



Water Storage Facility 2019 ROV Inspections City of Johnson City

Johnson City, TX

September 2019



www.usunderwaterservices.com

U.S. UNDERWATER SERVICES, LLC - 123 Sentry Drive - Mansfield, TX 76063 - PHONE (800) 860-2178 - FAX: (817) 447-0021



Statement of Certification

City of Johnson City

Location: Johnson City, TX

September 2019

This form certifies the inspections were completed on the above date for the facilities listed below:

- [1] 200,000 Gallon Ground
- [1] 95,000 Gallon Ground
- [1] 150,000 Gallon Elevated
- [1] 5,000 Gallon Pressure


U.S. Underwater Services, LLC certifies this work was completed in accordance with the American Water Works Association's [AWWA] current standards [ANSI/AWWA c652-92] regarding disinfection procedures when conducting underwater activities in potable water storage facilities. All equipment used is designated for potable water use only.

Rachel Potter

Rachel Potter
Director of Sales & Marketing
U.S. Underwater Services, LLC

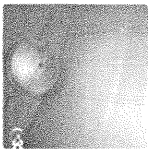
U.S. Underwater Services, LLC 123 Sentry Drive, Mansfield, TX 76063
P: 817-447-7321, F: 817-447-0021, Toll: 800-860-2178



Condition of Cathodic Protection	N/A
Condition of Sidewall Plates (SSPC Rating)	1 From 1 to 10
Condition of Side Manway Access	Good
Condition of Internal Plumbing	Good
Condition of Floor Plates (SSPC Rating)	8 From 1 to 10
Does Tank Have Baffles?	No
Is Facility Free of Sediment/Debris?	No
<p>--- Notes</p> <p>Recommend the 1/8" of sandy silt sediment be removed from the floor plates</p> <p>--- Photos</p>  <p>Photo 38</p>	
Sediment/Debris Type	Sandy Silt
Sediment Depth	
1/8"	
Percentage of Sediment Coverage	
100	
Level of Staining Inside Facility	Light
Clarity of Water	Good
Quality of Water	Good
Water Temperature	Cool
Additional Notes	
Unanswered	
Inspector	
Josh Boatright	

Internal Inspection

3 Failed

Condition of Water Access Ladder		Good
Photo of Water Access Ladder		
-- Photos		
Photo 33	Photo 34	Photo 35
Photo 36		
Width of Water Access Ladder		
18"		
Diameter of Ring		
2" angle		
Length of Ladder		
24'		
Length of Stenopoff		
9.5"		
Condition of Fall Protection System		
-- Notes		
Recommend a slider fall protection system be installed		
Condition of Roof Supports		Fair
Condition of Water Level Indicator System		Poor
-- Notes		
Recommend a new water level indicator system be installed		
-- Photos		
Photo 37		
Deficiency	+ Main Cable + Float	
Condition of Overflow	Fair	
Condition of Roof Plates (SSPC Rating)	8	From 1 to 10

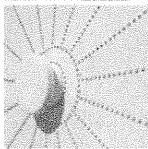
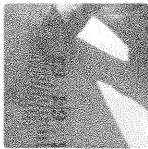
References

Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces – SSPC-VIS 2-82 & ASTM D 610-85

The graphical representations show examples of area percentages, which may be helpful in rust grading. The use of photographic reference standards requires the following precautions:

- ☒ Some finishes are stained by rust. This staining must not be confused with the actual rusting involved.
- ☒ Accumulated dirt or other material may make accurate determination of the degree of rusting difficult.
- ☒ Certain types of deposited dirt that contain iron or iron compounds may cause surface discoloration that should not be mistaken for corrosion.
- ☒ It must be realized that failure may vary over a given area and discretion must therefore be used in applying these reference standards.
- ☒ In evaluating surfaces, consideration shall be given to the color of the finish coating, since failures will be more apparent on a finish that shows color contrast with rust, such as white, than on a similar color, such as iron oxide finish.
- ☒ The photographic reference standards are not required for use of the rust grade scale since the scale is based upon the percent of the area rusted and any method of assessing area rusted may be used to determine the rust grade.

Rust Grades	Description
10	No rusting or less than 0.01% of surface rusted
9	Minor rusting less than 0.05% of surface rusted
8 ^h	Few isolated rust spots less than 0.1% of surface rusted
7	Less than 0.3% of surface rusted
6 ^c	Extensive rust spots but less than 1% of surface rusted
5	Rusting to the extent of 3% of surface rusted
4 ^p	Rusting to the extent of 10% of surface rusted
3 ^f	Approximately one sixth of the surface rusted 10%
2	Approximately one third of the surface rusted 35%
1	Approximately one half of the surface rusted 50%

Condition of Water Access Hatch	Good
Size of Water Access Hatch	
30"	
Was Water Access Hatch Labeled 'Confined Space'?	No
--- Notes	
Recommend a 'confined space entry' placard be installed	
Was Water Access Hatch Locked?	Yes, Lock in Good Condition
Type of Roof Vent	Mushroom Shape
Photo of Roof Vent	
--- Photos	
	Photo 31
	Photo 32
Condition of Roof Vent	Good
Vent Circumference	
63.75"	
Condition of Vent Screen	Compliant

Pressure Tank

conducted for

City of Johnson City

Completed on
24 Sep 2019 03:46 PM

Audit Title
City of Johnson City Inspection #1

Client/Site
City of Johnson City

Client Specific Tank Name
Pressure Tank

Job Number
5409

Conducted On
09 Sep 2019 01:04 PM

Prepared By
Rov One

External Inspection

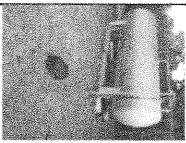
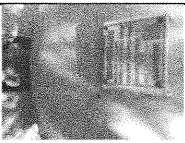
Question	Response	Details
Identification		
Reference photo		
Appendix 1		
What is the facility type?	Mild steel	
How is facility constructed?	Metal welded	
Gallon capacity	5K	
Height	UK	
What is diameter?	UK	
Is identification plate available?	Yes	
Photo ID plate		
		
Appendix 2		
Tank builder	Wendland MFG	
Year built	2000	
Serial number or identification	32969	
Intruder Protection		
Does facility have intruder fence?	Yes	

Photo of Intruder Protection Door

--- Photos

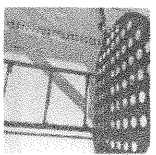


Photo 23

Condition of Fall Protection System

Good

Photo of Fall Protection System

--- Photos

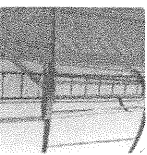


Photo 24

Photo of Roof Plates

--- Photos

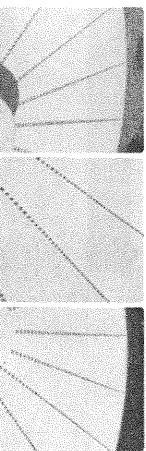


Photo 25

Photo 26

Photo 27

Condition of Roof Plates

Good

Condition of Roof Coating (SSPC Rating)

8
From 1 to 10

Condition of Anode Plates

N/A

Photo of Water Access Hatch

--- Photos

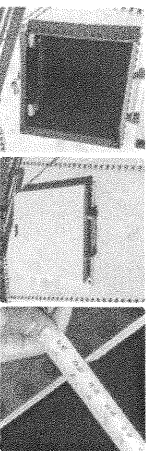


Photo 28

Photo 29

Photo 30

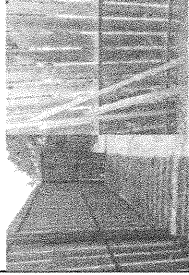


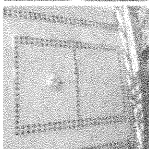

Photo of fence		Appendix 3	Appendix 4
Rate condition of the fence (1= Poor, 2= Fair, 3= Good)		3	
Structure Foundation			
Photo foundation		Appendix 5	Appendix 6 Appendix 7 Appendix 8
Foundation type?		Concrete pads	
Rate the overall condition of the foundation? (1= Poor, 2= Fair, 3= Good)		3	
Facility Plumbing			
Photo(s) of all plumbing		Appendix 9	Appendix 10 Appendix 11 Appendix 12 Appendix 13 Appendix 14
List all plumbing on facility		Inlet, Outlet, Drain	
Rate the overall condition of the plumbing (1= Poor, 2= Fair, 3= Good)		3	



Photo of Side Manway Access Hatch		Photo 14
Size of Manway Access Hatch		24"
Was Manway Access Hatch Labeled 'Confined Space'?		No
Recommend a 'confined space entry' placard be installed		
Condition of External Ladder		Good
Photo of External Ladder		Photo 15
Width of External Ladder		16"
Diameter of Rung		1
Length of External Ladder		24'
Length of Standoff		9"
Condition of Intruder Protection Door		Good

External Sidewalls			
Photo of sidewall plates			
Appendix 15	Appendix 16		
List the SSPC rust rating?	8		
Rate the condition of the sidewall plates (1= Poor, 2= Fair, 3= Good)	3		
Side Manway Access Hatch			
Does facility have manway hatch?	Yes		
Quantity of manway(s)	1		
Size(s)	18" - 14"		
Photo of manway(s)			
Appendix 17	Appendix 18	Appendix 19	Appendix 20
Rate the condition of the side manway access hatch (1= Poor, 2= Fair, 3= Good)	3		
Was manway labelled confined space?	No	Recommend a 'confined space entry' placard be installed	

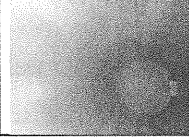

Photo of Foundation			
— Photos			
Photo 3	Photo 4		
Water Level Indicator Type(s)	None		
Condition of Overflow	Good		
Does Overflow Extend to Ground?	Compliant		
Does Overflow Flapper Seal?	Compliant		
Photo of Flapper			
— Photos			
Photo 5	Photo 6	Photo 7	Photo 8
Photo 9			
Condition of External Plumbing			
Good			
Photo of External Plumbing			
— Photos			
Photo 10	Photo 11	Photo 12	Photo 13
Condition of Sidewall Plates	Good		
Condition of Sidewall Protective Coating (SSPC Rating)	7 From 1 to 10		
Condition of Side Manway Access Hatch	Good		

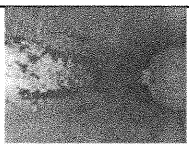
External Inspection

2 Failed

Reference Photo of Facility	
	
Photo 1	
Facility Type	Ground Metal Bolted
Facility Construction	
Capacity	35K
Height	24'
Diameter	28'
Does Facility Extend Underground?	No
Tank ID Plate?	Yes
Tank ID Plate Photo	
	
Photo 2	
Tank Builder	Columbian Tectank
Year Built	1992
Serial/ID Number	N/A
Condition of Intruder Protection Fence	Good
Condition of Foundation	Good

Internal Inspection

Question	Response	Details
Internal View Access Hatch		
Is an internal inspection of access hatch possible?	Yes	
Is access hatch internally in good condition?	Yes	
Internal Roof Plates		
Is an internal inspection of the roof plates possible?	Yes	
List the SSPC rust rating?	7	
		
Appendix 22		
Rate the condition of the roof plates (1= Poor, 2= Fair, 3= Good)	2	
List deficiencies for roof plates	Light corrosion, Blistering Light	
Is there condensation in the facility?	No	
Holes in the roof plates?	No	
Internal Sidewall Plates		
Is an internal inspection of the sidewall plates possible?	Yes	
		

Appendix 23	Appendix 24		
Corrosion on the internal sidewall plates?	No		
Signs of blistering of the coating?	No		
Peeling of the coating?	No		
Holes in the sidewall plates?	No		
Internal Plumbing			
Is an internal inspection of the plumbing possible?	Yes		
List types of plumbing	Inlet, Outlet, Drain		
Is the internal plumbing in good condition?	Yes	Light corrosion	
Repairs needed for plumbing?	No		
Floor Plates			
Is an internal inspection of the floor plates possible?	Yes		
			
Appendix 25			
List the SSPC rust rating	7		
Are the floor plates clean?	No		
List sediment description	Sandy silt		
Give depth of sediment	1/16"		
What is the % of sediment coverage on the floor plates?	10%		
Debris in the facility?	No		
Is cleaning recommended?	No		
Signs of blistering on the coating?	No		


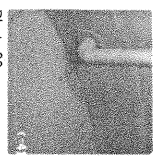
Failed Items

5 Failed

External Inspection

Was Manway Access Hatch Labeled 'Confined Space'?	No
<small>--- Notes</small> Recommend a 'confined space entry' placard be installed	
Was Water Access Hatch Labeled 'Confined Space'?	No
<small>--- Notes</small> Recommend a 'confined space entry' placard be installed	

Internal Inspection

Condition of Fall Protection System	N/A
<small>--- Notes</small> Recommend a slider fall protection system be installed	
Condition of Water Level Indicator System	Poor
<small>--- Notes</small> Recommend a new water level indicator system be installed	
<small>--- Photos</small> 	
Photo 37	
Is Facility Free of Sediment/Debris?	No
<small>--- Photos</small> Recommend the 1/8" of sandy silt sediment be removed from the floor plates	
<small>--- Photos</small> 	
Photo 38	



City of Johnson City Inspection #4 / Eagle GST

Ground Tank/Standpipe/Cleanwell Inspection 2019

Complete

Peeling of the coating?	No	
Insects in the facility?	No	
	Sean Garcia	09 Sep 2019 01:16 PM

Filled items

5

Inspection Title	City of Johnson City Inspection #4
Client Specific Tank Name	Eagle GST
Client	City of Johnson City
Location	6107 Justice Ave Lubbock, TX 79424 United States (33.537797590313005, -101.95034396766906)
Job Number	5409
Prepared by	Roy One
Contacted on	<input checked="" type="checkbox"/> 25th Sep, 2019 @ 8:34 AM CDT

Elevated Inspection

conducted for

City of Johnson City

Completed on
25 Sep 2019 07:54 AM

Audit Title
City of Johnson City Inspection #2


Client/Site
City of Johnson City

Client Specific Tank Name
Elevated

Job Number
5409

Conducted On
09 Sep 2019 01:37 PM

Prepared By
Roy One


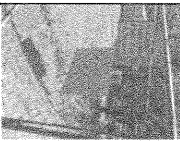
Side Manway Access		Is side manway hatch in good condition?	Yes	
Internal Plumbing				
List types of plumbing		Inlet, Outlet		
Is the internal plumbing in good condition?		Yes		
Repairs needed for plumbing?		No		
Floor plates				
What is the SSPC rust rating		8		
Are the floor plates clean?		Yes		
Debris in the facility?		Yes		
Describe debris		Rust and coating		
Is cleaning recommended?		No		
Signs of blistering on the coating?		No		
Peeling of the coating?		No		
Water Condition				
What is the water clarity? (1 = Poor, 2 = Fair, 3 = Good)		3		
What was the water temperature (1 = Cold, 2 = Cool, 3 = Warm, 4 = Hot (over 88 degrees Fahrenheit))		2		
Is an odor present?		No		
Is there oil on the water?		No		
Insects in the facility?		No		
What is the maximum water depth?		23'		
What was the actual water depth?		11'		
Sean Garcia	09 Sep 2019 03:49 PM			

Overflow	
What style of overflow is present?	Box
Is overflow in good condition?	No
List deficiencies	Light corrosion, Light blistering
Are repairs needed for overflow?	No
Roof Plates	
What is the SSPC rust rating?	6
Rate condition of roof plates (1= Poor, 2= Fair, 3= Good)	2
List deficiencies for roof plates	Moderate corrosion, Light corrosion, Peeling paint, Moderate blistering, Light blistering
Corrosion on braces and supports?	Yes
List visual severity of corrosion.	Light corrosion
Holes in roof plates?	No
Need for roof supports to be repaired?	No
Cathodic Protection	
Does tank have cathodic protection?	No
Sidewall Plates	
Corrosion on the sidewall plates?	Yes
List the SSPC rust rating	7
Signs of blistering of the coating?	Yes
What is the severity of the blistering	Light
Peeling of the coating?	No
Corrosion on braces and supports?	Yes
List visual severity of corrosion.	Light corrosion
Repairs to supports needed?	No
Holes in the sidewall plates?	No

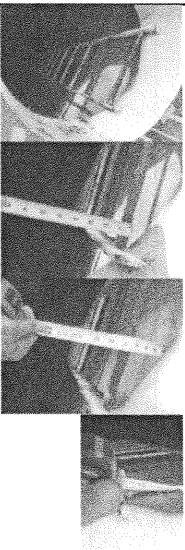
Recommended Maintenance


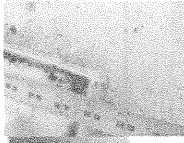
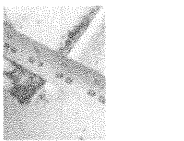

Question	Response	Details
Was manway on catwalk labeled confined space? (OSHA requirement)	No	Recommend a 'confined space entry' placard be installed
Was the roof access hatch locked?	No, needs a lock installed	
Was the water access hatch locked? (TCEQ/AWWA requirement)	No, needs a lock installed	
Was water access hatch labeled confined space? (OSHA requirement)	No	Recommend a 'confined space entry' placard be installed






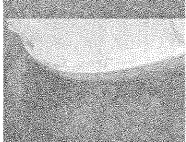

External Lower Level


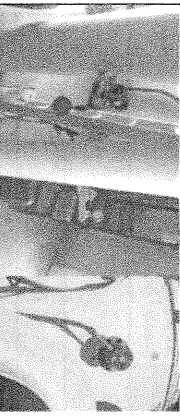
Question	Response	Details
Identification		
Reference photo of facility		
What is the facility type?	Hydropillar	
How is facility constructed?	Metal welded	
Gallon capacity	150K	
Height	DNK	
What is Diameter?	35'	
Is identification plate available?	No	
Is there a lower level manway?	No	
Intruder Protection		
Fence		
Does facility have intruder fence?	Yes	
Photo of fence		
		
Appendix 3		

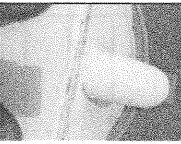
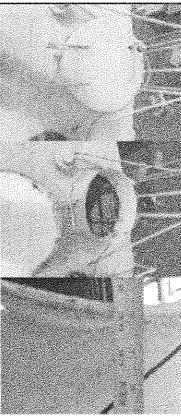
Internal Inspection



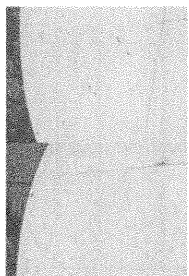



Question	Response	Details
Water Access Ladder		
Does facility have a water access ladder?	Yes	
Water access ladder photo		
		
Is water access ladder in good condition?	Yes	
Width of ladder	17"	
Length of standoff	7"	
Diameter of rung	3/4"	
Does water access ladder have fall protection? (OSHA requirement)	No	Recommend a slider fall protection system be installed
Water Level Indicator Probes		
Does facility have water level indicator probes?	Yes	
Do the water level indicators probes appear to be in good condition?	Yes	
Water Level Float		
Does facility have a water level float indicator?	Yes	
Are the float and guide wires in good condition?	No	
List deficiencies of float system	Float wire broken, Guide cables broken	
Need for repair and or replacement of float system?	Yes	Recommend a new water level float be installed










Rate the condition of the water access hatch (1= Poor, 2= Fair, 3= Good)	3
Roof Ventilation Structure	
Does facility have roof ventilation structure?	Yes
What type/shape	Box
How many vents?	1
Pipe circumference	27"
Photo of roof ventilation	
   	
Rate the condition of the roof vent (1= Poor, 2 = Fair, 3= Good)	3
Is vent screen in good condition? (16 gauge with no holes-TCEQ/AWWA requirement)	Yes
Need for roof vent repairs and/or replacement?	No
Aircraft Warning Lights	
Does facility have aircraft warning lights?	No
RF Antenna	
Does tank have antennas?	No

Rate condition of the intruder fence (1= Poor, 2= Fair, 3= Good)	3
Facility Access Door	
Does facility have access door?	Yes
Photo	
	
Was facility access door locked?	Yes
Was facility access door labeled 'confined space'?	No
Rate the condition of the facility access Door (1= Poor, 2= Fair, 3= Good)	3
Support Structure	
Photo foundation	
     	
Rate the overall condition of the Foundation? (1= Poor, 2= Fair, 3= Good)	3
Foundation type?	Concrete slab
What is the type of support structure?	Metal column
Photo of support structure	



Appendix 11		
Rate the overall condition of the support structure (1= Poor, 2= Fair, 3= Good)	3	
Water Level Indicators		
Does facility have water level indicators?	Yes	
Water level Indicator types	Pressure gauge, Electronic	
Photo of all indicator(s)		
Appendix 12	Appendix 13	Appendix 14
Rate the condition of the water level indicator #1 condition (1= Poor, 2= Fair, 3= Good)	3	
Is there a second water level indicator?	Yes	
Rate the condition of water level indicator # 2 (1= Poor, 2= Fair, 3= Good)	3	
Overflow Pipe and Flapper		
Rate the condition of the overflow pipe and flapper (1= Poor, 2= Fair, 3= Good)	3	
Does overflow flapper seal? (Must be < 1/16" gap-TCEQ/AWWA requirement)	Yes	
What is pipe diameter?	8"	
What is the size of flapper?	10"	



Overflow Penetration		
Can you safely inspect the overflow pipe where it penetrates the roof or sidewall plates?	Yes	
Photo		
Appendix 39		
Rate the condition of the overflow pipe (1= Poor, 2= Fair, 3= Good)	3	
Anode Covers		
Does facility have anode covers?	No	
Water Access Hatch		
Photo of water access hatch		
Appendix 40	Appendix 41	Appendix 42
Was water access hatch locked? (TCEQ/AWWA requirement)	No, needs a lock installed	
Was water access hatch labeled confined space? (OSHA requirement)	No	Recommend a 'confined space entry' placard be installed
What size is the water access hatch? (recommended minimum hatch size is 30"-TCEQ/AWWA requirement)	30"	
What is water access hatch made of?	Mild steel	

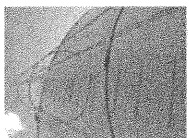
 Appendix 33		 Appendix 34	
What is the location of manway? Sidewall		Rate the condition of the side manway access hatch (1= Poor, 2= Fair, 3= Good) 3	
Was side manway labeled confined space? (OSHA requirement)		No	Recommend a 'confined space entry' placard be installed
External Roof Plates			
Photo of roof plates			
 Appendix 35		 Appendix 36	
List the SSPC rust rating		6	
Rate the condition of the external roof plates (1= Poor, 2= Fair, 3= Good)		2	
List deficiencies		Light corrosion, Peeling paint	
Photo of deficiencies			
 Appendix 37		 Appendix 38	

Does overflow extend to the ground? (TCEQ/AWWA requirement)		Yes	
What is the height from ground to pipe?		26"	
"Note location"			
Photo of overflow pipe and flapper			
 Appendix 15		 Appendix 16	
Photo of measurements for overflow pipe and flapper			
 Appendix 17		 Appendix 18	
 Appendix 19			
Plumbing			
List plumbing on facility		Center water riser	
Rate the overall condition of the plumbing (1= Poor, 2= Fair, 3= Good)		3	
Lower Ladder Section			
Does facility have a roof access ladder?		Yes	
Photo of ladder			
 Appendix 20		 Appendix 21	
 Appendix 22		 Appendix 23	
Rung shape		Circular	

External Upper Level

Diameter of rung	3/4"
Width of ladder	16"
Length of standoff (from wall/support leg to center of vertical rail)	N/A
Distance from ground to base of the ladder	3'
Rate the condition of the roof access ladder (1= Poor, 2= Fair, 3= Good)	3
Does lower level ladder have intruder protection?	Yes
Type of intruder protection?	Locking facility door
Photo of intruder protection	
	
Appendix 24	
Does lower level ladder have fall protection? (OSHA requirement)	Yes
Photo	
	
Appendix 25	
Rate the condition of the fall protection (1= Poor, 2= Fair, 3= Good)	3

Question	Response	Details
Carwalk		
Does facility have carwalk?	No	
External Sidewall Plates		
Photo of sidewall plates		
		
Appendix 24	Appendix 25	Appendix 26
List the SSPC rust rating?	8	
Rate the condition of external sidewall plates (1= Poor, 2= Fair, 3= Good)	3	
Side Manway Access Hatch		
Does facility have manway(s)?	Yes	
Quantity of side manway(s)	2	
Size(s)	31" 24"	
Photo of side manway(s)		
		
Appendix 27	Appendix 28	Appendix 29
		Appendix 30
		Appendix 31
		Appendix 32

Length of standoff (from wall/support leg to center of vertical rail)	7"
Distance from the ground to base of the ladder	13"
Rate the condition of the external ladder (1= Poor, 2= Fair, 3= Good)	3
Does external ladder have intruder protection?	No
Does external ladder have fall protection? (OSHA requirement)	Yes
Photo	
	
Type of Fall protection	Cage
Rate the condition of the fall protection (1= Poor, 2= Fair, 3= Good)	3

External Upper Level

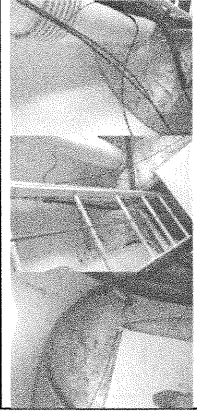

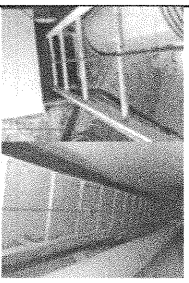
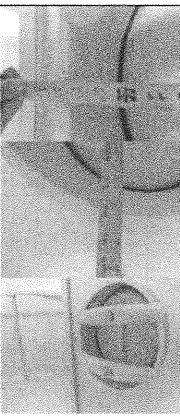
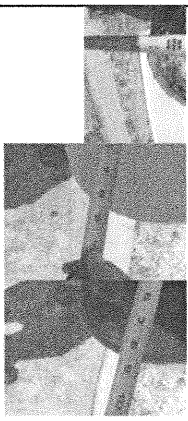


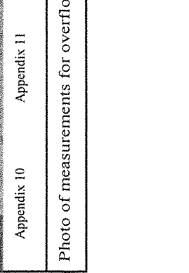
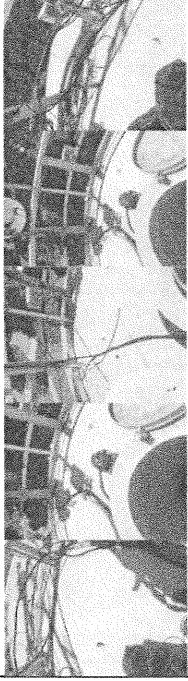
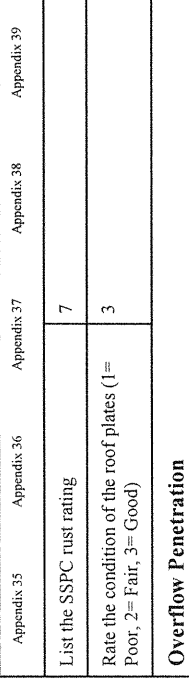

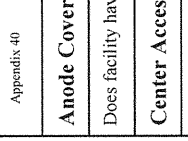
Question	Response	Details
Catwalk		
Does facility have catwalk?	Yes	
Photo(s)		
Appendix 26	Appendix 27	Appendix 28
Rate the condition of the catwalk (1= Poor, 2= Fair, 3= Good)	3	
Are there aircraft warning lights on the catwalk?	No	
External Sidewall Plates		
Photo of sidewall plates		
Appendix 29		
List the SSPC rust rating	7	
Rate the condition of the sidewall plates (1= Poor, 2= Fair, 3= Good)	3	
Ladder from Catwalk to Roof		
Does facility have ladder from catwalk to roof?	Yes	

Photo of ladder		
Appendix 30	Appendix 31	
Rate the condition of the ladder from catwalk to roof (1= Poor, 2= Fair, 3= Good)	3	
Does ladder from catwalk to roof have fall protection? (OSHA requirement)	Yes	
What type?	Slider	
Side Manway Access Hatch		
Is there a manway on the catwalk?	Yes	
Quantity of side manway(s)	1	
Size(s)	18"-4"	
Photo of side manway(s)		
Appendix 32	Appendix 33	Appendix 34
What is the location of the manway?	Bottom of bowl	
Rate the condition of the side manway hatch (1= Poor, 2= Fair, 3= Good)	3	
Are repairs needed for manway on catwalk?	No	
Was manway on catwalk labeled confined space? (OSHA requirement)	No	Recommend a 'confined space entry' placard be installed

Appendix 12	Appendix 13	Appendix 14			
Facility Plumbing					
Photo(s) of all plumbing					
Appendix 15	Appendix 16				
List all plumbing	Inlet, Outlet				
Rate the overall condition of the plumbing (1= Poor, 2= Fair, 3= Good)	3				
External Ladder					
Does facility have an external ladder?	Yes				
Photo of external ladder					
Appendix 17	Appendix 18	Appendix 19	Appendix 20	Appendix 21	Appendix 22
Rung shape	Circular				
Diameter of rung	3/4"				
Width of external ladder	17"				



 <p>Appendix 8</p>		 <p>Appendix 9</p>	
Rate the water level indicator #1 condition (1=Poor, 2= Fair, 3= Good)	3		
Does tank have second water level indicator?	Yes		
Rate the water level indicator # 2 (1= Poor, 2= Fair, 3= Good)	3		
Overflow			
Does facility have an overflow?	Yes		
Rate the condition of the overflow pipe and flapper (1= Poor, 2= Fair, 3= Good)	3		
Does flapper seal? (Must be < 1/16" gap- TCEQ/AWWA requirement))	Yes		
What is pipe diameter?	8"		
What is the size of flapper?	9"		
Does overflow extend to ground? (TCEQ/AWWA requirement)	Yes		
What is height from ground to pipe?	23"		
Photo of overflow pipe and flapper			
 <p>Appendix 10</p>		 <p>Appendix 11</p>	
Photo of measurements for overflow pipe and flapper			



External Roof Plates			
Photo of roof plates			
 <p>Appendix 35</p>		 <p>Appendix 36</p>	
List the SSPC rust rating	7		
Rate the condition of the roof plates (1= Poor, 2= Fair, 3= Good)	3		
Overflow Penetration			
Does Overflow pipe penetrate the roof or sidewall plates?	Yes		
Can you safely inspect where the overflow pipe penetrates the roof or sidewall plates?	Yes		
Rate the condition of overflow pipe (1= Poor, 2= Fair, 3= Good)	3		
Photo			
 <p>Appendix 37</p>		 <p>Appendix 38</p>	
Anode Covers			
Does facility have anode covers?	No		
Center Access Tube			
Does facility have a center access tube?	Yes		
Rate the condition of the center access tube (1= Poor, 2= Fair, 3= Good)	3		


Roof Access Hatch		
Does facility have a roof access hatch?	Yes	
Photo of roof access hatch		
Appendix 41	Appendix 42	Appendix 43
Was the roof access hatch locked?	No, needs a lock installed	
What size is the roof access hatch?	29"	
What is roof access hatch made of?	Mild steel	
Rate the condition of the roof access hatch (1= Poor, 2= Fair, 3= Good)	3	
Water Access Hatch		
Does facility have water access hatch?	Yes	
Photo of water access hatch		
Appendix 44	Appendix 45	Appendix 46
Was the water access hatch locked? (TCEQ/AWWA requirement)	No, needs a lock installed	
Was water access hatch labeled confined space? (OSHA requirement)	No	Recommend a 'confined space entry' placard be installed
What size is the water access hatch? (recommended minimum hatch size is 30"-TCEQ/AWWA requirement)	29"	
What is water access hatch made of?	Mild steel	

Intruder Protection		
Fence		
Does facility have intruder fence?	Yes	
Photo of fence		
Appendix 3		
Rate condition of intruder fence (1= Poor, 2= Fair, 3= Good)	3	
Structure Foundation		
Photo foundation		
Appendix 4	Appendix 5	Appendix 6
Foundation type	Gravel	
Rate the overall condition of the foundation (1= Poor, 2= Fair, 3= Good)	3	
Water Level Indicators		
Does facility have water level indicators?	Yes	
Water level indicator types	Manual visual, Electronic	
Photo(s) of all indicator(s)		

External Lower Level

Question	Response	Details
Identification		
Reference photo of facility		
 Appendix 1		
What is the facility type?	Ground	
How is facility constructed?	Metal welded	
Gallon capacity	200K	
Height	24'	
What is the Diameter?	38'	
Does facility extend underground?	No	
Is identification plate available?	Yes	
Photo ID plate		
 Appendix 2		
Tank builder	Bulldog Steel Products	
Year built	86	
Serial number or identification	S-2127	

Rate the condition of the water access hatch (1= Poor, 2= Fair, 3= Good)	3	
Roof Ventilation Structure		
Does facility have roof ventilation structure?	Yes	
What type/shape?	Mushroom shape	
How many vents?	1	
Pipe circumference	94"	
Photo of roof ventilation		
 Appendix 47 Appendix 48 Appendix 49		
Rate the condition of the roof vent (1= Poor, 2 = Fair, 3= Good)	3	
Aircraft Warning Lights		
Does facility have aircraft warning lights?	Yes	
Photo of aircraft warning lights		
 Appendix 50		
Rate the condition of the air craft warning lights (1= Poor, 2= Fair, 3= Good)	3	
Are the aircraft warning lights working?	Yes	
Number of aircraft warning lights	1	
Does conduit penetrate roof ventilation?	No	
Do the aircraft warning lights need repairs?	No	

RF Antenna				
Does tank have antennas?	Yes			
Photo of antenna(s)				
How many?	9			
Are RF hazard warning signs posted? (FCC requirement)	No			
Is the list for the wireless provider emergency phone numbers posted? (FCC requirement)	No			

Recommended Maintenance

Question	Response	Details
Does external ladder have intruder protection?	No	Recommend an intruder protection door be installed
Was side manway labeled confined space? (OSHA requirement)	No	Recommend a 'confined space entry' placard be installed
Was water access hatch locked? (TCFO/WWA requirement)	No, needs a lock installed	
Was water access hatch labeled confined space? (OSHA requirement)	No	Recommend a 'confined space entry' placard be installed
Does water access ladder have fall protection? (OSHA requirement)	No	Recommend a slider fall protection system be installed
Need for repair and or replacement of float system?	Yes	Recommend a new water level float be installed

Ground Tank Inspection

conducted for

City of Johnson City

Completed on
25 Sep 2019 08:11 AM

Audit Title
City of Johnson City Inspection #3

Client/Site
City of Johnson City


Client Specific Tank Name
Danz

Job Number
5409

Conducted On
09 Sep 2019 02:49 PM

Prepared By
Roy One

Internal Inspection

Question	Response	Details
Water Access Ladder		
Does facility have a water access ladder?	Yes	
Water access ladder photo		
		
Is water access ladder in good condition?	Yes	
Does water access ladder have fall protection? (OSHA requirement)	Yes	
List type of fall protection	Slider	
Is fall Protection on water access ladder in good condition?	Yes	
Water Level Indicator Probes		
Does facility have water level indicator probes?	Yes	
Do the water level indicators probes appear to be in good condition?	Yes	
Water Level Float		
Does facility have a water level float indicator?	No	
Overflow		
What style of overflow is present?	Box	
Is overflow flume in good condition?	No	
List deficiencies	Light corrosion, Light blistering	
Repairs needed for overflow flume?	No	
Describe repairs and equipment needed for overflow repair		

Center Access Tube	
Does facility have center access tube?	Yes
Is center access tube in good condition?	Yes
Roof Plates	
List the SSPC rust rating	7
Rate the condition of the roof plates (1= Poor, 2= Fair, 3= Good)	2
List deficiencies for roof plates	Light corrosion, Light blistering
Is there condensation in the facility?	No
Is there corrosion on braces and supports?	Yes
List visual severity of corrosion	Light corrosion
Holes in the roof plates?	No
Cathodic Protection	
Does facility have cathodic protection?	No
Sidewall Plates	
Rate the condition of the sidewall plates (1= Poor, 2= Fair, 3= Good)	2
List the SSPC rust rating	7
Signs of blistering of the coating?	Yes
What is the severity of the blistering	Light
Peeling of the coating?	No
Corrosion on braces and supports?	No
Holes in the sidewall plates?	No
Side Manway Access	
Is side manway hatch in good condition internally?	Yes
Internal Plumbing	
List types of plumbing	Center water riser

Is the internal plumbing in good condition?	Yes
Floor Plates	
Are the floor plates clean?	Yes
Debris in the facility?	No
Cleaning recommended?	No
Corrosion on floor plates?	No
Signs of blistering of the coating?	No
Peeling of the coating?	No
Water Condition	
What is the water clarity? (1= No Water, 2= Poor, 3= Fair, 4= Good)	4
What was the water temperature? (1= Cold, 2= Cool, 3= Warm, 4= Hot (over 88 degrees Fahrenheit))	2
Odor present?	No
Oil on the water?	No
Insects in the tank?	No
What is the maximum water depth?	45'
What was the actual water depth?	20'
Sean Garcia	09 Sep 2019 02:44 PM
