FIELD SAMPLING PLAN ADDENDUM 10A

WEST LAKE LANDFILL SUPERFUND SITE OPERABLE UNIT 1

Prepared For:

The United States Environmental Protection Agency Region VII

Prepared on Behalf of:

The West Lake Landfill OU-1 Respondents

Prepared By:

PARSONS

301 Plainfield Road, Suite 350
Syracuse, New York 13212

In Association With:

Engineering for a Better World
FEEZOR ENGINEERING, INC.

3377 Hollenberg Drive
Bridgeton, Missouri 63044

And

AMERIPHYSICS

9111 Cross Park Drive, Suite D200
Knoxville, TN 37923

FEBRUARY 2024

30826134

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

ACRONYM	Definition
amsl	above mean sea level
DIWP	Design Investigation Work Plan
DMP	Data Management Plan
DOE	U.S. Department of Energy
DPT	direct push technology
EPA	U.S. Environmental Protection Agency
FSP	Field Sampling Plan
MSW	municipal solid waste
OU	Operable Unit
pCi/g	picocurie/gram
QAPP	Quality Assurance Project Plan
RIM	radiologically impacted material
Site	West Lake Landfill Superfund Site

1.0 AREA 1 ADDITIONAL BORINGS

1.1 Introduction

This Field Sampling Plan (FSP) Addendum 10A has been prepared on behalf of West Lake Landfill OU-1 Respondents Bridgeton Landfill, LLC, Cotter Corporation (N.S.L.), and the U.S. Department of Energy (DOE) (collectively, Respondents) for the design investigation for the selected Amended Remedy for Operable Unit 1 (OU-1) of the West Lake Landfill Superfund Site (Site). The United States Environmental Protection Agency (EPA) approved (with modifications) the FSP, with the associated Design Investigation Work Plan (DIWP), Quality Assurance Project Plan (QAPP), and Data Management Plan (DMP), in September 2020. The final version of the FSP is dated October 16, 2020.

FSP Addendum 10A has been prepared because radiologically impacted material (RIM) and municipal solid waste (MSW) greater than 2 feet in thickness were identified in the northernmost transect of borings drilled between November 13, 2023 and November 22, 2023 along the eastern boundary of Area 1 and adjacent to St Charles Rock Road per FSP Addendum 10.

Additional step-out boring locations are proposed as part of this Addendum to complete delineation of RIM and MSW from the FSP Addendum 10 A1-PB-171 transect to the main Site access road and to perform confirmation sampling in advance of potential excavation. FSP Addendum 10/10A investigation results will be collectively summarized in an addendum to the Design Investigation Evaluation Report.

1.2 Summary of Design Investigation Findings

Eleven of the over 300 samples obtained during the FSP Addendum 10 investigation had results greater than 7.9 picocurie/gram (pCi/g, while two samples, at borings A1-PB-170-D and A1-PB-171-D, had a result greater than 52.9 pCi/g (see **Table A10A-1**). A prior boring (A1-PB-114-C) located just north of A1-PB-171-D did not indicate the presence of RIM, so the occurrence of RIM does not appear to be continuous in this area.

Boring A1-PB-171-C encountered more than 2 feet of MSW between the depths of 18 and 25 feet. This boring is located in the northernmost FSP Addendum 10 transect and is not bounded by a boring with less than 2 feet of MSW to the north.

As shown on the May and September 1973 Terrain Maps (see **Figures A10A-1** and **A10A-2**), there is evidence of a former stormwater detention basin just south of the site entrance and adjacent to St. Charles Rock Road. The sporadic RIM detected in this area may be due to secondary deposition in the bottom of the former stormwater detention basin due to a variable bottom elevation of the feature. The bottom of RIM and MSW elevations encountered in the Addendum 10 borings is roughly consistent with the ground surface elevations of the May 1973 and September 1973 Terrain Maps (see **Figures A10A-1 and A10A-2**). These figures also show the FSP Addendum 10 borings and proposed FSP Addendum 10A boring locations and indicate whether the Addendum 10 borings encountered RIM or MSW thickness greater than 2 feet as defined in Section 2.4.1.9 of the FSP. The historically present sediment basin was subsequently filled sometime after the late 1970s. Some of the boring logs indicate that the fill materials contain construction debris consisting primarily of concrete, asphalt, and wood.

1.3 Proposed Additional Boring Locations

Additional sampling is proposed to delineate the extent of RIM and MSW within the former sediment basin and to further characterize the area to the north of the area addressed by FSP Addendum 10. Analytical results of samples collected in the borings drilled as part of FSP Addendum 10 are summarized in **Table A10A-1**.

Four transects with five direct push technology (DPT) locations each, totaling 20 borings, are proposed within the former sediment basin as shown in **Figure A10A-3.** The proposed borings will be advanced to a target elevation of 434 feet above mean sea level (amsl), and approximately 4 feet below the deepest detection of RIM in the area (see **Table A10A-1**). Samples will be collected continuously at 0–0.5 foot and 0.5-1 foot, and at 2-foot intervals thereafter.

This extensive sampling program is intended to both delineate and verify RIM removal extents (both laterally and vertically) so that removal would be verified during remedial action using geometric survey, not additional analytical chemistry sampling. If there are areas where the lateral and vertical extent of RIM are not delineated during FSP Addendum 10A sampling, additional future sampling may be required. Additional sampling to delineate the extent of RIM between St. Charles Rock Road and borings that contain RIM (e.g., A1-PB-166-E, A1-PB-114-E, A1-PB-114-I, A1-PB-170-E) will be collected during the remedial action, if not before, to verify the RIM removal extent in this area.

1.4 Drilling and Sampling Methods and Protocols

The FSP standardizes the field procedures to be performed during the design investigation activities for OU-1. The work proposed in this Addendum uses those standard methods and protocols provided in the FSP. The specific provisions in the FSP that will be used are described below. The details regarding the proposed borings are summarized in **Table A10-2**.

DPT, as described in Section 2.2.1.1 of the FSP, will be used to drill the borings within the footprint of the former sediment basin (see **Figure A10-3**). The proposed borings will be advanced to a target elevation of 434 feet amsl, and approximately 4 feet below the deepest detection of RIM in the area. Soils will be logged and sampled following the procedures in FSP Section 2.4.2.6. Samples will be submitted for laboratory analysis of the parameters listed in FSP Section 2.4.5.2.

Proposed borings will be appropriately abandoned following the protocol described in FSP Section 2.2.3 immediately after drilling.

TABLES

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-166-A	A1-PB-166-A-0-0.5-N	645989	0	0.5	N	1.46		1.33		1.09		1.03		2.79	2.12
A1-PB-166-A	A1-PB-166-A-0.5-1-N	645989	0.5	1	N	1.35		1.34		1.23		1.11		2.69	2.34
A1-PB-166-A	A1-PB-166-A-1-2-N	645989	1	2	Y	1.38		1.13		1.33		1.15		2.51	2.48
A1-PB-166-A	A1-PB-166-A-2-4-N	645989	2	4	Y	1.57		1.26		1.27		1.23		2.83	2.5
A1-PB-166-A	A1-PB-166-A-4-6-N	645989	4	6	Y	1.6		1.17		4.61		0.996		2.77	5.606
A1-PB-166-A	A1-PB-166-A-6-8-N	645989	6	8	Y	1.62		0.943		3.83		1.09		2.563	4.92
A1-PB-166-A	A1-PB-166-A-8-10-N	645989	8	10	Y	1.41		1.13		1.45		1.42		2.54	2.87
A1-PB-166-A	A1-PB-166-A-10-12-D	645989	10	12	Y	1.23		1.19		1.05		0.936		2.42	1.986
A1-PB-166-A	A1-PB-166-A-10-12-N	645989	10	12	Y	1.36		1.05		0.986		0.893		2.41	1.879
A1-PB-166-A	A1-PB-166-A-12-14-N	645989	12	14	Y	1.54		1.59		1.09		8.32		3.13	9.41
A1-PB-166-A	A1-PB-166-A-14-16-N	645989	14	16	Y	1.27		1.15		1.32		1.19		2.42	2.51
A1-PB-166-A	A1-PB-166-A-16-18-N	645989	16	18	Y	1.45		1.19		1.36		1.08		2.64	2.44
A1-PB-166-A	A1-PB-166-A-18-20-N	645989	18	20	Y	1.19		1.05		0.985		0.954		2.24	1.939
A1-PB-166-A	A1-PB-166-A-20-22-N	645989	20	22	Y	1.07		1.1		0.988		0.973		2.17	1.961
A1-PB-166-A	A1-PB-166-A-22-24-N	645989	22	24	Y	1.52		1.45		1.38		1.1		2.97	2.48
A1-PB-166-A	A1-PB-166-A-24-26-N	645989	24	26	Y	1.45		1.17		1.23		1.2		2.62	2.43
A1-PB-166-A	A1-PB-166-A-26-28-N	645989	26	28	Y	1.48		1.15		1.25		1.07		2.63	2.32
A1-PB-166-A	A1-PB-166-A-28-29-N	645989	28	29	Y	1.42		1.16		1.58		1.24		2.58	2.82
A1-PB-166-B	A1-PB-166-B-0-0.5-N	647658	0	0.5	N	1.56		1.09		1.18		1.04		2.65	2.22
A1-PB-166-B	A1-PB-166-B-0.5-1-N	647658	0.5	1	N	1.45		1.17		1.09		1.32		2.62	2.41
A1-PB-166-B	A1-PB-166-B-1-2-N	647658	1	2	Y	1.56		1.14		1.32		1.21		2.7	2.53
A1-PB-166-B	A1-PB-166-B-2-4-N	647658	2	4	Y	1.43		1.48		1.29		1.3		2.91	2.59
A1-PB-166-B	A1-PB-166-B-4-6-N	647658	4	6	Y	1.53		1.27		1.28		1.15		2.8	2.43
A1-PB-166-B	A1-PB-166-B-6-8-N	647658	6	8	Y	1.63		1.15		1.86		0.995		2.78	2.855
A1-PB-166-B	A1-PB-166-B-8-10-N	647658	8	10	Y	1.21		1.34		0.593		0.956		2.55	1.549
A1-PB-166-B	A1-PB-166-B-10-12-N	647658	10	12	Y	1.42		1.21		1.14		0.917		2.63	2.057
A1-PB-166-B	A1-PB-166-B-12-14-N	647658	12	14	Y	1.33		1.09		0.912		1.13		2.42	2.042
A1-PB-166-B	A1-PB-166-B-14-16-N	647658	14	16	Y	1.37		1.17		1.19		1.07		2.54	2.26
A1-PB-166-B	A1-PB-166-B-16-18-N	647658	16	18	Y	1.38		1.26		1.29		1.18		2.64	2.47
A1-PB-166-B	A1-PB-166-B-18-20-D	647658	18	20	Y	1.52		1.43		1.21		1.31		2.95	2.52
A1-PB-166-B	A1-PB-166-B-18-20-N	647658	18	20	Y	1.47		1.39		1.50		1.1		2.86	2.6
A1-PB-166-B	A1-PB-166-B-20-22-N	647658	20	22	Y	1.35		1.16		1.24		1.02		2.51	2.26
A1-PB-166-B	A1-PB-166-B-22-24-N	647658	22	24	Y	1.31		0.999		1.25		0.996		2.309	2.246
A1-PB-166-B	A1-PB-166-B-24-26-N	647658	24	26	Y	1.41		1.38		1.19		1.01		2.79	2.2
A1-PB-166-B	A1-PB-166-B-26-28-N	647658	26	28	Y	1.33		0.981		1.15		0.957		2.311	2.107
A1-PB-166-B	A1-PB-166-B-28-29-N	647658	28	29	Y	1.28		0.984		1.18		0.917		2.264	2.097

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-166-C	A1-PB-166-C-0-0.5-N	645993	0	0.5	N	1.19		1.01		1.17		1.07		2.2	2.24
A1-PB-166-C	A1-PB-166-C-0.5-1-N	645993	0.5	1	N	1.33		1.21		1.07		1.12		2.54	2.19
A1-PB-166-C	A1-PB-166-C-1-2-N	645993	1	2	Y	1.34		1.11		1.46		1.11		2.45	2.57
A1-PB-166-C	A1-PB-166-C-2-4-N	645993	2	4	Y	1.53		1.12		1.69		1.28		2.65	2.97
A1-PB-166-C	A1-PB-166-C-4-6-N	645993	4	6	Y	1.54		1.18		1.53		1.36		2.72	2.89
A1-PB-166-C	A1-PB-166-C-6-8-N	645993	6	8	Y	1.43		1.17		3.49		1.01		2.6	4.5
A1-PB-166-C	A1-PB-166-C-8-10-N	645993	8	10	Y	1.33		1.07		1.19		1.18		2.4	2.37
A1-PB-166-C	A1-PB-166-C-10-12-N	645993	10	12	Y	1.33		1.23		1.34		1.21		2.56	2.55
A1-PB-166-C	A1-PB-166-C-12-14-N	645993	12	14	Y	1.47		1.16		1.31		1.04		2.63	2.35
A1-PB-166-C	A1-PB-166-C-14-16-N	645993	14	16	Y	1.56		1.36		1.06		1.04		2.92	2.1
A1-PB-166-C	A1-PB-166-C-16-18-D	645993	16	18	Y	1.74		1.38		1.28		1.34		3.12	2.62
A1-PB-166-C	A1-PB-166-C-16-18-N	645993	16	18	Y	1.31		1.2		1.31		0.979		2.51	2.289
A1-PB-166-C	A1-PB-166-C-18-20-N	645993	18	20	Y	1.41		1.3		1.05		0.914		2.71	1.964
A1-PB-166-C	A1-PB-166-C-20-20.5-N	645993	20	20.5	N	1.48		1.19		1.35		1.3		2.67	2.65
A1-PB-166-D	A1-PB-166-D-0-0.5-N	647619	0	0.5	N	1.28		1.13		0.928		0.889		2.41	1.817
A1-PB-166-D	A1-PB-166-D-0.5-1-N	647619	0.5	1	N	1.33		1.08		1.09		0.98		2.41	2.07
A1-PB-166-D	A1-PB-166-D-1-2-N	647619	1	2	Y	1.43		1.27		1.19		1.11		2.7	2.3
A1-PB-166-D	A1-PB-166-D-2-4-N	647619	2	4	Y	1.45		1.43		1.60		1.08		2.88	2.68
A1-PB-166-D	A1-PB-166-D-4-6-N	647619	4	6	Y	1.39		1.29		0.942		0.981		2.68	1.923
A1-PB-166-D	A1-PB-166-D-6-8-N	647619	6	8	Y	1.41		1.02		1.68		1.18		2.43	2.86
A1-PB-166-D	A1-PB-166-D-8-10-N	647619	8	10	Y	1.56		1.22		1.33		1.21		2.78	2.54
A1-PB-166-D	A1-PB-166-D-10-12-N	647619	10	12	Y	1.6		1.53		1.52		1.21		3.13	2.73
A1-PB-166-D	A1-PB-166-D-12-14-D	647619	12	14	Y	1.32		0.954		0.955		0.865		2.274	1.82
A1-PB-166-D	A1-PB-166-D-12-14-N	647619	12	14	Y	1.39		0.993		1.06		0.774		2.383	1.834
A1-PB-166-D	A1-PB-166-D-14-16-N	647619	14	16	Y	1.45		1.45		1.17		0.959		2.9	2.129
A1-PB-166-D	A1-PB-166-D-16-18-N	647619	16	18	Y	1.79		0.947		1.09		1.16		2.737	2.25
A1-PB-166-D	A1-PB-166-D-18-20-N	647619	18	20	Y	1.68		1.42		1.48		1.28		3.1	2.76
A1-PB-166-D	A1-PB-166-D-20-22-N	647619	20	22	Y	1.6		1.37		1.38		1.18		2.97	2.56
A1-PB-166-D	A1-PB-166-D-22-24-N	647619	22	24	Y	1.92		1.02		1.69		0.814		2.94	2.504
A1-PB-166-E	A1-PB-166-E-0-0.5-N	646159	0	0.5	N	1.27		0.93		1.66		1.02		2.2	2.68
A1-PB-166-E	A1-PB-166-E-0.5-1-N	646159	0.5	1	N	1.33		1.1		0.833		0.89		2.43	1.723
A1-PB-166-E	A1-PB-166-E-1-2-N	646159	1	2	Y	1.48		1.2		1.35		1.13		2.68	2.48
A1-PB-166-E	A1-PB-166-E-2-4-N	646159	2	4	Y	1.49		1.03		1.17		1.33		2.52	2.5
A1-PB-166-E	A1-PB-166-E-4-6-N	646159	4	6	Y	1.64		1.08		7.02		0.945		2.72	7.965
A1-PB-166-E	A1-PB-166-E-6-8-N	646159	6	8	Y	1.32		1.08		2.02		0.937		2.4	2.957
A1-PB-166-E	A1-PB-166-E-8-10-D	646159	8	10	Y	1.38		1.14		1.22		1.17		2.52	2.39
A1-PB-166-E	A1-PB-166-E-8-10-N	646159	8	10	Y	1.44		1.22		1.45		1.09		2.66	2.54
A1-PB-166-E	A1-PB-166-E-10-12-N	646159	10	12	Y	1.49		0.921		1.31		1.17		2.411	2.48
A1-PB-166-E	A1-PB-166-E-12-14-N	646159	12	14	Y	1.55		1.07		1.19		0.961		2.62	2.151

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-166-F	A1-PB-166-F-0-0.5-N	646412	0	0.5	N	1.1		0.987		0.719		0.802		2.087	1.521
A1-PB-166-F	A1-PB-166-F-0.5-1-N	646412	0.5	1	N	1.07		0.987		1.18		1.03		2.057	2.21
A1-PB-166-F	A1-PB-166-F-1-2-N	646412	1	2	Y	1.16		0.868		1.04		0.925		2.028	1.965
A1-PB-166-F	A1-PB-166-F-2-4-N	646412	2	4	Y	1.38		1.4		1.06		0.853		2.78	1.913
A1-PB-166-F	A1-PB-166-F-4-6-N	646412	4	6	Y	1.43		1.26		1.62		1.14		2.69	2.76
A1-PB-166-F	A1-PB-166-F-6-8-N	646412	6	8	Y	1.5		1.17		1.28		0.901		2.67	2.181
A1-PB-166-F	A1-PB-166-F-8-10-N	646412	8	10	Y	1.47		1.37		1.28		0.916		2.84	2.196
A1-PB-166-F	A1-PB-166-F-10-12-N	646412	10	12	Y	1.52		1.26		1.12		1.11		2.78	2.23
A1-PB-166-F	A1-PB-166-F-12-14-N	646412	12	14	Y	1.32		1.17		1.21		0.921		2.49	2.131
A1-PB-167-A	A1-PB-167-A-0-0.5-N	646438	0	0.5	N	1.4		1.18		1.23		1.09		2.58	2.32
A1-PB-167-A	A1-PB-167-A-0.5-1-N	646438	0.5	1	N	1.59		1.22		1.48		1.22		2.81	2.7
A1-PB-167-A	A1-PB-167-A-1-2-N	646438	1	2	Y	1.49		1.26		1.16		1.24		2.75	2.4
A1-PB-167-A	A1-PB-167-A-2-4-N	646438	2	4	Y	1.56		1.15		1.33		1.11		2.71	2.44
A1-PB-167-A	A1-PB-167-A-4-6-N	646438	4	6	Y	1.5		1.13		1.86		1.31		2.63	3.17
A1-PB-167-A	A1-PB-167-A-6-8-N	646438	6	8	Y	1.45		1.25		1.73		1.4		2.7	3.13
A1-PB-167-A	A1-PB-167-A-8-10-N	646438	8	10	Y	1.84		1.08		8.66		1.04		2.92	9.7
A1-PB-167-A	A1-PB-167-A-10-12-N	646438	10	12	Y	1.66		1.37		1.34		1.2		3.03	2.54
A1-PB-167-A	A1-PB-167-A-12-14-N	646438	12	14	Y	1.5		1.4		1.31		1.09		2.9	2.4
A1-PB-167-A	A1-PB-167-A-14-16-N	646438	14	16	Y	1.5		1.3		1.60		0.931		2.8	2.531
A1-PB-167-A	A1-PB-167-A-16-18-N	646438	16	18	Y	1.27		1.24		1.41		1.09		2.51	2.5
A1-PB-167-A	A1-PB-167-A-18-20-D	646438	18	20	Y	1.2		0.84		0.956		0.972		2.04	1.928
A1-PB-167-A	A1-PB-167-A-18-20-N	646438	18	20	Y	1.01		1.18		0.661		0.688		2.19	1.349
A1-PB-167-A	A1-PB-167-A-20-22-N	646438	20	22	Y	1.17		0.999		0.888		0.89		2.169	1.778
A1-PB-167-A	A1-PB-167-A-22-24-N	646438	22	24	Y	1.59		1.31		1.09		1.35		2.9	2.44
A1-PB-167-A	A1-PB-167-A-24-26-N	646438	24	26	Y	1.3		1.33		1.54		0.879		2.63	2.419
A1-PB-167-A	A1-PB-167-A-26-28-N	646438	26	28	Y	1.72		1.48		1.42		1.25		3.2	2.67
A1-PB-167-A	A1-PB-167-A-28-30-N	646438	28	30	Y	1.5		1.18		1.37		1.08		2.68	2.45
A1-PB-167-B	A1-PB-167-B-0-0.5-N	645545	0	0.5	N	1.51		1.37		1.66		1.25		2.88	2.91
A1-PB-167-B	A1-PB-167-B-0.5-1-N	645545	0.5	1	N	1.4		1.24		1.26		0.94		2.64	2.2
A1-PB-167-B	A1-PB-167-B-1-2-N	645545	1	2	Y	1.62		1.15		1.21		1.24		2.77	2.45
A1-PB-167-B	A1-PB-167-B-2-4-N	645545	2	4	Y	1.6		1.4		1.75		1.36		3	3.11
A1-PB-167-B	A1-PB-167-B-4-6-N	645545	4	6	Y	1.43		1.24		1.32		1.3		2.67	2.62
A1-PB-167-B	A1-PB-167-B-6-8-N	645545	6	8	Y	1.79		1.6		1.47		1.31		3.39	2.78
A1-PB-167-B	A1-PB-167-B-8-10-N	645545	8	10	Y	1.65		1.33		1.36		1.15		2.98	2.51
A1-PB-167-B	A1-PB-167-B-10-12-N	645545	10	12	Y	1.44		0.838		0.692		0.917		2.278	1.609
A1-PB-167-B	A1-PB-167-B-12-14-N	645545	12	14	Y	1.59		1.22		1.04		1		2.81	2.04
A1-PB-167-B	A1-PB-167-B-14-16-N	645545	14	16	Y	1.5		1.16		2.19		1.36		2.66	3.55
A1-PB-167-B	A1-PB-167-B-16-18-N	645545	16	18	Y	1.55		0.848		0.878		0.542		2.398	1.42
A1-PB-167-B	A1-PB-167-B-18-20-N	645545	18	20	Y	1.65		1.42		1.49		0.948		3.07	2.438
A1-PB-167-B	A1-PB-167-B-20-22-N	645545	20	22	Y	1.46		1.08		1.38		1.29		2.54	2.67

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-167-B	A1-PB-167-B-22-23-N	645545	22	23	Y	1.49		1.22		0.818		0.946		2.71	1.764
A1-PB-167-C	A1-PB-167-C-0-0.5-N	645821	0	0.5	N	1.25		1.44		1.03		1.1		2.69	2.13
A1-PB-167-C	A1-PB-167-C-0.5-1-N	645821	0.5	1	N	1.48		1.27		1.17		1.09		2.75	2.26
A1-PB-167-C	A1-PB-167-C-1-2-N	645821	1	2	Y	1.34		1.23		1.07		1.14		2.57	2.21
A1-PB-167-C	A1-PB-167-C-2-4-N	645821	2	4	Y	1.35		1.39		1.25		1.03		2.74	2.28
A1-PB-167-C	A1-PB-167-C-4-6-N	645821	4	6	Y	1.45		1.13		1.30		1.15		2.58	2.45
A1-PB-167-C	A1-PB-167-C-6-8-N	645821	6	8	Y	1.29		1.34		1.27		1.1		2.63	2.37
A1-PB-167-C	A1-PB-167-C-8-10-N	645821	8	10	Y	1.4		1.06		1.37		1.14		2.46	2.51
A1-PB-167-C	A1-PB-167-C-10-12-N	645821	10	12	Y	1.48		1.19		1.28		1.33		2.67	2.61
A1-PB-167-C	A1-PB-167-C-12-14-N	645821	12	14	Y	1.64		1.1		2.28		1.03		2.74	3.31
A1-PB-167-C	A1-PB-167-C-14-16-N	645821	14	16	Y	1.69		1.06		2.37		1.22		2.75	3.59
A1-PB-167-C	A1-PB-167-C-16-18-N	645821	16	18	Y	1.37		1.04		2.71		1.01		2.41	3.72
A1-PB-167-C	A1-PB-167-C-18-20-N	645821	18	20	Y	1.13		1.1		1.31		0.884		2.23	2.194
A1-PB-167-C	A1-PB-167-C-20-22-N	645821	20	22	Y	1.29		1.16		2.48		1.04		2.45	3.52
A1-PB-167-C	A1-PB-167-C-22-24-N	645821	22	24	Y	0.561		0.671		0.922		0.812		1.232	1.734
A1-PB-167-C	A1-PB-167-C-24-26-N	645821	24	26	Y	1.17		1.21		1.36		0.952		2.38	2.312
A1-PB-167-C	A1-PB-167-C-26-28-N	645821	26	28	Y	1.27		0.995		1.02		0.763		2.265	1.783
A1-PB-167-C	A1-PB-167-C-28-29-N	645821	28	29	Y	0.558		0.47		0.449		0.958		1.028	1.407
A1-PB-167-D	A1-PB-167-D-0-0.5-N	645539	0	0.5	N	1.54		1.39		1.07		1.1		2.93	2.17
A1-PB-167-D	A1-PB-167-D-0.5-1-N	645539	0.5	1	N	1.31		1.28		1.13		1.09		2.59	2.22
A1-PB-167-D	A1-PB-167-D-1-2-N	645539	1	2	Y	1.77		1.3		1.06		1.02		3.07	2.08
A1-PB-167-D	A1-PB-167-D-2-4-N	645539	2	4	Y	1.44		1.27		1.38		1.12		2.71	2.5
A1-PB-167-D	A1-PB-167-D-4-6-N	645539	4	6	Y	1.46		1.14		0.956		1.18		2.6	2.136
A1-PB-167-D	A1-PB-167-D-6-8-N	645539	6	8	Y	1.85		1.33		9.98		1.17		3.18	11.15
A1-PB-167-D	A1-PB-167-D-8-10-N	645539	8	10	Y	1.48		1.33		2.86		1.05		2.81	3.91
A1-PB-167-D	A1-PB-167-D-10-12-N	645539	10	12	Y	1.54		1.37		2.70		1.13		2.91	3.83
A1-PB-167-D	A1-PB-167-D-12-14-N	645539	12	14	Y	1.68		1.18		2.14		0.982		2.86	3.122
A1-PB-167-D	A1-PB-167-D-14-16-D	645539	14	16	Y	1.57		1.37		3.25		1.22		2.94	4.47
A1-PB-167-D	A1-PB-167-D-14-16-N	645539	14	16	Y	1.56		1.29		2.36		1.14		2.85	3.5
A1-PB-167-D	A1-PB-167-D-16-17-N	645539	16	17	Y	1.39		1.19		1.47		1.14		2.58	2.61
A1-PB-167-E	A1-PB-167-E-0-0.5-N	646176	0	0.5	N	1.24		0.809		1.77		0.511		2.049	2.281
A1-PB-167-E	A1-PB-167-E-0.5-1-N	646176	0.5	1	N	1.57		1.19		1.17		1.21		2.76	2.38
A1-PB-167-E	A1-PB-167-E-1-2-N	646176	1	2	Y	1.37		1.19		1.15		1.2		2.56	2.35
A1-PB-167-E	A1-PB-167-E-2-4-N	646176	2	4	Y	1.28		1.39		1.18		1.24		2.67	2.42
A1-PB-167-E	A1-PB-167-E-4-6-N	646176	4	6	Y	1.5		1.14		4.51		0.963		2.64	5.473
A1-PB-167-E	A1-PB-167-E-6-8-N	646176	6	8	Y	1.55		1.08		5.02		0.986		2.63	6.006
A1-PB-167-E	A1-PB-167-E-8-10-N	646176	8	10	Y	1.38		1.05		1.07		1.23		2.43	2.3
A1-PB-167-E	A1-PB-167-E-10-12-N	646176	10	12	Y	1.58		1.65		1.26		1.33		3.23	2.59
A1-PB-167-E	A1-PB-167-E-12-14-N	646176	12	14	Y	1.53		1.5		1.07		1.02		3.03	2.09
A1-PB-167-E	A1-PB-167-E-14-15-N	646176	14	15	Y	1.31		1.11		1.11		0.938		2.42	2.048

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-168-A-R	A1-PB-168-A-R-0-0.5-N	647636	0	0.5	N	1.45		1.16		1.33		1.26		2.61	2.59
A1-PB-168-A-R	A1-PB-168-A-R-0.5-1-N	647636	0.5	1	N	1.18		1.06		0.976		0.98		2.24	1.956
A1-PB-168-A-R	A1-PB-168-A-R-1-2-N	647636	1	2	Y	1.22		1.09		1.23		1.13		2.31	2.36
A1-PB-168-A-R	A1-PB-168-A-R-2-4-N	647636	2	4	Y	1.02		0.857		1.14		0.951		1.877	2.091
A1-PB-168-A-R	A1-PB-168-A-R-4-6-N	647636	4	6	Y	1.3		0.967		1.03		1.13		2.267	2.16
A1-PB-168-A-R	A1-PB-168-A-R-8-10-N	647636	8	10	Y	1.38		0.904		1.21		1.12		2.284	2.33
A1-PB-168-A-R	A1-PB-168-A-R-10-12-N	647636	10	12	Y	1.13		0.875		1.14		0.994		2.005	2.134
A1-PB-168-A-R	A1-PB-168-A-R-12-14-N	647636	12	14	Y	1.71		1.52		1.78		1.23		3.23	3.01
A1-PB-168-A-R	A1-PB-168-A-R-14-16-N	647636	14	16	Y	1.3		1.15		1.32		1.08		2.45	2.4
A1-PB-168-A-R	A1-PB-168-A-R-16-18-D	647636	16	18	Y	1.26		0.89		1.15		0.87		2.15	2.02
A1-PB-168-A-R	A1-PB-168-A-R-16-18-N	647636	16	18	Y	1.33		1.26		1.09		0.906		2.59	1.996
A1-PB-168-A-R	A1-PB-168-A-R-18-20-N	647636	18	20	Y	1.47		1.44		1.52		1.18		2.91	2.7
A1-PB-168-A-R	A1-PB-168-A-R-20-22-N	647636	20	22	Y	1.31		1.32		1.27		1.06		2.63	2.33
A1-PB-168-A-R	A1-PB-168-A-R-22-24-N	647636	22	24	Y	1.54		0.974		1.18		0.888		2.514	2.068
A1-PB-168-A-R	A1-PB-168-A-R-24-26-N	647636	24	26	Y	1.64		1.26		1.29		0.981		2.9	2.271
A1-PB-168-A-R	A1-PB-168-A-R-26-28-N	647636	26	28	Y	2.19		1.91		1.59		1.52		4.1	3.11
A1-PB-168-B	A1-PB-168-B-0-0.5-N	645815	0	0.5	N	1.66		1.31		1.40		1.22		2.97	2.62
A1-PB-168-B	A1-PB-168-B-0.5-1-N	645815	0.5	1	N	1.5		1.44		1.21		1.07		2.94	2.28
A1-PB-168-B	A1-PB-168-B-1-2-N	645815	1	2	Y	1.67		1.75		1.47		1.16		3.42	2.63
A1-PB-168-B	A1-PB-168-B-2-4-N	645815	2	4	Y	1.47		1.06		1.41		1.14		2.53	2.55
A1-PB-168-B	A1-PB-168-B-4-6-N	645815	4	6	Y	1.43		1.24		1.41		0.898		2.67	2.308
A1-PB-168-B	A1-PB-168-B-6-8-N	645815	6	8	Y	1.43		0.893		1.05		1.07		2.323	2.12
A1-PB-168-B	A1-PB-168-B-8-10-N	645815	8	10	Y	1.33		1.33		1.46		1.22		2.66	2.68
A1-PB-168-B	A1-PB-168-B-10-12-N	645815	10	12	Y	1.39		1.01		4.32		1.24		2.4	5.56
A1-PB-168-B	A1-PB-168-B-12-14-N	645815	12	14	Y	1.63		1.17		2.70		1.21		2.8	3.91
A1-PB-168-B	A1-PB-168-B-14-16-N	645815	14	16	Y	1.39		1.43		1.68		1.34		2.82	3.02
A1-PB-168-B	A1-PB-168-B-16-18-N	645815	16	18	Y	1.68		1.11		1.25		1.17		2.79	2.42
A1-PB-168-B	A1-PB-168-B-18-20-N	645815	18	20	Y	1.26		0.986		1.29		0.935		2.246	2.225
A1-PB-168-C	A1-PB-168-C-0-0.5-N	646004	0	0.5	N	1.32		1.41		1.09		1.13		2.73	2.22
A1-PB-168-C	A1-PB-168-C-0.5-1-N	646004	0.5	1	N	1.68		1.31		0.999		1.23		2.99	2.229
A1-PB-168-C	A1-PB-168-C-1-2-N	646004	1	2	Y	1.42		1.21		1.06		1.19		2.63	2.25
A1-PB-168-C	A1-PB-168-C-2-4-N	646004	2	4	Y	1.53		1.17		1.15		1.07		2.7	2.22
A1-PB-168-C	A1-PB-168-C-4-6-N	646004	4	6	Y	1.53		1.14		1.12		1.09		2.67	2.21
A1-PB-168-C	A1-PB-168-C-6-8-N	646004	6	8	Y	1.41		1.14		1.22		1.01		2.55	2.23
A1-PB-168-C	A1-PB-168-C-8-10-N	646004	8	10	Y	1.26		1.2		1.13		0.975		2.46	2.105
A1-PB-168-C	A1-PB-168-C-10-12-N	646004	10	12	Y	1.45		1.17		2.38		0.792		2.62	3.172
A1-PB-168-C	A1-PB-168-C-12-14-N	646004	12	14	Y	1.49		1.36		1.40		1.04		2.85	2.44
A1-PB-168-C	A1-PB-168-C-14-16-N	646004	14	16	Y	1.39		1.33		2.59		0.868		2.72	3.458
A1-PB-168-C	A1-PB-168-C-16-18-N	646004	16	18	Y	1.45		0.929		1.34		1.17		2.379	2.51
A1-PB-168-C	A1-PB-168-C-18-20-N	646004	18	20	Y	1.59		1.44		1.17		1.1		3.03	2.27

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-168-D	A1-PB-168-D-0-0.5-N	645819	0	0.5	N	1.66		1.47		1.29		1.06		3.13	2.35
A1-PB-168-D	A1-PB-168-D-0.5-1-N	645819	0.5	1	N	1.48		1.32		1.41		1.19		2.8	2.6
A1-PB-168-D	A1-PB-168-D-1-2-N	645819	1	2	Y	1.35		1.05		1.13		0.845		2.4	1.975
A1-PB-168-D	A1-PB-168-D-2-4-N	645819	2	4	Y	1.36		1.2		1.28		1.11		2.56	2.39
A1-PB-168-D	A1-PB-168-D-4-6-N	645819	4	6	Y	1.53		1.34		1.20		1.24		2.87	2.44
A1-PB-168-D	A1-PB-168-D-6-8-N	645819	6	8	Y	1.5		1.05		3.28		1.14		2.55	4.42
A1-PB-168-D	A1-PB-168-D-8-10-D	645819	8	10	Y	1.7		1.14		4.43		0.958		2.84	5.388
A1-PB-168-D	A1-PB-168-D-8-10-N	645819	8	10	Y	1.84		1.07		11.3		0.972		2.91	12.272
A1-PB-168-D	A1-PB-168-D-10-12-N	645819	10	12	Y	1.57		1.63		1.58		1.31		3.2	2.89
A1-PB-168-D	A1-PB-168-D-12-14-N	645819	12	14	Y	1.55		1.65		1.48		1.59		3.2	3.07
A1-PB-168-D	A1-PB-168-D-14-15.5-N	645819	14	15.5	Y	1.59		1.68		1.24		1.51		3.27	2.75
A1-PB-168-E	A1-PB-168-E-0-0.5-N	646176	0	0.5	N	1.35		1.13		1.42		1.12		2.48	2.54
A1-PB-168-E	A1-PB-168-E-0.5-1-N	646176	0.5	1	N	1.34		1.25		0.997		0.78		2.59	1.777
A1-PB-168-E	A1-PB-168-E-1-2-D	646176	1	2	Y	1.4		0.863		1.07		0.781		2.263	1.851
A1-PB-168-E	A1-PB-168-E-1-2-N	646176	1	2	Y	1.56		1.22		1.29		1.08		2.78	2.37
A1-PB-168-E	A1-PB-168-E-2-4-N	646176	2	4	Y	1.52		1.65		1.28		1.3		3.17	2.58
A1-PB-168-E	A1-PB-168-E-4-6-N	646176	4	6	Y	1.32		1.38		1.17		0.937		2.7	2.107
A1-PB-168-E	A1-PB-168-E-6-8-N	646176	6	8	Y	1.61		1.15		3.98		1.09		2.76	5.07
A1-PB-168-E	A1-PB-168-E-8-10-N	646176	8	10	Y	1.44		1.14		1.29		0.825		2.58	2.115
A1-PB-168-E	A1-PB-168-E-10-12-N	646176	10	12	Y	1.37		1.19		1.42		1.12		2.56	2.54
A1-PB-168-E	A1-PB-168-E-12-14-N	646176	12	14	Y	1.3		1.22		1.10		1.08		2.52	2.18
A1-PB-168-E	A1-PB-168-E-14-15-N	646176	14	15	Y	1.44		0.975		1.39		0.862		2.415	2.252
A1-PB-169-A	A1-PB-169-A-0-0.5-N	647236	0	0.5	N	1.22		1.15		1.33		1.07		2.37	2.4
A1-PB-169-A	A1-PB-169-A-0.5-1-N	647236	0.5	1	N	1.31		1.06		3.69		0.957		2.37	4.647
A1-PB-169-A	A1-PB-169-A-1-2-N	647236	1	2	Y	2.4		1.34		21.1		1.11		3.74	22.21
A1-PB-169-A	A1-PB-169-A-2-4-N	647236	2	4	Y	2.91		0.941		20.7		1.08		3.851	21.78
A1-PB-169-A	A1-PB-169-A-4-6-N	647236	4	6	Y	1.37		1.18		2.26		0.989		2.55	3.249
A1-PB-169-A	A1-PB-169-A-6-8-N	647236	6	8	Y	1.27		1.04		1.70		0.89		2.31	2.59
A1-PB-169-A	A1-PB-169-A-8-10-N	647236	8	10	Y	1.22		1.27		1.21		1.1		2.49	2.31
A1-PB-169-A	A1-PB-169-A-10-12-N	647236	10	12	Y	1.36		0.928		1.10		0.98		2.288	2.08
A1-PB-169-A	A1-PB-169-A-12-14-N	647236	12	14	Y	1.29		1.48		1.82		1.6		2.77	3.42
A1-PB-169-A	A1-PB-169-A-14-16-N	647236	14	16	Y	1.54		1.31		1.45		1.36		2.85	2.81
A1-PB-169-A	A1-PB-169-A-16-18-N	647236	16	18	Y	1.13		0.954		1.02		1.07		2.084	2.09
A1-PB-169-A	A1-PB-169-A-18-20-N	647236	18	20	Y	1.04		0.944		0.912		0.705		1.984	1.617
A1-PB-169-A	A1-PB-169-A-20-22-N	647236	20	22	Y	1.31		1.15		1.67		1.37		2.46	3.04
A1-PB-169-A	A1-PB-169-A-22-24-N	647236	22	24	Y	1.28		1.23		1.34		1.31		2.51	2.65
A1-PB-169-A	A1-PB-169-A-24-26-N	647236	24	26	Y	1.23		1.12		1.29		1.14		2.35	2.43
A1-PB-169-A	A1-PB-169-A-26-28-N	647236	26	28	Y	1.45		1.31		1.49		0.973		2.76	2.463
A1-PB-169-A	A1-PB-169-A-28-30-N	647236	28	30	Y	1.22		1.19		0.992		1.05		2.41	2.042

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-169-B	A1-PB-169-B-0-0.5-N	646003	0	0.5	N	1.6		1.19		0.910		1.16		2.79	2.07
A1-PB-169-B	A1-PB-169-B-0.5-1-N	646003	0.5	1	N	1.27		1.17		0.977		1.1		2.44	2.077
A1-PB-169-B	A1-PB-169-B-1-2-N	646003	1	2	Y	1.4		1.29		1.18		0.932		2.69	2.112
A1-PB-169-B	A1-PB-169-B-2-4-N	646003	2	4	Y	1.45		1.1		1.09		1.04		2.55	2.13
A1-PB-169-B	A1-PB-169-B-4-6-N	646003	4	6	Y	1.1		0.578		0.794		0.67		1.678	1.464
A1-PB-169-B	A1-PB-169-B-6-8-N	646003	6	8	Y	1.1		0.642		1.05		0.554		1.742	1.604
A1-PB-169-B	A1-PB-169-B-8-10-N	646003	8	10	Y	1.34		1.3		1.16		0.961		2.64	2.121
A1-PB-169-B	A1-PB-169-B-10-12-N	646003	10	12	Y	1.37		1.18		1.25		0.921		2.55	2.171
A1-PB-169-B	A1-PB-169-B-12-14-N	646003	12	14	Y	1.46		1.3		2.11		1.16		2.76	3.27
A1-PB-169-B	A1-PB-169-B-14-16-N	646003	14	16	Y	1.47		1.09		1.16		1.24		2.56	2.4
A1-PB-169-B	A1-PB-169-B-16-18-N	646003	16	18	Y	1.28		0.862		1.06		0.917		2.142	1.977
A1-PB-169-B	A1-PB-169-B-18-20-N	646003	18	20	Y	1.34		1.14		0.924		0.852		2.48	1.776
A1-PB-169-C	A1-PB-169-C-0-0.5-N	646423	0	0.5	N	1.4		1.15		1.14		0.806		2.55	1.946
A1-PB-169-C	A1-PB-169-C-0.5-1-N	646423	0.5	1	N	1.34		1.43		1.39		1.16		2.77	2.55
A1-PB-169-C	A1-PB-169-C-1-2-N	646423	1	2	Y	1.53		1.17		1.18		0.988		2.7	2.168
A1-PB-169-C	A1-PB-169-C-2-4-N	646423	2	4	Y	1.47		1.29		1.26		1.18		2.76	2.44
A1-PB-169-C	A1-PB-169-C-4-6-N	646423	4	6	Y	1.55		1.35		1.11		0.897		2.9	2.007
A1-PB-169-C	A1-PB-169-C-6-8-N	646423	6	8	Y	2.19		0.805		26.4		0.773		2.995	27.173
A1-PB-169-C	A1-PB-169-C-8-10-N	646423	8	10	Y	1.44		0.979		3.97		0.737		2.419	4.707
A1-PB-169-C	A1-PB-169-C-10-12-N	646423	10	12	Y	1.31		1.31		1.19		0.888		2.62	2.078
A1-PB-169-C	A1-PB-169-C-12-14-N	646423	12	14	Y	1.66		0.959		3.74		1.04		2.619	4.78
A1-PB-169-C	A1-PB-169-C-14-16-N	646423	14	16	Y	1.75		1.13		6.03		1.16		2.88	7.19
A1-PB-169-C	A1-PB-169-C-16-18-N	646423	16	18	Y	1.55		1.05		4.21		0.979		2.6	5.189

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-169-D-R1	A1-PB-169-D-R1-0-0.5-N	646161	0	0.5	N	1.45		1.19		1.04		1.06		2.64	2.1
A1-PB-169-D-R1	A1-PB-169-D-R1-0.5-1-N	646161	0.5	1	N	1.66		1.17		1.28		1.13		2.83	2.41
A1-PB-169-D-R1	A1-PB-169-D-R1-1-2-N	646161	1	2	Y	1.42		1.21		1.27		1.05		2.63	2.32
A1-PB-169-D-R1	A1-PB-169-D-R1-2-4-N	646161	2	4	Y	1.84		1.04		10.0		0.825		2.88	10.825
A1-PB-169-D-R1	A1-PB-169-D-R1-4-6-N	646161	4	6	Y	2.06		0.767		17.5		0.773		2.827	18.273
A1-PB-169-D-R1	A1-PB-169-D-R1-6-8-N	646161	6	8	Y	1.58		1.01		6.23		0.957		2.59	7.187
A1-PB-169-D-R1	A1-PB-169-D-R1-8-10-N	646161	8	10	Y	1.79		1.27		10.1		1.04		3.06	11.14
A1-PB-169-D-R1	A1-PB-169-D-R1-10-12-N	646161	10	12	Y	1.31		1.31		1.37		1.04		2.62	2.41
A1-PB-169-D-R1	A1-PB-169-D-R1-12-14-N	646161	12	14	Y	1.41		1.11		1.14		1.1		2.52	2.24
A1-PB-169-E	A1-PB-169-E-0-0.5-N	646499	0	0.5	N	1.3		1.18		1.28		1.11		2.48	2.39
A1-PB-169-E	A1-PB-169-E-0.5-1-N	646499	0.5	1	N	1.16		1.11		0.986		0.549		2.27	1.535
A1-PB-169-E	A1-PB-169-E-1-2-N	646499	1	2	Y	1.44		1.22		1.33		1.19		2.66	2.52
A1-PB-169-E	A1-PB-169-E-2-4-N	646499	2	4	Y	1.44		1.29		1.51		0.852		2.73	2.362
A1-PB-169-E	A1-PB-169-E-4-6-N	646499	4	6	Y	1.52		1.26		1.6		0.726		2.78	2.326
A1-PB-169-E	A1-PB-169-E-6-8-N	646499	6	8	Y	1.48		1.68		1.47		1.05		3.16	2.52
A1-PB-169-E	A1-PB-169-E-8-10-N	646499	8	10	Y	1.77		1.32		1.18		0.502		3.09	1.682
A1-PB-169-E	A1-PB-169-E-10-12-N	646499	10	12	Y	1.53		1.41		1.74		0.396		2.94	2.136
A1-PB-169-E	A1-PB-169-E-12-14-N	646499	12	14	Y	1.49		0.908		1.16		0.946		2.398	2.106
A1-PB-169-E	A1-PB-169-E-14-15-N	646499	14	15	Y	1.34		1.15		1.23		1.02		2.49	2.25
A1-PB-170-A	A1-PB-170-A-0-0.5-N	647621	0	0.5	N	1.4		0.979		0.955		0.721		2.379	1.676
A1-PB-170-A	A1-PB-170-A-0.5-1-N	647621	0.5	1	N	1.36		1.4		1.7		0.834		2.76	2.534
A1-PB-170-A	A1-PB-170-A-1-2-N	647621	1	2	Y	1.72		1.28		3.97		0.87		3	4.84
A1-PB-170-A	A1-PB-170-A-2-4-N	647621	2	4	Y	1.56		1.34		1.02		1.13		2.9	2.15
A1-PB-170-A	A1-PB-170-A-4-6-N	647621	4	6	Y	1.53		1.12		1.19		1.02		2.65	2.21
A1-PB-170-A	A1-PB-170-A-6-8-N	647621	6	8	Y	1.6		1.37		1.27		1.16		2.97	2.43
A1-PB-170-A	A1-PB-170-A-8-10-N	647621	8	10	Y	1.4		1.28		1.93		1.6		2.68	3.53
A1-PB-170-A	A1-PB-170-A-10-12-N	647621	10	12	Y	1.43		1.23		1.26		1.25		2.66	2.51
A1-PB-170-A	A1-PB-170-A-12-14-N	647621	12	14	Y	1.62		0.995		1.45		1.05		2.615	2.5
A1-PB-170-A	A1-PB-170-A-14-16-N	647621	14	16	Y	1.3		1.27		1.48		1.56		2.57	3.04
A1-PB-170-A	A1-PB-170-A-16-18-N	647621	16	18	Y	1.27		1.32		1.15		1.05		2.59	2.2
A1-PB-170-A	A1-PB-170-A-18-20-N	647621	18	20	Y	1.43		1.22		1.34		1.1		2.65	2.44
A1-PB-170-A	A1-PB-170-A-20-22-D	647621	20	22	Y	1.71		1.62		1.73		1.32		3.33	3.05
A1-PB-170-A	A1-PB-170-A-20-22-N	647621	20	22	Y	1.68		1.25		1.52		1.4		2.93	2.92
A1-PB-170-A	A1-PB-170-A-22-24-N	647621	22	24	Y	1.26		1		1.07		1.11		2.26	2.18
A1-PB-170-A	A1-PB-170-A-24-26-N	647621	24	26	Y	1.42		1.04		1.16		1.01		2.46	2.17
A1-PB-170-A	A1-PB-170-A-26-28-N	647621	26	28	Y	1.31		0.866		1.16		1.14		2.176	2.3
A1-PB-170-A	A1-PB-170-A-28-30-N	647621	28	30	Y	1.46		1.01		0.94		0.929		2.47	1.869

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

					Parameter	RADIUM-226		RADIUM-228		THORIUM-230		THORIUM-232		Total	Total
					Unit	pci/g		pci/g		pci/g		pci/g		Radium	Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-170-B	A1-PB-170-B-0-0.5-N	646408	0	0.5	N	1.43		1.45		1.2		0.84		2.88	2.04
A1-PB-170-B	A1-PB-170-B-0.5-1-N	646408	0.5	1	N	1.44		1.23		1.09		1.15		2.67	2.24
A1-PB-170-B	A1-PB-170-B-1-2-N	646408	1	2	Y	1.5		1.03		1.15		0.949		2.53	2.099
A1-PB-170-B	A1-PB-170-B-2-4-N	646408	2	4	Y	1.19		0.84		0.891		0.65		2.03	1.541
A1-PB-170-B	A1-PB-170-B-4-6-N	646408	4	6	Y	1.25		1.01		1.54		0.968		2.26	2.508
A1-PB-170-B	A1-PB-170-B-6-8-N	646408	6	8	Y	1.44		1.29		1.2		1.03		2.73	2.23
A1-PB-170-B	A1-PB-170-B-8-10-N	646408	8	10	Y	1.48		1.43		2.15		1.15		2.91	3.3
A1-PB-170-B	A1-PB-170-B-10-12-N	646408	10	12	Y	1.53		1.57		1.5		1.34		3.1	2.84
A1-PB-170-B	A1-PB-170-B-12-14-N	646408	12	14	Y	1.76		1.67		1.36		1.1		3.43	2.46
A1-PB-170-B	A1-PB-170-B-14-16-N	646408	14	16	Y	1.39		1.27		0.967		0.963		2.66	1.93
A1-PB-170-B	A1-PB-170-B-16-18-N	646408	16	18	Y	1.35		1.26		1.11		1.02		2.61	2.13
A1-PB-170-B	A1-PB-170-B-18-20-D	646408	18	20	Y	1.31		1.06		1.28		0.981		2.37	2.261
A1-PB-170-B	A1-PB-170-B-18-20-N	646408	18	20	Y	1.28		0.971		1.21		0.973		2.251	2.183
A1-PB-170-C	A1-PB-170-C-0-0.5-N	646397	0	0.5	N	1.49		1.35		1.16		1.18		2.84	2.34
A1-PB-170-C	A1-PB-170-C-0.5-1-N	646397	0.5	1	N	1.35		1.32		1.28		1.08		2.67	2.36
A1-PB-170-C	A1-PB-170-C-1-2-N	646397	1	2	Y	1.52		1.19		1.25		0.929		2.71	2.179
A1-PB-170-C	A1-PB-170-C-2-4-N	646397	2	4	Y	1.38		1.34		1.3		1.03		2.72	2.33
A1-PB-170-C	A1-PB-170-C-4-6-N	646397	4	6	Y	1.58		1.16		1.36		1.24		2.74	2.6
A1-PB-170-C	A1-PB-170-C-6-8-N	646397	6	8	Y	1.44		1.2		1.15		1.17		2.64	2.32
A1-PB-170-C	A1-PB-170-C-8-10-N	646397	8	10	Y	1.27		1.21		1.86		1.08		2.48	2.94
A1-PB-170-C	A1-PB-170-C-10-12-N	646397	10	12	Y	1.56		1.18		1.35		1.09		2.74	2.44
A1-PB-170-C	A1-PB-170-C-12-14-N	646397	12	14	Y	1.29		1.3		1.64		1.06		2.59	2.7
A1-PB-170-C	A1-PB-170-C-14-16-N	646397	14	16	Y	1.39		1.22		1.1		0.931		2.61	2.031
A1-PB-170-C	A1-PB-170-C-16-18-N	646397	16	18	Y	1.39		1.19		1.2		0.879		2.58	2.079
A1-PB-170-C	A1-PB-170-C-18-20-N	646397	18	20	Y	1.23		1.1		1.09		0.926		2.33	2.016
A1-PB-170-D	A1-PB-170-D-0-0.5-N	646499	0	0.5	N	1.48		1.35		1.52		1.11		2.83	2.63
A1-PB-170-D	A1-PB-170-D-0.5-1-N	646499	0.5	1	N	1.42		1.29		1.51		1.41		2.71	2.92
A1-PB-170-D	A1-PB-170-D-1-2-N	646499	1	2	Y	1.5		1.49		1.67		1		2.99	2.67
A1-PB-170-D	A1-PB-170-D-2-4-N	646499	2	4	Y	1.42		1.04		1.71		0.761		2.46	2.471
A1-PB-170-D	A1-PB-170-D-4-6-N	646499	4	6	Y	1.44		1.11		1.56		1.06		2.55	2.62
A1-PB-170-D	A1-PB-170-D-6-8-N	646499	6	8	Y	2.16		1.16		2.96		1.15		3.32	4.11
A1-PB-170-D	A1-PB-170-D-8-10-N	646499	8	10	Y	2.01		1.27		74.7		1.33		3.28	76.03
A1-PB-170-D	A1-PB-170-D-10-12-N	646499	10	12	Y	1.18		0.924		1.08		1		2.104	2.08
A1-PB-170-D	A1-PB-170-D-12-14-N	646499	12	14	Y	1.58		1.41		1.29		1.05		2.99	2.34
A1-PB-170-D	A1-PB-170-D-14-15-N	646499	14	15	Y	1.53		0.891		0.941		1.35		2.421	2.291

TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-170-E	A1-PB-170-E-0-0.5-N	646412	0	0.5	N	1.06		1.05		1.85		0.738		2.11	2.588
A1-PB-170-E	A1-PB-170-E-0.5-1-N	646412	0.5	1	N	1.21		1.22		1.17		0.665		2.43	1.835
A1-PB-170-E	A1-PB-170-E-1-2-D	646412	1	2	Y	1.48		1.1		1.38		1.01		2.58	2.39
A1-PB-170-E	A1-PB-170-E-1-2-N	646412	1	2	Y	1.37		0.989		1.24		0.928		2.359	2.168
A1-PB-170-E	A1-PB-170-E-2-4-N	646412	2	4	Y	1.63		1.09		1.33		1.05		2.72	2.38
A1-PB-170-E	A1-PB-170-E-4-6-N	646412	4	6	Y	1.2		1.02		1.08		0.928		2.22	2.008
A1-PB-170-E	A1-PB-170-E-6-8-N	646412	6	8	Y	1.67		1.02		9.43		0.573		2.69	10.003
A1-PB-170-E	A1-PB-170-E-8-10-N	646412	8	10	Y	1.61		1.37		1.34		1.23		2.98	2.57
A1-PB-170-E	A1-PB-170-E-10-12-N	646412	10	12	Y	1.39		1.36		0.915		0.938		2.75	1.853
A1-PB-170-E	A1-PB-170-E-12-14-N	646412	12	14	Y	1.62		1.23		1.2		0.958		2.85	2.158
A1-PB-170-E	A1-PB-170-E-14-15-N	646412	14	15	Y	1.67		1.16		1.26		0.946		2.83	2.206
A1-PB-171-A	A1-PB-171-A-0-0.5-N	647631	0	0.5	N	1.31		1.24		2.51		1.04		2.55	3.55
A1-PB-171-A	A1-PB-171-A-0.5-1-N	647631	0.5	1	N	1.33		1.13		2.04		1.16		2.46	3.2
A1-PB-171-A	A1-PB-171-A-1-2-N	647631	1	2	Y	1.38		1.3		1.45		1.14		2.68	2.59
A1-PB-171-A	A1-PB-171-A-2-4-N	647631	2	4	Y	1.42		1.14		1.48		1.25		2.56	2.73
A1-PB-171-A	A1-PB-171-A-4-6-N	647631	4	6	Y	1.32		0.988		1.34		1.01		2.308	2.35
A1-PB-171-A	A1-PB-171-A-6-8-N	647631	6	8	Y	1.51		1.27		1.41		1.11		2.78	2.52
A1-PB-171-A	A1-PB-171-A-8-10-N	647631	8	10	Y	1.64		1		1.51		1.04		2.64	2.55
A1-PB-171-A	A1-PB-171-A-10-12-N	647631	10	12	Y	1.47		0.938		1.33		1.03		2.408	2.36
A1-PB-171-A	A1-PB-171-A-12-14-N	647631	12	14	Y	1.41		1.21		1.09		0.906		2.62	1.996
A1-PB-171-A	A1-PB-171-A-14-16-N	647631	14	16	Y	1.57		1.33		1.12		1.12		2.9	2.24
A1-PB-171-A	A1-PB-171-A-16-18-N	647631	16	18	Y	1.37		1.03		1.11		1.15		2.4	2.26
A1-PB-171-A	A1-PB-171-A-18-20-N	647631	18	20	Y	1.54		1.46		1.28		1.01		3	2.29
A1-PB-171-A	A1-PB-171-A-20-22-N	647631	20	22	Y	1.79		1.67		1.59		1.37		3.46	2.96
A1-PB-171-A	A1-PB-171-A-22-24-N	647631	22	24	Y	1.65		1.57		1.41		1.16		3.22	2.57
A1-PB-171-A	A1-PB-171-A-24-26-N	647631	24	26	Y	1.41		1.25		1.14		1.07		2.66	2.21
A1-PB-171-A	A1-PB-171-A-26-28-N	647631	26	28	Y	1.78		1.66		1.12		1.29		3.44	2.41
A1-PB-171-A	A1-PB-171-A-28-30-N	647631	28	30	Y	1.27		1.2		0.997		0.871		2.47	1.868
A1-PB-171-B	A1-PB-171-B-0-0.5-N	646117	0	0.5	N	1.34		1.44		1.5		0.862		2.78	2.362
A1-PB-171-B	A1-PB-171-B-0.5-1-N	646117	0.5	1	N	1.36		1.23		1.4		0.999		2.59	2.399
A1-PB-171-B	A1-PB-171-B-1-2-N	646117	1	2	Y	1.42		1.09		1.25		0.904		2.51	2.154
A1-PB-171-B	A1-PB-171-B-2-4-N	646117	2	4	Y	1.35		0.917		1.35		1.01		2.267	2.36
A1-PB-171-B	A1-PB-171-B-4-6-N	646117	4	6	Y	1.34		1.1		1.83		1		2.44	2.83
A1-PB-171-B	A1-PB-171-B-6-8-N	646117	6	8	Y	0.499		0.388		1.22		1.19		0.887	2.41
A1-PB-171-B	A1-PB-171-B-8-10-N	646117	8	10	Y	1.44		1.15		2.49		1.1		2.59	3.59
A1-PB-171-B	A1-PB-171-B-10-12-N	646117	10	12	Y	1.25		1.01		1.87		0.863		2.26	2.733
A1-PB-171-B	A1-PB-171-B-12-14-N	646117	12	14	Y	1.44		1.06		0.895		1.05		2.5	1.945
A1-PB-171-B	A1-PB-171-B-14-16-N	646117	14	16	Y	1.37		0.849		1.17		1.17		2.219	2.34
A1-PB-171-B	A1-PB-171-B-16-17-N	646117	16	17	Y	1.45		0.778		1.45		1.45		2.228	2.9

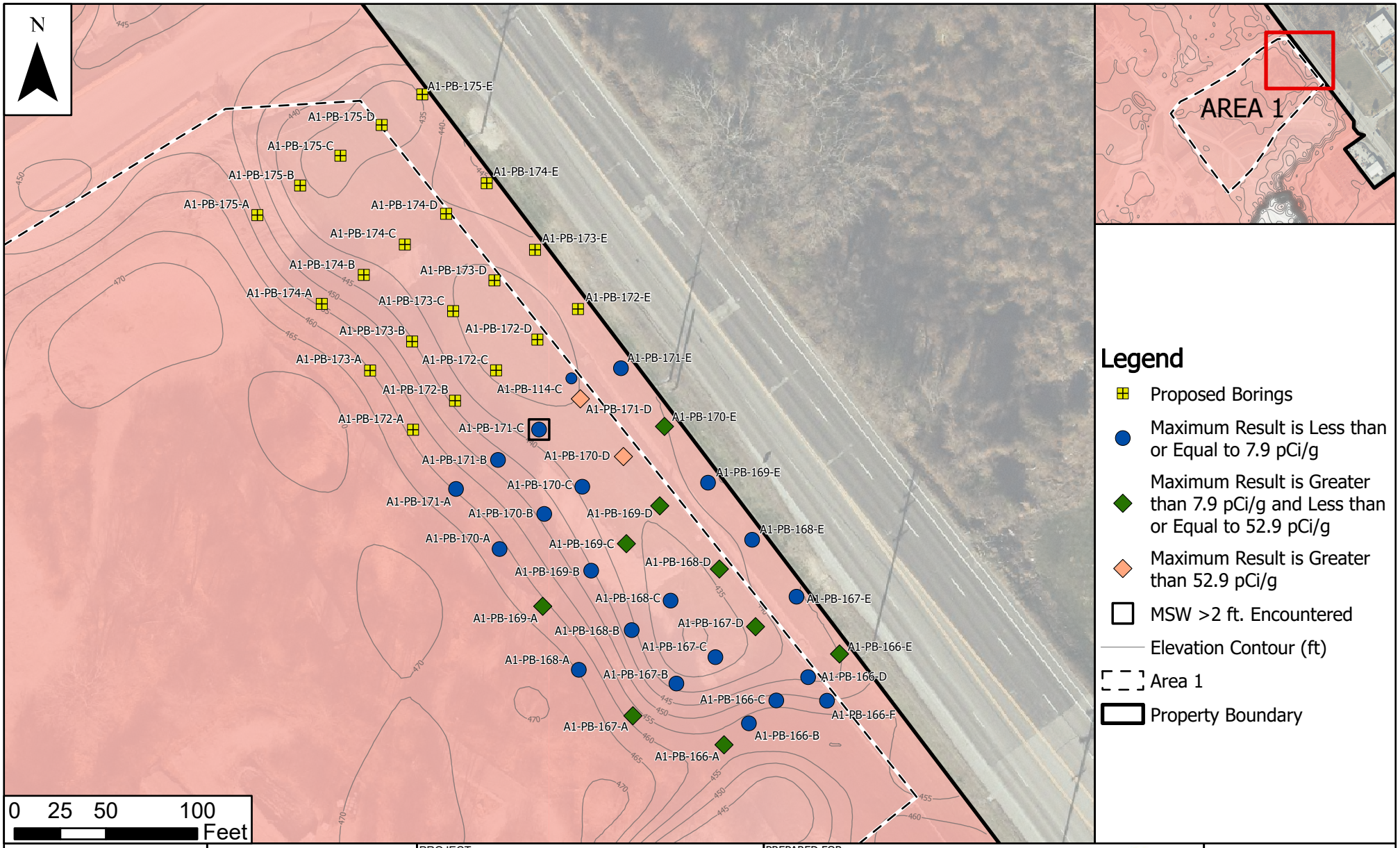
TABLE 10A-1 SUMMARY OF UNVALIDATED ANALYTICAL RESULTS

						RADIUM-226 pci/g		RADIUM-228 pci/g		THORIUM-230 pci/g		THORIUM-232 pci/g		Total Radium	Total Thorium
Location ID	SYS_SAMPLE_CODE	SDG	Start Depth	End Depth	Composite (Y/N)	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS	RESULT	QUALIFIERS		
A1-PB-171-C	A1-PB-171-C-0-0.5-N	646207	0	0.5	N	1.4		1.29		1.52		1.08		2.69	2.6
A1-PB-171-C	A1-PB-171-C-0.5-1-N	646207	0.5	1	N	1.53		1.37		1.37		1.04		2.9	2.41
A1-PB-171-C	A1-PB-171-C-1-2-N	646207	1	2	Y	1.44		1.15		1.27		1.05		2.59	2.32
A1-PB-171-C	A1-PB-171-C-2-4-N	646207	2	4	Y	1.14		0.81		1.29		0.617		1.95	1.907
A1-PB-171-C	A1-PB-171-C-4-6-N	646207	4	6	Y	1.25		0.756		1.14		0.775		2.006	1.915
A1-PB-171-C	A1-PB-171-C-6-8-N	646207	6	8	Y	1.27		0.744		1.29		0.901		2.014	2.191
A1-PB-171-C	A1-PB-171-C-8-10-N	646207	8	10	Y	1.17		0.598		0.96		0.551		1.768	1.511
A1-PB-171-C	A1-PB-171-C-10-12-N	646207	10	12	Y	1.62		1.24		4.89		1.13		2.86	6.02
A1-PB-171-C	A1-PB-171-C-12-14-D	646207	12	14	Y	1.42		0.868		1.03		1.01		2.288	2.04
A1-PB-171-C	A1-PB-171-C-12-14-N	646207	12	14	Y	1.37		1.35		1.14		0.948		2.72	2.088
A1-PB-171-C	A1-PB-171-C-14-15.5-N	646207	14	15.5	Y	1.39		1.23		1.07		1.12		2.62	2.19
A1-PB-171-D	A1-PB-171-D-0-0.5-N	646503	0	0.5	N	1.46		1.14		1.29		1.04		2.6	2.33
A1-PB-171-D	A1-PB-171-D-0.5-1-N	646503	0.5	1	N	1.46		1.42		1.25		1.19		2.88	2.44
A1-PB-171-D	A1-PB-171-D-1-2-N	646503	1	2	Y	1.41		0.961		1.4		1.07		2.371	2.47
A1-PB-171-D	A1-PB-171-D-2-4-N	646503	2	4	Y	1.36		1.07		2.3		0.722		2.43	3.022
A1-PB-171-D	A1-PB-171-D-4-6-N	646503	4	6	Y	1.59		1.04		1.54		0.931		2.63	2.471
A1-PB-171-D	A1-PB-171-D-6-8-N	646503	6	8	Y	1.59		1.21		13.9		1.2		2.8	15.1
A1-PB-171-D	A1-PB-171-D-8-10-N	646503	8	10	Y	4.98		1.18		72		0.705		6.16	72.705
A1-PB-171-D	A1-PB-171-D-10-12-N	646503	10	12	Y	1.64		1.26		0.884		0.939		2.9	1.823
A1-PB-171-D	A1-PB-171-D-12-14-N	646503	12	14	Y	1.36		0.918		1.35		1.15		2.278	2.5
A1-PB-171-D	A1-PB-171-D-14-15-N	646503	14	15	Y	1.49		1.05		1.2		0.977		2.54	2.177
A1-PB-171-E	A1-PB-171-E-0-0.5-N	645377	0	0.5	N	1.37		0.711		1.74		0.93		2.081	2.67
A1-PB-171-E	A1-PB-171-E-0.5-1-N	645377	0.5	1	N	1.67		1.44		1.42		1.31		3.11	2.73
A1-PB-171-E	A1-PB-171-E-1-2-N	645377	1	2	Y	1.43		1.57		1.44		1.22		3	2.66
A1-PB-171-E	A1-PB-171-E-2-4-N	645377	2	4	Y	1.48		1.22		1.34		1.03		2.7	2.37
A1-PB-171-E	A1-PB-171-E-4-6-N	645377	4	6	Y	1.31		0.996		1.14		1.2		2.306	2.34
A1-PB-171-E	A1-PB-171-E-6-8-N	645377	6	8	Y	1.41		1.03		3.42		1.51		2.44	4.93
A1-PB-171-E	A1-PB-171-E-8-10-N	645377	8	10	Y	1.56		1.4		1.19		1.33		2.96	2.52
A1-PB-171-E	A1-PB-171-E-10-12-N	645377	10	12	Y	1.44		1.13		1.16		1.12		2.57	2.28
A1-PB-171-E	A1-PB-171-E-12-14-N	645377	12	14	Y	1.54		1.3		1.25		1.25		2.84	2.5

TABLE A10A-2 PROPOSED ADDENDUM 10A ADDITIONAL BORINGS

Location ID	Northing (Local Site Coordinates)	Easting (Local Site Coordinates)	Estimated Total Boring Depth (feet B2005GS)	Total Laboratory Analytical Samples	Core Scan Interval (feet B2005GS)	Downhole Gamma Interval (feet B2005GS)	Justification
A1-PB-172-A	1,069,536.90	836,782.95	30	16	0-30	-	RIM or greater than 2 ft of MSW encountered in borings A1-PB-171-B, and A1-PB-171-C within the 1973 sediment basin and surrounding area.
A1-PB-172-B	1,069,552.76	836,805.92	30	16	0-30	-	
A1-PB-172-C	1,069,569.38	836,828.36	30	16	0-30	-	
A1-PB-172-D	1,069,586.18	836,850.94	30	16	0-30	-	
A1-PB-172-E	1,069,602.90	836,873.14	30	16	0-30	-	
A1-PB-173-E	1,069,635.28	836,849.66	30	16	0-30	-	
A1-PB-173-D	1,069,618.56	836,827.45	30	16	0-30	-	
A1-PB-173-C	1,069,601.76	836,804.87	30	16	0-30	-	
A1-PB-173-B	1,069,585.14	836,782.43	30	16	0-30	-	
A1-PB-173-A	1,069,569.28	836,759.46	30	16	0-30	-	
A1-PB-174-A	1,069,605.70	836,733.04	30	16	0-30		
A1-PB-174-B	1,069,621.57	836,756.01	30	16	0-30	-	
A1-PB-174-C	1,069,638.18	836,778.45	30	16	0-30	-	
A1-PB-174-D	1,069,654.98	836,801.03	30	16	0-30	-	
A1-PB-174-E	1,069,671.71	836,823.23	30	16	0-30	-	
A1-PB-175-A	1,069,654.27	836,697.81	30	16	0-30	-	
A1-PB-175-B	1,069,670.44	836,721.21	30	16	0-30	-	
A1-PB-175-C	1,069,686.75	836,743.22	30	16	0-30	-	
A1-PB-175-D	1,069,703.55	836,765.80	30	16	0-30	-	
A1-PB-175-E	1,069,720.27	836,788.00	30	16	0-30	-	
20	-	-	-	320	-	-	

FIGURES



PARSONS

301 Plainfield Rd, 350, Syracuse, NY 13212
Ph: 315-451-9560
Missouri State Certificate of Authority #: 2019041541

FEEZOR ENGINEERING

Feezor Engineering, Inc.
3377 Hollenberg Dr, Bridgeton, MO 63044
Ph: 217-483-3118
Missouri State Certificate of Authority #: E-200912211

PROJECT

WEST LAKE LANDFILL SUPERFUND SITE
DESIGN INVESTIGATION
BRIDGETON, ST. LOUIS COUNTY, MO

PREPARED FOR

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION VII

ON BEHALF OF

WEST LAKE LANDFILL OU-1 RESPONDENTS

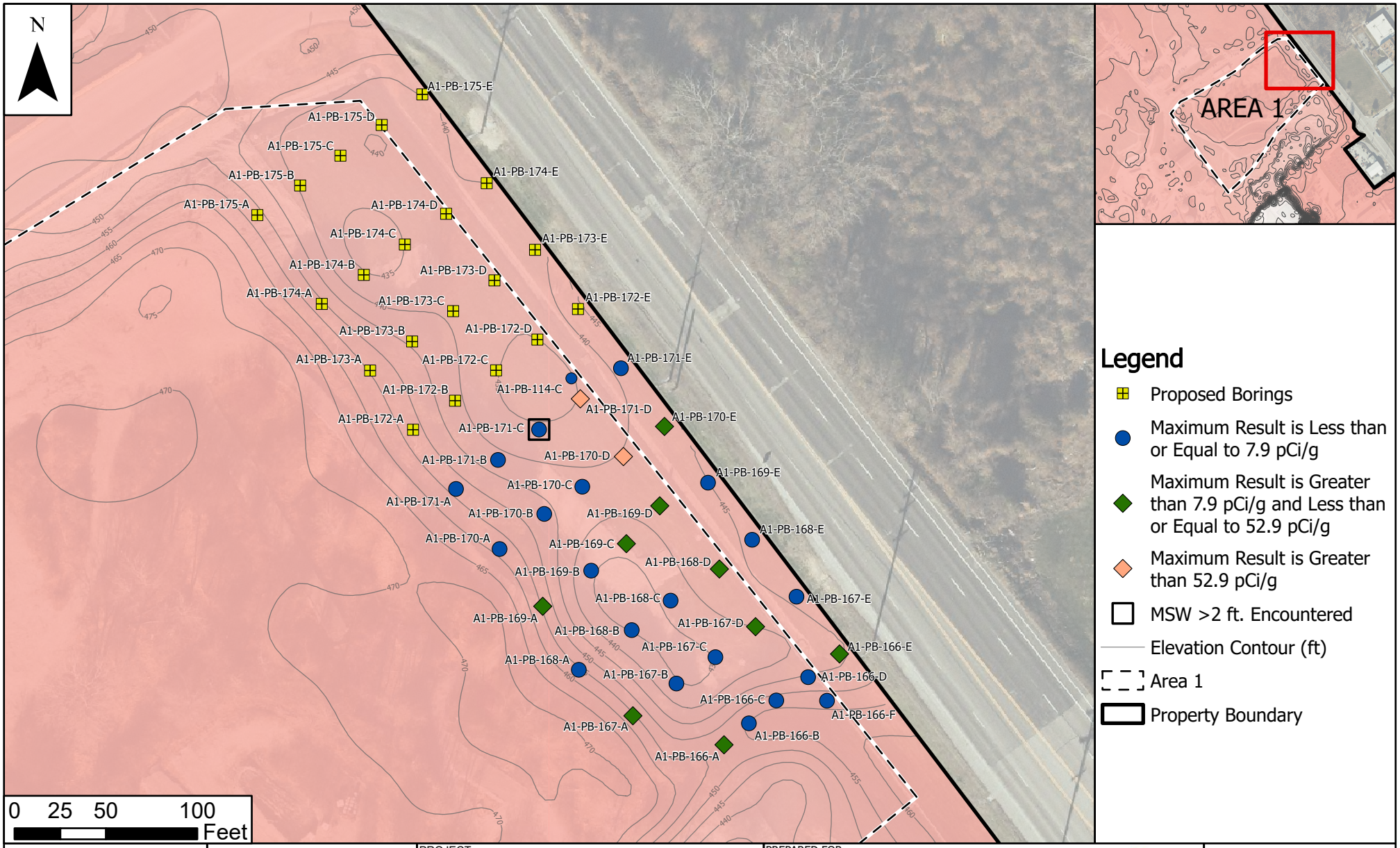
FIGURE A10A-1

DRAWN BY: EG
APPROVED BY:
DATE:

MAY 1973 TERRAIN MAP WITH PROPOSED AND EXISTING BORINGS

PROJECT NUMBER: AA-000

FILE PATH:



PARSONS
301 Plainfield Rd, 350, Syracuse, NY 13212
Ph: 315-451-9560
Missouri State Certificate of Authority #: 2019041541

FEEZOR ENGINEERING
Feezor Engineering, Inc.
3377 Hollenberg Dr, Bridgeton, MO 63044
Ph: 217-483-3118
Missouri State Certificate of Authority #: E-200912211

PROJECT
WEST LAKE LANDFILL SUPERFUND SITE
DESIGN INVESTIGATION
BRIDGETON, ST. LOUIS COUNTY, MO

PREPARED FOR
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION VII

ON BEHALF OF
WEST LAKE LANDFILL OU-1 RESPONDENTS

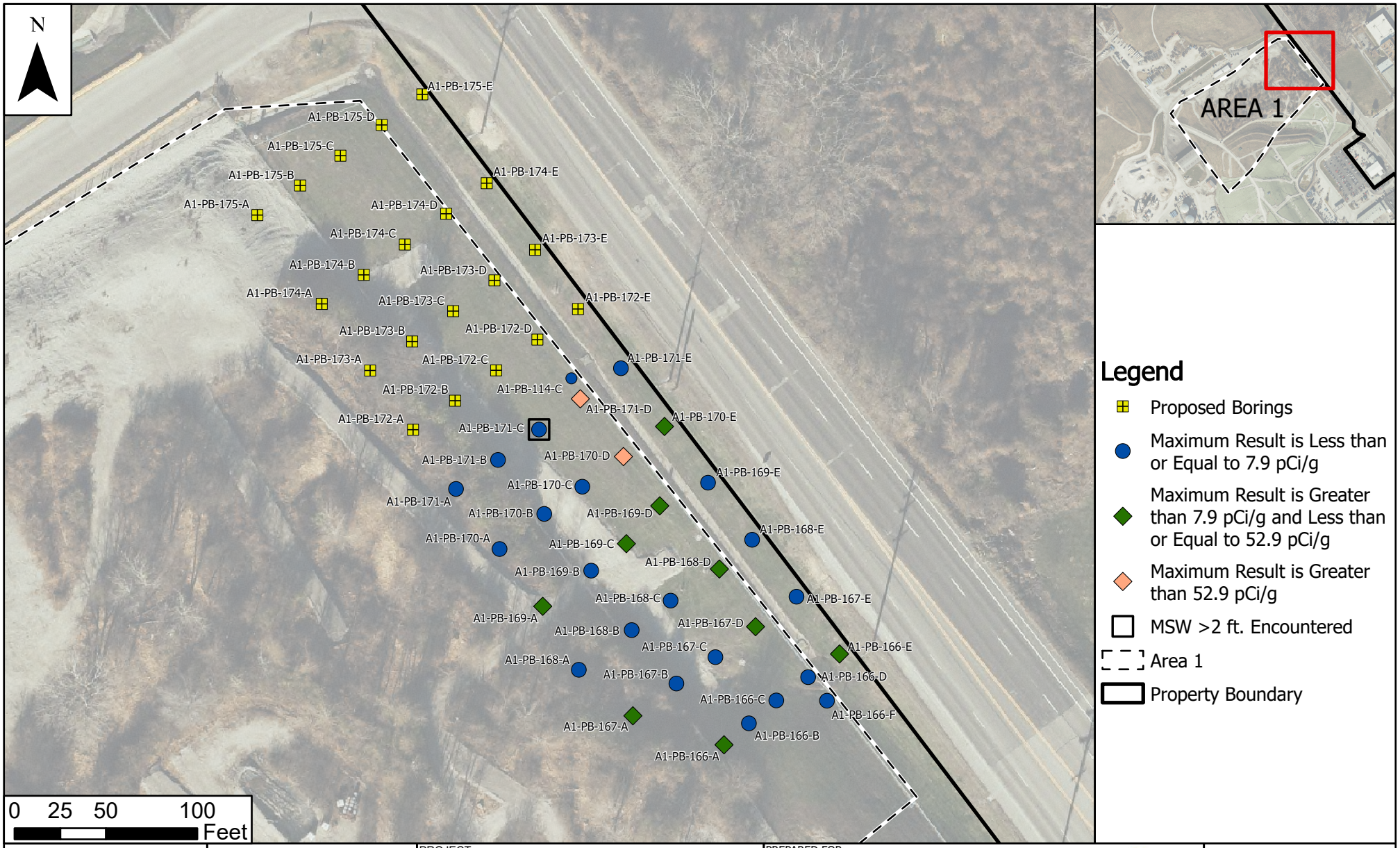
FIGURE A10A-2

DRAWN BY: EG
APPROVED BY:
DATE:

SEPTEMBER 1973 TERRAIN MAP WITH PROPOSED AND EXISTING BORINGS

PROJECT NUMBER: AA-000

FILE PATH:



PARSONS

301 Plainfield Rd, 350, Syracuse, NY 13212
Ph: 315-451-9560
Missouri State Certificate of Authority #: 2019041541

FEEZOR ENGINEERING

Feezor Engineering, Inc.
3377 Hollenberg Dr, Bridgeton, MO 63044
Ph: 217-483-3118
Missouri State Certificate of Authority #: E-200912211

PROJECT

WEST LAKE LANDFILL SUPERFUND SITE
DESIGN INVESTIGATION
BRIDGETON, ST. LOUIS COUNTY, MO

PREPARED FOR

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION VII

ON BEHALF OF

WEST LAKE LANDFILL OU-1 RESPONDENTS

FIGURE A10A-3

DRAWN BY: EG
APPROVED BY:
DATE:

PROPOSED BORING LOCATIONS

PROJECT NUMBER: AA-000

FILE PATH: