Joint Task Force-Red Hill

Bi-Monthly Quality Validation Working Group Meeting



10 Aug 2023



BACKGROUND/DESCRIPTION

- On January 27, 2023, the Hawai'i Department of Health (DOH) conditionally approves the Independent Third-Party Quality Validation Plan, with the following conditions:
 - Para #1, Provide resumes of those working QV (31 Jan) OUTSTANDING
 - Para #2, Provide QV Plan Addendum detailing testing requirements that will follow repairs (28 Feb)
 - Para #3a, Provide DoH/EPA our first monthly QV report (23 Feb)
 - Para #3b, Provide list of dates of major repair/inspection events that DoH/EPA can attend (23 Feb)
 - Para #4, Provide final report (last repair + 30 days)



RFI from DOH

- Repairs 182-184, 188 hydrostatic test updates, still Aug. 11 delivery?
- INC28 report mislabeled as 28 instead of INC-028
- 183 & 188 reports don't indicate that structural welds passed
- Repair 249 QV status update -
- Update to est. delivery of INC25, INC27-INC31, INC44
 - INC-025: FOR line painting non-repair, determination by Closure 17 Aug
 - INC-026 rev: HPV, pending hydrotest report 11 Aug
 - INC-027: AFFF sump testing 31 Aug
 - INC-028: AFFF retention line repairs 10 Aug
 - INC-029: AFFF cross connect to (b) (3) (A) 10 Oct
 - INC-030: AFFF LPD 10 Aug
 - •INC-031: (b) (3) (A)
 - INC-033 rev: HPV and LPD to existing spool 10 Aug
 - INC-044: (b) (3) (A) cross over vent 24 Aug



QV Accounting

- QV Complete = Sent to DOH/EPA.
 - •"253" = 248/253 repairs; 5 remain.
 - •"INC" = 37/44; 7 remain.
- QV Conditionally Approved
 - •DOH = 248/253, 37/37 Incremental
 - •EPA = 248/253, 15/37 Incremental



Quality Validation Report

	ENSURING A FREE AND OPEN INDO-PACIFIC		
NO.	Validation Complete	Date	Location
182	Repair Description Cont.: "The (b) (3) (A) to eliminate the non-standard repair in the bulkhead. The piping will need to be re-anchored. Replace piping through bulkhead." (b) (3) (A) Contractor used the existing bulkhead penetration as a sleeve for the new pipe segment. Contractor installed and (b) (3) (A), sleeved the (b) (3) (A) through the existing piping and reduced again to mate to a weld neck flange set. To prevent thrust movement, Contractor fillet welded shear lugs butting up to the bulkhead sleeve. Contractor installed Teflon centralizers to prevent the pipe from contacting the interior of the bulkhead sleeve. NDE result table, NDE inspection report, weld map/design detail, hydrotest result included for reference.	8 Aug 23	(b) (3) (A)
183	At bulkhead penetration (b) (3) (A) , Contractor used the existing bulkhead penetration as a sleeve for the new pipe segment. Contractor installed and (b) (3) (A) reducers to the mainline, sleeved the (b) (3) (A) through the existing piping and reduced again to mate to a weld neck flanged spool on the (b) (3) (A) side of the repair. To prevent thrust movement, Contractor fillet welded shear lugs butting up to the bulkhead sleeve. Contractor installed Teflon centralizers to prevent the pipe from contacting the interior of the bulkhead sleeve. NDE result table, NDE inspection report, weld map/design detail and hydrotest result included for reference.	8 Aug 23	



Quality Validation Report

	ENSURING A FREE AND OPEN INDO-PACIFIC		
NO.	Validation Complete	Date	Location
184	At bulkhead penetration (b) (3) (A) , Contractor used the existing bulkhead penetration as a sleeve for the new pipe segment. Contractor installed and reducers to the mainline, sleeved the through the existing piping and reduced again to mate to a weld neck flanged spool on the (b) (3) (A) side of the repair. To prevent thrust movement, Contractor fillet welded shear lugs butting up to the bulkhead sleeve. Contractor installed Teflon centralizers to prevent the pipe from contacting the interior of the bulkhead sleeve. NDE result table, NDE inspection report, weld map/design detail, and hydrotest result included for reference.	8 Aug 23	(b) (3) (A)
188	At bulkhead penetration (b) (3) (A) , Contractor used the existing bulkhead penetration as a sleeve for the new pipe segment. Contractor installed and (b) (3) (A) reducers to the mainline, sleeved the (b) (3) (A) through the existing piping and reduced again to mate to a weld neck flanged spool on the (b) (3) (A) side of the repair. To prevent thrust movement, Contractor fillet welded shear lugs butting up to the bulkhead sleeve. Contractor installed Teflon centralizers to prevent the pipe from contacting the interior of the bulkhead sleeve. NDE result table, NDE inspection report, weld map/design detail, and hydrotest result included for reference.	8 Aug 23	



Quality Validation Report

NO.	Validation Complete	Date	Location
249	At bulkhead penetration (b) (3) (A) Contractor used the existing bulkhead penetration as a sleeve for the new pipe segment. Contractor installed and (b) (3) (A) reducers to the mainline, sleeved the through the existing piping and reduced again to mate to a weld neck flange. To prevent thrust movement, Contractor fillet welded shear lugs butting up to the bulkhead sleeve. Contractor installed Teflon centralizers to prevent the pipe from contacting the interior of the bulkhead sleeve. NDE result table, NDE inspection report, weld map/design detail and hydrotest result included for reference.	8 Aug 23	(b) (3) (A)
INC -028	In-house labor applied (b) (3) (A) caulking at every PVC joint along the entire length of the (b) (3) (A) e. Corroded pipe hangers were replaced in-kind, with plumber's wrap added for corrosion protection. Belly pump replaced; additional electrical repairs were identified in operational testing. Follow-on electrical repairs completed.	8 Aug 23	
INC -030	Repair completed as a 2-step process. The broken PVC low point drain was first plugged with a mechanical compression plug rated for pressure. The assembly was then encased with a solvent-glued PVC coupler to the valve body, reinforced with a compression boot for impact protection. A threaded drip cap was installed to facilitate inspection. Reflective warning signs were secured to the assembly for awareness.	8 Aug 23	

				QUALI	TY VALIDATION (QV) REPO	ORT				
]	Red Hill B	ulk Fuel Storage Fac	ility Defue	el				
Valid	dation Firm	HDR Env	ironmental	, Operatio	ns and Construction,	Inc.		Repair No.	182		
	Address	9781 S. N	/leridian Bl	vd., Suite	400, Englewood, CO		F24.A22.	14			
Co	ontract No.	FA89031	5D0007, D	.O. FA890	3-19-F-0027			Report Date	11 AUG 2	2023	
Q'	V Engineer	(b) (Date							
		`	,		VALIDATION						
Sou	ırce	F	PDF Page N	o.	Facility Geograph	ic Area	(1)		Reference		
NDAA		73			нт		(b) (3) (A)			
Repair I	Description	bulkhead There is a	using weld repair sle bulkhead	led collars eve throug	ad. Pipe is anchored inside cast in place of the bulkhead. The encirclement sleeve.	Sour	ce Contract Reference	N394302 N394302			
Con	scription of atractor QC od(s) Used	Methods outlined in detail in CQCP. Pipe butt welds 100% inspection via Radiographic Testing; 100% VT on all shear lug assemblies, 100% PT on (b) (3) (A) Contractor QC Records Reviewed cumulative 50% requirement. Hydrotest of spool assembly.									
Val	otion of QA idation and bservations	Form 429 design ar JTF-RH s JTF-RH (submittals	06/2. Visua nd material secondary QV visually s, daily rep	Ily inspecte submittals QA and 3re inspected orts).	e is documented by to ed completed installations. Reviewed NDE rep d Party QV completed repairs and reviewed Date: 14 JUN 2023	tion; match orts. d.	ned comple	eted constr	uction aga	inst	
	Rework	Needed			Photo Record Attached	l	Repair	Work Vali	dated as Co	mplete	
0	Yes	\odot	No		See Page 2.		•	Yes	0	No	
Repair Description Cont. (b) (3) (A) side of the bulkhead has a half sleeve (b) (3) (A) support through bulkhead. The piping will need to be re-anchored. Replace piping through bulkhead." At bulkhead penetration between (b) (3) (A) contractor used the existing bulkhead penetration as a sleeve for the new pipe segment. Contractor installed and reduced again to mate to a weld neck flange set. To prevent thrust movement, Contractor fillet welded shear lugs butting up to the bulkhead sleeve. Contractor installed Teflon centralizers to prevent the pipe from contacting the interior of the bulkhead sleeve. NDE result table, NDE inspection report, weld map/design detail, hydrotest result included for reference.											
eport was pe eport is true		estantiated an	a tnis		DATE	11 AUG 2	2023				

(b) (3) (A)

EMERGENT PIPELINE REPAIRS

Repair 182

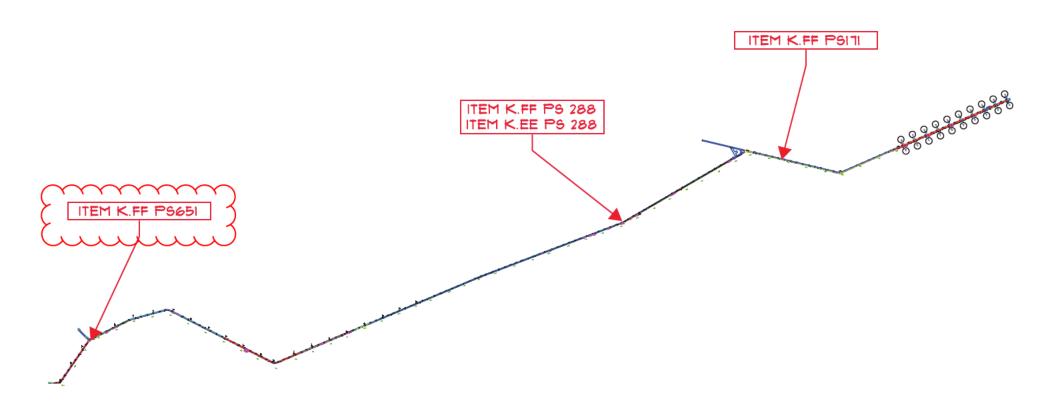
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o) (3) (A)			FF	T-UP			ROOT PASS					COVER PASS			NDE						HYDROTEST	
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCITM1-b	Р	04/07/2023	(b) (6)	04/07/2023	Р	(b) (6)	04/07/2023	(b) (6)	04/07/2023	Р	04/07/2023	(b) (6)				Р	04/17/2023	(b) (6)	N/A	
			FF	T-UP			ROOT PASS					COVER PASS			Ī		N	IDE			нург	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F	R	DATE		DATE	VT P/F	DATE		MT/PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE
	FIELD	OCI TM1-b	Р	04/10/2023		04/10/2023	Р		04/10/2023		04/12/2023	Р	04/12/2023					Р	04/17/2023		N/A	
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				T-UP			ROOT PASS	_				COVER PASS					N	IDE			HYDF	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F	3	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE
	FIELD	OCI TM1-b	P	04/07/2023		04/07/2023	Р		04/07/2023		04/07/2023	Р	04/07/2023					Р	04/17/2023		N/A	
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				T-UP			ROOT PASS					COVER PASS					, N	IDE			HYDE	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F	ŧ	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE
	FIELD	OCI TM1-b	P	03/30/2023		03 / 30 / 2023	P		03 / 30 / 2023		03/30/2023	Р	03 / 30 / 2023					P	04 / 17 / 2023		N/A	\perp
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				T-UP			ROOT PASS	_				COVER PASS			NET / PET			IDE av			HYDE	ROTEST
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	FIELD	OCI TM1-b	Р	04/12/2023		04/12/2023	Р		04/12/2023		04 / 12 / 2023	Р	04/12/2023					P	04/17/2023		Р	06 / 06 / 2023
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	FIELD	OCI TM1-b	P	04/06/2023	+	04/06/2023	P		04/06/2023		04 / 06 / 2023	P	04 / 06 / 2023					Р	04/17/2023		N/A	\vdash
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			L	T-UP			ROOT PASS			<u> </u>		COVER PASS			<u> </u>			IDE				ROTEST
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(b) (3) (A	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCI FW M1-d-1	FILLET WELD							(b) (6)	04/13/2023	Р	04/14/2023	(b) (6)	Р	04/17/2023	(b) (6)				N/A	
												STRUCTURAL WELD										
			FIT-	UP			ROOT PASS					COVER PASS					N	DE			HYDRO	OTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE
INITIAL	FIELD	OCI FW M1-d-1	FILLET WELD								04 / 13 / 2023	Р	04/14/2023		P	04/17/2023					N/A	
REWORK 1												STRUCTURAL WELD	•									
REWORK 2																						

RHEmergentPipelineRepairs N39430-2-0-0-2225-N3943021f4207

REPAIR ID			FIT	-UP			ROOT PASS			COVER PASS				NDE							HYDRÖTEST	
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT	INSPECTOR	DATE	WELDER	DATE	VT	DATE	INSPECTOR	MT/PT	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
- / (- / (- /	FIELD	OCI FW M1-d-1	FILLET WELD				P/F			—(b) (6)	04/13/2023	P/F P	04/14/2023	(b) (6)	P/F P	04/17/2023	(b) (6)	P/F			N/A	
												STRUCTURAL WELD					(5)(5)	1				
			FIT	-UP			ROOT PASS					COVER PASS			i -			NDE			HYDI	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCI FW M1-d-1	FILLET WELD				-,,,				04/13/2023	Р.	04/14/2023		P	04/17/2023		— "			N/A	
												STRUCTURAL WELD										
			FIT	-UP			ROOT PASS					COVER PASS						NDE			HYDR	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCI FW M1-d-1	FILLET WELD								04/13/2023	Р	04/14/2023		Р	04/17/2023					N/A	
												STRUCTURAL WELD)									
			FIT	-UP			ROOT PASS					COVER PASS						NDE			HYD	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCI FW M1-d-1	FILLET WELD								04/13/2023	Р	04/14/2023		Р	04/17/2023					N/A	
												STRUCTURAL WELD										
				-UP			ROOT PASS					COVER PASS						NDE			HYDI	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCI FW M1-d-1	FILLET WELD								04/13/2023	Р	04/14/2023		Р	04/17/2023					N/A	
												STRUCTURAL WELD										
			FIT	-UP			ROOT PASS					COVER PASS						NDE			HYDI	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCI FW M1-d-1	FILLET WELD								04/13/2023	Р	04/14/2023		P	04/17/2023					N/A	
												STRUCTURAL WELD										
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RHEmergentPipelineRepairs N39430-20-0-2225-N394302174207



(b) (3) (A), (b) (4)

IN-PROCESS EXAMINATION REPORTS



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)	Item Inspected: (weld number, tie point etc, attach drawing) (b) (3) (A)
Applicable Code:	Alternative Testing Approved by:	(b) (6)
ASME B31.3-2020	QA Lead:	(D)(D)
(b) (4) Procedure:	AMS-830-15-PR-45037	
NDE required by Scope: MT	Root□ MT Passes□ HTPT Root□ HTPT	Passes□ MT Final□ RT Final⊠ SWUT PAUT□ Final Root Int. VT□

Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	7 April 2023
Welder is Qualified: Stamp #		Acceptable		7 April 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		7 April 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		7 April 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		7 April 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		7 April 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		7 April 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		7 April 2023
Subsequent Pass's complete, Visual Inspection after cleaning	×	Pass		7 April 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4)		17 April 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		
100% RT Final (ref. NDE Report #) 100% UT Final (ref. NDE Report #) SWUT□ PAUT□		Passed, (b) (4) N/A		17 April 2023

Additional Comments:			
In-process examination completed in accordance	e with project specification 33 52 23.15; All vis	ual inspections were	performed in accordance with (b) (4)
Procedure AMS-830-15-PR-45037 - GENERAL	TECHNIQUE VISUAL EXAMINATION		· ——
(b) (6)			/L \ /C \
\ / \ /		17 April 2023	
Inspector Name	Inspector Signature	Date	Certification: □CAWI ☑CWI □SCWI
•			



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)	Item Inspected: (weld number, tie point etc, attach drawing) (b) (3) (A)
Applicable Code:	Alternative Testing Approved by:	(b) (6)
ASME B31.3-2020	QA Lead:	(D)(D)
(b) (4) Procedure:	AMS-830-15-PR-45037	
NDE required by Scope: MT	Root□ MT Passes□ HTPT Root□ HTPT	Passes□ MT Final□ RT Final⊠ SWUT PAUT□ Final Root Int. VT□

Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	10 April 2023
Welder is Qualified: Stamp #		Acceptable		10 April 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		10 April 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		10 April 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		10 April 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		10 April 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		10 April 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		12 April 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		12 April 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4)		17 April 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments:			
In-process examination completed in accordance		ual inspections were	performed in accordance with (b) (4)
Procedure AMS-830-15-PR-45037 - GENERAL	TECHNIQUE VISUAL EXAMINATION		
/			
(b) (6)			
			(b) (6)
		17 April 2023	(D)(D)
Inspector Name	Inspector Signature	Date	Certification: □CAWI ☑CWI □SCWI
inapector italile	inapector orginature	Date	Certification: CAVI MCVVI 13CVVI



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)	Item Inspected: (weld number, tie point etc, attach drawing) (b) (3) (A)
Applicable Code:	Alternative Testing Approved by:	(b) (6)
ASME B31.3-2020	QA Lead:	(D)(D)
(b) (4) Procedure:	AMS-830-15-PR-45037	
NDE required by Scope: MT	Root□ MT Passes□ HTPT Root□ HTPT	Passes□ MT Final□ RT Final⊠ SWUT PAUT□ Final Root Int. VT□

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Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	7 April 2023
Welder is Qualified: Stamp # (b) (6)		Acceptable		7 April 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		7 April 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		7 April 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		7 April 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		7 April 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		7 April 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		7 April 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		7 April 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4)		17 April 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments:										
In-process examination completed in accordance	e with project specification 33 52 23.15; All vis	ual inspections were	performed in accordance with (b) (4)							
Procedure AMS-830-15-PR-45037 - GENERAL	TECHNIQUE VISUAL EXAMINATION		· ——							
(b) (6)			/L \ /C \							
\ / \ /		17 April 2023								
Inspector Name	Inspector Signature	Date	Certification: □CAWI ☑CWI □SCWI							
•										



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)	Item Inspected: (weld number, tie point etc, attach drawing) (b) (3) (A)
Applicable Code:	Alternative Testing Approved by:	(b) (6)
ASME B31.3-2020	QA Lead:	(D)(D)
(b) (4) Procedure:	AMS-830-15-PR-45037	
NDE required by Scope: MT	Root□ MT Passes□ HTPT Root□ HTPT	Passes□ MT Final□ RT Final⊠ SWUT PAUT□ Final Root Int. VT□

	1		1	
Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	30 March 2023
Welder is Qualified: Stamp #		Acceptable		30 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		30 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		30 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		30 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		30 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		30 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		30 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		30 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	⊠	Passed, (b) (4)		17 April 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments:									
In-process examination completed in accordance	e with project specification 33 52 23.15; All vis	ual inspections were	performed in accordance with (b) (4)						
Procedure AMS-830-15-PR-45037 - GENERAL TECHNIQUE VISUAL EXAMINATION									
(0)(6)			(b) (6)						
		17 April 2023	(D)						
Inspector Name	Inspector Signature	Date	Certification: □CAW ☑CW □SCW						
			STATE OF THE POST						



Revision: 0 Approval Date: 2/7/2023

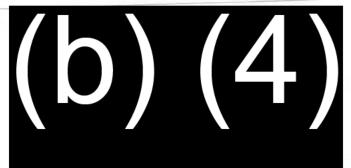
IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)	Item Inspected: (weld number, tie point etc, attach drawing) (b) (3) (A)
Applicable Code:	Alternative Testing Approved by:	(b) (6)
ASME B31.3-2020	QA Lead:	(D)(D)
(b) (4) Procedure:	AMS-830-15-PR-45037	
NDE required by Scope: MT	Root□ MT Passes□ HTPT Root□ HTPT	Passes□ MT Final□ RT Final⊠ SWUT PAUT□ Final Root Int. VT□

Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	6 April 2023
Welder is Qualified: Stamp #		Acceptable		6 April 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		6 April 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		6 April 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		6 April 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		6 April 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		6 April 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		6 April 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		6 April 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4)		17 April 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		
	_			

Additional Comments:									
In-process examination completed in accordance with project specification 33 52 23.15; All visual inspections were performed in accordance with (b) (4) Procedure AMS-830-15-PR-45037 - GENERAL TECHNIQUE VISUAL EXAMINATION									
Frocedure AMS-630-15-FR-45037 - GENERAL 1	ECHNIQUE VISUAL EXAMINATION								
(1) (0)									
(b) (6)		17 April 2023	(b) (6)						
Inspector Name	Inspector Signature	Date	Certification: □CAWI ☑CWI □SCWI						

NDE REPORTS



RADIOGRAPHIC INSPECTION REPORT

Repair 182

(b) (4)
W. O. No.: 23-034

Report No.: 65041723

Date: 4-17-2023

4-17-2023

Date of Inspection

Customer

M NDT-005.1 STOMER (b) (4)		CUST JOB#				CIFICATIO	A COLOR			OC. B31.3 REV 20	- C	Single Wall
DJECT Rechill Em	vergent Piping	DWG. NO.			PRO	CEDURE						(•))
SOURCE TRIPS	FILM AG	EADS PB	SCREEN	s	PENS:	ASTM	SHIMS	MAT'L/TH	KNS	MATERIAL CS	(A)	
SUURCE / 2/9)					YPE	1B		IIQUE USE	D 3, 1	THICKNES (b) (3)	1 200	Panoramic
~	$\mathbf{Z} \mathbf{I}$		1			IAL CS	EXPOS	SURE TIME	2:30	JOINT TYP	2.	Single Wall
ノノ(ION F	-	ESSING	MANUAL	C PIPE DIA.		
			_		11	11	18/2	///				
=	*	GEOMETRI	C NESS /	1/4	/3/		3/25/	1 2 8			3.	Offset Double Wall
WELD#	VIEW #	*UG*	VESS &							REMARKS	3.	Doddie wan
			17	1	77	77	//	///		/2\ /A	7	()=
F24 W1	o) (3) (A	050	X				-	\dashv	-(D)	(3)(A	\vdash	
12101	, () (1	X					-	_ ` /		—	Davide Wall 0/00
			X								4.	Double Wall 0/90
		1	1 X	X								
		220	X	1								•
FZY WZ		050.	1	1		+						Elliptical
			-X-	-	\vdash	+					5.	Plate *
			X	-		++-	-					
524 W3		,020,	X		1	++	\vdash	\vdash				
		1	X					\vdash			6.	Other
			X									
			1,	\neg								

(b		1)

RADIOGRAPHIC INSPECTION REPORT

Repair 182

(b) (4)_{W. O. No.: 23 - 934}

Report No.: <u>CS0427</u>23

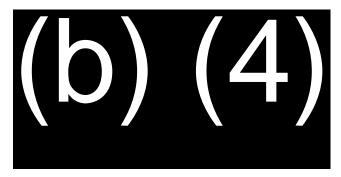
Page <u>Z</u>of Z

Date of Inspection

WELD#	VIEW#	GEOMETRIC UNSHARPNESS *UG*				REMAR		
F24 W4	(b) (3) (/ 4			(D) ((3) (A)		
FZY WS		/ X						
7 0,		X X						
F24 L06	-	X 050						
FZY W7		X 050 X						
	_	/ X						
F24 W1 R	1	.020 X						
			(b	(6		I	4-	17-2023

ITEM:(b) (3) (A)Torsion Bars	4)	Client (b) P.O. No.: (b) (4) Report No.	(4)	ID PENET	Location Job No.:	Red Hill Page 1 of 1 23-034 SME B31.3
MATERIAL			PENETRANT	MATERIA	A L	TECHNIQUE
TYPE: CS FW		BRAND	DESIGNATIO	N PO#	BATCH#	Preclean Drying Time: 5 MIN
Surface Condition: As Welded	Cleaner	Magnaflux	SKC-S	N/A	1A01K 030929	Method of Application: Brush
Ground Other Weld Prep	Penetrant	Magnaflux	SKL-SP1	N/A	06010K 04394	Dwell Time: 10 Min
New weld	Emulsifier	N/A	N/A	N/A	N/A	Emulsification Time: N/A
	Developer	Magnaflux		N/A	07K15K	Developing Time: 15 Min
Temperature: <u>X</u> 60° F – 125° F Other	•	Illuminatio		FC 150	00750	(b) (4) Control # UV Meter N/A
Item(s)	Accept	Reject	Sketch/Notes			
(b) (3) (A)						
	\boxtimes					
	\boxtimes			N T		1
				No inc	lications not	ed at time of inspection.
_						
Performed By (b) (6) Level	II Date: 4/18/2	023]	Reviewed By	:	Date:

HYDROTEST REPORTS



ŀ	41	7	١R	ns	TΔ.	TIC	TES	T FC	DRM

CLIENT: (b)

SYSTEM: SPOOL HYDRO

Proje	ct Name:	Red Hill Emergent Pipeli	ne			
·	n Description: Starting point	(b) (3)	3) (A)			
Cor	nection Point Ending point		/ (/			
PS	Req.:		8	e Req.:	4 hours	
Start of ⁻	Test Period:	Time:	11:03 hrs	Date:	8/8/2023	
End of T	est Period:	Time:	15:03 hrs	Date:	8/8/2023	
No.	Time	PSI READING		Remarks		
1	11.03	(b) (3) (A)		Pic taken; no leaks det	tected	
2	11:18			No leaks detected	d	
3	11:33			No leaks detected	d	
4	11:48			No leaks detected	d	
5	12:03			Pic taken		
6	12:18		No	leaks visual, ambient tempe	rature went up	
7	12:33		No le	eaks visual, ambient tempera	ature keeps rising	
8	12:48		No le	eaks visual, ambient tempera	ature keeps rising	
9	13:03			Picture taken		
10	13:18		No leaks visual,	, PSI increased to ambie	nt temperature keeps rising	
11	13:33		No le	eaks visual, ambient tempera	ature keeps rising	
12	13:48			aks visual, PSI rising from am		
13	14:03			ıre taken, no leaks, gauge inc	reased to (b) (3) (A)	
14	14:18		PSI	INCREASED TO released	l PSI back	
15	14:33			No leaks visual,		
16	14:48		No leaks visual,	, PSI increased to (6) (6) (A) ambie	nt temperature keeps rising	
17	15:03			End test, picture taken, no	visual leaks	

PSI Gauge Manufacturer:	Ashcroft 0-600	
Test Witness Client:	(b) (c)	
Test Witness OCI Rep.:	$\square(D)(O)$	

RD Technology of Hawaii

(b) (4) Pg.1

134 Nakolo Place Honolulu, HI 96819 (808) 833-3499

Certificate of Calibration



Ashcroft	0-600 PSI
Manufacturer	Model
32488	Pressure Gauge
Serial Number	Description
02/28/2023	182,039
Calibration Date	Test Number
02/28/2024	그렇다 이 사람들이 되었다면서 모르게 되어 주었다.
Recalibration Due	Asset Number
(b) (4)	23 °C 43 % RH
nstrument Accuracy / Procedure	Temperature Humidity

RD Technology of Hawaii's quality management system conforms to ISO/IEC 17025:2005, ANSI/NCSL Z540-1-1994, and MIL-STD-45662A. All calibrations are performed using internationally recognized standards traceable to the International System of Units (SI Units). Traceability is achieved through calibrations by the National Institute of Standards and Technology (NIST), other National Measurement Institutes (NMI's), or by using natural physical contants, intrinsic standards, or ratio calibration techniques. There is no expressed or implied warranty that the above instrument will maintain its specificied tolerances during the calibration interval due to possible drift, environment, or other factors beyond the control of RD Technology of Hawaii.

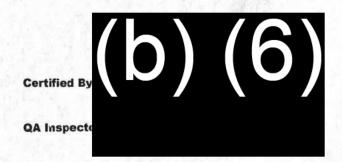
Calibration Standards Used:

Equip # Manufacturer Description Model Serial Date Calibrated Date Due O1/01/2023 01/01/2024

In Tolerance

Condition Received
In Tolerance

Condition Returned



				QUALITY VALIDATION	(QV) REPO	ORT					
			1	Red Hill Bulk Fuel Storage F	acility Defue	el					
Vali	dation Firm	HDR Env	rironmental	, Operations and Construction	n, Inc.		Repair No.	183			
	Address	9781 S. N	Meridian Bl	vd., Suite 400, Englewood, Co	D 80112			F24.A22.	15		
C	Contract No.	FA89031	5D0007, D	.O. FA8903-19-F-0027			Report	11 AUG 2	2023		
Q	V Engineer	(b)	(6)								
			()	VALIDATION							
So	urce	,	PDF Page N	To. Facility Geograp	hic Area		Location	Reference			
EXWC		N/A		(b) (3) (A	4)						
Repair	Description	(b) (3) (A	of 46% at the bulkhead. Pine g will need to be re-anchored.		Sour	ce Contract Reference	N394302 N394302			
Co	escription of ntractor QC nod(s) Used	(b)	3) (A	detail in CQCP. Pipe butt well or an area of the company of the co	all shear d	1	ntractor QC s Reviewed	CQCP an Reports.	d Daily		
Va	ption of QA lidation and observations	Form 429 design ar JTF-RH 9 JTF-RH 0 submittal	96/2. Visua nd material secondary QV visually s, daily rep	Assurance is documented by lly inspected completed instal submittals. Reviewed NDE re QA and 3rd Party QV completed inspected repairs and review ports).	ation; match ports. ed.	ned comple	eted constr	uction aga	inst		
	Rework	Needed		Photo Record Attach	ed	Repair	Work Vali	dated as Co	mplete		
\bigcirc	Yes	•	No	See Page 2.		•	Yes	0	No		
At bulkhe for the ne piping an movemer prevent the	At bulkhead penetration between (b) (3) (A) Contractor used the existing bulkhead penetration as a sleeve for the new pipe segment. Contractor installed and (b) (3) (A) through the existing piping and reduced again to mate to a weld neck flanged spool on the (b) (3) (A) side of the repair. To prevent thrust movement, Contractor fillet welded shear lugs butting up to the bulkhead sleeve. Contractor installed Teflon centralizers to prevent the pipe from contacting the interior of the bulkhead sleeve. NDE result table, NDE inspection report, weld map/design detail and hydrotest result included for reference.										
				CERTIFICATIO	N						
	tify that repair			QV ENGINEER SIGNATURE	(b)	(6)					
report was preport is true	personally sub e.	ostantiated an	d this	DATE	11 AUG 2	2023					

(b) (3) (A)

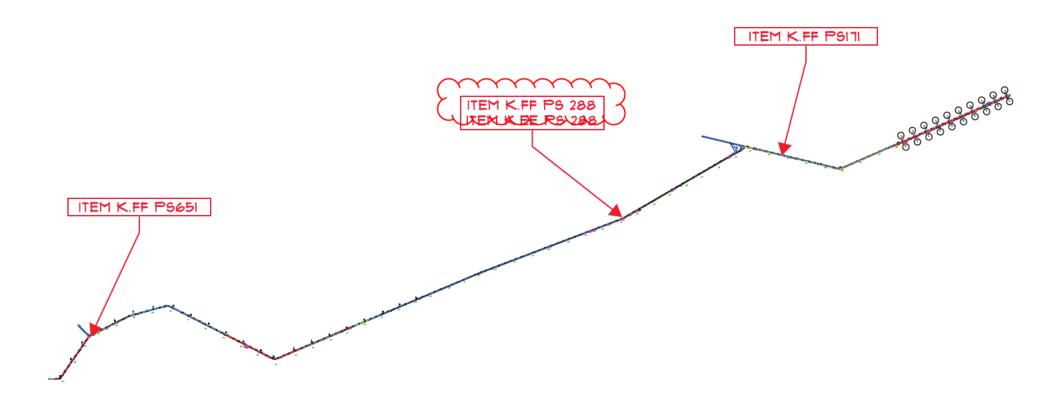
								н	Repair 183											
	F	IT-UP			ROOT PASS					COVER PASS		NDE							HYDF	ROTEST
SHOP / FIELD PROCEDUR	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
FIELD OCI TM1-b	P	03/16/2023	(b) (6)	03 / 20 / 2023	Р	(b) (6)	03 / 20 / 2023	(b) (6)	03/20/2023	Р	03 / 20 / 2023	(b) (6)				P	03 / 30 / 2023	(b) (6)	N/A	
								-												
	<u> </u>																			
		IT-UP			ROOT PASS					COVER PASS					N N	IDE			HYDE	ROTEST
SHOP / FIELD PROCEDUR	P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE
FIELD OCI TM1-b	P	03/21/2023		03/21/2023	Р		03/21/2023		03/21/2023	P	03 / 21 / 2023						03 / 30 / 2023		N/A	
	+								03/31/2023	P	03/31/2023					P	03/31/2023			
	+-																			
	DOTUE	IT-UP			ROOT PASS			-	T	COVER PASS VT			MT/PT			IDE RT	Ī			ROTEST
SHOP / FIELD PROCEDUR	P/F	03 / 22 / 2023		DATE 03 / 22 / 2023	P/F P		DATE 03 / 22 / 2023		03 / 22 / 2023	P/F P	03 / 22 / 2023		P/F	DATE	INSPECTOR	P/F P	DATE 03 / 30 / 2023		P/F N/A	DATE
FIELD OCI TM1-b	 '	03 / 22 / 2023		03 / 22 / 2023	r		03 / 22 / 2023		03/22/2023	, , ,	03 / 22 / 2023					,	03 / 30 / 2023		N/A	-
	+																			_
l	 	IT-UP			ROOT PASS					COVER PASS						IDE			HYD	ROTEST
SHOP / FIELD PROCEDUR	FITUP	DATE		DATE	VT		DATE		DATE	VT	DATE		MT/PT	DATE	INSPECTOR	RT	DATE		P/F	DATE
FIELD OCI TM1-b	P/F	03/21/2023		03 / 21 / 2023	P/F P		03/21/2023		03/21/2023	P/F P	03/21/2023		P/F			P/F P	03 / 30 / 2023		N/A	_
	F	IT-UP			ROOT PASS					COVER PASS					N	IDE			нүрг	ROTEST
SHOP / FIELD PROCEDUR	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE
FIELD OCI TM1-b	Р	03 / 24 / 2023		03 / 24 / 2023	Р		03 / 24 / 2023		03 / 24 / 2023	Р	AW					P	03 / 30 / 2023		Р	08/08/
		IT-UP			ROOT PASS					COVER PASS					N	IDE			HYDF	ROTEST
SHOP / FIELD PROCEDUR	E FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE
FIELD OCI TM1-b	Р	03 / 27 / 2023		03 / 27 / 2023	Р		03 / 27 / 2023		03 / 27 / 2023	Р	03 / 27 / 2023					P	03 / 30 / 2023		Р	08/08/2
																				-
																				
		IT-UP			ROOT PASS					COVER PASS			/		N N	IDE			HYDR	ROTEST
SHOP / FIELD PROCEDUR	Pyr	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE
FIELD OCI TM1-b	Р	03 / 23 / 2023		03/23/2023	Р		03/23/2023		03 / 23 / 2023	P	03 / 23 / 2023						03 / 30 / 2023		N/A	-
	+								03/31/2023	P	03/31/2023					Р	03/31/2023		<u> </u>	-
	+-		<u> </u>																 	
		IT-UP			ROOT PASS					COVER PASS						IDE			HYDR	ROTEST

•										cpail 100											
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER (b) (3) (A)	DATE	VT P/F	DATE	INSPECTOR (b) (3) (A)-	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
FIELD	OCI FW M1-d-1	FILLET WELD							(5) (5) (1)	03 / 29 / 2023	Р	03 / 29 / 2023	(5) (5) (7)							N/A	
											STRUCTURAL WELD										
		FIT	-UP			ROOT PASS					COVER PASS					NI	DE			HYDR	ROTEST
SHOP / FIELD	PROCEDURE	FITUP	DATE	WELDER	DATE	VT	INSPECTOR	DATE		DATE	VT	DATE		MT/PT	DATE	INSPECTOR	RT	DATE	INSPECTOR	P/F	DATE
FIELD	OCI FW M1-d-1	P/F FILLET WELD				P/F				03/29/2023	P/F P	03 / 29 / 2023		P/F			P/F			N/A	
											STRUCTURAL WELD										
		FIT	-UP			ROOT PASS					COVER PASS					NI	DE			HYDR	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
FIELD	OCI FW M1-d-1	FILLET WELD				-,,,				03 / 29 / 2023	P	03 / 29 / 2023		-,,			-,,			N/A	
											STRUCTURAL WELD										
		FIT	-UP			ROOT PASS					COVER PASS					NI	DE			HYDR	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
FIELD	OCI FW M1-d-1	FILLET WELD				-,-				03 / 29 / 2023	Р	03 / 29 / 2023					,			N/A	
											STRUCTURAL WELD										
		FIT	-UP			ROOT PASS					COVER PASS					NI	DE			HYDR	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
FIELD	OCI FW M1-d-1	FILLET WELD				,-				03 / 29 / 2023	P	03 / 29 / 2023		-,,			-,,			N/A	
											STRUCTURAL WELD										
		FIT	-UP			ROOT PASS					COVER PASS					NI	DE			HYDR	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
FIELD	OCI FW M1-d-1	FILLET WELD				-,,.				03 / 29 / 2023	P	03 / 29 / 2023		-,-			-,-			N/A	
											STRUCTURAL WELD										
											SINGEIGHAL WELL						l			1	1

RHEmergentPipelineRepairs N39430-20-0-2225-N3943021f4207

× -																								
	EPAIR ID			FIT	-UP			ROOT PASS					COVER PASS					N	DE			HYDR	IOTEST	1
b) ح) (3) (A)	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	1
ح		FIELD	OCI FW M1-d-1	FILLET WELD							(b) (6)	03 / 29 / 2023	Р	03 / 29 / 2023	(b) (6)							N/A		1
۷.													STRUCTURAL WELD											1
>																								
ح				FIT	-UP			ROOT PASS					COVER PASS					N	DE			HYDR	IOTEST	1
5		SHOP / FIELD	PROCEDURE	PITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	1
>		FIELD	OCI FW M1-d-1	FILLET WELD								03 / 29 / 2023	Р	03 / 29 / 2023								N/A		
													STRUCTURAL WELD											1
																								1
\sim							ı	1	1	1	1	1	1	I	1	1				1		1		3 ,

RHEmergentPipelineRepairs N39430-20-0-2225-N394302174207



(b) (3) (A), (b) (4)

IN-PROCESS EXAMINATION REPORTS



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)		tem insp	pected: er tie point etc	attach drawing)	Weld (b)	(3)(A)
Applicable Code:	Alternative Te	sting Approved	by:	(6)		-	
ASME B31.3-2020		QA Le	ad:				
(b) (4)							
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□ H	TPT Passes□	MT Fina	RT Final⊠	SWUT PAUT□	Final Root Int. VT□

	Hold	Findings, Repairs and	Sign	
Inspection Milestones	Point	Observations	Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	16 March 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		16 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		16 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		16 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		16 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		20 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		20 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		20 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	×	Pass		20 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		
		·		

Additional Comments: (b) (4)			
	A B B B C C C C C C C C C C C C C C C C		
(b)(6)			
Inspector Name	Inspector Signature	Date	Certification: □CAW ☑CW □SCW



Revision: 0

Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)		tem insp	pected: er tie point etc	attach drawing)	Weld (b)	(3)(A)
Applicable Code:	Alternative Te	sting Approved	by:	(6)		-	
ASME B31.3-2020		QA Le	ad:				
(b) (4)							
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□ H	TPT Passes□	MT Fina	RT Final⊠	SWUT PAUT□	Final Root Int. VT□

	Hold	Findings, Repairs and	Sign	
Inspection Milestones	Point	Observations	Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	21 March 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		21 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		21 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		21 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		21 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		21 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		21 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		21 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		21 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments: (b) (4)			
(b) (6)			
Inspector Name	Inspector Signature	Date	Certification: □CAW ☑CW □SCW



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	b) (3) (A)			/I \	pected: er tie point etc	attach drawing)	Weld (b)	(3) (A)	
Applicable Code:	Alternative Te	esting Approve	d by:	(h)	(6)		'		•
ASME B31.3-2020		QA L	-ead:	(D)					
ASME B31.3-2020 (b) (4)									
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□	HTPT	Passes□	MT Fina I □	RT Final⊠	SWUT PAUT□	Final Root Int. V	T

Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	- 4.10
Welder is Qualified: Stamp #(b) (6)		Acceptable		22 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		22 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		22 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		22 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		22 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		22 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		22 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		22 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments:			
(b) (4)			
$\overline{}$			
Inspector Name	Inspector Signature	Date	Certification: □CAW ☑CW □SCW



Revision: 0

Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)		tem insp	pected: er tie point etc	attach drawing)	Weld (b)	(3)(A)
Applicable Code:	Alternative Te	sting Approved	by:	(6)		-	
ASME B31.3-2020		QA Le	ad:				
(b) (4)							
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□ H	TPT Passes□	MT Fina	RT Final⊠	SWUT PAUT□	Final Root Int. VT□

	Hold	Findings, Repairs and	Sign	
Inspection Milestones	Point	Observations	Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	21 March 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		21 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		21 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		21 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		21 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		21 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		21 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		21 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		21 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments: (b) (4)			
(b) (6)			
Inspector Name	Inspector Signature	Date	Certification: □CAW ☑CW □SCW



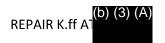
Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	b) (3) (A)			tem Insp	pected: er tie point etc.	attach drawing)	Weld (b)	(3) (A)	
Applicable Code:	Alternative Te	sting Approved	d by:	(h)	(6)		<u> </u>		
ASME B31.3-2020		QA L	.ead:	(D)					
(b) (4)									
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□ I	HTPT F	Passes□	MT Fina I □	RT Final⊠	SWUT PAUT□	Final Root Int. VT□	

Hold Point	Findings, Repairs and Observations	Sign Off	Date
	Acceptable	(b) (6)	23 March 2023
	Acceptable		23 March 2023
	Acceptable		23 March 2023
	Acceptable		23 March 2023
	Acceptable		23 March 2023
	N/A		
	Acceptable		23 March 2023
	Acceptable		23 March 2023
	N/A		
	Acceptable		23 March 2023
\boxtimes	Pass		23 March 2023
	N/A		
	N/A		
	N/A		
\boxtimes	Passed, (b) (4), (b) (6)		30 March 2023
	N/A		
	N/A – not accessible		
		Point Observations □ Acceptable □ Acceptable □ Acceptable □ Acceptable □ N/A □ Acceptable □ Acceptable □ Acceptable □ N/A □ Acceptable □ N/A □ Acceptable □ N/A □ N/A □ N/A □ N/A □ N/A □ N/A □ N/A □ N/A □ N/A □ N/A	Point Observations Off □ Acceptable (b) (6) □ Acceptable □ Acceptable □ N/A □ Acceptable □ Acceptable □ Acceptable □ N/A □ Acceptable □ N/A □ Acceptable □ N/A □ Acceptable □ N/A □ N/A □ N/A □ N/A □ N/A □ N/A □ N/A □ N/A

Additional Comments:			
(b) (6)			
Inspector Name	Inspector Signature	Date	Certification: □CAWI ⊠CWI □SCWI



NDE REPORTS



Repair 183

(b) (4) w. o. Ne	0.: 23-034
	No.: 6533023
Date: _ 3/3	30/23
Page	of 4

STOMER	(4)	CUST JOB#	SPECIFICATION	ASMEV	ACCEPTANCE ASME 1831.3	1. Single Wall
OJECT & L	I ement In	DWG. NO.	PROCEDURE	A)TOUG REV C	ACC. PROC. \$31.3 REV ZO15	
SOURCE TY	97 FILM A	PB SCREENS	PENS: ASTM	SHIMS MAT'L/THKNS		
L	(2)	/ / / /	TYPE 1B	TECHNIQUE USED	1 /3 THICKNE (b) (3) (A	Panoramic
	151	(A)	MATERIAL SS	EXPOSURE TIME	LOO JOINT TY	2. Single Wall
		\' \'	LOCATION F	PROCESSING [MANUAL AUTOMATIC PIPE DIA.	
WELD#	VIEW#	GEOMETRIC UNSHARPNESS *UG*		/////	REMARKS	Offset 3. Double Wall
in ys	(b) (3) (A	0701			(b) (3) (A)	
		/ 🗴				4. Double Wall 0/90
24 WZ		.670 X	X			
		/ X				Elliptical
			-			5. Plate •
2 W3		-070 X				
		/ X	-		<u>.</u>	
				++++		6. Other
						-
(b)) (6			B	3/30/23	
				T-TC-1A Level	Date of Inspection	Customer

h\	

Repair 183

(b) (4)
W. O. No.: <u>23-03</u>

Report No.: <u>GSo33</u>023

Page <u>Z</u> of <u>4</u>

3-30-2027

Date of Inspection

WELD#	VIEW#	GEOMETRIC UNSHARPN *UG*	ESS		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			MARKS	/ A \
FZY WY	(b) (3) (A)	1026	X X						(3)	5)	(A)
FZY WS		,0Z6	X X X								
F24 W6		.020	X X	/							
F24 W7		.020	X	X /							
		/	X								
					/ L	16	37				

SNT-TC-1A Level



Repair 183

	W. O. No.: <u>73-0</u> Report No.: <u>65-3</u>	034 13123
Date:	212.12	3
Page	of J	

Customer

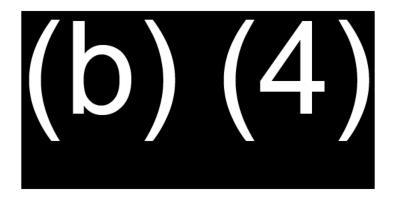
CORM NOT ONE 1

PROJECT (A)	Emigent Ive	DWG. NO.		PRO	CEDURE	VOTOG REV	ACC. P	ROC. \$31.3 REV ZOI	5
RT SOURCE TO	/ 0\	PAD PB SO	REENS	PENS:	1B	SHIMS MAT'L		THICKNES (b) (3) (A) Panoramic
(D)	(<i>3)</i>	(A)		MATERIA	-	EXPOSURE 1	TIME 5:30	JOINT TYP	2. Single Wall
WELD#	VIEW#	GEOMETRIC UNSHARPNESS *UG*				///	////	REMARKS	Offset 3. Double Wall
F24-WZ	(b) (3) (A)	.020)			\prod				
F24-W7 121		.070 X							4. Double Wall 0/90
									5. Plate
									6. Other
b) (6)							3/31/23	

SNT-TC-1A Level

Date of Inspection

HYDROTEST REPORTS



uv	DD	CCT	TAT	107	rest	EO	DAA
пτ	DΚ	U3 I	AI		ESI	TO.	KIVI.

client: (b) (4)

SYSTEM: SPOOL HYDRO

Proje	ct Name:	Red Hill Emergent Pipe	eline			
Systen	n Description Starting poir	(h) ('	3) (A	1		
C	starting poin					
Cor	nection Poir		•			
	Ending poir					
PS	Req.:			eq.:	4 hours	
Start of	Test Period:	Time:	11:03 hrs	Date:	8/8/2023	
End of T	est Period:	Time:	15:03 hrs	Date:	8/8/2023	
	_					
No.	Time	PSI READING		Remarks		
1	11.03	(b) (3) (A)		Pic taken; no leaks det		
2	11:18			No leaks detected	d	
3	11:33			No leaks detected	d	
4	11:48			No leaks detected	d	
5	12:03			Pic taken		
6	12:18			No leaks visual, ambient tempe	rature went up	
7	12:33		No	o leaks visual, ambient tempera	ture keeps rising	
8	12:48		No	o leaks visual, ambient tempera	ture keeps rising	
9	13:03			Picture taken		
10	13:18		No leaks visu	al, PSI increased to (a) (A) ambie	nt temperature keeps rising	
11	13:33		No	o leaks visual, ambient tempera	ture keeps rising	
12	13:48		No	leaks visual, PSI rising from am	bient temperature	
13	14:03		Pic	cture taken, no loaks, gauge inc	roased to (b) (3) (A) SI	
14	14:18			siincreased(b)(3)	(A)	
15	14:33			No leaks visual,	·	
16	14:48		No leaks visu	al, PSI increased to ambie	nt temperature keeps rising	
17	15:03			End test, picture taken, no	visual leaks	
		•				

PSI Gauge Manufacturer:	Ashcroft 0-600	
Test Witness Client:	(b) (c)	
Test Witness OCI Rep.:	(D) (O)	

(b) (4)

Certificate of Calibration

(b) (4)

Ashcroft

Manufacturer

32488

Serial Number

02/28/2023

Calibration Date

02/28/2024

Recalibration Due

(b) (4)

Instrument Accuracy / Procedure

0-600 PSI

Model

Pressure Gauge

Description

182,039

Test Number

Asset Number

23 °C

43 % RH

Temperature

Humidity



Calibration Standards Used:

(b) (4)

Description
Standards on File

Model

Serial

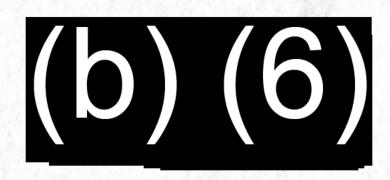
Date Calibrated 01/01/2023 Date Due 01/01/2024

In Tolerance

Condition Received

In Tolerance

Condition Returned



				QUALITY VALIDATION	(QV) REPO	ORT				
]	Red Hill Bulk Fuel Storage l	acility Defue	el				
Valid	dation Firm	HDR Env	rironmental	, Operations and Construction	n, Inc.		Repair No.	184		
	Address	9781 S. N	Meridian Bl	vd., Suite 400, Englewood, C	O 80112			F24.A22.	16	
C	ontract No.	FA89031	5D0007, D	.O. FA8903-19-F-0027			11 AUG 2	2023		
Q'	V Engineer	(b) (6	3)				Date			
				VALIDATION						
Sou	ırce	1	PDF Page N	o. Facility Geogra	phic Area		Location	Reference		
EXWC		N/A		(b) (3)	(A)					
Repair I	Description	(b) (3) (A)		Sour	ce Contract Reference			
Cor	scription of ntractor QC nod(s) Used	inspection (b) (c	n via Radio 3) (A)	detail in CQCP. Pipe butt we ographic Testing; 100% VT of uirement. Hydrotest of spool	n all shear	1	ntractor QC s Reviewed			
Val	otion of QA idation and bservations	Form 429 design ar JTF-RH 9 JTF-RH 0 submittal	96/2. Visua nd material secondary QV visually s, daily rep	Ily inspected completed insta submittals. Reviewed NDE QA and 3rd Party QV comple inspected repairs and review	llation; match eports. eted.	in the daily CQC reports using NAV hed completed construction against or QC documentation (Work Plan,				
	Rework	Needed	, , ,	Photo Record Attac	hed	Repair	Work Vali	dated as Co	mplete	
0	Yes	•	No	See Page 2.		•	Yes	0	No	
				weld map/design detail, and		sult include	d for refere	ence.		
				CERTIFICATIO	ON CONTRACTOR OF THE PROPERTY	0 \				
		work validates		QV ENGINEER SIGNATURI	6)					
eport was p		Juliana di		DATE	11 AUG 2	2023				

(b) (3) (A)

EMERGENT PIPELINE REPAIRS Repair 184

HOP / FIELD			r-UP			ROOT PASS					COVER PASS			NDE						HYDROTEST		
HOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATI	
FIELD	OCITM1-b	Р	04/27/2023	(b) (6)	04/27/2023	Р	-(b) (6)	04/27/2023	(b) (6)	04/28/2023	Р	04/28/2023	(b) (6)				Р	05 / 03 / 2023	(b) (6)	NA.		
		FI	r-up			ROOT PASS			T		COVER PASS					N	IDE			HYDI	ROTEST	
HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE	T	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DA	
FIELD	OCI TM1-b	P	05/01/2023		05/01/2023	P		05/01/2023	T T	05/01/2023	P	05/01/2023	† 33	-,,			P	05 / 03 / 2023		NA NA		
		FI	r-UP			ROOT PASS			T		COVER PASS					N	IDE			нург	ROTEST	
HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE	T	DATE	VT P/F	DATE	T	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DA	
FIELD	OCI TM1-b	P	05/01/2023		05/01/2023	P		05/01/2023	†	05/01/2023	Р	05/01/2023	† 33	-,,			P	05 / 03 / 2023		NA NA		
		FI	r-UP			ROOT PASS			\top		COVER PASS					N	IDE			HYDI	ROTEST	
HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE	T	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	D	
FIELD	OCI TM1-b	P	04/17/2023		04/17/2023	P		04/17/2023	i e	04/18/2023	P	04/18/2023		-,,			P	05 / 03 / 2023		NA NA		
		FI	r-UP			ROOT PASS			T		COVER PASS					N	IDE			HYDI	ROTEST	
HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE	T	DATE	VT P/F	DATE	T	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	D	
FIELD	OCI TM1-b	P	04/18/2023		04/18/2023	Р		04/19/2023	i e	04/19/2023	Р	04/19/2023	† 1	-,-			Р	05 / 03 / 2023		Р	08/0	
		FIT	r-up			ROOT PASS			T		COVER PASS					N	IDE			нург	ROTEST	
HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE	T	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DV	
FIELD	OCI TM1-b	Р	04/18/2023		04/18/2023	Р		04/19/2023		04/19/2023	Р	04/19/2023	† 1				Р	05 / 03 / 2023		Р	08/0	
		FIT	r-UP			ROOT PASS			T		COVER PASS					N	IDE			HYDI	ROTEST	
HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE	T	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DA	
FIELD	OCI TM1-b	P	05/02/2023		05 / 02 / 2023	P		05 / 02 / 2023		05 / 02 / 2023	P	05 / 02 / 2023	† 155	-,-			P	05/03/2023		NA NA		

RHEmergentPipelineRepairs N39430-20-0-2225-N3943021F4207

EMERGENT PIPELINE REPAIRS Repair 184

											open ro i											
			FIT	-UP			ROOT PASS					COVER PASS						NDE			HYDF	ROTEST
) (A) _{si}	HOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	_(b) (6)_	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DAT
	FIELD	OCI FW M1-d-1	FILLET WELD								05 / 04 / 2023	Р	05 / 04 / 2023	(b) (6)	Р	05 / 04 / 2023	(b) (6)				NA	
												STRUCTURAL WELD	,									\perp
			FIT	-UP			ROOT PASS					COVER PASS						NDE			HYD	ROTEST
SI	HOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DA
	FIELD	OCI FW M1-d-1	FILLET WELD								05/04/2023	Р	05/04/2023		Р	05 / 04 / 2023					NA NA	
												STRUCTURAL WELD										
			FIT	-UP			ROOT PASS					COVER PASS						NDE			HYDI	ROTEST
SI	HOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DA
	FIELD	OCI FW M1-d-1	FILLET WELD				-,,.				05/04/2023	P	05/04/2023		P	05 / 04 / 2023					NA	T
												STRUCTURAL WELD										
			FIT	-UP			ROOT PASS					COVER PASS						NDE			HYD	ROTEST
SI	HOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DA
	FIELD	OCI FW M1-d-1	FILLET WELD				-7/				05/04/2023	P	05/04/2023		P	05 / 04 / 2023					NA.	\vdash
												STRUCTURAL WELD										
																						\Box
			FIT	-UP			ROOT PASS					COVER PASS						NDE			нург	ROTEST
SI	HOP / FIELD	PROCEDURE	FITUP	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DA
	FIELD	OCI FW M1-d-1	P/F FILLET WELD				P/F				05/04/2023	P P	05 / 04 / 2023		P/F	05 / 04 / 2023		7//			NA NA	+
												STRUCTURAL WELD										\vdash
			FIT	-UP			ROOT PASS					COVER PASS						NDE			HAD	ROTEST
SI	HOP / FIELD	PROCEDURE	FITUP	DATE	WELDER	DATE	VT	INSPECTOR	DATE		DATE	VT	DATE		MT/PT	DATE		RT	DATE	INSPECTOR	P/F	DA
	FIELD	0CI FW M1-d-1	P/F FILLET WELD				P/F				05/04/2023	P/F P	05 / 04 / 2023		P/F P	05/04/2023		P/F			NA.	+
												STRUCTURAL WELD				.,,					<u> </u>	+-
																						+
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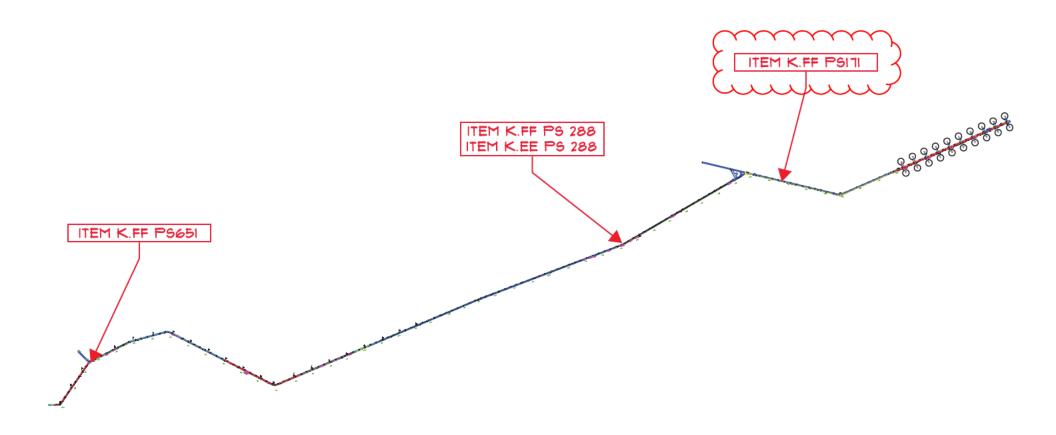
RHEmergentPipelineRepairs N39430-20-0-2225-N394302174207

EMERGENT PIPELINE REPAIRS

Repair 184

		FIT-	-UP			ROOT PASS					COVER PASS					N	DE			HYDR	ROTEST	_ (
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE]
FIELD	OCI FW M1-d-1	FILLET WELD							(b) (b)	05 / 04 / 2023	Р	05 / 04 / 2023	(b) (6)	Р	05 / 04 / 2023	j(b) (6				NA] .
											STRUCTURAL WELD]
																						֓֞֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
		FIT-	UP			ROOT PASS					COVER PASS									HYDS	ROTEST] .
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE	
FIELD	OCI FW M1-d-1	FILLET WELD								05 / 04 / 2023	Р	05 / 04 / 2023		Р	05 / 04 / 2023					NA		
											STRUCTURAL WELD].
] .
	FIELD SHOP / FIELD FIELD	SHOP / FIELD PROCEDURE FIELD OCI FW M1-d-1	FIELD OCI FW M1-d-1 FILLET WELD FITT SHOP / FIELD PROCEDURE P/F FIELD OCI FW M1-d-1 FILLET WELD	FIELD OCI FW M1-4-1 FILLET WELD FIT-UP SHOP / FIELD PROCEDURE PYE FIELD OCI FW M1-4-1 FILLET WELD	FIELD OCI FW M1-d-1 PILET WELD FIT-UP SHOP / FIELD PROCEDURE PIP DATE WELDER FIELD OCI FW M1-d-1 PILET WELD	FIELD OCI FW M1-d-1 FILLET WELD FIT-UP SHOP / FIELD PROCEDURE P/F DATE WELDER DATE FIELD OCI FW M1-d-1 FILLET WELD	FIELD OCI FW M1-d-1 FILLET WELD FIT-UP ROOT PASS SHOP / FIELD PROCEDURE P/F DATE WELDER DATE VT P/F FIELD OCI FW M1-d-1 FILLET WELD	FIELD OCI FW M1-d-1 FILLET WELD	FIELD OCI FW M1-d-1 FILLET WELD	FIELD OCIFW M1-d-1 FILET WELD FIT-UP ROOT PASS SHOP / FIELD PROCEDURE P/F DATE WELDER DATE VT P/F INSPECTOR DATE FIELD OCIFW M1-d-1 FILET WELD	FIELD OCI FW M1-d-1 FILET WELD	FIELD OCIFW M1-d-1 FILLET WELD STRUCTURAL WELD FIT-UP ROOT PASS SHOP / FIELD PROCEDURE P/F DATE WELDER DATE VT P/F INSPECTOR DATE FIELD OCIFW M1-d-1 FILLET WELD STRUCTURAL WELD STRUCTURAL WELD STRUCTURAL WELD STRUCTURAL WELD STRUCTURAL WELD STRUCTURAL WELD STRUCTURAL WELD STRUCTURAL WELD	FIELD OCIFW M1-d-1 PILLET WELD	FIELD OCI FW M1-d-1 FILLET WELD	FIELD OCIFW M1-0-1 PILLET WELD (b) (6) P STRUCTURAL WELD FIT-UP ROOT PASS SHOP / FIELD PROCEDURE PUP DATE WELDER DATE PUP INSPECTOR DATE FIELD OCIFW M1-0-1 PILLET WELD (5 / 04 / 2023) P 05 / 04 / 2023 P STRUCTURAL WELD STRUCTURAL WELD MTT / PT PUP STRUCTURAL WELD STRUCTURAL WELD	FIELD OCIFW M1-d-1 FILLET WELD FIT-UP ROOT PASS SHOP / FIELD PROCEDURE FIVE PIFE DATE WELDER DATE FIELD OCIFW M1-d-1 FILLET WELD FIT-UP ROOT PASS SHOP / FIELD PROCEDURE FIVE DATE WELDER DATE FIELD OCIFW M1-d-1 FILLET WELD FIT-UP ROOT PASS STRUCTURAL WELD MT / PT DATE PIFE DATE FIVE DATE STRUCTURAL WELD MT / PT DATE FIELD OCIFW M1-d-1 FILLET WELD STRUCTURAL WELD STRUCTURAL WELD FIT-UP DATE PIFE DATE FILET WELD STRUCTURAL WELD FIT-UP STRUCTURAL WELD MT / PT DATE FILET WELD STRUCTURAL WELD STRUCTURAL WELD FIT-UP DATE FILET WELD FIT-UP DATE FILET WELD FIT-UP DATE FILET WELD STRUCTURAL WELD FIT-UP DATE FILET WELD	FIELD OCIFW M1-d-1 FILLET WELD	FIELD OCIFW M1-d-1 FILLET WELD	FIELD OCIFW M1-d-1 PILLET WELD	FIELD OCIFW M1-d-1 PILLET WELD	FIELD OCIFW M1-d-1 FILLET WELD FIT-UP ROOT PASS SHOP / FIELD PROCEDURE FIT-UP ROOT PASS SHOP / FIELD PROCEDURE FIT-UP PROCEDURE PROCEDURE FIT-UP PROCEDURE PROCED	FIELD OCIFW M1-4-1 FILLET WELD

RHEmergentPipelineRepairs N39430-20-D-2225-N3943021F4207



(b) (3) (A), (b) (4)

IN-PROCESS EXAMINATION REPORTS



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)		tem ins	pected:	attach drawing)	(b) (3) (A	
Applicable Code:	Alternative To	esting Approved by	$\mathbf{I}(\mathbf{h})$	(6)				
ASME B31 3-2020		QA Lead						
(b) (4)								
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□ HTP	Γ Passes□	MT Fina I □	RT Final⊠	SWUT PAUT□	Final Root Int. V	T

			1	
Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	27 Apri l 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		27 Apri l 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		27 April 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		27 April 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		27 April 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		28 Apri l 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		28 Apri l 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		28 Apri l 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		28 Apri l 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	⊠	Passed, (b) (4), (b) (6)		4 May 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

(b) (3) (A)			
(1) (0)	CERTIFICATION		
(b) (6)			
Inspector Name	Inspector Signature	Date	Certification: □CAWI ⊠CWI □SCWI



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

	Equipment /Line #:	(b) (3) (A)		Item Inspected:	attach drawing)	(3) (A)
	Applicable Code:	Alternative Tes	sting Approved by:	1(h) (6)		
J	ASME B31 3-2020		QA Lead:	$\mathbb{N} \cup \mathcal{N} \cup $		
l	o) (4)					
	NDE required by Scope: MT	Root□ MT Passes□ F	TPT Root□ HTPT	Passes□ MT Final□	RT Final⊠ SWUT PAUT	☐ Final Root Int. VT☐

			_	
Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	1 May 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		1 May 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		1 May 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		1 May 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		1 May 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		1 May 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		1 May 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		1 May 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		1 May 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4), (b) (6)		4 May 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments:			
(b) (3) (A)			
	CERTIFICATION		
(b) (6)			
Inspector Name	Inspector Signature	Date	Certification: □CAWI ⊠CWI □SCWI



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A)		tem ins	pected:	attach drawing)	(b) (3) (A	
Applicable Code:	Alternative To	esting Approved by	$\mathbf{I}(\mathbf{h})$	(6)				
ASME B31 3-2020		QA Lead						
(b) (4)								
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□ HTP	Γ Passes□	MT Fina I □	RT Final⊠	SWUT PAUT□	Final Root Int. V	T

Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	1 May 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		1 May 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		1 May 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		1 May 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		1 May 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		1 May 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		1 May 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		1 May 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		1 May 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4), (b) (6)		4 May 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments			
(b) (3) (A)			
	CERTIFICATION		
(b) (6)			
Inspector Name	Inspector Signature	Date	Certification: □CAWI ⊠CWI □SCWI



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

	Equipment /Line #:	(b) (3) (A)		Item Inspected:	attach drawing)	(3) (A)
	Applicable Code:	Alternative Tes	sting Approved by:	1(h) (6)		
J	ASME B31 3-2020		QA Lead:	$\mathbb{N} \cup \mathcal{N} \cup $		
l	o) (4)					
	NDE required by Scope: MT	Root□ MT Passes□ F	TPT Root□ HTPT	Passes□ MT Final□	RT Final⊠ SWUT PAUT	☐ Final Root Int. VT☐

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Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OC TM1-b		Acceptable	(b) (6)	17 April 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		17 April 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		17 April 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		17 April 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		17 April 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		17 April 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		18 April 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		18 April 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	×	Passed, (b) (4), (b) (6)		4 May 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments:			
(b) (3) (A)			
(D)(D)(I)			
	CERTIFICATION		
(h) (6)			
(D)(O)			
V / V	and a star O' and the star	Dete	
Inspector Name	Inspector Signature	Date	Certification: □CAWI ⊠CWI □SCWI



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

	Equipment /Line #:	(b) (3) (A)		Item Inspected:	attach drawing)	(3) (A)
	Applicable Code:	Alternative Tes	sting Approved by:	1(h) (6)		
J	ASME B31 3-2020		QA Lead:	$\mathbb{N} \cup \mathcal{N} \cup $		
l	o) (4)					
	NDE required by Scope: MT	Root□ MT Passes□ F	TPT Root□ HTPT	Passes□ MT Final□	RT Final⊠ SWUT PAUT	☐ Final Root Int. VT☐

	_			
Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	2 May 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		2 May 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		2 May 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		2 May 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		2 May 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		2 May 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		2 May 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		2 May 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		2 May 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	⊠	Passed, (b) (4), (b) (6)		4 May 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

Additional Comments:			
(b) (3) (A)			
	CERTIFICATION		
(b) (6)			
Inspector Name	Inspector Signature	Date	Certification: □CAWI ⊠CWI □SCWI

NDE REPORTS



Repair 184

(b) (4)

W. O. No.: 73-034

Report No.: 550473

Date: 514173

FORM NDT-005.1							
сивто((b) (4)	CUST JOB#		SPECIFICATION	ASME V	ACCEPTAN	ICE ASME B31.3	1. Single Wall
PROJECT Rol Hill Emerent DIS	el DWG. NO.		PROCEDURE	UDIQUE REV C	ACC. PRO	B31.3 REV ZOIS	
0 , ,	the state of the s	PB SCREENS	PENS: ASTM	SHIMS MAT'L/THKNS	/	MATERIAL	
/ / / / / / / / / /	/ \	\	TYPE 1B	TECHNIQUE USED 2	3/1	THICKNES(b) (3) (A)	Panoramic
			MATERIAL SS	EXPOSURE TIME 30	Sec	JOINT TY	2. Single Wall
		-/	LOCATION F	PROCESSING	MANUAL AUTOMATIC	PIPE DIA.	
WELD#	GEOMETI			/////	in i		Offset
WELD	*UG*	NESS (5)			E /	REMARKS	3. Double Wall
(b) (3) (A	.000	X				(3)(A	
	.000	X					Double Wall 0/90
							Elliptical
		X					Plate •
		X					
	.020	X					
	/	X					Other
		X					
		X					
(b) (6)				I		5/4/23	0
				SNT-TC-1A Level	L	Date of Inspection	Customer

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Repair 184

(b) (4)
W. O. No.: <u>73-534</u>

Report No.: <u>655-547</u>

Page <u>8</u> of 3

WELD#	VIEW#	GEOMETRIC UNSHARPNI *UG*		\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		The state of the s	REMARKS	
(b) (3)	(A)	.670	X			(b)	(3)	(A)
		.000	× ×				\ /	
		.070	X					
			X X					
		.020	\			-		
		.070	X					
			X					
				b)	(6		1.	
						工		5/4/23

Film Interpreter

SNT-TC-1A Level

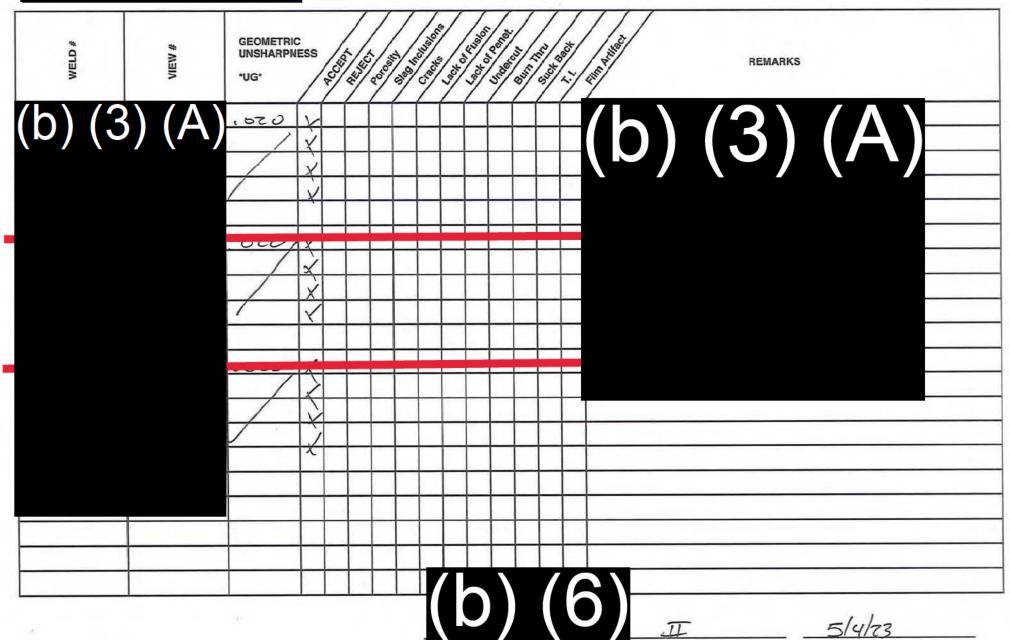
Date of Inspection

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\cup	

Repair 184

(b) (4) W. O. No.: <u>73-03</u> Report No.: <u>6556423</u> Page <u>3</u> of <u>3</u>

Date of Inspection

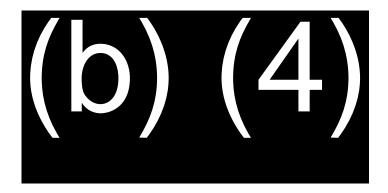


Film Interpreter

SNT-TC-1A Level

(b) (3) (A), (b)	(Δ)	LIC	OUID PENE	TRANT EX	AMINATION RECO	ORD
(D) (D) (N)	(-)		QUID I LIVE		in in the contract of the cont	
	Client	(b) (4)		Location	n: Red Hill	Page 1 of 1
	(b) (4)	0.:		Job No.:	23-034	-
	(b) (4) _P	Procedure: NDT002	2.2 Rev C	Code: A	SME B31.3	
	Report	No. GS050423				
(b) (3) (A)						
WIATEKIAL		PENETRA	NT MATERI	AL	TECH	INIQUE
TYPE: CS FW	BRA	ND DESIGNA	TION PO#	BATCH#	Preclean Drying Time:	5 MIN
Surface Condition: Clear	ner			1A01K	Method of Application:	Brush
As Welded	Magna	flux SKC-	S N/A	030929		
Ground Pene	trant			06010K	Dwell Time: 10 Min	
Other Weld Prep	Magna	flux SKL-S	P1 N/A	04394		
New weld Emu	lsifier				Emulsification Time: N	J/A
	N/A	A N/A	N/A	N/A		
Deve	eloper	a arra		07K15K	Developing Time: 15 M	lin
T 1250 F 1250 F	Magnat			08738	(b) (4) Control #	
Temperature: <u>X</u> 60° F – 125° F Other	Illumin	ation: White	FC 150		UV Meter N/A	
Item(s)	Accept Reject	Sketch/Note	S			
(b) $(3) (A)$						
		1				
		┥				
			No in	dications not	ted at time of inspection	n.
					r	
		1				
Performe (b) (6) Level II Da	ate: 5/04/2023		Reviewed B	y:		Date:

HYDROTEST REPORTS



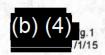
HYDROSTATIC TEST FORM

client: (b) (

SYSTEM: SPOOL HYDRO

Proje	ct Name:	Red Hill Emergent Pipe	eline			
	n Description: Starting point nnection Point Ending point	(b) (3	3) (A)			
PS	l Req.:			Req.:	4 hours	
Start of ⁻	Test Period:	Time:	11:03 hrs	Date:	8/8/2023	
End of T	est Period:	Time:	15:03 hrs	Date:	8/8/2023	
No.	Time	PSI READING		Remarks		_
1	11.03	(P) (3) (V)		Pic taken; no leaks det	rected	_
2	11:18	-(D)(3)(A)		No leaks detected		_
3	11:33	——————————————————————————————————————		No leaks detected		_
4	11:48	——————————————————————————————————————		No leaks detected	d	_
5	12:03			Pic taken		_
6	12:18		N	lo leaks visual, ambient tempe	rature went up	
7	12:33		No	leaks visual, ambient tempera	ture keeps rising	
8	12:48		No	leaks visual, ambient tempera	ture keeps rising	
9	13:03			Picture taken (b) (3) (A)		
10	13:18		No leaks visua		nt temperature keeps rising	
11	13:33			leaks visual, ambient tempera	<u> </u>	
12	13:48			eaks visual, PSI rising from am	(b) (3) (A	
13	14:03			ture taken, no leaks, gauge inc		_
14	14:18		PS	SI INCREASED TO (b) (3) (A)		_
15	14:33			No leaks visual,		_
16	14:48		No leaks visua	·	nt temperature keeps rising	_
17	15:03			End test, picture taken, no	visual leaks	_

PSI Gauge Manufacturer:	Ashcroft 0-600	
Test Witness Client:	(h) (6)	
Test Witness OCI Rep.:		



Certificate of Calibration

(b) (4)

Ashcroft

Manufacturer

32488

Serial Number

02/28/2023

Calibration Date

02/28/2024

Recalibration Due

(b) (4)

Instrument Accuracy / Procedure

0-600 PSI

Model

Pressure Gauge

Description

182,039

Test Number

Asset Number

23 °C

43 % RH

Temperature

Humidity



Calibration Standards Used:



Description
Standards on File

Model

Serial

Date Calibrated 01/01/2023

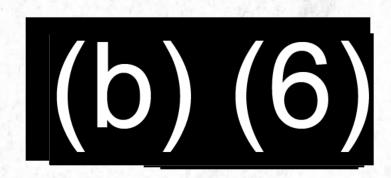
Date Due 01/01/2024

In Tolerance

Condition Received

In Tolerance

Condition Returned



	QUALITY VALIDATION (QV) REPORT											
	Red Hill Bulk Fuel Storage Facility Defuel											
Vali	idation Firm	HDR Env	vironmental	, Operation	ns and Construction,	Inc.		Repair No.	188			
	Address	9781 S. N	Meridian Bl	vd., Suite 4	00, Englewood, CO	80112			JP5.A21.	02		
C	Contract No.	FA89031	5D0007, D	.O. FA890	3-19-F-0027			Report Date	11 AUG 2	2023		
Ç	V Engineer	(b) (d	6)					Bute				
			•		VALIDATION							
So	ource]	PDF Page N	o.	Facility Geograph	nic Area		Location	Reference			
EXWC		N/A	-		(b) (3) ((A)						
Repair Description (b) (3)	(A)		Sour	ce Contract Reference	N394302 N394302			
					CQCP an Reports.	d Daily						
Va	ption of QA lidation and Observations	Form 429 design ar JTF-RH 9 JTF-RH 0 submittal	96/2. Visua nd material secondary QV visually s, daily rep	lly inspecte submittals QA and 3rd inspected orts).	e is documented by the completed installar. Reviewed NDE repairs and reviewed Date: 14 JUN 2023	ition; match oorts. d.	ed comple	ted constr	uction aga	inst		
	Rework	Needed]	Photo Record Attached	d	Repair	Work Vali	dated as Co	mplete		
\circ	Yes	•	No		See Page 2.		\odot	Yes	0	No		
	(b) (3) (A) NDE result table, NDE inspection report, weld map/design detail, and hydrotest result included for reference.											
1100		or mopoot		mola mapre	CERTIFICATION			a 101 101010				
	rtify that repair			QV ENG	NEER SIGNATURE	(b)	(6)					
report was preport is true	personal l y sub e.	estantiated ar	nd this		DATE	11 AUG 2	2023					

(b) (3) (A)

EMERGENT PIPELINE REPAIRS Repair 188

	Repair 188															3							
(A)			FI	r-UP			ROOT PASS			COVER PASS					NDE						HYDROTEST		13
	HOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	12
	FIELD	OCI TM1-b	Р	03/15/2023	(b) (6	03 / 16 / 2023	Р	(b) (6)	03 / 16 / 2023	(b) (6)	03 / 16 / 2023	Р	03 / 16 / 2023	(b) (6)				Р	03/30/2023	(b) (6)	N/A		I٦
																							13
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T			FI	r-UP			ROOT PASS			COVER PASS					NDE						HYDE	OTEST	ıζ
s	HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE	13
	FIELD	OCI TM1-b	P	03/22/2023		03 / 24 / 2023	P		03/24/2023		03 / 24 / 2023	P	03 / 24 / 2023		-,,			P	03/30/2023		N/A		12
T																							lλ
																							13
Ť	SHOP / FIELD PROCEDURE HTUP P/F DATE					ROOT PASS					COVER PASS			NDE						HYDF	OTEST	įΣ	
s	HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE	13
十	FIELD	OCI TM1-b		03/21/2023		03/21/2023	P		03/21/2023		03/21/2023	P	03/21/2023					P	03/30/2023		N/A		13
\top																							12
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Т			FI	r-UP			ROOT PASS					COVER PASS					N	IDE			HYDE	OTEST	ĺζ
s	HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE	12
I^{\dagger}	FIELD	OCI TM1-b		03/21/2023		03/21/2023	Р		03/21/2023		03/21/2023	Р	03/21/2023		-,-			Р	03 / 30 / 2023		N/A		13
																							13
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Т			FI	r-UP	ROOT PASS				COVER PASS					NDE						HYDROTEST		iΖ	
s	HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE	12
\top	FIELD	OCI TM1-b	Р	03 / 28 / 2023		03 / 28 / 2023	Р		03 / 28 / 2023		03 / 28 / 2023	Р	03 / 28 / 2023					P	03 / 30 / 2023		Р	08/04/2023] \
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Ι	SHOP / FIELD PROCEDURE P/F DATE				ROOT PASS					COVER PASS					NDE						IOTEST	13	
s	HOP / FIELD	PROCEDURE		DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE	13
	FIELD	OCI TM1-b	Р	03 / 28 / 2023		03/28/2023	Р		03 / 28 / 2023		03 / 28 / 2023	Р	03/28/2023					P	03 / 30 / 2023		Р	08 / 04 / 2023]]
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T	FIT-UP				ROOT PASS				COVER PASS							N		HYDE	OTEST	13			
s	HOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE	13
\perp	FIELD	OCI TM1-b	P	03 / 23 / 2023		03 / 23 / 2023	Р		03 / 23 / 2023		03 / 24 / 2023	Р	03 / 24 / 2023					Р	03 / 30 / 2023		N/A		12
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\perp																							13
	FIT-UP			r-UP			ROOT PASS					COVER PASS			NDE						HYDR	OTEST] (
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EMERGENT PIPELINE REPAIRS Repair 188

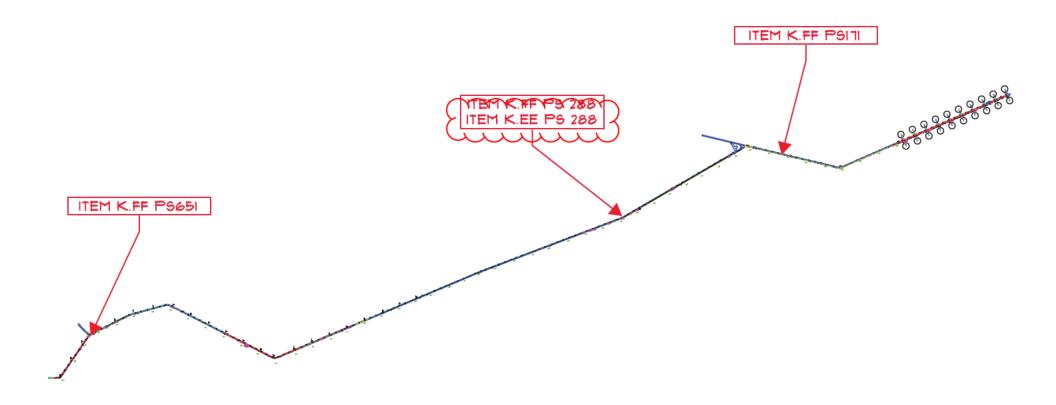
(b) (3)

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SHOP / FIEL	D PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	1 :	
FIELD	OCI FW M1-d-1	FILLET WELD							(b) (6)	03/31/2023	Р	03/31/2023	(b) (6)							N/A			
											STRUCTURAL WELD												
	•	FIT-UP				ROOT PASS				COVER PASS				NDE			HYDI	ROTEST	三 2				
SHOP / FIEL	D PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	1	
FIELD	OCI FW M1-d-1	FILLET WELD								03/31/2023	P	03/31/2023		-,,						N/A			
											STRUCTURAL WELD												
		FIT	r-UP	ROOT PASS						COVER PASS				NDE							HYDROTEST		
SHOP / FIEL	D PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	l	
FIELD	OCI FW M1-d-1	FILLET WELD				,-				03/31/2023	Р	03/31/2023		.,,						N/A			
											STRUCTURAL WELD												
		FIT	r-UP	ROOT PASS					COVER PASS				NDE							HYDROTEST			
SHOP / FIEL	D PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE		
FIELD	OCI FW M1-d-1	FILLET WELD								03/31/2023	P	03/31/2023								N/A			
											STRUCTURAL WELD												
	•	FIT-UP				ROOT PASS			COVER PASS					NDE						HYDROTEST		İ	
SHOP / FIEL	D PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	l	
FIELD	OCI FW M1-d-1	FILLET WELD								03/31/2023	Р	03/31/2023								N/A			
											STRUCTURAL WELD												
		FIT-UP		ROOT PASS						COVER PASS				NDE						HYDROTEST		ĺ	
SHOP / FIEL	D PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	l	
FIELD	OCI FW M1-d-1	FILLET WELD								03/31/2023	P	03 / 31 / 2023								N/A			
											STRUCTURAL WELD)											

RHEmergentPipelineRepairs N39430-2-0-D-2225-N39430-216/207

<i>r</i>																								
۲.	REPAIR ID			FIT	-UP			ROOT PASS					COVER PASS				N	DE			HYDROTEST			
ک	b) (3) (A)	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE	
)		FIELD	OCI FW M1-d-1	FILLET WELD							(b) (6)	03/31/2023	Р	03/31/2023	(b) (6)							N/A		-
۲													STRUCTURAL WELL)										-
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C				FIT	-UP			ROOT PASS					COVER PASS					N	DE			HYDR	OTEST	
3				FITUP				ROOT PASS					COVER PASS			MT / PT		N	DE RT			HYDR		
		SHOP / FIELD	PROCEDURE	FITUP P/F	-UP DATE	WELDER	DATE	ROOT PASS VT P/F	INSPECTOR	DATE	,	DATE	COVER PASS VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR		DATE	INSPECTOR	HYDR P/F	DATE	
		SHOP / FIELD	PROCEDURE OCI FW M1-d-1	FITUP		WELDER	DATE	VT	INSPECTOR	DATE	,	DATE 03/31/2023	VT	DATE 03 / 31 / 2023			DATE			DATE	INSPECTOR			
				FITUP P/F		WELDER	DATE	VT	INSPECTOR	DATE	,	03/31/2023	VT	03/31/2023			DATE			DATE	INSPECTOR	P/F		
	REWORK 2			FITUP P/F		WELDER	DATE	VT	INSPECTOR	DATE	,	03/31/2023	VT P/F P	03/31/2023			DATE			DATE	INSPECTOR	P/F		

RHEmergentPipelineRepairs N39430-20-D-2225-N3943021F4207



(b) (3) (A), (b) (4)

IN-PROCESS EXAMINATION REPORTS



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

	- \ (0\ ((h) (2)	\
Equipment /Line #:	b) (3) (A)		item insp (weld numb		attach drawing	(b) (3)	(A)
Applicable Code:	Alternative Te	sting Approve	d by:	(6)			
ASME B31.3-2020			ead:	(\mathbf{O})			
(b) (4)				` '			
NDE required by Scope: MT	Root□ MT Passes□ I	HTPT Root□	HTPT Passes□	MT Final□	RT Final⊠	SWUT PAUT□	Final Root Int. VT□

Legend: MT: Magnetic Particle Testing PT: Penetrant Testing HTPT: High Temp Penetrant Testing RT: Radiographic Testing; SWUT: Shear Wave Ultrasonic Testing PAUT: Phased Array Ultrasonic Testing VT: Visual Testing HDNT: Hardness Testing PMI: Positive Material Identification FT: Ferrite Testing HYDRO: Hydrostatic testing

Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OC TM1-b		Acceptable	(b) (6)	15 March 2023
Welder is Qualified: Stamp #(b) (6)		Acceptable		15 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		15 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		15 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		15 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		16 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		16 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		16 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		16 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A (b) (d) (e)		
100% RT Final (ref. NDE Report #)	×	Passed (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

(b) (3) (A)			
	CERTIFICATION		
(b) $(7)(A)$			
Inspector Name	Inspector Signature	Date	Certification: □CAWI ☑CWI □SCWI
<u>. </u>			



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT										
7	(b) (0) (A)									
Equipment /Line #: (b) (3) (A)				Item Inspected: (weld number, tie point etc, attach drawing (D) (3) (A)						
Applicable Code: Alternative Testing Approved by:			<u>/: </u>	(6)						
ASME B31.3-2020		QA Lead	1: (C	(0)						
(b) (4)				, , ,						
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□ HT	PT Pass	es□ MTFina l □	RT Final⊠	SWUT PAUT	□ Fir	nal Root Int. VT□		
	egend: MT: Magnetic Particle Testing PT: Penetrant Testing HTPT: High Temp Penetrant Testing RT: Radiographic Testing; SWUT: Shear Wave Ultrasonic esting PAUT: Phased Array Ultrasonic Testing VT: Visual Testing HDNT: Hardness Testing PMI: Positive Material Identification FT: Ferrite Testing HYDRO: lydrostatic testing									
Hold Findings, Repairs and Sign Point Observations Off Date							Date			
Weld Procedure Reviewed	and Acceptable:			cceptable		(b)	$(6)^{-}$	22 March 2023		

Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
·	Point			
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	22 March 2023
Welder is Qualified: Stamp # (D) (6)		Acceptable		22 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		22 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		22 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		22 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		24 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		24 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		24 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		24 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	⊠	Passed (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A	
Root Internal Visual Examination		N/A – not accessible	
Additional Comments:	'		
(b) (3) (A)			
	CERTIEI	CATION	
(b) (7)(A)			
Inspector Name Inspector	or Signatur	re Date Ce	rtification: □CAWI ⊠CWI □SCWI



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

IN TROOTES IN ELECTRICATE CITY									
Equipment /Line #: (b) (3) (A) Item Inspected: (weld number, tie point etc, attach drawing (b) (3) (A)									
Lydipinont/Line #		(weld number, tie point etc,	attach drawing	(0)		$oldsymbol{ol{ol{ol}}}}}}}}}}}}}}}}}$			
Applicable Code:	Alternative Testing Approved by:					\perp			
ASME B31.3-2020	QA Lead:	(0)(0)				_			
(b) (4)						_			
NDE required by Scope: MT	Root□ MT Passes□ HTPT Root□ HTPT	Passes□ MT Final□	RT Final⊠ SWUT F	PAUT□	Final Root Int. VT□				
NDE required by Scope: MT Root ☐ MT Passes ☐ HTPT Root ☐ HTPT Passes ☐ MT Final ☐ RT Final ☐ SWUT PAUT ☐ Final Root Int. VT ☐ egend: MT: Magnetic Particle Testing PT: Penetrant Testing HTPT: High Temp Penetrant Testing RT: Radiographic Testing; SWUT: Shear Wave Ultrasonic Testing PAUT: Phased Array Ultrasonic Testing VT: Visual Testing HDNT: Hardness Testing PMI: Positive Material Identification FT: Ferrite Testing HYDRO: lydrostatic testing									
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	Hold	Findings Beneits and	Cian	
Inspection Milestones	Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	21 March 2023
Welder is Qualified: Stamp # (b) (6)		Acceptable		21 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		21 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		21 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		21 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		21 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		21 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		21 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		21 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A (b) (4) (b) (6)		
100% RT Final (ref. NDE Report #)	\boxtimes	Passed (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

SWUTL PAUTL			
Root Internal Visual Examination		N/A - not accessible	
Additional Comments:			
$(h)(3)(\Delta)$			
(D)(G)(G)			
	CERTIE	CATION	
/ L \ / 7 \/ A \			
(b) (7)(A)			
Inspector Name Inspector	r Signatu	re Date Ce	rtification: □CAWI ⊠CWI □SCWI
		•	



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

IN TROOTES IN ELECTRICATE CITY									
Equipment /Line #: (b) (3) (A) Item Inspected: (weld number, tie point etc, attach drawing (b) (3) (A)									
Lydipinont/Line #		(weld number, tie point etc,	attach drawing	(0)		$oldsymbol{ol{ol{ol}}}}}}}}}}}}}}}}}$			
Applicable Code:	Alternative Testing Approved by:					\perp			
ASME B31.3-2020	QA Lead:	(0)(0)				_			
(b) (4)						_			
NDE required by Scope: MT	Root□ MT Passes□ HTPT Root□ HTPT	Passes□ MT Final□	RT Final⊠ SWUT F	PAUT□	Final Root Int. VT□				
NDE required by Scope: MT Root ☐ MT Passes ☐ HTPT Root ☐ HTPT Passes ☐ MT Final ☐ RT Final ☐ SWUT PAUT ☐ Final Root Int. VT ☐ egend: MT: Magnetic Particle Testing PT: Penetrant Testing HTPT: High Temp Penetrant Testing RT: Radiographic Testing; SWUT: Shear Wave Ultrasonic Testing PAUT: Phased Array Ultrasonic Testing VT: Visual Testing HDNT: Hardness Testing PMI: Positive Material Identification FT: Ferrite Testing HYDRO: lydrostatic testing									
				ſ <u></u>					

	Hold	Findings Beneits and	Cian	
Inspection Milestones	Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	21 March 2023
Welder is Qualified: Stamp # (b) (6)		Acceptable		21 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		21 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		21 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		21 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		21 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		21 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		21 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	\boxtimes	Pass		21 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A (b) (4) (b) (6)		
100% RT Final (ref. NDE Report #)	\boxtimes	Passed (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

SWUTL PAUTL			
Root Internal Visual Examination		N/A - not accessible	
Additional Comments:			
$(h)(3)(\Delta)$			
(D)(G)(G)			
	CERTIE	CATION	
/ L \ / 7 \/ A \			
(b) (7)(A)			
Inspector Name Inspector	r Signatu	re Date Ce	rtification: □CAWI ⊠CWI □SCWI
		•	



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

		(b) (0) (A)
Equipment /Line #:	b) (3) (A)	Item Inspected: (weld number, tie point etc, attach drawing) (b) (3) (A)
Applicable Code:	Alternative Testing Approved by: QA Lead:	(b) (6)
ASME B31.3-2020	QA Lead:	(D)(O)
(b) (4)		
NDE required by Scope: MT	Root□ MT Passes□ HTPT Root□ HTPT	Passes□ MT Final□ RT Final⊠ SWUT PAUT□ Final Root Int. VT□
		p Penetrant Testing RT: Radiographic Testing; SWUT: Shear Wave Ultrasonic Iness Testing PMI: Positive Material Identification FT: Ferrite Testing HYDRO:

Hydrostatic testing

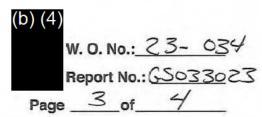
Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-b		Acceptable	(b) (6)	
Welder is Qualified: Stamp #(b) (6)		Acceptable		23 March 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		23 March 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		23 March 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		23 March 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		23 March 2023
Root Pass complete, Visual after cleaning, maintain preheat		Acceptable		23 March 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		24 March 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		24 March 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A (b) (b) (c)		
100% RT Final (ref. NDE Report #)	⊠	Passed (b) (4), (b) (6)		30 March 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible		

	LL		
Additional Comments:			
(b) (3) (A)			
	CERTIFICATION		
(b) (7)(A)			
(D)(I)(I)			
Inspector Name	Inspector Signature	Date	Certification: □CAWI ☑CWI □SCWI

NDE REPORTS



Repair 188



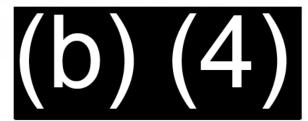
WELD#	VIEW#	GEOMETRIC UNSHARPN *UG*	ESS		A September 1 Sept	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 1 25 L	/ /		REMARKS		
JP5-ω1	(b) (3) (A)	,020	X	1					b'	(3		(A)
JP5-W2		,020	X X	/							\-	- /
			X									
JBS-W3		,020	X									
JP5-WY		, 020	X X	1								
		1	X	/								
			4									
					7	16	7					

riiii interpreter

3-30-23

SNT-TC-1A Level

Date of Inspection



Repair 188

(b) (4)
W. O. No.: <u>23-034</u>

Report No.: <u>GS03.30</u> 23

Page <u>4</u> of <u>4</u>

WELD#	VIEW#	GEOMETR UNSHARP	IC NESS			100 mg/100 mg/10		/	REMARKS		
JP5-WS	b) (3) (A	026	X X X	/)	(3		(A)
JP5-W6			X X X								
JPS-W7		020	X X X							=e)	

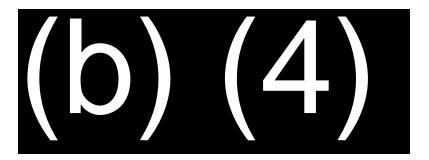
er SNT

SNT-TC-1A Level

Date of Inspection

3-30-2023

HYDROTEST REPORTS



HYDROSTATIC TEST FORM

CLIENT: (b) (4), (b) (3) (A)

Projec	ct Name:	Red Hill Emergent Pipelir	•				
Systen	n Description: Starting point inection Point Ending point	(h) (2)					
PSI	Req.:			Time Req.:		4 hours	
Start of ⁻	Test Period:	Time:	13:52 hrs		Date:	8/4/2023	
End of T	est Period:	Time:	17:52 hrs		Date:	8/4/2023	
No.	Time	PSI READING			Remarks		
1	13:52	PSI READING (b) (3) (A)			Start test		
2	14:15				no visual lea	ks	
3	14:30			P:	SI dropped, no vis	ual leaks	
4	14:45			P:	SI dropped, no vis	ual leaks	
5	15:00			P	SI holding, no visu	ıal leaks	
6	15:15			Low	point drain blind f	lange is weeping	
7	15:30			PSI dropped; I	ow point drain bl	ind flange is weeping	
8	15:45				PSI holding	(b) (3) (A)	
9	16:00				PSI dropped 2 lbs.	(b) (3) (A)	
10	16:15			PSI holdin	g, weeping at blin		
11	16:30				PSI dropped 3 lbs.		
12	16:45				PSI increased to		
13	17:00				no visual lea		
14	17:15				PSI holding		
15	17:30				PSI dropped 1 lbs.		
16	17:45				PSI holding		
17	17:56			End to	est, PSI holding, n	o visual leaks	

PSI Gauge Manufacturer:	Ashcroft 0-600
Test Witness Client:	(b) (6)
Test Witness OCI Rep.	(D) (O)
-	

(b) (4)

(b) (4)

Certificate of Calibration

(b)(4)

Ashcroft

Manufacturer

32488

Serial Number

02/28/2023

Calibration Date

02/28/2024

Recalibration Due

(b) (4)

Instrument Accuracy / Procedure

0-600 PSI

Model

Pressure Gauge

Description

182,039

Test Number

Asset Number

23 °C

43 % RH

Temperature

Humidity



Calibration Standards Used:

(b) (4)

Description
Standards on File

Model

Serial

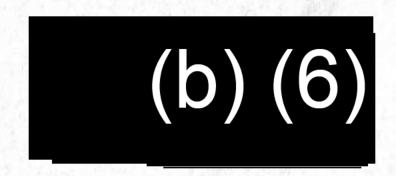
Date Calibrated 01/01/2023 Date Due 01/01/2024

In Tolerance

Condition Received

In Tolerance

Condition Returned



			QUALI	TY VALIDATION (C	QV) REPO	ORT					
]	Red Hill B	ulk Fuel Storage Fac	ility Defue	el					
Validation Fir	m HDR Env	rironmental	, Operation	ns and Construction,	Inc.		Repair No.	249			
Addre	ss 9781 S. I	Meridian Bl	vd., Suite	400, Englewood, CO	80112		Repair ID	EPRC.OF	T.c		
Contract N	o. FA89031	5D0007, D	.O. FA890	3-19-F-0027			Report Date	11 AUG 2	2023		
QV Engine	(b) (6)					Bute				
	_	,		VALIDATION							
Source]	PDF Page N	o.	Facility Geograph	ic Area		Location	Reference			
EXWC	N/A			Tank Gallery		(b) (3) (A)				
Repair Description	4110110100			nethod using a reduc Anchor new pup to c		Sour	ce Contract Reference	N3943020 N394302			
Description Contractor Q Method(s) Use	$(b)^{\text{of inspection}}$	3) (A	ographic Te	QCP. Pipe butt welds esting: 100% VT on a	ll shear		ntractor QC s Reviewed	CQCP an Reports	d Daily		
Description of Q Validation ar Observation	4296/2. V A material s ad JTF-RH se as JTF-RH QV daily repo	isually inspe ubmittals. F condary QA / visually in: orts).	ected comp Reviewed N and 3rd Pa spected rep	is documented by the lefted installation; mate DE reports. arty QV completed. pairs and reviewed con Date: 14 JUN 2023	ched comp	leted const	ruction aga	inst design	and		
Rewo	rk Needed	prante of gr		Photo Record Attached		Repair	Work Vali	dated as Co			
Yes	•	No		See Page 2.		•	Yes	0	No		
NDE result table, I	_		_	•	Irotest resi	ult included	t included for reference.				
I hereby certify that rep report was personally s			QV ENG	INEER SIGNATURE	(b) (6)						
report was personally s	uvstantiated ar	iu tilis		DATE	11 AUG 2	2023					

(b) (3) (A)

										<u> </u>											
S) (A)		FIT	-UP			ROOT PASS					COVER PASS					N	IDE			HYDE	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
FIELD	OCITM1-b	Р	02/06/2023	(b) (6)	02/06/2023	Р	(b) (6	02 / 06 / 2023	(b) (6)	02 / 06 / 2023	Р	02/06/2023	(b) (6)			NEEDS RESHOOT-> DBL EXPOSURE ->	N/A	02/07/2023	(b) (6)		
				(10)												DULEN COOKE S	Р	02 / 24 / 2023	` ′ ` ′	Р	08/09/20
																			<u> </u>		
		FIT	-UP			ROOT PASS	_				COVER PASS					, N	IDE			HYDE	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DATE
SHOP	OCI TM1-b																P	04 / 19 / 2022		P	08/09/2
		FIT	LID			ROOT PASS					COVER PASS				•		IDE		-	HAD	ROTEST
		FITUP				VT					VT			MT/PT			RT				_
SHOP / FIELD		P/F	DATE		DATE	P/F		DATE		DATE	P/F	DATE		P/F	DATE	INSPECTOR	P/F	DATE	-	P/F	DATE
FIELD	OCI TM1-b	Р	02 / 08 / 2023		02/08/2023	Р		02 / 08 / 2023		02 / 09 / 2023	Р	02 / 09 / 2023					Р	02 / 24 / 2023		P	08/09/
		FIT	-UP			ROOT PASS					COVER PASS					N	IDE			HYD	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	i e	P/F	DAT
SHOP	OCI TM1-b	P/F				P/F					1 1/1						P/F	04/19/2022		P	08/09/
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																		+			
			L									L							-		
		FIT	-UP			ROOT PASS	_				COVER PASS					N N	IDE			HYDE	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE		P/F	DAT
FIELD	OCI TM1-b	P	01/30/2023		01/30/2023	Р		01/30/2023		01/30/2023	Р	01/30/2023					P	02 / 07 / 2023		N/A	
		FIT	-UP			ROOT PASS					COVER PASS						IDE			HYD	ROTEST
SHOP / FIELD	ppocrpupr	FITUP	DATE		DATE	VT		DATE		DATE	VT	DATE		MT/PT	DATE		RT	DATE	INSPECTOR	P/F	DATI
_		P/F	DATE		DATE	P/F		DATE			P/F			P/F		(b) (6)	P/F	DATE	INSPECTOR	P/F	DATE
FIELD	OCI FW M1-d-1	FILLET WELD								02 / 10 / 2023	Р	02/10/2023		P	02 / 24 / 2023						
											STRUCTURAL WELL	1									_
		FIT	-UP			ROOT PASS					COVER PASS						IDE			HYD	ROTEST
SHOP / FIELD	PROCEDURE	FITUP P/F	DATE		DATE	VT P/F		DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DAT
FIELD	OCI FW M1-d-1	FILLET WELD				-71				02 / 10 / 2023	P	02/10/2023		P	02 / 24 / 2023		","		-		+
											STRUCTURAL WELL				,,			 			
,																		+	\vdash	-	+
		'																			
			-UP			ROOT PASS			<u> </u>		COVER PASS						IDE		\sqsubseteq		ROTEST

((b) (3) (A)										110	pan 240											
ζ	(6) (6) (7)	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
۲		FIELD	OCI FW M1-d-1	FILLET WELD							(b) (6)	02/10/2023	Р	02/10/2023	(b) (6)	Р	02 / 24 / 2023	(b) (6)					
>													STRUCTURAL WELD										
۲																							
9				FIT-	-UP			ROOT PASS					COVER PASS						E			HYDRI	OTEST
ک		SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE
(FIELD	OCI FW M1-d-1	FILLET WELD								02/10/2023	Р	02 / 10 / 2023		Р	02 / 24 / 2023						
۲	REWORK 1												STRUCTURAL WELD)									
۲	REWORK 2																						

RHEmergentPipelineRepairs N39430-20-D-2225-N3943021F4207

											•											
AIR ID	Ļ		FIT	-UP			ROOT PASS					COVER PASS					N	IDE			HYDF	ROTEST
(3) (A	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	WELDER	DATE	VT P/F	DATE	INSPECTOR	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCI FW M1-d-1	FILLET WELD							(b) (6)	02/10/2023	Р	02/10/2023	(b) (6)	Р	02 / 24 / 2023	(b) (6)					
												STRUCTURAL WELD)									
			FIT	-UP			ROOT PASS					COVER PASS						DE			HYDF	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DATE
	FIELD	OCI FW M1-d-1	FILLET WELD								02/10/2023	Р	02/10/2023		P	02/24/2023						
												STRUCTURAL WELD										
			FIT	-UP			ROOT PASS					COVER PASS						DE			HYDR	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DAT
	FIELD	OCI FW M1-d-1	FILLET WELD								02/10/2023	Р	02/10/2023		P	02/24/2023						
												STRUCTURAL WELD	•									
			FIT	-UP			ROOT PASS					COVER PASS						DE			HYDS	ROTEST
	SHOP / FIELD	PROCEDURE	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE		DATE	VT P/F	DATE		MT / PT P/F	DATE		RT P/F	DATE	INSPECTOR	P/F	DAT
	FIELD	OCI FW M1-d-1	FILLET WELD								02/10/2023	Р	02/10/2023		Р	02 / 24 / 2023						
												STRUCTURAL WELD										

RHEmergentPipelineRepairs N39430-2-0-0-2225-N3943021f4207

(b) (3) (A), (b) (4)

(b) (3) (A), (b) (4)

IN-PROCESS EXAMINATION REPORTS



Revision: 0 Approval Date: 2/7/2023

IN-PROCESS INSPECTION REPORT

Equipment /Line #:	(b) (3) (A		Item Insp	pected: er tie point etc	attach drawing)	(b) (3)	3) (A)
Applicable Code:	Alternative Te	sting Approved	by:	(6)			
ASME R31 3-2020			ead:	(\mathbf{O})			
(b) (4)							
NDE required by Scope: MT	Root□ MT Passes□	HTPT Root□ F	ITPT Passes□	MT Fina I □	RT Final⊠	SWUT PAUT□	Final Root Int. VT□

Legend: MT: Magnetic Particle Testing PT: Penetrant Testing HTPT: High Temp Penetrant Testing RT: Radiographic Testing; SWUT: Shear Wave Ultrasonic Testing PAUT: Phased Array Ultrasonic Testing VT: Visual Testing HDNT: Hardness Testing PMI: Positive Material Identification FT: Ferrite Testing HYDRO: Hydrostatic testing

Inspection Milestones	Hold Point	Findings, Repairs and Observations	Sign Off	Date
Weld Procedure Reviewed and Acceptable: WPS# OCI TM1-B		Acceptable	(b) (6)	30 Jan 2023
Welder is Qualified: Stamp (b) (6)		Acceptable		30 Jan 2023
Joint prep, Land, Bevel, Gap, Fit Up, Cleanliness;		Acceptable		30 Jan 2023
Ensure Excessive Strain IS NOT Employed to Maintain Fit Up		Acceptable		30 Jan 2023
Electrodes compliant to WPS, Rod Oven in use as required		Acceptable		30 Jan 2023
Preheat adequate as required by WPS or Scope (use temp-stick)		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal				30 Jan 2023
Root Pass complete, Visual after cleaning, maintain preheat				30 Jan 2023
Dry MT/HTPT of Root Pass (ref. NDE Report #), maintain preheat MT□ HTPT□		N/A		
Observe weave and progression throughout all passes and ensure compliance to WPS. Ensure all slag & stop/start removal		Acceptable		30 Jan 2023
Subsequent Pass's complete, Visual Inspection after cleaning	⊠	Pass		30 Jan 2023
100% MT/PT Final (ref. NDE Report #) MT□ HTPT□		N/A		
100% RT before PWHT if required (ref. NDE Report #)		N/A		
If PWHT required, review chart and hardness		N/A		
100% RT Final (ref. NDE Report #)	⊠	Passe (b) (4)		7 Feb 2023
100% UT Final (ref. NDE Report #) SWUT□ PAUT□		N/A		
Root Internal Visual Examination		N/A – not accessible following weld.		

	(b) (3) (A), (b)	(4)		
		CERTIFICATION		
(
	Inspector Name	Inspector Signature	Date	Certification: □CAWI MCWI □SCWI
- 1				Continuation: Boxtin Botti Botti

NDE REPORTS

	h)	
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Repair 249

(b) (4) W. O. No.: <u>22-098</u> Report No.: <u>GS4/922</u> Page <u>Z</u> of <u>3</u>

WELD#	VIEW#	GEOMETR UNSHARP *UG*	NESS					REMARKS		
N /	b) (3) (A)					+	h)	(3)	(A)	
		/	V							
		/	X							
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			X							
1		42.				+ +				
		1	X							
		1	X							
b) (3) (A)		1							
5) (5) (7	,	050	X							
			X							
					10	\				

Thin interpreter SINT-TC-1A Level

Date of Inspection

4-19-2022

	a Y		
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Repair 249

(b) (4) W. O. No.: <u>23-634</u> Report No.: <u>G50224</u>23

						rage
WELD#			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 0 10 10 10 10 10 10 10 10 10 10 10 10 1		REMARKS
(b) (3) (A)	,020 X					(b) (3) (A)
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					 +	

(b) (6)

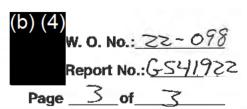
II

2-24-2023

SNT-TC-1A Level

Date of Inspection

Repair 249



WELD #	VIEW#	GEOMETRI UNSHARPI "UG"	c NESS	110000	200 00 00 00 00 00 00 00 00 00 00 00 00	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Man Land	Sept and	(b)	(3) ((A)	
b) (3)) (A)	.670)	XXX									

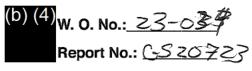
(b) (6)

II

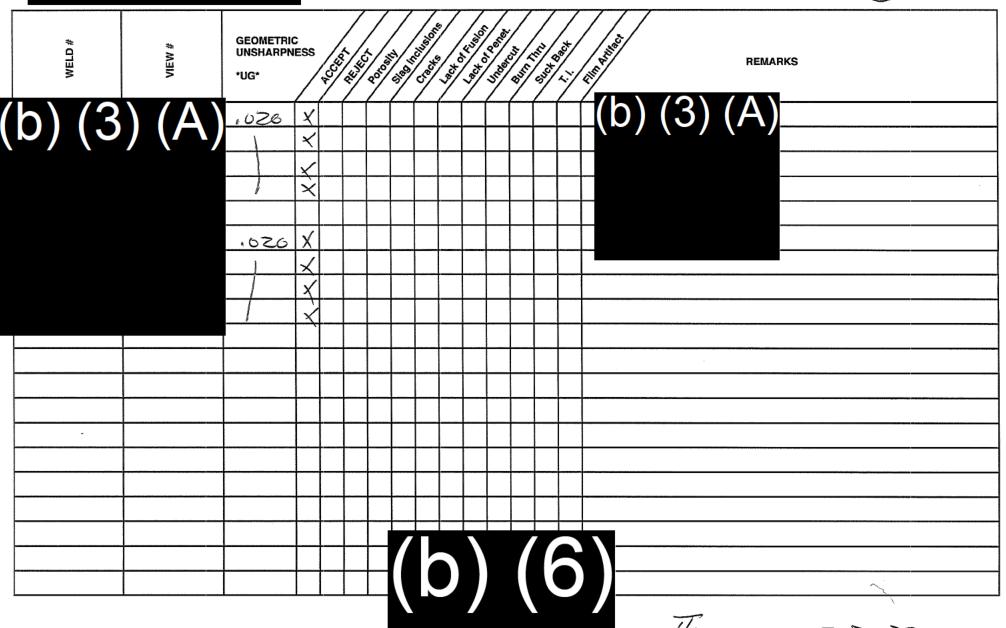
4-19-2022

	h)	
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Repair 249



Date of Inspection

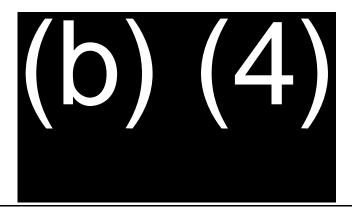


-TC-1A Level

Repair 249

	b) (4), (b) (3	3) (A)		LIQUID	PENET	TRANT EX	AMINATION RECO	RD
`	/ (// (/ (, , ,		(4)				
			_{Client} (b)	(4)		Location	n: Red Hill	Page 1 of 1
			P.O. No.:			Job No.:	23-034	
		(1	(4) roced	ure: NDT002.2 Rev	·C	Code: A	SME B31.3	
			Report No. C	S022423				
	MATERIAL		Pl	ENETRANT M	ATERI A	AL	TECH	NIQUE
[TYPE: CS FW		BRAND	DESIGNATION	PO#	BATCH#	Preclean Drying Time: 5	MIN
ſ	Surface Condition:	Cleaner				1A01K	Method of Application: B	rush
- 1	As Welded		Magnaflux	SKC-S	N/A	030929		
- 1	Ground	Penetrant				06010K	Dwell Time: 10 Min	
	Other Weld Prep		Magnaflux	SKL-SP1	N/A	04394		
	New weld	Emulsifier					Emulsification Time: N/A	A
			N/A	N/A	N/A	N/A		
		Developer) (C	GKD GO	NT/A	07K15K	Developing Time: 15 Mir	1
╌	T		Magnaflux	SKD-S2 White	N/A	08738	(b) (4) _{Control #}	
	Temperature: \underline{X} 60° F – 125° F Other		Illumination:	white	FC 150		UV Meter N/A	
7	Itam(s)	Accept	Reject Sk	cetch/Notes				
(r	O(3)							
					No ind	lications no	ted at time of inspection	
		\boxtimes					1	
		\boxtimes						
		\boxtimes						
	Performed By (b) (6) Level	II Date: 2/24/2	023	Rev	riewed By	:		Date:

HYDROTEST REPORTS

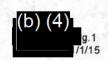


HYDROSTATIC TEST FORM

CLIENT: (b) (4), (b) (3) (A)

SYSTEM:

Proje	ct Name:	Red Hill Emergent Pip	peline								
	n Description:	(b) ((3) (A								
	Starting point										
Cor	nnection Point										
	Ending point										
PS	l Req.:	$_{(b)}(3)$	(A)	Req.:	4 hours						
Start of	Test Period:	Time:	11:10 hrs	Date:	8/9/2023						
End of 1	Test Period:	Time:	15:10 hrs	Date:	8/9/2023						
NI-	т	DCI DEADING	D		DCI duan						
No.	Time 10:55	PSI READING	SI READING Remarks – restart test due to PSI drop								
2	11:10	\perp (D) (3) (A)	(D) (3) (A) Re-Start test, pic taken, no leaks detected no visual leaks at flanges or testing area								
3	11:25	+		no visual leaks at flanges of	-						
4	11:40	 		no visual leaks at flanges of							
5	11:55			no visual leaks at flanges of							
6	12:10			no visual leaks at flanges o							
7	12:25			no visual leaks at flanges o	r testing area						
8	12:40			no visual leaks at flanges o							
9	12:55		no visual lea	ks at flanges or testing area	PSI dropped 1 lbs. ta ^(b) (3) (A)						
10	13:10			taken, no visual leaks at fla							
11	13:25		no visual lea	ks at flanges or testing area	PSI dropped 1 lbs. to						
12	13:40		no vi	sual leaks at flanges, PSI dro	opped 1 lbs. to 447						
13	13:55	_	no visual lea	ks at flanges or testing area							
14	14:10	_		no visual leaks at flanges,	-						
15	14:25	<u> </u>		no visual leaks at flanges,	-						
16 17	14:40 14:55	+		no visual leaks at flanges,	-						
18	15:10	<u> </u>		End test, PSI holding, no							
10	15:10		end test, no visual leak	s detected, holding PSI, no	sign of leaks anywhere						
	PSI Gauge Manufacture	r:		Ashcroft 0-600							
	Test Wit	ness Client:	/h\ /	<u> </u>							
Test Witness OCI Rep.											



Certificate of Calibration

Ashcroft

Manufacturer

32488

Serial Number

02/28/2023

Calibration Date

02/28/2024

Recalibration Due

Instrument Accuracy / Procedure

0-600 PSI

Model

Pressure Gauge

Description

182,039

Test Number

Asset Number

23 °C

43 % RH

Temperature

Humidity



Calibration Standards Used:

Manufacturer

Description Standards on File Model

Serial

Date Calibrated 01/01/2023

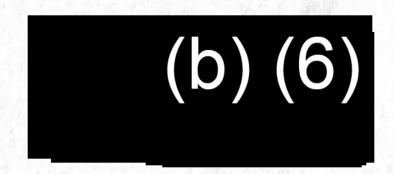
Date Due 01/01/2024

In Tolerance

Condition Received

In Tolerance

Condition Returned



				QUALITY VALIDATION (C	(V) REPORT				
]	Red Hill Bulk Fuel Storage Faci	lity Defuel				
Validation Firm		HDR Environmental, Operations and Construction, Inc.				Repair No.			
Address		9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112					AFFF.Line.1		
Contract No.		FA890315D0007, D.O. FA8903-19-F-0027				Report Date			
Q	V Engineer	(b)	(6)			Dute			
		\ /	, ,	VALIDATION					
Source		I	PDF Page N	o. Facility Geographi	c Area	Location Reference			
NAVFAC		N/A (b) (3) (A)							
Repair Description		Repair (b) (3) (A) Line: Caulk Joints, Replace Belly Pump, Repair corroded pipe hangers			·	Source Contract Reference		ouse	
Description of Contractor QC Method(s) Used						Contractor QC Records Reviewed		N/A	
Description of QA Validation and Observations									
		Final acceptance by government. Date: 04 AUG 2023							
Rework		Needed		Photo Record Attached	Rep	Repair Work Validated as Complete		nplete	
0	Yes	$oldsymbol{\odot}$	No	See Pages 2-3.	•	Yes	0	No	
) (3) (A)	ine. Corro	ed (b) (3 ded pipe h itional elec	angers we	re replaced in-kind, with plumbe irs were identified in operational CERTIFICATION	r's wrap added for testing. Fo l low-on	corrosion pr electrical rep	otection. Be pairs comple	eted.	
hereby certify that repair work validated in this report was personally substantiated and this				QV ENGINEER SIGNATURE	(b) (6)				
eport was per eport is true		stantiated and this		DATE	8 AUG 2023				

(b) (3) (A)

(b) (3) (A)

				QUALI	TY VALIDATION (QV) REPO	ORT				
]	Red Hill B	ulk Fuel Storage Fac	ility Defue	el				
Validation I	Firm	HDR Env	rironmental	, Operatio	ns and Construction,	Inc.		Repair No.	INC-030		
Add	iress	9781 S. N	Meridian Bl	vd., Suite	400, Englewood, CO	80112			AFFF.LP	D	
Contract	No.	FA89031	5D0007, D	.O. FA890)3-19-F-0027		Report Date 08 AUG 2023				
QV Engi	neer	(b) (6)					Dute			
		` , ,	,		VALIDATION						
Source]	PDF Page N	lo.	o. Facility Geographic Area Loc						
NAVFAC		N/A									
Repair Descrip		Repair da protection	amaged LP n around Li	D on (b) PD after be	(3) (A) Line. Proeing repaired.	vide	Sour	ce Contract Reference			
Contractor	Description of Contractor QC Method(s) Used						1	ntractor QC s Reviewed			
Description of Validation Observat	and				r to confirm retention provided to JTF-RH		bint drain re	epaired. Co	ompleted w	ork order	
		Final acce	ptance by go	overnment.	Date: 04 AUG 2023						
Rev	work	Needed	Π		Photo Record Attached	i	Repair	Work Vali	dated as Co	mplete	
Yes	es	\odot	No		See Pages 2-3.		•	Yes	0	No	
(b)		3)	(A		CERTIFICATION						
hereby certify that report was personall				QV ENG	V ENGINEER SIGNATURE (b) (6)						
report is true.	-				DATE 08 AUG 2						



Rework - Quality Validation Report

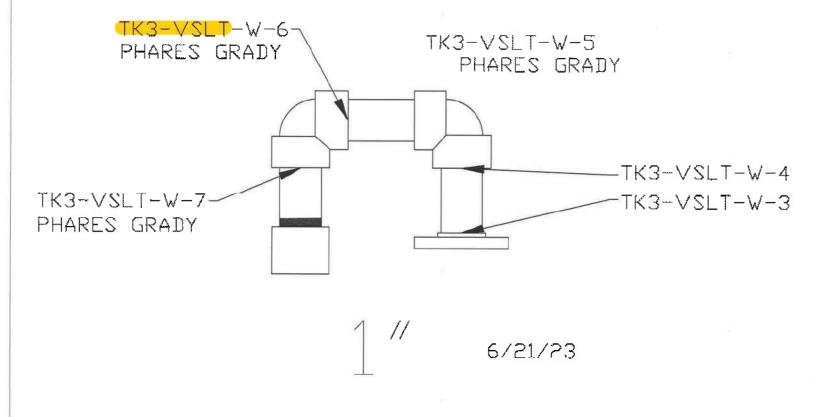
ENSURING A FREE AND OPEN INDO-PACIFIC

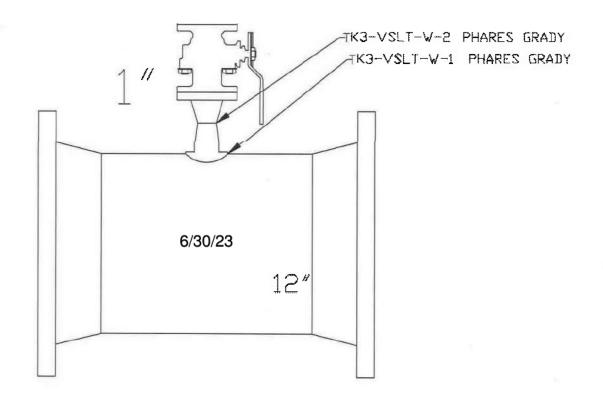
NO.	Validation Complete	Date	Location
INC- 033	Contractor carefully removed (b) (3) (A) of residual fuel from the line via high point vents prior to removing spool. Full containment measures were deployed to prevent any accidental spillage of residual fuel when spool removed from (b) (3) (A) . The spool was transported out of the tunnel for the installation of the high point vent and low point drain assemblies. Socket welds were inspected via dye penetrant testing (PT). Spool was hydrostatically tested prior to reinstallation. Recovered fuel received by the Facility.	28 Jul 23	(b) (3) (A)

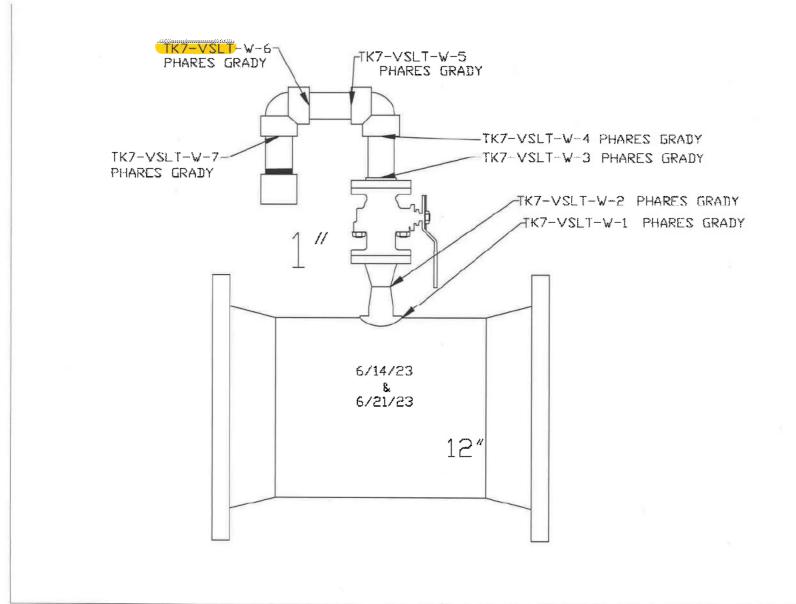
				QUALIT	Y VALIDATION (QV) REPO	ORT				
]	Red Hill Bu	ılk Fuel Storage Fa	cility Defue	el				
Val	idation Firm	HDR Env	vironmental	, Operation	s and Construction,	Inc.		Repair No.	026		
	Address	9781 S. I	Meridian Bl	vd., Suite 4	00, Englewood, CO	80112		Repair ID	EPRC.K.	рр	
(Contract No.	FA89031	5D0007, D	.O. FA8903	3-19-F-0027			Report Date	11 AUG 2	2023	
Ç	QV Engineer	(b)	(6)								
		()	()		VALIDATION						
So	ource		PDF Page N	·o.	Facility Geograph	nic Area	Location Reference				
XWC	(b) (3) (A)					no i nou					
		L \ (6	\								
(b) (3) (A) Repair Description) (A)				Sour	ce Contract			
								Reference			
		Mathada	مناه ممانم	datail in CC	OCD. Ding but wels	- 1000/			000D av	d Daile	
	escription of	inspectio	n via Radio	graphic Te	QCP. Pipe butt weld sting. Socket welds		Con	ntractor QC	CQCP an Reports.	d Dally	
	ontractor QC hod(s) Used		VI and PI.	Spools hydrostatically tested.			Record	s Reviewed			
Va	ption of QA lidation and Observations	Form 429 design at JTF-RH 9 JTF-RH 9 submittal	96/2. Visua nd material secondary QV visually s, daily rep	lly inspecte submittals. QA and 3rd inspected orts).	e is documented by d completed installa . Reviewed NDE rep l Party QV complete repairs and reviewe Date: 13 JUL 2023	ation; match ports. ed.	ned comple	eted constr	uction aga	inst	
	Rework	Needed	1 10		Photo Record Attache	d	Repair	r Work Vali	dated as Co	mplete	
0	Yes	•	No		See Page 2.		•	Yes	0	No	
omments	S		1								
D)	ult table, N			weld map/d	lesign detail include	d for refere	ence.				
					CERTIFICATION	/1_\	(0)				
	rtify that repair personal l y sub			QV ENGI	NEER SIGNATURE	(b)	(6)				
port is tru	е.				DATE	11 AUG 2	2023 / Rev	1			

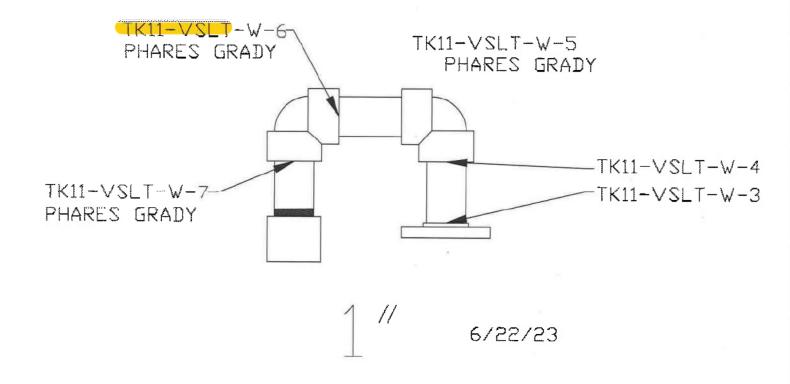
Weld ID				VELD INFORM							
Weld ID	Number	SIZE	TYPE	JOINT		JOINT	WELDER ID	DATE	(b) (3) (A) (b) (6)	N INFORMATIO DATE	RESULTS
(b)(3)(A)		o) (3) (A)		(h)	(2)	(A)	(b) (6)		(b) (3) (A) (D) (b)	-11	
(D)(D)(M)	1	+	BW	(D)	(0)		. / . /	6/14/2023			PASSED
	2	H	BW	\ /	\ /	\ /	-	6/9/2023		6/30/2023	PASSED PASSED
	_	İ						5,5,252		6/12/2023	PASSED
	3		SW					6/22/2023			PASSED
										6/29/2023	PASSED
	4	H	SW				-	6/22/2023		6/20/2022	PASSED
	5	+	SW				H	6/22/2023		6/29/2023	PASSED PASSED
		Ť	- 311					0/22/2023		6/29/2023	PASSED
	6	İ	SW				į į	6/22/2023			PASSED
										6/29/2023	PASSED
	7		SW					6/22/2023		5 /00 /0000	PASSED
		H								6/29/2023	PASSED
		H									
	1	i	BW					6/16/2023		6/16/2023	PASSED
							į į			6/30/2023	PASSED
	2		BW					6/9/2023			PASSED
			cu.					6 20 2022		6/12/2023	PASSED
	3		SW					6/28/2023		6/30/2023	PASSED PASSED
	4		SW					6/28/2023		6/30/2023	PASSED
								_,,,		-, 32, 2020	PASSED
	5		SW				<u> </u>	6/28/2023		6/30/2023	PASSED
		1					!!!				PASSED
	6	H	SW				-	6/28/2023		6/30/2023	PASSED
	7	+	SW				H	6/28/2023		6/30/2023	PASSED PASSED
			344					0/28/2023		0/30/2023	PASSED
		İ	~~				`			~~~	$\gamma\gamma\gamma$
	1		BW] !	6/30/2023			PASSED
								s to a to a a a		7/5/2023	PASSED
	2		BW					6/30/2023		7/5/2023	PASSED PASSED
	3	H	sw				-	6/21/2023		7/3/2023	PASSED
	_	i						-,,		6/29/2023	PASSED
	4		SW				į į	6/21/2023			PASSED
		1					!!!			6/29/2023	PASSED
	5	H	SW				-	6/21/2023		6/20/2022	PASSED
	6	+	sw				-	6/21/2023		6/29/2023	PASSED PASSED
		Ť	- 311					0/21/2023		6/29/2023	PASSED
	7	İ	SW					6/21/2023			PASSED
							. !			6/29/2023	PASSED
	لمحلحط		A				ě.	popolo			
	1	+					-			1-1-1-	
	1		BW					6/14/2023		7/5/2023	PASSED PASSED
	2		BW					6/15/2023		., 5, 2025	PASSED
										7/5/2023	PASSED -
	3		SW					6/21/2023			PASSED
			C)A/					6/21/2022		6/29/2023	PASSED
	4		SW					6/21/2023		6/29/2023	PASSED PASSED
	5		sw					6/21/2023		0/25/2023	PASSED
								. ,		6/29/2023	PASSED
	6		SW					6/21/2023			PASSED
								c las laces		6/29/2023	PASSED
	7		SW					6/21/2023		6/20/2022	PASSED PASSED
										6/29/2023	FASSED
	1		BW					6/14/2023			PASSED -
										7/5/2023	PASSED
	2		BW					6/15/2023		7/5/2022	PASSED
	3		SW					6/21/2023		7/5/2023	PASSED -
			344					0/21/2023		6/20/2022	PASSED
										6/29/2023	FASSED

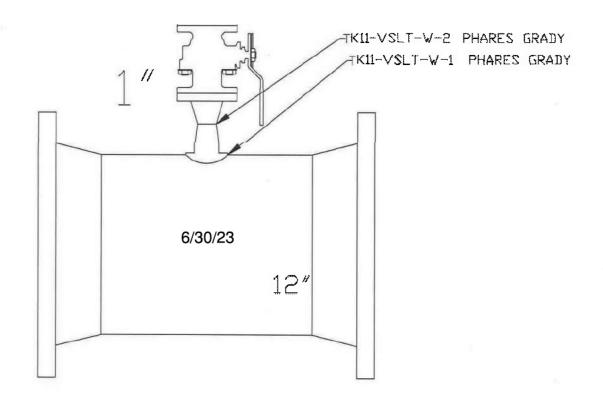
MY MY MY MY MY MY MY MY MY MY MY MY MY M		EKO INFORMA	TIVIN	$\overline{\gamma}$	$\overline{\gamma}$	\sim		NINFORMATIO	
Wold ID Number SIZE	TYPE	JOINT		JOINT	WELDER ID	DATE	(b) (3) (A) INITIALS	DATE	RESULTS
$(b) (3) (A) \frac{\text{Number}}{4} (b) (3)$	A) sw	(h)	(3)	/ /	$\sqrt{(b)(6)}$	6/21/2023	(b) (3) (A) b) (6)		PASSED
			(.5)	(A)	(10)		b) (b)	6/29/2023	PASSED 🚽
5	SW	$(\boldsymbol{\triangleright})$	(\cup)	(, ,	/	6/21/2023			PASSED
			. ,	•	•			6/29/2023	PASSED
6	SW					6/21/2023			PASSED
								6/29/2023	PASSED
7	SW					6/21/2023			PASSED 1
								6/29/2023	PASSED
									\mathcal{Y}
* *	* *					<u> </u>		7 7 7	7 7 7
1	BW					6/30/2023			PASSED 🔥
								7/5/2023	PASSED
2	BW					6/30/2023		= /= /====	PASSED
								7/5/2023	PASSED
3	SW					6/22/2023		5 (0.0 (0.000	PASSED
	6144					6 /22 /2022		6/29/2023	PASSED
4	SW					6/22/2023		6/20/2022	PASSED
5	SW					6/22/2023		6/29/2023	PASSED -
5	300					0/22/2023		6/29/2023	PASSED
6	SW					6/22/2023		0/29/2023	PASSED
- 0	344					0/22/2023		6/29/2023	PASSED
7	sw					6/22/2023		0/23/2023	PASSED
· ·	3**					0/22/2023		6/29/2023	PASSED
λ λ ·	X X					<u> </u>		\ \ \ \ \ \	\ \ \ \ \ \ \
						$\sim\sim$			\sim
1	BW					6/15/2023		6/15/2023	PASSED
						-,,		6/30/2023	PASSED
2	BW					6/9/2023		,	PASSED
								6/12/2023	PASSED
3	SW					6/22/2023			PASSED
								6/29/2023	PASSED
4	SW					6/22/2023			PASSED
								6/29/2023	PASSED
5	SW					6/22/2023			PASSED
								6/29/2023	PASSED
6	SW					6/22/2023			PASSED
								6/29/2023	PASSED
7	SW					6/22/2023			PASSED
								6/29/2023	PASSED











RADIOGRAPHIC INSPECTION REPORT

(b) (4)

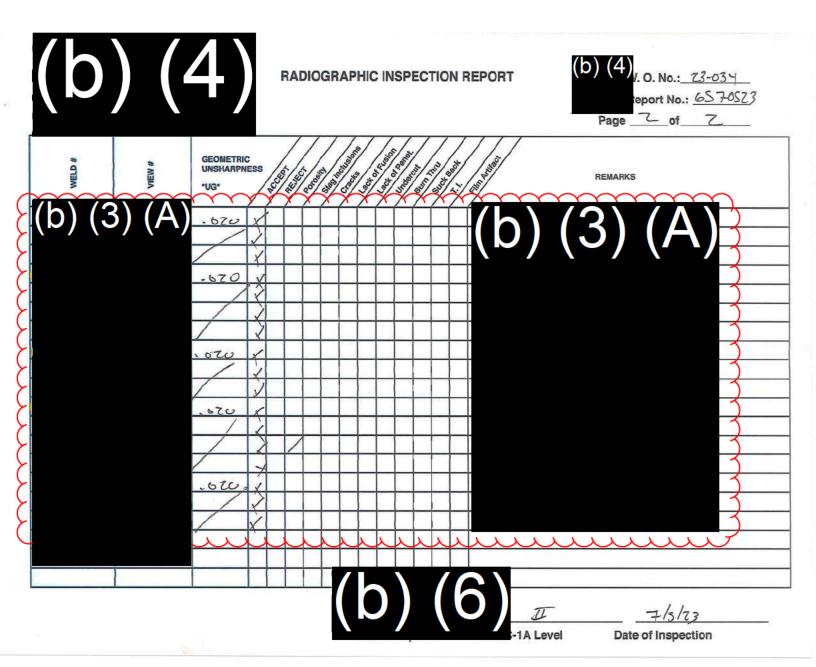
V. O. No.: 73-034

Report No.: 6570573

Date: 715123

Page 1 of 2

custome (b) (4)	CUST JOB#	SPECIFICATION	I ASUE V	ACCEPTANCE ASME \$31.3	1. Single Wall
PROJECT RELIGIBLE PIPE	DWG. NO.		NOTOO G REV C	ACC. PROC. \$31.3 REV ZOIS	
The state of the s		PENS: ASTM	SHIMS MAT'L/THKNS		((•))
sc / I \ / () \	/ / /	YPE UB	TECHNIQUE USED	THICKNE(b) (3) (A	Panoramic
■ (b)(3)	(A)	ATERIAL SS	EXPOSURE TIME 4		2. Single Wall
SF C	\ '\'	OCATION F		MANUAL AUTOMATIC PIPE DIA	
WELD#	GEOMETRIC UNSHARPNESS				Offset 3. Double Wall
TYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYYY	X X X X X X X X X	(XXXXX		2) /2) / /)-	
(h) (3) (A	V 050.			o) (3) (A)) ()•
		++++	\)
					1. Double Wall 0/90
		++++		_	
	X C50.	++++			
		111			Elliptical
		++++	1 1 1		5. Plate •
	.020	+++)
		++++	++++		6. Other
) o.n.o.
P*.					
IDIB			T	7/5/23	
(b) (6		SI	NT-TC-1A Level	Date of Inspection	Customer



(b) (4), (b) (3	3) (A)		LIQUII) PENET	TRANT EX	AMINATION RECO	ORD
			Clien (b)	•			: Red Hill	Page 1 of 3
			(b) (4) ced Report No. G	ure: NDT002.2 Re S062923	v C	Code: AS	SME B31.3	
	MATERIAL		Pl	ENETRANT M	IATERL	AL		INIQUE
	TYPE: CS FW		BRAND	DESIGNATION	PO#	BATCH#	Preclean Drying Time:	
	Surface Condition: As Welded	Cleaner	Magnaflux	SKC-S	N/A	21002K 002711	Method of Application:	Brush
	Ground Other Weld Prep	Penetrant	Magnaflux	SKL-SP1	N/A	19G04K 01755	Dwell Time: 10 Min	
	⊠ New weld	Emulsifier	N/A	N/A	N/A	N/A	Emulsification Time: N	
		Developer	Magnaflux	SKD-S2	N/A	20L02U	Developing Time: 15 M (b) (4) Control #	lin
	Temperature: <u>X</u> 60° F – 125° F Other		Illumination:	⊠White	FC 150		Control # UV Meter N/A]
1	h) (2) (1)	Aycept	Reject Sk	etch/Notes				
	b) (3) (A)			(No inc	lications note	ed at time of inspectio	n.
١,	Performed By	evel III Date: 6	/29/2023	Re	viewed By	·•		Date:

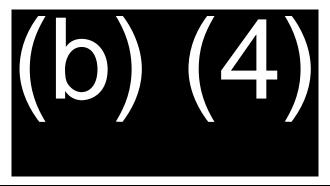
PCP-02.1 REV. B (06/04/03)

(b) (4), (b) (3) (A) LIQUID PENETRANT EXAMINATION RECORD Location: Red Hill Page 2 of 3 Job No.: 23-034 NDT002.2 Rev C Code: ASME B31.3 **MATERIAL** PENETRANT MATERIAL **TECHNIQUE** TYPE: CS FW DESIGNATION PO# BATCH# Preclean Drying Time: 5 MIN Surface Condition: Cleaner 21002K Method of Application: Brush As Welded SKC-S N/A 002711 Magnaflux Ground Penetrant 19G04K Dwell Time: 10 Min Other Weld Prep SKL-SP1 01755 Magnaflux New weld Emulsification Time: N/A Emulsifier N/A N/A 20L02U Developing Time: 15 Min Developer (4)SKD-S2 N/A Magnaflux Temperature: X 60° F - 125° F White Illumination: FC 150 rol# N/A Accept Reject Sketch/Notes X \times \times No indications noted at time of inspection. X X \times \boxtimes \boxtimes \times \times Performed By (b) (6) Level III Reviewed By: Date:

PCP-02.1 REV. B (06/04/03)

(b)	(4	.)	LIQUID	PENET		AMINATION REC	ORD Page 1 of 1
					Job No.:	23-034	1
(1) (2) (4)			023d	, C	Code: AS	SME B31.3	
(b) (3) (A)		PH	ENETRANT M	ATERL	AL	TEC	HNIQUE
TYPE: CS FW		BRAND	DESIGNATION		BATCH#	Preclean Drying Time:	
Surface Condition: As Welded	Cleaner	Magnaflux	SKC-S	N/A	21002K 002711	Method of Application	: Brush
Ground Other Weld Prep	Penetrant	Magnaflux	SKL-SP1	N/A	19G04K 01755	Dwell Time: 10 Min	
⊠ New weld	Emulsifier	N/A	N/A	N/A	N/A	Emulsification Time:	
	Developer	Magnaflux	SKD-S2	N/A	20L02U	Developing Time: 15 M	Min
Temperature: <u>X</u> 60° F – 125° F Other		Illumination:	⊠White	FC 150	(UV Meter N/A	
(h) (3) (A)	Abeebh	Reject Sk	etch/Notes				
(b) (3) (A)	\bowtie	\ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>					
		<u>-</u>	/	~~	~~~	~~~	\sim
		<u>- </u>	(No ind	lications not	ed at time of inspecti	on.
-		 	'	ا	ىىى	ستست	
	<u> </u>						
Performed By: (b) (6)	evel III Date:	6/29/2023	Re	viewed By	:		Date:

PCP-02.1 REV. B (06/04/03)



HYDROSTATIC TEST FORM

CLIENT: (b) (4)

SYSTEM:

Proje	ct Name:	Red Hill Emergent Pipel	ine			
Systen	n Description:	/ L \ /	2 \ //	\ \		
	Starting point nection Point Ending point	(D) (3) (1)		
PS	Req.:				4 hours	
Start of ⁻	Гest Period:	Time:	14:48 hrs	Date:	8/2/2023	
End of T	est Period:	Time:	18:48 hrs	Date:	8/2/2023	
No.	Time	PSI READING		Remarks		
1	14:48	(b) (3) (A)		Pic taken; no visual leaks detect	ted during test	
2	15:03	_(D) (D) (A) 		no visual leaks detected de	-	
3	15:18			no visual leaks detected d		
4	15:33			Pic taken; no visual leaks detect	ted during test	
5	15:48			no visual leaks detected de	uring test	
6	16:03			no visual leaks detected d	uring test	
7	16:18			no visual leaks detected de	uring test	
8	16:33			Pic taken; no visual leaks detect	ted during test	
9	16:48			no visual leaks detected d	uring test	
10	17:03			no visual leaks detected d	uring test	
11	17:18			no visual leaks detected d	uring test	
12	17:33		ĺ	Pic taken; no visual leaks detect	ted during test	
13	17:48			no visual leaks detected de	uring test	
14	18:03			no visual leaks detected de	uring test	
15	18:18			no visual leaks detected de	uring test	
16	18:33			no visual leaks detected de	uring test	
17	18:48			End test, picture taken, no v	risual leaks	

PSI Gauge Manufacturer:	Ashcroft 0-600
Test Witness Client:	(h) (6)
Test Witness OCI Rep.	

(b) (4)_{/ Pg.1}

RD Technology of Hawaii

134 Nakolo Place Honolulu, HI 96819 (808) 833-3499

Certificate of Calibration



Ashcroft

Manufacturer

32488

Serial Number

02/28/2023

Calibration Date

02/28/2024

Recalibration Due

(b) (4)

Instrument Accuracy / Procedure

0-600 PSI
Model
Pressure Gauge
Description
182,039
Test Number

Asset Number
23 °C 43 % RH
Temperature Humidity

RD Technology of Hawaii's quality management system conforms to ISO/IEC 17025:2005, ANSI/NCSL Z540-1-1994, and MIL-STD-45662A. All calibrations are performed using internationally recognized standards traceable to the International System of Units (SI Units). Traceability is achieved through calibrations by the National Institute of Standards and Technology (NIST), other National Measurement Institutes (NMI's), or by using natural physical contants, intrinsic standards, or ratio calibration techniques. There is no expressed or implied warranty that the above instrument will maintain its specificied tolerances during the calibration interval due to possible drift, environment, or other factors beyond the control of RD Technology of Hawaii.

Calibration Standards Used:

(b) (4) nufacturer

Description
Standards on File

Model

Serial

Date Calibrated

Date Due 01/01/2024

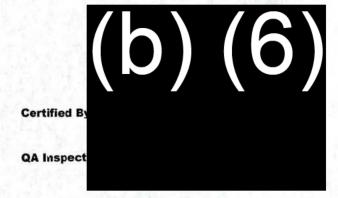
Standards on File

01/01/2023

In Tolerance
Condition Received

In Tolerance

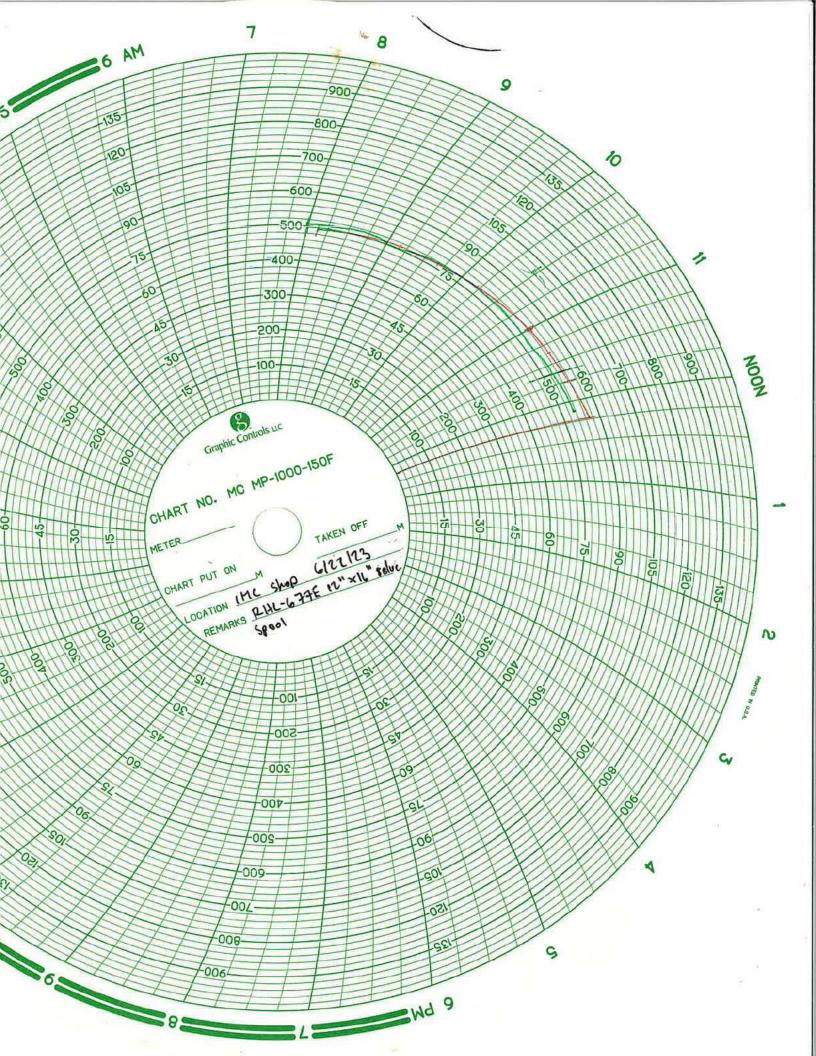
Condition Returned



		QUALITY VALIDATION	ON (QV) REPO	ORT				
	1	Red Hill Bulk Fuel Storag	e Facility Defue	el				
Validation Firm	HDR Environmenta	l, Operations and Construc	etion, Inc.		Repair No.	LING-033		
Address	9781 S. Meridian Bl	vd., Suite 400, Englewood	, CO 80112		Repair ID		3	
Contract No.	FA890315D0007, D	.O. FA8903-19-F-0027		Report Date 28 JUL 2023				
QV Engine	b) (6)				Dute			
Source	PDF Page N	Io. Facility Geo	graphic Area		Location	Reference		
FLC	N/A	(b) (3)	(A)					
Repair Description	(b) (3	8) (B) `		Sour	ce Contract Reference			
Description of Contractor QC Method(s) Used	piping codes as a b	QCP. Contractor used B31.3 Class I asis for the hydrostatic testing of the Contractor used B31.3 Class I Records Recor			ntractor QC s Reviewed	`		
Description of QA Validation and Observations	JTF-RH QV visually	ed in QASP. QA and 3rd Party QV com r inspected repair & review	•	C docume	ntation.			
	Final acceptance by go	overnment. Date: 12 JUL 202	23					
Rework	Needed	Photo Record Att	ached	Repair	Work Vali	dated as Co	mplete	
Yes	No	See Page 2	2.	•	Yes	0	No	
		CERTIFICATE QV ENGINEER SIGNATURE	/ _ \	(6)				
hereby certify that repai eport was personally sul eport is true.		DATE		(6) 2023 / Rev	1			

h) (4)	LIQUID PENETRANT EXAMINATION RECORD					
		Client: (b)			Location Job No.:	(b) (4) Page 1 of 1	
		Report No. K	lure: NDT-002.2 Rev	A	The same transfer and the	SME B31.3	
MATERIA	L	P	ENETRANT M.	ATERL	AL	TECHNIQUE	
TYPE: Carbon Steel		BRAND	DESIGNATION	PO#	BATCH#	Preclean Drying Time: 5 Minutes	
Surface Condition: As Welded	Cleaner	Magnaflux SpotCheck	SKC-S	N/A	19L06K	Method of Application: Brush	
	Penetrant	Magnaflux SpotCheck	SKL-SP1	N/A	09L19K	Dwell Time: 15 Minutes	
New weld	Emulsifier	N/A	N/A	N/A		Emulsification Time: N/A	
	Developer	Magnaflux SpotCheck	SKD-S2	N/A	09L01K	Developing Time: 15 Minutes (b) (4)	
Temperature: 60° F – 125° F Other	Illumination: White FC >100				Control # UV Meter N/A X		
Item(s) Accept	Reject Sketo	h/Notes				\$	

Item(s)	Accept	Reject	Sketch/Notes
Reducing Spool Socket Welds			PT Inspection performed on the reducing spools socket welds for the high and low points.
High Point	\boxtimes		Project RHL-677E
Low Point			No relevant indications noted.
Performed By (b)	(6)	Level I	I Date: 06-22-23 Reviewed By: Date:



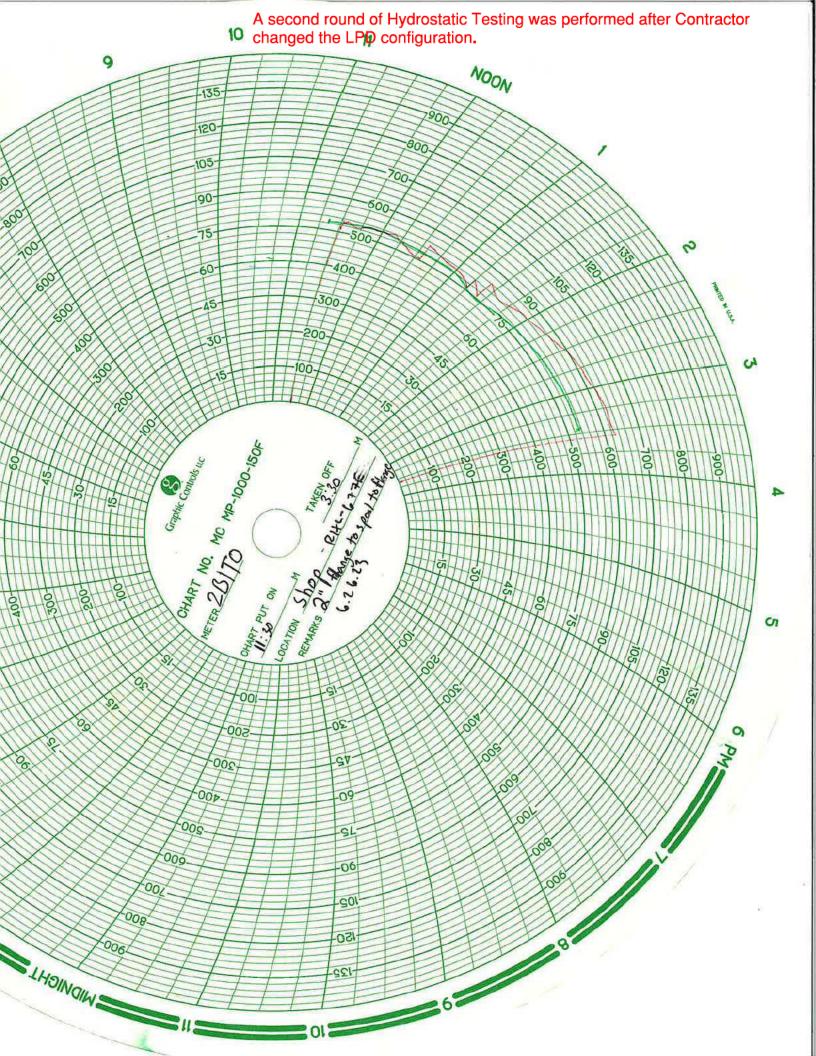
ITEM: Socket Welds		4		Client (b) (4 P.O. No.: 622 (b) (4) roced Report No. K	4) 252-108 lure: NDT-002.2 Rev	100	Location: Job No.:		
	TERIAI	·		P	ENETRANT M.	ATERL	TECHNIQUE		
TYPE: Carbon Steel	Marke Hadding Allice			BRAND	DESIGNATION	PO#	BATCH#	Preclean Drying Time: 5 Minutes	
Surface Condition: As Welded		Cleaner		Magnaflux SpotCheck	SKC-S	N/A	19L06K	Method of Application: Brush	
		Pene	etrant	Magnaflux SpotCheck	SKL-SP1	N/A	09L19K	Dwell Time: 15 Minutes	
⊠ New weld		Emu	lsifier	N/A	N/A	N/A		Emulsification Time: N/A	
		Dev	eloper	Magnaflux SpotCheck	SKD-S2	N/A	09L01K	Developing Time: 15 Minutes	
Temperature: 60° F – 125° F Other			Illumination:	White	FC >10	o) (4) Control # UV Meter N/A X			
Item(s)	Accept	Reject	Sket	ch/Notes					
Reducing Spool Socket Weld				PT Inspection performed on the reducing spool socket welds for the revamped low point drain.					
Low Point Welds #1-#4	\boxtimes			Project RHL-677E No relevant indications noted.					
				A second ro		perform	ed after Co	ntractor changed the LPD	

Date: 06-26-23

Reviewed By:

Level II

Date:





Relief - Quality Validation Report

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Validation Complete	Date	Location



Testing & Inspection Dates

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Testing & Inspection Dates	Date	Location
1			
2			
3			
4			



Around the Horn

ENSURING A FREE AND OPEN INDO-PACIFIC

AGENCIES:

- NAVAL FACILITIES ENGINEERING SYS COMMAND-HAWAII (NAVFAC-HI)
- JOINT TASK FORCE-RED HILL (JTF-RH)
- ENVIRONMENTAL PROTECTION AGENCY (EPA)
- DEPARTMENT OF HEALTH (DOH)
- FLEET LOGISTIC CENTER-PEARL HARBOR (FLC-PH)
- DEFENSE LOGISTIC AGENCY (DLA)
- COMMANDER, NAVY REGION-HAWAII (CNR-HI)
- ENGINEERING AND EXPEDITIONARY WARFARE CENTER (EXWC)
- NAVY-OTHER