TEMPORARY DISPOSAL SITE
ADVANCE CONTRACTING INITIATIVE (ACI)

Well Completion Report

United States Army Corps of Engineers

Rock Island District
1500 Rock Island Drive
Rock Island, IL 61201

Contract No. W912EK-22-D-0004
Task Order No. W9128A-24-F-0001

August 2024

Submission Number: PC-026.00

ECC Constructors LLC
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Introduction

In February 2024, Maui County passed Bill 120, which specified groundwater-detection monitoring at the Temporary Disposal Site (TDS) located in Olowalu, Maui.

Two groundwater monitoring wells were subsequently installed in support the groundwater-detection monitoring effort at the TDS (Figure 1).

History

The TDS was constructed as a temporary storage site for the debris generated from the 2023 Lahaina Maui Wildfire cleanup efforts.

Clearance and Location

Prior to drilling, the selected locations were cleared and approved by Federal Emergency Management Agency (FEMA) and the United States Army Corp. of Engineers (USACE).

FEMA and USACE personnel completed a site visit on 14-March-2024 to perform an archaeological, biological, and cultural review of the proposed drilling locations. No issues were identified, and the locations were approved. Alpha Inc - Drilling of Maui was selected as the drilling contractor.

One well was placed upgradient of the TDS cell and the other well was placed downgradient. The upgradient monitoring well (MW) was designated MW-01 while the downgradient well was designated as MW-02.

Well Construction

Monitoring Well 01 [MW-01]

Well construction for MW-01 started on 03-June-2024 and was completed on 10-July-2024. Notable details during the construction included:

- Encountering a lava tube at 168-180 ft,
- Water was first encountered at 312 ft below ground surface (BGS)
- Boring ended at 347 ft; and the screening interval set from 308.55 to 328.92 ft.
- The well development was completed on 06-July-2024.
- The installation of the secured well caps and bollards were completed on 10-July-2024.

Monitoring Well 02 [MW-02]

Well construction for MW-02 started on 13-June-2024 and was completed on 10-July-2024. Notable details during the construction included:

- Sidewall blowout from 125 to 130-ft,
- Water was first encountered at 145-ft BGS;
- Boring ended at 167.5-ft; screening interval set from 138.16 to 158.53-ft.
- The installation of the secured well caps and bollards were completed on 10-July-2024.

Table 1 summarizes the details for each well. The well construction logs for both wells are located in the attachment section of this report.

Figures

Figure 1
2023 Maui Wild Fire
Temporary Landfill

LEGEND

Monitoring Wells Surveyed
(05-Aug-2024)

0 400 800 Feet

1 inch = 400 feet

NOTES
1. Coordinate System: NAD83 StatePlane Hawaii 2, US Feet (FIPS 5102)
2. Map Size: B-size (17"x11")
3. Revision Date: 8/20/2024

ENVIRONMENTAL CHEMICAL CORPORATION

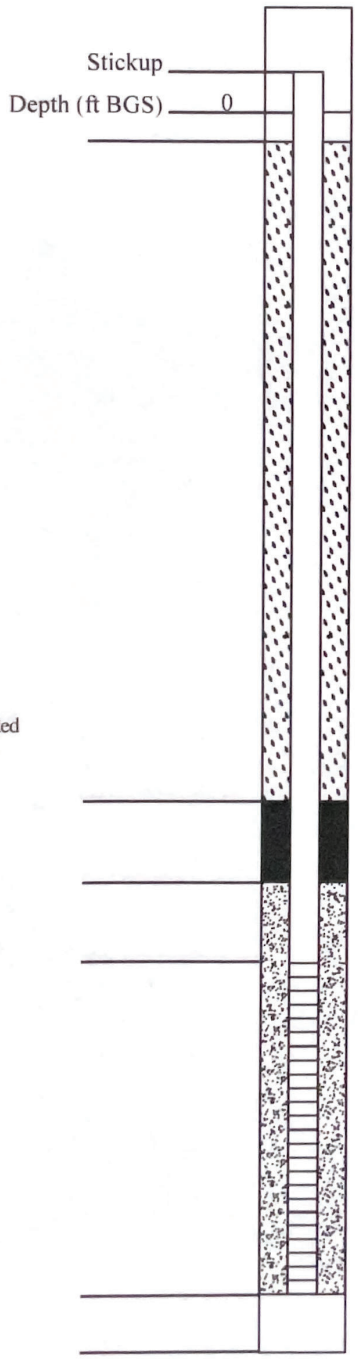
US Army Corps of Engineers

ECC GIS Server E:\Projects\Maui\MapDocuments\TDS\Fig_TDS.mxd

Attachments

WELL CONSTRUCTION LOG

Project Name: Maui TDSS Drill + Well Install	Project Number:		Sheet 1 of 1
Well Location: Northing: Easting:	Well Number: MW-01	Well Depth (TOC): ft 330.99'	
Driller: Alpha (Joe Griffiths)	Borehole Dia. (in): 6	Depth to Water (ft): 312.5' Static: N/A rel. to GS. Drilling: ft	
Drilling Company: Alpha, Inc.	Date Started: 06/03/2024		
Drilling Equipment: Atlas Copco T4	Date Finished: 07/10/2024	Elevation:	
Drilling Method: Air Rotary	Logged by: Brian Mallari	Checked by:	
Drilling Fluid: 1% Foamer ES (Matex) + Water	Number of Soil Samples: Ø	Date Checked:	



Elevation (TOC): _____

Stick-up Height: 2.07'

Vault Elevation: 1.85'

Well Casing Surrounded With Cement/Grout

Bentonite Seal

Filter Pack: 1 pipe group, 1 pipe

Screen Interval

PROTECTIVE CASING
Material/Type: Galvanized Steel Cylinder Pipe
Diameter (in): 6"
Depth (ft. BGS): 2.5'

GUARD POSTS
No: 4 ; Type: 4"D Galvanized Steel

SURFACE PAD
Composition and Size: Concrete, 5'x5'x6"D

RISER PIPE
Type and Thickness: Schedule 80 PVC, Threaded
Diameter (in): 3"
Total Lenght (ft TOC to TOS): 310.62' w/ 2.07' stick up
Ventilated Cap: (Y (N)

CONCRETE / GROUT
Composition and/or Proportions: 1:1, PorHand Limestone Cement + Coral Sand Slurry
Tremied: (Y/ N)
Interval (ft BGS): 0' - 245.45'

CENTRALIZERS
Depths (ft): N/A

SEAL
Type: 3/8" Bentonite Plug, Hydrated
Source: Halliburton
Tremied: (Y/N) Interval (ft BGS): 245.45' - 300.45'

FILTER PACK
Type: Sigmund Linder 10mm Glass Beads
Amount Used: ~7.7 ft³
Tremied: (Y/N)
Source: Sigmund Linder
Grain Size Dist.: 10mm ; Interval (ft BAS): 300.45' - 331'

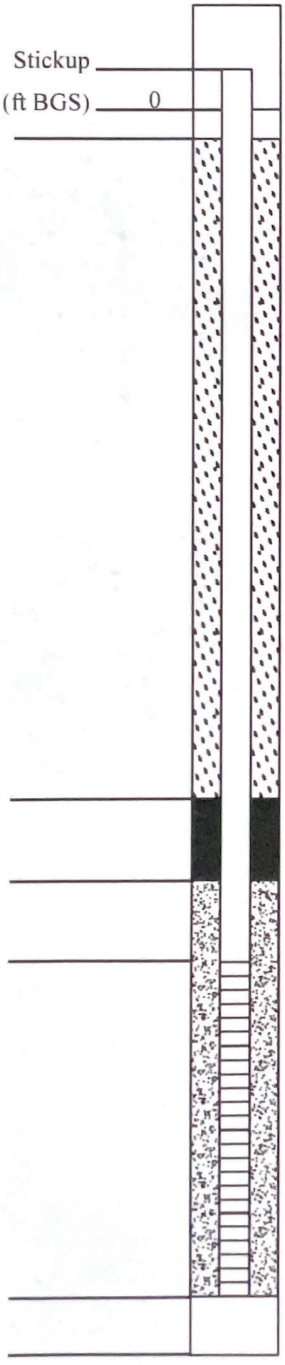
SCREEN
Type and Thickness: Slotted Schedule 80 PVC, Threaded
Diameter (in): 3" ; Slot Size: (in): 0.02"
Interval: (ft BGS): 308.55' - 328.92'

WELL FOOT
Interval (ft BGS): 328.92'

BACKFILL PLUG
Interval (ft BGS): 331' ; Material: 10mm Sigmund Linder Glass Beads
Hydration Time: N/A

WELL CONSTRUCTION LOG

Project Name: Maui TDSS Drill + Well Install	Project Number:	Sheet 1 of 1
Well Location: Northing: Easting:	Well Number: MW-02	Well Depth (TOC): ft 160.64'
Driller: Alpha (Joe Griffiths)	Borehole Dia. (in): 6	Depth to Water (ft): Static: N/A
Drilling Company: Alpha, Inc.	Date Started: 06/13/2024	Drilling: ft 145' rel to GS
Drilling Equipment: Atlas Copco T4	Date Finished: 07/10/2024	Elevation:
Drilling Method: Air Rotary	Logged by: Brian Mallari	Checked by:
Drilling Fluid: 1% Foamer ES (Matex) + Water	Number of Soil Samples: Ø	Date Checked:



Elevation (TOC): _____

Stick-up Height: 2.32'

Vault Elevation: 2.10'

Well Casing Surrounded With Cement/Grout

Bentonite Seal

Filter Pack: 1 pipe group, 1 pipe

Screen Interval

PROTECTIVE CASING
Material/Type: Galvanized Steel Cylinder Pipe
Diameter (in): 6"
Depth (ft. BGS): 2.5'

GUARD POSTS
No: 4 ; Type: 4"D Galvanized Steel

SURFACE PAD
Composition and Size: Concrete, 5'x5'x6"D

RISER PIPE
Type and Thickness: Schedule 80 PVC, Threaded
Diameter (in): 3"
Total Lenght (ft TOC to TOS): 140.48' w/ 2.32' Stickup
Ventilated Cap: (Y) (N)

CONCRETE / GROUT
Composition and/or Proportions: 1:1, Portland Limestone Cement + Coral Sand Slurry
Tremied: (Y) N)
Interval (ft BGS): 0' - 101.87'

CENTRALIZERS
Depths (ft): N/A

SEAL
Type: 3/8" Bentonite Plug, Hydrated
Source: Halliburton
Tremied: (Y) N) Interval (ft BGS): 101.87' - 129.62'

FILTER PACK
Type: Sigmund Linder 10mm Glass Beads
Amount Used: ~7.7 ft3
Tremied: (Y) N)
Source: Sigmund Linder
Grain Size Dist.: 10mm ; Interval (ft BAS): 129.62' - 167.5'

SCREEN
Type and Thickness: Slotted Schedule 80 PVC, threaded
Diameter (in): 3" ; Slot Size (in): 0.02'
Interval: (ft BGS): 138.16' - 158.53'

WELL FOOT
Interval (ft BGS): 158.53'

BACKFILL PLUG
Interval (ft BGS): 167.5' ; Material: 10mm Sigmund Linder Glass Beads
Hydration Time: N/A

Tables

Table 1: Well Details

	MW-01	MW-02
Coordinates - Lattitude	20.83137	20.8297
Coordinates - Longitude	-156.62718	-156.63173
Elevation - Concrete Pad (ft)	316.006	149.202
Elevation - Top of Metal Casing (TOC) (ft)	317.409	150.648
Survey Date [1]	5-Aug-24	5-Aug-24
Well Depth (ft)	328.92	158.53
Screening interval - Top (ft - BGS)	308.55	138.16
Screening interval - Bottom (ft - BGS)	328.92	158.53
Installation Date	10-Jul-24	10-Jul-24

1) MW-01: Survey Point 7085

MW-02: Survey Point 7080