



283 Rucker Street
Anniston, Alabama 36205
Phone: 256.847.0780
Fax: 256.847.0905
matrixdesigngroup.com

December 13, 2016

Mr. Stephen A. Cobb, Chief
c/o Mrs. Brandi Little
Governmental Hazardous Waste Branch Land Division
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

SUBJECT: Well Abandonment at the *Former Mock Village at Yahou Lake, Parcel 130Q-X*,
McClellan, Calhoun County, Alabama
Facility I.D. No. AL4 210 020 562

Dear Mr. Cobb:

On behalf of the McClellan Development Authority (MDA), Matrix Environmental Services, LLC (MES) sent a well abandonment request to the Alabama Department of Environmental Management (ADEM) on September 8, 2016 in regards to four groundwater wells located at the Former Mock Village at Yahou Lake, Parcel 130-Q-X (Yahou Lake). This request was approved via email by ADEM on August 23, 2016.

The MDA abandoned these wells on November 8-10, 2016, in accordance with the *Monitoring Well Abandonment Plan*, dated June 23, 2015 approved by ADEM on April 11, 2016 and with Appendix B, Section B.5.2(c) of the Alabama Environmental Investigation and Remediation Guidance (AEIRG). Copies of the well abandonment logs and a copy of the daily field logs with photo documentation has been attached.

Sincerely,
MATRIX ENVIRONMENTAL SERVICES, LLC.

A handwritten signature in black ink, appearing to read "Richard Satkin".

Richard Satkin, P.G.
McClellan Program Manager

CC: Mrs. Brandi Little, ADEM (email, two paper copies)
Mr. Robin Scott, MDA (transmittal letter only)



Matrix Environmental Services
283 Rucker Street
Anniston, AL 36205
(256) 847-0780
(256) 847-0905

Project

McClellan

Well ID

HR-130Q-MW01

Project No.

15-43.1

Location (Site)

Yahou Lake

MONITORING WELL ABANDONMENT

Abandoned By

GeoLab

Date

11/9/2016

Well Type

Stick-up

Northing

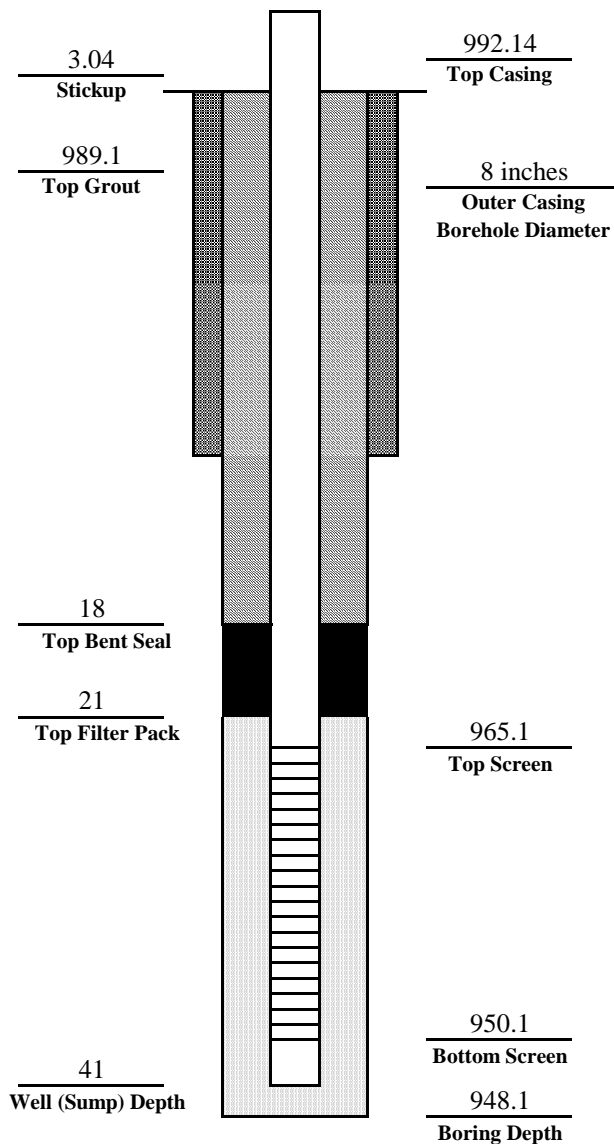
1159374.75

Easting

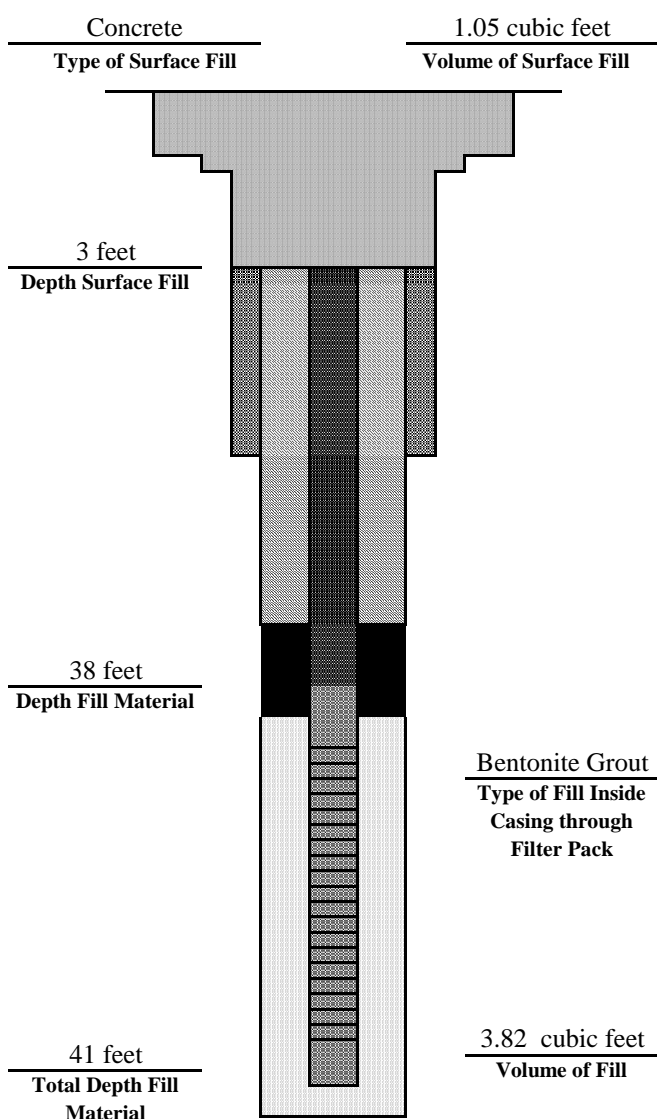
666532.81

Well Summary Prior to Abandonment

data presented in feet bgs



Well Summary After to Abandonment



notes:

Approximately 20 feet of PVC casing from HR-130Q-MW01 was removed before the casing broke. An attempt to overdrill the well was made and the drill hit refusal around 9 feet below ground surface. The remaining well casing was grouted in place.

Concrete Pad Removed

Protective Posts Removed

Flush Mount Removed

Outer Casing Removed

Inner Casing Removed

Length of Inner Casing Removed 20 feet

No	Yes	NA
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No	Yes	Partial
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



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Project

McClellan

Well ID

HR-130Q-MW02

Project No.

15-43.1

Location (Site)

Yahou Lake

MONITORING WELL ABANDONMENT

Abandoned By

GeoLab

Date

11/8/2016

Well Type

Stick-up

Northing

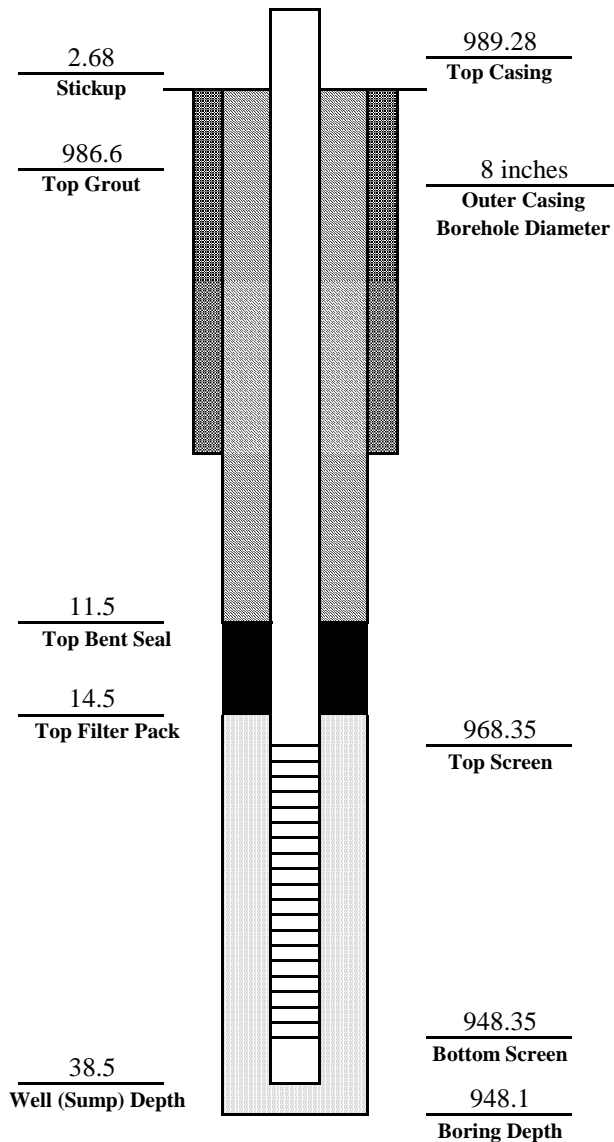
1159201.21

Easting

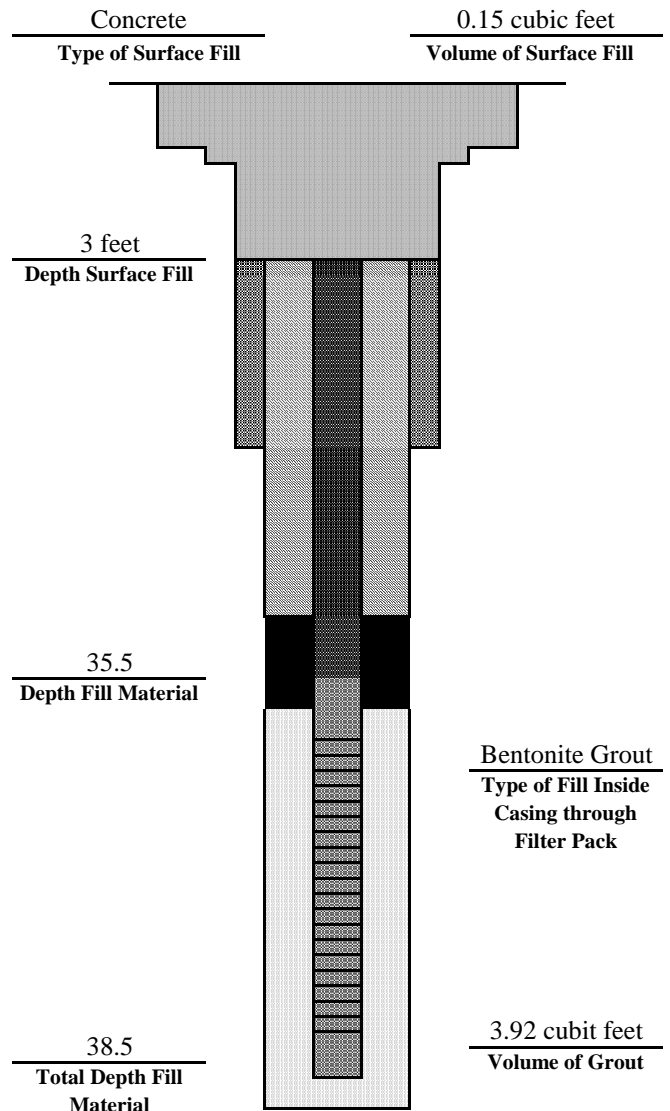
666721.86

Well Summary Prior to Abandonment

data presented in feet bgs



Well Summary After to Abandonment



notes:

During the removal of the PVC casing, the casing broke. The well was overdrilled with a hollow stem auger and a 4 1/4 inch bit to remove remaining casing and screen. The entire casing was removed.

Concrete Pad Removed

Protective Posts Removed

Flush Mount Removed

Outer Casing Removed

Inner Casing Removed

Length of Inner Casing Removed 40 feet

No	Yes	NA
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No	Yes	Partial
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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Project

McClellan

Well ID

HR-130Q-MW03

Project No.

15-43.1

Location (Site)

Yahou Lake

MONITORING WELL ABANDONMENT**Abandoned By**

GeoLab

Date

11/8/2016

Well Type

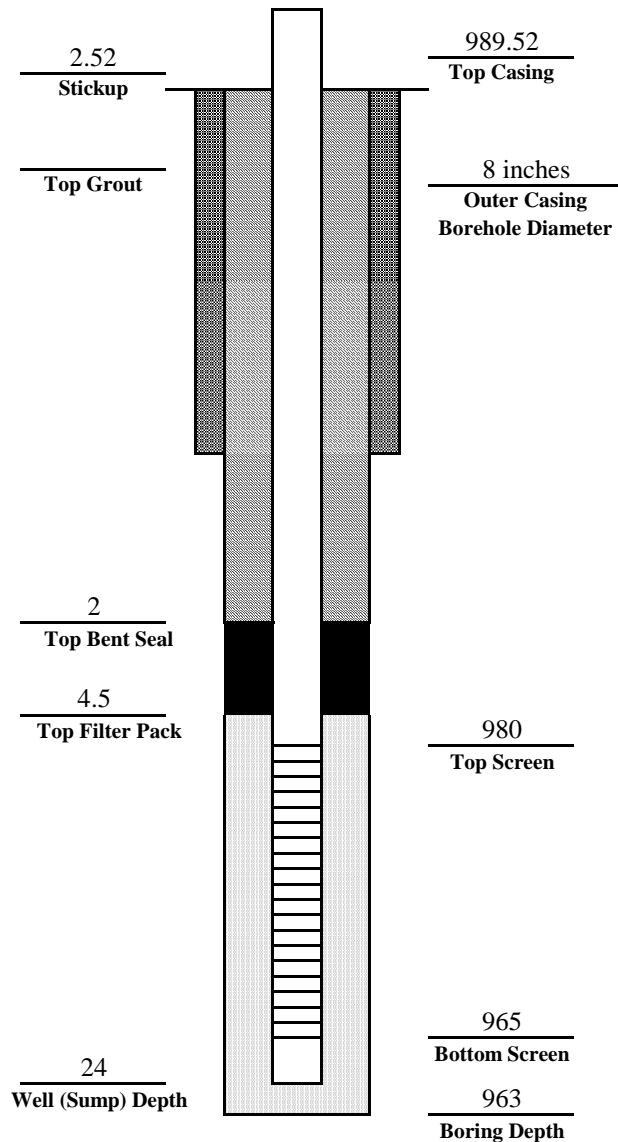
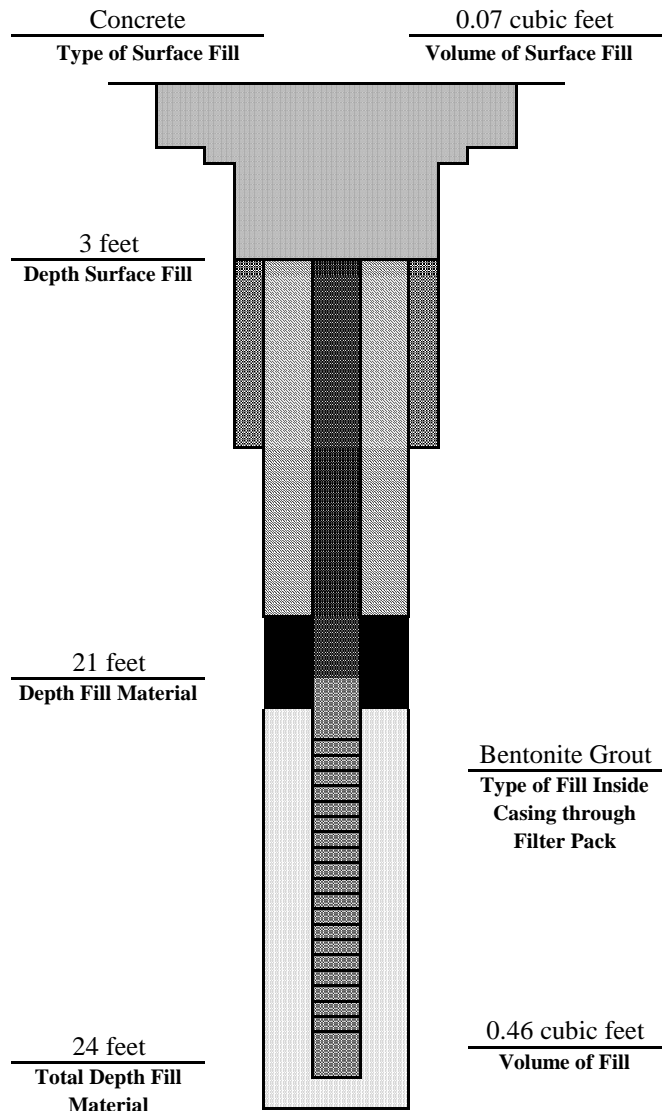
Stick-up

Northing

1159039.02

Easting

666566.71

Well Summary Prior to Abandonment*data presented in feet bgs***Well Summary After to Abandonment****notes:**

Entire casing and screen was removed from this well.

Concrete Pad Removed

Protective Posts Removed

Flush Mount Removed

Outer Casing Removed

Inner Casing Removed

Length of Inner Casing Removed 26 feet

No	Yes	NA
	X	
	X	
		X
		X

No	Yes	Partial
	X	



Matrix Environmental Services
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Project

McClellan

Well ID

HR-130Q-MW14

Project No.

15-43.1

Location (Site)

Yahou Lake

MONITORING WELL ABANDONMENT

Abandoned By

GeoLab

Date

11/8/2016

Well Type

Stick-up

Northing

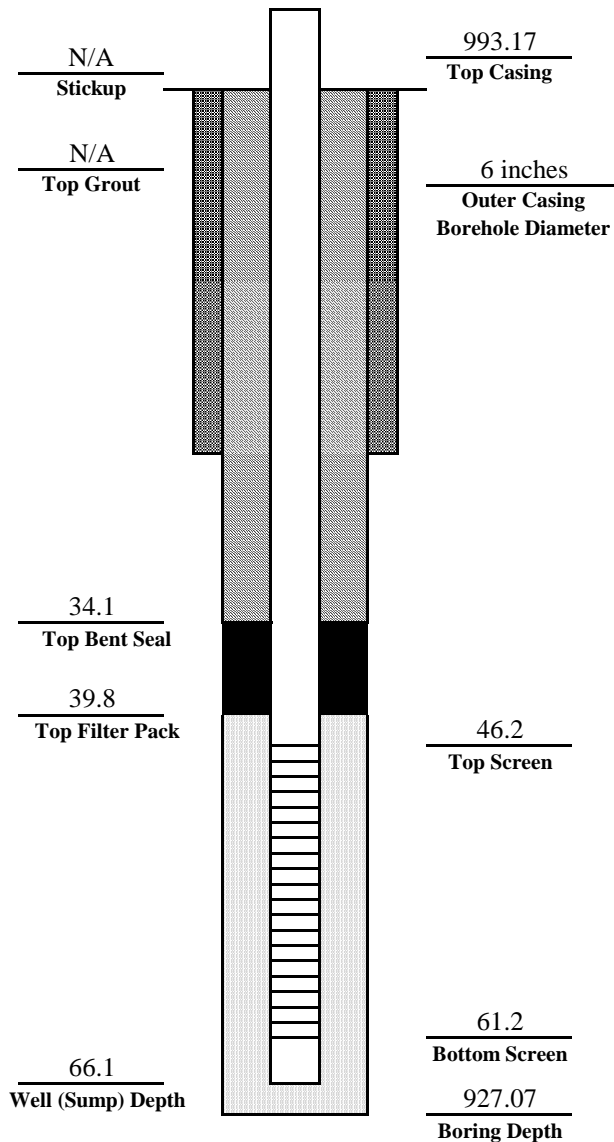
1159034.31

Easting

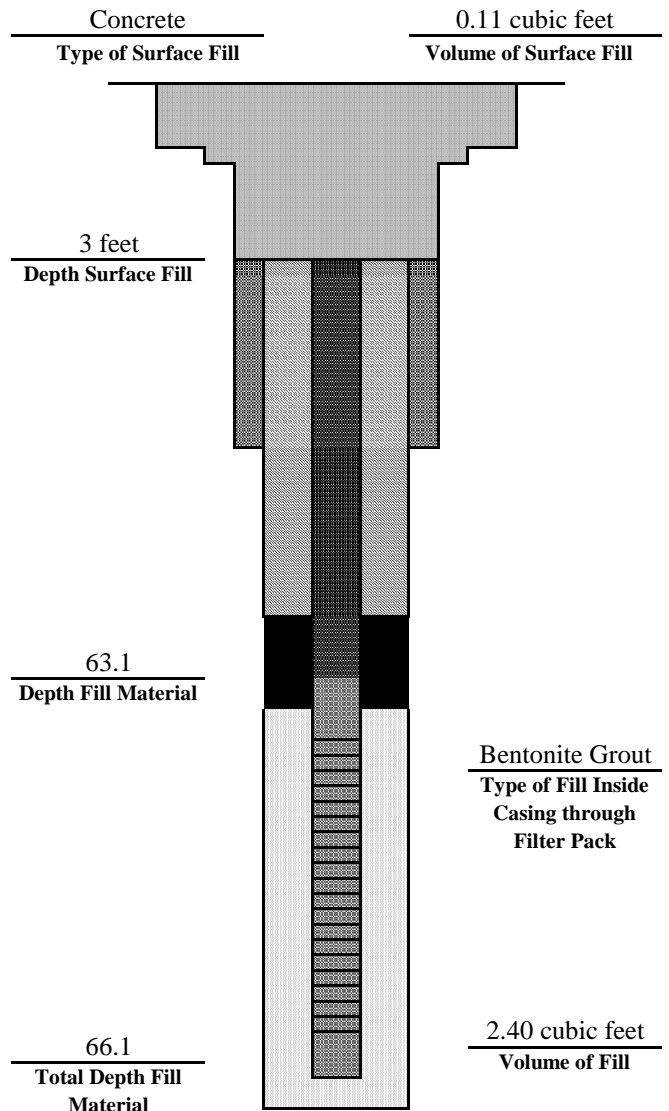
666689.57

Well Summary Prior to Abandonment

data presented in feet bgs



Well Summary After to Abandonment



notes:

Well was overdrilled with a solid stem auger and 3 1/2 inch bit. The entire casing was removed.

Concrete Pad Removed

Protective Posts Removed

Flush Mount Removed

Outer Casing Removed

Inner Casing Removed

Length of Inner Casing Removed 66.1 feet

No	Yes	NA
	X	
	X	
		X
		X

No	Yes	Partial
	X	

Job No. 15-43.1

Date: November 8, 2016
Client: McClellan Development Authority
Site Location: McClellan

Contact: Joseph Owens
Weather: Overcast, 72°F

Title: McClellan Project Manager
Wind: Light breeze

Name	Title	Company
Jason Tulley	Environmental Field Tech	Matrix Environmental Services
Shane Haney	Driller	GeoLab
A.J. Melrom	Driller	GeoLab
Van Pruett	Driller	GeoLab

Item	Qty.	Tolls
Flatbed Pickup Truck	1	

[illegible][illegible]

JOB DESCRIPTION:

- GeoLab arrived to MES office and personnel watched UXO avoidance video prior to visiting the site.
- Mobilized to Yahou Lake and set up on HR-130Q-MW03. Decision was made to abandon the shallowest well first and move in increasing depth, leaving the deepest well to be abandoned last.
- The entire casing for MW-03 was removed.
- 250-gallon cage tank was filled with water from the MES office to use for decontamination of the equipment.
- HR-130Q-MW02 casing broke during removal and the well was over drilled to remove the PVC casing and screen.
- The concrete pad and approximately 20 feet of the PVC casing of HR-130Q-MW01 was able to be removed before the casing broke.
- The pad and entire PVC casing of HR-130Q-MW14 was removed.
- HR-130Q-MW02 and HR-130Q-MW03 were filled with grout and allowed to settle overnight.

PLANNED WORK FOR FOLLOWING DAY:

- Over drill two remaining wells to completely remove well casings and screens.

JOB DISCREPANCIES:

- None.

Project Status

Prepared by:	Joseph Owens	Project
Title:	Project Manager	<input checked="" type="checkbox"/> Continue <input type="checkbox"/> Completed

Yahou Lake Well Abandonment Photo Log

November 08, 2016



11-08-2016-001: A skid steer was used by the GeoLab to break up the concrete pads and pull the PVC well casing.



11-08-2016-002: The entire casing was removed from HR-130Q-MW03.



11-08-2016-003: The geoprobe was used to help remove the casings and over drill the well if the casing broke during removal.



11-08-2016-004: When the entire casing was removed, MW-02 and MW-03 were filled with grout and allowed to settle overnight prior to pouring the cement cap.

Job No. 15-43.1

Date: November 8, 2016
Client: McClellan Development Authority
Site Location: McClellan

Title: McClellan Project Manager

Wind: Light breeze

Name	Title	Company
Jason Tulley	Environmental Field Tech	Matrix Environmental Services
Shane Haney	Driller	GeoLab
A.J. Melrom	Driller	GeoLab
Van Pruett	Driller	GeoLab

Item	Qty.	Tolls
Flatbed Pickup Truck	1	

[illegible][illegible]

JOB DESCRIPTION:

- GeoLab set up to over drill HR-130Q-MW01 but encountered drill refusal with the hollow stem auger at approximately 9 feet below ground surface. GeoLab switched to the solid stem auger bit but was still unable to push past nine feet below ground surface (bgs). The decision was made to grout the remainder of the casing in place.
- HR-130Q-MW14 was over drilled using a solid stem auger and all casing and screen was removed from the well.
- Both wells MW01 and MW14 were filled with grout and allowed to settle overnight before pouring the concrete cap.

PLANNED WORK FOR FOLLOWING DAY:

- Pour a concrete cap over the grouted wells.

JOB DISCREPANCIES:

- The drillers could not push past nine feet bgs on well HR-130Q-MW01.

Project Status

Prepared by:	Joseph Owens	Project
Title:	Project Manager	<input checked="" type="checkbox"/> Continue <input type="checkbox"/> Completed

Yahou Lake Well Abandonment Photo Log

November 09, 2016



11-09-2016-001: GeoLab used the geoprobe to over drill wells to remove the casings that broke or were not able to be completely removed.



11-09-2016-002: Bentonite grout was applied to the wells after removing the well casing and screen and was allowed to sit overnight to account for settlement.

Job No. 15-43.1

Daily Job Report

Title: McClellan Project Manager

Matrix Personnel and Subcontractors		
Name	Title	Company
Jason Tulley	Environmental Field Tech	Matrix Environmental Services
Shane Haney	Driller	GeoLab
A.J. Melrom	Driller	GeoLab
Van Pruett	Driller	GeoLab

VEHICLES		
Item	Qty.	Tolls
Flatbed Pickup Truck	1	

[illegible][illegible]

JOB DESCRIPTION:

- GeoLab poured a three-foot concrete cap over the four abandoned wells and de-mobed from the site.

PLANNED WORK FOR FOLLOWING DAY:

- None. Project is complete.

JOB DISCREPANCIES:

- None.

Project Status		
Prepared by:	Joseph Owens	Project
Title:	Project Manager	<input type="checkbox"/> Continue <input checked="" type="checkbox"/> Completed

Yahou Lake Well Abandonment Photo Log

November10, 2016



11-10-2016-001: A concrete cap seal was poured on top of the bentonite grout after allowing the grout to settle.