

**Inspection Report for
Apple Valley Heights CWD
Apple Valley, CA**



**20KG Steel On-Grade
Middle Tank**

Date Completed: January 9, 2023

Commercial Dive Team:

**Diver – Colin Lafever
Dive Controller – Ceasar Hernandez
Tender – Noah Coleman**

Scope of Work:

Our team completed sediment removal using underwater vacuum equipment. Sediment depth, ranging from 1/16 inch to 1 inch, were removed from the tank floor. When the cleaning process was finished, a full visual inspection was performed of the tank interior and all interior fixtures. The team also performed a full visual inspection of the tank exterior and all attached fixtures. The details of the inspection findings are included in the report below.

Summary of the Inspection:

Exterior Inspection

1. The team had to go portable to get to the tank. (In a gated area)
2. The wall was found in good condition with minor oxidation and heavy chalking noted.
3. The overflow was found in poor condition with heavy oxidation, corrosive staining, cracking and 3% uniform surface corrosion & intergranular corrosion noted.
4. The manway was found secure and in good condition with heavy chalking noted.
5. The water level indicator was found in poor condition with 10% uniform surface corrosion noted.
6. The ladder was found secure, OSHA approved and in good condition with minor oxidation, heavy chalking and 0.3% uniform surface corrosion noted.
7. The uncoated roof was found in good condition.
8. The hatch, which also serves as the vent, was found bolted shut with no gasket present and in good condition.
9. The vent, which is located on the hatch, was found in good condition with minor oxidation noted.

Key

Excellent – Like new, no repairs needed

Good – Cosmetic problems, repair if utility wants

Fair – Minor problems, repairs needed

Poor – Major problems, fix now

Summary of the Inspection:

Interior Inspection

1. The interior roof was found in good condition with minor corrosive staining, minor to moderate oxidation and 0.01% uniform surface corrosion noted.
2. The overflow was found in good condition with minor corrosive staining, minor to moderate oxidation and 0.1% uniform surface corrosion noted.
3. The interior wall was found in good condition with minor corrosive staining, heavy sediment staining and 0.03% uniform surface corrosion & rust noduling noted.
4. The floor was found in fair to poor condition with heavy sediment & corrosive staining, 1/16 inch deep pitting, 33% rust noduling and greater than 50% uniform surface corrosion noted.
5. The manway was found in good condition with minor sediment staining, heavy corrosive staining, 1/32 inch deep pitting and 1% rust noduling & uniform surface corrosion noted.
6. The common inlet/outlet was found in good to fair condition with heavy sediment & corrosive staining, 1/16 inch deep pitting, 10% rust noduling and 0.3% uniform surface corrosion noted.
7. The drain was found in good to fair condition with minor to moderate corrosive & sediment staining and 0.3% rust noduling noted.
8. The float was found in poor condition with the cable and guidelines unattached.
9. The support column was found secure and in good condition with minor sediment staining, heavy corrosive staining, 0.01% rust noduling and 0.1% uniform surface corrosion noted.

Recommendations:

1. Schedule a blast and recoat of the interior or replace the floor as soon as budgets will allow. If, within 3 years, the recoating or replacing has not been completed, schedule a follow-up clean and inspect as recommended by the AWWA.

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Inland Potable Services, Inc.

Exterior Inspection Report



Wall Panel Condition

Coating Condition: Good
 Seams/Welds Condition: Good
 Corrosion Present? Y N
 Oxidation Present? Y N
 De-lamination Present? Y N
 Dents Present? Y N
 Holes Present? Y N
 Signs Of Leaking? Y N

Summary: The wall was found in good condition with minor oxidation and heavy chalking noted.



Overflow Structure Condition

Coating Condition: Poor
 Seams/Welds Condition: Good
 Stand Off Supports Condition: Good
 Corrosion Present? Y N
 Oxidation Present? Y N
 De-lamination Present? Y N
 Directly Connected To Sewer or Drain? Y N N/A
 End Cap Present? Y N
 Hinge and Cap Condition: Fair
 #24 mesh Screen Present? Y N
 Condition: N/A

Summary: The overflow was found in poor condition with heavy oxidation, corrosive staining, cracking and 3% uniform surface corrosion & intergranular corrosion noted. There are also holes in the pipe.



Manway Condition

Coating Condition: Good
 Weld/Seam Condition: Good
 Corrosion Present? Y N
 Oxidation Present? Y N
 De-lamination Present? Y N

Summary: The manway was found secure and in good condition with heavy chalking noted.



Water Level Indicator Condition

Marker Condition: Poor

Attached & Accurate? Y N

Marker Board Condition: Poor

Is the level reading visible? Y N

Pulley Condition: Poor

Attached Properly? Y N

Cable Condition: Poor

Attached Properly? Y N

Hardware Condition: Poor

Corrosion Present? Y N

Summary: The water level indicator was found in poor condition with 10% uniform surface corrosion noted.



Access Ladder Condition

Ladder Type: Steel bolted

Is Ladder and Safety Climb OSHA Approved? Y N

Is Vandal Guard Present? Y N

Locked? Y N N/A

Safety Climb Type: N/A

Safety Climb Condition: N/A

Is Top Of Tank Easily Accessible? Y N

Coating Condition: Good

Seams/Welds Condition: Good

Stand Off Supports Condition: Good

Corrosion Present? Y N

Oxidation Present? Y N

De-lamination Present? Y N

Summary: The ladder was found secure, OSHA approved and in good condition with minor oxidation, heavy chalking and 0.3% uniform surface corrosion noted.



Roof Condition

Roof Type: Pitched

Coating Condition: N/A

Seams/Welds Condition: Good

Corrosion Present? Y N

Oxidation Present? Y N

De-lamination Present? Y N

Low Spots Present? Y N

Holes in Roof? Y N

Cathodic Protection Plates Present? Y N

Sealed Edges: Y N N/A

Loose Plates? Y N N/A

Missing Plates? Y N N/A

Summary: The uncoated roof was found in good condition.



Access Hatch Condition

Coating Condition: N/A
 Seams/Welds Condition: Good
 Corrosion Present: Y N
 Oxidation Present? Y N
 De-lamination Present? Y N
 Hatch Size: 18 inch round
 Riser Height: 4 inches Lid Height: 1 inch
 Hatch Locked? Y N bolted

Hinge Condition: N/A
 Gasket Present? Y N
 Intact? Y N N/A
 Insects, Dirt Or Debris Present Under Hatch? Y N

Summary: The hatch, which also serves as the vent, was found bolted shut with no gasket present and in good condition.



Vent Condition

Coating Condition: Good
 Seams/Welds Condition: Good
 Corrosion Present: Y N
 Oxidation Present? Y N
 De-lamination Present? Y N
 #24 Mesh Screen in Place? Y N
 Condition: Good
 All Openings Sealed? Y N
 Cap Condition: Good

Summary: The vent, which is located on the hatch, was found in good condition with minor oxidation noted.





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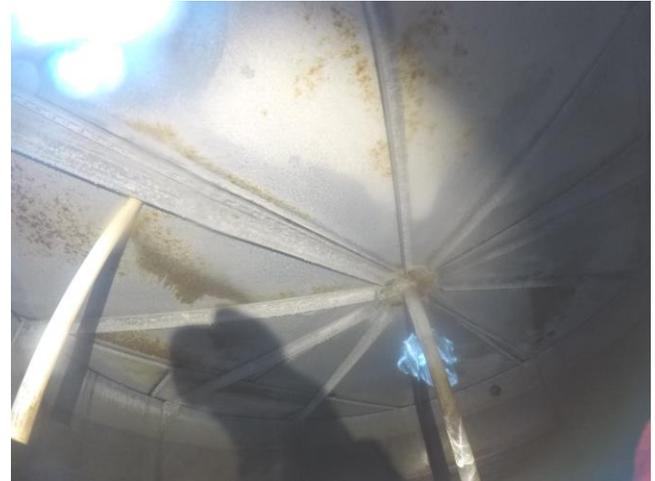
Interior Inspection Report



Roof Condition

Coating Condition: N/A
Welds/seam Condition: Good
Corrosion Present On Panels? Y N
Oxidation Present? Y N
De-lamination Present? Y N

Summary: The interior roof was found in good condition with minor corrosive staining, minor to moderate oxidation and 0.01% uniform surface corrosion noted.



Overflow Condition

Overflow Location: 7 o'clock
Coating Condition: N/A
Weld/Seam Condition: Good
Corrosion Present? Y N
Oxidation Present? Y N
De-lamination Present? Y N

Summary: The overflow was found in good condition with minor corrosive staining, minor to moderate oxidation and 0.1% uniform surface corrosion noted.



Wall Panel Condition

Coating Condition: N/A
Welds/seam Condition: Good
Corrosion Present On Panel? Y N
Oxidation Present? Y N
De-lamination Present? Y N
Is Biofilm Present: Y N
Any irregularities or structural deficiencies? Y N

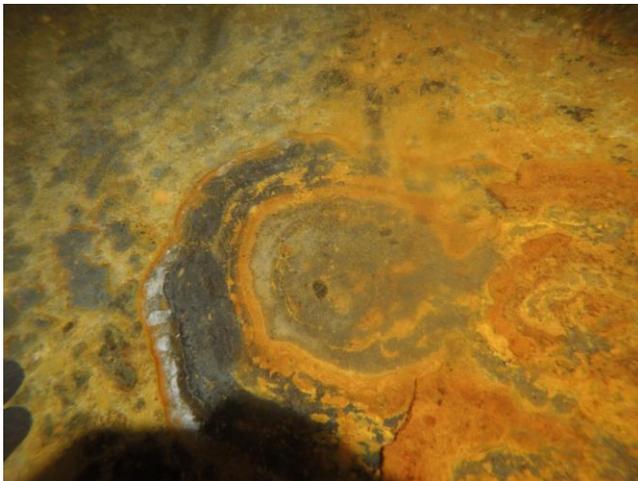
Summary: The interior wall was found in good condition with minor corrosive staining, heavy sediment staining and 0.03% uniform surface corrosion & rust noduling noted.



Floor Condition

Coating Condition: N/A
Welds/seam Condition: Fair
Corrosion Present? Y N
Oxidation Present? Y N
De-lamination Present? Y N
Any irregularities or structural deficiencies? Y N

Summary: The floor was found in fair to poor condition with heavy sediment & corrosive staining, 1/16 inch deep pitting, 33% rust noduling and greater than 50% uniform surface corrosion noted.



Manway Condition

Manway Location(s): 12 o'clock

Coating Condition: N/A

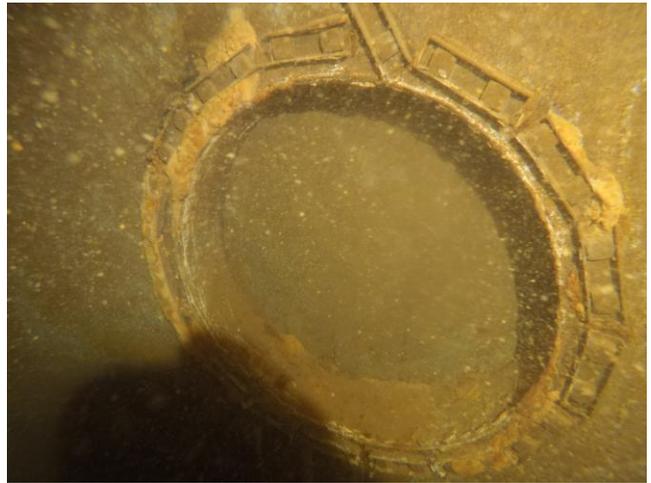
Weld/Seam Condition: Good

Corrosion Present? Y N

Oxidation Present? Y N

De-lamination Present? Y N

Summary: The manway was found in good condition with minor sediment staining, heavy corrosive staining, 1/32 inch deep pitting and 1% rust noduling & uniform surface corrosion noted.



Inlet and Outlet Condition

Common Inlet/Outlet? Y N

Location: 5 o'clock

Coating Condition: N/A

Weld/Seam Condition: Good/Fair

Corrosion Present? Y N

Oxidation Present? Y N

De-lamination Present? Y N

Summary: The common inlet/outlet was found in good to fair condition with heavy sediment & corrosive staining, 1/16 inch deep pitting, 10% rust noduling and 0.3% uniform surface corrosion noted.



Drain Condition

Drain Location: 9 o'clock

Coating Condition: N/A

Weld/Seam Condition: Good

Corrosion Present? Y N

Oxidation Present? Y N

De-lamination Present? Y N

Summary: The drain was found in good to fair condition with minor to moderate corrosive & sediment staining and 0.3% rust noduling noted.



Float Condition

Float Location: 12:05 o'clock
 Guidelines Condition: Poor
 Attached Properly? Y N
 Cable Condition: Poor
 Attached Properly? Y N
 Float Condition: Poor
 Sealed? Y N

Hardware Condition: Poor
 Corrosion Present? Y N

Summary: The float was found in poor condition with the cable and guidelines unattached.



Support Column Condition

Number Of Columns: 1
 Coating Condition: N/A
 Welds/seam Condition: Good
 Corrosion Present? Y N
 Oxidation Present? Y N
 De-lamination Present? Y N

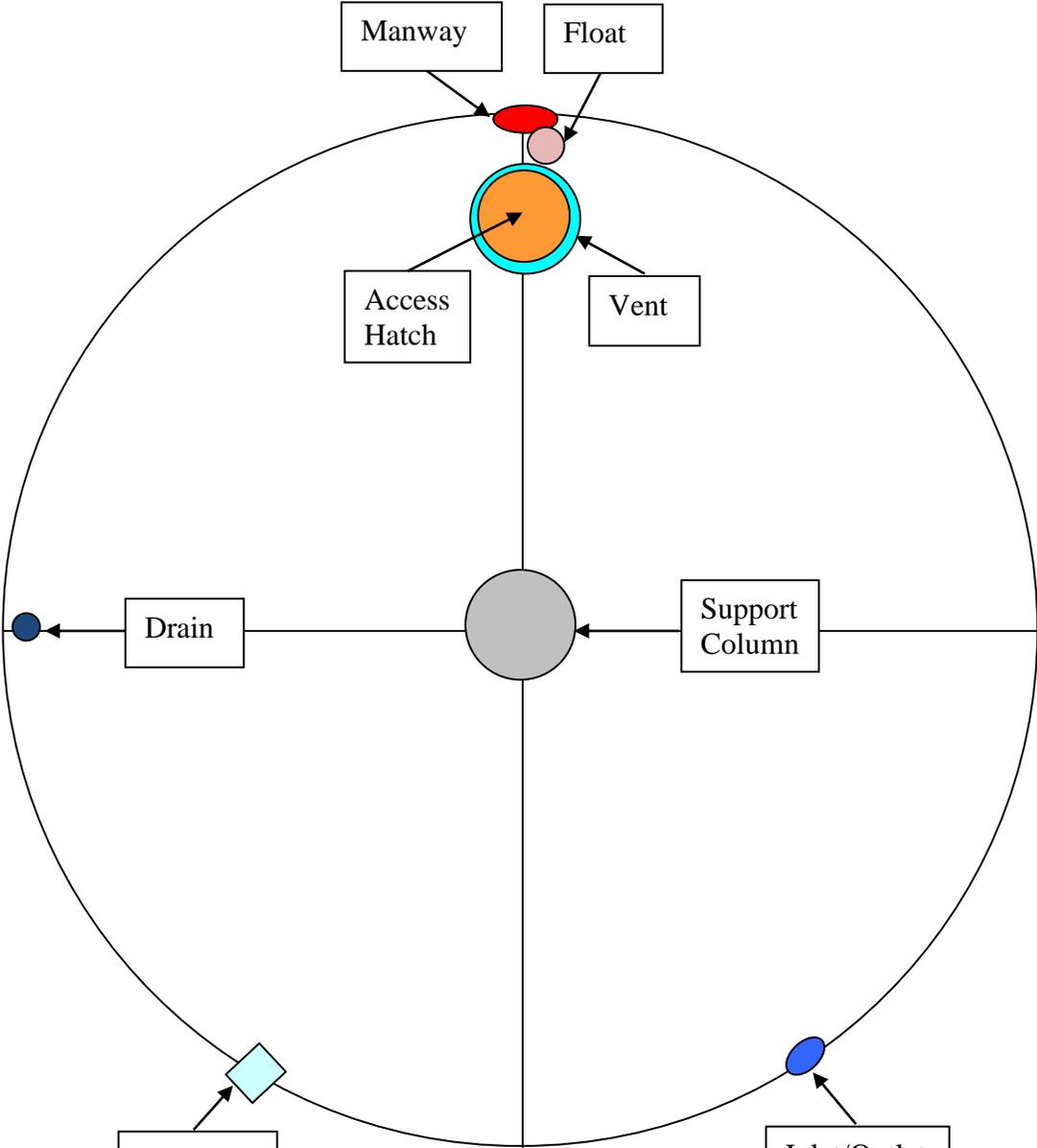
Summary: The support column was found secure and in good condition with minor sediment staining, heavy corrosive staining, 0.01% rust noduling and 0.1% uniform surface corrosion noted.



Tank Layout

Quadrant #4

Quadrant #1



Quadrant #3

Quadrant #2