

ATTACHMENT F
MONITORING WELL SAMPLING LOGS



CAMP MINDEN - AREA I DESTRUCTION SITE
GROUNDWATER SAMPLING EVENT
WATER LEVEL MEASUREMENTS

WELL NO.	DATE	TOC Elev. Ft. MSL	Water Level		Comments <i>TOTAL well depth</i>	
			Depth	Elev.		
MW-1	8.31.2015	205.110	23.10	182.06	33.08	
MW-2	↓	206.07	23.85	182.22	32.89	
MW-3		204.14	22.52	181.62	32.42	
MW-4		203.66	22.18	181.48	32.91	
MW-5		204.08	22.74	181.34	30.30	
MW-6		202.69	21.22	181.47	30.18	

**GROUNDWATER MONITORING SAMPLING LOG
LOW-FLOW**

Project: Camp Minden – Area I Disposal Site
 Project No.: 750-0001
 Site Location: Minden, Louisiana
 Monitor Well No.: MW-1
 Date Purged/Sampled: 8-31-2015 Sampled By: BD

MONITOR WELL INFORMATION

Total Depth of Monitor Well (TD): 33.08 ft.
 Static Depth to Groundwater (DTW): 23.10 ft.
 Screen Length (SL) from Boring Logs: 10 ft.
 Depth to Top of Well Screen (TD-SL): 23.08 ft.
 Height of Water Column (H=TD-DTW): 9.98 ft.

Purge Flow Rate: _____ mL/min
 Volume Purged: 4.5 gallons
 Date/Time of Sample: 8/31/15@1300 Time

WELL CASING VOLUME CALCULATIONS

2" Well (H x 0.163 gal/ft) 1.6 gal. (1 well volume) 4.9 gal. (3 well volumes)
 4" Well (H x 0.653 gal/ft) _____ gal. (1 well volume) _____ gal. (3 well volumes)
 Other: _____

PURGING METHOD

Peristaltic Pump
 Low-flow Submersible Pump
 Water Well
 Other (Specify) BAILER

METHOD OF SAMPLE COLLECTION

Peristaltic Pump
 Low-flow Submersible Pump
 Bailer Dedicated Disposable
 Other (Specify) _____

LOW-FLOW MONITORING PARAMETERS

Time	Flow Rate	Temp.	Specific Conductivity	Dissolved Oxygen	pH	ORP	Turbidity	DTW
hr/min	mL/min	°C	mS/cm	mg/L	Standard Units	mV	NTU or FTU	feet
Stabilization Criteria	100 - 500 mL/min	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1	+/- 10%	+/- 10% (if >10 NTU or FTU)	<0.3 ft. or Top of Screen
<u>1243</u>	<u>Initial</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>23.10</u>
<u>1246</u>								

Notes: 1. Well is stable if 3 consecutive measurements of as many as 3 indicators are within their target ranges.
 2. Take measurements every 3 to 5 minutes.
 3. Field QA/QC Sample ID and Time Collected: _____

**GROUNDWATER MONITORING SAMPLING LOG
LOW-FLOW**

Project: Camp Minden – Area I Disposal Site
 Project No.: 750-0001
 Site Location: Minden, Louisiana
 Monitor Well No.: MW- 2
 Date Purged/Sampled: 8.31.2015 Sampled By: BD

MONITOR WELL INFORMATION

Total Depth of Monitor Well (TD): 32.89 ft.
 Static Depth to Groundwater (DTW): 23.85 ft.
 Screen Length (SL) from Boring Logs: 10 ft.
 Depth to Top of Well Screen (TD-SL): 22.89 ft.
 Height of Water Column (H=TD-DTW): 9.04 ft.

Purge Flow Rate: _____ mL/min
 Volume Purged: 4.5 gallons
 Date/Time of Sample: 8/31/15 @ 1330 Time

WELL CASING VOLUME CALCULATIONS

2" Well (H x 0.163 gal/ft) 1.5 gal. (1 well volume) 4.4 gal. (3 well volumes)
 4" Well (H x 0.653 gal/ft) _____ gal. (1 well volume) _____ gal. (3 well volumes)
 Other: _____

PURGING METHOD

Peristaltic Pump
 Low-flow Submersible Pump
 Water Well
 Other (Specify) BAILER

METHOD OF SAMPLE COLLECTION

Peristaltic Pump
 Low-flow Submersible Pump
 Bailer Dedicated Disposable
 Other (Specify) _____

LOW-FLOW MONITORING PARAMETERS

Time	Flow Rate	Temp.	Specific Conductivity	Dissolved Oxygen	pH	ORP	Turbidity	DTW
hr/min	mL/min	°C	mS/cm	mg/L	Standard Units	mV	NTU or FTU	feet
Stabilization Criteria	100 - 500 mL/min	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1	+/- 10%	+/- 10% (if >10 NTU or FTU)	<0.3 ft. or Top of Screen
	Initial	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>23.85</u>

Notes: 1. Well is stable if 3 consecutive measurements of as many as 3 indicators are within their target ranges.
 2. Take measurements every 3 to 5 minutes.
 3. Field QA/QC Sample ID and Time Collected: _____

**GROUNDWATER MONITORING SAMPLING LOG
LOW-FLOW**

Project: Camp Minden – Area I Disposal Site
Project No.: 750-0001
Site Location: Minden, Louisiana
Monitor Well No.: MW- 3
Date Purged/Sampled: 8.31.2015 **Sampled By:** BSD

MONITOR WELL INFORMATION

Total Depth of Monitor Well (TD): 32.42 ft.
 Static Depth to Groundwater (DTW): 22.52 ft.
 Purge Flow Rate: _____ mL/min
 Screen Length (SL) from Boring Logs: 10 ft.
 Volume Purged: 5 gallons
 Depth to Top of Well Screen (TD-SL): 22.42 ft.
 Date/Time of Sample: 8/31/15 @ 1400 Time
 Height of Water Column (H=TD-DTW): 9.90 ft.

WELL CASING VOLUME CALCULATIONS

2" Well (H x 0.163 gal/ft) 1.6 gal. (1 well volume) 4.8 gal. (3 well volumes)
 4" Well (H x 0.653 gal/ft) _____ gal. (1 well volume) _____ gal. (3 well volumes)
 Other: _____

PURGING METHOD

Peristaltic Pump
 Low-flow Submersible Pump
 Water Well
 Other (Specify) BAILER

METHOD OF SAMPLE COLLECTION

Peristaltic Pump
 Low-flow Submersible Pump
 Bailer Dedicated Disposable
 Other (Specify) _____

LOW-FLOW MONITORING PARAMETERS

Time	Flow Rate	Temp.	Specific Conductivity	Dissolved Oxygen	pH	ORP	Turbidity	DTW
hr/min	mL/min	°C	mS/cm	mg/L	Standard Units	mV	NTU or FTU	feet
Stabilization Criteria	100 - 500 mL/min	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1	+/- 10%	+/- 10% (if >10 NTU or FTU)	<0.3 ft. or Top of Screen
	Initial	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>22.52</u>

Notes: 1. Well is stable if 3 consecutive measurements of as many as 3 indicators are within their target ranges.
 2. Take measurements every 3 to 5 minutes.
 3. Field QA/QC Sample ID and Time Collected: _____

**GROUNDWATER MONITORING SAMPLING LOG
LOW-FLOW**

Project: Camp Minden – Area I Disposal Site
 Project No.: 750-0001
 Site Location: Minden, Louisiana
 Monitor Well No.: MW- 4
 Date Purged/Sampled: 8-31-2015 Sampled By: BD

MONITOR WELL INFORMATION

Total Depth of Monitor Well (TD): 32.91 ft.
 Static Depth to Groundwater (DTW): 22.18 ft.
 Purge Flow Rate: _____ mL/min
 Screen Length (SL) from Boring Logs: 10 ft.
 Volume Purged: 5.4 gallons
 Depth to Top of Well Screen (TD-SL): 22.91 ft.
 Date/Time of Sample: 8/31/15 @ 1430 Time
 Height of Water Column (H=TD-DTW): 10.73 ft.

WELL CASING VOLUME CALCULATIONS

2" Well (H x 0.163 gal/ft) 1.7 gal. (1 well volume) 5.2 gal. (3 well volumes)
 4" Well (H x 0.653 gal/ft) _____ gal. (1 well volume) _____ gal. (3 well volumes)
 Other: _____

PURGING METHOD

Peristaltic Pump
 Low-flow Submersible Pump
 Water Well
 Other (Specify) BAILER

METHOD OF SAMPLE COLLECTION

Peristaltic Pump
 Low-flow Submersible Pump
 Bailer Dedicated Disposable
 Other (Specify) _____

LOW-FLOW MONITORING PARAMETERS

Time	Flow Rate	Temp.	Specific Conductivity	Dissolved Oxygen	pH	ORP	Turbidity	DTW
hr/min	mL/min	°C	mS/cm	mg/L	Standard Units	mV	NTU or FTU	feet
Stabilization Criteria	100 - 500 mL/min	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1	+/- 10%	+/- 10% (if >10 NTU or FTU)	<0.3 ft. or Top of Screen
	Initial	—	—	—	—	—	—	22.18

Notes: 1. Well is stable if 3 consecutive measurements of as many as 3 indicators are within their target ranges.
 2. Take measurements every 3 to 5 minutes.
 3. Field QA/QC Sample ID and Time Collected: ms/mst

**GROUNDWATER MONITORING SAMPLING LOG
LOW-FLOW**

Project: Camp Minden – Area I Disposal Site
Project No.: 750-0001
Site Location: Minden, Louisiana
Monitor Well No.: MW- 5
Date Purged/Sampled: 8.31.2015 **Sampled By:** BD

MONITOR WELL INFORMATION

Total Depth of Monitor Well (TD): 30.30 ft.
 Static Depth to Groundwater (DTW): 22.74 ft.
 Screen Length (SL) from Boring Logs: 10 ft.
 Depth to Top of Well Screen (TD-SL): 20.30 ft.
 Height of Water Column (H=TD-DTW): 7.56 ft.

Purge Flow Rate: _____ mL/min
Volume Purged: 4 gallons
Date/Time of Sample: 8/31/15 @ 1500 Time

WELL CASING VOLUME CALCULATIONS

2" Well (H x 0.163 gal/ft) 1.23 gal. (1 well volume) 3.7 gal. (3 well volumes)
 4" Well (H x 0.653 gal/ft) _____ gal. (1 well volume) _____ gal. (3 well volumes)
 Other: _____

PURGING METHOD

Peristaltic Pump
 Low-flow Submersible Pump
 Water Well
 Other (Specify) BAILER

METHOD OF SAMPLE COLLECTION

Peristaltic Pump
 Low-flow Submersible Pump
 Bailer Dedicated Disposable
 Other (Specify) _____

LOW-FLOW MONITORING PARAMETERS

Time	Flow Rate	Temp.	Specific Conductivity	Dissolved Oxygen	pH	ORP	Turbidity	DTW
hr/min	mL/min	°C	mS/cm	mg/L	Standard Units	mV	NTU or FTU	feet
Stabilization Criteria	100 - 500 mL/min	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1	+/- 10%	+/- 10% (if >10 NTU or FTU)	<0.3 ft. or Top of Screen
	Initial	—	—	—	—	—	—	<u>22.74</u>

Notes: 1. Well is stable if 3 consecutive measurements of as many as 3 indicators are within their target ranges.
 2. Take measurements every 3 to 5 minutes.
 3. Field QA/QC Sample ID and Time Collected: _____

**GROUNDWATER MONITORING SAMPLING LOG
LOW-FLOW**

Project: Camp Minden – Area I Disposal Site
 Project No.: 750-0001
 Site Location: Minden, Louisiana
 Monitor Well No.: MW- 10
 Date Purged/Sampled: 8.31.2015 Sampled By: BD

MONITOR WELL INFORMATION

Total Depth of Monitor Well (TD): 30.18 ft.
 Static Depth to Groundwater (DTW): 21.22 ft.
 Purge Flow Rate: _____ mL/min
 Screen Length (SL) from Boring Logs: 10 ft.
 Volume Purged: 4.4 gallons
 Depth to Top of Well Screen (TD-SL): 20.18 ft.
 Date/Time of Sample: 8/31/15 @ 1530 Time
 Height of Water Column (H=TD-DTW): 8.96 ft.

WELL CASING VOLUME CALCULATIONS

2" Well (H x 0.163 gal/ft) 1.46 gal. (1 well volume) 4.38 gal. (3 well volumes)
 4" Well (H x 0.653 gal/ft) _____ gal. (1 well volume) _____ gal. (3 well volumes)
 Other: _____

PURGING METHOD

Peristaltic Pump
 Low-flow Submersible Pump
 Water Well
 Other (Specify) BAILER

METHOD OF SAMPLE COLLECTION

Peristaltic Pump
 Low-flow Submersible Pump
 Bailer Dedicated Disposable
 Other (Specify) _____

LOW-FLOW MONITORING PARAMETERS

Time	Flow Rate	Temp.	Specific Conductivity	Dissolved Oxygen	pH	ORP	Turbidity	DTW
hr/min	mL/min	°C	mS/cm	mg/L	Standard Units	mV	NTU or FTU	feet
Stabilization Criteria	100 - 500 mL/min	+/- 1°C	+/- 3%	+/- 10%	+/- 0.1	+/- 10%	+/- 10% (if >10 NTU or FTU)	<0.3 ft. or Top of Screen
	Initial	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>21.22</u>

Notes: 1. Well is stable if 3 consecutive measurements of as many as 3 indicators are within their target ranges.
 2. Take measurements every 3 to 5 minutes.
 3. Field QA/QC Sample ID and Time Collected: GW Dup #1