

APPENDIX E

(PROVIDED ON ATTACHED CD)

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

February 7, 2011

Steve Spencer, Project Manager
Environmental Management Services, LLC
7006 27th Street W, Suite E
Tacoma, WA 98466

Dear Mr. Spencer:

Included are the results from the testing of material submitted on January 31, 2011 from the Highland 20, LLC-0393-01, F&BI 101307 project. There are 106 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
EMS0207R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 31, 2011 by Friedman & Bruya, Inc. from the Environmental Management Services, Highland 20, LLC-0393-01, F&BI 101307 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-01	S1-A1-6"
101307-02	S1-A1-12"
101307-03	S2-A1-6"
101307-04	S2-A1-12"
101307-05	S3-A1-6"
101307-06	S3-A1-12"
101307-07	S4-A1-6"
101307-08	S4-A1-12"
101307-09	S5-A1-6"
101307-10	S5-A1-12"
101307-11	S6-A1-6"
101307-12	S6-A1-12"
101307-13	S7-A1-6"
101307-14	S7-A1-12"
101307-15	S8-A1-6"
101307-16	S8-A1-12"
101307-17	S9-A1-6"
101307-18	S9-A1-12"
101307-19	S10-A1-6"
101307-20	S10-A1-12"
101307-21	S11-1B-6"
101307-22	S11-1B-12"
101307-23	S12-1B-6"
101307-24	S12-1B-12"
101307-25	S13-1B-6"
101307-26	S13-1B-12"
101307-27	S14-1B-6"
101307-28	S14-1B-12"
101307-29	S15-1B-6"
101307-30	S15-1B-12"
101307-31	S16-1B-6"
101307-32	S16-1B-12"
101307-33	S17-1B-6"
101307-34	S17-1B-12"
101307-35	S18-1B-6"
101307-36	S18-1B-12"
101307-37	S19-1B-6"
101307-38	S19-1B-12"
101307-39	S20-1B-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-40	S20-1B-12"
101307-41	S21-2F-6"
101307-42	S21-2F-12"
101307-43	S22-2F-6"
101307-44	S22-2F-12"
101307-45	S23-2F-6"
101307-46	S23-2F-12"
101307-47	S24-2F-6"
101307-48	S24-2F-12"
101307-49	S25-2F-6"
101307-50	S25-2F-12"
101307-51	S26-2F-6"
101307-52	S26-2F-12"
101307-53	S27-2F-6"
101307-54	S27-2F-12"
101307-55	S28-2F-6"
101307-56	S28-2F-12"
101307-57	S29-2F-6"
101307-58	S29-2F-12"
101307-59	S30-2E-6"
101307-60	S30-2E-12"
101307-61	S31-2E-6"
101307-62	S31-2E-12"
101307-63	S32-2E-6"
101307-64	S32-2E-12"
101307-65	S33-2E-6"
101307-66	S33-2E-12"
101307-67	S34-2E-6"
101307-68	S34-2E-12"
101307-69	S35-2E-6"
101307-70	S35-2E-12"
101307-71	S36-2E-6"
101307-72	S36-2E-12"
101307-73	S37-2E-6"
101307-74	S37-2E-12"
101307-75	S38-2E-6"
101307-76	S38-2E-12"
101307-77	S39-2E-6"
101307-78	S39-2E-12"
101307-79	S40-2E-6"
101307-80	S40-2E-12"
101307-81	S41-2D-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-82	S41-2D-12"
101307-83	S42-2D-6"
101307-84	S42-2D-12"
101307-85	S43-2D-6"
101307-86	S43-2D-12"
101307-87	S44-2D-6"
101307-88	S44-2D-12"
101307-89	S45-2D-6"
101307-90	S45-2D-12"
101307-91	S46-2D-6"
101307-92	S46-2D-12"
101307-93	S47-2D-6"
101307-94	S47-2D-12"
101307-95	S48-2D-6"
101307-96	S48-2D-12"
101307-97	S49-2D-6"
101307-98	S49-2D-12"
101307-99	S50-2D-6"
101307-100	S50-2D-12"
101307-101	S51-2B-6"
101307-102	S51-2B-12"
101307-103	S52-2B-6"
101307-104	S52-2B-12"
101307-105	S53-2B-6"
101307-106	S53-2B-12"
101307-107	S54-2B-6"
101307-108	S54-2B-12"
101307-109	S55-2B-6"
101307-110	S55-2B-12"
101307-111	S56-2B-6"
101307-112	S56-2B-12"
101307-113	S57-2B-6"
101307-114	S57-2B-12"
101307-115	S58-2B-6"
101307-116	S58-2B-12"
101307-117	S59-2B-6"
101307-118	S59-2B-12"
101307-119	S60-2B-6"
101307-120	S60-2B-12"
101307-121	S61-2A-6"
101307-122	S61-2A-12"
101307-123	S62-2A-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-124	S62-2A-12"
101307-125	S63-2A-6"
101307-126	S63-2A-12"
101307-127	S64-2A-6"
101307-128	S64-2A-12"
101307-129	S65-2A-6"
101307-130	S65-2A-12"
101307-131	S66-2A-6"
101307-132	S66-2A-12"
101307-133	S67-2A-6"
101307-134	S67-2A-12"
101307-135	S68-2A-6"
101307-136	S68-2A-12"
101307-137	S69-2A-6"
101307-138	S69-2A-12"
101307-139	S70-2A-6"
101307-140	S70-2A-12"
101307-141	S71-2C-6"
101307-142	S71-2C-12"
101307-143	S72-2C-6"
101307-144	S72-2C-12"
101307-145	S73-2C-6"
101307-146	S73-2C-12"
101307-147	S74-2C-6"
101307-148	S74-2C-12"
101307-149	S75-2C-6"
101307-150	S75-2C-12"
101307-151	S76-2C-6"
101307-152	S76-2C-12"
101307-153	S77-2C-6"
101307-154	S77-2C-12"
101307-155	S78-2C-6"
101307-156	S78-2C-12"
101307-157	S79-2C-6"
101307-158	S79-2C-12"
101307-159	S80-2C-6"
101307-160	S80-2C-12"
101307-161	S81-2G-6"
101307-162	S81-2G-12"
101307-163	S82-2G-6"
101307-164	S82-2G-12"
101307-165	S83-2G-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-166	S83-2G-12"
101307-167	S84-2G-6"
101307-168	S84-2G-12"
101307-169	S85-2G-6"
101307-170	S85-2G-12"
101307-171	S86-2G-6"
101307-172	S86-2G-12"
101307-173	S87-2G-6"
101307-174	S87-2G-12"
101307-175	S88-2G-6"
101307-176	S88-2G-12"
101307-177	S89-2G-6"
101307-178	S89-2G-12"
101307-179	S90-2G-6"
101307-180	S90-2G-12"

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S1-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-01
Date Analyzed:	02/02/11	Data File:	101307-01.013
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	79.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S2-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-03
Date Analyzed:	02/02/11	Data File:	101307-03.014
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	92.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S3-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-05
Date Analyzed:	02/02/11	Data File:	101307-05.015
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S4-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-07
Date Analyzed:	02/02/11	Data File:	101307-07.016
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	190

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S5-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-09
Date Analyzed:	02/02/11	Data File:	101307-09.017
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S6-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-11
Date Analyzed:	02/02/11	Data File:	101307-11.019
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	83.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S7-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-13
Date Analyzed:	02/02/11	Data File:	101307-13.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	253

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S8-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-15
Date Analyzed:	02/02/11	Data File:	101307-15.021
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	82	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	42.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S9-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-17
Date Analyzed:	02/02/11	Data File:	101307-17.022
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	157

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S10-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-19
Date Analyzed:	02/02/11	Data File:	101307-19.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	66.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S11-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-21
Date Analyzed:	02/02/11	Data File:	101307-21.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S12-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-23
Date Analyzed:	02/02/11	Data File:	101307-23.025
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	102

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S13-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-25
Date Analyzed:	02/02/11	Data File:	101307-25.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S14-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-27
Date Analyzed:	02/02/11	Data File:	101307-27.027
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	53.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S15-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-29
Date Analyzed:	02/02/11	Data File:	101307-29.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	55.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S16-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-31
Date Analyzed:	02/02/11	Data File:	101307-31.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	231

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S17-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-33
Date Analyzed:	02/02/11	Data File:	101307-33.031
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	60.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S18-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-35
Date Analyzed:	02/02/11	Data File:	101307-35.010
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	66.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S19-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-37
Date Analyzed:	02/02/11	Data File:	101307-37.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	59.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S20-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-39
Date Analyzed:	02/02/11	Data File:	101307-39.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S21-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-41
Date Analyzed:	02/02/11	Data File:	101307-41.040
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	85	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	62.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S22-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-43
Date Analyzed:	02/02/11	Data File:	101307-43.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	59.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S23-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-45
Date Analyzed:	02/02/11	Data File:	101307-45.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	77.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S24-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-47
Date Analyzed:	02/02/11	Data File:	101307-47.043
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S25-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-49
Date Analyzed:	02/02/11	Data File:	101307-49.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S26-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-51
Date Analyzed:	02/02/11	Data File:	101307-51.045
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	79	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S27-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-53
Date Analyzed:	02/02/11	Data File:	101307-53.046
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	47.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S28-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-55
Date Analyzed:	02/02/11	Data File:	101307-55.047
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S29-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-57
Date Analyzed:	02/02/11	Data File:	101307-57.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S30-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-59
Date Analyzed:	02/02/11	Data File:	101307-59.050
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S31-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-61
Date Analyzed:	02/02/11	Data File:	101307-61.051
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S32-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-63
Date Analyzed:	02/02/11	Data File:	101307-63.052
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S33-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-65
Date Analyzed:	02/02/11	Data File:	101307-65.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	46.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S34-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-67
Date Analyzed:	02/02/11	Data File:	101307-67.053
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	41.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S35-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-69
Date Analyzed:	02/02/11	Data File:	101307-69.054
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	84.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S36-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-71
Date Analyzed:	02/02/11	Data File:	101307-71.055
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	28.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S37-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-73
Date Analyzed:	02/02/11	Data File:	101307-73.056
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S38-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-75
Date Analyzed:	02/02/11	Data File:	101307-75.057
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	42.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S39-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-77
Date Analyzed:	02/02/11	Data File:	101307-77.058
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	55.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S40-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-79
Date Analyzed:	02/02/11	Data File:	101307-79.059
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S41-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-81
Date Analyzed:	02/02/11	Data File:	101307-81.066
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	117

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S42-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-83
Date Analyzed:	02/02/11	Data File:	101307-83.067
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	20.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S43-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-85
Date Analyzed:	02/02/11	Data File:	101307-85.063
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S44-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-87
Date Analyzed:	02/02/11	Data File:	101307-87.068
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S45-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-89
Date Analyzed:	02/02/11	Data File:	101307-89.069
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S46-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-91
Date Analyzed:	02/02/11	Data File:	101307-91.071
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S47-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-93
Date Analyzed:	02/02/11	Data File:	101307-93.072
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	31.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S48-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-95
Date Analyzed:	02/02/11	Data File:	101307-95.073
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	30.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S49-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-97
Date Analyzed:	02/02/11	Data File:	101307-97.074
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	49.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S50-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-99
Date Analyzed:	02/02/11	Data File:	101307-99.075
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S51-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-101
Date Analyzed:	02/02/11	Data File:	101307-101.076
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	63.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S52-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-103
Date Analyzed:	02/02/11	Data File:	101307-103.077
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	20.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S53-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-105
Date Analyzed:	02/02/11	Data File:	101307-105.078
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	25.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S54-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-107
Date Analyzed:	02/02/11	Data File:	101307-107.079
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	18.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S55-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-109
Date Analyzed:	02/02/11	Data File:	101307-109.081
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	38.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S56-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-111
Date Analyzed:	02/02/11	Data File:	101307-111.082
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S57-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-113
Date Analyzed:	02/02/11	Data File:	101307-113.083
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S58-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-115
Date Analyzed:	02/02/11	Data File:	101307-115.084
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	61.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S59-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-117
Date Analyzed:	02/02/11	Data File:	101307-117.085
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S60-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-119
Date Analyzed:	02/02/11	Data File:	101307-119.086
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	253

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S61-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-121
Date Analyzed:	02/03/11	Data File:	101307-121.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	138

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S62-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-123
Date Analyzed:	02/03/11	Data File:	101307-123.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	119

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S63-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-125
Date Analyzed:	02/03/11	Data File:	101307-125.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S64-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-127
Date Analyzed:	02/03/11	Data File:	101307-127.045
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	58.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S65-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-129
Date Analyzed:	02/03/11	Data File:	101307-129.046
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	173

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S66-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-131
Date Analyzed:	02/03/11	Data File:	101307-131.047
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	240

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S67-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-133
Date Analyzed:	02/03/11	Data File:	101307-133.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S68-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-135
Date Analyzed:	02/03/11	Data File:	101307-135.038
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	13.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S69-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-137
Date Analyzed:	02/03/11	Data File:	101307-137.049
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	245

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S70-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-139
Date Analyzed:	02/03/11	Data File:	101307-139.050
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	88.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S71-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-141
Date Analyzed:	02/03/11	Data File:	101307-141.051
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	56.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S72-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-143
Date Analyzed:	02/03/11	Data File:	101307-143.053
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	46.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S73-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-145
Date Analyzed:	02/03/11	Data File:	101307-145.054
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	17.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S74-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-147
Date Analyzed:	02/03/11	Data File:	101307-147.055
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	182

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S75-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-149
Date Analyzed:	02/03/11	Data File:	101307-149.056
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	53.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S76-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-151
Date Analyzed:	02/03/11	Data File:	101307-151.057
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	94.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S77-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-153
Date Analyzed:	02/03/11	Data File:	101307-153.058
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	58.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S78-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-155
Date Analyzed:	02/03/11	Data File:	101307-155.059
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	179

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S79-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-157
Date Analyzed:	02/03/11	Data File:	101307-157.060
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	50.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S80-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-159
Date Analyzed:	02/03/11	Data File:	101307-159.061
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	50.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S81-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-161
Date Analyzed:	02/03/11	Data File:	101307-161.077
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	77.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S82-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-163
Date Analyzed:	02/03/11	Data File:	101307-163.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S83-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-165
Date Analyzed:	02/03/11	Data File:	101307-165.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	28.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S84-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-167
Date Analyzed:	02/03/11	Data File:	101307-167.025
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	73.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S85-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-169
Date Analyzed:	02/03/11	Data File:	101307-169.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	47.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S86-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-171
Date Analyzed:	02/03/11	Data File:	101307-171.028
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S87-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-173
Date Analyzed:	02/03/11	Data File:	101307-173.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S88-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-175
Date Analyzed:	02/03/11	Data File:	101307-175.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S89-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-177
Date Analyzed:	02/03/11	Data File:	101307-177.031
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	74.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S90-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-179
Date Analyzed:	02/03/11	Data File:	101307-179.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	44.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-69 mb
Date Analyzed:	02/02/11	Data File:	I1-69 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-71 mb
Date Analyzed:	02/02/11	Data File:	I1-71 mb.034
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	83	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-72 mb
Date Analyzed:	02/02/11	Data File:	I1-72 mb.061
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-73 mb
Date Analyzed:	02/03/11 12:45:50	Data File:	I1-73 mb.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Environmental Management Services
Date Received:	Not Applicable	Project: Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID: I1-75 mb
Date Analyzed:	02/03/11 10:47:51	Data File: I1-75 mb.008
Matrix:	Soil	Instrument: ICPMS1
Units:	mg/kg (ppm)	Operator: AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-35 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	66.5	123 b	197 b	44-151	46 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-65 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	46.3	103 b	147 b	44-151	35 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-85 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	29.5	102 b	112 b	44-151	9 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	98	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-135 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	13.2	107 b	131 b	44-151	20 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101302-11 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.03	93 b	100 b	44-151	7 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	80-120

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

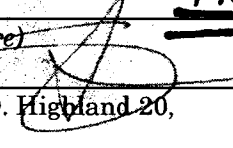
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 1of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions



Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S1-A1-6"	01	1/31		So. 1	1							X				Run
S1-A1-12"	02															Hold
S2-A1-6"	03															Run
S2-A1-12"	04															Hold
S3-A1-6"	05															Run
S3-A1-12"	06															Hold
S4-A1-6"	07															Run
S4-A1-12"	08															Hold
S5-A1-6"	09															Run
S5-A1-12"	10	✓		✓	✓							✓				Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steven Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	FDB	1/31	10:30
Relinquished by:				
Received by:		Samples received at <u>17</u> °C		

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BIC

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 2 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions



Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S6-A1-6"	11	1/31		Soil	1											Run
S6-A1-12"	12															Hold
S7-A1-6"	13															Run
S7-A1-12"	14															Hold
S8-A1-6"	15															Run
S8-A1-12"	16															Hold
S9-A1-6"	17															Run
S9-A1-12"	18															Hold
S10-A1-6"	19															Run
S10-A1-12"	20															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPAULAK	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
18Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 3 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


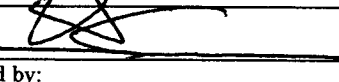
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S11-1B-6"	21	1/31		Soil	1											Run
S11-1B-12"	22															Hold
S12-1B-6"	23															Run
S12-1B-12"	24															Hold
S13-1B-6"	25															Run
S13-1B-12"	26															Hold
S14-1B-6"	27															Run
S14-1B-12"	28															Hold
S15-1B-6"	29															Run
S15-1B-12"	30															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10-30
Received by: 	Kurt Johnson	FDS	1/31	10-30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
18Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 4 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

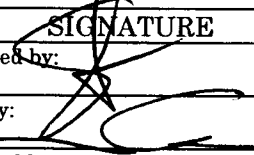
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	As				
S16-1 B-6"	31	1/31		Soil	1											Run
S16-1 B-12"	32															Hold
S17-1 B-6"	33															Run
S17-1 B-12"	34															Hold
S18-1 B-6"	35															Run
S18-1 B-12"	36															Hold
S19-1 B-6"	37															Run
S19-1 B-12"	38															Hold
S20-1 B-6"	39															Run
S20-1 B-12"	40															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	10:30
Received by:	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 5 of 18 *etc*

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

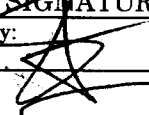
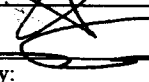
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S21-2 F - 6"	41	1/31		Soil	1											Run
S21-2 F - 12"	42															hold
S22-2 F - 6"	43															Run
S22-2 F - 12"	44															hold
S23-2 F - 6"	45															Run
S23-2 F - 12"	46															hold
S24-2 F - 6"	47															Run
S24-2 F - 12"	48															hold
S25-2 F - 6"	49															Run
S25-2 F - 12"	50															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BT4 6 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 6 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


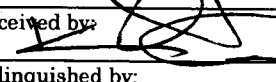
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Ausenic				
S26-2F-6"	51	1/31		Soil	1											Run
S26-2F-12"	52															hold
S27-2F-6"	53															Run
S27-2F-12"	54															hold
S28-2F-6"	55															Run
S28-2F-12"	56															hold
S29-2F-6"	57															Run
S29-2F-12"	58															hold
S30-2F-6"	59															Run
S30-2F-12"	60															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVE SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17	°C

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

Page # 7 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 7 of 18

TURNAROUND TIME

Standard (2 Weeks) **BT4**

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

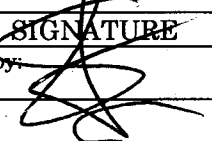

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S31-2E-6"	61	1/31		Soil	1											Run
S31-2E-12"	62															hold
S32-2E-6"	63															Run
S32-2E-12"	64															hold
S33-2E-6"	65															Run
S33-2E-12"	66															hold
S34-2E-6"	67															Run
S34-2E-12"	68															hold
S35-2E-6"	69															Run
S35-2E-12"	70															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

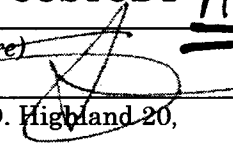
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17	00

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
20/18Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98166Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 8of 20/18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


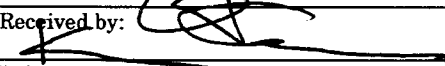
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S36-2E-6"	71	1/31		Soil	1											Run
S36-2E-12"	72															hold
S37-2E-6"	73															Run
S37-2E-12"	74															hold
S38-2E-6"	75															Run
S38-2E-12"	76															hold
S39-2E-6"	77															Run
S39-2E-12"	78															hold
S40-2E-6"	79															Run
S40-2E-12"	80															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

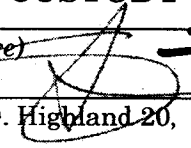
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Stephen Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17:00	

101307

SAMPLE CHAIN OF CUSTODY ME-01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 9 of 218

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

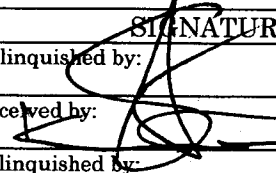
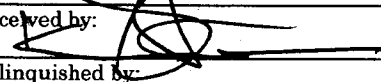
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aromatic				
541-2D-6"	81	1/31		Soil	1											Run
541-2D-12"	82															hold
542-2D-6"	83															Run
542-2D-12"	84															hold
543-2D-6"	85															Run
543-2D-12"	86															hold
544-2D-6"	87															Run
544-2D-12"	88															hold
545-2D-6"	89															Run
545-2D-12"	90															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

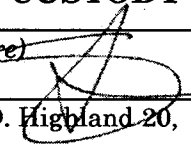
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steve Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:	Samples received at 17 °C			

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 10 of 22 18

TURNAROUND TIME

Standard (2 Weeks) BT4

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

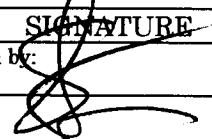
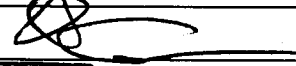
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Avesma				
546-2D-6"	91	1/31		Soil	1											Run
546-2D-12"	92															hold
547-2D-6"	93															Run
547-2D-12"	94															hold
548-2D-6"	95															Run
548-2D-12"	96															hold
549-2D-6"	97															Run
549-2D-12"	98															hold
550-2D-6"	99															Run
550-2D-12"	100															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F3B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BTY 11 of 2818

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page #

of

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

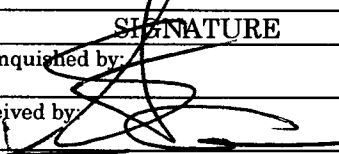
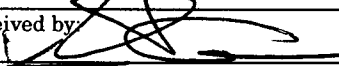
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aqueous				
S51-2B-6"	101	1/21		Soil	1											Run
S51-2B-12"	102															hold
S52-2B-6"	103															Run
S52-2B-12"	104															hold
S53-2B-6"	105															Run
S53-2B-12"	106															hold
S54-2B-6"	107															Run
S54-2B-12"	108															hold
S55-2B-6"	109															Run
S55-2B-12"	110															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

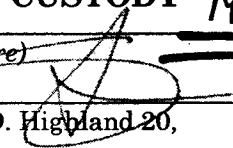
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:36
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 12 of 18

TURNAROUND TIME

Standard (2 Weeks) BTX

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

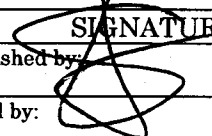
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aromatic				
556-2B-6"	111	1/31		Soil	1											Run
556-2B-12"	112															hold
557-2B-6"	113															Run
557-2B-12"	114															hold
558-2B-6"	115															Run
558-2B-12"	116															hold
559-2B-6"	117															Run
559-2B-12"	118															hold
560-2B-6"	119															Run
560-2B-12"	120															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steve Spencer	EMS	1/31	1230
Received by:				
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 13 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


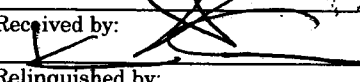
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Avesol				
S61-2A-6"	121	1/31		Soil	1											Run
S61-2A-12"	122															hold
S62-2A-6"	123															Run
S62-2A-12"	124															hold
S63-2A-6"	125															Run
S63-2A-12"	126															hold
S64-2A-6"	127															Run
S64-2A-12"	128															hold
S65-2A-6"	129															Run
S65-2A-12"	130															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Stephen Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	12°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) Page # 14 of 18PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

REMARKS

sspencer@msgroupllc.com

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


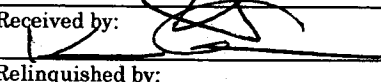
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Average				
566-2A-6"	131	1/31		Soil	1											Run
567-2A-12"	132															hold
567-2A-6"	133															Run
567-2A-12"	134															hold
568-2A-6"	135															Run
568-2A-12"	136															hold
569-2A-6"	137															Run
569-2A-12"	138															hold
570-2A-6"	139															Run
570-2A-12"	140															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	11:30
Received by: 	Kurt Johnson	FB B	1/31	10:30
Relinquished by:				
Received by:				
Samples received at 17 °C				

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BDP
15 of 18

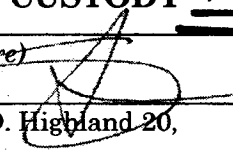
Send Report To Steve Spencer

Company Environmental Management Services, LLC

Address 7006 27th Street W, Suite E

City, State, ZIP Tacoma, WA 98466

Phone # (253) 921-7059 Fax # (253) - 369-6228

SAMPLERS (signature) 

PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 15 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

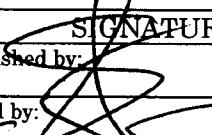

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S71-2C-6"	141	1/31		Soil	1											Run
S71-2C-12"	142															hold
S72-2C-6"	143															Run
S72-2C-12"	144															hold
S73-2C-6"	145															Run
S73-2C-12"	146															hold
S74-2C-6"	147															Run
S74-2C-12"	148															hold
S75-2C-6"	149															Run
S75-2C-12"	150															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY *ME 01/31/11*

Send Report To Steve Spencer

Company Environmental Management Services, LLC

Address 7006 27th Street W, Suite E

City, State, ZIP Tacoma, WA 98466

Phone # (253) 921-7059 Fax # (253) - 369-6228

SAMPLERS (*signature*)

PROJECT NAME/NO. Highland 20,
LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 16 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
576-2C-6"	151	1/31		Soil	1											Run
576-2C-12"	152															hold
577-2C-6"	153															Run
577-2C-12"	154															hold
578-2C-6"	155															Run
578-2C-12"	156															hold
579-2C-6"	157															Run
579-2C-12"	158															hold
580-2C-6"	159															Run
580-2C-12"	160															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>(Signature)</i>	STEPHEN SPENCER	EMS	1/31	10:30
Received by: <i>(Signature)</i>	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

Page #

17 of 18 BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

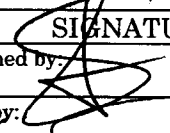

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Ar&B				
S81-2G-6"	161	1/31		Soil	1											Run
S82-2G-12"	162															hold
S82-2G-6"	163															Run
S82-2G-12"	164															hold
S83-2G-6"	165															Run
S83-2G-12"	166															hold
S84-2G-6"	167															Run
S84-2G-12"	168															hold
S85-2G-6"	169															Run
S85-2G-12"	170															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:20
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BTY

Page #

18 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

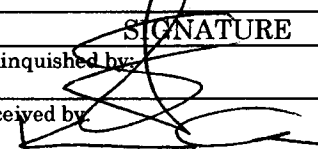

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
586-2 G-6"	171	1/31		Soil	1											Run
586-2 G-12"	172															hold
587-2 G-6"	173															Run
587-2 G-12"	174															hold
588-2 G-6"	175															Run
588-2 G-12"	176															hold
589-2 G-6"	177															Run
589-2 G-12"	178															hold
590-2 G-6"	179															Run
590-2 G-12"	180															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F & B	1/31	10:30
Relinquished by:				
Received by:	Samples received at 17:00			

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

September 20, 2011

Steve Spencer, Project Manager
EcoCon
1912 64th Ave
University Place, WA 98466

Dear Mr. Spencer:

Included are the additional results from the testing of material submitted on September 9, 2011 from the Highland Golf-2, F&BI 109118 project. There are 7 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
EMS0920R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 9, 2011 by Friedman & Bruya, Inc. from the EcoCon Highland Golf-2, F&BI 109118 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>EcoCon</u>
109118-01	S61-22"-9811
109118-02	S62-24"-9811
109118-03	S63-24"-9811
109118-04	S64-24"-9811
109118-05	S65-24"-9811
109118-06	S66-24"-9811
109118-07	S67-24"-9811
109118-08	S68-24"-9811
109118-09	S69-24"-9811
109118-10	S70-24"-9811

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S62-24"-9811	Client:	EcoCon
Date Received:	09/09/11	Project:	Highland Golf-2
Date Extracted:	09/12/11	Lab ID:	109118-02
Date Analyzed:	09/12/11	Data File:	109118-02.013
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP
Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	105	60	125
Analyte:	Concentration mg/kg (ppm)		
Lead	28.6		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S68-24"-9811	Client:	EcoCon
Date Received:	09/09/11	Project:	Highland Golf-2
Date Extracted:	09/12/11	Lab ID:	109118-08
Date Analyzed:	09/12/11	Data File:	109118-08.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP
Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	102	60	125
Analyte:	Concentration mg/kg (ppm)		
Lead	30.3		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S70-24"-9811	Client:	EcoCon
Date Received:	09/09/11	Project:	Highland Golf-2
Date Extracted:	09/12/11	Lab ID:	109118-10
Date Analyzed:	09/12/11	Data File:	109118-10.022
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP
Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	105	60	125
Analyte:	Concentration mg/kg (ppm)		
Lead	116		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	EcoCon
Date Received:	Not Applicable	Project:	Highland Golf-2
Date Extracted:	09/12/11	Lab ID:	I1-633 mb
Date Analyzed:	09/12/11	Data File:	I1-633 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP
Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Holmium	101	60	125
Analyte:	Concentration mg/kg (ppm)		
Lead	<1		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/20/11

Date Received: 09/09/11

Project: Highland Golf-2, F&BI 109118

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 109118-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/kg (ppm)	50	8.18	104	102	65-126	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/kg (ppm)	50	104	81-120

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

109118

SAMPLE CHAIN OF CUSTODY ME 09/09/11

AI3

Send Report To STEPHEN SPENCERCompany ECIAddress PO Box 153City, State, ZIP Box Island, WAPhone # 2539217059 Fax # 2533694228SAMPLERS (signature) 

PROJECT NAME/NO.

Highland Golf - 2

PO #

REMARKS

RAP - Results by 9/12 - 11AMPage # 1 of 1

TURNAROUND TIME

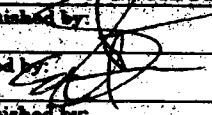
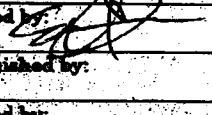
☐ Standard (2 Weeks)☒ RUSH ASAP

Rush charges authorized by:

SAMPLE DISPOSAL

☒ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes	
						TPH-Diesel	TPH-Gasoline	BTX by GC/MS	VOCs by GC/MS	SVOCs by GC/MS	HPS	AS-Residue	Lead				
S61-22"-9811	01	9/9		Soil	1								X				(2) per SS9/14/11 M
S62-24"-9811	02				1								X	(X)			
S63-24"-9811	03												X				
S64-24"-9811	04												X				
S65-24"-9811	05												X				
S66-24"-9811	06												X				
S67-24"-9811	07												X				
S68-24"-9811	08												X	(X)			
S69-24"-9811	09												X				
S70-24"-9811	10												X	(X)			

SIGNATURE		PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		STEPHEN SPENCER	ECI	9/9	9 AM
Received by:		ERIC YOUNG	FAB	9/9	9 AM
Relinquished by:					
Received by:					

Samples received at 25 °C

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 885-8282

Fax (206) 883-5044

FORMS\COC\COC.DOC


Arsenic Contaminated Soil Corrective Action Plan (Revised)

1400 Highland Parkway
Tacoma, Washington

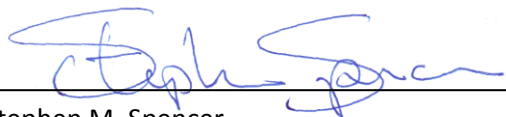
February 16, 2012

Completed For:

Highlands Twenty, LLC
Joe Foss, Managing Partner
1400 Highland Parkway
Tacoma, Washington



Matthew P. Loxterman
Sr. Environmental Scientist



Stephen M. Spencer
Principal Environmental Scientist

Prepared By:

ECI | Environmental Consulting.
PO Box 153
Tacoma, Washington 98333
(253) 238-9270

ECI Project No.: 0393-02

Table of Contents

1.0	Introduction	3
1.1	Background.....	3
1.2	Site Geology.....	4
2.0	Previous Investigations	4
3.0	Site Remediation.....	4
3.1	Sample Collection & Analysis	5
3.2	Contaminated Soil Stabilization - Tee Box & Landscaping	5
4.0	Site Closure – Voluntary Cleanup Program.....	5
5.0	Conclusion.....	6

List of Attachments

Attachment A: Project Figures

- Figure 1: Site Location Map
- Figure 2: Site Topographic Map
- Figure 3: Site Map - Area
- Figure 4: Site Map – Lot 2A
- Figure 5: Site Map – Lot 2B
- Figure 6: Site Map – Lot 2C
- Figure 7: Site Map – Lot 2D

Attachment B: Previous Environmental Reports

- February 2011 Arsenic Investigation
- September 2011 Arsenic Investigation

1.0 Introduction

EcoCon, Inc. (ECI), at the request of Highland Twenty, LLC, has completed this Corrective Action Plan (CAP) following the identification of arsenic impacted soil on nine prospective building sites in Tacoma, Washington. These sites are located at 1400 Highland Parkway, Tacoma, Washington on Pierce County parcels 4467100700, 4467100660, 4467121270 and 4467121280. ECI understands that the current development plan has been changed to include only four of the original nine lots. The new development plan will include the removal of arsenic impacted soil from four future residential building sites located on two of parcels 4467121270 (lots 2A and 2B) and 4467121280 (lots 2D and 2E), use the impacted soil for improvements to the parent parcels, complete the re-plat separating the newly remediated lots from their original “parent” parcels and apply for a No Further Action Determination (NFA) for the newly remediated and platted lots from the Washington State Department of Ecology (Ecology).

1.1 Objectives

This CAP details the remediation activities selected to bring the four selected site(s) into general compliance with Washington State Model Toxics Control Act (MTCA) Cleanup Regulations (WAC 173-340) and obtain a “No Further Action” (NFA) determination from the Department of Ecology (Ecology).

The objective of this CAP is to evaluate and describe the remedial techniques selected to clean up contaminated site soils impacted by offsite historic actives at the Asarco Smelter located in Ruston, Washington.

1.2 Background

According to the Washington Department of Ecology (Ecology), the Site is located within the Tacoma Asarco Smelter Plume (Smelter Plume)¹. The City of Tacoma has required that the subject Site(s) be assessed for arsenic and lead contamination related to the Smelter Plume. Ecology provides sampling guidelines that stipulate a minimum of ten (10) soil samples be collected per acre or building site at six inch increments.

The Site was historically naturally forested then developed into an 18-hole golf course in the 1930’s. Using existing soil and imported soil, the golf course was landscaped. The golf course grounds have been routinely re-landscaped over the past 80 years, gradually reducing the original 18-holes to 9-holes and the construction of a residential community surrounding the golf course. The natural topography of the golf course and adjacent areas consists of a gently rolling landscape having a gross general downward slope to the west. With development and redevelopment of the area some of the rolling

¹ http://www.ecy.wa.gov/programs/tcp/sites/dirt_alert/studies_and_maps/sources.html

topography has been smoothed and some accentuated with the addition of roads, building sites, and fairways.

1.2 Site Geology

Based on test pit excavations completed during a geotechnical survey (Allen L. Hart Engineering Geologist – February 2011), below a layer of sod/topsoil, in non fill areas the site is generally underlain by approximately one to three feet of brown to tan, loose to medium dense, silty sand having a variable gravel content, which in turn is underlain by a tan-to gray, medium dense to very dense, silty sand with a varying gravel content (glacial till, Alderwood Group agricultural soils².)

2.0 Previous Investigations

Initial sampling completed in February 2011 identified Arsenic at concentration exceeding the 20 mg/kg MTCA-A CUL at 95% of the sample locations encompassing each of the original nine building sites extending from the surface to 6 inches bgs (Table 1 – Attached). A second sampling event conducted on Lot 2A (one of the original 9 lots) on September 9, 2011 included the collection of ten soil samples at 18 to 24 inches bgs. Of the 10 sample locations, three were reported exceeding the MTCA-A Arsenic CUL of 20 mg/kg. Total lead was analyzed on each of the three samples reported containing arsenic exceeding the applicable CUL. Total lead concentrations were reported below the 250 mg/kg MTCA-A CUL.

2.1 Regulatory Compliance

Regulatory compliance for this project is provided by the Washington State Department of Ecology (Ecology), Washington Administrative Code (WAC) 173-340, the Model Toxic Control Act (MTCA). Impacted soil investigations and remedial actions must meet the substantive requirements as specified in MTCA. The target point of compliance is meeting the Method A Soil Cleanup Levels for Unrestricted Land Uses – WAC 173-340-900 - Table 740-1. Specifically, the cleanup level for total arsenic (20 mg/kg) and total lead (250 mg/kg).

3.0 Site Remediation

Using excavation equipment the top 12 inches of soil will be excavated and transferred to a receiving area located approximately 200 feet away from the excavation area (Figure 2). Each lot is expected to contain 200 to 300 cubic yards of impacted soil. After the soil transfer, the receiving area will be landscaped into a tee box³ or other golf course features (see “Contaminated Soil Stabilization - Tee Box & Landscaping” - below). Six millimeter plastic will be used to cover the soil until tee box / landscape construction is completed.

² <http://www.dnr.wa.gov/ResearchScience/Topics/GeologyofWashington/Pages/lowland.aspx>

³ The "tee box" is just another term for teeing ground. The teeing ground is the starting point on each hole of a golf course. It's the area covered by the space in-between two tee markers and two-club-lengths back from the tee markers.

Following the removal of the initial 12 inches of soil, samples will be collected at 10 select locations and analyzed for arsenic and lead. Sample results will be expedited to assist in any additional excavation beyond 12 inches bgs. This process will be repeated every 12 inches until sample results are reported below applicable CULs. Based on previous sampling events (September 2011) and subsurface geology, specifically glacial till (till) formations identified in the 2011 geotechnical survey (Allen L. Hart Engineering – 2011) impacted soil is not expected to extend below 36 inches bgs.

3.1 Sample Collection & Analysis

Soil samples will be collected following each 12 inch excavation activity. Each sample will be collected by a properly trained environmental professional using industry standard sampling techniques. At each of the ten sample locations, a discrete sample will be collected extending approximately 6 inches below existing grade using properly decontaminated sampling equipment and donning disposable personal protective equipment (e.g. nitrile gloves, eye protection). One new 4-ounce laboratory provided sample jar with teflon lined lid will be filled, assigned a unique identification number and stored in a climate controlled container maintained at 4° Celsius. Following sample collection, the samples will be delivered to a properly accredited laboratory under industry standard Chain of Custody. Each sample will be analyzed for arsenic and lead by EPA Method 200.8.

3.2 Contaminated Soil Stabilization – Golf Course Landscaping

Soil transported from each of the remediation sites will be stockpiled / landscaped to allow for golf features construction following transfer activities. The landscaped surface (soil surface) will be graded and covered with plastic daily during import and landscape activities. Stormwater best management practices will be implemented as necessary, and as described in the City of Tacoma approved temporary erosion and sediment control (TESC) plan. Final grade will be landscaped and incorporated into existing golf course features and seeded per golf course specifications.

3.2 Health & Safety

A site specific health and safety plan will be completed addressing hazards associated with known contaminants, proposed excavation activities and outlining working conditions and worker exposure.

All site workers and inspectors conducting compliance inspections must have the following minimum training:

1. 40 hour Hazardous Waste Sites training as required by OSHA or
2. Certification showing completion of the annual Refresher for Hazardous Waste sites (8 hour), if applicable.

4.0 Site Closure Reporting – Voluntary Cleanup Program

Following excavation and confirmation sampling activities a report will be prepared detailing remediation activities, sampling activities and analytical results.

Each of the four sites will be entered separately into the Washington State Voluntary Cleanup Program (VCP) with the intent to receive a No Further Action (NFA) determination. Collaboration with Ecology both through the use of this work plan and continued communication, prior to, during and following corrective action activities is expected to meet all requirements outlined within the Washington Administrative Code (WAC) 173-340: Model Toxic Control Act (MTCA).

5.0 Conclusion

The purpose of this work plan is to provide corrective action guidelines during construction activities. As with all projects, the more information gathered in the planning stages, the less possibility of plan deviation or need for contingencies. As identified in the previous investigations, the top six inches of soil is impacted with arsenic exceeding the MTCA-A cleanup level of 20 mg/kg. What is not known is the vertical extent (depth) of impacted soil. Sample results from the September 2011 sampling event identified arsenic at 35% of sample locations at 18 to 24 inches bgs. Glacial till or “hard pan” was identified during the 2011 Geotechnical Assessment (Hart – 2011) at depths ranging from 12 to 36 inches bgs throughout the site(s). Total excavation depth is not expected to exceed 24 inches bgs except at a minimal number of locations on each Lot.

Specific activities with regard to the excavation and management of impacted soil and the installation of the final landscape will vary, however the intent remains constant, to remove impacted soil exceeding applicable cleanup levels, and apply for a No Further Action determination on each of the four newly subdivided lots.

Following construction, a summary report detailing the specific corrective action will be completed and submitted to Ecology, with a request for a No Further Action determination.

Attachment A

Project Figures

Figure 1: Site Location Map

Figure 2: Site Topographic Map

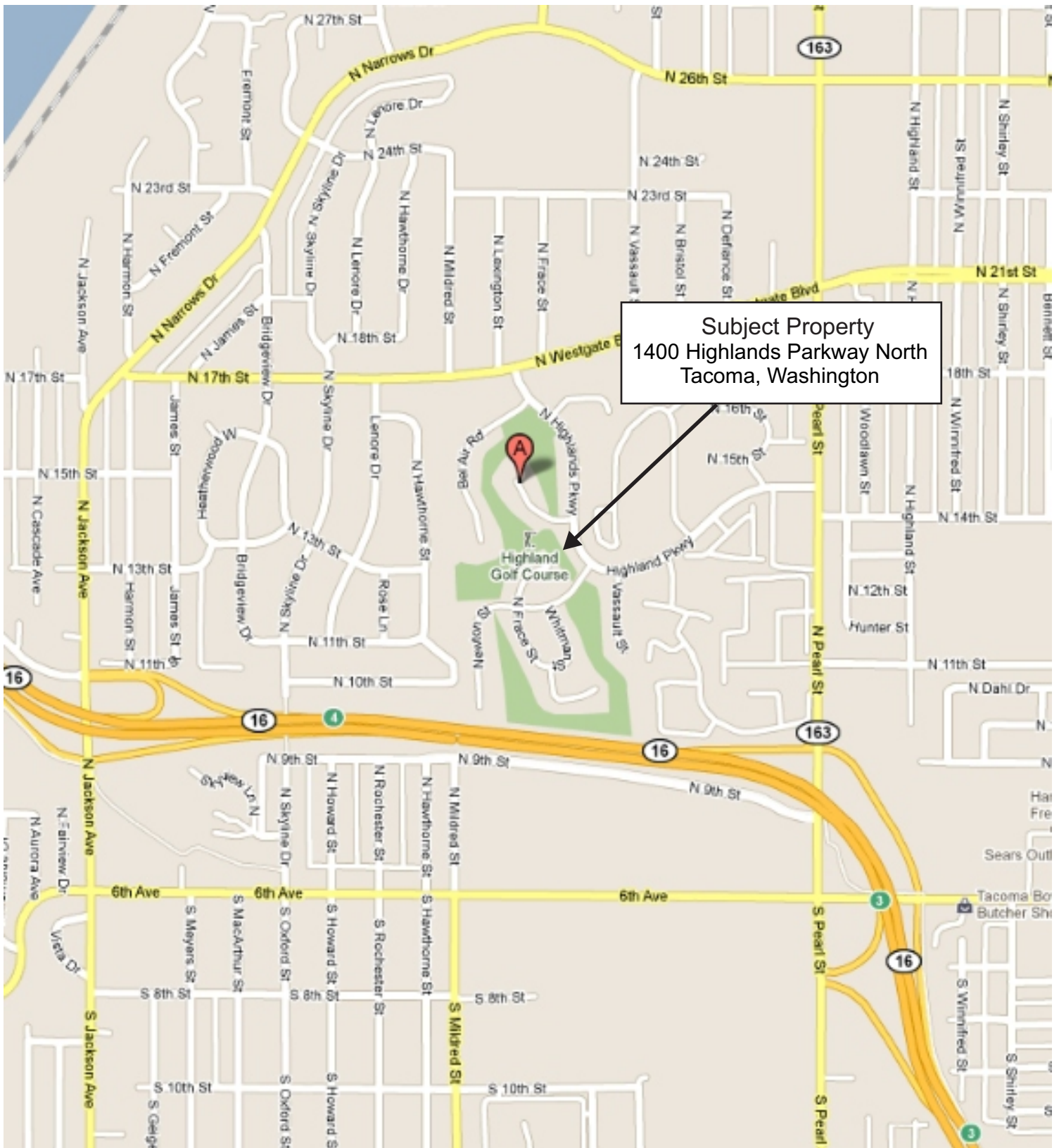
Figure 3: Site Map - Area

Figure 4: Site Map – Lot 2A

Figure 5: Site Map – Lot 2B

Figure 6: Site Map – Lot 2C

Figure 7: Site Map – Lot 2D



Site Location Map
1400 Highlands Parkway North
Tacoma, Washington

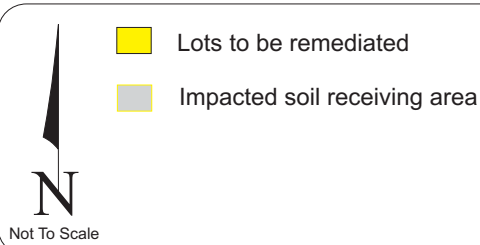
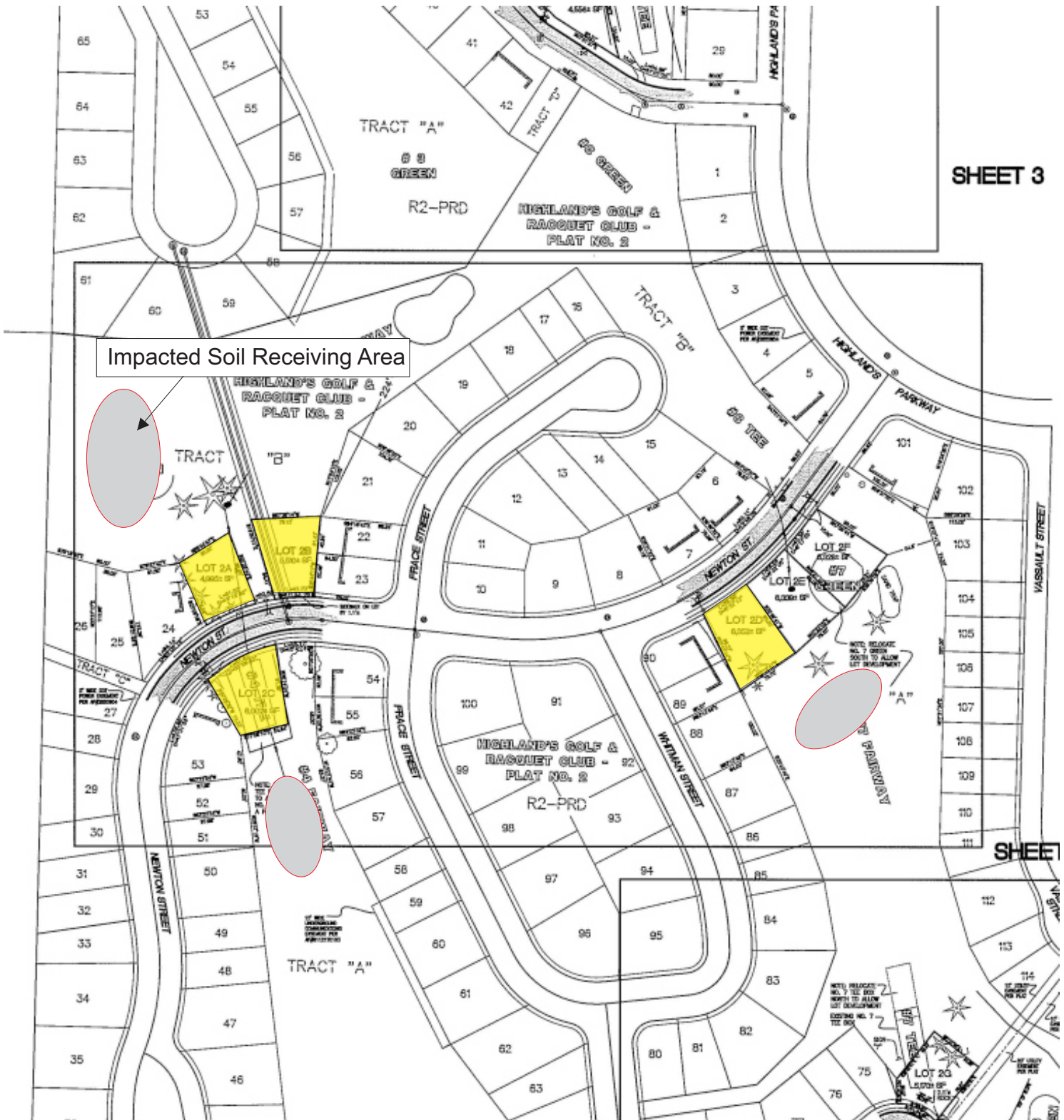
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

01

Sheet 01 of 01

ECI | environmental consulting
www.ecoonline.com



Site Map
1400 Highlands Parkway North
Tacoma, Washington

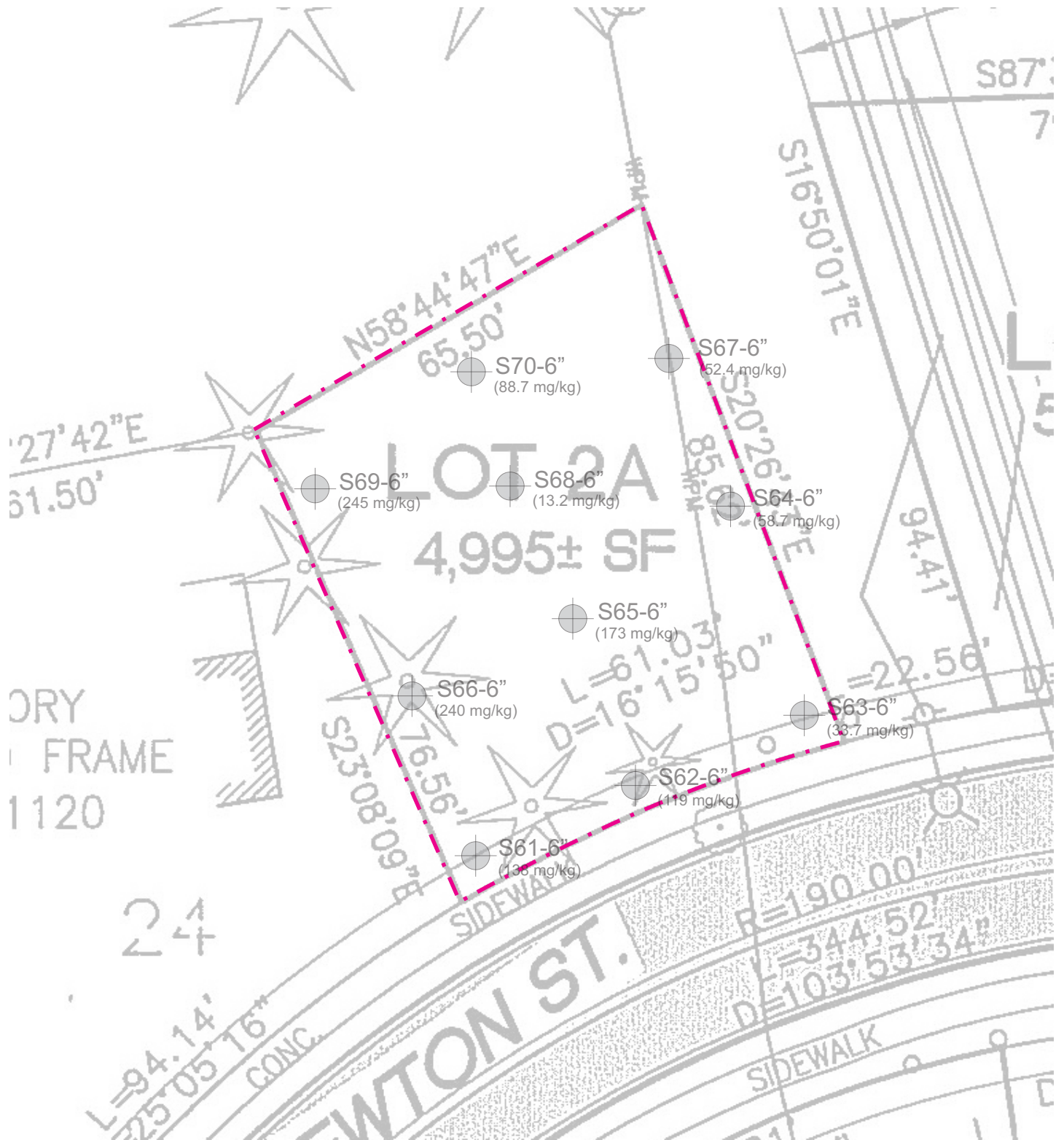
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S.Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

03

Sheet 01 of 01

ECI | environmental consulting
www.eciconline.com



Lot 2A
1400 Highlands Parkway North
Tacoma, Washington

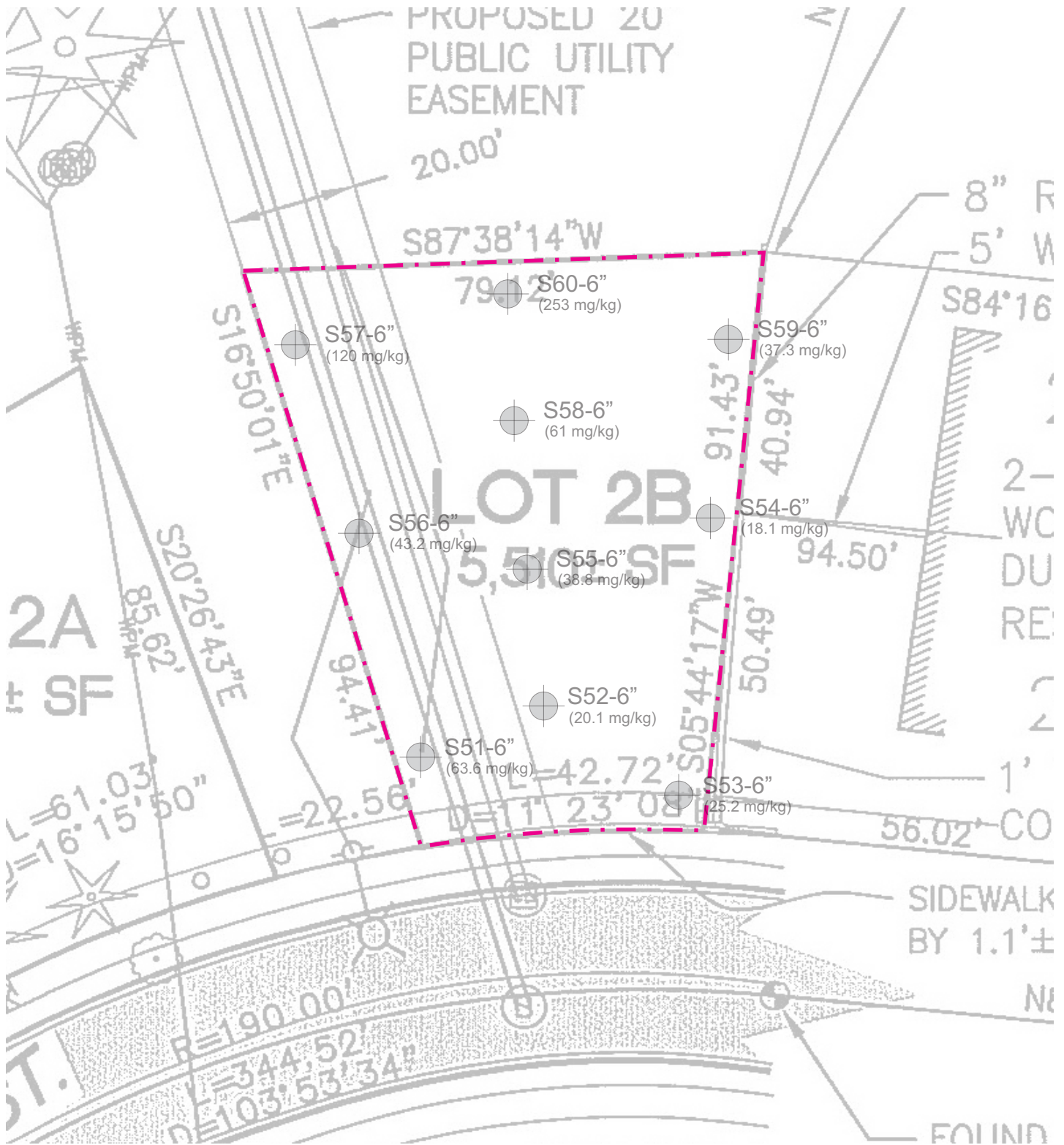
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

04

Sheet 01 of 01

ECI | environmental consulting
www.ecoonline.com



Lot 2B
1400 Highlands Parkway North
Tacoma, Washington

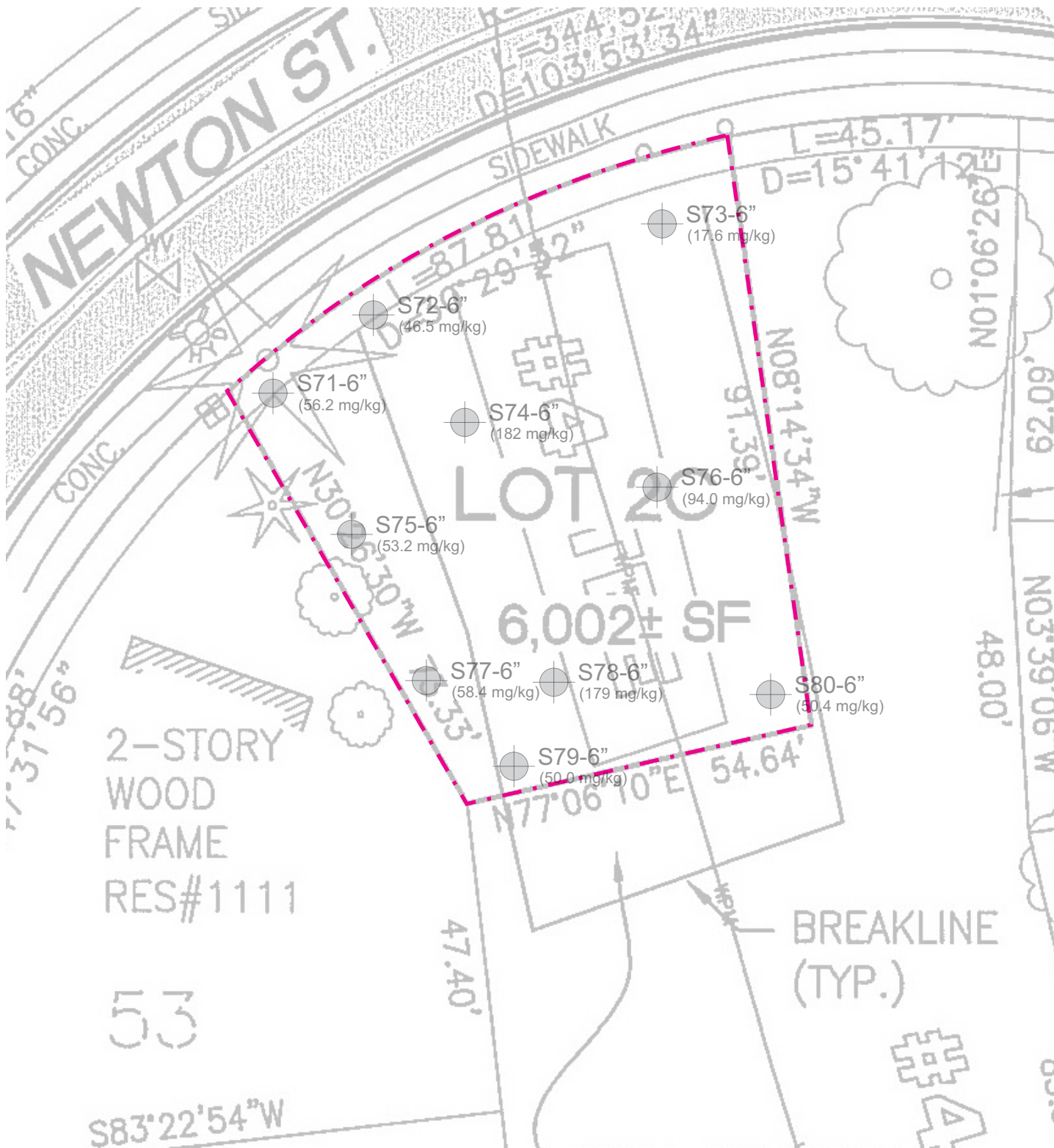
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

05

Sheet 01 of 01

ECI | environmental consulting
www.ecoconline.com



Lot 2C
1400 Highlands Parkway North
Tacoma, Washington

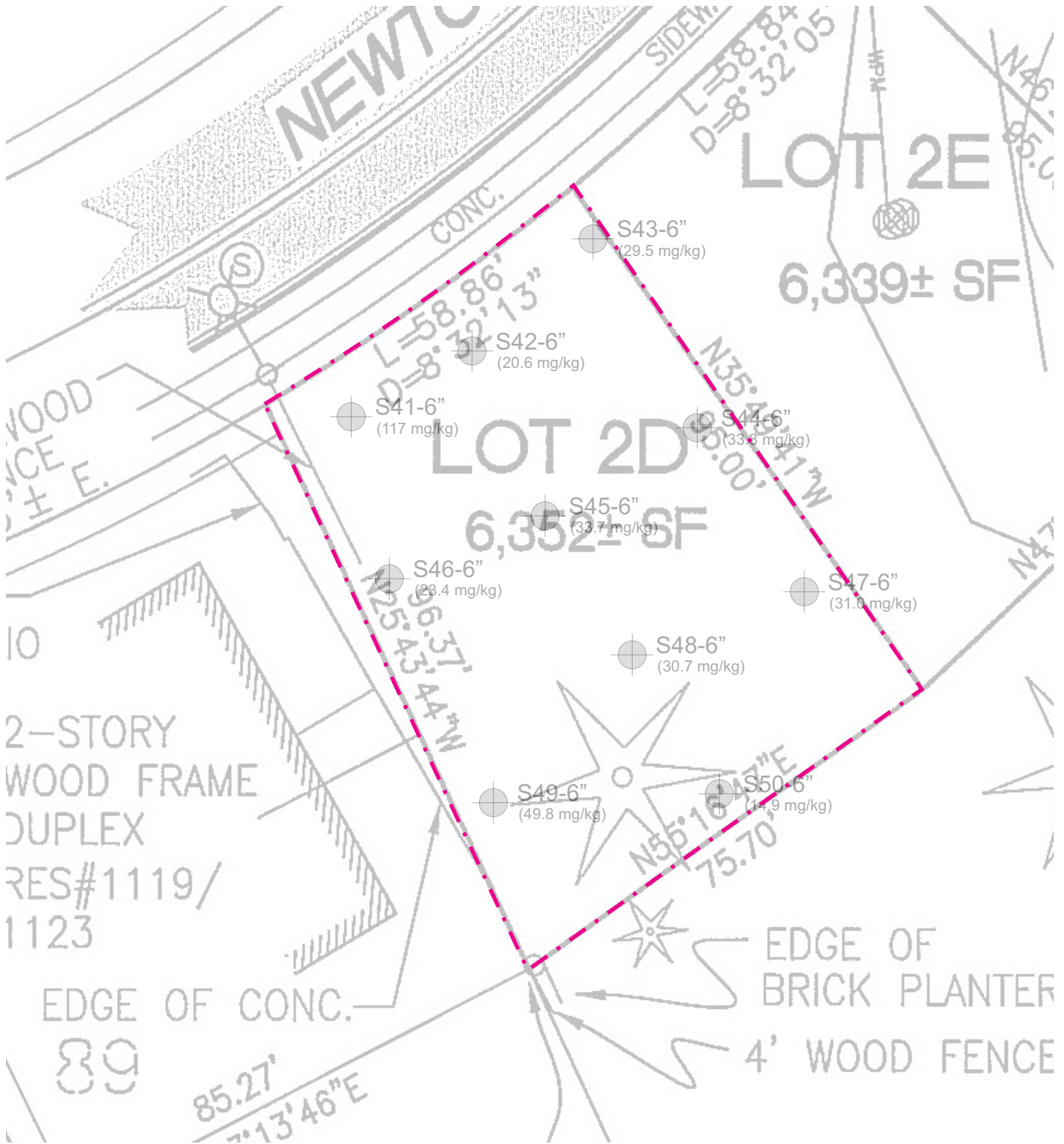
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

06

Sheet 01 of 01

ECI | environmental consulting
www.ecoconline.com



Lot 2D
1400 Highlands Parkway North
Tacoma, Washington

Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

07

Sheet 01 of 01

ECI | environmental consulting
www.ecoconline.com

Attachment B

Previous Environmental Reports

February 2011 Arsenic Investigation
September 2011 Arsenic Investigation

Attachment B
Previous Environmental Reports



February 11, 2011

Highlands Twenty, LLC
C/o Kevin Foley
Baseline Engineering
1910 64th Avenue
Fircrest, WA 98466

Re: Surface Soil Investigation
1400 Highland Parkway
Tacoma, Washington

Dear Mr. Foley:

Environmental Management Services, LLC (EMS), at the request of Highland Twenty, LLC, completed a focused, surface soil environmental investigation. This investigation was conducted on nine proposed residential building sites located on portions of Pierce County Parcels 4467100210, 4467100660, 4467121280, 4467121270 located in Tacoma Washington (Subject Properties – Figures 1-12).

According to the Washington Department of Ecology (Ecology), the Site is located within the Tacoma Asarco Smelter Plume (Smelter Plume)¹. The City of Tacoma has required that, if the properties are to be developed, the Subject Properties will need to be assessed for surface arsenic contamination related to the Smelter Plume. Ecology provides sampling guidelines that stipulate a minimum of ten (10) soil samples be collected per acre at six inch increments starting at the surface elevation.

The goal of this project was to comply with the City of Tacoma and Ecology surface soil sampling requirements. The arsenic sampling methodology includes the collection of soil samples at two elevations (0-6" and 6-12") from ten (10) sample points on each of the nine properties.

Soil Sampling Activities

EMS completed sampling activities at the Site on January 30 and 31, 2011. Ten sample locations were randomly selected on each of the nine proposed building sites (Figures 4-12). The Washington State administrative code (WAC) 173-340 (Model Toxic Control Act) Method A

¹ http://www.ecy.wa.gov/programs/tcp/sites/dirt_alert/studies_and_maps/sources.html

(MTCA-A) Cleanup Levels for Unrestricted Land Use for arsenic in soil is 20 milligram per kilogram (mg/kg). Of the ninety (90) 0-6" sample locations, eighty three (83) were reported exceeding the MTCA-A cleanup level of 20 mg/kg. The remaining seven (7) samples were reported below the MTCA-A cleanup level. Provided in Attachment A are figures 4-12, the project sample location maps identifying each of the sample locations.

EMS collected 180 discrete soil samples, 20 samples from each of the nine proposed building locations. Ten (10) samples from zero to six inches below ground surface (bgs) and 10 from 6 to 12 inches bgs. Each discrete soil sample was collected by a properly trained sampling technician using appropriately decontaminated sampling equipment.

Each soil sample was placed into new laboratory provided sampling containers and labeled using a unique sample identification number. Samples were delivered under industry standard chain of custody to Freidman & Bruya, Inc., an Ecology accredited laboratory for chemical analysis.

Laboratory Analysis

The soil samples collected from the depth of 0-6" were analyzed for Total Arsenic (As) by Environmental Protection Agency (EPA) Method 6020 (Attachment C – Laboratory Results). Seven soil samples, S20-1B, S28-2F, S50-2D, S54-2B, S68-2A, S73-2C and S88-2G were reported below the 20 mg/kg cleanup level.

The remaining 83 samples were reported exceeding the 20 mg/kg cleanup level. Concentration ranged from 20.1 mg/kg to 245 mg/kg. (Attachment B -Project Tables - Table 1 - Soil Sample Results - Total Arsenic).

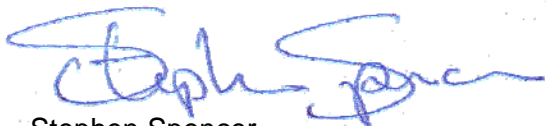
Summary

Based on soil sample analysis, soil impacted with arsenic exceeding the MTCA-A cleanup limit of 20 mg/kg was identified on each of the nine proposed building sites. Further assessment to delineate the vertical and horizontal extent of impacted soil may be necessary to properly ascertain remediation or mitigation costs.

In order to develop the sites, the arsenic impacted soil will need to be addressed. Remediation or mitigation of the impacted soil can be incorporated in to the development of the property. However, an approved work plan addressing the proposed corrective action should be competed prior to construction to eliminate construction delays.

EMS appreciates the opportunity to provide environmental services on this project. Should you have any questions, please contact our office at 253-921-7059.

Environmental Management Services, LLC



Stephen Spencer
Principal

Encl:

Attachment A – Project Figures

- Figure 1 – Site Location Map
- Figure 2 – Site Topographic Map
- Figure 3 – Sample Location Map

Attachment B – Project Tables

- Table 1 – Soil Sample Results - Total Arsenic
- MTCA-A Unrestricted Cleanup Levels for Unrestricted Land Use

Attachment C - Laboratory Results

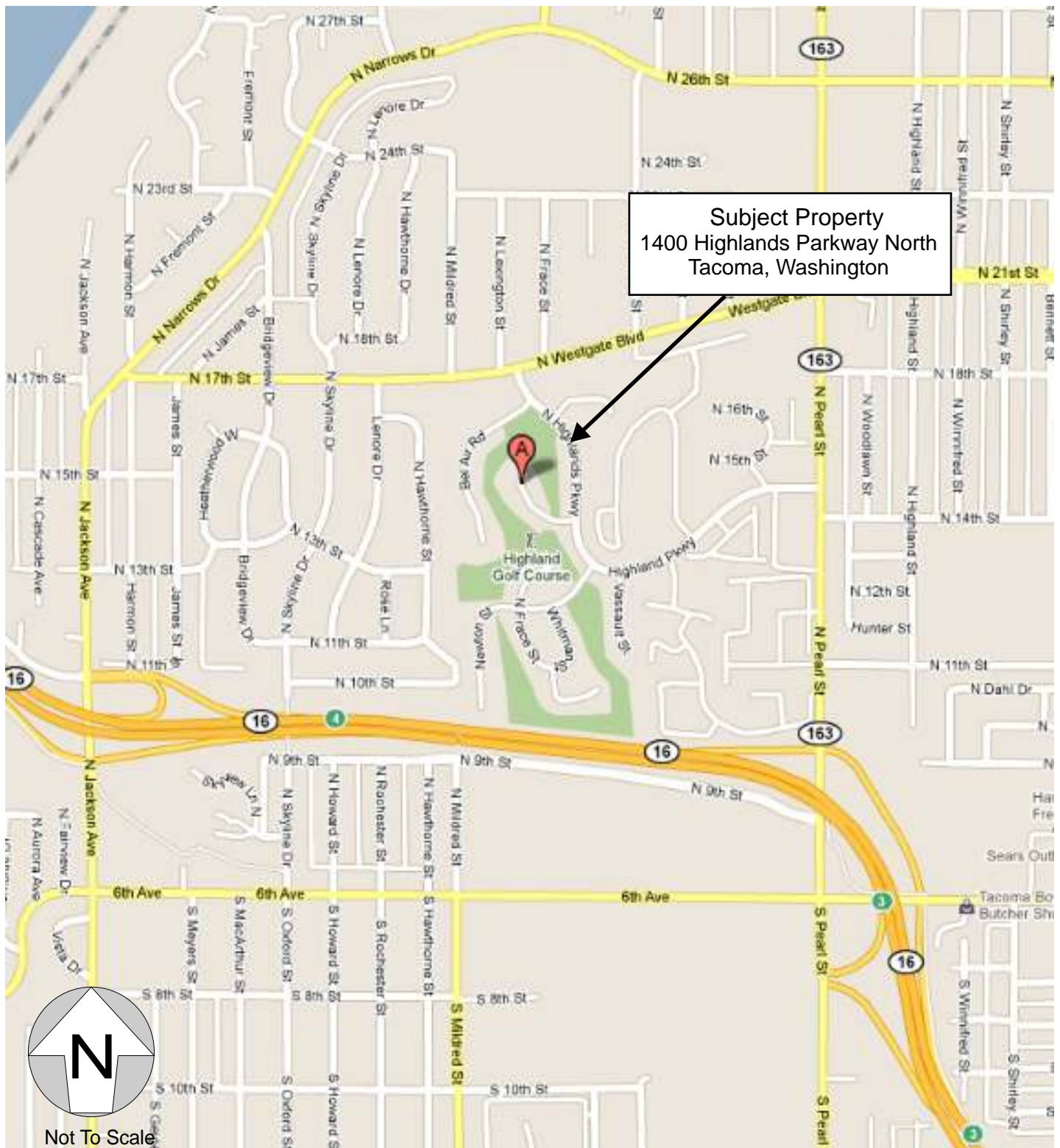
- Sample Analytical Results
- Analytical Results & Chain of Custody

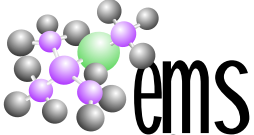
Attachment D – Professional Qualifications

Attachment A


Project Figures

- Figure 1 - Site Location Map
- Figure 2 - Site Topographic Map
- Figure 3 - Sample Location Map

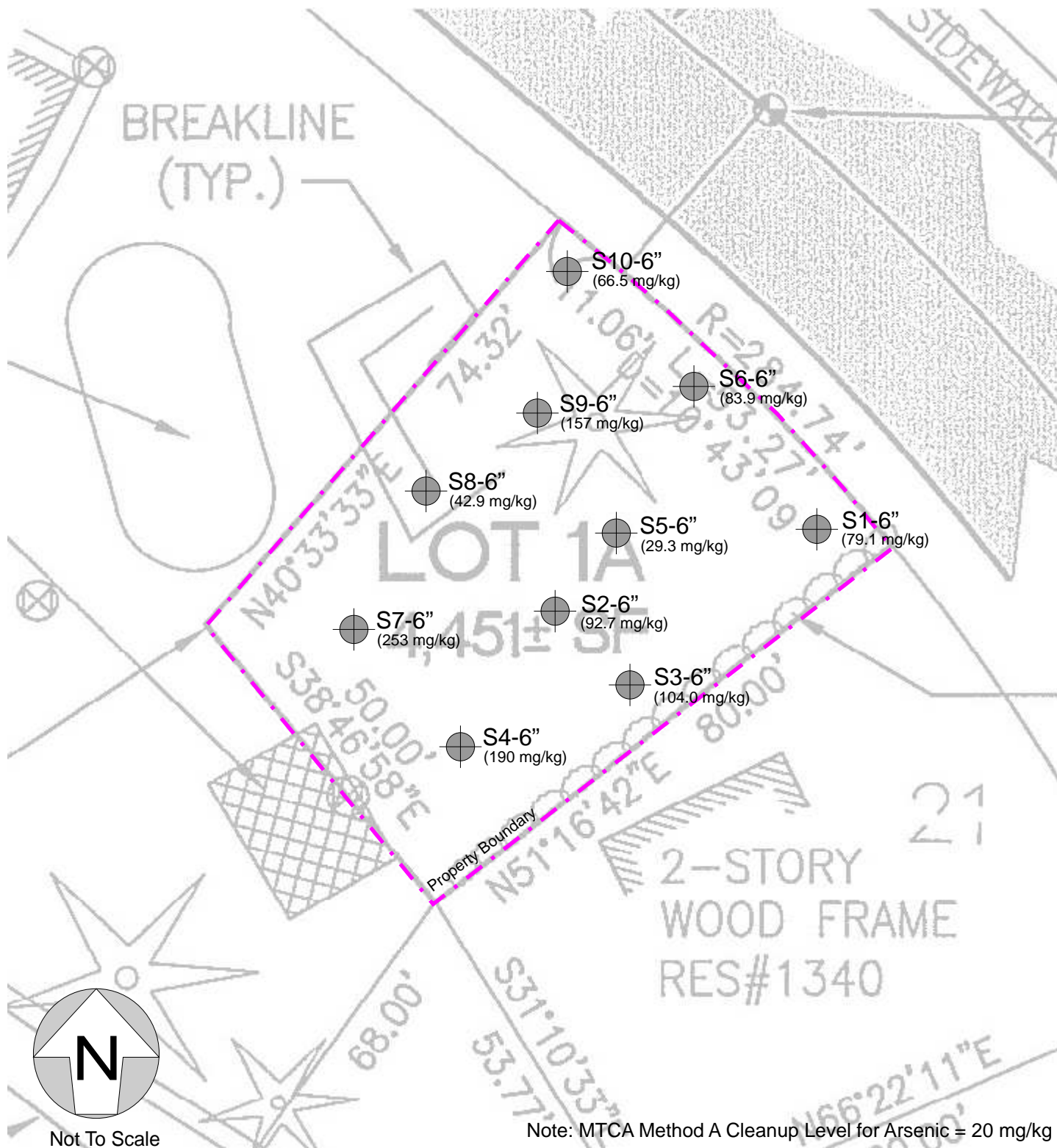



 <p>Environmental Services www.emsgroupplc.com</p>	<p>Site Location Map 1400 Highlands Parkway North Tacoma, Washington</p>	<p>Date: February 10, 2011 Completed: K. Spencer Checked By: S. Spencer EMS Project No: 0393-01</p>	<p>Figure No. 01</p>
---	--	---	---------------------------------

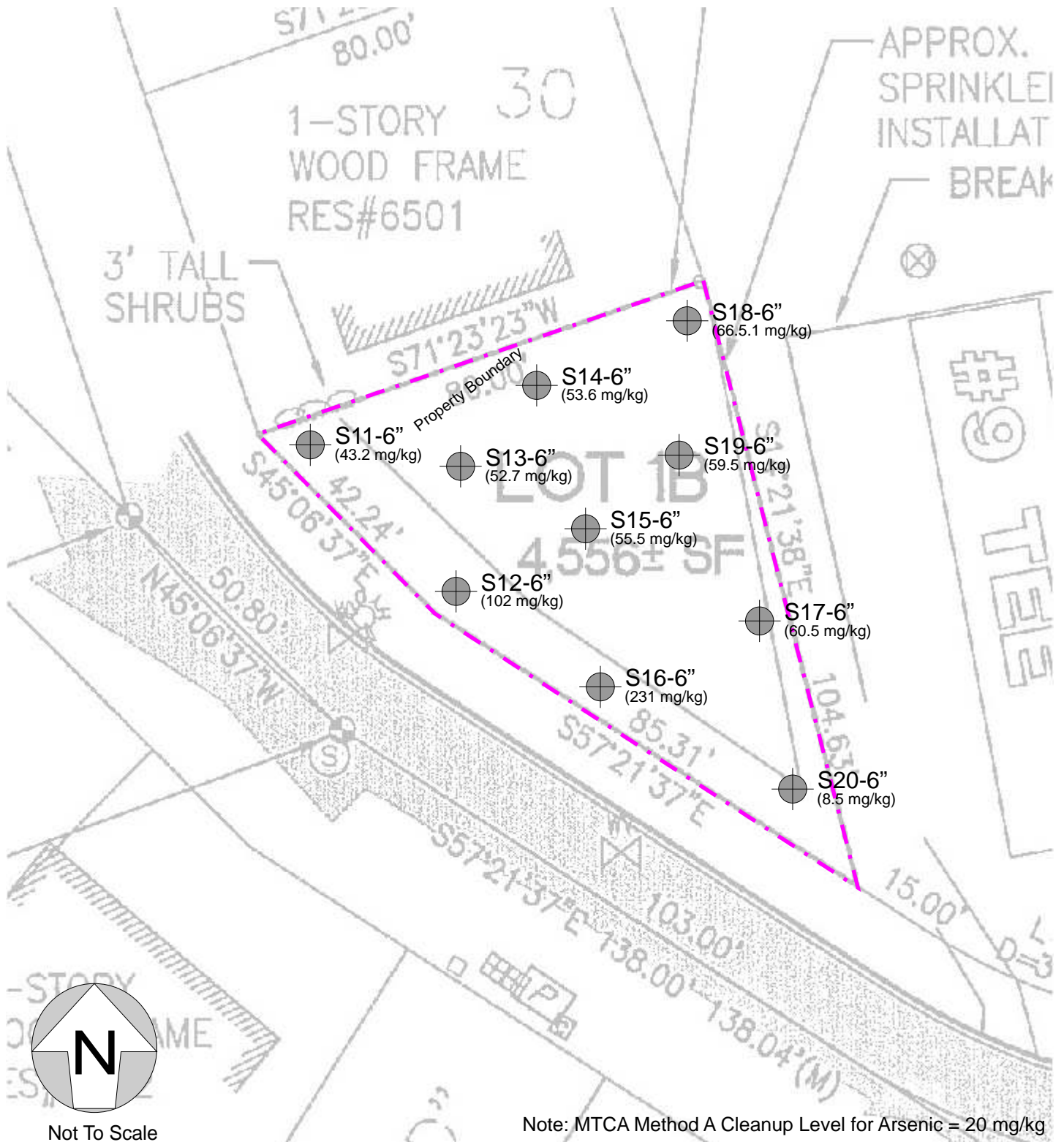


 <p>Environmental Services www.emsgroupllc.com</p>	<p>Site Topographic Map 1400 Highlands Parkway North Tacoma, Washington</p>	<p>Date: February 10, 2011 Completed: K. Spencer Checked By: S. Spencer EMS Project No: 0393-01</p>	<p>Figure No. 02</p>
---	---	---	---------------------------------



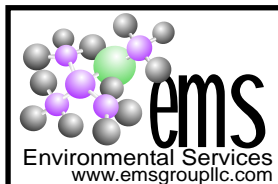


 <p>Environmental Services www.emsgroupplc.com</p>	<p>Sample Location Map Lot 1A 1400 Highlands Parkway North Tacoma, Washington</p>	<p>Date: February 10, 2011 Completed: K. Spencer Checked By: S. Spencer EMS Project No: 0393-01</p>	<p>Figure No. 04 Lot 1A</p>
---	---	---	--



S4-6"
 (190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
 Total Arsenic Concentration

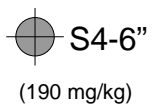
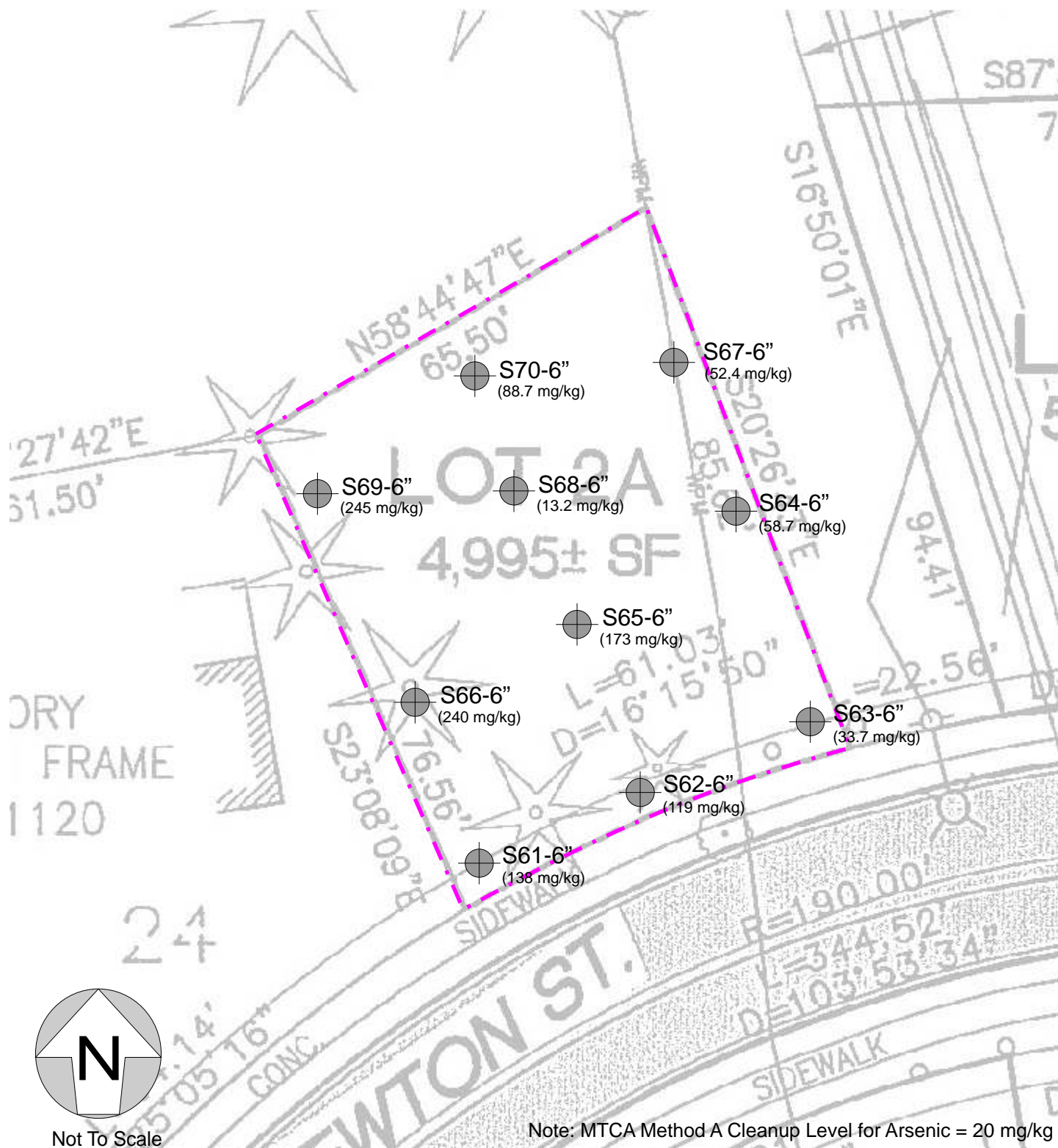


Sample Location Map
 Lot 1B
 1400 Highlands Parkway North
 Tacoma, Washington

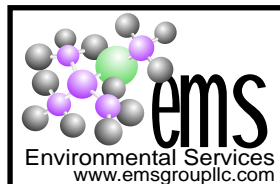
Date: February 10, 2011
 Completed: K. Spencer
 Checked By: S. Spencer
 EMS Project No: 0393-01

Figure No.

05
 Lot 1B



Soil sample identification and location - 0-6" below ground surface
Total Arsenic Concentration

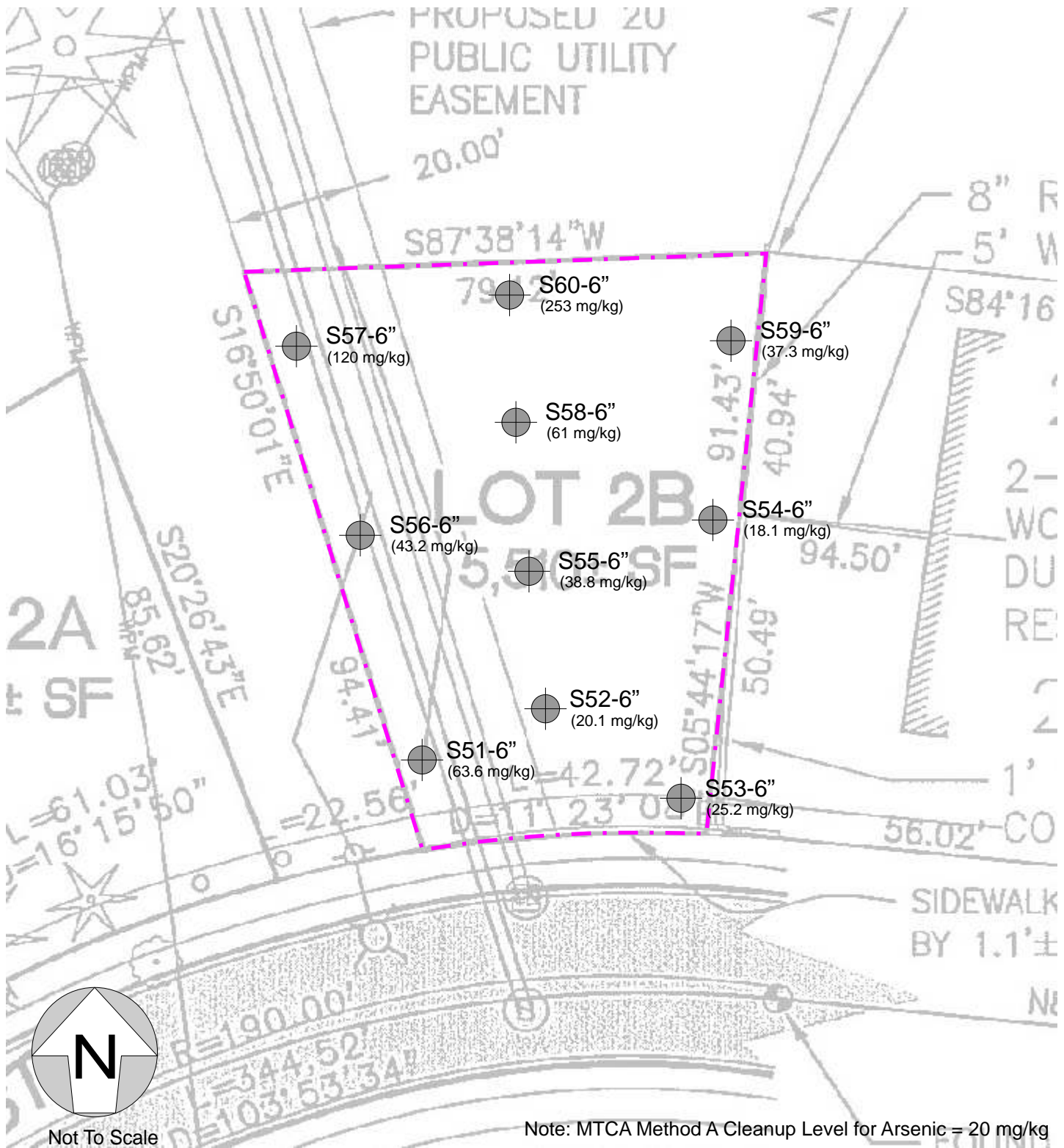



Sample Location Map
Lot 2A
1400 Highlands Parkway North
Tacoma, Washington

Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01

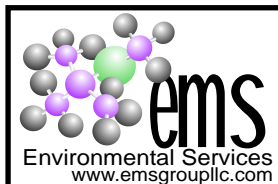
Figure No.

06
Lot 2A




S4-6"
 (190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
 Total Arsenic Concentration

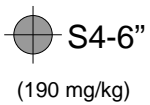
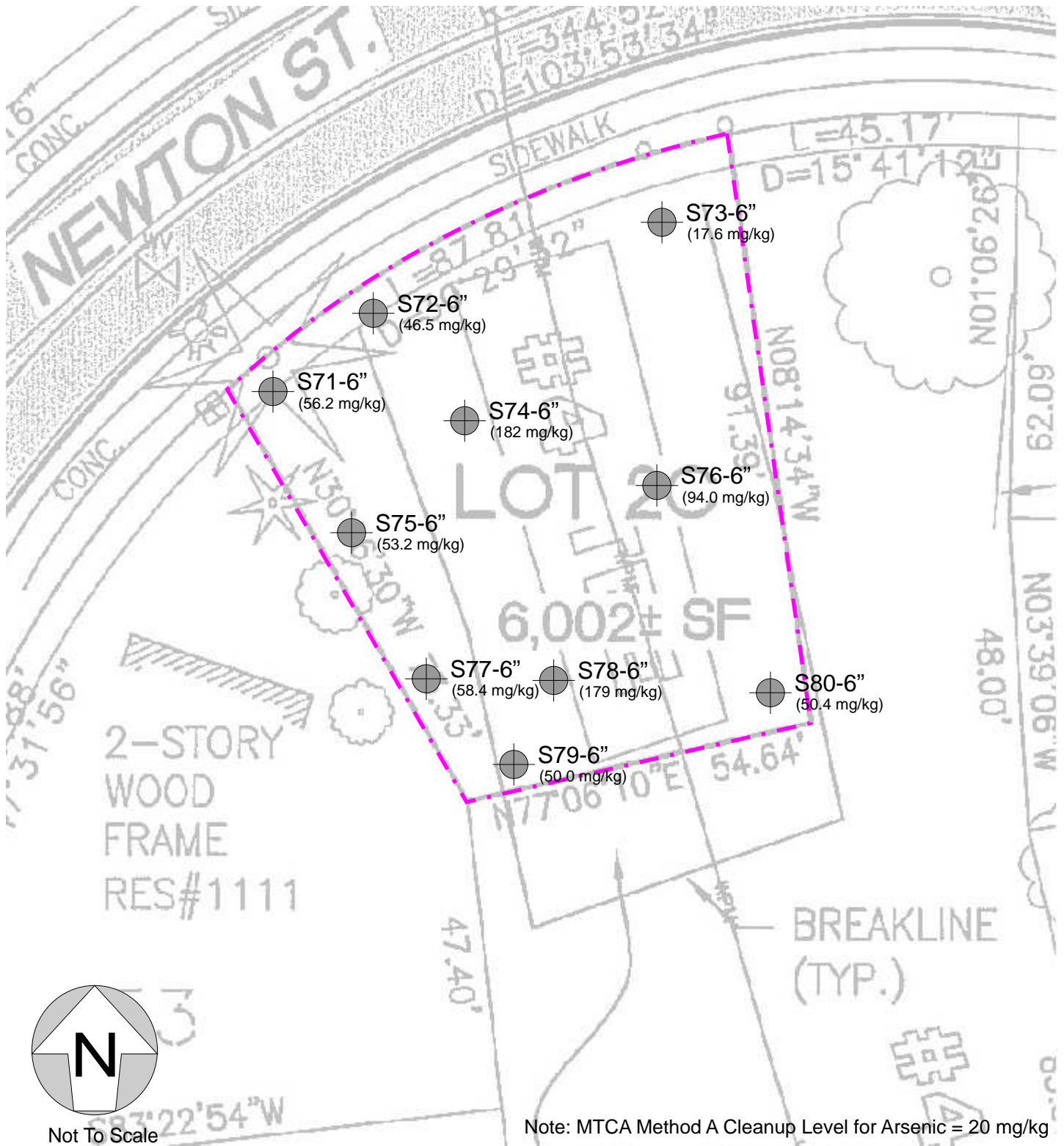


Sample Location Map
 Lot 2B
 1400 Highlands Parkway North
 Tacoma, Washington

Date: February 10, 2011
 Completed: K. Spencer
 Checked By: S. Spencer
 EMS Project No: 0393-01

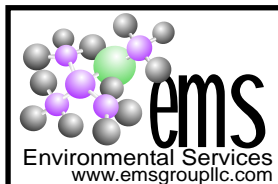
Figure No.

07
 Lot 2B



Soil sample identification and location - 0-6" below ground surface

Total Arsenic Concentration

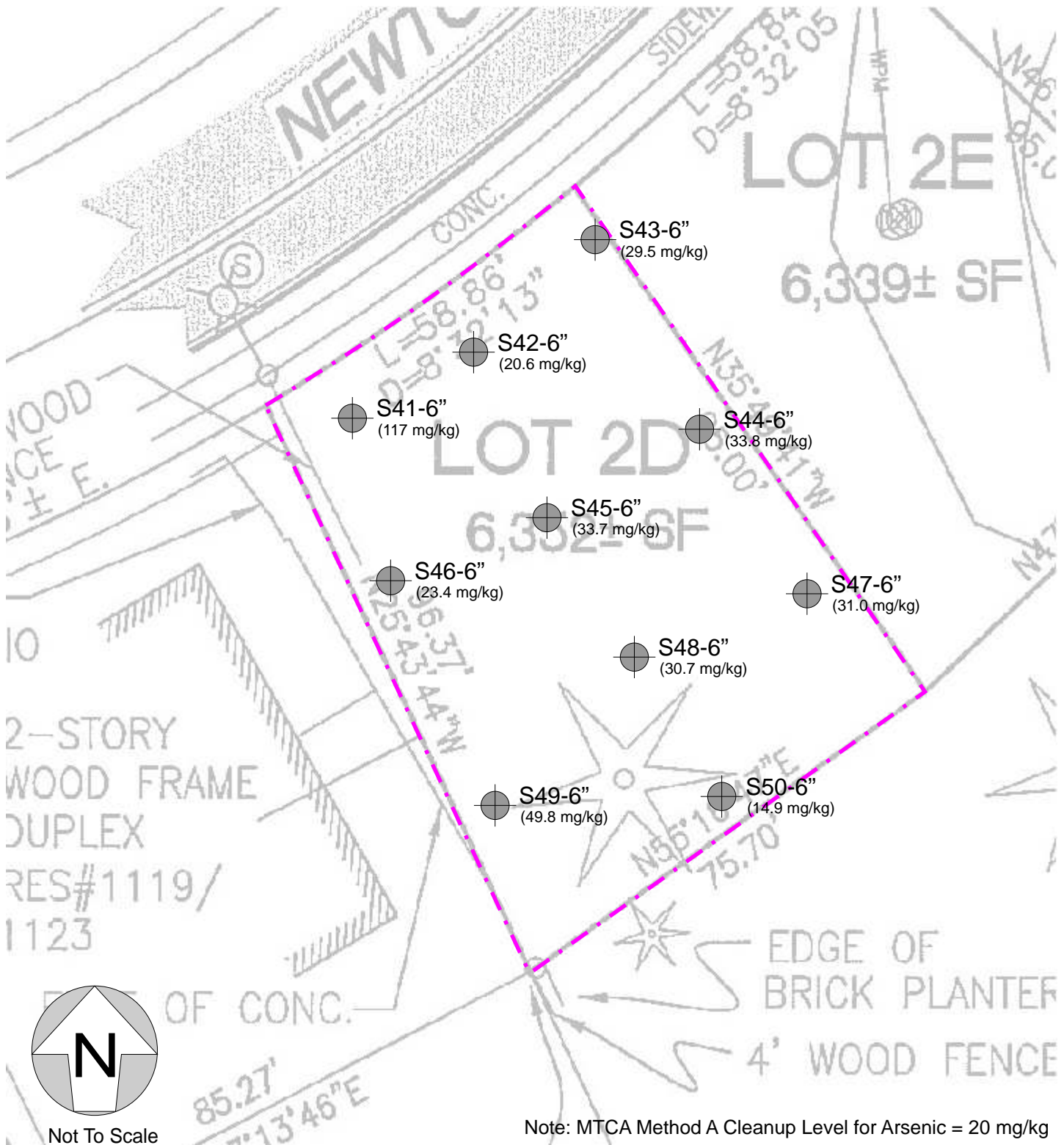



Sample Location Map
Lot 2C
1400 Highlands Parkway North
Tacoma, Washington

Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01

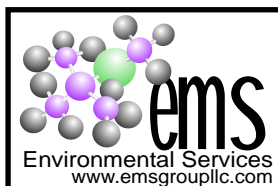
Figure No.

08
Lot 2C




S4-6"
 (190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
 Total Arsenic Concentration

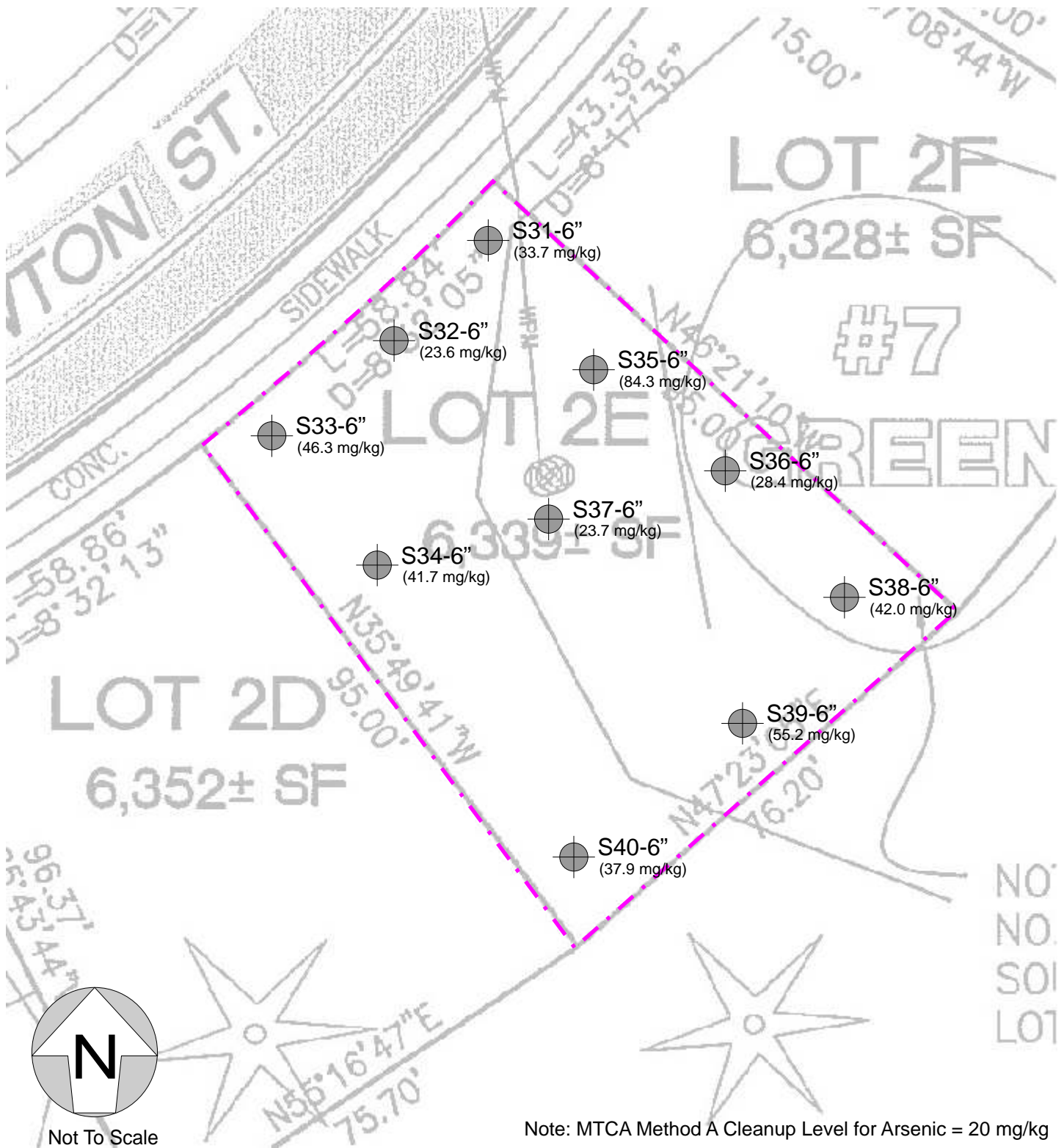



Sample Location Map
 Lot 2D
 1400 Highlands Parkway North
 Tacoma, Washington

Date: February 10, 2011
 Completed: K. Spencer
 Checked By: S. Spencer
 EMS Project No: 0393-01

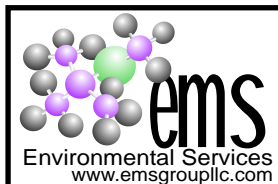
Figure No.

09
 Lot 2D




S4-6"
 (190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
 Total Arsenic Concentration

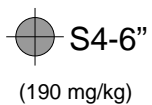
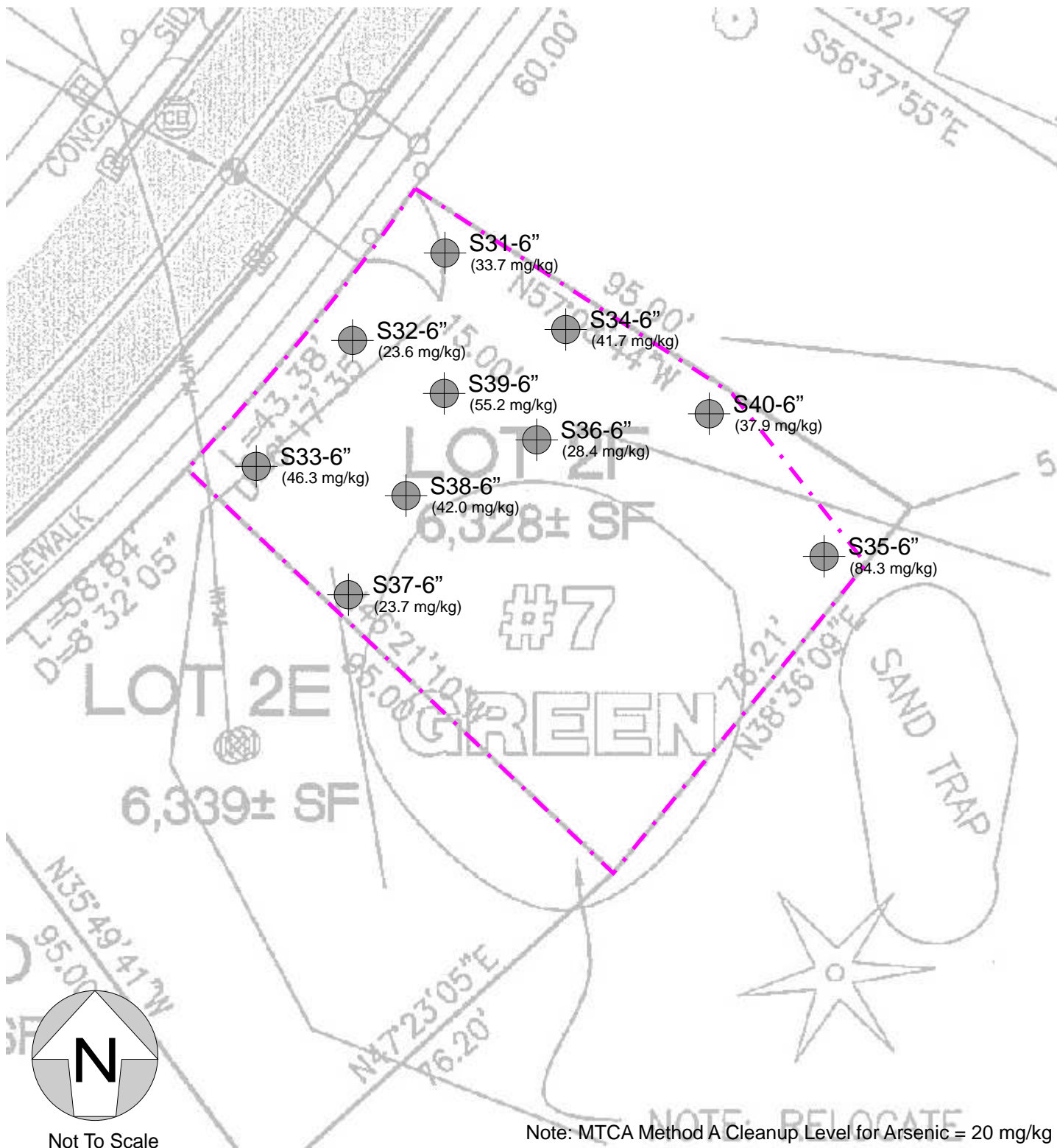


Sample Location Map
 Lot 2E
 1400 Highlands Parkway North
 Tacoma, Washington

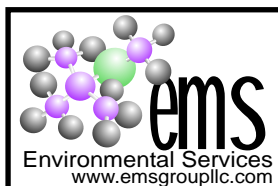
Date: February 10, 2011
 Completed: K. Spencer
 Checked By: S. Spencer
 EMS Project No: 0393-01

Figure No.

10
 Lot 2E



Soil sample identification and location - 0-6" below ground surface
Total Arsenic Concentration

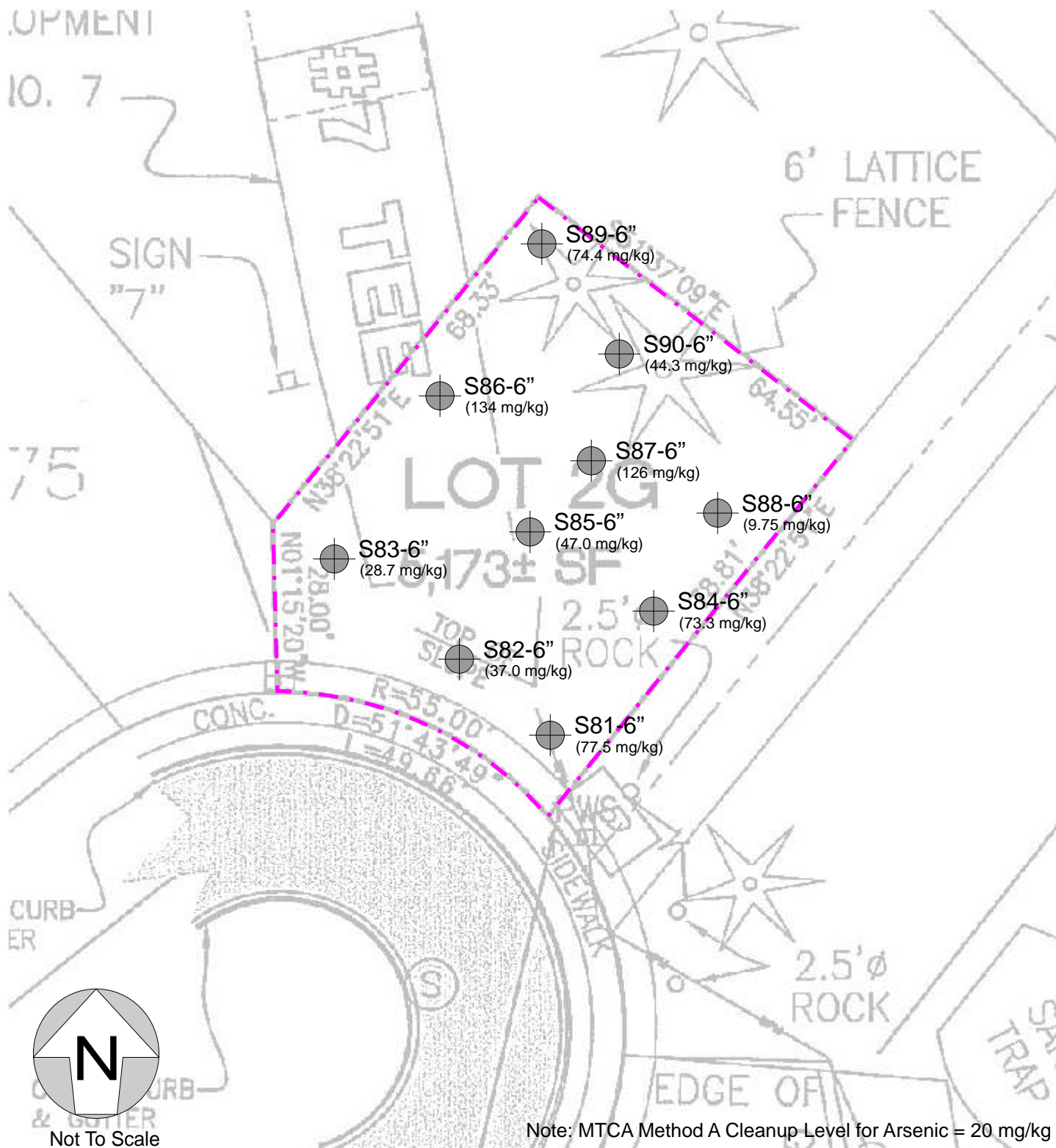



Sample Location Map
Lot 2F
1400 Highlands Parkway North
Tacoma, Washington

Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01

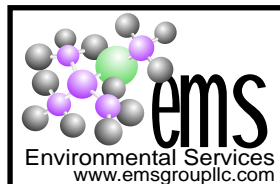
Figure No.

11
Lot 2F




S4-6"
 (190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
 Total Arsenic Concentration



Sample Location Map
 Lot 2G
 1400 Highlands Parkway North
 Tacoma, Washington

Date: February 10, 2011
 Completed: K. Spencer
 Checked By: S. Spencer
 EMS Project No: 0393-01

Figure No.

12
 Lot 2G

Attachment B

Project Tables

Table 1 - Arsenic Sample Results
MTCA-A Unrestricted Cleanup Levels for Unrestricted Land Use



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 1A				
S1-A1-6"	LOT1A	0-6"	1/30/2011	<u>79.1</u>
S2-A1-6"	LOT1A	0-6"	1/30/2011	<u>92.7</u>
S3-A1-6"	LOT1A	0-6"	1/30/2011	<u>104.0</u>
S4-A1-6"	LOT1A	0-6"	1/30/2011	<u>190.0</u>
S5-A1-6"	LOT1A	0-6"	1/30/2011	<u>29.3</u>
S6-A1-6"	LOT1A	0-6"	1/30/2011	<u>83.8</u>
S7-A1-6"	LOT1A	0-6"	1/30/2011	<u>253.0</u>
S8-A1-6"	LOT1A	0-6"	1/30/2011	<u>42.9</u>
S9-A1-6"	LOT1A	0-6"	1/30/2011	<u>157.0</u>
S10-A1-6"	LOT1A	0-6"	1/30/2011	<u>66.5</u>
BUILDING LOT 1B				
S11-1B-6"	LOT1B	0-6"	1/30/2011	<u>43.2</u>
S12-1B-6"	LOT1B	0-6"	1/30/2011	<u>102.0</u>
S13-1B-6"	LOT1B	0-6"	1/30/2011	<u>52.7</u>
S14-1B-6"	LOT1B	0-6"	1/30/2011	<u>53.6</u>
S15-1B-6"	LOT1B	0-6"	1/30/2011	<u>55.5</u>
S16-1B-6"	LOT1B	0-6"	1/30/2011	<u>231.0</u>
S17-1B-6"	LOT1B	0-6"	1/30/2011	<u>60.5</u>
S18-1B-6"	LOT1B	0-6"	1/30/2011	<u>66.5</u>
S19-1B-6"	LOT1B	0-6"	1/30/2011	<u>59.5</u>
S20-1B-6"	LOT1B	0-6"	1/30/2011	8.5



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 2F				
S21-2F-6"	LOT2F	0-6"	1/30/2011	<u>62.1</u>
S22-2F-6"	LOT2F	0-6"	1/30/2011	<u>59.7</u>
S23-2F-6"	LOT2F	0-6"	1/30/2011	<u>77.0</u>
S24-2F-6"	LOT2F	0-6"	1/30/2011	<u>29.2</u>
S25-2F-6"	LOT2F	0-6"	1/30/2011	<u>43.5</u>
S26-2F-6"	LOT2F	0-6"	1/30/2011	<u>52.0</u>
S27-2F-6"	LOT2F	0-6"	1/30/2011	<u>47.2</u>
S28-2F-6"	LOT2F	0-6"	1/30/2011	11.4
S29-2F-6"	LOT2F	0-6"	1/30/2011	<u>37.7</u>
S30-2F-6"	LOT2F	0-6"	1/30/2011	<u>27.5</u>
BUILDING LOT 2E				
S31-2E-6"	LOT2E	0-6"	1/30/2011	<u>33.7</u>
S32-2E-6"	LOT2E	0-6"	1/30/2011	<u>23.6</u>
S33-2E-6"	LOT2E	0-6"	1/30/2011	<u>46.3</u>
S34-2E-6"	LOT2E	0-6"	1/30/2011	<u>41.7</u>
S35-2E-6"	LOT2E	0-6"	1/30/2011	<u>84.3</u>
S36-2E-6"	LOT2E	0-6"	1/30/2011	<u>28.4</u>
S37-2E-6"	LOT2E	0-6"	1/30/2011	<u>23.7</u>
S38-2E-6"	LOT2E	0-6"	1/30/2011	<u>42.0</u>
S39-2E-6"	LOT2E	0-6"	1/30/2011	<u>55.2</u>
S40-2E-6"	LOT2E	0-6"	1/30/2011	<u>37.9</u>



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 2D				
S41-2D-6"	LOT2D	0-6"	1/30/2011	<u>117.0</u>
S42-2D-6"	LOT2D	0-6"	1/30/2011	<u>20.6</u>
S43-2D-6"	LOT2D	0-6"	1/30/2011	<u>29.5</u>
S44-2D-6"	LOT2D	0-6"	1/30/2011	<u>33.8</u>
S45-2D-6"	LOT2D	0-6"	1/30/2011	<u>33.7</u>
S46-2D-6"	LOT2D	0-6"	1/30/2011	<u>23.4</u>
S47-2D-6"	LOT2D	0-6"	1/30/2011	<u>31.0</u>
S48-2D-6"	LOT2D	0-6"	1/30/2011	<u>30.7</u>
S49-2D-6"	LOT2D	0-6"	1/30/2011	<u>49.8</u>
S50-2D-6"	LOT2D	0-6"	1/30/2011	14.9
BUILDING LOT 2B				
S51-2B-6"	LOT2B	0-6"	1/30/2011	<u>63.6</u>
S52-2B-6"	LOT2B	0-6"	1/30/2011	<u>20.1</u>
S53-2B-6"	LOT2B	0-6"	1/30/2011	<u>25.2</u>
S54-2B-6"	LOT2B	0-6"	1/30/2011	18.1
S55-2B-6"	LOT2B	0-6"	1/30/2011	<u>38.8</u>
S56-2B-6"	LOT2B	0-6"	1/30/2011	<u>43.2</u>
S57-2B-6"	LOT2B	0-6"	1/30/2011	<u>120.0</u>
S58-2B-6"	LOT2B	0-6"	1/30/2011	<u>61.0</u>
S59-2B-6"	LOT2B	0-6"	1/30/2011	<u>37.3</u>
S60-2B-6"	LOT2B	0-6"	1/30/2011	<u>253.0</u>



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 2A				
S61-2A-6"	LOT2A	0-6"	1/30/2011	<u>138.0</u>
S62-2A-6"	LOT2A	0-6"	1/30/2011	<u>119.0</u>
S63-2A-6"	LOT2A	0-6"	1/30/2011	<u>33.7</u>
S64-2A-6"	LOT2A	0-6"	1/30/2011	<u>58.7</u>
S65-2A-6"	LOT2A	0-6"	1/30/2011	<u>173.0</u>
S66-2A-6"	LOT2A	0-6"	1/30/2011	<u>240.0</u>
S67-2A-6"	LOT2A	0-6"	1/30/2011	<u>52.4</u>
S68-2A-6"	LOT2A	0-6"	1/30/2011	13.2
S69-2A-6"	LOT2A	0-6"	1/30/2011	<u>245.0</u>
S70-2A-6"	LOT2A	0-6"	1/30/2011	<u>88.7</u>
BUILDING LOT 2C				
S71-2C-6"	LOT2C	0-6"	1/30/2011	<u>56.2</u>
S72-2C-6"	LOT2C	0-6"	1/30/2011	<u>46.5</u>
S73-2C-6"	LOT2C	0-6"	1/30/2011	17.6
S74-2C-6"	LOT2C	0-6"	1/30/2011	<u>182.0</u>
S75-2C-6"	LOT2C	0-6"	1/30/2011	<u>53.2</u>
S76-2C-6"	LOT2C	0-6"	1/30/2011	<u>94.0</u>
S77-2C-6"	LOT2C	0-6"	1/30/2011	<u>58.4</u>
S78-2C-6"	LOT2C	0-6"	1/30/2011	<u>179.0</u>
S79-2C-6"	LOT2C	0-6"	1/30/2011	<u>50.0</u>
S80-2C-6"	LOT2C	0-6"	1/30/2011	<u>50.4</u>



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 2G				
S81-2G-6"	LOT2G	0-6"	1/30/2011	<u>77.5</u>
S82-2G-6"	LOT2G	0-6"	1/30/2011	<u>37.0</u>
S83-2G-6"	LOT2G	0-6"	1/30/2011	<u>28.7</u>
S84-2G-6"	LOT2G	0-6"	1/30/2011	<u>73.3</u>
S85-2G-6"	LOT2G	0-6"	1/30/2011	<u>47.0</u>
S86-2G-6"	LOT2G	0-6"	1/30/2011	<u>134.0</u>
S87-2G-6"	LOT2G	0-6"	1/30/2011	<u>126.0</u>
S88-2G-6"	LOT2G	0-6"	1/30/2011	9.8
S89-2G-6"	LOT2G	0-6"	1/30/2011	<u>74.4</u>
S90-2G-6"	LOT2G	0-6"	1/30/2011	<u>44.3</u>
METHOD BLANK	NA	NA	2/1/2011	<1
Laboratory Method Reporting Limit				1
Model Toxic Control Act (MTCA) Method A Cleanup Levels For Soil				20

BOLD/Underlined = Analyte above MTCA 2001 Method A Cleanup levels for arsenic in soil.

Values are reported in milligrams per kilograms (mg/kg).

< # (ND) = analyte not detected above the analytical method reporting limit cited.

MTCA 2001 Method A Cleanup Levels for Unrestricted Residential Land Use - (MTCA) WAC 173-340-900 Tables.

bgs=below ground surface

NA=Not Applicable

Attachment C

Laboratory Results

Analytical Results
Analytical Chain of Custody

Attachment C
Laboratory Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

February 7, 2011

Steve Spencer, Project Manager
Environmental Management Services, LLC
7006 27th Street W, Suite E
Tacoma, WA 98466

Dear Mr. Spencer:

Included are the results from the testing of material submitted on January 31, 2011 from the Highland 20, LLC-0393-01, F&BI 101307 project. There are 106 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
EMS0207R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 31, 2011 by Friedman & Bruya, Inc. from the Environmental Management Services, Highland 20, LLC-0393-01, F&BI 101307 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-01	S1-A1-6"
101307-02	S1-A1-12"
101307-03	S2-A1-6"
101307-04	S2-A1-12"
101307-05	S3-A1-6"
101307-06	S3-A1-12"
101307-07	S4-A1-6"
101307-08	S4-A1-12"
101307-09	S5-A1-6"
101307-10	S5-A1-12"
101307-11	S6-A1-6"
101307-12	S6-A1-12"
101307-13	S7-A1-6"
101307-14	S7-A1-12"
101307-15	S8-A1-6"
101307-16	S8-A1-12"
101307-17	S9-A1-6"
101307-18	S9-A1-12"
101307-19	S10-A1-6"
101307-20	S10-A1-12"
101307-21	S11-1B-6"
101307-22	S11-1B-12"
101307-23	S12-1B-6"
101307-24	S12-1B-12"
101307-25	S13-1B-6"
101307-26	S13-1B-12"
101307-27	S14-1B-6"
101307-28	S14-1B-12"
101307-29	S15-1B-6"
101307-30	S15-1B-12"
101307-31	S16-1B-6"
101307-32	S16-1B-12"
101307-33	S17-1B-6"
101307-34	S17-1B-12"
101307-35	S18-1B-6"
101307-36	S18-1B-12"
101307-37	S19-1B-6"
101307-38	S19-1B-12"
101307-39	S20-1B-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-40	S20-1B-12"
101307-41	S21-2F-6"
101307-42	S21-2F-12"
101307-43	S22-2F-6"
101307-44	S22-2F-12"
101307-45	S23-2F-6"
101307-46	S23-2F-12"
101307-47	S24-2F-6"
101307-48	S24-2F-12"
101307-49	S25-2F-6"
101307-50	S25-2F-12"
101307-51	S26-2F-6"
101307-52	S26-2F-12"
101307-53	S27-2F-6"
101307-54	S27-2F-12"
101307-55	S28-2F-6"
101307-56	S28-2F-12"
101307-57	S29-2F-6"
101307-58	S29-2F-12"
101307-59	S30-2E-6"
101307-60	S30-2E-12"
101307-61	S31-2E-6"
101307-62	S31-2E-12"
101307-63	S32-2E-6"
101307-64	S32-2E-12"
101307-65	S33-2E-6"
101307-66	S33-2E-12"
101307-67	S34-2E-6"
101307-68	S34-2E-12"
101307-69	S35-2E-6"
101307-70	S35-2E-12"
101307-71	S36-2E-6"
101307-72	S36-2E-12"
101307-73	S37-2E-6"
101307-74	S37-2E-12"
101307-75	S38-2E-6"
101307-76	S38-2E-12"
101307-77	S39-2E-6"
101307-78	S39-2E-12"
101307-79	S40-2E-6"
101307-80	S40-2E-12"
101307-81	S41-2D-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-82	S41-2D-12"
101307-83	S42-2D-6"
101307-84	S42-2D-12"
101307-85	S43-2D-6"
101307-86	S43-2D-12"
101307-87	S44-2D-6"
101307-88	S44-2D-12"
101307-89	S45-2D-6"
101307-90	S45-2D-12"
101307-91	S46-2D-6"
101307-92	S46-2D-12"
101307-93	S47-2D-6"
101307-94	S47-2D-12"
101307-95	S48-2D-6"
101307-96	S48-2D-12"
101307-97	S49-2D-6"
101307-98	S49-2D-12"
101307-99	S50-2D-6"
101307-100	S50-2D-12"
101307-101	S51-2B-6"
101307-102	S51-2B-12"
101307-103	S52-2B-6"
101307-104	S52-2B-12"
101307-105	S53-2B-6"
101307-106	S53-2B-12"
101307-107	S54-2B-6"
101307-108	S54-2B-12"
101307-109	S55-2B-6"
101307-110	S55-2B-12"
101307-111	S56-2B-6"
101307-112	S56-2B-12"
101307-113	S57-2B-6"
101307-114	S57-2B-12"
101307-115	S58-2B-6"
101307-116	S58-2B-12"
101307-117	S59-2B-6"
101307-118	S59-2B-12"
101307-119	S60-2B-6"
101307-120	S60-2B-12"
101307-121	S61-2A-6"
101307-122	S61-2A-12"
101307-123	S62-2A-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-124	S62-2A-12"
101307-125	S63-2A-6"
101307-126	S63-2A-12"
101307-127	S64-2A-6"
101307-128	S64-2A-12"
101307-129	S65-2A-6"
101307-130	S65-2A-12"
101307-131	S66-2A-6"
101307-132	S66-2A-12"
101307-133	S67-2A-6"
101307-134	S67-2A-12"
101307-135	S68-2A-6"
101307-136	S68-2A-12"
101307-137	S69-2A-6"
101307-138	S69-2A-12"
101307-139	S70-2A-6"
101307-140	S70-2A-12"
101307-141	S71-2C-6"
101307-142	S71-2C-12"
101307-143	S72-2C-6"
101307-144	S72-2C-12"
101307-145	S73-2C-6"
101307-146	S73-2C-12"
101307-147	S74-2C-6"
101307-148	S74-2C-12"
101307-149	S75-2C-6"
101307-150	S75-2C-12"
101307-151	S76-2C-6"
101307-152	S76-2C-12"
101307-153	S77-2C-6"
101307-154	S77-2C-12"
101307-155	S78-2C-6"
101307-156	S78-2C-12"
101307-157	S79-2C-6"
101307-158	S79-2C-12"
101307-159	S80-2C-6"
101307-160	S80-2C-12"
101307-161	S81-2G-6"
101307-162	S81-2G-12"
101307-163	S82-2G-6"
101307-164	S82-2G-12"
101307-165	S83-2G-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-166	S83-2G-12"
101307-167	S84-2G-6"
101307-168	S84-2G-12"
101307-169	S85-2G-6"
101307-170	S85-2G-12"
101307-171	S86-2G-6"
101307-172	S86-2G-12"
101307-173	S87-2G-6"
101307-174	S87-2G-12"
101307-175	S88-2G-6"
101307-176	S88-2G-12"
101307-177	S89-2G-6"
101307-178	S89-2G-12"
101307-179	S90-2G-6"
101307-180	S90-2G-12"

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S1-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-01
Date Analyzed:	02/02/11	Data File:	101307-01.013
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	79.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S2-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-03
Date Analyzed:	02/02/11	Data File:	101307-03.014
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	92.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S3-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-05
Date Analyzed:	02/02/11	Data File:	101307-05.015
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S4-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-07
Date Analyzed:	02/02/11	Data File:	101307-07.016
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	190

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S5-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-09
Date Analyzed:	02/02/11	Data File:	101307-09.017
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S6-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-11
Date Analyzed:	02/02/11	Data File:	101307-11.019
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	83.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S7-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-13
Date Analyzed:	02/02/11	Data File:	101307-13.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	253

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S8-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-15
Date Analyzed:	02/02/11	Data File:	101307-15.021
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	82	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	42.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S9-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-17
Date Analyzed:	02/02/11	Data File:	101307-17.022
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	157

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S10-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-19
Date Analyzed:	02/02/11	Data File:	101307-19.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	66.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S11-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-21
Date Analyzed:	02/02/11	Data File:	101307-21.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S12-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-23
Date Analyzed:	02/02/11	Data File:	101307-23.025
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	102

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S13-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-25
Date Analyzed:	02/02/11	Data File:	101307-25.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S14-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-27
Date Analyzed:	02/02/11	Data File:	101307-27.027
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	53.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S15-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-29
Date Analyzed:	02/02/11	Data File:	101307-29.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	55.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S16-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-31
Date Analyzed:	02/02/11	Data File:	101307-31.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	231

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S17-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-33
Date Analyzed:	02/02/11	Data File:	101307-33.031
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	60.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S18-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-35
Date Analyzed:	02/02/11	Data File:	101307-35.010
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	66.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S19-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-37
Date Analyzed:	02/02/11	Data File:	101307-37.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	59.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S20-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-39
Date Analyzed:	02/02/11	Data File:	101307-39.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S21-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-41
Date Analyzed:	02/02/11	Data File:	101307-41.040
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	85	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	62.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S22-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-43
Date Analyzed:	02/02/11	Data File:	101307-43.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	59.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S23-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-45
Date Analyzed:	02/02/11	Data File:	101307-45.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	77.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S24-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-47
Date Analyzed:	02/02/11	Data File:	101307-47.043
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S25-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-49
Date Analyzed:	02/02/11	Data File:	101307-49.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S26-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-51
Date Analyzed:	02/02/11	Data File:	101307-51.045
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	79	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S27-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-53
Date Analyzed:	02/02/11	Data File:	101307-53.046
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	47.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S28-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-55
Date Analyzed:	02/02/11	Data File:	101307-55.047
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S29-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-57
Date Analyzed:	02/02/11	Data File:	101307-57.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S30-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-59
Date Analyzed:	02/02/11	Data File:	101307-59.050
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S31-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-61
Date Analyzed:	02/02/11	Data File:	101307-61.051
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S32-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-63
Date Analyzed:	02/02/11	Data File:	101307-63.052
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S33-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-65
Date Analyzed:	02/02/11	Data File:	101307-65.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	46.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S34-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-67
Date Analyzed:	02/02/11	Data File:	101307-67.053
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	41.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S35-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-69
Date Analyzed:	02/02/11	Data File:	101307-69.054
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	84.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S36-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-71
Date Analyzed:	02/02/11	Data File:	101307-71.055
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	28.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S37-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-73
Date Analyzed:	02/02/11	Data File:	101307-73.056
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S38-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-75
Date Analyzed:	02/02/11	Data File:	101307-75.057
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	42.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S39-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-77
Date Analyzed:	02/02/11	Data File:	101307-77.058
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	55.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S40-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-79
Date Analyzed:	02/02/11	Data File:	101307-79.059
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S41-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-81
Date Analyzed:	02/02/11	Data File:	101307-81.066
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	117

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S42-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-83
Date Analyzed:	02/02/11	Data File:	101307-83.067
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	20.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S43-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-85
Date Analyzed:	02/02/11	Data File:	101307-85.063
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S44-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-87
Date Analyzed:	02/02/11	Data File:	101307-87.068
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S45-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-89
Date Analyzed:	02/02/11	Data File:	101307-89.069
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S46-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-91
Date Analyzed:	02/02/11	Data File:	101307-91.071
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S47-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-93
Date Analyzed:	02/02/11	Data File:	101307-93.072
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	31.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S48-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-95
Date Analyzed:	02/02/11	Data File:	101307-95.073
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	30.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S49-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-97
Date Analyzed:	02/02/11	Data File:	101307-97.074
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	49.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S50-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-99
Date Analyzed:	02/02/11	Data File:	101307-99.075
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S51-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-101
Date Analyzed:	02/02/11	Data File:	101307-101.076
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	63.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S52-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-103
Date Analyzed:	02/02/11	Data File:	101307-103.077
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	20.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S53-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-105
Date Analyzed:	02/02/11	Data File:	101307-105.078
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	25.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S54-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-107
Date Analyzed:	02/02/11	Data File:	101307-107.079
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	18.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S55-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-109
Date Analyzed:	02/02/11	Data File:	101307-109.081
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	38.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S56-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-111
Date Analyzed:	02/02/11	Data File:	101307-111.082
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S57-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-113
Date Analyzed:	02/02/11	Data File:	101307-113.083
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S58-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-115
Date Analyzed:	02/02/11	Data File:	101307-115.084
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	61.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S59-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-117
Date Analyzed:	02/02/11	Data File:	101307-117.085
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S60-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-119
Date Analyzed:	02/02/11	Data File:	101307-119.086
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	253

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S61-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-121
Date Analyzed:	02/03/11	Data File:	101307-121.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	138

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S62-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-123
Date Analyzed:	02/03/11	Data File:	101307-123.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	119

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S63-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-125
Date Analyzed:	02/03/11	Data File:	101307-125.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S64-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-127
Date Analyzed:	02/03/11	Data File:	101307-127.045
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	58.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S65-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-129
Date Analyzed:	02/03/11	Data File:	101307-129.046
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	173

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S66-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-131
Date Analyzed:	02/03/11	Data File:	101307-131.047
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	240

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S67-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-133
Date Analyzed:	02/03/11	Data File:	101307-133.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S68-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-135
Date Analyzed:	02/03/11	Data File:	101307-135.038
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	13.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S69-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-137
Date Analyzed:	02/03/11	Data File:	101307-137.049
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	245

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S70-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-139
Date Analyzed:	02/03/11	Data File:	101307-139.050
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	88.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S71-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-141
Date Analyzed:	02/03/11	Data File:	101307-141.051
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	56.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S72-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-143
Date Analyzed:	02/03/11	Data File:	101307-143.053
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	46.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S73-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-145
Date Analyzed:	02/03/11	Data File:	101307-145.054
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	17.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S74-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-147
Date Analyzed:	02/03/11	Data File:	101307-147.055
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	182

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S75-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-149
Date Analyzed:	02/03/11	Data File:	101307-149.056
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	53.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S76-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-151
Date Analyzed:	02/03/11	Data File:	101307-151.057
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	94.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S77-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-153
Date Analyzed:	02/03/11	Data File:	101307-153.058
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	58.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S78-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-155
Date Analyzed:	02/03/11	Data File:	101307-155.059
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	179

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S79-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-157
Date Analyzed:	02/03/11	Data File:	101307-157.060
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	50.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S80-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-159
Date Analyzed:	02/03/11	Data File:	101307-159.061
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	50.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S81-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-161
Date Analyzed:	02/03/11	Data File:	101307-161.077
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	77.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S82-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-163
Date Analyzed:	02/03/11	Data File:	101307-163.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S83-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-165
Date Analyzed:	02/03/11	Data File:	101307-165.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	28.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S84-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-167
Date Analyzed:	02/03/11	Data File:	101307-167.025
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	73.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S85-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-169
Date Analyzed:	02/03/11	Data File:	101307-169.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	47.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S86-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-171
Date Analyzed:	02/03/11	Data File:	101307-171.028
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S87-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-173
Date Analyzed:	02/03/11	Data File:	101307-173.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S88-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-175
Date Analyzed:	02/03/11	Data File:	101307-175.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S89-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-177
Date Analyzed:	02/03/11	Data File:	101307-177.031
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	74.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S90-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-179
Date Analyzed:	02/03/11	Data File:	101307-179.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	44.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-69 mb
Date Analyzed:	02/02/11	Data File:	I1-69 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-71 mb
Date Analyzed:	02/02/11	Data File:	I1-71 mb.034
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	83	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-72 mb
Date Analyzed:	02/02/11	Data File:	I1-72 mb.061
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-73 mb
Date Analyzed:	02/03/11 12:45:50	Data File:	I1-73 mb.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Environmental Management Services
Date Received:	Not Applicable	Project: Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID: I1-75 mb
Date Analyzed:	02/03/11 10:47:51	Data File: I1-75 mb.008
Matrix:	Soil	Instrument: ICPMS1
Units:	mg/kg (ppm)	Operator: AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-35 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	66.5	123 b	197 b	44-151	46 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-65 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	46.3	103 b	147 b	44-151	35 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-85 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	29.5	102 b	112 b	44-151	9 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	98	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-135 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	13.2	107 b	131 b	44-151	20 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101302-11 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.03	93 b	100 b	44-151	7 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	80-120

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

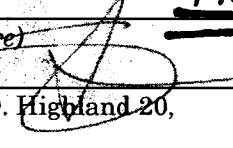
x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 1of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions



Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S1-A1-6"	01	1/31		So. 1	1							X				Run
S1-A1-12"	02															Hold
S2-A1-6"	03															Run
S2-A1-12"	04															Hold
S3-A1-6"	05															Run
S3-A1-12"	06															Hold
S4-A1-6"	07															Run
S4-A1-12"	08															Hold
S5-A1-6"	09															Run
S5-A1-12"	10	✓		✓	✓							✓				Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steven Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	FDB	1/31	10:30
Relinquished by:				
Received by:		Samples received at 17 °C		

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BIC

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 2 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions



Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S6-A1-6"	11	1/31		Soil	1											Run
S6-A1-12"	12															Hold
S7-A1-6"	13															Run
S7-A1-12"	14															Hold
S8-A1-6"	15															Run
S8-A1-12"	16															Hold
S9-A1-6"	17															Run
S9-A1-12"	18															Hold
S10-A1-6"	19															Run
S10-A1-12"	20															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPAULAK	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
18Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 3 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


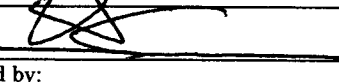
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S11-1B-6"	21	1/31		Soil	1											Run
S11-1B-12"	22															Hold
S12-1B-6"	23															Run
S12-1B-12"	24															Hold
S13-1B-6"	25															Run
S13-1B-12"	26															Hold
S14-1B-6"	27															Run
S14-1B-12"	28															Hold
S15-1B-6"	29															Run
S15-1B-12"	30															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

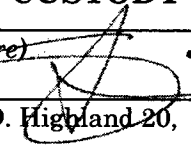
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10-30
Received by: 	Kurt Johnson	FDS	1/31	10-30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
18Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 4 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

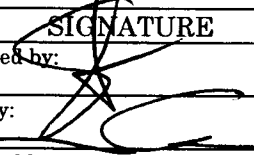
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	As				
S16-1 B-6"	31	1/31		Soil	1											Run
S16-1 B-12"	32															Hold
S17-1 B-6"	33															Run
S17-1 B-12"	34															Hold
S18-1 B-6"	35															Run
S18-1 B-12"	36															Hold
S19-1 B-6"	37															Run
S19-1 B-12"	38															Hold
S20-1 B-6"	39															Run
S20-1 B-12"	40															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	10:30
Received by:	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 5 of 18 ^{STG}

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

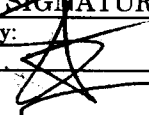
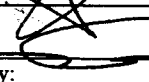
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S21-2 F - 6"	41	1/31		Soil	1											Run
S21-2 F - 12"	42															hold
S22-2 F - 6"	43															Run
S22-2 F - 12"	44															hold
S23-2 F - 6"	45															Run
S23-2 F - 12"	46															hold
S24-2 F - 6"	47															Run
S24-2 F - 12"	48															hold
S25-2 F - 6"	49															Run
S25-2 F - 12"	50															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17.0	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BT4 6 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 6 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


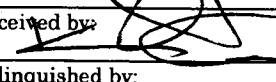
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Ausenic				
S26-2F-6"	51	1/31		Soil	1											Run
S26-2F-12"	52															hold
S27-2F-6"	53															Run
S27-2F-12"	54															hold
S28-2F-6"	55															Run
S28-2F-12"	56															hold
S29-2F-6"	57															Run
S29-2F-12"	58															hold
S30-2F-6"	59															Run
S30-2F-12"	60															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVE SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17	°C

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

Page # 7 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 7 of 18

TURNAROUND TIME

Standard (2 Weeks) **BT4**

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

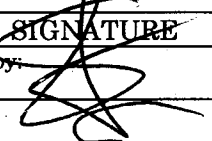

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S31-2E-6"	61	1/31		Soil	1											Run
S31-2E-12"	62															hold
S32-2E-6"	63															Run
S32-2E-12"	64															hold
S33-2E-6"	65															Run
S33-2E-12"	66															hold
S34-2E-6"	67															Run
S34-2E-12"	68															hold
S35-2E-6"	69															Run
S35-2E-12"	70															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

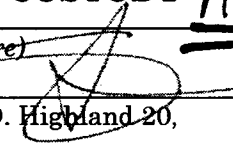
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
2018Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98166Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 8of 2018

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


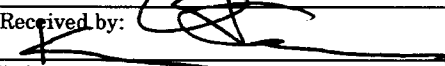
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S36-2E-6"	71	1/31		Soil	1											Run
S36-2E-12"	72															hold
S37-2E-6"	73															Run
S37-2E-12"	74															hold
S38-2E-6"	75															Run
S38-2E-12"	76															hold
S39-2E-6"	77															Run
S39-2E-12"	78															hold
S40-2E-6"	79															Run
S40-2E-12"	80															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

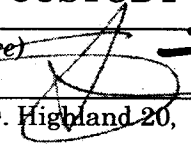
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17:00	

101307

SAMPLE CHAIN OF CUSTODY ME-01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 9 of 218

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

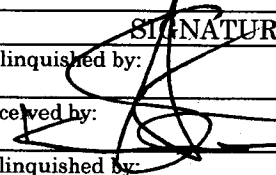
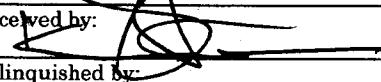
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aromatic				
541-2D-6"	81	1/31		Soil	1											Run
541-2D-12"	82															hold
542-2D-6"	83															Run
542-2D-12"	84															hold
543-2D-6"	85															Run
543-2D-12"	86															hold
544-2D-6"	87															Run
544-2D-12"	88															hold
545-2D-6"	89															Run
545-2D-12"	90															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

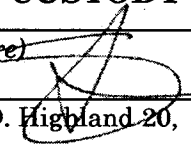
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steve Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:	Samples received at 17 °C			

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 10 of 22 18

TURNAROUND TIME

Standard (2 Weeks) BT4

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

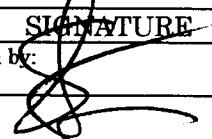
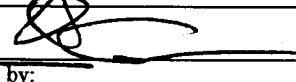
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Avesma				
546-2D-6"	91	1/31		Soil	1											Run
546-2D-12"	92															hold
547-2D-6"	93															Run
547-2D-12"	94															hold
548-2D-6"	95															Run
548-2D-12"	96															hold
549-2D-6"	97															Run
549-2D-12"	98															hold
550-2D-6"	99															Run
550-2D-12"	100															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steve Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	F3B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BTY 11 of 2818

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page #

of

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

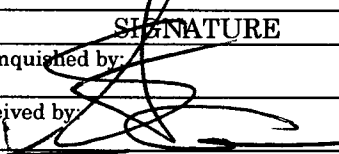
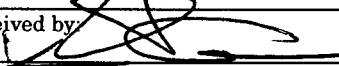
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aqueous				
S51-2B-6"	101	1/21		Soil	1											Run
S51-2B-12"	102															hold
S52-2B-6"	103															Run
S52-2B-12"	104															hold
S53-2B-6"	105															Run
S53-2B-12"	106															hold
S54-2B-6"	107															Run
S54-2B-12"	108															hold
S55-2B-6"	109															Run
S55-2B-12"	110															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

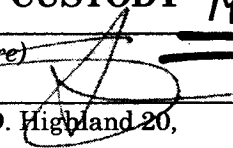
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:36
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 12 of 18

TURNAROUND TIME

Standard (2 Weeks) BTX

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

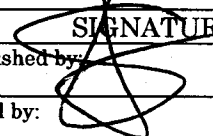
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aromatic				
556-2B-6"	111	1/31		Soil	1											Run
556-2B-12"	112															hold
557-2B-6"	113															Run
557-2B-12"	114															hold
558-2B-6"	115															Run
558-2B-12"	116															hold
559-2B-6"	117															Run
559-2B-12"	118															hold
560-2B-6"	119															Run
560-2B-12"	120															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steve Spencer	EMS	1/31	1230
Received by:				
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 13 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


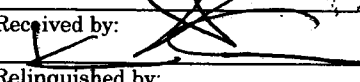
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Avesal				
S61-2A-6"	121	1/31		Soil	1											Run
S61-2A-12"	122															hold
S62-2A-6"	123															Run
S62-2A-12"	124															hold
S63-2A-6"	125															Run
S63-2A-12"	126															hold
S64-2A-6"	127															Run
S64-2A-12"	128															hold
S65-2A-6"	129															Run
S65-2A-12"	130															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Stephen Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	12°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 14 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


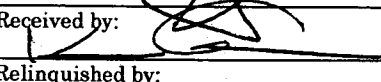
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Average				
566-2A-6"	131	1/31		Soil	1											Run
567-2A-12"	132															hold
567-2A-6"	133															Run
567-2A-12"	134															hold
568-2A-6"	135															Run
568-2A-12"	136															hold
569-2A-6"	137															Run
569-2A-12"	138															hold
570-2A-6"	139															Run
570-2A-12"	140															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	11:30
Received by: 	Kurt Johnson	FB B	1/31	10:30
Relinquished by:				
Received by:				
Samples received at 17 °C				

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BDP
15 of 18

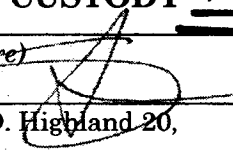
Send Report To Steve Spencer

Company Environmental Management Services, LLC

Address 7006 27th Street W, Suite E

City, State, ZIP Tacoma, WA 98466

Phone # (253) 921-7059 Fax # (253) - 369-6228

SAMPLERS (signature) 

PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 15 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

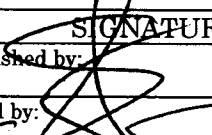

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S71-2C-6"	141	1/31		Soil	1											Run
S71-2C-12"	142															hold
S72-2C-6"	143															Run
S72-2C-12"	144															hold
S73-2C-6"	145															Run
S73-2C-12"	146															hold
S74-2C-6"	147															Run
S74-2C-12"	148															hold
S75-2C-6"	149															Run
S75-2C-12"	150															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY *ME 01/31/11*

Send Report To Steve Spencer

Company Environmental Management Services, LLC

Address 7006 27th Street W, Suite E

City, State, ZIP Tacoma, WA 98466

Phone # (253) 921-7059 Fax # (253) - 369-6228

SAMPLERS (*signature*)

PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 16 of 18 *574*

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
576-2C-6"	151	1/31		Soil	1											Run
576-2C-12"	152															hold
577-2C-6"	153															Run
577-2C-12"	154															hold
578-2C-6"	155															Run
578-2C-12"	156															hold
579-2C-6"	157															Run
579-2C-12"	158															hold
580-2C-6"	159															Run
580-2C-12"	160															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>(Signature)</i>	STEPHEN SPENCER	EMS	1/31	10:30
Received by: <i>(Signature)</i>	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

Page #

17 of 18 BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

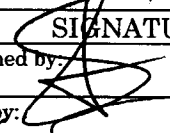

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Ar&B				
S81-2G-6"	161	1/31		Soil	1											Run
S82-2G-12"	162															hold
S82-2G-6"	163															Run
S82-2G-12"	164															hold
S83-2G-6"	165															Run
S83-2G-12"	166															hold
S84-2G-6"	167															Run
S84-2G-12"	168															hold
S85-2G-6"	169															Run
S85-2G-12"	170															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:20
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BTY

Page #

18 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

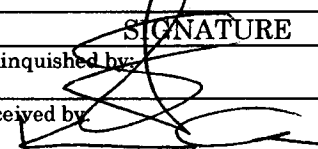

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
586-2 G-6"	171	1/31		Soil	1											Run
586-2 G-12"	172															hold
587-2 G-6"	173															Run
587-2 G-12"	174															hold
588-2 G-6"	175															Run
588-2 G-12"	176															hold
589-2 G-6"	177															Run
589-2 G-12"	178															hold
590-2 G-6"	179															Run
590-2 G-12"	180															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F & B	1/31	10:30
Relinquished by:				
Received by:	Samples received at 17:00			

Attachment D

Professional Qualifications

Attachment D

Professional Qualifications

Environmental Management Services, LLC


Environmental Management Services (EMS) is an environmental contracting and consulting company addressing client's needs throughout the West Coast. Our serves industries include the real estate community, general contractors, property developers and local and state government. We understand the importance of blending a variety of expertise and experience in order to provide our clients the most effective leadership in addressing their specific project needs. Our professionals combine a high level of technical ability with a broad understanding of the overall regulatory compliance requirements.

As an environmental services and consulting company, EMS prides itself maintaining a broad understanding of the most current regulatory compliance requirements, local and state permitting requirements and maintaining contact with our region's environmental advocacy group's positions. EMS provides our clients the services they require by offering cost effective, non-biased, practical, solutions while maintaining positive relations with the regulatory community.

Our associates have completed projects including remedial investigation / feasibility studies (RI/FS), remediation design and management, facility regulatory compliance assessments, due diligence assessments, regulatory compliance training, underground storage tank compliance and hazardous materials management as well as many other environmental compliance related matters for clients throughout the west coast in all avenues of business. The varied background our associates possess compliments the diverse nature of our clientele, providing better understanding of our client's needs and ultimate goals for their projects.

The information in the following pages outlines our professional experience and capabilities in providing environmental management and consulting services. We appreciate your interest in EMS. At your convenience, please feel free to contact our office should you have any questions regarding this document or for more information on the services we provide.

Sincerely,
Environmental Management Services



Stephen M. Spencer
Principal



Stephen M. Spencer
Principal

Mr. Spencer started his career in the environmental services and construction industry in 1987. During his career, he has worked on and successfully completed projects in many varied aspects of the environmental industry. Since 2002, as principal and senior project manager for Environmental Management Services, Mr. Spencer has successfully completed projects for clients throughout the west coast. His forte is in facility assessment, due diligence investigation, health & safety program development and remediation management.

Mr. Spencer has established positive working relationships with regulatory agencies throughout the west coast, affording his clients a superior level of confidence in his approach to their specific project.

His skills as a project manager frequently result in significant savings in both time and budget to his clients. He is proficient in report writing providing a clear, concise detail of project activities including supporting documents and figures. His client's have ranged from property owners and facility operators to the regulatory agencies themselves. His overall understanding of environmental compliance requirements provides a unique perspective on assessing potential and realized environmental risk and a creative understanding of remediation technique.

Robin P. Hamlet, L.G. / L.HG
Sr. Environmental Scientist / Project Manager

- State of Washington Licensed Geologist/Hydrogeologist
- Ecology Licensed Washington State Site Assessor
- Ecology Licensed UST Decommissioning Supervisor
- AHERA Licensed Building Inspector
- OSHA Hazardous Materials & Emergency Response Certified

Robin P. Hamlet is a Licensed Geologist and Hydrogeologist in the State of Washington. Mr. Hamlet has 30 years experience in the geological sciences with over 25 years providing professional environmental consulting services. Mr. Hamlet has been involved with environmental investigations working on Environmental Protection Agency (EPA), United States Navy and Air Force environmental projects, as a project geologist and project manager. As a Senior Project Manager in the private sector, Mr. Hamlet has performed multiple Phase I and Phase II Environmental Site Assessments; including geophysical surveys, soil and groundwater studies and has managed the design and implementation of soil and groundwater remediation projects.



As a Licensed Washington State Underground Storage Tank (UST) Decommissioner and Licensed Site Assessor, Mr. Hamlet has managed multiple UST decommissioning and remediation projects, has prepared proposals, final reports, budgets, contracts with subcontractors, negotiated with prospective clients, and coordinated activities with regulatory agencies. Mr. Hamlet has been involved in training personnel in environmental field operations and Health & Safety programs, has working knowledge of state (NW states) and federal environmental regulations and the ASTM standards. As an AHERA Building Inspector, Mr. Hamlet has performed hazardous materials surveys, air monitoring projects as well as providing asbestos abatement projects.

Adam Harris, L.G.
Sr. Environmental Scientist (Contract)

- Master of Science in Sedimentary Geology
- Licensed geologist in California and Washington
- Current OSHA 40 Hour HAZWOPER
- Certified Oracle Database 9 Administrator
- Certified MS Access 2007 Administrator
- Certified ARC/INFO 9.1 Professional

Mr. Harris has a Bachelors of Science degree from the University of California (UC), Davis in Environmental & Resources Sciences, Specializing in Vadose zone and aqueous geochemistry, hydrology, and environmental management. Mr. Harris graduated with Honors and a Citation for excellence. Mr. Harris continued his education, receiving his Masters in Geology from the University of California, Davis. His thesis Topic was: Environmental geochemistry and paleomagnetism of sediment cores obtained from Ocean Drilling Program Leg 169S, Saanich Inlet, British Columbia.

Engineering Geologist,
Leaking Underground Storage Tank Cleanup Program (2001 to 2005)

- Mr. Harris, as a California State Water Resources Board site manager, implemented state and federal regulations for LUST program. He provided regulatory oversight, reviewed and commented on hydrogeologic reports, plans and findings submitted by other regulated parties for LUST surface spill sites, and surface mines.
- Mr. Harris conducted site investigations, developed site conceptual models, model development, calibration and validation. Further, he reviewed petitions appealing technical decisions of local and regional agencies, Mediated and resolved conflicts between local regulatory agencies and the regulated community.



- Mr. Harris has authored professional opinions, position papers, technical reports, legal orders, notices, presentations and letters for wide stakeholder distribution. Investigated and reported on emerging contaminant fate and transport pathways and collaborated on development and management of statewide online site reporting database.
- Provided technical oversight and guidance to local UST programs, building local program knowledge and ensuring statewide program consistency. Conducted oversight of UST inspections for consistency in program implementation. Introduced legislative concepts resulting in promulgation of new UST regulations.

Geologic Technician - 1999 to 2000

- Mr. Harris participated in international scientific research expedition. Planned transport, set up and operation of environmental analysis laboratory in Antarctica. Investigated and analyzed high-resolution environmental records. Reported research results for publication.

James E. Corcoran, P.E.

Sr. Project Manager / Sr. Project Engineer (Contract)

- Bachelor of Science - Civil Engineering - Oregon State University - 1991
- Washington State Registered Professional Engineer – 1999
- OSHA Hazardous Materials & Emergency Response Certified

Mr. Corcoran has 17 years of experience in Civil Engineering and Project Management. For the past three years, Mr. Corcoran has been the principal of a consulting business that provides civil engineering consulting and site development services including:

- Critical Areas Review
- FEMA floodplain study
- State Environmental Policy Act (SEPA) checklist
- Stormwater Pollution Prevention Plans (SWPPP)
- Spill Prevention, Control, and Countermeasure (SPCC) plans
- Temporary Erosion/Sediment Control (TESC) plans
- Permanent soil stabilization and precise grading plans
- Surface water collection, detention, retention, treatment, and infiltration design
- Construction coordination with utility purveyors
- Site inspection to verify conformance with design intent and contract documents

Mr. Corcoran has provided civil engineering consulting and stormwater management on residential, commercial, and industrial development projects in multiple Washington state jurisdictions including the City of Tacoma, the City of Lacey, the City of Kent, Pierce County, and King County. Specific projects that Mr. Corcoran provided engineering service include:



- Preparing a TESC plan, SPCC plan, and surface water drainage collection and treatment system for a proposed petroleum products recycling process facility which discharges to a municipal storm sewer located in the Port of Tacoma
- Preparing a SEPA checklist, TESC plan, SPCC plan and surface water drainage collection and treatment system for a proposed privately owned fueling facility, which drains to an environmentally sensitive wetland in the City of Kent.
- Preparing a TESC plan, and permanent surface water drainage retention and treatment system, which infiltrates to site soils underlying a proposed commercial retail center in Pierce County.
- Preparing a TESC plan and permanent surface water drainage collection and treatment system which discharges to a municipal storm sewer in the City of Tacoma.
- Preparing a TESC plan and permanent surface water drainage collection, detention and treatment system for a proposed supermarket and commercial retail center located on the Key Peninsula.

Collette Foley, B.S. Geology
Environmental Scientist / Geologist

- Ecology Licensed Site Assessor
- Ecology Licensed UST Decommissioning Supervisor
- AHERA Licensed Building Inspector
- OSHA Compliance Supervisor
- OSHA Hazardous Materials & Emergency Response Certified

Ms. Foley has been conducting Phase I and II Environmental Site Assessments of commercial, industrial, multi- and single-family residential properties throughout western Washington since 2004. Ms. Foley performs a variety of activities associated with completing due diligence investigations including, but not limited to current and historical site research, regulatory agency file reviews, and subsurface investigations including drilling soil borings and installing monitoring wells to determine the presence and outcome of contamination in soil and groundwater.

Additionally, Ms. Foley completes asbestos “*Good Faith*” surveys prior to demolition or renovation of buildings; conducts project oversight for UST removals; and provides extensive environmental consulting as requested. Ms. Foley received her Bachelors degree in Geology and Environmental Science in 2003 from Pacific Lutheran University and has over two years experience as a field geologist / hydrogeologist performing regional hydrogeologic characterization and production well drilling.



Kevin Foley, B.S. Environmental Science, AICP
Sr. Environmental Planner

- AICP Certified Planners
- Washington State Commercial Real Estate Agent

Mr. Foley currently serves as EMS's main point of contact to assist in the resolution of land use, zoning and permitting issues at the local, state and federal level. He has extensive experience in helping prepare and process development proposals for vacant property and the expansion or renovation of developed sites. He also coordinates certain baseline/investigative work by coordinating land surveys needs, sensitive area analysis and the completion of civil design plans for roads, water, traffic and storm water requirements.

Gina Mulderig, B.S. Chemistry
Environmental Scientist / Chemist

- Ecology Licensed Site Assessor
- Ecology Licensed UST Decommissioning Supervisor
- AHERA Licensed Building Inspector
- Certified Erosion and Sediment Control Lead
- OSHA Hazardous Materials & Emergency Response Certified

Ms. Mulderig received her Bachelors degree in Chemistry from the University of Puget Sound in 1979. Ms. Mulderig has been working in the environmental regulatory compliance field since 1985, starting her career with a position as an environmental analyst for Weyerhaeuser Company. Her fifteen year position at Weyerhaeuser required a thorough knowledge of environmental regulatory compliance, focusing on groundwater monitoring, waste water management, storm water management and facility compliance audits.

Ms. Mulderig worked with two local environmental services / consulting firms from 2000 until 2007, greatly increasing her overall regulatory compliance, hydrogeology and environmental engineering knowledge and experience.

Her position with EMS as a Project Manager / Environmental Scientist provides a vast knowledge base to EMS clients in multiple areas of regulatory compliance and environmental science.



Kaitlyn Allegretti, B.S. Geology
Environmental Scientist / Technician

- Ecology Licensed UST Decommissioning Supervisor
- Ecology Licensed Site Assessor
- AHERA Licensed Building Inspector
- OSHA Hazardous Materials & Emergency Response Certified

Ms. Allegretti serves as a site manager and field technical for EMS. Ms. Allegretti graduated from the University of Dayton (2005) with a Bachelor's degree in Geology. Ms. Allegretti's primary responsibilities are field work including monitoring well sampling, underground storage tank closure and decommissioning and asbestos inspections. Ms. Allegretti was licensed as an AHERA building inspector and UST Decommissioner within the first 60 days of her employment.

During her two years with EMS, Ms. Allegretti has completed in excess of fifty Phase I Environmental Site Assessments and in excess of 20 commercial underground storage tank closure projects.

James D. Coppernoll, L.G. / L.HG (Sub-Consultant)
Licensed Geologist / Hydrogeologist

- Washington State Licensed Geologist and Hydrogeologist
- Ecology Licensed Site Assessor

James D. Coppernoll is a Washington State licensed Geologist and Hydrogeologist with thirteen years of experience practicing environmental geology in the Northwest. During his career, Mr. Coppernoll worked with clients ranging from major oil companies and national corporations to local businesses to identify, manage, and resolve their environmental problems and helped local agencies, businesses, and individuals with their environmental, geological, and regulatory issues.

Mr. Coppernoll has conducted various environmental and geological investigations ranging from numerous Phase I Environmental Assessments to contaminated site investigations and remedial planning and implementation as well as land use and development studies in Washington, Oregon, Idaho, Montana, and Alaska, and has frequently acted as a regulatory liaison and client representative in third-party negotiations.

Mr. Coppernoll managed all phases of assessment and remediation at dozens of retail and bulk fuel facilities for major oil companies in the Northwest including: excavation and disposal of contaminated soil; free product recovery; feasibility studies; and design, installation, and



operation/maintenance of in-situ soil and ground water remediation systems. Mr. Coppernoll managed many of these sites from initial assessment through remediation and closure with the state.

Mr. Coppernoll has conducted geological investigations and assessments for diverse property development projects in the northwest including landfills, hot springs, and residential properties. The purpose of these assessments and investigations was to provide professional and reliable information for use in developing sensitive areas properties.

Professional References

Diamond Parking Services
Mr. Bob Turley, CFO
3161 Elliott Ave. Ste. 200
Seattle, Washington 98121
(206) 284-3100 (Client)

Michael J. Goldfarb Enterprises, LLC
Brett Goldfarb, President
1420 Fifth Avenue. Suite 2625
Seattle, WA 98101-2333

The Wattles Company
Craig Wattles, President
35800 2249th Ave SE
Enumclaw, Washington 98022
(253) 272-7205

Baseline Engineering, Inc.
Terry Ferguson
1910 64th Ave. West
Fircrest, WA 98466
(253) 565-4491 (Client)

Best Parking Lot Services
Rebecca Craig, Owner
PO Box 159
Sumner, Washington 98390
(253) 863-3330 (Client)

Republic Services / Regional Disposal
Leslie Whiteman, Special Waste Manager
54 South Dawson Street
Seattle, Washington 98134
(206) 332-7711 (Client)

Joe Hall Construction
Robert Walker, Project Manager
1317 54th Ave. E.
Tacoma, Washington 98424
(253) 922-6815 (Client)

R.W. Rhine, Inc.
Mr. Joel D. Simmonds, President
1124 112th St. East
Tacoma, Washington 98445
(253) 531-9548 (Client)

CAM Properties
Mr. Peter Coates, President
18420 68th Avenue
Kent, Washington 98032
(425) 251-3268 (Client)

Gallanar Inc. / Independent Fuels
Mike Gallanar, President
PO Box 15661
Seattle, Washington 98115
(206) 779-8860 (Client)



Financial Institution References

First Savings Bank Northwest
Mr. John Wallace, Sr. Vice President
Commercial Lending
400 Industrial Drive, Suite 110
Tukwila, Washington 98188
(206) 719-0118

West Coast Bank
Mr. Robert Salvador, Vice President
Commercial Lending
400 Industrial Drive, Suite 110
Tukwila, Washington 98188
(206) 719-0118

KeyBank
Jennifer E. Ringenbach, Vice President
Commercial Lending
1101 Pacific Avenue
Post Office Box 11500
Tacoma, Washington 98411-5500

Washington Trust Bank
Mr. Jack Heath, President
PO Box 2127
Spokane, Washington 99210-2127
(509) 353-3897

Washington First International Bank
Kathleen Herdlein
Manager
9709 Third Ave NE, Suite 110
Seattle, Washington
(206) 830-7156

Commercial Real Estate References

Johnson Commercial
Tim Johnson, President
11120 Gravelly Lake Drive SW
Lakewood, Washington 98499
(253) 589-9999 / tim@tjcp.biz

CB Richard Ellis | Brokerage Services
John Bauder, Vice President
1145 Broadway Plaza, Suite 1000
Tacoma, WA 98402
(253) 596-0047 / John.Bauder@cbre.com

Neil Walter Company
Bruce Valentine, Principal
Foss Landing
1940 East D Street, Suite 100
Tacoma, Washington 98421
(253) 779-2400/bvalentine@neilwalter.com

PDSK Properties, Inc.
Paul Krakow, President
PO Box 98630
Lakewood, WA 98496-8630
(253) 627-4070



Public Agency References

Tacoma Pierce County Health Department
Rob Olsen, Special Inspector
3629 South D Street, MS 170
Tacoma, WA 98418-6813
(253) 798-2855 - Office

Tacoma Pierce County Health Department
Sharon Bell, Special Inspector
3629 South D Street, MS 170
Tacoma, WA 98418-6813
(253) 798-2891 – Office

Tacoma Public Utilities
Paris Um, Health & Safety Manager
3628 South 35th Street
Tacoma, WA 98411-0007
(253) 502-8555 - Office

Pierce County
Rick Tacket, Property Manager
1102 Broadway
Tacoma, Washington 98402
(253) 798-6200

Washington Department of Ecology
Carol Johnston, Site Manager / Inspector
PO Box 47775
Olympia, WA 98504-7775
(360) 407-6263 – Office

King County DDES
Elizabeth Deraitus Abatement Manager
900 Oakesdale Ave SW
Renton, WA 98057-5212
206-296-7090

Yakima County
Mark Cleaver, Project Engineer
128 N. 2nd Street, Fourth Floor
Yakima, Washington 98901
(509) 574-2314

Washington Department of Ecology
Chuck Cline, Program Director
PO Box 47775
Olympia, WA 98504-7775
(360) 407-6267 - Office




Arsenic Contaminated Soil Corrective Action Plan (Revised)

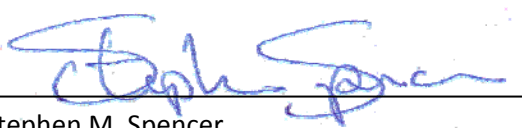
1400 Highland Parkway
Tacoma, Washington

Original: February 16, 2012
Revised: March 26, 2012

Completed For:

Highlands Twenty, LLC
Joe Foss, Managing Partner
1400 Highland Parkway
Tacoma, Washington



Matthew P. Loxterman
Sr. Environmental Scientist

Stephen M. Spencer
Principal Environmental Scientist

Prepared By:

ECI | Environmental Consulting.
PO Box 153
Tacoma, Washington 98333
(253) 238-9270

ECI Project No.: 0393-02

Table of Contents

1.0	Introduction	3
1.1	Objectives	3
1.2	Background	3
1.2	Site Geology	4
2.0	Previous Investigations	4
2.1	Regulatory Compliance	4
3.0	Site Remediation	4
3.1	Sample Collection & Analysis	5
3.2	Contaminated Soil Stabilization – Golf Course Landscaping	5
3.3	Tee Box / Teeing Ground Construction	5
3.2	Health & Safety	6
4.0	Site Closure Reporting – Voluntary Cleanup Program	6
5.0	Conclusion	6

List of Attachments

Attachment A: Project Figures

- Figure 1: Site Location Map
- Figure 2: Site Topographic Map
- Figure 3: Site Map - Area
- Figure 4: Site Map – Lot 2A
- Figure 5: Site Map – Lot 2B
- Figure 6: Site Map – Lot 2C
- Figure 7: Site Map – Lot 2D
- Figure 8: Tee Box / Teeing Ground - General Grading Plan

Attachment B: Previous Environmental Reports

- February 2011 Arsenic Investigation
- September 2011 Arsenic Investigation

1.0 Introduction

EcoCon, Inc. (ECI), at the request of Highland Twenty, LLC, has completed this Corrective Action Plan (CAP) following the identification of arsenic impacted soil on nine prospective building sites in Tacoma, Washington. These sites are located at 1400 Highland Parkway, Tacoma, Washington on Pierce County parcels 4467100700, 4467100660, 4467121270 and 4467121280. ECI understands that the current development plan has been changed to include only four of the original nine lots. The new development plan will include the removal of arsenic impacted soil from four future residential building sites located on two of parcels 4467121270 (lots 2A and 2B) and 4467121280 (lots 2D and 2E), use the impacted soil for improvements to the parent parcels, complete the re-plat separating the newly remediated lots from their original “parent” parcels and apply for a No Further Action Determination (NFA) for the newly remediated and platted lots from the Washington State Department of Ecology (Ecology).

1.1 Objectives

This CAP details the remediation activities selected to bring the four selected site(s) into general compliance with Washington State Model Toxics Control Act (MTCA) Cleanup Regulations (WAC 173-340) and obtain a “No Further Action” (NFA) determination from the Department of Ecology (Ecology).

The objective of this CAP is to evaluate and describe the remedial techniques selected to clean up contaminated site soils impacted by offsite historic actives at the Asarco Smelter located in Ruston, Washington.

1.2 Background

According to the Washington Department of Ecology (Ecology), the Site is located within the Tacoma Asarco Smelter Plume (Smelter Plume)¹. The City of Tacoma has required that the subject Site(s) be assessed for arsenic and lead contamination related to the Smelter Plume. Ecology provides sampling guidelines that stipulate a minimum of ten (10) soil samples be collected per acre or building site at six inch increments.

The Site was historically naturally forested then developed into an 18-hole golf course in the 1930's. Using existing soil and imported soil, the golf course was landscaped. The golf course grounds have been routinely re-landscaped over the past 80 years, gradually reducing the original 18-holes to 9-holes and the construction of a residential community surrounding the golf course. The natural topography of the golf course and adjacent areas consists of a gently rolling landscape having a gross general downward slope to the west. With development and redevelopment of the area some of the rolling

¹ http://www.ecy.wa.gov/programs/tcp/sites/dirt_alert/studies_and_maps/sources.html

topography has been smoothed and some accentuated with the addition of roads, building sites, and fairways.

1.2 Site Geology

Based on test pit excavations completed during a geotechnical survey (Allen L. Hart Engineering Geologist – February 2011), below a layer of sod/topsoil, in non fill areas the site is generally underlain by approximately one to three feet of brown to tan, loose to medium dense, silty sand having a variable gravel content, which in turn is underlain by a tan-to gray, medium dense to very dense, silty sand with a varying gravel content (glacial till, Alderwood Group agricultural soils².)

2.0 Previous Investigations

Initial sampling completed in February 2011 identified Arsenic at concentration exceeding the 20 mg/kg MTCA-A CUL at 95% of the sample locations encompassing each of the original nine building sites extending from the surface to 6 inches bgs (Table 1 – Attached). A second sampling event conducted on Lot 2A (one of the original 9 lots) on September 9, 2011 included the collection of ten soil samples at 18 to 24 inches bgs. Of the 10 sample locations, three were reported exceeding the MTCA-A Arsenic CUL of 20 mg/kg. Total lead was analyzed on each of the three samples reported containing arsenic exceeding the applicable CUL. Total lead concentrations were reported below the 250 mg/kg MTCA-A CUL.

2.1 Regulatory Compliance

Regulatory compliance for this project is provided by the Washington State Department of Ecology (Ecology), Washington Administrative Code (WAC) 173-340, the Model Toxic Control Act (MTCA). Impacted soil investigations and remedial actions must meet the substantive requirements as specified in MTCA. The target point of compliance is meeting the Method A Soil Cleanup Levels for Unrestricted Land Uses – WAC 173-340-900 - Table 740-1. Specifically, the cleanup level for total arsenic (20 mg/kg) and total lead (250 mg/kg).

3.0 Site Remediation

Using excavation equipment the top 12 inches of soil will be excavated and transferred to a receiving area located approximately 200 feet away from the excavation area (Figure 2). Each lot is expected to contain 200 to 300 cubic yards of impacted soil. After the soil transfer, the receiving area will be landscaped into a tee box³ or other golf course features (see “Contaminated Soil Stabilization - Tee Box & Landscaping” - below). Six millimeter plastic will be used to cover the soil until tee box / landscape construction is completed.

² <http://www.dnr.wa.gov/ResearchScience/Topics/GeologyofWashington/Pages/lowland.aspx>

³ The "tee box" is just another term for teeing ground. The teeing ground is the starting point on each hole of a golf course. It's the area covered by the space in-between two tee markers and two-club-lengths back from the tee markers.

Following the removal of the initial 12 inches of soil, samples will be collected at 10 select locations and analyzed for arsenic and lead. Sample results will be expedited to assist in any additional excavation beyond 12 inches bgs. This process will be repeated every 12 inches until sample results are reported below applicable CULs. Based on previous sampling events (September 2011) and subsurface geology, specifically glacial till (till) formations identified in the 2011 geotechnical survey (Allen L. Hart Engineering – 2011) impacted soil is not expected to extend below 36 inches bgs.

3.1 Sample Collection & Analysis

Soil sample locations following the initial excavation event will be placed in general proximity to the original sample locations as shown on Figure 4-7). Ten samples will be collected initially following excavation activities. Soil sample analytical results will dictate additional excavation and sampling requirements.

Soil samples will be collected following each 12 inch excavation activity. Each sample will be collected by a properly trained environmental professional using industry standard sampling techniques. At each of the ten sample locations, a discrete sample will be collected extending approximately 6 inches below existing grade using properly decontaminated sampling equipment and donning disposable personal protective equipment (e.g. nitrile gloves, eye protection). One new 4-ounce laboratory provided sample jar with teflon lined lid will be filled, assigned a unique identification number and stored in a climate controlled container maintained at 4° Celsius. Following sample collection, the samples will be delivered to a properly accredited laboratory under industry standard Chain of Custody. Each sample will be analyzed for arsenic and lead by EPA Method 200.8.

3.2 Contaminated Soil Stabilization – Golf Course Landscaping

Soil transported from each of the remediation sites will be stockpiled / landscaped to allow for golf features construction following transfer activities. The landscaped surface (soil surface) will be graded and covered with plastic daily during import and landscape activities. Stormwater best management practices will be implemented as necessary, and as described in the City of Tacoma approved temporary erosion and sediment control (TESC) plan. Final grade will be landscaped and incorporated into existing golf course features and seeded per golf course specifications.

3.3 Tee Box / Teeing Ground Construction

Final disposition of displaced arsenic impacted soil will be used to construct four new Teeing Grounds (Tee Box's). Each box will be approximately 100 to 150 feet in length and 34 to 50 feet wide. The Tee Box elevation will slope gradually (3 to 1) from the existing grade to the final grade expected to be 2.5 to 4 feet above the existing grade (Figure 8). The imported arsenic impacted soil will be graded as specified and seeded. New top soil and mulch will be used as necessary. As the receiving area where the Tee Box is to be constructed is also impacted with arsenic, further capping features are deemed excessive.

3.2 Health & Safety

A site specific health and safety plan will be completed addressing hazards associated with known contaminants, proposed excavation activities and outlining working conditions and worker exposure.

All site workers and inspectors conducting compliance inspections must have the following minimum training:

1. 40 hour Hazardous Waste Sites training as required by OSHA or
2. Certification showing completion of the annual Refresher for Hazardous Waste sites (8 hour), if applicable.

4.0 Site Closure Reporting – Voluntary Cleanup Program

Following excavation and confirmation sampling activities a report will be prepared detailing remediation activities, sampling activities and analytical results.

Each of the four sites will be entered separately into the Washington State Voluntary Cleanup Program (VCP) with the intent to receive a No Further Action (NFA) determination. Collaboration with Ecology both through the use of this work plan and continued communication, prior to, during and following corrective action activities is expected to meet all requirements outlined within the Washington Administrative Code (WAC) 173-340: Model Toxic Control Act (MTCA).

5.0 Conclusion

The purpose of this work plan is to provide corrective action guidelines during construction activities. As with all projects, the more information gathered in the planning stages, the less possibility of plan deviation or need for contingencies. As identified in the previous investigations, the top six inches of soil is impacted with arsenic exceeding the MTCA-A cleanup level of 20 mg/kg. What is not known is the vertical extent (depth) of impacted soil. Sample results from the September 2011 sampling event identified arsenic at 35% of sample locations at 18 to 24 inches bgs. Glacial till or “hard pan” was identified during the 2011 Geotechnical Assessment (Hart – 2011) at depths ranging from 12 to 36 inches bgs throughout the site(s). Total excavation depth is not expected to exceed 24 inches bgs except at a minimal number of locations on each Lot.

Specific activities with regard to the excavation and management of impacted soil and the installation of the final landscape will vary, however the intent remains constant, to remove impacted soil exceeding applicable cleanup levels, and apply for a No Further Action determination on each of the four newly subdivided lots.

Following construction, a summary report detailing the specific corrective action will be completed and submitted to Ecology, with a request for a No Further Action determination.

Attachment A

Project Figures

Figure 1: Site Location Map

Figure 2: Site Topographic Map

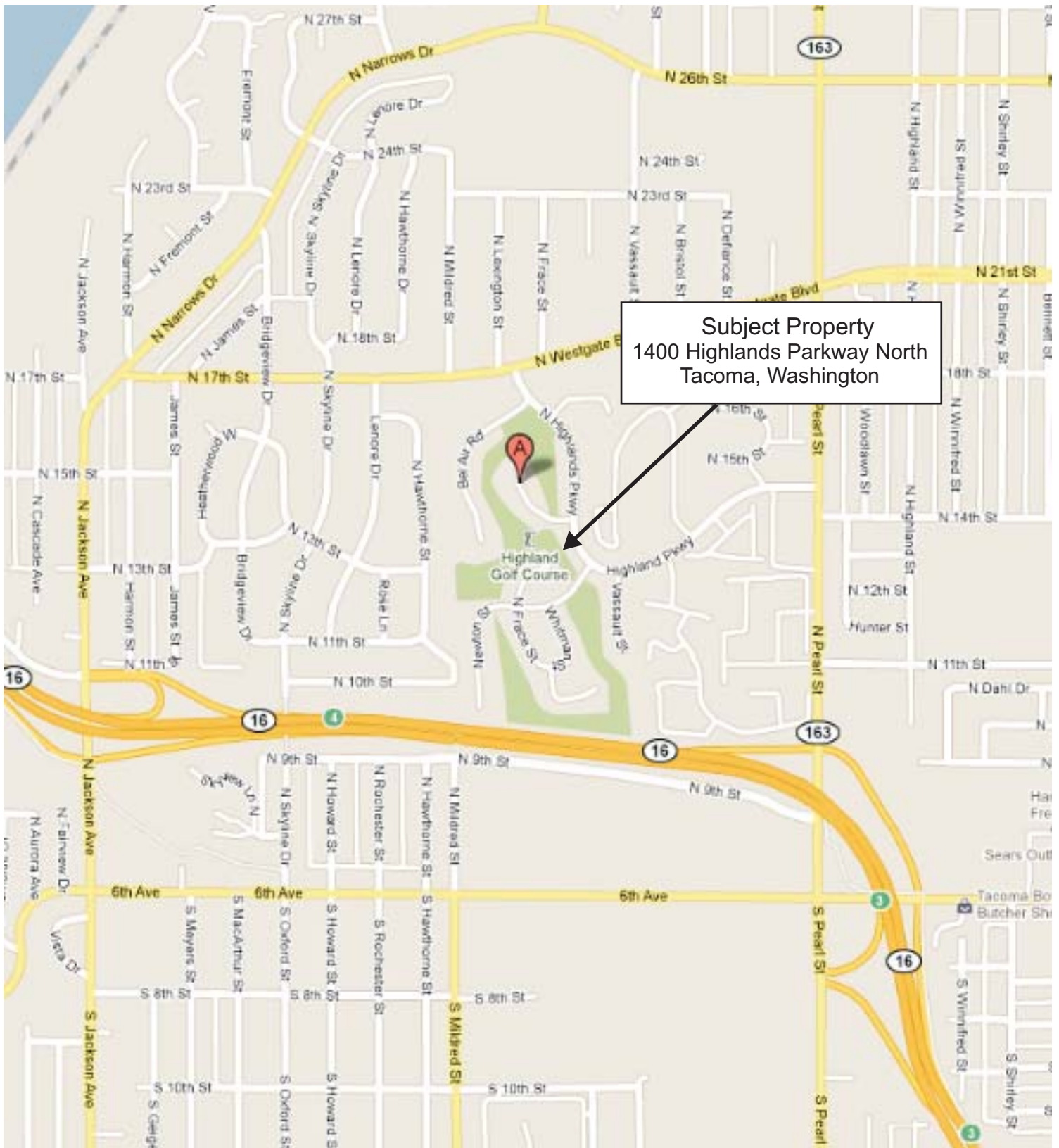
Figure 3: Site Map - Area

Figure 4: Site Map – Lot 2A

Figure 5: Site Map – Lot 2B

Figure 6: Site Map – Lot 2C

Figure 7: Site Map – Lot 2D



Site Location Map
1400 Highlands Parkway North
Tacoma, Washington

Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

01

Sheet 01 of 01

ECI | environmental consulting
www.ecoonline.com



Site Topographic Map
1400 Highlands Parkway North
Tacoma, Washington

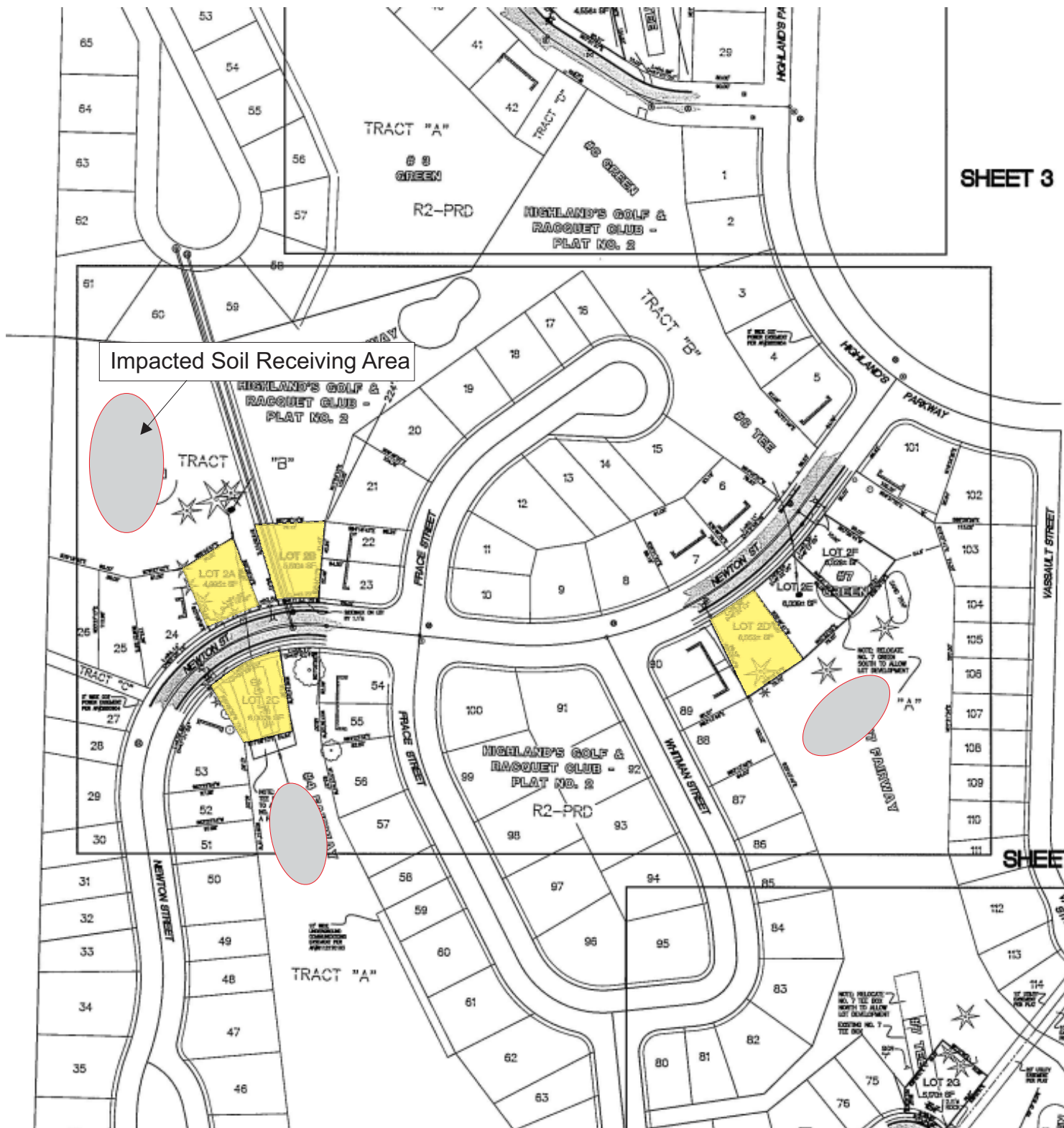
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

02

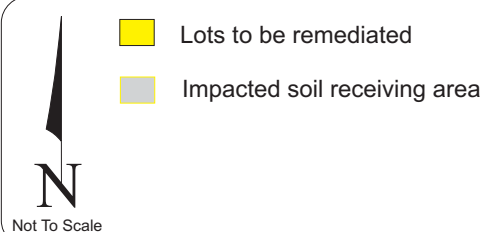
Sheet 01 of 01

ECI | environmental consulting
www.eciconline.com



SHEET 3

SHEET



Site Map
1400 Highlands Parkway North
Tacoma, Washington

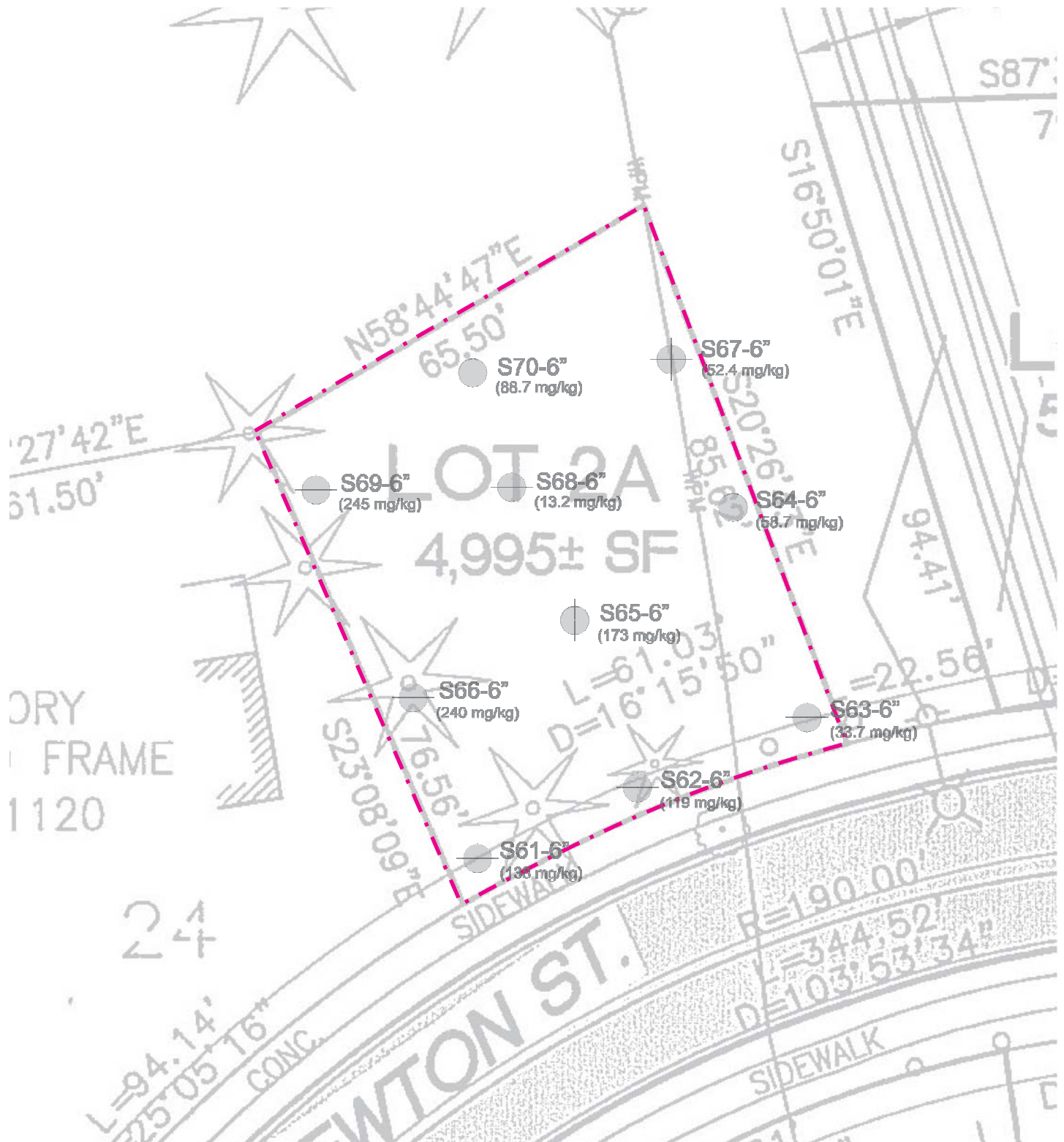
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

03

Sheet 01 of 01

ECI | environmental consulting
www.ecoonline.com



Lot 2A
1400 Highlands Parkway North
Tacoma, Washington

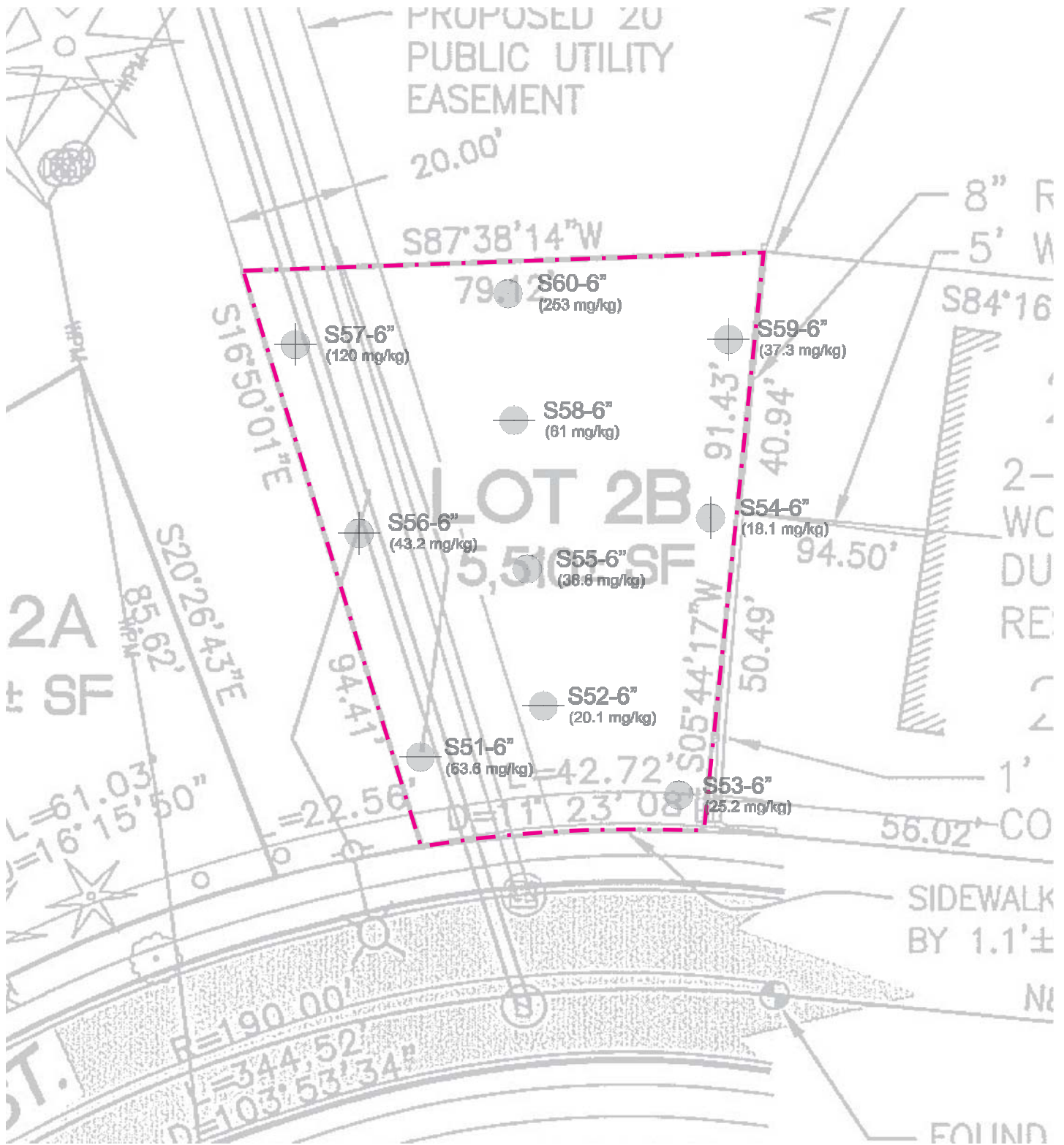
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

04

Sheet 01 of 01

ECI | environmental consulting
www.ecoconline.com



Lot 2B
1400 Highlands Parkway North
Tacoma, Washington

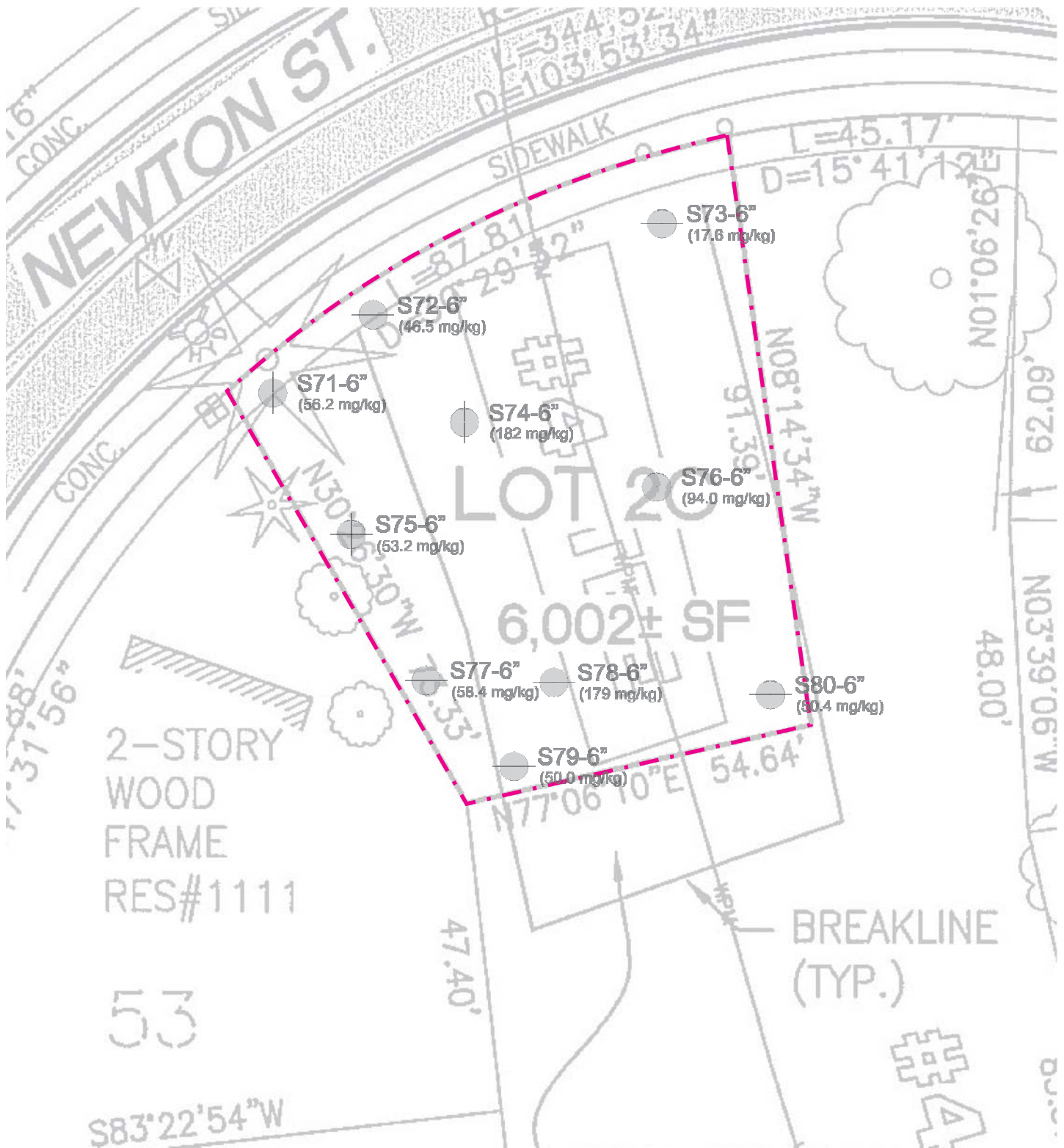
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

05

Sheet 01 of 01

ECI | environmental consulting
www.eciconline.com



Lot 2C
1400 Highlands Parkway North
Tacoma, Washington

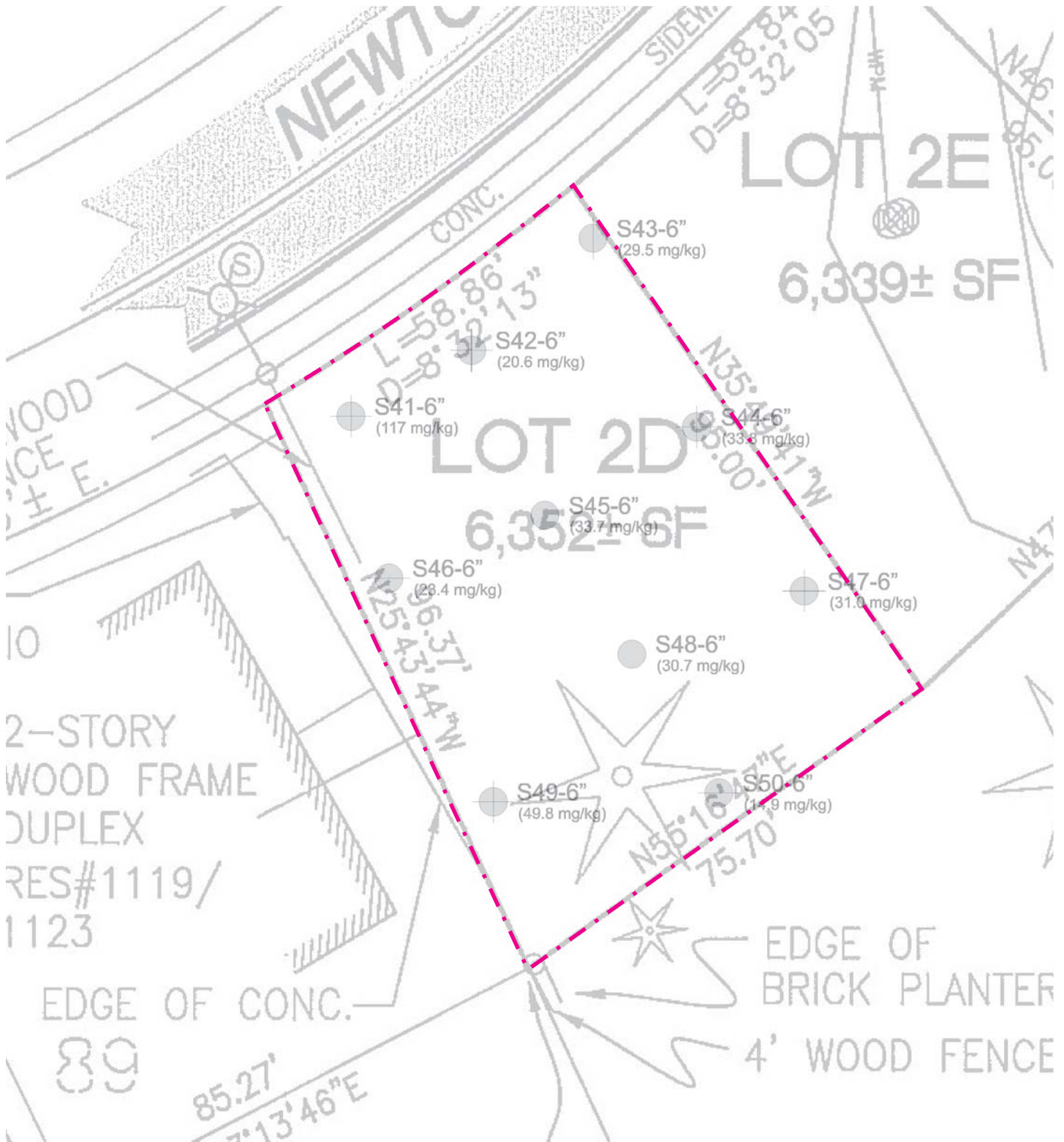
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

06

Sheet 01 of 01

ECI | environmental consulting
www.ecoconline.com



Lot 2D
1400 Highlands Parkway North
Tacoma, Washington

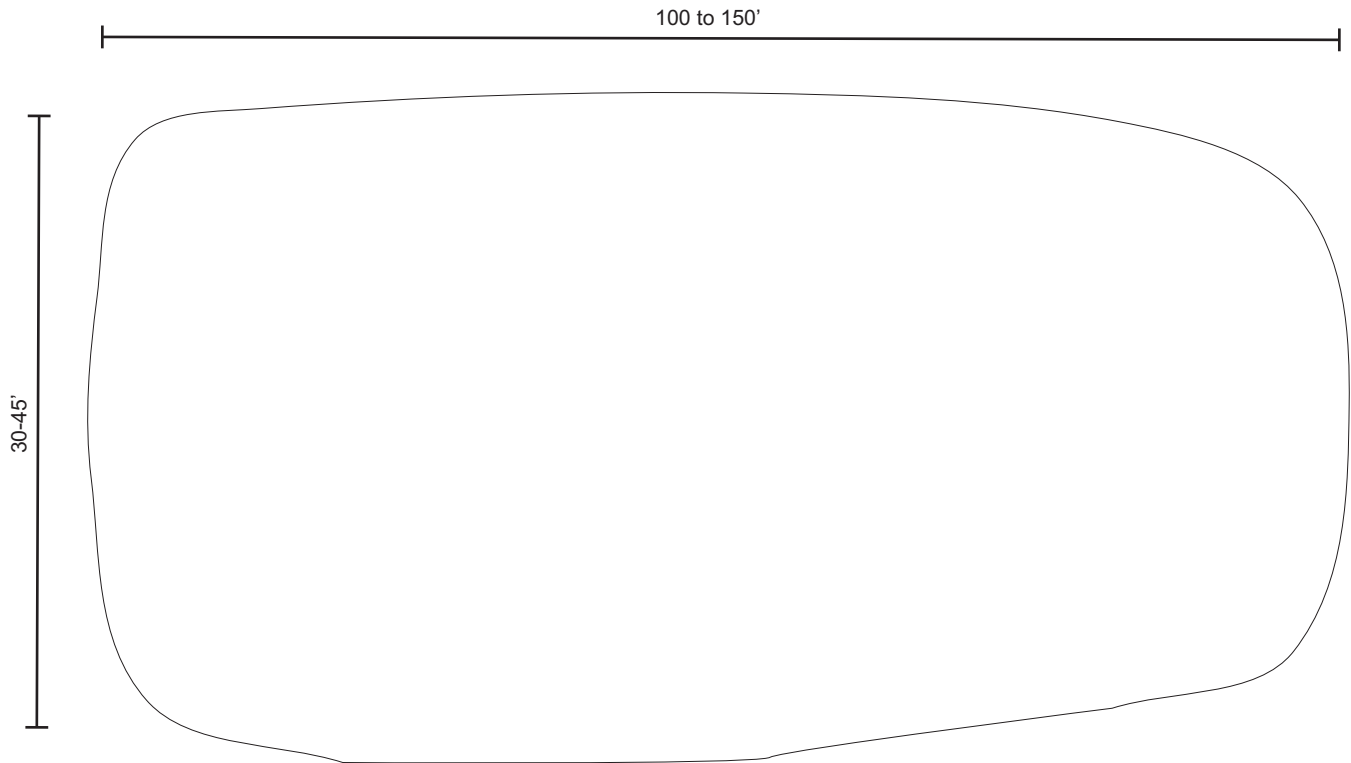
Date: January 17, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

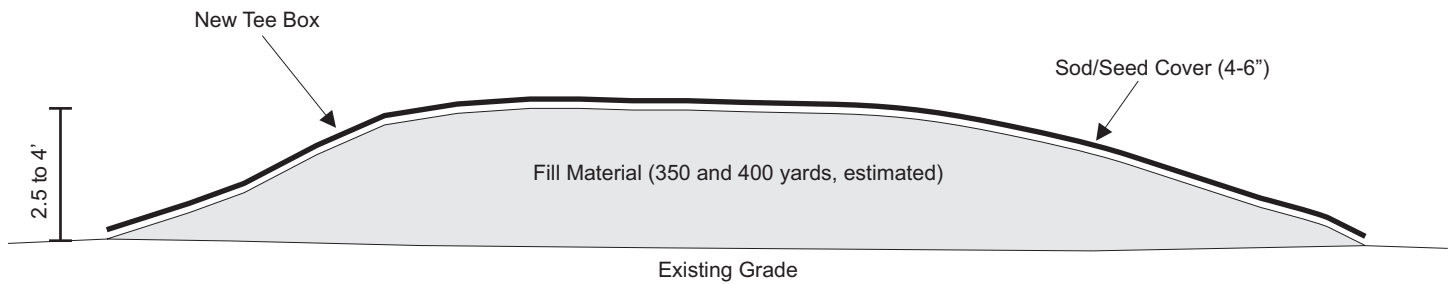
07

Sheet 01 of 01

ECI | environmental consulting
www.eciconline.com



PLAN VIEW



SIDE PROFILE



Tee Box / Teeing Ground General Grading Plan
1400 Highlands Parkway North
Tacoma, Washington

Date: March 29, 2012
Completed By: M. Kennedy
Reviewed By: S. Spencer
Version: ECI-002
Project No.: 0393-03

Figure No.:

08

Sheet 01 of 01

ECI | environmental consulting
www.ecoconline.com

Attachment B

Previous Environmental Reports

February 2011 Arsenic Investigation
September 2011 Arsenic Investigation

Attachment B
Previous Environmental Reports



February 11, 2011

Highlands Twenty, LLC
C/o Kevin Foley
Baseline Engineering
1910 64th Avenue
Fircrest, WA 98466

Re: Surface Soil Investigation
1400 Highland Parkway
Tacoma, Washington

Dear Mr. Foley:

Environmental Management Services, LLC (EMS), at the request of Highland Twenty, LLC, completed a focused, surface soil environmental investigation. This investigation was conducted on nine proposed residential building sites located on portions of Pierce County Parcels 4467100210, 4467100660, 4467121280, 4467121270 located in Tacoma Washington (Subject Properties – Figures 1-12).

According to the Washington Department of Ecology (Ecology), the Site is located within the Tacoma Asarco Smelter Plume (Smelter Plume)¹. The City of Tacoma has required that, if the properties are to be developed, the Subject Properties will need to be assessed for surface arsenic contamination related to the Smelter Plume. Ecology provides sampling guidelines that stipulate a minimum of ten (10) soil samples be collected per acre at six inch increments starting at the surface elevation.

The goal of this project was to comply with the City of Tacoma and Ecology surface soil sampling requirements. The arsenic sampling methodology includes the collection of soil samples at two elevations (0-6" and 6-12") from ten (10) sample points on each of the nine properties.

Soil Sampling Activities

EMS completed sampling activities at the Site on January 30 and 31, 2011. Ten sample locations were randomly selected on each of the nine proposed building sites (Figures 4-12). The Washington State administrative code (WAC) 173-340 (Model Toxic Control Act) Method A

¹ http://www.ecy.wa.gov/programs/tcp/sites/dirt_alert/studies_and_maps/sources.html

(MTCA-A) Cleanup Levels for Unrestricted Land Use for arsenic in soil is 20 milligram per kilogram (mg/kg). Of the ninety (90) 0-6" sample locations, eighty three (83) were reported exceeding the MTCA-A cleanup level of 20 mg/kg. The remaining seven (7) samples were reported below the MTCA-A cleanup level. Provided in Attachment A are figures 4-12, the project sample location maps identifying each of the sample locations.

EMS collected 180 discrete soil samples, 20 samples from each of the nine proposed building locations. Ten (10) samples from zero to six inches below ground surface (bgs) and 10 from 6 to 12 inches bgs. Each discrete soil sample was collected by a properly trained sampling technician using appropriately decontaminated sampling equipment.

Each soil sample was placed into new laboratory provided sampling containers and labeled using a unique sample identification number. Samples were delivered under industry standard chain of custody to Freidman & Bruya, Inc., an Ecology accredited laboratory for chemical analysis.

Laboratory Analysis

The soil samples collected from the depth of 0-6" were analyzed for Total Arsenic (As) by Environmental Protection Agency (EPA) Method 6020 (Attachment C – Laboratory Results). Seven soil samples, S20-1B, S28-2F, S50-2D, S54-2B, S68-2A, S73-2C and S88-2G were reported below the 20 mg/kg cleanup level.

The remaining 83 samples were reported exceeding the 20 mg/kg cleanup level. Concentration ranged from 20.1 mg/kg to 245 mg/kg. (Attachment B -Project Tables - Table 1 - Soil Sample Results - Total Arsenic).

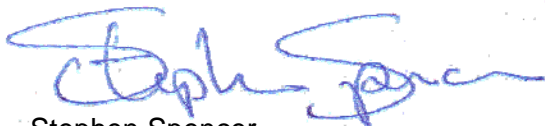
Summary

Based on soil sample analysis, soil impacted with arsenic exceeding the MTCA-A cleanup limit of 20 mg/kg was identified on each of the nine proposed building sites. Further assessment to delineate the vertical and horizontal extent of impacted soil may be necessary to properly ascertain remediation or mitigation costs.

In order to develop the sites, the arsenic impacted soil will need to be addressed. Remediation or mitigation of the impacted soil can be incorporated in to the development of the property. However, an approved work plan addressing the proposed corrective action should be competed prior to construction to eliminate construction delays.

EMS appreciates the opportunity to provide environmental services on this project. Should you have any questions, please contact our office at 253-921-7059.

Environmental Management Services, LLC



Stephen Spencer
Principal

Encl:

Attachment A – Project Figures

- Figure 1 – Site Location Map
- Figure 2 – Site Topographic Map
- Figure 3 – Sample Location Map

Attachment B – Project Tables

- Table 1 – Soil Sample Results - Total Arsenic
- MTCA-A Unrestricted Cleanup Levels for Unrestricted Land Use

Attachment C - Laboratory Results

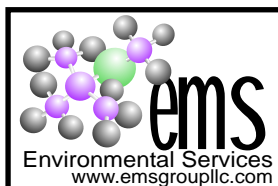
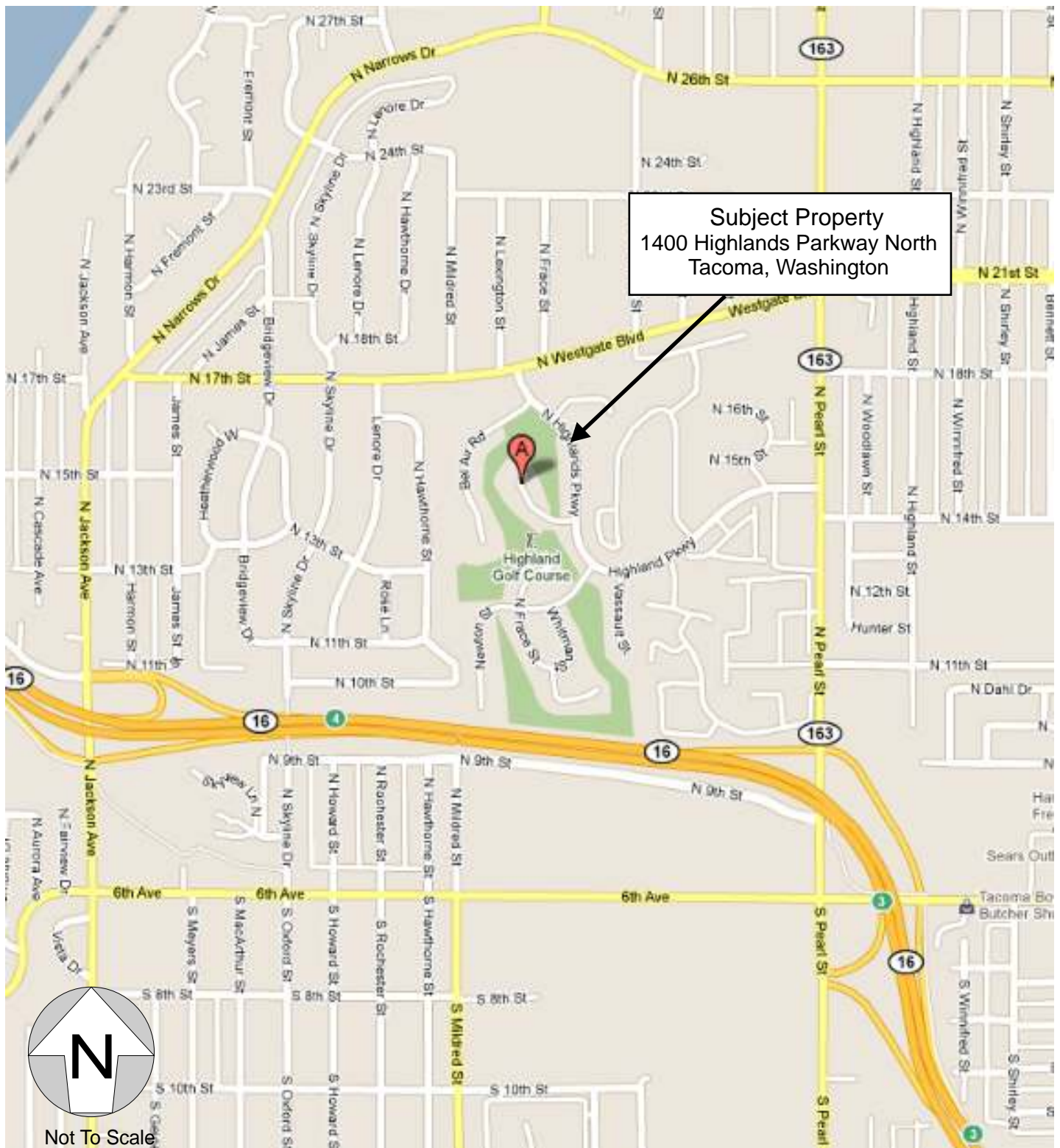
- Sample Analytical Results
- Analytical Results & Chain of Custody

Attachment D – Professional Qualifications

Attachment A

Project Figures

- Figure 1 - Site Location Map
- Figure 2 - Site Topographic Map
- Figure 3 - Sample Location Map




Site Location Map
1400 Highlands Parkway North
Tacoma, Washington

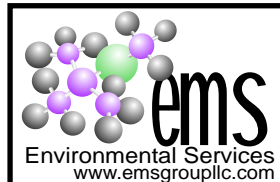
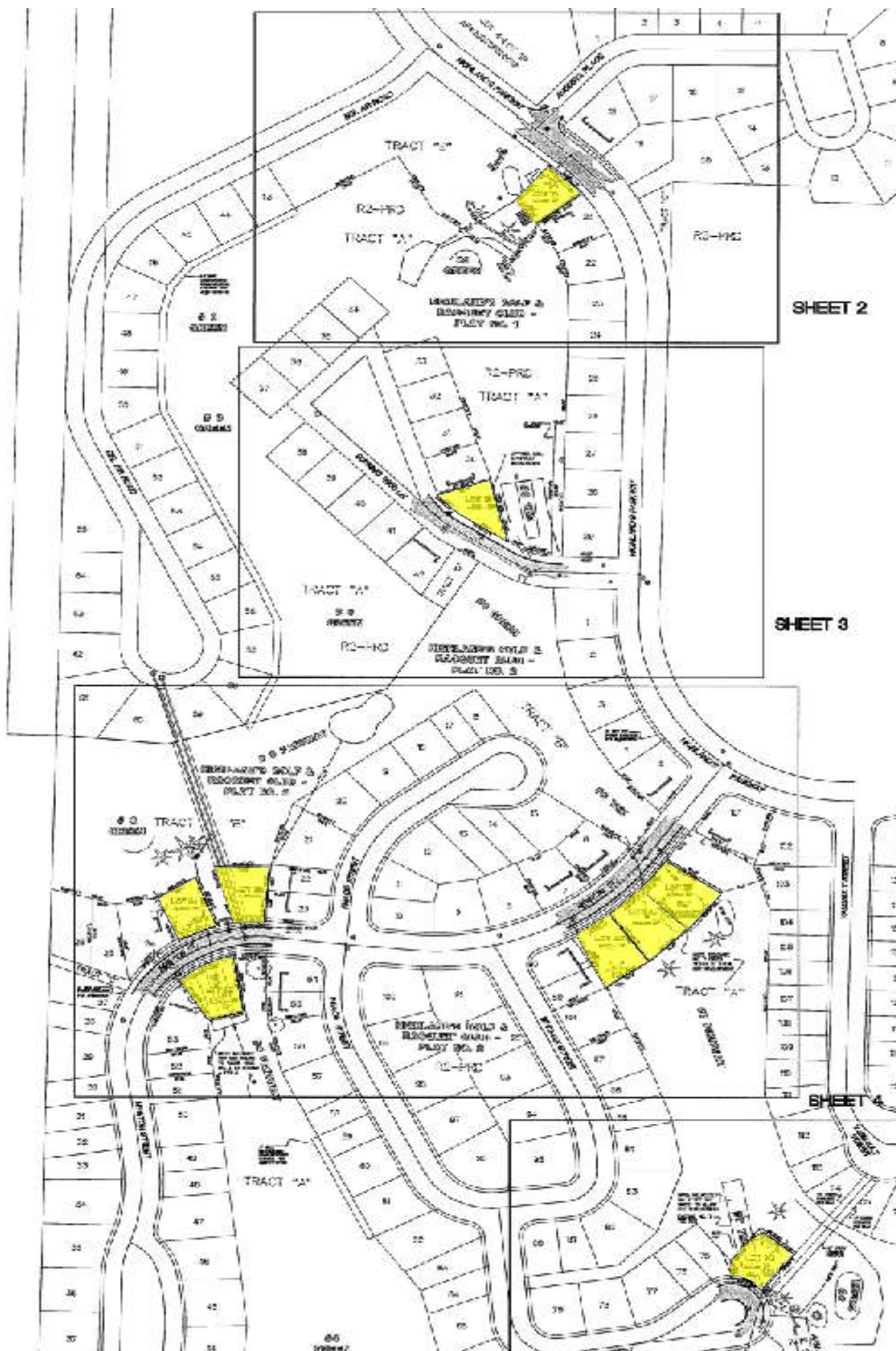
Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01

Figure No.

01



 <p>Environmental Services www.emsgroupllc.com</p>	<p>Site Topographic Map 1400 Highlands Parkway North Tacoma, Washington</p>	<p>Date: February 10, 2011 Completed: K. Spencer Checked By: S. Spencer EMS Project No: 0393-01</p>	<p>Figure No. 02</p>
---	---	---	--------------------------------------

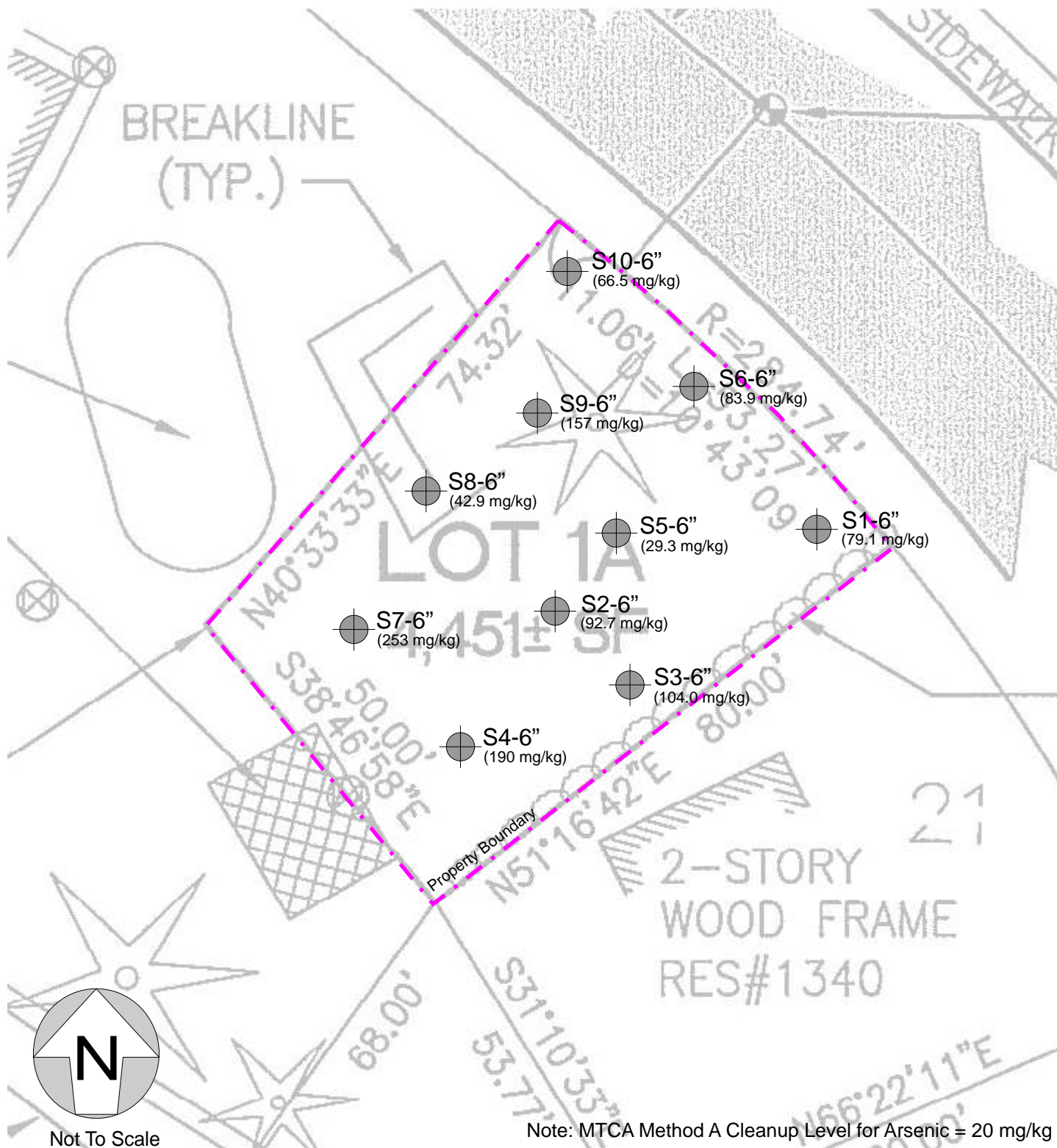



Site Map
1400 Highlands Parkway North
Tacoma, Washington

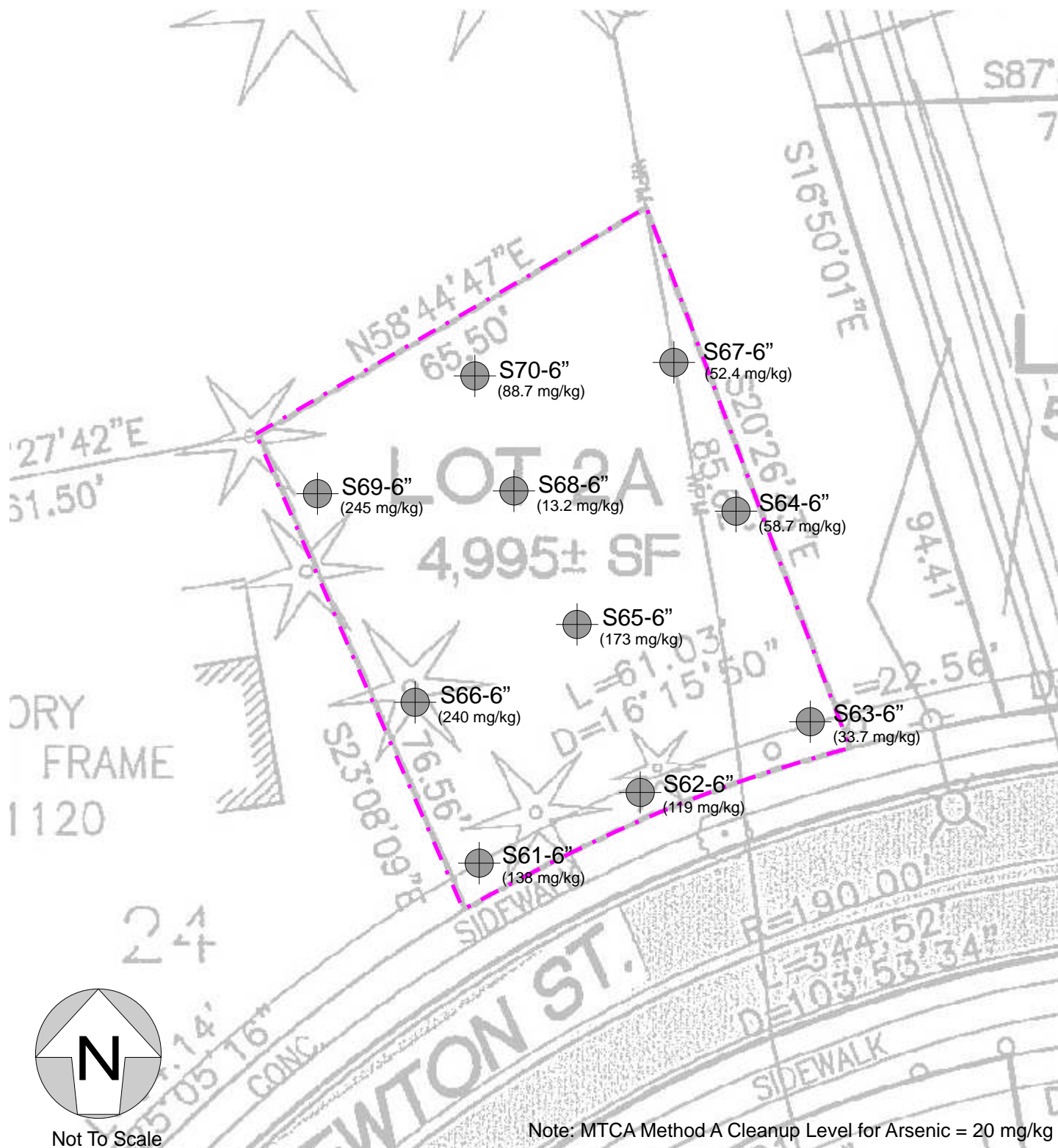
Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01


Figure No.

03

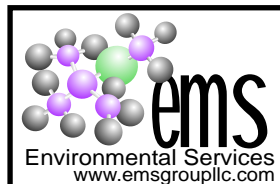


 <p>Environmental Services www.emsgroupplc.com</p>	<p>Sample Location Map Lot 1A 1400 Highlands Parkway North Tacoma, Washington</p>	<p>Date: February 10, 2011 Completed: K. Spencer Checked By: S. Spencer EMS Project No: 0393-01</p>	<p>Figure No. 04 Lot 1A</p>
---	---	---	--




S4-6"
 (190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
 Total Arsenic Concentration


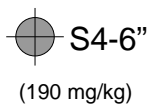


Sample Location Map
 Lot 2A
 1400 Highlands Parkway North
 Tacoma, Washington

Date: February 10, 2011
 Completed: K. Spencer
 Checked By: S. Spencer
 EMS Project No: 0393-01

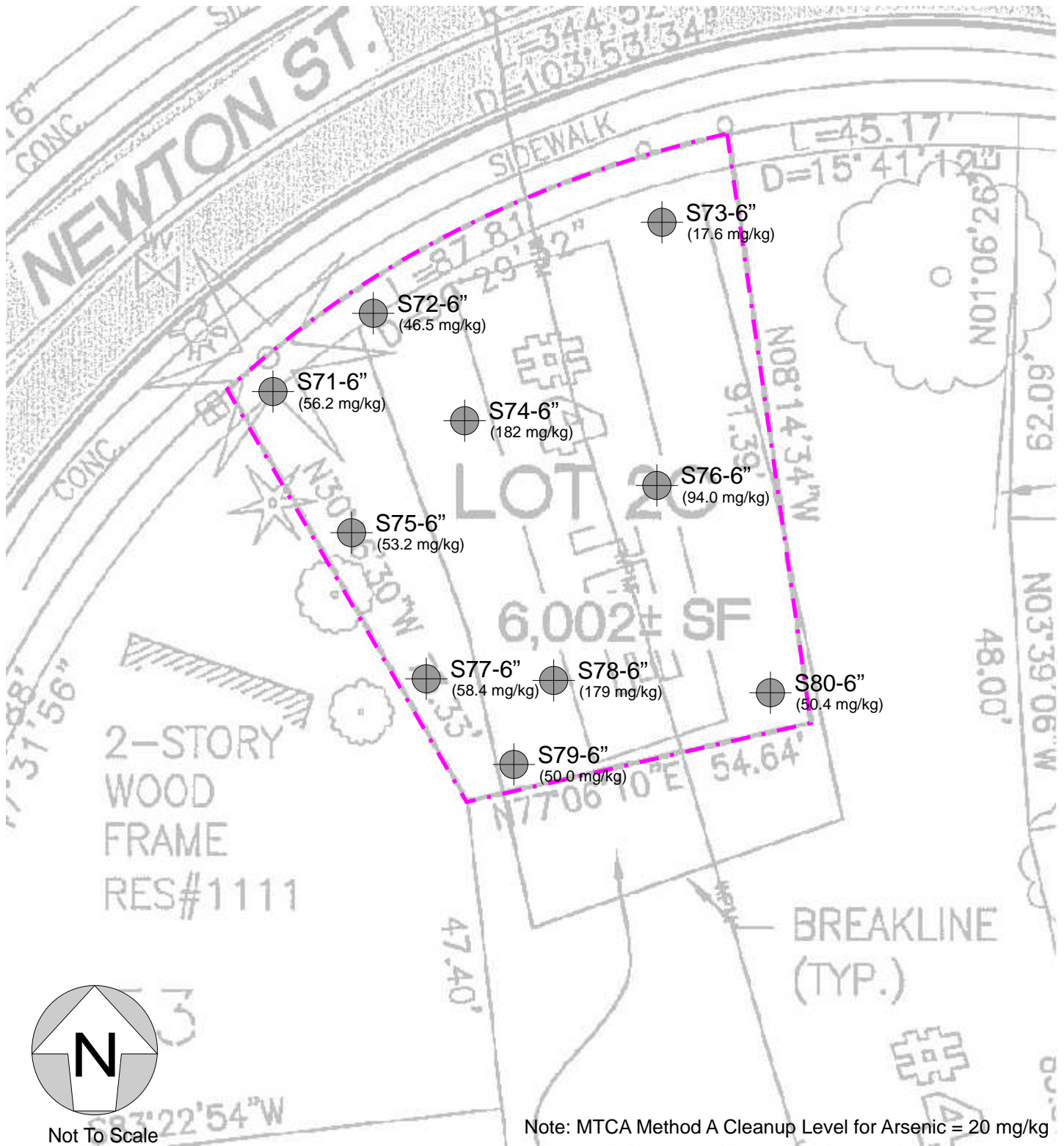
Figure No.

06
 Lot 2A



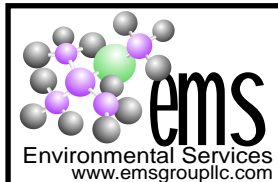
Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01

07
Lot 2B



S4-6"
(190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
Total Arsenic Concentration


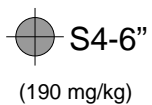


Sample Location Map
Lot 2C
1400 Highlands Parkway North
Tacoma, Washington

Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01

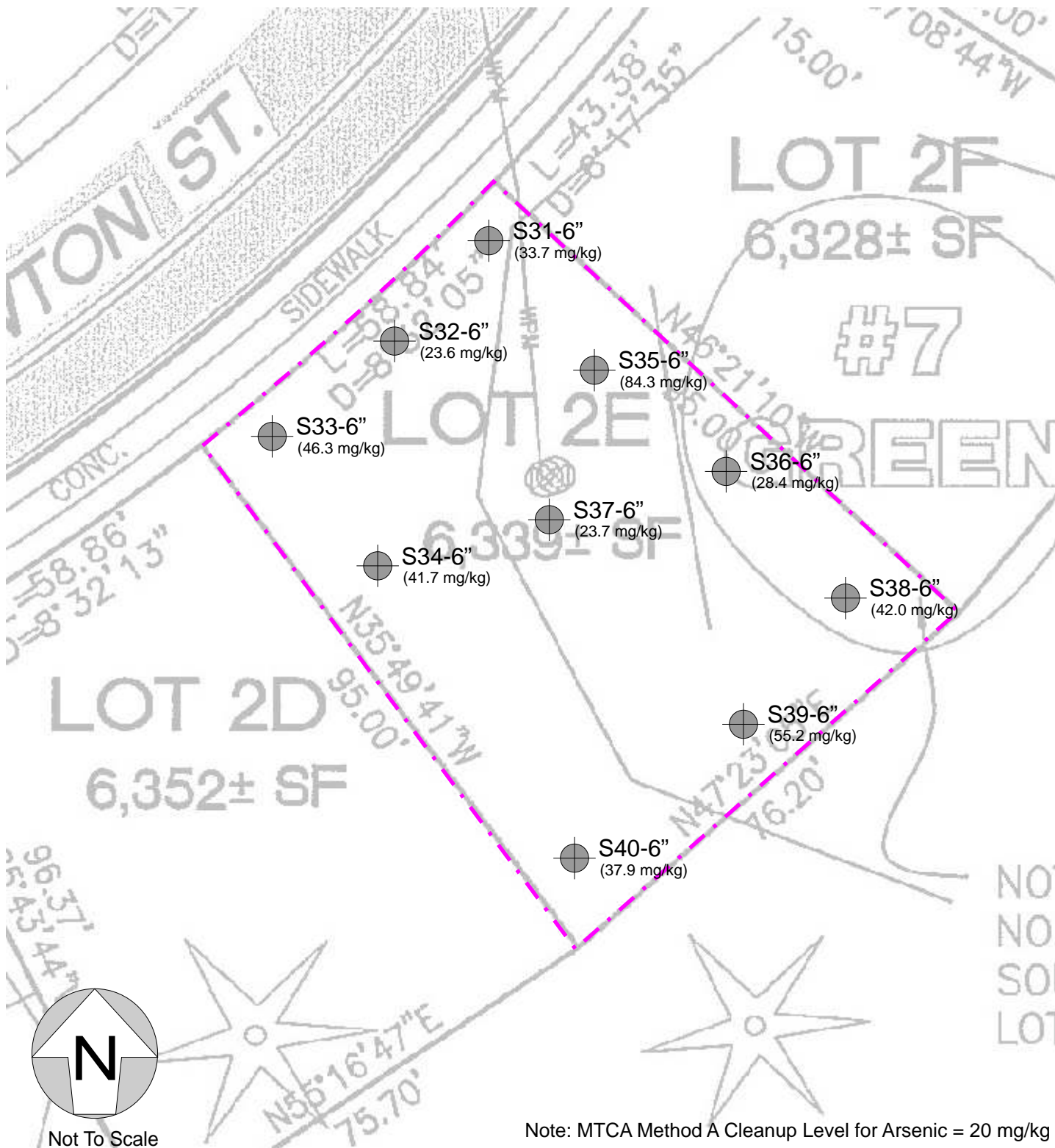
Figure No.


08
Lot 2C



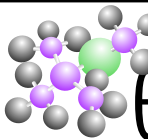
Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01

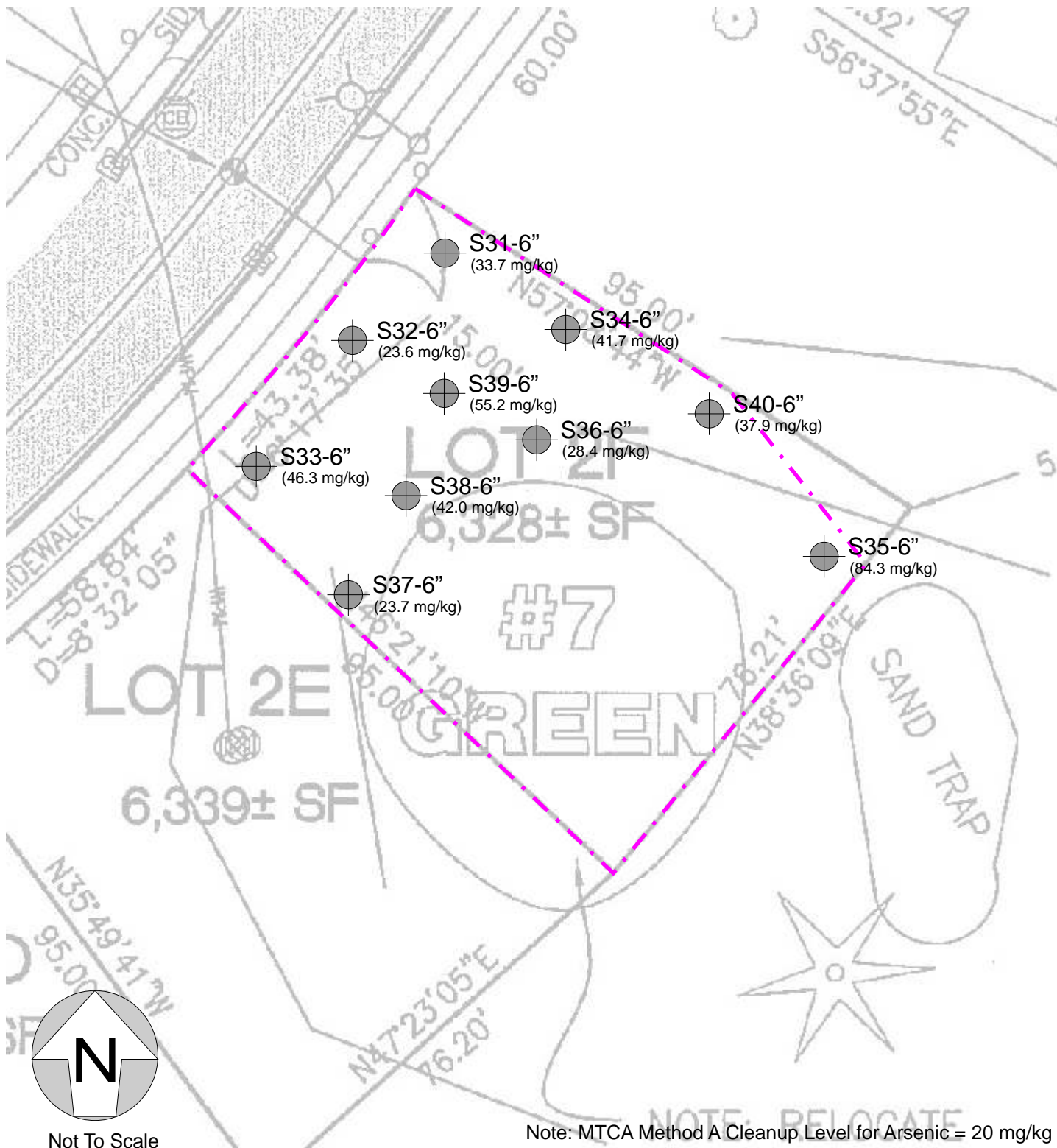
09
Lot 2D




S4-6"
 (190 mg/kg)

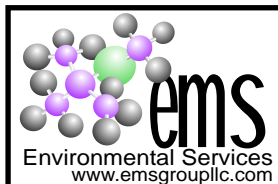
Soil sample identification and location - 0-6" below ground surface
 Total Arsenic Concentration

 <p>ems Environmental Services www.emsgroupplc.com</p>	<p>Sample Location Map Lot 2E 1400 Highlands Parkway North Tacoma, Washington</p>	<p>Date: February 10, 2011 Completed: K. Spencer Checked By: S. Spencer EMS Project No: 0393-01</p>	<p>Figure No. 10 Lot 2E</p>
--	---	---	--



S4-6"
(190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
Total Arsenic Concentration

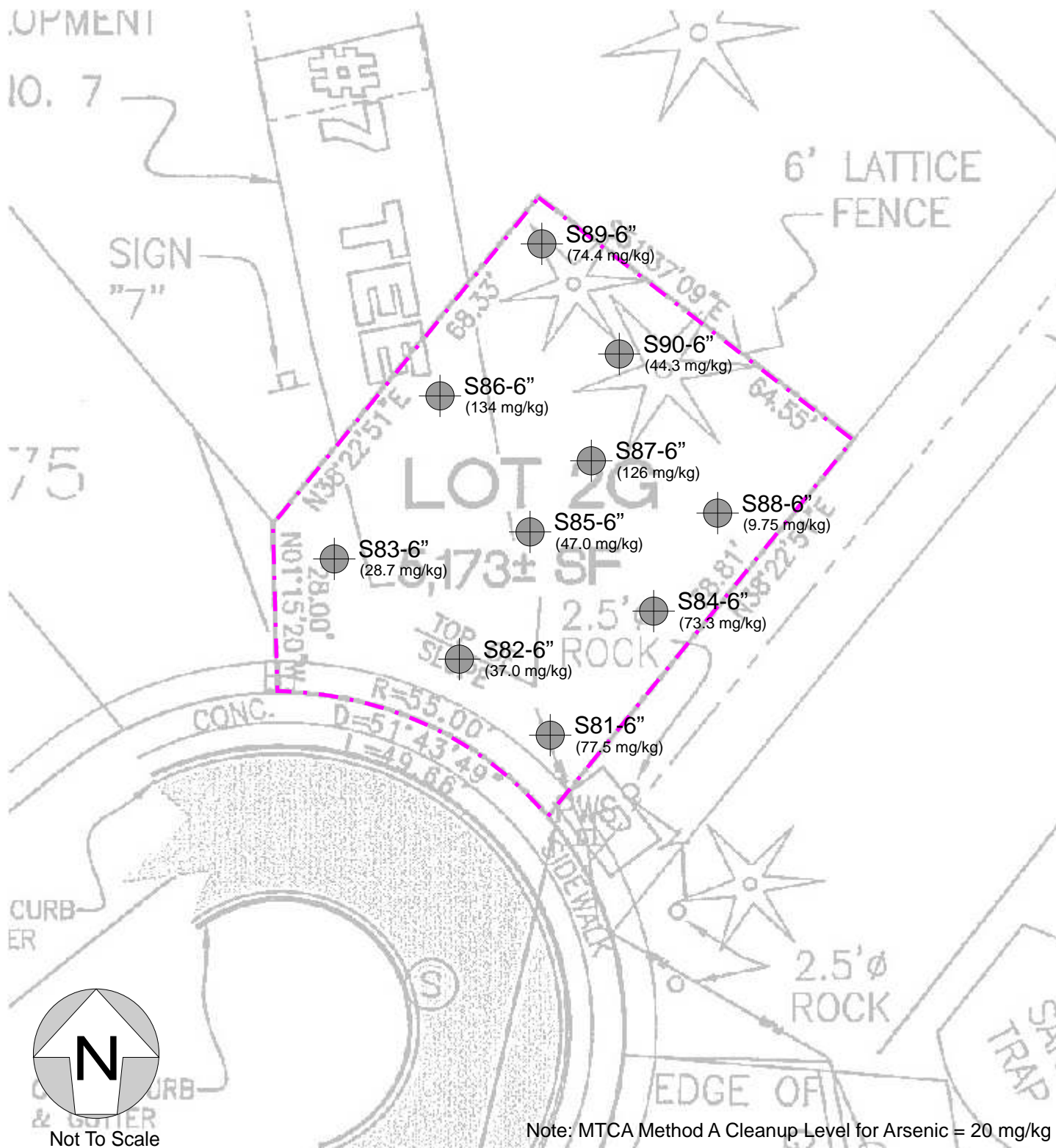



Sample Location Map
Lot 2F
1400 Highlands Parkway North
Tacoma, Washington

Date: February 10, 2011
Completed: K. Spencer
Checked By: S. Spencer
EMS Project No: 0393-01

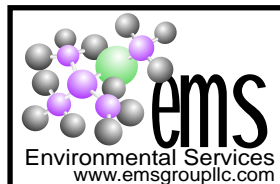
Figure No.

11
Lot 2F




S4-6"
 (190 mg/kg)

Soil sample identification and location - 0-6" below ground surface
 Total Arsenic Concentration



Sample Location Map
 Lot 2G
 1400 Highlands Parkway North
 Tacoma, Washington

Date: February 10, 2011
 Completed: K. Spencer
 Checked By: S. Spencer
 EMS Project No: 0393-01

Figure No.

12
 Lot 2G

Attachment B

Project Tables

Table 1 - Arsenic Sample Results
MTCA-A Unrestricted Cleanup Levels for Unrestricted Land Use



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 1A				
S1-A1-6"	LOT1A	0-6"	1/30/2011	<u>79.1</u>
S2-A1-6"	LOT1A	0-6"	1/30/2011	<u>92.7</u>
S3-A1-6"	LOT1A	0-6"	1/30/2011	<u>104.0</u>
S4-A1-6"	LOT1A	0-6"	1/30/2011	<u>190.0</u>
S5-A1-6"	LOT1A	0-6"	1/30/2011	<u>29.3</u>
S6-A1-6"	LOT1A	0-6"	1/30/2011	<u>83.8</u>
S7-A1-6"	LOT1A	0-6"	1/30/2011	<u>253.0</u>
S8-A1-6"	LOT1A	0-6"	1/30/2011	<u>42.9</u>
S9-A1-6"	LOT1A	0-6"	1/30/2011	<u>157.0</u>
S10-A1-6"	LOT1A	0-6"	1/30/2011	<u>66.5</u>
BUILDING LOT 1B				
S11-1B-6"	LOT1B	0-6"	1/30/2011	<u>43.2</u>
S12-1B-6"	LOT1B	0-6"	1/30/2011	<u>102.0</u>
S13-1B-6"	LOT1B	0-6"	1/30/2011	<u>52.7</u>
S14-1B-6"	LOT1B	0-6"	1/30/2011	<u>53.6</u>
S15-1B-6"	LOT1B	0-6"	1/30/2011	<u>55.5</u>
S16-1B-6"	LOT1B	0-6"	1/30/2011	<u>231.0</u>
S17-1B-6"	LOT1B	0-6"	1/30/2011	<u>60.5</u>
S18-1B-6"	LOT1B	0-6"	1/30/2011	<u>66.5</u>
S19-1B-6"	LOT1B	0-6"	1/30/2011	<u>59.5</u>
S20-1B-6"	LOT1B	0-6"	1/30/2011	8.5



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 2F				
S21-2F-6"	LOT2F	0-6"	1/30/2011	<u>62.1</u>
S22-2F-6"	LOT2F	0-6"	1/30/2011	<u>59.7</u>
S23-2F-6"	LOT2F	0-6"	1/30/2011	<u>77.0</u>
S24-2F-6"	LOT2F	0-6"	1/30/2011	<u>29.2</u>
S25-2F-6"	LOT2F	0-6"	1/30/2011	<u>43.5</u>
S26-2F-6"	LOT2F	0-6"	1/30/2011	<u>52.0</u>
S27-2F-6"	LOT2F	0-6"	1/30/2011	<u>47.2</u>
S28-2F-6"	LOT2F	0-6"	1/30/2011	11.4
S29-2F-6"	LOT2F	0-6"	1/30/2011	<u>37.7</u>
S30-2F-6"	LOT2F	0-6"	1/30/2011	<u>27.5</u>
BUILDING LOT 2E				
S31-2E-6"	LOT2E	0-6"	1/30/2011	<u>33.7</u>
S32-2E-6"	LOT2E	0-6"	1/30/2011	<u>23.6</u>
S33-2E-6"	LOT2E	0-6"	1/30/2011	<u>46.3</u>
S34-2E-6"	LOT2E	0-6"	1/30/2011	<u>41.7</u>
S35-2E-6"	LOT2E	0-6"	1/30/2011	<u>84.3</u>
S36-2E-6"	LOT2E	0-6"	1/30/2011	<u>28.4</u>
S37-2E-6"	LOT2E	0-6"	1/30/2011	<u>23.7</u>
S38-2E-6"	LOT2E	0-6"	1/30/2011	<u>42.0</u>
S39-2E-6"	LOT2E	0-6"	1/30/2011	<u>55.2</u>
S40-2E-6"	LOT2E	0-6"	1/30/2011	<u>37.9</u>



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 2D				
S41-2D-6"	LOT2D	0-6"	1/30/2011	<u>117.0</u>
S42-2D-6"	LOT2D	0-6"	1/30/2011	<u>20.6</u>
S43-2D-6"	LOT2D	0-6"	1/30/2011	<u>29.5</u>
S44-2D-6"	LOT2D	0-6"	1/30/2011	<u>33.8</u>
S45-2D-6"	LOT2D	0-6"	1/30/2011	<u>33.7</u>
S46-2D-6"	LOT2D	0-6"	1/30/2011	<u>23.4</u>
S47-2D-6"	LOT2D	0-6"	1/30/2011	<u>31.0</u>
S48-2D-6"	LOT2D	0-6"	1/30/2011	<u>30.7</u>
S49-2D-6"	LOT2D	0-6"	1/30/2011	<u>49.8</u>
S50-2D-6"	LOT2D	0-6"	1/30/2011	14.9
BUILDING LOT 2B				
S51-2B-6"	LOT2B	0-6"	1/30/2011	<u>63.6</u>
S52-2B-6"	LOT2B	0-6"	1/30/2011	<u>20.1</u>
S53-2B-6"	LOT2B	0-6"	1/30/2011	<u>25.2</u>
S54-2B-6"	LOT2B	0-6"	1/30/2011	18.1
S55-2B-6"	LOT2B	0-6"	1/30/2011	<u>38.8</u>
S56-2B-6"	LOT2B	0-6"	1/30/2011	<u>43.2</u>
S57-2B-6"	LOT2B	0-6"	1/30/2011	<u>120.0</u>
S58-2B-6"	LOT2B	0-6"	1/30/2011	<u>61.0</u>
S59-2B-6"	LOT2B	0-6"	1/30/2011	<u>37.3</u>
S60-2B-6"	LOT2B	0-6"	1/30/2011	<u>253.0</u>



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 2A				
S61-2A-6"	LOT2A	0-6"	1/30/2011	<u>138.0</u>
S62-2A-6"	LOT2A	0-6"	1/30/2011	<u>119.0</u>
S63-2A-6"	LOT2A	0-6"	1/30/2011	<u>33.7</u>
S64-2A-6"	LOT2A	0-6"	1/30/2011	<u>58.7</u>
S65-2A-6"	LOT2A	0-6"	1/30/2011	<u>173.0</u>
S66-2A-6"	LOT2A	0-6"	1/30/2011	<u>240.0</u>
S67-2A-6"	LOT2A	0-6"	1/30/2011	<u>52.4</u>
S68-2A-6"	LOT2A	0-6"	1/30/2011	13.2
S69-2A-6"	LOT2A	0-6"	1/30/2011	<u>245.0</u>
S70-2A-6"	LOT2A	0-6"	1/30/2011	<u>88.7</u>
BUILDING LOT 2C				
S71-2C-6"	LOT2C	0-6"	1/30/2011	<u>56.2</u>
S72-2C-6"	LOT2C	0-6"	1/30/2011	<u>46.5</u>
S73-2C-6"	LOT2C	0-6"	1/30/2011	17.6
S74-2C-6"	LOT2C	0-6"	1/30/2011	<u>182.0</u>
S75-2C-6"	LOT2C	0-6"	1/30/2011	<u>53.2</u>
S76-2C-6"	LOT2C	0-6"	1/30/2011	<u>94.0</u>
S77-2C-6"	LOT2C	0-6"	1/30/2011	<u>58.4</u>
S78-2C-6"	LOT2C	0-6"	1/30/2011	<u>179.0</u>
S79-2C-6"	LOT2C	0-6"	1/30/2011	<u>50.0</u>
S80-2C-6"	LOT2C	0-6"	1/30/2011	<u>50.4</u>



Table 1 - Arsenic Soil Sample Results
Highland Golf
1400 Highlands Parkway
Tacoma, Washington

February 11, 2011

Sample Number	Sample Location	Sample Depth	Sample Date	EPA 6020
				Total Metals - Arsenic (As)
				mg/kg
BUILDING LOT 2G				
S81-2G-6"	LOT2G	0-6"	1/30/2011	<u>77.5</u>
S82-2G-6"	LOT2G	0-6"	1/30/2011	<u>37.0</u>
S83-2G-6"	LOT2G	0-6"	1/30/2011	<u>28.7</u>
S84-2G-6"	LOT2G	0-6"	1/30/2011	<u>73.3</u>
S85-2G-6"	LOT2G	0-6"	1/30/2011	<u>47.0</u>
S86-2G-6"	LOT2G	0-6"	1/30/2011	<u>134.0</u>
S87-2G-6"	LOT2G	0-6"	1/30/2011	<u>126.0</u>
S88-2G-6"	LOT2G	0-6"	1/30/2011	9.8
S89-2G-6"	LOT2G	0-6"	1/30/2011	<u>74.4</u>
S90-2G-6"	LOT2G	0-6"	1/30/2011	<u>44.3</u>
METHOD BLANK	NA	NA	2/1/2011	<1
Laboratory Method Reporting Limit				1
Model Toxic Control Act (MTCA) Method A Cleanup Levels For Soil				20

BOLD/Underlined = Analyte above MTCA 2001 Method A Cleanup levels for arsenic in soil.

Values are reported in milligrams per kilograms (mg/kg).

< # (ND) = analyte not detected above the analytical method reporting limit cited.

MTCA 2001 Method A Cleanup Levels for Unrestricted Residential Land Use - (MTCA) WAC 173-340-900 Tables.

bgs=below ground surface

NA=Not Applicable

Attachment C

Laboratory Results

Analytical Results
Analytical Chain of Custody

Attachment C
Laboratory Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

February 7, 2011

Steve Spencer, Project Manager
Environmental Management Services, LLC
7006 27th Street W, Suite E
Tacoma, WA 98466

Dear Mr. Spencer:

Included are the results from the testing of material submitted on January 31, 2011 from the Highland 20, LLC-0393-01, F&BI 101307 project. There are 106 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
EMS0207R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on January 31, 2011 by Friedman & Bruya, Inc. from the Environmental Management Services, Highland 20, LLC-0393-01, F&BI 101307 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-01	S1-A1-6"
101307-02	S1-A1-12"
101307-03	S2-A1-6"
101307-04	S2-A1-12"
101307-05	S3-A1-6"
101307-06	S3-A1-12"
101307-07	S4-A1-6"
101307-08	S4-A1-12"
101307-09	S5-A1-6"
101307-10	S5-A1-12"
101307-11	S6-A1-6"
101307-12	S6-A1-12"
101307-13	S7-A1-6"
101307-14	S7-A1-12"
101307-15	S8-A1-6"
101307-16	S8-A1-12"
101307-17	S9-A1-6"
101307-18	S9-A1-12"
101307-19	S10-A1-6"
101307-20	S10-A1-12"
101307-21	S11-1B-6"
101307-22	S11-1B-12"
101307-23	S12-1B-6"
101307-24	S12-1B-12"
101307-25	S13-1B-6"
101307-26	S13-1B-12"
101307-27	S14-1B-6"
101307-28	S14-1B-12"
101307-29	S15-1B-6"
101307-30	S15-1B-12"
101307-31	S16-1B-6"
101307-32	S16-1B-12"
101307-33	S17-1B-6"
101307-34	S17-1B-12"
101307-35	S18-1B-6"
101307-36	S18-1B-12"
101307-37	S19-1B-6"
101307-38	S19-1B-12"
101307-39	S20-1B-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-40	S20-1B-12"
101307-41	S21-2F-6"
101307-42	S21-2F-12"
101307-43	S22-2F-6"
101307-44	S22-2F-12"
101307-45	S23-2F-6"
101307-46	S23-2F-12"
101307-47	S24-2F-6"
101307-48	S24-2F-12"
101307-49	S25-2F-6"
101307-50	S25-2F-12"
101307-51	S26-2F-6"
101307-52	S26-2F-12"
101307-53	S27-2F-6"
101307-54	S27-2F-12"
101307-55	S28-2F-6"
101307-56	S28-2F-12"
101307-57	S29-2F-6"
101307-58	S29-2F-12"
101307-59	S30-2E-6"
101307-60	S30-2E-12"
101307-61	S31-2E-6"
101307-62	S31-2E-12"
101307-63	S32-2E-6"
101307-64	S32-2E-12"
101307-65	S33-2E-6"
101307-66	S33-2E-12"
101307-67	S34-2E-6"
101307-68	S34-2E-12"
101307-69	S35-2E-6"
101307-70	S35-2E-12"
101307-71	S36-2E-6"
101307-72	S36-2E-12"
101307-73	S37-2E-6"
101307-74	S37-2E-12"
101307-75	S38-2E-6"
101307-76	S38-2E-12"
101307-77	S39-2E-6"
101307-78	S39-2E-12"
101307-79	S40-2E-6"
101307-80	S40-2E-12"
101307-81	S41-2D-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-82	S41-2D-12"
101307-83	S42-2D-6"
101307-84	S42-2D-12"
101307-85	S43-2D-6"
101307-86	S43-2D-12"
101307-87	S44-2D-6"
101307-88	S44-2D-12"
101307-89	S45-2D-6"
101307-90	S45-2D-12"
101307-91	S46-2D-6"
101307-92	S46-2D-12"
101307-93	S47-2D-6"
101307-94	S47-2D-12"
101307-95	S48-2D-6"
101307-96	S48-2D-12"
101307-97	S49-2D-6"
101307-98	S49-2D-12"
101307-99	S50-2D-6"
101307-100	S50-2D-12"
101307-101	S51-2B-6"
101307-102	S51-2B-12"
101307-103	S52-2B-6"
101307-104	S52-2B-12"
101307-105	S53-2B-6"
101307-106	S53-2B-12"
101307-107	S54-2B-6"
101307-108	S54-2B-12"
101307-109	S55-2B-6"
101307-110	S55-2B-12"
101307-111	S56-2B-6"
101307-112	S56-2B-12"
101307-113	S57-2B-6"
101307-114	S57-2B-12"
101307-115	S58-2B-6"
101307-116	S58-2B-12"
101307-117	S59-2B-6"
101307-118	S59-2B-12"
101307-119	S60-2B-6"
101307-120	S60-2B-12"
101307-121	S61-2A-6"
101307-122	S61-2A-12"
101307-123	S62-2A-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-124	S62-2A-12"
101307-125	S63-2A-6"
101307-126	S63-2A-12"
101307-127	S64-2A-6"
101307-128	S64-2A-12"
101307-129	S65-2A-6"
101307-130	S65-2A-12"
101307-131	S66-2A-6"
101307-132	S66-2A-12"
101307-133	S67-2A-6"
101307-134	S67-2A-12"
101307-135	S68-2A-6"
101307-136	S68-2A-12"
101307-137	S69-2A-6"
101307-138	S69-2A-12"
101307-139	S70-2A-6"
101307-140	S70-2A-12"
101307-141	S71-2C-6"
101307-142	S71-2C-12"
101307-143	S72-2C-6"
101307-144	S72-2C-12"
101307-145	S73-2C-6"
101307-146	S73-2C-12"
101307-147	S74-2C-6"
101307-148	S74-2C-12"
101307-149	S75-2C-6"
101307-150	S75-2C-12"
101307-151	S76-2C-6"
101307-152	S76-2C-12"
101307-153	S77-2C-6"
101307-154	S77-2C-12"
101307-155	S78-2C-6"
101307-156	S78-2C-12"
101307-157	S79-2C-6"
101307-158	S79-2C-12"
101307-159	S80-2C-6"
101307-160	S80-2C-12"
101307-161	S81-2G-6"
101307-162	S81-2G-12"
101307-163	S82-2G-6"
101307-164	S82-2G-12"
101307-165	S83-2G-6"

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE (continued)

<u>Laboratory ID</u>	<u>Environmental Management Services, LLC</u>
101307-166	S83-2G-12"
101307-167	S84-2G-6"
101307-168	S84-2G-12"
101307-169	S85-2G-6"
101307-170	S85-2G-12"
101307-171	S86-2G-6"
101307-172	S86-2G-12"
101307-173	S87-2G-6"
101307-174	S87-2G-12"
101307-175	S88-2G-6"
101307-176	S88-2G-12"
101307-177	S89-2G-6"
101307-178	S89-2G-12"
101307-179	S90-2G-6"
101307-180	S90-2G-12"

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S1-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-01
Date Analyzed:	02/02/11	Data File:	101307-01.013
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	79.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S2-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-03
Date Analyzed:	02/02/11	Data File:	101307-03.014
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	92.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S3-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-05
Date Analyzed:	02/02/11	Data File:	101307-05.015
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S4-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-07
Date Analyzed:	02/02/11	Data File:	101307-07.016
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	190

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S5-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-09
Date Analyzed:	02/02/11	Data File:	101307-09.017
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S6-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-11
Date Analyzed:	02/02/11	Data File:	101307-11.019
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	83.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S7-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-13
Date Analyzed:	02/02/11	Data File:	101307-13.020
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	253

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S8-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-15
Date Analyzed:	02/02/11	Data File:	101307-15.021
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	82	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	42.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S9-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-17
Date Analyzed:	02/02/11	Data File:	101307-17.022
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	157

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S10-A1-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-19
Date Analyzed:	02/02/11	Data File:	101307-19.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	66.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S11-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-21
Date Analyzed:	02/02/11	Data File:	101307-21.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S12-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-23
Date Analyzed:	02/02/11	Data File:	101307-23.025
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	102

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S13-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-25
Date Analyzed:	02/02/11	Data File:	101307-25.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S14-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-27
Date Analyzed:	02/02/11	Data File:	101307-27.027
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	53.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S15-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-29
Date Analyzed:	02/02/11	Data File:	101307-29.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	55.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S16-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-31
Date Analyzed:	02/02/11	Data File:	101307-31.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	231

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S17-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-33
Date Analyzed:	02/02/11	Data File:	101307-33.031
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	60.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S18-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-35
Date Analyzed:	02/02/11	Data File:	101307-35.010
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	66.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S19-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-37
Date Analyzed:	02/02/11	Data File:	101307-37.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	59.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S20-1B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-39
Date Analyzed:	02/02/11	Data File:	101307-39.033
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	8.50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S21-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-41
Date Analyzed:	02/02/11	Data File:	101307-41.040
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	85	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	62.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S22-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-43
Date Analyzed:	02/02/11	Data File:	101307-43.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	59.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S23-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-45
Date Analyzed:	02/02/11	Data File:	101307-45.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	77.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S24-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-47
Date Analyzed:	02/02/11	Data File:	101307-47.043
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S25-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-49
Date Analyzed:	02/02/11	Data File:	101307-49.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S26-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-51
Date Analyzed:	02/02/11	Data File:	101307-51.045
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	79	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S27-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-53
Date Analyzed:	02/02/11	Data File:	101307-53.046
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	47.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S28-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-55
Date Analyzed:	02/02/11	Data File:	101307-55.047
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	11.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S29-2F-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-57
Date Analyzed:	02/02/11	Data File:	101307-57.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S30-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-59
Date Analyzed:	02/02/11	Data File:	101307-59.050
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	27.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S31-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-61
Date Analyzed:	02/02/11	Data File:	101307-61.051
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S32-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-63
Date Analyzed:	02/02/11	Data File:	101307-63.052
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S33-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-65
Date Analyzed:	02/02/11	Data File:	101307-65.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	46.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S34-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-67
Date Analyzed:	02/02/11	Data File:	101307-67.053
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	41.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S35-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-69
Date Analyzed:	02/02/11	Data File:	101307-69.054
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	84.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S36-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-71
Date Analyzed:	02/02/11	Data File:	101307-71.055
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	28.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S37-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-73
Date Analyzed:	02/02/11	Data File:	101307-73.056
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S38-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-75
Date Analyzed:	02/02/11	Data File:	101307-75.057
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	42.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S39-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-77
Date Analyzed:	02/02/11	Data File:	101307-77.058
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	55.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S40-2E-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-79
Date Analyzed:	02/02/11	Data File:	101307-79.059
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S41-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-81
Date Analyzed:	02/02/11	Data File:	101307-81.066
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	117

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S42-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-83
Date Analyzed:	02/02/11	Data File:	101307-83.067
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	20.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S43-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-85
Date Analyzed:	02/02/11	Data File:	101307-85.063
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	29.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S44-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-87
Date Analyzed:	02/02/11	Data File:	101307-87.068
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S45-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-89
Date Analyzed:	02/02/11	Data File:	101307-89.069
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S46-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-91
Date Analyzed:	02/02/11	Data File:	101307-91.071
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	23.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S47-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-93
Date Analyzed:	02/02/11	Data File:	101307-93.072
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	31.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S48-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-95
Date Analyzed:	02/02/11	Data File:	101307-95.073
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	30.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S49-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-97
Date Analyzed:	02/02/11	Data File:	101307-97.074
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	49.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S50-2D-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-99
Date Analyzed:	02/02/11	Data File:	101307-99.075
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	14.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S51-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-101
Date Analyzed:	02/02/11	Data File:	101307-101.076
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	63.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S52-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-103
Date Analyzed:	02/02/11	Data File:	101307-103.077
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	20.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S53-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-105
Date Analyzed:	02/02/11	Data File:	101307-105.078
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	25.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S54-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-107
Date Analyzed:	02/02/11	Data File:	101307-107.079
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	18.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S55-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-109
Date Analyzed:	02/02/11	Data File:	101307-109.081
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	38.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S56-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-111
Date Analyzed:	02/02/11	Data File:	101307-111.082
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	43.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S57-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-113
Date Analyzed:	02/02/11	Data File:	101307-113.083
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S58-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-115
Date Analyzed:	02/02/11	Data File:	101307-115.084
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	61.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S59-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-117
Date Analyzed:	02/02/11	Data File:	101307-117.085
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S60-2B-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-119
Date Analyzed:	02/02/11	Data File:	101307-119.086
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	253

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S61-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-121
Date Analyzed:	02/03/11	Data File:	101307-121.041
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	138

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S62-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-123
Date Analyzed:	02/03/11	Data File:	101307-123.042
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	119

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S63-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-125
Date Analyzed:	02/03/11	Data File:	101307-125.044
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	33.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S64-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-127
Date Analyzed:	02/03/11	Data File:	101307-127.045
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	58.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S65-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-129
Date Analyzed:	02/03/11	Data File:	101307-129.046
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	173

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S66-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-131
Date Analyzed:	02/03/11	Data File:	101307-131.047
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	86	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	240

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S67-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-133
Date Analyzed:	02/03/11	Data File:	101307-133.048
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	52.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S68-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-135
Date Analyzed:	02/03/11	Data File:	101307-135.038
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	13.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S69-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-137
Date Analyzed:	02/03/11	Data File:	101307-137.049
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	245

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S70-2A-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-139
Date Analyzed:	02/03/11	Data File:	101307-139.050
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	88.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S71-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-141
Date Analyzed:	02/03/11	Data File:	101307-141.051
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	56.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S72-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-143
Date Analyzed:	02/03/11	Data File:	101307-143.053
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	46.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S73-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-145
Date Analyzed:	02/03/11	Data File:	101307-145.054
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	17.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S74-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-147
Date Analyzed:	02/03/11	Data File:	101307-147.055
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	182

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S75-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-149
Date Analyzed:	02/03/11	Data File:	101307-149.056
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	53.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S76-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-151
Date Analyzed:	02/03/11	Data File:	101307-151.057
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	94.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S77-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-153
Date Analyzed:	02/03/11	Data File:	101307-153.058
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	58.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S78-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-155
Date Analyzed:	02/03/11	Data File:	101307-155.059
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	179

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S79-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-157
Date Analyzed:	02/03/11	Data File:	101307-157.060
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	50.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S80-2C-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	101307-159
Date Analyzed:	02/03/11	Data File:	101307-159.061
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	50.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S81-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-161
Date Analyzed:	02/03/11	Data File:	101307-161.077
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	77.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S82-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-163
Date Analyzed:	02/03/11	Data File:	101307-163.023
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	37.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S83-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-165
Date Analyzed:	02/03/11	Data File:	101307-165.024
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	28.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S84-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-167
Date Analyzed:	02/03/11	Data File:	101307-167.025
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	73.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S85-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-169
Date Analyzed:	02/03/11	Data File:	101307-169.026
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	47.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S86-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-171
Date Analyzed:	02/03/11	Data File:	101307-171.028
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S87-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-173
Date Analyzed:	02/03/11	Data File:	101307-173.029
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S88-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-175
Date Analyzed:	02/03/11	Data File:	101307-175.030
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	9.75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S89-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-177
Date Analyzed:	02/03/11	Data File:	101307-177.031
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	74.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	S90-2G-6"	Client:	Environmental Management Services
Date Received:	01/31/11	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID:	101307-179
Date Analyzed:	02/03/11	Data File:	101307-179.032
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	44.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-69 mb
Date Analyzed:	02/02/11	Data File:	I1-69 mb.008
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-71 mb
Date Analyzed:	02/02/11	Data File:	I1-71 mb.034
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	83	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-72 mb
Date Analyzed:	02/02/11	Data File:	I1-72 mb.061
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Management Services
Date Received:	Not Applicable	Project:	Highland 20, LLC-0393-01
Date Extracted:	02/01/11	Lab ID:	I1-73 mb
Date Analyzed:	02/03/11 12:45:50	Data File:	I1-73 mb.036
Matrix:	Soil	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Environmental Management Services
Date Received:	Not Applicable	Project: Highland 20, LLC-0393-01
Date Extracted:	02/02/11	Lab ID: I1-75 mb
Date Analyzed:	02/03/11 10:47:51	Data File: I1-75 mb.008
Matrix:	Soil	Instrument: ICPMS1
Units:	mg/kg (ppm)	Operator: AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-35 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	66.5	123 b	197 b	44-151	46 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	103	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-65 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	46.3	103 b	147 b	44-151	35 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-85 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	29.5	102 b	112 b	44-151	9 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	98	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101307-135 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	13.2	107 b	131 b	44-151	20 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	101	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/07/11

Date Received: 01/31/11

Project: Highland 20, LLC-0393-01, F&BI 101307

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 101302-11 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	2.03	93 b	100 b	44-151	7 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	100	80-120

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

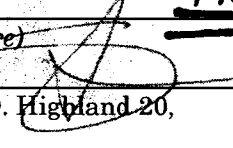
vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 1 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions



Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S1-A1-6"	01	1/31		So. 1	1							X				Run
S1-A1-12"	02															Hold
S2-A1-6"	03															Run
S2-A1-12"	04															Hold
S3-A1-6"	05															Run
S3-A1-12"	06															Hold
S4-A1-6"	07															Run
S4-A1-12"	08															Hold
S5-A1-6"	09															Run
S5-A1-12"	10	✓		✓	✓							✓				Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steven Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	FDB	1/31	10:30
Relinquished by:				
Received by:		Samples received at 17 °C		

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

B14

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 2 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions



Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S6-A1-6"	11	1/31		Soil	1											Run
S6-A1-12"	12															Hold
S7-A1-6"	13															Run
S7-A1-12"	14															Hold
S8-A1-6"	15															Run
S8-A1-12"	16															Hold
S9-A1-6"	17															Run
S9-A1-12"	18															Hold
S10-A1-6"	19															Run
S10-A1-12"	20															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPAULAK	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
18Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 3 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


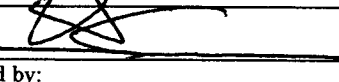
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S11-1B-6"	21	1/31		Soil	1											Run
S11-1B-12"	22															Hold
S12-1B-6"	23															Run
S12-1B-12"	24															Hold
S13-1B-6"	25															Run
S13-1B-12"	26															Hold
S14-1B-6"	27															Run
S14-1B-12"	28															Hold
S15-1B-6"	29															Run
S15-1B-12"	30															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10-30
Received by: 	Kurt Johnson	FDS	1/31	10-30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
18Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 4 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

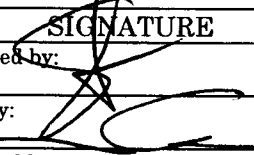
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	As				
S16-1 B-6"	31	1/31		Soil	1											Run
S16-1 B-12"	32															Hold
S17-1 B-6"	33															Run
S17-1 B-12"	34															Hold
S18-1 B-6"	35															Run
S18-1 B-12"	36															Hold
S19-1 B-6"	37															Run
S19-1 B-12"	38															Hold
S20-1 B-6"	39															Run
S20-1 B-12"	40															Hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	10:30
Received by:	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 5 of 18 ^{STG}

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

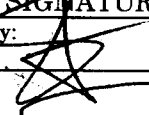
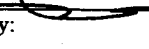
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S21-2 F - 6"	41	1/31		Soil	1											Run
S21-2 F - 12"	42															hold
S22-2 F - 6"	43															Run
S22-2 F - 12"	44															hold
S23-2 F - 6"	45															Run
S23-2 F - 12"	46															hold
S24-2 F - 6"	47															Run
S24-2 F - 12"	48															hold
S25-2 F - 6"	49															Run
S25-2 F - 12"	50															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17.0	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BT4 6 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 6 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


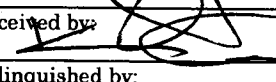
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Ausenic				
S26-2F-6"	51	1/31		Soil	1											Run
S26-2F-12"	52															hold
S27-2F-6"	53															Run
S27-2F-12"	54															hold
S28-2F-6"	55															Run
S28-2F-12"	56															hold
S29-2F-6"	57															Run
S29-2F-12"	58															hold
S30-2F-6"	59															Run
S30-2F-12"	60															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVE SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17	°C

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

Page # 7 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 7 of 18

TURNAROUND TIME

Standard (2 Weeks) **BT4**

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

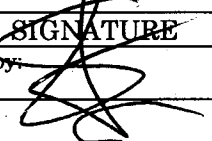

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S31-2E-6"	61	1/31		Soil	1											Run
S31-2E-12"	62															hold
S32-2E-6"	63															Run
S32-2E-12"	64															hold
S33-2E-6"	65															Run
S33-2E-12"	66															hold
S34-2E-6"	67															Run
S34-2E-12"	68															hold
S35-2E-6"	69															Run
S35-2E-12"	70															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

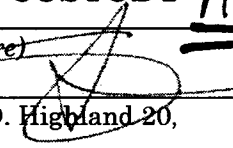
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4
2018Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98166Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 8of 2018

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


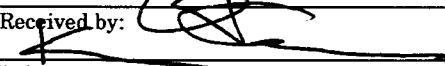
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S36-2E-6"	71	1/31		Soil	1											Run
S36-2E-12"	72															hold
S37-2E-6"	73															Run
S37-2E-12"	74															hold
S38-2E-6"	75															Run
S38-2E-12"	76															hold
S39-2E-6"	77															Run
S39-2E-12"	78															hold
S40-2E-6"	79															Run
S40-2E-12"	80															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

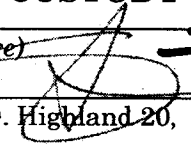
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17:00	

101307

SAMPLE CHAIN OF CUSTODY ME-01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 9 of 218

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

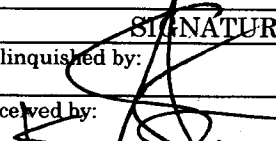
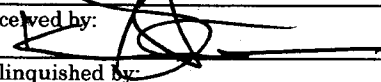
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aromatic				
541-2D-6"	81	1/31		Soil	1											Run
541-2D-12"	82															hold
542-2D-6"	83															Run
542-2D-12"	84															hold
543-2D-6"	85															Run
543-2D-12"	86															hold
544-2D-6"	87															Run
544-2D-12"	88															hold
545-2D-6"	89															Run
545-2D-12"	90															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

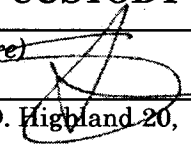
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steve Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:	Samples received at 17 °C			

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 10 of 22 18

TURNAROUND TIME

Standard (2 Weeks) BT4

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

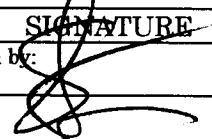
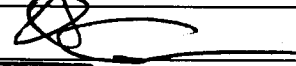
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Avesma				
546-2D-6"	91	1/31		Soil	1											Run
546-2D-12"	92															hold
547-2D-6"	93															Run
547-2D-12"	94															hold
548-2D-6"	95															Run
548-2D-12"	96															hold
549-2D-6"	97															Run
549-2D-12"	98															hold
550-2D-6"	99															Run
550-2D-12"	100															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVE SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F3B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BTY 11 of 28 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page #

of

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

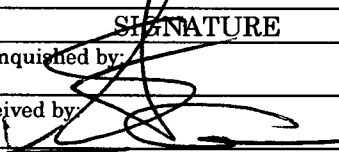
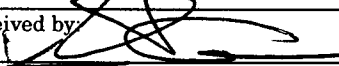
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aqueous				
S51-2B-6"	101	1/21		Soil	1											Run
S51-2B-12"	102															hold
S52-2B-6"	103															Run
S52-2B-12"	104															hold
S53-2B-6"	105															Run
S53-2B-12"	106															hold
S54-2B-6"	107															Run
S54-2B-12"	108															hold
S55-2B-6"	109															Run
S55-2B-12"	110															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

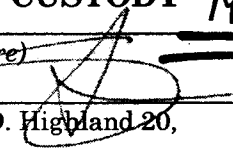
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:36
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 12 of 18

TURNAROUND TIME

Standard (2 Weeks) BTX

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

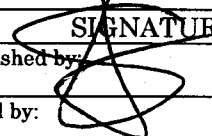
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Aromatic				
556-2B-6"	111	1/31		Soil	1											Run
556-2B-12"	112															hold
557-2B-6"	113															Run
557-2B-12"	114															hold
558-2B-6"	115															Run
558-2B-12"	116															hold
559-2B-6"	117															Run
559-2B-12"	118															hold
560-2B-6"	119															Run
560-2B-12"	120															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

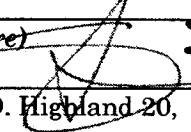
Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Steve Spencer	EMS	1/31	1230
Received by:				
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 13 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


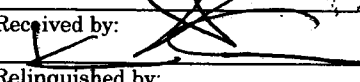
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Avesal				
S61-2A-6"	121	1/31		Soil	1											Run
S61-2A-12"	122															hold
S62-2A-6"	123															Run
S62-2A-12"	124															hold
S63-2A-6"	125															Run
S63-2A-12"	126															hold
S64-2A-6"	127															Run
S64-2A-12"	128															hold
S65-2A-6"	129															Run
S65-2A-12"	130															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Stephen Spencer	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	2°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) Page # 14 of 18PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

REMARKS

sspencer@msgroupllc.com

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions


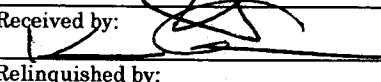
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Average				
566-2A-6"	131	1/31		Soil	1											Run
567-2A-12"	132															hold
567-2A-6"	133															Run
567-2A-12"	134															hold
568-2A-6"	135															Run
568-2A-12"	136															hold
569-2A-6"	137															Run
569-2A-12"	138															hold
570-2A-6"	139															Run
570-2A-12"	140															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	11:30
Received by: 	Kurt Johnson	FB B	1/31	10:30
Relinquished by:				
Received by:				
Samples received at 17 °C				

101307

SAMPLE CHAIN OF CUSTODY ME 01/31/11

BDP
15 of 18

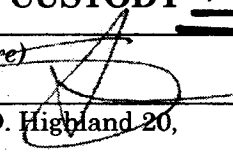
Send Report To Steve Spencer

Company Environmental Management Services, LLC

Address 7006 27th Street W, Suite E

City, State, ZIP Tacoma, WA 98466

Phone # (253) 921-7059 Fax # (253) - 369-6228

SAMPLERS (signature) 

PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

Page # 15 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

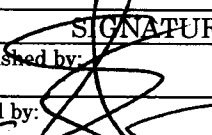

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
S71-2C-6"	141	1/31		Soil	1											Run
S71-2C-12"	142															hold
S72-2C-6"	143															Run
S72-2C-12"	144															hold
S73-2C-6"	145															Run
S73-2C-12"	146															hold
S74-2C-6"	147															Run
S74-2C-12"	148															hold
S75-2C-6"	149															Run
S75-2C-12"	150															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY *ME 01/31/11*

Send Report To Steve Spencer

Company Environmental Management Services, LLC

Address 7006 27th Street W, Suite E

City, State, ZIP Tacoma, WA 98466

Phone # (253) 921-7059 Fax # (253) - 369-6228

SAMPLERS (*signature*)

PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@msgroupllc.com

Page # 16 of 18

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
576-2C-6"	151	1/31		Soil	1											Run
576-2C-12"	152															hold
577-2C-6"	153															Run
577-2C-12"	154															hold
578-2C-6"	155															Run
578-2C-12"	156															hold
579-2C-6"	157															Run
579-2C-12"	158															hold
580-2C-6"	159															Run
580-2C-12"	160															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <i>(Signature)</i>	STEPHEN SPENCER	EMS	1/31	10:30
Received by: <i>(Signature)</i>	Kurt Johnson	F&B	1/31	10:30
Relinquished by:				
Received by:		Samples received at	17°C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

Page #

17 of 18 BT4

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

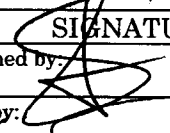

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Ar&B				
S81-2G-6"	161	1/31		Soil	1											Run
S82-2G-12"	162															hold
S82-2G-6"	163															Run
S82-2G-12"	164															hold
S83-2G-6"	165															Run
S83-2G-12"	166															hold
S84-2G-6"	167															Run
S84-2G-12"	168															hold
S85-2G-6"	169															Run
S85-2G-12"	170															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEPHEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F&B	1/31	10:20
Relinquished by:				
Received by:		Samples received at	17 °C	

101307

SAMPLE CHAIN OF CUSTODY

ME 01/31/11

BTY

Page #

18 of 18

Send Report To Steve SpencerCompany Environmental Management Services, LLCAddress 7006 27th Street W, Suite ECity, State, ZIP Tacoma, WA 98466Phone # (253) 921-7059 Fax # (253) - 369-6228SAMPLERS (signature) PROJECT NAME/NO. Highland 20, LLC - 0393-01

PO #

REMARKS

sspencer@emsgroupllc.com

TURNAROUND TIME

Standard (2 Weeks)

Rush charges authorized by:

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

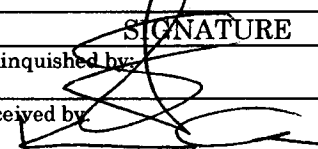

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Arsenic				
586-2 G-6"	171	1/31		Soil	1											Run
586-2 G-12"	172															hold
587-2 G-6"	173															Run
587-2 G-12"	174															hold
588-2 G-6"	175															Run
588-2 G-12"	176															hold
589-2 G-6"	177															Run
589-2 G-12"	178															hold
590-2 G-6"	179															Run
590-2 G-12"	180															hold

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	STEVEN SPENCER	EMS	1/31	10:30
Received by: 	Kurt Johnson	F & B	1/31	10:30
Relinquished by:				
Received by:	Samples received at 17:00			

Attachment D

Professional Qualifications

Attachment D

Professional Qualifications

Environmental Management Services, LLC

Environmental Management Services (EMS) is an environmental contracting and consulting company addressing client's needs throughout the West Coast. Our serves industries include the real estate community, general contractors, property developers and local and state government. We understand the importance of blending a variety of expertise and experience in order to provide our clients the most effective leadership in addressing their specific project needs. Our professionals combine a high level of technical ability with a broad understanding of the overall regulatory compliance requirements.

As an environmental services and consulting company, EMS prides itself maintaining a broad understanding of the most current regulatory compliance requirements, local and state permitting requirements and maintaining contact with our region's environmental advocacy group's positions. EMS provides our clients the services they require by offering cost effective, non-biased, practical, solutions while maintaining positive relations with the regulatory community.

Our associates have completed projects including remedial investigation / feasibility studies (RI/FS), remediation design and management, facility regulatory compliance assessments, due diligence assessments, regulatory compliance training, underground storage tank compliance and hazardous materials management as well as many other environmental compliance related matters for clients throughout the west coast in all avenues of business. The varied background our associates possess compliments the diverse nature of our clientele, providing better understanding of our client's needs and ultimate goals for their projects.

The information in the following pages outlines our professional experience and capabilities in providing environmental management and consulting services. We appreciate your interest in EMS. At your convenience, please feel free to contact our office should you have any questions regarding this document or for more information on the services we provide.

Sincerely,
Environmental Management Services



Stephen M. Spencer
Principal



Stephen M. Spencer
Principal

Mr. Spencer started his career in the environmental services and construction industry in 1987. During his career, he has worked on and successfully completed projects in many varied aspects of the environmental industry. Since 2002, as principal and senior project manager for Environmental Management Services, Mr. Spencer has successfully completed projects for clients throughout the west coast. His forte is in facility assessment, due diligence investigation, health & safety program development and remediation management.

Mr. Spencer has established positive working relationships with regulatory agencies throughout the west coast, affording his clients a superior level of confidence in his approach to their specific project.

His skills as a project manager frequently result in significant savings in both time and budget to his clients. He is proficient in report writing providing a clear, concise detail of project activities including supporting documents and figures. His client's have ranged from property owners and facility operators to the regulatory agencies themselves. His overall understanding of environmental compliance requirements provides a unique perspective on assessing potential and realized environmental risk and a creative understanding of remediation technique.

Robin P. Hamlet, L.G. / L.HG
Sr. Environmental Scientist / Project Manager

- State of Washington Licensed Geologist/Hydrogeologist
- Ecology Licensed Washington State Site Assessor
- Ecology Licensed UST Decommissioning Supervisor
- AHERA Licensed Building Inspector
- OSHA Hazardous Materials & Emergency Response Certified

Robin P. Hamlet is a Licensed Geologist and Hydrogeologist in the State of Washington. Mr. Hamlet has 30 years experience in the geological sciences with over 25 years providing professional environmental consulting services. Mr. Hamlet has been involved with environmental investigations working on Environmental Protection Agency (EPA), United States Navy and Air Force environmental projects, as a project geologist and project manager. As a Senior Project Manager in the private sector, Mr. Hamlet has performed multiple Phase I and Phase II Environmental Site Assessments; including geophysical surveys, soil and groundwater studies and has managed the design and implementation of soil and groundwater remediation projects.



As a Licensed Washington State Underground Storage Tank (UST) Decommissioner and Licensed Site Assessor, Mr. Hamlet has managed multiple UST decommissioning and remediation projects, has prepared proposals, final reports, budgets, contracts with subcontractors, negotiated with prospective clients, and coordinated activities with regulatory agencies. Mr. Hamlet has been involved in training personnel in environmental field operations and Health & Safety programs, has working knowledge of state (NW states) and federal environmental regulations and the ASTM standards. As an AHERA Building Inspector, Mr. Hamlet has performed hazardous materials surveys, air monitoring projects as well as providing asbestos abatement projects.

Adam Harris, L.G.
Sr. Environmental Scientist (Contract)

- Master of Science in Sedimentary Geology
- Licensed geologist in California and Washington
- Current OSHA 40 Hour HAZWOPER
- Certified Oracle Database 9 Administrator
- Certified MS Access 2007 Administrator
- Certified ARC/INFO 9.1 Professional

Mr. Harris has a Bachelors of Science degree from the University of California (UC), Davis in Environmental & Resources Sciences, Specializing in Vadose zone and aqueous geochemistry, hydrology, and environmental management. Mr. Harris graduated with Honors and a Citation for excellence. Mr. Harris continued his education, receiving his Masters in Geology from the University of California, Davis. His thesis Topic was: Environmental geochemistry and paleomagnetism of sediment cores obtained from Ocean Drilling Program Leg 169S, Saanich Inlet, British Columbia.

Engineering Geologist,
Leaking Underground Storage Tank Cleanup Program (2001 to 2005)

- Mr. Harris, as a California State Water Resources Board site manager, implemented state and federal regulations for LUST program. He provided regulatory oversight, reviewed and commented on hydrogeologic reports, plans and findings submitted by other regulated parties for LUST surface spill sites, and surface mines.
- Mr. Harris conducted site investigations, developed site conceptual models, model development, calibration and validation. Further, he reviewed petitions appealing technical decisions of local and regional agencies, Mediated and resolved conflicts between local regulatory agencies and the regulated community.



- Mr. Harris has authored professional opinions, position papers, technical reports, legal orders, notices, presentations and letters for wide stakeholder distribution. Investigated and reported on emerging contaminant fate and transport pathways and collaborated on development and management of statewide online site reporting database.
- Provided technical oversight and guidance to local UST programs, building local program knowledge and ensuring statewide program consistency. Conducted oversight of UST inspections for consistency in program implementation. Introduced legislative concepts resulting in promulgation of new UST regulations.

Geologic Technician - 1999 to 2000

- Mr. Harris participated in international scientific research expedition. Planned transport, set up and operation of environmental analysis laboratory in Antarctica. Investigated and analyzed high-resolution environmental records. Reported research results for publication.

James E. Corcoran, P.E.

Sr. Project Manager / Sr. Project Engineer (Contract)

- Bachelor of Science - Civil Engineering - Oregon State University - 1991
- Washington State Registered Professional Engineer – 1999
- OSHA Hazardous Materials & Emergency Response Certified

Mr. Corcoran has 17 years of experience in Civil Engineering and Project Management. For the past three years, Mr. Corcoran has been the principal of a consulting business that provides civil engineering consulting and site development services including:

- Critical Areas Review
- FEMA floodplain study
- State Environmental Policy Act (SEPA) checklist
- Stormwater Pollution Prevention Plans (SWPPP)
- Spill Prevention, Control, and Countermeasure (SPCC) plans
- Temporary Erosion/Sediment Control (TESC) plans
- Permanent soil stabilization and precise grading plans
- Surface water collection, detention, retention, treatment, and infiltration design
- Construction coordination with utility purveyors
- Site inspection to verify conformance with design intent and contract documents

Mr. Corcoran has provided civil engineering consulting and stormwater management on residential, commercial, and industrial development projects in multiple Washington state jurisdictions including the City of Tacoma, the City of Lacey, the City of Kent, Pierce County, and King County. Specific projects that Mr. Corcoran provided engineering service include:



- Preparing a TESC plan, SPCC plan, and surface water drainage collection and treatment system for a proposed petroleum products recycling process facility which discharges to a municipal storm sewer located in the Port of Tacoma
- Preparing a SEPA checklist, TESC plan, SPCC plan and surface water drainage collection and treatment system for a proposed privately owned fueling facility, which drains to an environmentally sensitive wetland in the City of Kent.
- Preparing a TESC plan, and permanent surface water drainage retention and treatment system, which infiltrates to site soils underlying a proposed commercial retail center in Pierce County.
- Preparing a TESC plan and permanent surface water drainage collection and treatment system which discharges to a municipal storm sewer in the City of Tacoma.
- Preparing a TESC plan and permanent surface water drainage collection, detention and treatment system for a proposed supermarket and commercial retail center located on the Key Peninsula.

Collette Foley, B.S. Geology
Environmental Scientist / Geologist

- Ecology Licensed Site Assessor
- Ecology Licensed UST Decommissioning Supervisor
- AHERA Licensed Building Inspector
- OSHA Compliance Supervisor
- OSHA Hazardous Materials & Emergency Response Certified

Ms. Foley has been conducting Phase I and II Environmental Site Assessments of commercial, industrial, multi- and single-family residential properties throughout western Washington since 2004. Ms. Foley performs a variety of activities associated with completing due diligence investigations including, but not limited to current and historical site research, regulatory agency file reviews, and subsurface investigations including drilling soil borings and installing monitoring wells to determine the presence and outcome of contamination in soil and groundwater.

Additionally, Ms. Foley completes asbestos “*Good Faith*” surveys prior to demolition or renovation of buildings; conducts project oversight for UST removals; and provides extensive environmental consulting as requested. Ms. Foley received her Bachelors degree in Geology and Environmental Science in 2003 from Pacific Lutheran University and has over two years experience as a field geologist / hydrogeologist performing regional hydrogeologic characterization and production well drilling.



Kevin Foley, B.S. Environmental Science, AICP
Sr. Environmental Planner

- AICP Certified Planners
- Washington State Commercial Real Estate Agent

Mr. Foley currently serves as EMS's main point of contact to assist in the resolution of land use, zoning and permitting issues at the local, state and federal level. He has extensive experience in helping prepare and process development proposals for vacant property and the expansion or renovation of developed sites. He also coordinates certain baseline/investigative work by coordinating land surveys needs, sensitive area analysis and the completion of civil design plans for roads, water, traffic and storm water requirements.

Gina Mulderig, B.S. Chemistry
Environmental Scientist / Chemist

- Ecology Licensed Site Assessor
- Ecology Licensed UST Decommissioning Supervisor
- AHERA Licensed Building Inspector
- Certified Erosion and Sediment Control Lead
- OSHA Hazardous Materials & Emergency Response Certified

Ms. Mulderig received her Bachelors degree in Chemistry from the University of Puget Sound in 1979. Ms. Mulderig has been working in the environmental regulatory compliance field since 1985, starting her career with a position as an environmental analyst for Weyerhaeuser Company. Her fifteen year position at Weyerhaeuser required a thorough knowledge of environmental regulatory compliance, focusing on groundwater monitoring, waste water management, storm water management and facility compliance audits.

Ms. Mulderig worked with two local environmental services / consulting firms from 2000 until 2007, greatly increasing her overall regulatory compliance, hydrogeology and environmental engineering knowledge and experience.

Her position with EMS as a Project Manager / Environmental Scientist provides a vast knowledge base to EMS clients in multiple areas of regulatory compliance and environmental science.



Kaitlyn Allegretti, B.S. Geology
Environmental Scientist / Technician

- Ecology Licensed UST Decommissioning Supervisor
- Ecology Licensed Site Assessor
- AHERA Licensed Building Inspector
- OSHA Hazardous Materials & Emergency Response Certified

Ms. Allegretti serves as a site manager and field technical for EMS. Ms. Allegretti graduated from the University of Dayton (2005) with a Bachelor's degree in Geology. Ms. Allegretti's primary responsibilities are field work including monitoring well sampling, underground storage tank closure and decommissioning and asbestos inspections. Ms. Allegretti was licensed as an AHERA building inspector and UST Decommissioner within the first 60 days of her employment.

During her two years with EMS, Ms. Allegretti has completed in excess of fifty Phase I Environmental Site Assessments and in excess of 20 commercial underground storage tank closure projects.

James D. Coppernoll, L.G. / L.HG (Sub-Consultant)
Licensed Geologist / Hydrogeologist

- Washington State Licensed Geologist and Hydrogeologist
- Ecology Licensed Site Assessor

James D. Coppernoll is a Washington State licensed Geologist and Hydrogeologist with thirteen years of experience practicing environmental geology in the Northwest. During his career, Mr. Coppernoll worked with clients ranging from major oil companies and national corporations to local businesses to identify, manage, and resolve their environmental problems and helped local agencies, businesses, and individuals with their environmental, geological, and regulatory issues.

Mr. Coppernoll has conducted various environmental and geological investigations ranging from numerous Phase I Environmental Assessments to contaminated site investigations and remedial planning and implementation as well as land use and development studies in Washington, Oregon, Idaho, Montana, and Alaska, and has frequently acted as a regulatory liaison and client representative in third-party negotiations.

Mr. Coppernoll managed all phases of assessment and remediation at dozens of retail and bulk fuel facilities for major oil companies in the Northwest including: excavation and disposal of contaminated soil; free product recovery; feasibility studies; and design, installation, and



operation/maintenance of in-situ soil and ground water remediation systems. Mr. Coppernoll managed many of these sites from initial assessment through remediation and closure with the state.

Mr. Coppernoll has conducted geological investigations and assessments for diverse property development projects in the northwest including landfills, hot springs, and residential properties. The purpose of these assessments and investigations was to provide professional and reliable information for use in developing sensitive areas properties.

Professional References

Diamond Parking Services
Mr. Bob Turley, CFO
3161 Elliott Ave. Ste. 200
Seattle, Washington 98121
(206) 284-3100 (Client)

Michael J. Goldfarb Enterprises, LLC
Brett Goldfarb, President
1420 Fifth Avenue. Suite 2625
Seattle, WA 98101-2333

The Wattles Company
Craig Wattles, President
35800 2249th Ave SE
Enumclaw, Washington 98022
(253) 272-7205

Baseline Engineering, Inc.
Terry Ferguson
1910 64th Ave. West
Fircrest, WA 98466
(253) 565-4491 (Client)

Best Parking Lot Services
Rebecca Craig, Owner
PO Box 159
Sumner, Washington 98390
(253) 863-3330 (Client)

Republic Services / Regional Disposal
Leslie Whiteman, Special Waste Manager
54 South Dawson Street
Seattle, Washington 98134
(206) 332-7711 (Client)

Joe Hall Construction
Robert Walker, Project Manager
1317 54th Ave. E.
Tacoma, Washington 98424
(253) 922-6815 (Client)

R.W. Rhine, Inc.
Mr. Joel D. Simmonds, President
1124 112th St. East
Tacoma, Washington 98445
(253) 531-9548 (Client)

CAM Properties
Mr. Peter Coates, President
18420 68th Avenue
Kent, Washington 98032
(425) 251-3268 (Client)

Gallanar Inc. / Independent Fuels
Mike Gallanar, President
PO Box 15661
Seattle, Washington 98115
(206) 779-8860 (Client)



Financial Institution References

First Savings Bank Northwest
Mr. John Wallace, Sr. Vice President
Commercial Lending
400 Industrial Drive, Suite 110
Tukwila, Washington 98188
(206) 719-0118

West Coast Bank
Mr. Robert Salvador, Vice President
Commercial Lending
400 Industrial Drive, Suite 110
Tukwila, Washington 98188
(206) 719-0118

KeyBank
Jennifer E. Ringenbach, Vice President
Commercial Lending
1101 Pacific Avenue
Post Office Box 11500
Tacoma, Washington 98411-5500

Washington Trust Bank
Mr. Jack Heath, President
PO Box 2127
Spokane, Washington 99210-2127
(509) 353-3897

Washington First International Bank
Kathleen Herdlein
Manager
9709 Third Ave NE, Suite 110
Seattle, Washington
(206) 830-7156

Commercial Real Estate References

Johnson Commercial
Tim Johnson, President
11120 Gravelly Lake Drive SW
Lakewood, Washington 98499
(253) 589-9999 / tim@tjcp.biz

CB Richard Ellis | Brokerage Services
John Bauder, Vice President
1145 Broadway Plaza, Suite 1000
Tacoma, WA 98402
(253) 596-0047 / John.Bauder@cbre.com

Neil Walter Company
Bruce Valentine, Principal
Foss Landing
1940 East D Street, Suite 100
Tacoma, Washington 98421
(253) 779-2400/bvalentine@neilwalter.com

PDSK Properties, Inc.
Paul Krakow, President
PO Box 98630
Lakewood, WA 98496-8630
(253) 627-4070



Public Agency References

Tacoma Pierce County Health Department
Rob Olsen, Special Inspector
3629 South D Street, MS 170
Tacoma, WA 98418-6813
(253) 798-2855 - Office

Tacoma Pierce County Health Department
Sharon Bell, Special Inspector
3629 South D Street, MS 170
Tacoma, WA 98418-6813
(253) 798-2891 – Office

Tacoma Public Utilities
Paris Um, Health & Safety Manager
3628 South 35th Street
Tacoma, WA 98411-0007
(253) 502-8555 - Office

Pierce County
Rick Tacket, Property Manager
1102 Broadway
Tacoma, Washington 98402
(253) 798-6200

Washington Department of Ecology
Carol Johnston, Site Manager / Inspector
PO Box 47775
Olympia, WA 98504-7775
(360) 407-6263 – Office

King County DDES
Elizabeth Deraitus Abatement Manager
900 Oakesdale Ave SW
Renton, WA 98057-5212
206-296-7090

Yakima County
Mark Cleaver, Project Engineer
128 N. 2nd Street, Fourth Floor
Yakima, Washington 98901
(509) 574-2314

Washington Department of Ecology
Chuck Cline, Program Director
PO Box 47775
Olympia, WA 98504-7775
(360) 407-6267 - Office



Quick views

Documents (11)

Flagged

Photos (31)

Shipping updates (1)

[New category](#)

Messenger

You're signed in to Messenger. To change your status, click your name in the upper right corner.
[Keep me signed in](#) | [Sign out of Messenger](#)

[6 invitations](#)

No friends are online.

[Sign out of Messenger](#)

Home

Contacts

Calendar

JOE FOSS

[Show this message...](#)

5/02/12

[Show](#)

Elizabeth Weldin

5/02/12

To Joe Foss, Stephen Spencer, Wayne Thronson, Doug McArthur, cavanar@wsdot...

[Reply](#) ▼

Hi Joe and Steven,

Thank you very much for the revised cleanup action plan. We appreciate the additional information about the tee boxes, including the written description and drawing.

Ecology is trying to work with you to find a viable solution for the contaminated soil. Ecology liked your idea of putting the contaminated soil under the tee boxes. However, we were under the impression that you were going to cap the contaminated soil under the tee boxes using the appropriate engineering controls (see e-mail from Stephen Spencer below).

Based on the revised cleanup action plan, it sounds like the contaminated soil from the newly created lots will be moved to the parent parcel. Grass seed will be spread on the newly consolidated contaminated soil mounds, which are to be used as tee boxes. There appears to be no engineering controls for the consolidated contaminated soil. In the revised Cleanup Action Plan, you stated that "as the receiving area where the Tee Box is to be constructed is also impacted with arsenic, further capping features are deemed excessive." Ecology respectfully disagrees. Since no other sampling has been conducted throughout the golf course, it is unknown what concentrations of arsenic are present. What we *do* know are the concentrations of arsenic in the soil to be consolidated, which needs to be handled accordingly.

In the draft [Interim Action Plan](#) (hyperlink), Ecology wants consolidated contaminated soil to be capped with either a soil cap or hard cap to protect human health and the environment. A soil cap would be clean soil and geotextile liner covering the contaminated soil. A hard cap would be asphalt, concrete, or paving over the contaminated soil. Please see Chapter 11 (pages 79 – 93) in the draft Interim Action Plan for more details about appropriate engineering controls for consolidated contaminated soil. As reminder, an environmental covenant would need to be placed on the parent parcels where the engineered controls are implemented. This would be a condition of receiving a Property-Specific NFA for the proposed new lots that will be remediated. Ecology will not give the parent parcels an NFA since these parcels will not be remediated. These parcels would remain listed on Confirmed and Suspected Contaminated Sites List. Even though the parent parcels would not be getting an NFA, they would still be subject to periodic reviews.

Please revise the plans for the tee boxes to either have a soil or hard cap over the consolidated contaminated soil in the tee boxes. If you do choose to use a soil cap, please choose the soil cap appropriate for the level of contamination found. Some of the lots have high levels of arsenic

contamination and a type 1 soil cap would not be appropriate.

If you have any questions, feel free to contact me.

Thank you.

Elizabeth Weldin
Technical Assistance Coordinator
Toxics Cleanup Program, Southwest Regional Office
Washington State Department of Ecology
360-407-7094

From: Stephen Spencer [mailto:sspencer@ecocononline.com]
Sent: Thursday, December 29, 2011 10:51 AM
To: Weldin, Elizabeth (ECY)
Cc: JOE FOSS; Matt Loxterman
Subject: RE: Highlands Golf VCP

Elizabeth,

I have meet with Joe Foss and the other Highland Golf managers. They have asked that I present you with an alternative "remediation plan". Basically, they are developing four lots that reside in two tax parcels. They want to remediate the proposed lots prior to being subdivided, place the impacted soil into tee-boxes located on the associated tax parcels, then subdivide the remediated lots. The tee-boxes will be engineered using appropriate engineering controls. I have explained that the tax parcels that contain the impacted soil will remain on the Confirmed and Suspected Contaminated Sites List (CSCSL), but the new lots, now being free of impacted soil should qualify for a No Further Action determination.

They have also asked to be put on whatever lists, grants, etc. that are available for assistance with the Asarco Settlement fund. If you could forward me the Ecology contacts that are managing the Settlement Fund, I will be putting together a proposal for their consideration.

Best Regards,

Stephen Spencer
President | EcoCon, Inc.



Direct: 253.921.7059 | Fax: 253.369.6228 | Office: 253.238.9270

This correspondence is for the sole use of the named addressee, who is the intended recipient, and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail or call the sender at (253) 238-9270, and please destroy all copies of the original message.