2					
3				Sand, some silty fill, brown	< 25 ppm Pb
4					
5	3'/4'	0.0		Silt, gray, moist	< 22 ppm Pb
6					
7					< 22 ppm Pb
8					
9	4'/4'	0.0		Clay, some silt, brown	< 26 ppm Pb
10					
11					< 24 ppm Pb
12					
13	4'/4'	0.0		Clay, some silt, brown, firm	< 24 ppm Pb
14					
15			SB-18-14-16'		< 24 ppm Pb
16					
17	4'/4'	0.0		Clay, gray, firm	< 24 ppm Pb
18					
19				Bottom of boring	< 24 ppm Pb
20				Collect groundwater sample SB-18-GW from 36 to 40 feet bgs	