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Fax: 661.775.7628 www.CSIServices.biz

Repo	rt No.			1	
Page	1	Of		4	
Date	11/5/20	112	Monday		
CSI J	ob No.:		2	12115	

Daily Coating Inspection Report

Project: Red Hill Tank 5 Tank Clean, Inspect,	Inspector: Frank Bringas			
Client: Willbros Contractor: Abhe		e and Svboda		
Client Contact: Mr. Joe Gilbert	4	Foreman: Robert Webster		

No.	Location	of Work	Prepa	aration	Initial Rus	st Grade A	В	C	DX	
			Spec.	Actual	Attrib	ute	Sat	Unsat	N/A	
lw-			☐ SP1	☐ SP1	Metal Porosity, Prot	trusion Free		9 - 63	\boxtimes	
			☐ SP2	☐ SP2	Grease and Oil Ren	oval		4 0	\boxtimes	
			☐ SP3	☐ SP3	Recycled Abrasive	Vial Test		4 4	\boxtimes	
			☐ SP7	☐ SP7	Visible Moisture on	Surface		9 A	\boxtimes	
lw-			☐ SP14	SP14	Dust Removal		20 3	\$ - W	\boxtimes	
-00			SP6	☐ SP6	Clean and Dry Abra			\boxtimes		
	Surface Pro	file	Other:						\boxtimes	
Spec	Spec Actual		Soluble Salt Testing							
(mils)	Avg (mils)	Range (mils)) Location		(µS/cm²)	Prior to top	Sat	Unsat	N/A	
- NA	NA	to	4	n/a	n/a	n/a	10 J		\boxtimes	

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.

Lak R. Briger	11/05/12	Q	C Report Revi	ew	Total C. Toudler	11-07-2012
Inspector Signature	Date	Satisfactory X	Incomplete	Corrected	Reviewer Signature	Date

CSI Coating Inspection Report Page 1

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Repo	rt No.		1
Page	2	Of	4
Date	11/5/20	012	Monday
CSI J	ob No.:		212115

Project:	Red H	ill Tank 5 Ta	ank Clean,	Inspect	, Repa	ir		Ins	specto	r: Frar	k Bringas			
Coati	ng	Resurfac	er Sea	lant	Paint	Li	ning		Caulki	ng	Other:			/
Manufac	turer	Product Name	Thinner Name	Shelf Life (Mnth)	The second secon	ninner ded Actual	Coat Ten (F°	np	Mix Start	ing Stop	Induction Time	Pot Life	All	lixes essed
			20 CO			3 3 3 3						/	☐ Yes ☐ Yes ☐ Yes	□ No □ No
		34				gi ji		J				5	∐ les	
Mixing							CONTRACTOR OF STREET			h Ider	dication			
Mix No.	Pr	oduct (Quantity	\boxtimes A	В	C	A 🗵	В	C	A	□ B □ C		A B	С
						_			-	A ^S		-		
	×													
												1		
	Ç													
Applica	tion		Color:		Appl	lication S	tart:			1	Application S	top:		
No.		Location o	f Work	/	Equi	pment		Attribute			Sat	Unsat	N/A	
						Brush		_		Cover	1000			\boxtimes
					-26	Roller		100000000000000000000000000000000000000			eanliness			
				1	Conve	entional Airless		_		Cleanli	st (time):	H		
			/	D	lural Co	mponent	_	*2760000000		me Min	a and a second second			
					idi di Co	HVLP	-		Agital		/ I·IdA	Н	H	
		-/-				HITTER		100	rigital				21-41	KA
		/				Trowel		Stri	ре соа	it		74 - 51	8 0	\boxtimes
.0						Flock		Oth	•					\boxtimes
	f.			Ot	her:			We	t Film	Thickne	ess (Mils)			F 2
				Ot	her:		57	Spe	ec:	A	ctual:			

Comments: None.

CSI Coating Inspection Report Page 2

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Repo	rt No.		1
Page	3	Of	4
Date	11/5/20)12	Monday
CSI J	ob No.:		212115

rioje	ect: Red Hill Tank	A J Talik	Cicali, Ilis	ресс, кер	ali		Lins	pecie	n. riaii	k Bringas				
Fina	I Inspection	□P	rime				nterm	ediate	e 🔲	Midcoat	☐ Top/	Finis	4	
		Dry	Film Thic (mils)	kness	Vis	sual	Holiday Detection			ection	tion (ASTM D)			
No.	Location	19.00	Ac	tual			Voltage				1000APSPERSON	677	4541	
		Spec	Avg	Range	Sat	Unsat	N/A	Sat	Unsat	Remaining Holidays	PSI/ Rating		esive/ esive	
									(A) - (2) (a) - (2)					
3														
					\$ 0.00 0.00									
Misce	ellaneous	A55,A	10 60						The state of the s		7	uğ.		
Instru	uments					Visitors	to th	e Site						
Type				Serial N	0.	Name				Company	y			
Sling	Psychrometer			K-44396	6					50				
	ce Temperature C	Gage								No.				
Sprin	g Micrometer	- N - N - N	150	,						20				
	ce Comparator	S,	S, SH							>0				
	ometer									70				
	ector 6000			1308						70				
	ration Plate	2 22		140404.	26					30				
	ay Detector 🛛 M	1, 🗌 AP,	AP/W	533267						>2				
	ture Meter		W W.							Sp				
	Contamination Kit									20				
	a Conductivity M			K-73025						>0				
Othe	r: Digital Psycrom	neter												

Comments:

IR-1

CSI Coating Inspection Report Page 3

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Repo	rt No.		16	1
Page	4	Of		4
Date	11/5/1	2	100-200	
CSI Jo	b No.:		21	2115

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

Inspector: Frank Bringas

Photo Log









IR-1

CSI Coating Inspection Report Page 4

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

Repo	rt No.			2	
Page	ge 1			4	
Date	11/6/20	11/6/2012		Tuesday	
CSI J	ob No.:		2	12115	

Inspector: Frank Bringas

Daily Coating Inspection Report

Client: Will	bros	Contractor: A	ohe and Svboda	
Client Cont	tact: Mr. Joe Gilbert	-41	Foreman: Robert Webster	
6 (
Surface	Preparation			
No	Location of Work	Preparation	Initial Rust Grade A R	

No.	Location	of Work	Prepa	aration	Initial Rus	t Grade A	В	C	DX		
	Lower bowl		Spec.	Actual	Attrib	ute	Sat	Unsat	N/A		
			⊠ SP1	☐ SP1	Metal Porosity, Prot	rusion Free	2 3	V 48	X		
			☐ SP2	☐ SP2	Grease and Oil Rem	noval	\boxtimes	7 0	20-14		
			☐ SP3	☐ SP3	Recycled Abrasive \	/ial Test	20 3	4 4	X		
			SP7	☐ SP7	Visible Moisture on	Surface	\boxtimes	4 4	- F		
W.					☐ SP14	☐ SP14	Dust Removal		20 33	14 - 65	\boxtimes
3			☐ SP6	☐ SP6	Clean and Dry Abra	sive			\boxtimes		
	Surface Pro	file	☐ Other:				8-16		\boxtimes		
Spec	A	ctual			Soluble Sa	It Testing	•	•			
(mils)	Avg (mils)	Range (mils)	Lo	cation	Specified (µg/cm)	Actual (µg/cm)	Sat	Unsat	N/A		
NA	NA	to	Se	ee below	n/a	n/a	65 (1)	\boxtimes	8 19		

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.

Lak R. Binger	11/06/12	Q	QC Report Review		QC Report Review			
Inspector Signature	Date	Satisfactory X	Incomplete	Corrected	Reviewer Signature	Date		

CSI Coating Inspection Report Page 1

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Repo	rt No.	2				
Page	2	Of 4				
Date	11/6/20	012 Tuesday				
CSI J	ob No.:	212115				

Project: I	Red H	ill Tank 5	Tank	Clean,	Inspect	, Repa	ir		ln	specto	or: Fran	k Bringas			
Coatir	ng	Resurfa	cer	Sea	lant	Paint		ning	G	Caulk	ing	Other:			
Manufact		Product Name		Thinner Name	Shelf Life (Mnth)		ninner ded Actual	Coat Ten (F	np	Mix Start	cing Stop	Induction Time	Pot Life	All	THE STATE OF THE S
	3		- 18			3 3				8			/	☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes☐ Yes	□ No □ No
Mixing	1			T	, c		C	omno	mor	at Bate	h Ider	dification		l.	
Mix No.	Pro	oduct	Ouz	antity	_ A _	В		A	В	C	TAC.	B		В	Пс
IIIAITOI		Outlet	Que	ancicy					- Mag.		1		+		
		İ													
								/							
			2										-		
				-											
									_					49	
Applicat	tion		Col	lor:		Appl	lication S	tart:			ì	Application S	top:		
No.		Location	of W	ork		Equi	pment		300		Attribu	100000	Sat	Unsat	N/A
					/		Brush	A 0			e Cover	100.0			\boxtimes
(2.				_/			Roller		2000			eanliness			
						Conve	entional Airless	38 <u>-0</u> 0			Clean	st (time):	H	k H	
		22	/		D	lural Co	mponent	(A)(A)	ACT OF THE PARTY OF		me Min				
					-	iurai co	HVLP	H		t Agita		/ IMAX			
		-/-					HVLP	21_21	FU	c Agita	uon		100		
							Trowel		Str	ripe coa	at				\boxtimes
							Flock		Oti	her:					\boxtimes
					Otl	her:		0.02	We	et Film	Thickne	ess (Mils)		-	
					Otl	her:			7900	ec:		ctual:			

Comments: None.

CSI Coating Inspection Report Page 2

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Repo	rt No.	2				
Page	3	Of	4			
Date	11/6/20	012 Tuesda				
CSI J	ob No.:	212115				

Proje	ct: Red Hill Tank	c 5 Tank (Clean, Ins	pect, Rep	oair		Inspector: Frank Bringas						
Fina	Inspection	ППР	rime			Thi	Interm	nediate	, In	Midcoat	☐ Top/	Finish	
		S (S18, 36)	Film Thic (mils)	kness	Vi	sual			ay Dete		Adhesion (ASTM D)		
No.	Location	Act		ual			Voltage:				(MOAPS PERSON) 11-001	677 4541	
		Spec	Avg	Range	Sat	Unsat	N/A	Sat	Unsat	Remaining Holidays	PSI/ Rating	Cohesive/A dhesive	
-					\$								
					\$				Ц				
Misce	llaneous	1 de 200	ti te	d.		d.				V 10		ed.	
Instru	ments					Visitors	s to th	e Site					
Type				Serial N	0.	Name				Company	J		
	Psychrometer			K-44396	3								
	ce Temperature C	Gage											
Sprin	g Micrometer	67 35 35	150 /01										
	ce Comparator	_ S,	S, SH										
	ometer	2011000000	1000										
	ector 6000			1308									
	ation Plate	25 - 95 - 15	- 67	140404.	26								
	ay Detector 🛛 M	1, 🗌 AP,	AP/W	533267									
	ure Meter												
000000000000000000000000000000000000000	ontamination Kit												
	a Conductivity M			K-73025	5								
Other	: Digital Psycrom	neter		.0									

Comments:

IR-1

CSI Coating Inspection Report Page 3

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Repo	rt No.	2				
Page 4		Of	4			
Date	11/6/1	12 Tuesday				
CSI Jo	b No.:	212115				

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

Inspector: Frank Bringas

Photo Log



Location of one salt test



Visible salt on flat bottom of tank IR-1



Result of one salt test



Visible salt on flat bottom of tank
CSI Coating Inspection Report Page 4

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Repo	3					
Page 1		Of		4		
Date	11/20/2	012 Tuesday				
CSI J	ob No.:	212115				

Daily Coating Inspection Report

Project: Red Hill Tank 5 Tank Clean, Inspect, I	Inspector: Frank Bringas			
Client: Willbros Contractor: Abhe		he and Svboda		
Client Contact: Mr. Joe Gilbert		Foreman: Robert Webster		

Surface Preparation No. **Location of Work** Preparation Initial Rust Grade A В C DX Lower bowl **Attribute** Sat Unsat N/A Spec. Actual SP1 X ⊠ SP1 Metal Porosity, Protrusion Free SP2 SP2 Grease and Oil Removal SP3 SP3 Recycled Abrasive Vial Test \times SP7 SP7 Visible Moisture on Surface X SP14 SP14 **Dust Removal** SP6 SP6 Clean and Dry Abrasive **Surface Profile** Other: X Actual Soluble Salt Testing Spec Specified Actual (mils) Range (mils) Location Sat Unsat N/A Avg (mils) (µg/cm) (µg/cm) NA NA n/a

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 ½" 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.

Lak R. Binga	11/20/12	Q	QC Report Review		Let C Touth	11-23-2012
Inspector Signature	Date	Satisfactory X	Incomplete	Corrected	Reviewer Signature	Date

CSI Coating Inspection Report Page 1

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Repo	ort No.	3					
Page	2	Of	4				
Date	11/20/2	012 Tuesday					
CSI J	ob No.:	212115					

Project: Red	Hill Tank 5 Tar	nk Clean,	Inspect	, Repa	ir		In	specto	r: Frar	k Bringas			
Coating	Resurface	r Sea	lant	Paint	Пп	ning	Œ	Caulki	na	Other:			
Manufacture	Product	Thinner Name	Shelf Life (Mnth)	% Th	ninner ded Actual	Coat Ten (F°	1p	Mix Start		Induction Time	Pot Life	All	
								2 2 8			/	☐ Yes ☐ Yes ☐ Yes	□ No □ No
					şi			9					Пио
Mixing					C	ompo	nen	nt Batc	h Ideg	dication			
	Product Q	uantity	_ A _	В	c	A	В	С	A	В		A B	С
		3164	781	.310		ALC:				325		2022X	191
							- 5				-		
								ro.					
		-									1		
	÷												
	<u>_</u>				/								
Application	1 0	olor:		Appl	ication S	tart:			1	Application S	top:	10	
No.	Location of	Work	/	Equi	pment		100	A	ttribu	te	Sat	Unsat	N/A
					Brush			otective			A 5		\boxtimes
		/			Roller	- 3	2000			eanliness			
			1	Conve	entional			111210-12-02-03		st (time):	H		
			100	lural Con	Airless mponent		ALC BUSINESS	tercoat		a and a second second			
			-	iurai Coi	HVLP			coat Tir t Agitat		/ Max			
	/				HALF		FU	t Agitat	.1011		M = 1		
	/				Trowel		Str	ripe coa			24 51	8 0	\boxtimes
	62				Flock	39, 38		ner:					
			Ot	her:		1000			Thickne	ess (Mils)	100.000	<u> </u>	Wanter
			- 1	her:		57 - S	CNC11	ec:		ctual:			

Comments: None.

CSI Coating Inspection Report Page 2

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Repo	ort No.	3				
Page	Page 3		4			
Date	11/20/2	2012 Tuesday				
CSI J	ob No.:	212115				

Final	Inspection	□P	rime			☐ Intermediate ☐ N				Midcoat Top/Finish			
		Dry	Dry Film Thickness (mils)			Visual		Holiday Detection			Adhesion (ASTM D)		
No.	Location	10.00	Ac	tual			Volt	age:			(Otto-Artistantia) 11-00	677 4541	
		Spec	Avg	Range	Sat	Unsat	N/A	Sat	Onsat	Remaining Holidays	PSI/ Rating	Cohesive/A dhesive	
8				r de	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2								
					1 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3								
		250										× 1	
Misce	llaneous		- 10		A.501.			t.		9 ii			
Instru	ments				1/2	Visitors	to th	e Site					
Type				Serial N	lo.	Name				Company	y		
	Psychrometer			K-44396	6								
	ce Temperature (Gage		2						Ĵ			
	g Micrometer	- 10 10 UK	Ni 29										
	ce Comparator	S,	S, 🗌 SH										
	ometer			4000									
	ector 6000 ation Plate			1308	26								
	ay Detector 🔀 M	1, AP,	AP/W	140404. 533267	20								
	ure Meter	i, Ar,		333201	-								
	ontamination Kit	t .			-					*			
	a Conductivity M			K-73025	5								
	: Digital Psycrom												

Comments:

IR-1

CSI Coating Inspection Report Page 3

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Repo	rt No.			3
Page	4	Of		4
Date	11/20/	/12 Tuesday		
CSI Jo	ob No.:		21	2115

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

Inspector: Frank Bringas

Photo Log



Location of one salt test



Grease spots that are clearly visible IR-1



Grease spots on 3 course



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

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Repo	ort No.		4
Page	1	Of	4
Date	11/26/2	012	Monday
CSI J	ob No.:		212115

Daily Coating Inspection Report

Project: Red Hill Tank 5 Tank Clean, Inspect,	Inspector: Frank Bringas			
Client: Willbros	r: Abhe and Svboda			
Client Contact: Mr. Joe Gilbert	33	Foreman: Robert Webster		

Surfac	e Preparation								
No.	Location	of Work	Prepa	aration	Initial Rus	st Grade A	В	C	DX
1	Lower bowl		Spec.	Actual	Attrib	ute	Sat	Unsat	N/A
			⊠ SP1	☐ SP1	Metal Porosity, Prot	rusion Free			
			SP2	☐ SP2	Grease and Oil Rem	noval			\boxtimes
	J.		SP3	☐ SP3	Recycled Abrasive \	/ial Test			\boxtimes
			SP7	☐ SP7	Visible Moisture on	Surface			\boxtimes
			☐ SP14	☐ SP14	Dust Removal				\boxtimes
			SP6	☐ SP6	Clean and Dry Abra	sive			\boxtimes
	Surface Pro	file	☐ Other:				6	5	\boxtimes
Spec		ctual			Soluble Sa	It Testing	**	•	8.
(mils		Range (mils)	Lo	ocation	Specified (µg/cm)	Actual (µg/cm)	Sat	Unsat	N/A
NA	NA	to		n/a	n/a	n/a		\boxtimes	

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 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.

frak R. Binger	11/26/12	Q	C Report Revi	ew	Let C. Ludler	11-28-2012
Inspector Signature	Date	Satisfactory 🖂	Incomplete	Corrected	Reviewer Signature	Date

CSI Coating Inspection Report Page 1

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Repo	ort No.		4
Page	2	Of	4
Date	11/26/2	012	Monday
CSI J	ob No.:		212115

Project:	Red H	ill Tank 5 Ta	nk Clean,	Inspect	, Repa	ir		Ins	specto	r: Frar	k Bringas			
Coati	ng	Resurface	er Sea	lant	Paint	Li	ning		Caulki	ng	Other:			/
Manufac	turer	Product Name	Thinner Name	Shelf Life (Mnth)		ninner ded Actual	Coat Ten (F°	np	Mix Start	ing Stop	Induction Time	Pot Life	All	lixes essed
	20	\$ \$	6 65 5 65 5 69									/	☐ Yes	□ No
													☐ Yes	□ No
Mixing						C	ompo	nen	t Bato	h Idep	dification			
Mix No.	Pr	oduct Q	Quantity		В] C 🔲	A [В	□с	A	□В□С		A B	С
				751	,316		AIE.				727		5820	127
	X					+								
	5													
						\mathcal{L}						_		
	Ŷ.												¥4	
Applica	tion		Color:		Appl	lication S	tart:				Application S			
No.		Location of	Work	_/	Equi	pment		Name and American		ttribu	100000	Sat	Unsat	N/A
				/ ⊢		Brush Roller		_		Cover	ings eanliness	H		\boxtimes
	9		_/		Conve	entional		100000000000000000000000000000000000000			st (time):	占		
						Airless		_		Cleanli				
	5			P	lural Co	mponent	8 3	Rec	coat Ti	me Min	/Max			\boxtimes
						HVLP		Pot	Agital	ion			9.0	
						Trowel	39 39		ipe coa	it				\boxtimes
						Flock		Oth	er:			4 5	<u> </u>	
					her:		167	734.1			ess (Mils)		П	\boxtimes
				Ot	her:		50 m	Spe	ec:	A	ctual:		914	K-N

Comments: None.

CSI Coating Inspection Report Page 2

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Repo	ort No.	4			
Page	3	Of	4		
Date	11/26/2	2012 Monday			
CSI J	ob No.:		212115		

Proje	ct: Red Hill Tank	5 Tank	Clean, Ins	pect, Rep	oair		Ins	specto	r: Frank	Bringas			
Fina	I Inspection	ПР	rime			Thi	nterm	ediate	. In	Midcoat	Ton	/Finish	
		V V V V V V V V V V V V V V V V V V V	Film Thic	kness			Holiday Detection				Adhesion (ASTM D)		
No.	Location	1922	Ac	tual			Volt	age:			(OCATAPONE)	6677 4541	
		Spec	Avg	Range	Sat	Unsat	N/A	Sat	Onsat	Remaining Holidays	PSI/ Rating	Cohesive/A dhesive	
							П					. 61	
				nea									
								8					
									Ц				
Misce	ellaneous												
SAME OF THE OWNER, THE	ıments					Visitors	to th	e Site					
Type				Serial N	100,000	Name				Compan	у		
	Psychrometer			K-44396	3					V2			
	ce Temperature G	age		,									
	g Micrometer									3			
	ce Comparator ometer	_ S,	S, 🗌 SH	1						*			
	ector 6000			1308						3			
	ration Plate			140404.	26								
	ay Detector 🔀 M1	1, AP,	AP/W	533267	20					*			
	ure Meter	', A' ,		333201						22			
	Contamination Kit												
	a Conductivity Mo			K-73025	5								
	: Digital Psycrom												
	mento:												

Comments:

IR-1

CSI Coating Inspection Report Page 3

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Repo	rt No.			4
Page	4	Of		4
Date	11/26/	/12 Monday		
CSI Jo	ob No.:		2	12115

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

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Repo	ort No.			5	
Page	1	Of		6	
Date	12/10/2	2012 Monday			
CSI J	ob No.:		2	12115	

Daily Coating Inspection Report

Project: Red Hill Tank 5 Tank Clean, Inspect, R	Inspector: Frank Bringas	
Client: Willbros	Contractor: Abhe	and Svboda
Client Contact: Mr. Joe Gilbert		Foreman: Robert Webster
	CONTRACTOR. ADME	

Surface I	reparation								
No.	Location	of Work	Prepa	aration	Initial Rus	t Grade A	В	c⊠	D 🗌
			Spec.	Actual	Attrib	ute	Sat	Unsat	N/A
			☐ SP1	☐ SP1	Metal Porosity, Prot	rusion Free	20-31	\$ -63	\boxtimes
			☐ SP2	☐ SP2	Grease and Oil Rem	oval	200		\boxtimes
· ·			SP3	☐ SP3	Recycled Abrasive V	ial Test	2		X
			SP7	☐ SP7	Visible Moisture on	Surface	25		X
N.			☐ SP14	☐ SP14	Dust Removal		20-30	9 3	\boxtimes
·S.			SP6	☐ SP6	Clean and Dry Abra	sive			\boxtimes
	Surface Pro	file	Other:						\boxtimes
Spec	P	ctual			Soluble Sa	lt Testing	•	•	•
(mils)	Avg (mils)	Range (mils)	Lo	cation	Specified (µg/cm)	Actual (µg/cm)	Sat	Unsat	N/A
NA	NA	to		n/a	n/a	n/a	25 36	\boxtimes	Ø 19

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 2nd course from plate 34 to plate to plate 66, dropped down to course 1 and inspected course 1 from plate 1-44.

After the 1st 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.

frak R. Birger	12/10/12	Q	C Report Revi	ew	Let C. Sudla	12-12-2012	
Inspector Signature	Date	Satisfactory 🛛	Incomplete	Corrected	Reviewer Signature	Date	

CSI Coating Inspection Report Page 1

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Repo	ort No.		5		
Page 2		Of	6		
Date	12/10/2	012	Monday		
CSI J	ob No.:		212115		

Project:	Red H	ill Tank 5 Ta	nk Clean,	Inspect	, Repa	ir		Ins	specto	r: Frar	k Bringas			
Coati	ng	Resurface	er Sea	lant	Paint	Li	ning		Caulki	ng	Other:			/
Manufac	turer	Product Name	Thinner Name	Shelf Life (Mnth)		ninner ded Actual	Coat Ten (F°	np	Mix Start	ing Stop	Induction Time	Pot Life	All	lixes essed
	20	\$ \$	6 65 5 65 5 69									/	☐ Yes	□ No
													☐ Yes	□ No
Mixing						C	ompo	nen	t Bato	h Idep	dification			
Mix No.	Pr	oduct Q	Quantity		В] C 🔲	A [В	□с	A	□В□С		A B	С
				751	,316		AIE.				727		5820	127
	X					+								
	5													
						\mathcal{L}						_		
	(¥4	
Applica	tion		Color:		Appl	lication S	tart:				Application S			
No.		Location of	Work	_/	Equi	pment		Name and American		ttribu	100000	Sat	Unsat	N/A
				/ ⊢		Brush Roller		_		Cover	ings eanliness	H		\boxtimes
	9		_/		Conve	entional		100000000000000000000000000000000000000			st (time):	占		
						Airless		_		Cleanli				
	5			P	lural Co	mponent	8 3	Rec	coat Ti	me Min	/Max			\boxtimes
						HVLP		Pot	Agital	ion			9.0	
						Trowel	39 39		ipe coa	it				\boxtimes
						Flock		Oth	er:			4 5	<u> </u>	
					her:		167	734.1			ess (Mils)		П	\boxtimes
				Ot	her:		50 m	Spe	ec:	A	ctual:		914	K-N

Comments: None.

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Repo	ort No.		5
Page	3	Of	6
Date	12/10/2	012	Monday
CSI J	ob No.:		212115

Proje	ct: Red Hill Tank	c 5 Tank	Clean, Ins	pect, Rep	air		Ins	specto	or: Frank	Bringas		
Fina	Inspection	□P	rime				Interm	nediate	e 🔲	Midcoat	☐ Top/	Finish
		Dry	Film Thic (mils)	kness	Vis	sual		Holid	ay Dete	ection		esion TM D)
No.	Location	No. 1	Act	tual			Volt	age:	3		3359 6	677 4541
		Spec	Avg	Range	Sat	Unsat	N/A	Sat	Unsat	Remaining Holidays	PSI/ Rating	Cohesive/A dhesive
									(A03)			
0												
9												
		250										
Misce	llaneous	attent.	i de			Č.		to.	. The state of the	Vi.		-4
Instru	ments				17	Visitors	s to th	e Site		- Marie S		
Type				Serial N	0.	Name				Compan	y	
Sling	Psychrometer			K-44396	i							
Surfa	ce Temperature C	Gage										
	g Micrometer									Ü		
Surfa	ce Comparator	S,	S, SH									
Windo	ometer	20 102300 00	700.7									
Posite	ector 6000			1308								
Calibr	ation Plate	25 - 450	27	140404.	26							
Holida	ay Detector 🛛 M	1, 🗌 AP,	AP/W	533267								
	ure Meter	1000	4)11									
Salt C	ontamination Kit											
Horib	a Conductivity M	eter		K-73025	5.					33		
Other	: Digital Psycrom	neter										

Comments:

IR-1

CSI Coating Inspection Report Page 3

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Repo	rt No.		5			
Page	4	Of 6				
Date	12/10/	12	Mo	nday		
CSI J	ob No.:		21	2115		

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 moderate to extensive weld spatter IR-1



Length of weld with less extensive weld spatter



Length of weld with less extensive weld spatter
CSI Coating Inspection Report Page 4

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Repo	5							
Page	Page 5		Of 6					
Date	12/10/	12	Mo	onday				
CSI J	CSI Job No.:			12115				

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

Inspector: Frank Bringas

Photo Log



Length of horizontal weld with extensive weld spatter





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



Length of weld with less extensive weld spatter
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Repo	rt No.		5				
Page	6	Of 6					
Date	12/10/	12	Mo	onday			
CSI J	CSI Job No.:			2115			

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



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



Length of weld with extensive weld spatter
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