APPENDIX A.1

ESI Soil Sample Collection Logs

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-05

Date (YYMMDD): 07/17/00

Time (HHMMSS): 0850

Top Depth: 0.0'

Bottom Depth: 0.5'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Partly Cloudy, 85°F, slight breeze

Prepared by: Phil Hammons

Checked by: DJA

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, Total Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
~~Glass~~ Vial	~~40mL~~ 2@3	TPH	~~2~~ 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-06

Date (YYMMDD): 07/17/00

Time (HHMMSS): 0910

Top Depth: 0.0'

Bottom Depth: 0.5'

Matrix: Sed / (Soil) Water

Sample Qualifier: QA / QC (FD) / CS

Sample Type: (GRAB) COMP. / NA

Sampler: RODNEY HICKMON

Witness: PHIL HAMMONS

Contractor: Morrison Knudsen

Remarks:

Weather: Partly Cloudy, 90°F, Sly NE breeze

Prepared by: Phil Hammons

Checked by: RG AS

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Soil Glass	16oz	Pesticides, PCBs Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	40mL 203	TPH	2 1
Vial	40mL	VOCs	3
Rinsate Blank			

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 EST

Site: AMS No.7

Sample I.D.: AMS7-SS-06-EB

Date (YYMMDD): 7/17/00

Time (HHMMSS): ~~9:10AM~~ 0920

Top Depth: NA ground 0.0'

Bottom Depth: 0.0'

Matrix: Sed / Soil / (Water)

Sample Qualifier: QA / QC / (FB) / CS

Sample Type: GRAB / COMP. / NA

Sampler: Rodney Hackman

Witness: Phil Hammonds

Contractor: Morrison Knudsen

Remarks:

Weather:

Prepared by: Phil Hammonds

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Amber glass	1 liter	Pesticides	2
Amber glass	1 liter	Herbicides	2
Amber glass	1 liter	PCB	2
Amber glass	1 liter	SVOCs	2
VOA vials	40 ml	TPH	3
VOA vials	40ml	VOCs	3
Poly	250ml	Metals	1

Field Screening Results

PID	Bkgd 0.0	Reading NA
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-07

Date (YYMMDD): 07/17/00

Time (HHMMSS): 10:15

Top Depth: 0.0'

Bottom Depth: 0.5'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Hot, Dry, Windy 88°F

Prepared by: Phil Hammons

Checked by: [signature]

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs, Herb, SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Vial Glass	40mL 2oz	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220
Project: AMS No.7 ESI
Site: AMS No.7

Sample I.D.: AMS7-SS-08
Date (YYMMDD): 07/14/00
Time (HHMMSS): 11:55
Top Depth: 0.0'
Bottom Depth: 0.5'
Matrix: Sed / (Soil) / Water
Sample Qualifier: (QA) (QC) / RB / CS
Sample Type: (GRAB) / COMP. / NA
Sampler: Rodney Hickmon
Witness: Phil Hammons
Contractor: Morrison Knudsen
Remarks:

Weather: 100°F, Clear, Slight Breeze

Prepared by: Phil Hammons
Checked by: DBH

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs, Herb, SVOCs	3+2
Poly	4oz	Moisture	3+2
Glass	2oz	Metals	3+2
Glass Vial	40mL x3	TPH	3+2+2
Vial	40mL	VOCs	9+6

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-09

Date (YYMMDD): 07/14/00

Time (HHMMSS): 12:15

Top Depth: 0.0'

Bottom Depth: 0.5'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: 102°F, Clear, calm

Prepared by: Phil Hammons

Checked by: DS

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCB, Herb, SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	40zz 2oz	TPH	21
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-10

Date (YYMMDD): 07/17/00

Time (HHMMSS): 0830

Top Depth: 0.0'

Bottom Depth: 0.5'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) COMP. / NA

Sampler: RODNEY HICKMON

Witness: PHIL HAMMONS

Contractor: Morrison Knudsen

Remarks:

Weather: Partly Cloudy, 85°F, Slight Breeze

Prepared by: Phil Hammons

Checked by: DSH

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Perform w/ TCLP Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	40mL 2oz	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220	Project: AMS No.7 ESI Site: AMS No.7

Sample I.D.: AMS7-SS-11
Date (YYMMDD): 07/14/00
Time (HHMMSS): 0945
Top Depth: 0.0'
Bottom Depth: 0.5'
Matrix: Sed / (Soil) / Water
Sample Qualifier: QA / QC / RB / CS
Sample Type: (GRAB) / COMP. / NA
Sampler: Rodney Hickmon
Witness: Phil Hammons
Contractor: Morrison Knudsen
Remarks:

Weather: Clear, 90°F, Calm

Prepared by: Phil Hammons
Checked by:

Analytical Request			
Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs/ Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
~~Glass~~ Vial	~~40mL~~ 2@3	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results		
PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-12

Date (YYMMDD): 07/14/00

Time (HHMMSS): 0935

Top Depth: 0.0'

Bottom Depth: 0.5'

Matrix: Sed / (Soil) Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Clear, 90°F, Calm

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs, Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	~~4oz~~ 2oz	TPH	≥1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-13

Date (YYMMDD): 07/14/00

Time (HHMMSS): 10:15

Top Depth: 0.0'

Bottom Depth: 0.5'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Clear, 95°F, Calm

Prepared by: Phil Hammons

Checked by: DWH

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs, Herb, SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	40mL 2oz	TPH	2-1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

TULSA TERC	DOCUMENT NUMBER: 10-SS-01	EFFECTIVE DATE: 02/25/98
	REVISION: 0	PAGE: 11 of 11

TITLE: SOIL SAMPLING

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-14

Date (YYMMDD): 07/14/00

Time (HHMMSS): 10:30

Top Depth: 0.0

Bottom Depth: 0.5'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Clear, 95°F, Calm

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs, Herb, SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass	4oz 2oz	TPH	21
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH06-S-00

Date (YYMMDD): 07/18/00

Time (HHMMSS): 1200

Top Depth: 0.0

Bottom Depth: 0.5'

Matrix: Sed / (Soil) Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: GRAB / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Partly Cloudy, 85°F, breezy

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs Herb SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
9/1000 Vial	4oz 40mL	TPH	1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH06-S-05

Date (YYMMDD): 07/19/00

Time (HHMMSS): 1405

Top Depth: 5.0'

Bottom Depth: 6.0'

Matrix: Sed / (Soil) Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: 103°F, Clear, Slight breeze

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Formaldehyde, TCL Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	4oz	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH06-S-10

Date (YYMMDD): 07/19/00

Time (HHMMSS): 1415

Top Depth: 10.0'

Bottom Depth: 11.0'

Matrix: Sed / (Soil) Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: 105°F, Clear Slight Breeze

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides/PCBs Herb SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	4oz	TPH	2
Vial	40mL	VOC's	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH06-S-18

Date (YYMMDD): 07/19/00

Time (HHMMSS): 1425

Top Depth: 16.0'

Bottom Depth: 18.0'

Matrix: Sed / (Soil) / Water

Sample Qualifier: (DA) (QC) / RB / CS

Sample Type: GRAB / (COMP.) / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: 105°F, Clear, slight breeze

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Preservative, TCLP Herb. SVOCs	X3
Poly	4oz	Moisture	X3
Glass	2oz	Metals	X3
Glass Vial	4oz 2.03	TPH	X3
Vial	40mL	VOCs	X9

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH06-S-76

Date (YYMMDD): 07/19/00

Time (HHMMSS): 1815

Top Depth: 75.5

Bottom Depth: 76.5

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: 102°F, Clear, Calm

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs Herb SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Vial Glass	4 40mL 2oz	TPH	21
Vial	40mL	VOC's	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-SS-0 BH07-S-00

Date (YYMMDD): 07/14/00

Time (HHMMSS): 1510

Top Depth: 0.0'

Bottom Depth: 0.5'

Matrix: Sed / (Soil) Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: GRAB / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Clear, 101°F, Muggy

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs, Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Vial Glass	40mL 2oz	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH07-S-05

Date (YYMMDD): 07/17/00

Time (HHMMSS): 1520

Top Depth: 5.0'

Bottom Depth: 6.0'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: GRAB / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Clear, 101°F, breezy

Prepared by:

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs, Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
~~Glass~~ Vial	~~40mL~~ 4oz	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH07-S-10

Date (YYMMDD): 07/17/00

Time (HHMMSS): 15:25

Top Depth: 10.0'

Bottom Depth: 11.0'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: GRAB / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Clear, 101°F, breezy

Prepared by: Phil Hammons

Checked by: DH, HE

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	4oz 40mL	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH07-S-85

Date (YYMMDD): 07/18/00

Time (HHMMSS): 1740

Top Depth: 84.5'

Bottom Depth: 85.5'

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: GRAB / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks: Insta-Vis (CETCO) a liquid polymer added to mud pit at 65' bgs. Sample collected at 84.5-85.5' had polymer present based on characteristic "slimy" feel to sample.

Weather: Partly Cloudy, 95°F, Slight breeze

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Particle, Total Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Vial Glass	4oz 2oz	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH08-~~00~~ S-00

Date (YYMMDD): 07/18/00

Time (HHMMSS): 1205

Top Depth: 0.0

Bottom Depth: 0.5

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Rodney Hickmon

Witness: Phil Hammons

Contractor: Morrison Knudsen

Remarks:

Weather: Partly Cloudy, 95°F, Breezy

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pesticides, PCBs, Herb. SVOCs	1
Poly	4oz	Moisture	1
Glass	2oz	Metals	1
Glass Vial	4oz 40mL	TPH	2 1
Vial	40mL	VOCs	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH08-S-05

Date (YYMMDD): 7/20/00

Time (HHMMSS): 1250

Top Depth: 5.0'

Bottom Depth: 6.0'

Matrix: Sed (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Phil Hammans

Witness: Rodney Hickman

Contractor: Morrison Knudsen

Remarks:

Weather: 103°F, Hazy, Slight breeze

Prepared by: Phil Hammans

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pest./PCB Herb. SVOCs	1
Glass	2oz	Metals	1
Glass	4oz	TPH	1
Poly	4oz	Moisture	1
Vials	40ml	VOC's	3

Field Screening Results

PID	Bkgd 0.0	Reading >2000 ppm
RAD Frisk	Bkgd	Reading
pH		

f:\white\terc\do#18.ppl\procedur\ss01

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No. 7

Sample I.D.: AMS7-BH08-S-10

Date (YYMMDD): 7/20/00

Time (HHMMSS): 1300

Top Depth: 10.0'

Bottom Depth: 11.0'

Matrix: Sed (Soil) Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Phil Hammons

Witness: Rodney Heckman

Contractor: Morrison Knudsen

Remarks:

Weather: 103°F, Hazy, slight breeze

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pest./PCB Herb. SVOCs	1
Glass	2oz	Metals	1
Glass	4oz	TPH	1
Poly	4oz	Moisture	1
Vials	40ml	VOC's	3

Field Screening Results

PID	Bkgd 0.0	>2000 PPM Reading 0.0 ppm
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH08-S-15

Date (YYMMDD): 7/20/00

Time (HHMMSS): 1325

Top Depth: 15.0'

Bottom Depth: 16.0'

Matrix: Sed (Soil) Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Phil Hammons

Witness: Rodney Heckman

Contractor: Morrison Knudsen

Remarks:

Weather: 109°F, clear, calm

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pest./PCB Herb. SVOCs	1
Glass	2oz	Metals	1
Glass	4oz	TPH	1
Poly	4oz	Moisture	1
Vials	40ml	VOC's	3

Field Screening Results

PID	Bkgd 0.0	Reading 56.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 Est

Site: AMS No.7

Sample I.D.: AMS7-BH08-S-18.0

Date (YYMMDD): 7/20/00

Time (HHMMSS): 1340

Top Depth: 16.5

Bottom Depth: 18.5

Matrix: Sed / (Soil) / Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: GRAB (COMP) / NA

Sampler: Phil Hammons

Witness: Rodney Heckman

Contractor: Morrison Knudsen

Remarks:

Weather: 103°F, Clear, calm

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16 oz	Pest./Herb SVOCs/PCBs	3
Glass	2 oz	metals	3
Glass	4 oz	TPH	3
Poly	4 oz	Moisture	3
Viols	40 ml	VOC's	9

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No. 7

Sample I.D.: AMS7-BH08-S-80

Date (YYMMDD): 7/20/00

Time (HHMMSS): 1730

Top Depth: 80.1

Bottom Depth: 80.5

Matrix: Sed (Soil) Water

Sample Qualifier: QA / QC / RB / CS

Sample Type: (GRAB) / COMP. / NA

Sampler: Phil Hammonds

Witness: Rodney Hickman

Contractor: Morrison Knudsen

Remarks:

Weather: 105°F, Clear, Slight breeze

Prepared by: Phil Hammonds

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Glass	16oz	Pest./PCB Herb. SVOCs	1
Glass	2oz	Metals	1
Glass	4oz	TPH	1
Poly	4oz	Moisture	1
Vials	40ml	VOC's	3

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

ATTACHMENT 3

SOIL SAMPLE COLLECTION LOG

Delivery Order No: 4423-0220

Project: AMS No.7 ESI

Site: AMS No.7

Sample I.D.: AMS7-BH08-S-80 EB

Date (YYMMDD): 7/20/00

Time (HHMMSS): 1730

Top Depth: NA

Bottom Depth: NA

Matrix: Sed / Soil / (Water)

Sample Qualifier: QA / QC / (FB) / CS

Sample Type: GRAB / COMP. / (NA)

Sampler: PHIL Hammons

Witness: Rodney Heckman

Contractor: Morrison Knudsen

Remarks:

Weather: 105°F, Clear, Slight breeze

Prepared by: Phil Hammons

Checked by:

Analytical Request

Container Type	Sample Volume	Parameter	No. of Cont.
Amber Glass	1 liter	PCBs	2
Amber Glass	1 liter	SVOCs	2
Amber Glass	1 liter	Pest.	2
Amber Glass	1 liter	Herb.	2
VOA Vials	40ml	TPH	3
VOA Vials	40ml	VOCs	3
Poly	250ml	Metals	1

Field Screening Results

PID	Bkgd 0.0	Reading 0.0
RAD Frisk	Bkgd	Reading
pH		

APPENDIX A.2

ESI Groundwater Sample Collection Logs

TULSA TERC

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AMS No. 7	LocID: MW06	Date: 7/26/00 and 8/08/00
	Project Name: Atlas Missile Silo No.7 ESI	Project #: 4423-0220	Recorded By: P. Hammons Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: Horiba U-22 Hach Co #0102	Water Level Indicator Type/ID #: Solinst M.101/26268	PID Type/ID #: Photovac 2020/Hnu 13896
		Sampling Equipment: Grundfos Redi-flo2/300'	Equipment Decon.: Wash/double rinse
WELL INFO	Casing I.D. (in) [a]: 2"	Unit Casing Volume (gal/lin ft) [b]: 0.16 gal/ft	Initial Depth to Water (ft) [c]: 24.21'
	Total Well Depth (ft) [d]: 33.79'	Water Column Thickness (ft) [d-c]: 9.58	Well Volume (gal) ([d-c] x b): 1.53 gal.
	Ambient PID (ppm): 0.0	Well Mouth PID (ppm): 140 ppm	Ground Condition of Well: Dry
	Ambient Explosimeter (%LEL): NA	Well Mouth Explosimeter (%LEL): NA	Remarks: Pump intake set at 30.0' btoc

CASING INFO										
Casing I.D. (in) [a]:	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (gal/lin ft) [b]:	0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (L)	Pumping Rate (Lpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	Radiation (TDS / g/L)	Remarks (odor, clarity, etc.)
7/26/00	1055	24.21	~~0.50.3~~	0.40	22.4	7.01	0.435	6.7	130		Clear
	1100	24.35	0.6	0.40	22.6	6.85	0.434	6.7	130	0.28	↓
	1105	24.35	1.2	0.40	22.9	6.82	0.434	6.6	120	0.28	↓
	1110	24.35	2.0	0.35	23.3	6.81	0.433	6.6	73	0.28	Generator went down from 11:12 to 11:16
~~QAQC~~	~~1120~~	~~24.35~~	~~2.~~			pump					Generator went down again 11:18-11:25
	1130	24.35	2.8	0.40	24.6	6.77	0.431	6.3	62	0.28	Clear
	1135	24.35	3.4	0.40	24.3	6.73	0.429	6.2	42	0.28	↓
↓	1140	24.35	4.2	0.40	24.3	6.71	0.428	6.2	36	0.28	↓

Pump Rate: <=0.5 L/min Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)/Ferrous Iron Result(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
AMS7-MW06-GW/1215/7-26-00 →	~~pump~~ 20 (7/26/00)		No	Pump	as above
GW-QA/1215/7-26-00 →	20 ↓		No	↓	
GW-QC/1215/7-26-00 →	20		No		
AMS7-MW06-GW/1225/8/08/00 →	2 (8/08/00)		No	Pump	
GW-QC/1225/8-08-00 →	2 ↓		No	↓	
GW-QA/1226/8-08-00 →	6 ↓		No	↓	MS/MSD
On 8/08/00 Collected additional volume for PCB/Tox analysis, MS/MSD for QA sample					

TULSA TERC

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AMS No. 7	LocID: MW06
	Project Name: Atlas Missile Silo No. 7 ESI	Project #: 4423-0220

Date	Time (24 hr)	Method (pump, bail)	Water Level (FTOC)	Volume Removed (L)	Pumping Rate (Lpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	Sed. (mg/L)	TDS ~~Red.~~ (g/L)	Remarks (odor, clarity, etc.)
7/26/00	1145	Pump	24.35	4.9	0.40	24.2	6.69	0.427	6.1	30		0.28	Clear
	1150		24.35	5.5	0.40	24.2	6.68	0.427	6.1	28		0.28	
	1155		24.30	5.8	0.25	24.6	6.69	0.426	6.1	24		0.28	
↓	1200	↓	24.30	6.2	0.30	24.9	6.70	0.427	6.1	22		0.28	↓ parameters stable
Sample collected (1215) AMS7-mw06-GW/QA/QC													
8/08/00	1105	Start purging well 3 casing volumes prior to parameter measurements at 0.34m											
	1135		24.40	2.3	0.30	23.2	6.90	0.424	7.9	14		0.28	
	1140												pump stable
	1145		24.45	3.8	0.50	22.9	6.90	0.419	7.4	150		0.27	
	1150		24.40	4.4	0.30	23.4	6.89	0.416	7.4	140		0.27	
	1155		24.42	4.8	0.30	23.7	6.88	0.416	7.8	120		0.27	
	1200		24.37	5.2	0.20	24.1	6.89	0.417	7.4	92		0.27	
	1205		24.40	5.5	0.30	24.6	6.90	0.418	7.7	50		0.27	
	1210		24.39	5.7	0.075	25.1	6.92	0.421	7.2	50		0.27	
	1215		24.40	6.4	0.16	24.9	6.90	0.422	7.3	78		0.27	
	1220		24.40	6.8	0.35	24.0	6.91	0.420	7.4	41		0.27	
↓	1225		Sample collected at 1225 for PCB/TOX Analysis										
			Turbidity not stable and Temp ±0.9c										

Pump Rate: <=0.5 ' Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH +/- 3% conductivity, +/- 10% DO, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

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TULSA TERC

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AMS No.7	LocID: MW07	Date: 7/28/00 and 7/31/00
	Project Name: Atlas Missile Silo No.7 ESI	Project #: 4423-0220	Recorded By: P. HAMMONDS Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: Horiba U-22 Haz Co # 0102	Water Level Indicator Type/ID #: Solinst M. 101/26268	PID Type/ID #: Photovac 2020/Hz36 #13896
		Sampling Equipment: Redi flo2/300'/Teflon tubing	Equipment Decon.: Wash/double rinse
WELL INFO	Casing I.D. (in) [a]: 2"	Unit Casing Volume (gal/lin ft) [b]: 0.16 gal/ft	Initial Depth to Water (ft) [c]: 14.52
	Total Well Depth (ft) [d]: 26.75 ~~pmo~~ 28	Water Column Thickness (ft) [d-c]: 11.68	Well Volume (gal) [(d-c) x b]: 1.87
	Ambient PID (ppm): 0.0	Well Mouth PID (ppm): 0.0 ppm	Ground Condition of Well: dry
	Ambient Explosimeter (%LEL): N/A	Well Mouth Explosimeter (%LEL): N/A	Remarks: Pump intake set at 28 ~~mbtoc~~ 22.0' btoc

CASING INFO	Casing I.D. (in) [a]: 2"	1.5	(2.0)	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
	Unit Casing Volume (gal/lin ft) [b]:	0.09	(0.16)	0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (L)	Pumping Rate (Lpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	TDS Radiation (g/L)	Remarks (odor, clarity, etc.)
7/28/00	0845	16.93	0.5	.350	22.5	6.51	0.885	6.6	120	0.57	Cloudy
	0850	16.90	0.75	.250	22.6	6.52	0.886	5.7	96	0.57	Cloudy
	0855	16.79	1.30	.300	22.7	6.51	0.884	5.4	94	0.57	Slightly Cloudy
	0900	16.71	2.00	.300	22.8	6.52	0.885	4.7	91	0.57	Clear
	0905	16.75	2.60	.300	22.9	6.53	0.893	4.4	91	0.57	
	0910	16.76	3.10	.300	23.1	6.53	0.898	4.3	83	0.58	
	0915	16.79	3.60	.300	23.2	6.54	0.907	4.3	61	0.58	
	0920	16.76	4.10	.300	23.4	6.56	0.909	4.3	60	0.58	

Pump Rate: <=0.5 L/min Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)/Ferrous Iron Result(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
AMS7-MW07-GW/0935/7-28-00	~~HCl~~ 19 2 pint 19		Y 10u	Pump	as above
AMS7-MW07-GW/0830/7-31-00	/		N	Pump	
AMS7-MW07-GW/0950/8-01-00	19		N	Pump	
AMS7-MW07-GW-EB/1400/7-31-00	20		N	Pump	

TULSA TERC

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AMS No. 7	LocID: MW07
	Project Name: Atlas Missile Silo No. 7 ESI	Project #: 4423-0220

Date	Time (24 hr)	Method (pump, bail)	Water Level (FTOC)	Volume Removed (L)	Pumping Rate (Lpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	Sed. (mg/L)	TDS Red. (g/L)	Remarks (odor, clarity, etc.)
7/28 00	0925	Pump	16.81	4.7	0.30	23.6	6.57	0.913	4.4	56		0.58	Parameters stable
↓	Collected sample at 0930 AMS7-MW07-GW (Fl, Nitrite/Nitrate not collected)												
7/31 00	0810	Begin repurging MW07 to collect Fl/Nitrate/Nitrate sample											
		Purged 2.5 gallons at 0.300 l/m rate before starting purge measurements											
	0820	Pump	17.80	2.6	0.30	21.3	6.83	0.865	7.2	28		0.55	Clear
	0825	↓	17.87	3.3	0.30	21.4	6.86	0.866	7.2	26		0.55	↓
↓	0830	↓	17.86	3.8	0.30	21.6	6.89	0.870	7.2	25		0.56	↓
			Collect AMS7-MW07-GW @ 0830 for Fl/NO_2/NO_3.										
8/01 00	0830	Begin repurging MW07 to collect sample. Purged 2.5 gallons at 0.300 l/m rate before starting purge measurements											
	0850	Pump	16.72	2.5	0.30	21.7	6.38	0.892	5.5	15		0.57	
	0855		16.74	2.9	0.30	21.9	6.40	0.895	5.0	13		0.57	
	0900		16.78	3.4	0.30	22.1	6.43	0.899	4.7	17		0.58	
	0905		16.79	3.8	0.30	22.3	6.48	0.902	4.5	16		0.58	
	0910		16.75	4.3	0.30	22.7	6.54	0.907	4.5	12		0.58	
	0915		16.80	4.8	0.30	22.9	6.62	0.910	4.6	8		0.58	
	0920		16.81	5.2	0.30	23.2	6.67	0.913	4.6	3		0.58	
	0925		16.80	5.6	0.30	23.6	6.70	0.916	4.6	~~20~~		0.59	
	0930		16.79	5.8	0.30	23.9	6.73	0.918	4.5	0		0.59	
	0935		16.80	6.2	0.30	24.3	6.74	0.921	4.6	0		0.59	
	0940		16.80	6.6	0.20	24.7	6.76	0.924	4.5	0		0.59	Parameters stable
	Sample collected at 0950 AMS7-MW07-GW												

Pump Rate: <=0.5 Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

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TULSA TERC

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AMS No.7	LocID: MW08	Date: 7/31/00
	Project Name: Atlas Missile Silo No.7 ESI	Project #: 4423-0220	Recorded By: P. Hammons Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: Horiba U-22 Hazco #0102	Water Level Indicator Type/ID #: Solinst M. 101/26268	PID Type/ID #: Photovac 2020/Hazco #13896
		Sampling Equipment: Redi flo 2/300'/Teflon tubing	Equipment Decon.: Wash/double rinse
WELL INFO	Casing I.D. (in) [a]: 2"	Unit Casing Volume (gal/lin ft) [b]: 0.16 gal/ft	Initial Depth to Water (ft) [c]: 23.42
	Total Well Depth (ft) [d]: 28.02'	Water Column Thickness (ft) [d-c]: 4.6'	Well Volume (gal) ([d-c] x b): 0.736
	Ambient PID (ppm): 0.0	Well Mouth PID (ppm): 218 ppm	Ground Condition of Well: Dry
	Ambient Explosimeter (%LEL): NA	Well Mouth Explosimeter (%LEL): NA	Remarks: Set Pump Intake at 27.0' btoc

CASING INFO											
Casing I.D. (in) [a]:	1.5	(2.0)	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (gal/lin ft) [b]:	0.09		0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (gal)	Pumping Rate (Lpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	TDS Radiation (g/L)	Remarks (odor, clarity, etc.)
7/31/00	0915	23.90	0.20	0.20	22.2	7.12	0.606	1.2	990	0.39	Turbid
	0920	23.85	~~0.45~~ 0.4	0.15	22.4	7.08	0.610	0.9	990	0.39	↓
	0950	24.12	3.4	0.15	—	—	—	—	—	—	Let pump run at 0.10 Lpm for 30 min to clean up turbidity, removed 3.0 gallons
	0950	— Pump stops - or flow stops - Pull pump to check									
	1000	Pump restarted									
	1020	Flow stops again due to insufficient head above pump intake (6.4 gallons removed)									
	1045	Pump Well Dry with high flow and pump on bottom. In accordance w/ SOP will sample well w/ bailer for massive money									

Pump Rate: <=0.5 L/min Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10% turb (<= 10 NTU Ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)/Ferrous Iron Result(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
AMS7-MW08-GW/0800/08-01-00	4x40		N	Bailer ~~pump~~ pump	as above
			Nitrate filters w/ 10 um (660 NTU) turbidity		filter due to high

TULSA TERC

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AMS No. 7	LocID: MW08
	Project Name: Atlas Missile Silo No. 7 ESI	Project #: 4423-0220

Date	Time (24 hr)	Method (pump, bail)	Water Level (FTOC)	Volume Removed (L)	Pumping Rate (Lpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	Sed. (mg/L)	TDS ~~Red.~~ (g/L)	Remarks (odor, clarity, etc.)
08/01/00	0750	Begin	Filling	bottles	w/	Teflon	bailer	at	MW08				
	0800	bailer	—	—	—	20.6	6.53	0.608	~~4.2 ppm~~	670 660		0.39	
	Sample collected		AMS7-MW08-GW		at	0800							

Pump Rate: <=[illegible] Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH +/- 3% conductivity, +/- 10% DO, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

TULSA TERC

MONITORING WELL SAMPLE COLLECTION FORM

LOCATION	Site: AMS No.7	LocID: MW09	Date: 8/14/00
	Project Name: Atlas Missile Silo No.7 ESI	Project #: 4423-0220	Recorded By: P. Hammons Checked By:
EQUIPMENT	Water Quality Meter Type/ID #: Horiba U-22 Haz Co # 0102	Water Level Indicator Type/ID #: Solinst M. 101/20248	PID Type/ID #: Photovac 2020/Haz Co # 13896
		Sampling Equipment: Grundfos Rede-flo2/300'	Equipment Decon.: Wash/double rinse
WELL INFO	Casing I.D. (in) [a]: 4"	Unit Casing Volume (gal/lin ft) [b]: 0.65	Initial Depth to Water (ft) [c]: 42.65'
	Total Well Depth (ft) [d]: ~~215'~~ 215'	Water Column Thickness (ft) [d-c]: 172.35	Well Volume (gal) [(d-c) x b]: 112.03'
	Ambient PID (ppm): 0.0	Well Mouth PID (ppm): 0.0	Ground Condition of Well: Dry
	Ambient Explosimeter (%LEL): NR	Well Mouth Explosimeter (%LEL): ~~0.0~~ NR	Remarks:

CASING INFO										
Casing I.D. (in) [a]:	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (gal/lin ft) [b]:	0.09	0.16	0.20	0.37	0.65	0.75	1.0	1.5	2.0	2.6

Date	Time (24 hr)	Water Level (FTOC)	Volume Removed (L)	Pumping Rate (Lpm)	Temp. (C)	pH	Conductivity (mS/cm)	DO (mg/L)	Turb. (NTU)	TDS Radiation (g/L)	Remarks (odor, clarity, etc.)
8/14/00	0800	42.46'	Well	sampled w/ bailer after Recovered for ~~development~~ from dry status at end of Development on 8/11/00							
	0830	—	NA	NA	21.7	10.04	7.39	7.0	220	4.7	Slightly cloudy

Pump Rate: <=0.5 L/min Drawdown: < 0.33 ft Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 0.1 pH, +/- 3% conductivity, +/- 10% DO, +/- 10% turb (<= 10 NTU ideal) for 3 consecutive readings

Sample ID #(s)/Time(s)/Ferrous Iron Result(s)	No. Containers/Volume/Type	Preserv.	Filter (Y/N)	Pump OR Bailer	Parameter(s)
AMS7-MW09-GW/0800/08-14-00	2 1			Bailer Teflon	