



P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		1	
Page	1	Of	4
Date	11/5/2012		Monday
CSI Job No.:		212115	

## Daily Coating Inspection Report

<b>Project: Red Hill Tank 5 Tank Clean, Inspect, Repair</b>		<b>Inspector: Frank Bringas</b>	
<b>Client: Willbros</b>		<b>Contractor: Abhe and Svoda</b>	
<b>Client Contact: Mr. Joe Gilbert</b>		<b>Foreman: Robert Webster</b>	

### Surface Preparation

No.	Location of Work	Preparation		Initial Rust Grade	A <input type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input checked="" type="checkbox"/>
		Spec.	Actual					
		<input type="checkbox"/> SP1	<input type="checkbox"/> SP1	Metal Porosity, Protrusion Free	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP2	<input type="checkbox"/> SP2	Grease and Oil Removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP3	<input type="checkbox"/> SP3	Recycled Abrasive Vial Test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP7	<input type="checkbox"/> SP7	Visible Moisture on Surface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP14	<input type="checkbox"/> SP14	Dust Removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP6	<input type="checkbox"/> SP6	Clean and Dry Abrasive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Surface Profile</b>		<input type="checkbox"/> Other:			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Spec (mils)	Actual		Soluble Salt Testing					
	Avg (mils)	Range (mils)	Location	( $\mu\text{S}/\text{cm}^2$ )	Prior to top	Sat	Unsat	N/A
NA	NA	to	n/a	n/a	n/a	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Comments** Assumed duties as CSI QA/QC Inspector at Tank # 5 Red Hill.

A pre-blast inspection of the bottom dome in Tank # 5 showed extensive weld spatter that measured up to approximately 5/16" high and 1/4" diameter. In addition, there are some areas along the welds where the weld spatter is over 1" away from the weld.

The welds, due to deterioration and other factors, have sharp irregular surfaces that protrude in several directions.


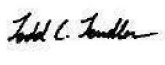
The extensive weld spatter and sharp edges on the welds could cause premature failure in the form of pinpoint corrosion.

The UFGS requires the application of one full coat of modified epoxy novolac polysulfide primer @ 12-15 mils, one stripe coat of epoxy novolac polysulfide and one full coat of modified epoxy novolac polysulfide @ 12-15 mils.

I am recommending the application of one additional stripe coat of to all welds and the weld spatter that are within the 1" area as per the stripe coat definition in SSPC PA-1.

I am further recommending that the weld spatter that is beyond 1" away from the weld, receive two brush coats on those areas.

All overcoat windows, between coats, shall be observed.

	11/05/12	<b>QC Report Review</b>				11-07-2012
<b>Inspector Signature</b>	<b>Date</b>	Satisfactory <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	Corrected <input type="checkbox"/>	<b>Reviewer Signature</b>	<b>Date</b>

CSI Coating Inspection Report Page 1

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

<b>Report No.</b>	<b>1</b>		
<b>Page</b>	<b>2</b>	<b>Of</b>	<b>4</b>
<b>Date</b>	<b>11/5/2012</b>	<b>Monday</b>	
<b>CSI Job No.:</b>	<b>212115</b>		

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair

**Inspector:** Frank Bringas

<b>Coating</b>	<input type="checkbox"/> Resurfacer	<input type="checkbox"/> Sealant	<input type="checkbox"/> Paint	<input type="checkbox"/> Lining	<input type="checkbox"/> Caulking	<input type="checkbox"/> Other:						
<b>Manufacturer</b>	<b>Product Name</b>	<b>Thinner Name</b>	<b>Shelf Life (Mnth)</b>	<b>% Thinner Added</b> Spec Actual		<b>Coating Temp (F°)</b>	<b>Mixing</b> Start Stop		<b>Induction Time</b>	<b>Pot Life</b>	<b>All Mixes Witnessed</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
											<input type="checkbox"/> Yes	<input type="checkbox"/> No
											<input type="checkbox"/> Yes	<input type="checkbox"/> No
											<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>Mixing</b>			<b>Component Batch Identification</b>											
<b>Mix No.</b>	<b>Product</b>	<b>Quantity</b>	<input checked="" type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input checked="" type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C

<b>Application</b>		<b>Color:</b>	<b>Application Start:</b>	<b>Application Stop:</b>			
<b>No.</b>	<b>Location of Work</b>	<b>Equipment</b>	<b>Attribute</b>		<b>Sat</b>	<b>Unsat</b>	<b>N/A</b>
		Brush <input type="checkbox"/>	Protective Coverings		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Roller <input type="checkbox"/>	Surrounding Air Cleanliness		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Conventional <input type="checkbox"/>	White Blotter Test (time):		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Airless <input type="checkbox"/>	Intercoat Cleanliness		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Plural Component <input type="checkbox"/>	Recoat Time Min/Max		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		HVLP <input type="checkbox"/>	Pot Agitation		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Trowel <input type="checkbox"/>	Stripe coat		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Flock <input type="checkbox"/>	Other:		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Other: <input type="checkbox"/>	Wet Film Thickness (Mils)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Other: <input type="checkbox"/>	Spec:	Actual:			

**Comments:** None.



P. O. Box 801357, Santa Clarita, CA 91380  
 Phone: 877.274.2422 (toll free)  
 Fax: 661.775.7628  
[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		1	
Page	3	Of	4
Date	11/5/2012		Monday
CSI Job No.:		212115	

**Project: Red Hill Tank 5 Tank Clean, Inspect, Repair**      **Inspector: Frank Bringas**

Final Inspection		<input type="checkbox"/> Prime					<input type="checkbox"/> Intermediate			<input type="checkbox"/> Midcoat		<input type="checkbox"/> Top/Finish	
No.	Location	Dry Film Thickness (mils)			Visual		Holiday Detection				Adhesion (ASTM D)		
		Spec	Actual				Voltage:				3359	6677	4541
			Avg	Range	Sat	Unsat	N/A	Sat	Unsat	Remaining Holidays	PSI/ Rating	Cohesive/A adhesive	
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

<b>Miscellaneous</b>		<b>Visitors to the Site</b>	
Instruments			
Type	Serial No.	Name	Company
Sling Psychrometer	K-44396		
Surface Temperature Gage			
Spring Micrometer			
Surface Comparator <input type="checkbox"/> S, <input type="checkbox"/> GS, <input type="checkbox"/> SH			
Windometer			
Positector 6000	1308		
Calibration Plate	140404.26		
Holiday Detector <input checked="" type="checkbox"/> M1, <input type="checkbox"/> AP, <input type="checkbox"/> AP/W	533267		
Moisture Meter			
Salt Contamination Kit			
Horiba Conductivity Meter	K-73025		
Other: Digital Psycrometer			

**Comments:**





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		1	
Page	4	Of	4
Date	11/5/12	Monday	
CSI Job No.:		212115	

Project: Red Hill Tank 5 Tank Clean, Inspect, Repair

Inspector: Frank Bringas

Photo Log



IR-1

CSI Coating Inspection Report Page 4

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		2	
Page	1	Of	4
Date	11/6/2012		Tuesday
CSI Job No.:		212115	

## Daily Coating Inspection Report

<b>Project:</b> Red Hill Tank 5 Tank Clean, Inspect, Repair	<b>Inspector:</b> Frank Bringas
<b>Client:</b> Willbros	<b>Contractor:</b> Abhe and Svoda
<b>Client Contact:</b> Mr. Joe Gilbert	<b>Foreman:</b> Robert Webster

### Surface Preparation

No.	Location of Work	Preparation		Initial Rust Grade	A <input type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input checked="" type="checkbox"/>
		Spec.	Actual	Attribute	Sat	Unsat	N/A	
1	Lower bowl	<input checked="" type="checkbox"/> SP1	<input type="checkbox"/> SP1	Metal Porosity, Protrusion Free	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP2	<input type="checkbox"/> SP2	Grease and Oil Removal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/> SP3	<input type="checkbox"/> SP3	Recycled Abrasive Vial Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP7	<input type="checkbox"/> SP7	Visible Moisture on Surface	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/> SP14	<input type="checkbox"/> SP14	Dust Removal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP6	<input type="checkbox"/> SP6	Clean and Dry Abrasive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Surface Profile</b>		<input type="checkbox"/> Other:			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Spec (mils)	Actual		Soluble Salt Testing					
	Avg (mils)	Range (mils)	Location	Specified (µg/cm)	Actual (µg/cm)	Sat	Unsat	N/A
NA	NA	to	See below	n/a	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Comments** Assumed duties as CSI QC Inspector at Tank # 5 Red Hill. I accomplished the pre-blast inspections including the and degrease check throughout the lower bowl section of Tank 5 using the visual and clean white rag method. The checks were sat.

The contractor accomplished the soluble salt testing on various locations throughout the tank. No salts were detected on any surfaces with the exception of one test on the bottom flat part of the tank which measured 1 µg/cm. Upon further inspection of the lower flat part of the tank I noticed visible salts. Upon inquiry of why there would be salts in that area, I was told that a hydro test was conducted on a pipe using firemain (salt) water and some had leaked out due to improper purging of the line. The contamination appeared to be localized. The contractor cleaned the area with Chor-id but was not re-tested.

Due to safety concern with FLP any further surface preparation has been postponed.

	11/06/12	<b>QC Report Review</b>				11-08-2012
<b>Inspector Signature</b>	<b>Date</b>	Satisfactory <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	Corrected <input type="checkbox"/>	<b>Reviewer Signature</b>	<b>Date</b>

CSI Coating Inspection Report Page 1

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

<b>Report No.</b>	<b>2</b>		
<b>Page</b>	<b>2</b>	<b>Of</b>	<b>4</b>
<b>Date</b>	<b>11/6/2012</b>	<b>Tuesday</b>	
<b>CSI Job No.:</b>	<b>212115</b>		

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair

**Inspector:** Frank Bringas

<b>Coating</b>	<input type="checkbox"/> Resurfacer	<input type="checkbox"/> Sealant	<input type="checkbox"/> Paint	<input type="checkbox"/> Lining	<input type="checkbox"/> Caulking	<input type="checkbox"/> Other:						
<b>Manufacturer</b>	<b>Product Name</b>	<b>Thinner Name</b>	<b>Shelf Life (Mnth)</b>	<b>% Thinner Added</b> Spec Actual		<b>Coating Temp (F°)</b>	<b>Mixing</b> Start Stop		<b>Induction Time</b>	<b>Pot Life</b>	<b>All Mixes Witnessed</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
											<input type="checkbox"/> Yes	<input type="checkbox"/> No
											<input type="checkbox"/> Yes	<input type="checkbox"/> No
											<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>Mixing</b>			<b>Component Batch Identification</b>											
<b>Mix No.</b>	<b>Product</b>	<b>Quantity</b>	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C

<b>Application</b>		<b>Color:</b>	<b>Application Start:</b>	<b>Application Stop:</b>			
<b>No.</b>	<b>Location of Work</b>	<b>Equipment</b>	<b>Attribute</b>		<b>Sat</b>	<b>Unsat</b>	<b>N/A</b>
		Brush <input type="checkbox"/>	Protective Coverings		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Roller <input type="checkbox"/>	Surrounding Air Cleanliness		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Conventional <input type="checkbox"/>	White Blotter Test (time):		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Airless <input type="checkbox"/>	Intercoat Cleanliness		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Plural Component <input type="checkbox"/>	Recoat Time Min/Max		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		HVLP <input type="checkbox"/>	Pot Agitation		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Trowel <input type="checkbox"/>	Stripe coat		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Flock <input type="checkbox"/>	Other:		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Other: <input type="checkbox"/>	Wet Film Thickness (Mils)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		Other: <input type="checkbox"/>	Spec:	Actual:			

**Comments:** None.





P. O. Box 801357, Santa Clarita, CA 91380  
 Phone: 877.274.2422 (toll free)  
 Fax: 661.775.7628  
[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		2	
Page	3	Of	4
Date	11/6/2012		Tuesday
CSI Job No.:		212115	

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair **Inspector:** Frank Bringas

Final Inspection		<input type="checkbox"/> Prime					<input type="checkbox"/> Intermediate		<input type="checkbox"/> Midcoat		<input type="checkbox"/> Top/Finish	
No.	Location	Dry Film Thickness (mils)			Visual		Holiday Detection				Adhesion (ASTM D)	
		Spec	Actual				Voltage:			3359	6677	4541
			Avg	Range	Sat	Unsat	N/A	Sat	Unsat	Remaining Holidays	PSI/ Rating	Cohesive/A adhesive
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

<b>Miscellaneous</b>				<b>Visitors to the Site</b>	
Instruments					
Type	Serial No.			Name	Company
Sling Psychrometer	K-44396				
Surface Temperature Gage					
Spring Micrometer					
Surface Comparator <input type="checkbox"/> S, <input type="checkbox"/> GS, <input type="checkbox"/> SH					
Windometer					
Positector 6000	1308				
Calibration Plate	140404.26				
Holiday Detector <input checked="" type="checkbox"/> M1, <input type="checkbox"/> AP, <input type="checkbox"/> AP/W	533267				
Moisture Meter					
Salt Contamination Kit					
Horiba Conductivity Meter	K-73025				
Other: Digital Psycrometer					

**Comments:**





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		2	
Page	4	Of	4
Date	11/6/12	Tuesday	
CSI Job No.:		212115	

Project: Red Hill Tank 5 Tank Clean, Inspect, Repair

Inspector: Frank Bringas

Photo Log



Location of one salt test



Result of one salt test



Visible salt on flat bottom of tank  
IR-1



Visible salt on flat bottom of tank

CSI Coating Inspection Report Page 4

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		3	
Page	1	Of	4
Date	11/20/2012		Tuesday
CSI Job No.:		212115	

## Daily Coating Inspection Report

<b>Project:</b> Red Hill Tank 5 Tank Clean, Inspect, Repair	<b>Inspector:</b> Frank Bringas
<b>Client:</b> Willbros	<b>Contractor:</b> Abhe and Svoda
<b>Client Contact:</b> Mr. Joe Gilbert	<b>Foreman:</b> Robert Webster

### Surface Preparation

No.	Location of Work	Preparation		Initial Rust Grade	A <input type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input checked="" type="checkbox"/>
		Spec.	Actual	Attribute	Sat	Unsat	N/A	
1	Lower bowl	<input checked="" type="checkbox"/> SP1	<input type="checkbox"/> SP1	Metal Porosity, Protrusion Free	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP2	<input type="checkbox"/> SP2	Grease and Oil Removal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/> SP3	<input type="checkbox"/> SP3	Recycled Abrasive Vial Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP7	<input type="checkbox"/> SP7	Visible Moisture on Surface	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP14	<input type="checkbox"/> SP14	Dust Removal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		<input type="checkbox"/> SP6	<input type="checkbox"/> SP6	Clean and Dry Abrasive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Surface Profile</b>		<input type="checkbox"/> Other:			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Spec (mils)	Actual		Soluble Salt Testing					
	Avg (mils)	Range (mils)	Location	Specified (µg/cm)	Actual (µg/cm)	Sat	Unsat	N/A
NA	NA	to	n/a	n/a	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Comments** Assumed duties as CSI QA Inspector at Tank # 5 Red Hill. I accomplished the pre-blast inspections including the soluble salt test on the lower flat areas of bottom of the tank. The salt test was sat.

After the salt test was completed I noticed spot of grease on the third course. In addition there was grease under the newly installed 4" and 1/2" pipes. I told the contractor that those areas would require proper cleaning and re-inspection prior to the commencement of any surface preparation.

The contractor stated they would clean those areas and would be ready for inspection on 11/26/12.

	11/20/12	<b>QC Report Review</b>				11-23-2012
<b>Inspector Signature</b>	<b>Date</b>	Satisfactory <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	Corrected <input type="checkbox"/>	<b>Reviewer Signature</b>	<b>Date</b>

CSI Coating Inspection Report Page 1

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

<b>Report No.</b>	<b>3</b>		
<b>Page</b>	<b>2</b>	<b>Of</b>	<b>4</b>
<b>Date</b>	<b>11/20/2012</b>	<b>Tuesday</b>	
<b>CSI Job No.:</b>	<b>212115</b>		

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair

**Inspector:** Frank Bringas

<b>Coating</b>	<input type="checkbox"/> Resurfacer	<input type="checkbox"/> Sealant	<input type="checkbox"/> Paint	<input type="checkbox"/> Lining	<input type="checkbox"/> Caulking	<input type="checkbox"/> Other:						
<b>Manufacturer</b>	<b>Product Name</b>	<b>Thinner Name</b>	<b>Shelf Life (Mnth)</b>	<b>% Thinner Added</b> Spec Actual		<b>Coating Temp (F°)</b>	<b>Mixing</b> Start Stop		<b>Induction Time</b>	<b>Pot Life</b>	<b>All Mixes Witnessed</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
											<input type="checkbox"/> Yes	<input type="checkbox"/> No
											<input type="checkbox"/> Yes	<input type="checkbox"/> No
											<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>Mixing</b>			<b>Component Batch Identification</b>											
<b>Mix No.</b>	<b>Product</b>	<b>Quantity</b>	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C

<b>Application</b>		<b>Color:</b>	<b>Application Start:</b>	<b>Application Stop:</b>			
<b>No.</b>	<b>Location of Work</b>	<b>Equipment</b>	<b>Attribute</b>	<b>Sat</b>	<b>Unsat</b>	<b>N/A</b>	
		Brush <input type="checkbox"/>	Protective Coverings	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Roller <input type="checkbox"/>	Surrounding Air Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Conventional <input type="checkbox"/>	White Blotter Test (time):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Airless <input type="checkbox"/>	Intercoat Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Plural Component <input type="checkbox"/>	Recoat Time Min/Max	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		HVLP <input type="checkbox"/>	Pot Agitation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Trowel <input type="checkbox"/>	Stripe coat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Flock <input type="checkbox"/>	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Other: <input type="checkbox"/>	Wet Film Thickness (Mils)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Other: <input type="checkbox"/>	Spec: Actual:				

**Comments:** None.





P. O. Box 801357, Santa Clarita, CA 91380  
 Phone: 877.274.2422 (toll free)  
 Fax: 661.775.7628  
[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.	3		
Page	3	Of	4
Date	11/20/2012		Tuesday
CSI Job No.:		212115	

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair **Inspector:** Frank Bringas

Final Inspection		<input type="checkbox"/> Prime					<input type="checkbox"/> Intermediate			<input type="checkbox"/> Midcoat		<input type="checkbox"/> Top/Finish	
No.	Location	Dry Film Thickness (mils)			Visual		Holiday Detection				Adhesion (ASTM D)		
		Spec	Actual				Voltage:				3359	6677	4541
			Avg	Range	Sat	Unsat	N/A	Sat	Unsat	Remaining Holidays	PSI/ Rating	Cohesive/A adhesive	
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Miscellaneous		Visitors to the Site	
Instruments			
Type	Serial No.	Name	Company
Sling Psychrometer	K-44396		
Surface Temperature Gage			
Spring Micrometer			
Surface Comparator <input type="checkbox"/> S, <input type="checkbox"/> GS, <input type="checkbox"/> SH			
Windometer			
Positector 6000	1308		
Calibration Plate	140404.26		
Holiday Detector <input checked="" type="checkbox"/> M1, <input type="checkbox"/> AP, <input type="checkbox"/> AP/W	533267		
Moisture Meter			
Salt Contamination Kit			
Horiba Conductivity Meter	K-73025		
Other: Digital Psycrometer			

**Comments:**





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		3	
Page	4	Of	4
Date	11/20/12	Tuesday	
CSI Job No.:		212115	

Project: Red Hill Tank 5 Tank Clean, Inspect, Repair

Inspector: Frank Bringas

Photo Log



Location of one salt test



Grease spots on 3 course



Grease spots that are clearly visible  
IR-1



Visible grease under newly installed ppg  
CSI Coating Inspection Report Page 4

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380  
 Phone: 877.274.2422 (toll free)  
 Fax: 661.775.7628  
[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		4	
Page	1	Of	4
Date	11/26/2012		Monday
CSI Job No.:		212115	

## Daily Coating Inspection Report

<b>Project:</b> Red Hill Tank 5 Tank Clean, Inspect, Repair	<b>Inspector:</b> Frank Bringas
<b>Client:</b> Willbros	<b>Contractor:</b> Abhe and Svoda
<b>Client Contact:</b> Mr. Joe Gilbert	<b>Foreman:</b> Robert Webster

### Surface Preparation

No.	Location of Work	Preparation		Initial Rust Grade	A <input type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input checked="" type="checkbox"/>
		Spec.	Actual	Attribute	Sat	Unsat	N/A	
1	Lower bowl	<input checked="" type="checkbox"/> SP1	<input type="checkbox"/> SP1	Metal Porosity, Protrusion Free	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP2	<input type="checkbox"/> SP2	Grease and Oil Removal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP3	<input type="checkbox"/> SP3	Recycled Abrasive Vial Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP7	<input type="checkbox"/> SP7	Visible Moisture on Surface	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP14	<input type="checkbox"/> SP14	Dust Removal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP6	<input type="checkbox"/> SP6	Clean and Dry Abrasive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Surface Profile</b>		<input type="checkbox"/> Other:			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Spec (mils)	Actual		Soluble Salt Testing					
	Avg (mils)	Range (mils)	Location	Specified (µg/cm)	Actual (µg/cm)	Sat	Unsat	N/A
NA	NA	to	n/a	n/a	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Comments** Assumed duties as CSI QA Inspector at Tank # 5 Red Hill. I accomplished the pre-blast inspection for degreasing, that was noted during a pre-blast inspection on 11/20/12, prior to the start of removal of paint on the weld seams. During the inspection for de-greasing it was noted that the area under the 4" and ½" ppg and including the 4" pipe that there was grease that had not been cleaned. I told the Willbros site manager James Hagan and the sub-contractor PM that the areas need to be cleaned and re-inspected prior to the start of sand blast paint removal. The sub-contractor PM stated that they were going to blast the bottom of the tank then work on the weld seams.

	11/26/12	<b>QC Report Review</b>				11-28-2012
<b>Inspector Signature</b>	<b>Date</b>	Satisfactory <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	Corrected <input type="checkbox"/>	<b>Reviewer Signature</b>	<b>Date</b>

CSI Coating Inspection Report Page 1

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

<b>Report No.</b>	<b>4</b>		
<b>Page</b>	<b>2</b>	<b>Of</b>	<b>4</b>
<b>Date</b>	<b>11/26/2012</b>	<b>Monday</b>	
<b>CSI Job No.:</b>	<b>212115</b>		

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair

**Inspector:** Frank Bringas

<b>Coating</b>	<input type="checkbox"/> Resurfacer	<input type="checkbox"/> Sealant	<input type="checkbox"/> Paint	<input type="checkbox"/> Lining	<input type="checkbox"/> Caulking	<input type="checkbox"/> Other:					
<b>Manufacturer</b>	<b>Product Name</b>	<b>Thinner Name</b>	<b>Shelf Life (Mnth)</b>	<b>% Thinner Added</b> Spec Actual		<b>Coating Temp (F°)</b>	<b>Mixing</b> Start Stop		<b>Induction Time</b>	<b>Pot Life</b>	<b>All Mixes Witnessed</b>
											<input type="checkbox"/> Yes <input type="checkbox"/> No
											<input type="checkbox"/> Yes <input type="checkbox"/> No
											<input type="checkbox"/> Yes <input type="checkbox"/> No

<b>Mixing</b>			<b>Component Batch Identification</b>											
<b>Mix No.</b>	<b>Product</b>	<b>Quantity</b>	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C

<b>Application</b>		<b>Color:</b>	<b>Application Start:</b>	<b>Application Stop:</b>			
<b>No.</b>	<b>Location of Work</b>	<b>Equipment</b>	<b>Attribute</b>	<b>Sat</b>	<b>Unsat</b>	<b>N/A</b>	
		Brush <input type="checkbox"/>	Protective Coverings	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Roller <input type="checkbox"/>	Surrounding Air Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Conventional <input type="checkbox"/>	White Blotter Test (time):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Airless <input type="checkbox"/>	Intercoat Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Plural Component <input type="checkbox"/>	Recoat Time Min/Max	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		HVLP <input type="checkbox"/>	Pot Agitation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Trowel <input type="checkbox"/>	Stripe coat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Flock <input type="checkbox"/>	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Other: <input type="checkbox"/>	Wet Film Thickness (Mils)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Other: <input type="checkbox"/>	Spec: Actual:				

**Comments:** None.



P. O. Box 801357, Santa Clarita, CA 91380  
 Phone: 877.274.2422 (toll free)  
 Fax: 661.775.7628  
[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		4	
Page	3	Of	4
Date	11/26/2012		Monday
CSI Job No.:		212115	

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair **Inspector:** Frank Bringas

Final Inspection		<input type="checkbox"/> Prime					<input type="checkbox"/> Intermediate		<input type="checkbox"/> Midcoat		<input type="checkbox"/> Top/Finish	
No.	Location	Dry Film Thickness (mils)			Visual		Holiday Detection				Adhesion (ASTM D)	
		Spec	Actual				Voltage:			3359	6677	4541
			Avg	Range	Sat	Unsat	N/A	Sat	Unsat	Remaining Holidays	PSI/ Rating	Cohesive/A adhesive
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

<b>Miscellaneous</b>		<b>Visitors to the Site</b>	
Instruments			
Type	Serial No.	Name	Company
Sling Psychrometer	K-44396		
Surface Temperature Gage			
Spring Micrometer			
Surface Comparator <input type="checkbox"/> S, <input type="checkbox"/> GS, <input type="checkbox"/> SH			
Windometer			
Positector 6000	1308		
Calibration Plate	140404.26		
Holiday Detector <input checked="" type="checkbox"/> M1, <input type="checkbox"/> AP, <input type="checkbox"/> AP/W	533267		
Moisture Meter			
Salt Contamination Kit			
Horiba Conductivity Meter	K-73025		
Other: Digital Psycrometer			

**Comments:**





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		4	
Page	4	Of	4
Date	11/26/12	Monday	
CSI Job No.:		212115	

Project: Red Hill Tank 5 Tank Clean, Inspect, Repair

Inspector: Frank Bringas

Photo Log



Cleaned and degreased areas



Cleaned and degreased areas



Cleaned and degreased areas

IR-1

CSI Coating Inspection Report Page 4

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		5	
Page	1	Of	6
Date	12/10/2012		Monday
CSI Job No.:		212115	

## Daily Coating Inspection Report

<b>Project:</b> Red Hill Tank 5 Tank Clean, Inspect, Repair	<b>Inspector:</b> Frank Bringas
<b>Client:</b> Willbros	<b>Contractor:</b> Abhe and Svoda
<b>Client Contact:</b> Mr. Joe Gilbert	<b>Foreman:</b> Robert Webster

### Surface Preparation

No.	Location of Work	Preparation		Initial Rust Grade	A <input type="checkbox"/>	B <input type="checkbox"/>	C <input checked="" type="checkbox"/>	D <input type="checkbox"/>
		Spec.	Actual	Attribute	Sat	Unsat	N/A	
		<input type="checkbox"/> SP1	<input type="checkbox"/> SP1	Metal Porosity, Protrusion Free	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP2	<input type="checkbox"/> SP2	Grease and Oil Removal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP3	<input type="checkbox"/> SP3	Recycled Abrasive Vial Test	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP7	<input type="checkbox"/> SP7	Visible Moisture on Surface	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP14	<input type="checkbox"/> SP14	Dust Removal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		<input type="checkbox"/> SP6	<input type="checkbox"/> SP6	Clean and Dry Abrasive	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Surface Profile</b>		<input type="checkbox"/> Other:			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Spec (mils)	Actual		Soluble Salt Testing					
	Avg (mils)	Range (mils)	Location	Specified (µg/cm)	Actual (µg/cm)	Sat	Unsat	N/A
NA	NA	to	n/a	n/a	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Comments** Assumed duties as CSI QA Inspector at Tank # 5 Red Hill. The contractor sand blasted the retained coating on the welds in way of the lower bowl liner plates of tank 5. The areas included 3 feet up on course 4 from the lower dome/barrel interface and down to the floor plated including courses 1-3. This was accomplished to allow the contractor to identify and grind the excessive and large weld spatter.

I was asked by Willbros to ascertain the extent of the weld spatter on the exposed welds.

Using the basket, I dropped down to course 3/4 and went from plate 66 to plate 34 of quadrants D and C, dropped down to the 2<sup>nd</sup> course from plate 34 to plate to plate 66, dropped down to course 1 and inspected course 1 from plate 1-44.

After the 1<sup>st</sup> course was inspected, using the basket went up to course 2 from plate 33 to plate 1 then up to course 3/4 from plate 1 to plate 33.

All vertical and horizontal welds were looked at. It must be noted that several 4"X4" plate were welded along the horizontal welds. These plates had weld spatter also.

There are approximately 444 lengths of welds. All lengths of welds had weld spatter that require removal. 335 lengths of weld has weld spatter on approximately 75-100% (moderate to extensive) of the individual length on both sides of the weld. 109 lengths of weld had less than 50% weld spatter on both sides of the weld.

Photos were taken of the weld spatter representative of moderate to extensive weld spatter along 100% of the length of weld, photos of the length of weld with 50% or less weld spatter and the welded plates and length of welds that the contractor had already grinded. These areas that were grinded include lengths of weld that had 100% grinding on each side of the weld and lengths of weld that had less weld spatter.

	12/10/12	<b>QC Report Review</b>				12-12-2012
<b>Inspector Signature</b>	<b>Date</b>	Satisfactory <input checked="" type="checkbox"/>	Incomplete <input type="checkbox"/>	Corrected <input type="checkbox"/>	<b>Reviewer Signature</b>	<b>Date</b>

CSI Coating Inspection Report Page 1

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

<b>Report No.</b>	<b>5</b>		
<b>Page</b>	<b>2</b>	<b>Of</b>	<b>6</b>
<b>Date</b>	<b>12/10/2012</b>	<b>Monday</b>	
<b>CSI Job No.:</b>	<b>212115</b>		

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair

**Inspector:** Frank Bringas

<b>Coating</b>	<input type="checkbox"/> Resurfacer	<input type="checkbox"/> Sealant	<input type="checkbox"/> Paint	<input type="checkbox"/> Lining	<input type="checkbox"/> Caulking	<input type="checkbox"/> Other:						
<b>Manufacturer</b>	<b>Product Name</b>	<b>Thinner Name</b>	<b>Shelf Life (Mnth)</b>	<b>% Thinner Added</b> Spec Actual		<b>Coating Temp (F°)</b>	<b>Mixing</b> Start Stop		<b>Induction Time</b>	<b>Pot Life</b>	<b>All Mixes Witnessed</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
											<input type="checkbox"/> Yes	<input type="checkbox"/> No
											<input type="checkbox"/> Yes	<input type="checkbox"/> No
											<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>Mixing</b>			<b>Component Batch Identification</b>											
<b>Mix No.</b>	<b>Product</b>	<b>Quantity</b>	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C

<b>Application</b>		<b>Color:</b>	<b>Application Start:</b>	<b>Application Stop:</b>			
<b>No.</b>	<b>Location of Work</b>	<b>Equipment</b>	<b>Attribute</b>	<b>Sat</b>	<b>Unsat</b>	<b>N/A</b>	
		Brush <input type="checkbox"/>	Protective Coverings	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Roller <input type="checkbox"/>	Surrounding Air Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Conventional <input type="checkbox"/>	White Blotter Test (time):	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Airless <input type="checkbox"/>	Intercoat Cleanliness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Plural Component <input type="checkbox"/>	Recoat Time Min/Max	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		HVLP <input type="checkbox"/>	Pot Agitation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Trowel <input type="checkbox"/>	Stripe coat	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Flock <input type="checkbox"/>	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Other: <input type="checkbox"/>	Wet Film Thickness (Mils)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
		Other: <input type="checkbox"/>	Spec: Actual:				

**Comments:** None.



P. O. Box 801357, Santa Clarita, CA 91380  
 Phone: 877.274.2422 (toll free)  
 Fax: 661.775.7628  
[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		5	
Page	3	Of	6
Date	12/10/2012		Monday
CSI Job No.:		212115	

**Project:** Red Hill Tank 5 Tank Clean, Inspect, Repair **Inspector:** Frank Bringas

Final Inspection		<input type="checkbox"/> Prime					<input type="checkbox"/> Intermediate			<input type="checkbox"/> Midcoat		<input type="checkbox"/> Top/Finish	
No.	Location	Dry Film Thickness (mils)			Visual		Holiday Detection				Adhesion (ASTM D)		
		Spec	Actual				Voltage:				3359	6677	4541
			Avg	Range	Sat	Unsat	N/A	Sat	Unsat	Remaining Holidays	PSI/ Rating	Cohesive/A adhesive	
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Miscellaneous		Visitors to the Site	
Instruments			
Type	Serial No.	Name	Company
Sling Psychrometer	K-44396		
Surface Temperature Gage			
Spring Micrometer			
Surface Comparator <input type="checkbox"/> S, <input type="checkbox"/> GS, <input type="checkbox"/> SH			
Windometer			
Positector 6000	1308		
Calibration Plate	140404.26		
Holiday Detector <input checked="" type="checkbox"/> M1, <input type="checkbox"/> AP, <input type="checkbox"/> AP/W	533267		
Moisture Meter			
Salt Contamination Kit			
Horiba Conductivity Meter	K-73025		
Other: Digital Psycrometer			

**Comments:**

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		5	
Page	4	Of	6
Date	12/10/12	Monday	
CSI Job No.:		212115	

Project: Red Hill Tank 5 Tank Clean, Inspect, Repair

Inspector: Frank Bringas

Photo Log



Length of weld with extensive weld spatter



Length of weld with less extensive weld spatter



Length of weld with moderate to extensive weld spatter  
IR-1



Length of weld with less extensive weld spatter

CSI Coating Inspection Report Page 4

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

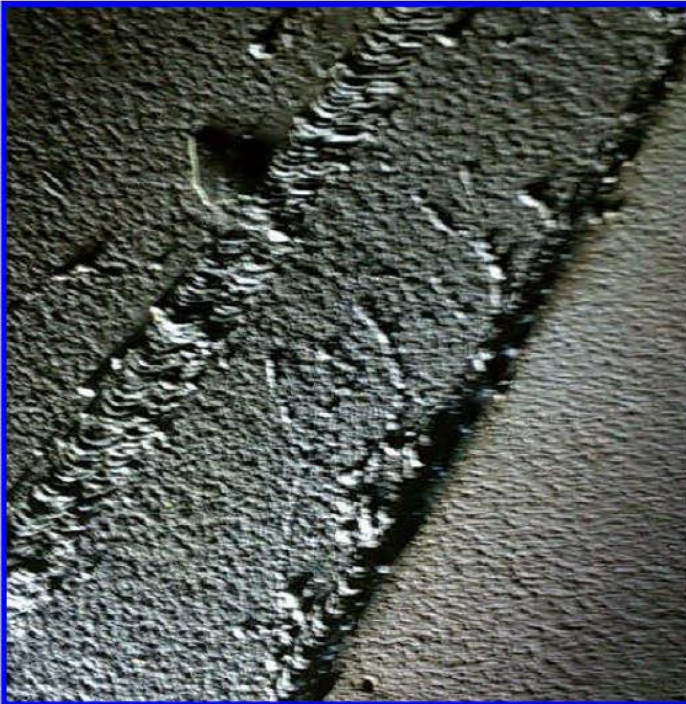
[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		5	
Page	5	Of	6
Date	12/10/12	Monday	
CSI Job No.:		212115	

**Project: Red Hill Tank 5 Tank Clean, Inspect, Repair**

**Inspector: Frank Bringas**

**Photo Log**



Length of horizontal weld with extensive weld spatter



4\"X4\" welded plate with extensive weld spatter



Overview of welded 4\"X4\" welded plate on lower course  
IR-1



Length of weld with less extensive weld spatter

CSI Coating Inspection Report Page 5

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004





P. O. Box 801357, Santa Clarita, CA 91380

Phone: 877.274.2422 (toll free)

Fax: 661.775.7628

[www.CSIServices.biz](http://www.CSIServices.biz)

Report No.		5	
Page	6	Of	6
Date	12/10/12	Monday	
CSI Job No.:		212115	

Project: Red Hill Tank 5 Tank Clean, Inspect, Repair

Inspector: Frank Bringas

Photo Log



Welds and 4"X4" plate that had the weld spatter grinded off



Length of weld with less extensive weld spatter that had been grinded



Length of weld with moderate to extensive weld spatter that had been grinded by the contractor



Length of weld with extensive weld spatter

CSI Coating Inspection Report Page 6

The information reported was obtained using visual observations and testing believed to be accurate. The information reported represents the data obtained from the specific representative areas inspected, tested, and/or verified.

© Copyright CSI Services 2004