Joint Task Force-Red Hill

Bi-Monthly Quality Validation Working Group Meeting

20 July 2023

As of 20 1155W JUL 23

BACKGROUND/DESCRIPTION

ENSURING A FREE AND OPEN INDO-PACIFIC

- 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

ENSURING A FREE AND OPEN INDO-PACIFIC

Second June Submission

- **Repair 10**: The report states U-bolts were installed except at (b) (3) (A) However, the photos appear to indicate (b) (3) (A) was also an exception. In both locations, welded brackets were used. If correct, the documentation should be revised for accuracy.
- **Repair 11**: The report states U-bolts were installed except at (b) (3) (A) . However, the photos appear to indicate (b) (3) (A) was also an exception. In both locations, welded brackets were used. If correct, the documentation should be revised for accuracy. The after photo for the repair at (b) (3) (A) appears to either be missing or mislabeled. Photos for repairs at (b) (3) (A) were not included.
- **Repair 19**: The repair appears to be associated with the F-24 line. However, the comment section of the report refers to the (b) (4) memo, dated November 30, 2022, which references the JP-5 line. Please clarify whether the correct citation is the updated (b) (4) memo, dated June 22, 2023, and that the correct reference to (b) (3) (A) for the F-24 line is on page 5 under Section 1.
- **Repair 241**: Why is the "Rework 2" line indicating a failure of weld (b) (3) (A) after the "rework" 1 line indicates it passed and was inspected?
- **Repairs 241 and 242**: These reports included weld tests associated with O- and U- repairs. What repair numbers are these associated with? Were these welds resolved?

Third June Submission

- **Repair 96**: This repair is for (b) (3) (A) However, the after photo presented is labelled (b) (3) (A). Is the photo mislabeled, or was the incorrect photo included? Please provide an after photo for (b) (3) (A)
- **Repair 128**: Do welds (b) (3) (A) represent actions performed on Repair 128? Data on those welds were not provided. Please clarify.

Quality Validation Report (+ x23)

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Validation Complete	Date	Location
002	Contractor installed pressure indicating transmitters (PITs) at [redacted] locations throughout the Red Hill tunnel connecting to Bleed ring fittings at high point vents on the JP-5 and F-24 piping. PITs integrated into facility automated fuel handling equipment (AFHE) and supervisory control and data acquisition (SCADA) systems. The PITs provide operators with real-time pressure readings to ensure conditions are acceptable before and during fuel movement. Equipment is factory calibrated. Subsequent calibration will be performed once the system has been repacked, documented in the Site Survey Report (SSR).	17 JUL 23	TG/HT

Quality Validation Report (+ x23)

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Validation Complete	Date	Location
INC -002	Contractor unbolted non-standard/field-fabricated flange, cleaned the flange face to accept a new (b) (3) (A) gasket. Contractor installed a new (b) (3) (A) blind flange with new hardware.	13 JUL 23	(b) (3) (A)
INC -003	Contractor removed (b) (3) (A) of piping at Pipe Support (b) (3) (A) to address dent on bell joint. Contractor butt welded pipe pup; tie-in welds received 100% radiographic testing. NDE result table, NDE inspection report, weld map included for reference.	19 JUL 23	
INC -004	Contractor installed a new high point vent assembly on the (b) (3) (A) to facilitate line packing. NOE result table, NOE inspection report, weld map/design detail included for reference.	19 JUL 23	
INC -005	Contractor equally torqued tension rod nuts to (b) (3) (A) pounds around the Dresser coupling lugs.	19 JUL 23	
INC -006	Contractor removed and replaced damaged grout from beneath Pipe Support (b) (3) (A)	19 JUL 23	
INC -007	Contractor removed existing threaded plug from the top of the piping. Contractor installed a threaded nipple, (b) (3) (A) ball valve and threaded end cap.	13 JUL 23	

Quality Validation Report (+ x22)

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Validation Complete	Date	Location
INC -008	Contractor installed conduit clips to restrain (b) (3) (A) piping to existing uni-strut bracket for piping connected to the (b) (3) (A) [redacted]	13 JUL 23	(b) (3) (A) [redacted]
INC -009	Contractor installed u-bolt brackets and shims for (b) (3) (A) [redacted] to existing support bracket.	13 JUL 23	
INC -010	Contractor installed u-bolt brackets and shims for (b) (3) (A) [redacted] to existing bracket.	13 JUL 23	
INC -011	Contractor fabricated hanging supports by anchoring threaded rod into existing overhead structures to support uni-strut brackets. Conduit clips were installed to secure the piping to the uni-strut bracket supports.	13 JUL 23	
INC -012	Contractor added a section angle to connect the (b) (3) (A) [redacted]. Contractor welded a (b) (3) (A) plate to the side of the existing structural beam for reinforcement.	19 JUL 23	
INC -013	Contractor installed a column beam approximately (b) (3) (A) from the wall (to allow clearance for opening existing electrical panel), anchored to the tunnel floor with (b) (3) (A) anchor bolts. Grout installed beneath new column baseplate.	19 JUL 23	

Quality Validation Report (+ x22)

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Validation Complete	Date	Location
INC -014	Contractor installed knee brace to tunnel wall. Brace welded to beam and baseplate, baseplate anchored to tunnel wall with (b) (3) (A) anchor bolts. Grout installed beneath baseplate.	19 JUL 23	(b) (3) (A)
INC -015	Contractor welded a (b) (3) (A) plate ((b) (3) (A)) extending (b) (3) (A) to reinforce beam at Pipe Support	19 JUL 23	
INC -016	Contractor welded a (b) (3) (A) plate (b) (3) (A)) extending (b) (3) (A) to reinforce beam at Pipe Support	19 JUL 23	
INC -017	Contractor welded a (b) (3) (A) plate ((b) (3) (A) extending (b) (3) (A) to reinforce beam at Pipe Support	19 JUL 23	
INC -018	Contractor welded a (b) (3) (A) plate (b) (3) (A)) extending (b) (3) (A) to reinforce beam at Pipe Support	19 JUL 23	
INC -019	Contractor welded a (b) (3) (A) plate (b) (3) (A)) extending (b) (3) (A) to reinforce beam at Pipe Support Visual inspection and MT was performed on the structural welds IAW AWS D1.1 code, 50% random.	19 JUL 23	
INC -020	Contractor welded a (b) (3) (A) place, (b) (3) (A) high on the outside of the vertical support. Visual inspection and PT was performed on the structural welds IAW AWS D1.1 code, 50% random.	19 JUL 23	

Quality Validation Report (+ x22)

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Validation Complete	Date	Location
INC -021	Contractor removed the bottom (b) (3) (A) of the vertical support and replaced in-kind at (b) (3) (A) locations: (b) (3) (A) . Structural welds inspection via VT and PT, 50% random.	19 JUL 23	(b) (3) (A)
INC -022	Contractor welded a (b) (3) (A) place, (b) (3) (A) high on the outside of the vertical support. Visual inspection and PT was performed on the structural welds IAW AWS D1.1 code, 50% random.	19 JUL 23	
INC -024	At Pipe Support (b) (3) (A), contractor removed coating from anchor nut to allow tack welding to the anchor bolt in place of full thread engagement.	19 JUL 23	

Rework - Quality Validation Report

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Validation Complete	Date	Location

Relief - Quality Validation Report

ENSURING A FREE AND OPEN INDO-PACIFIC

NO.	Validation Complete	Date	Location

Seeking Repair Relief: #006, UGPH

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

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	002
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	(b) (4).06
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	17 JUL 2023
QV Engine	(b) (6)		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
(b) (4)	319	(b) (4)	

Repair Description	Install addition essure cating Transmi (b) (4) (b) (4) existing PITs are in t ce trumentation.	Source Contra Referen	
Description of Contractor QC Method(s) Used	Pre Installation, Pre Operational and Operational Testing completed. Integration with AFHE.	Contractor QC Records Reviewed	Performance Metrics in PWS

Description of QA Validation and Observations

Government Quality Assurance is documented IAW PWS.
Visually inspected completed installation; matched completed construction against design and material submittals.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals).
Final acceptance by government. Date: 12 JUL 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Pages 2 5.	◉	Yes	○	No

Comments

Contractor instal [redacted] put [redacted] d [redacted] vents on t [redacted] piping. PITs integrated into facility automated fuel handling equipment (AFHE) and supervisory control and data acquisition (SCADA) systems. The PITs provide operators with real time pressure readings to ensure conditions are acceptable before and during fuel movement. Equipment is factory calibrated. Subsequent calibration will be performed once the system has been repacked, documented in the Site Survey Report (SSR).

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6)
	DATE	17 JUL 2023

(b) (3) (A)

(b) (3) (A)

(b) (3) (A)

(b) (3) (A)

(b) (3) (A)

(b) (3) (A)

(b) (3) (A)

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 002
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted]027
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	13 JUL 2023
QV Engine	(b) (6)		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]/C / NDA[redacted]	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Replace Non [redacted]ard B[redacted]lange. [redacted]	Source Contr Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in QCP.	Contractor QC Records Reviewed	QCP and Daily Reports.
Description of QA Validation and Observations	QA methods outlined in QASP. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repair & reviewed contractor QC documentation. Final acceptance by government. Date: 26 MAY 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor unbo[redacted]a[redacted] to a[redacted](b) (3) (A)[redacted]
[redacted]ed a new (b) (3) (A) [redacted] blind flange with new hardware.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	13 JUL 2023

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 003
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted]A21.51
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]/C [redacted]	N/A	[redacted]	(b) (3) (A) [redacted]

Repair Description	Dent on bell jo[redacted]PI as[redacted]ment; failed FFS[redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Pipe welds 100% inspection via Radiographic Testing.	Contractor QC Records Reviewed	CQCP and Daily Reports.
Description of QA Validation and Observations	Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports). Final acceptance by government. Date: 14 JUN 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor remo[redacted](b) (3) (A) [redacted](b) (3) (A) [redacted]ell jo[redacted]% radiogr[redacted]E result table, NDE inspection report, weld map included for reference.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS

REPAIR ID	ROOT PASS							COVER PASS										
[redacted]	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
INITIAL	FILLET WELD							[redacted]	05 / 04 / 2023	P	05 / 04 / 2023	[redacted]	P	05 / 04 / 2023	[redacted]			
REWORK 1								[redacted]	STRUCTURAL WELD			[redacted]			[redacted]			
REWORK 2								[redacted]				[redacted]			[redacted]			

REPAIR ID	ROOT PASS							[redacted]	COVER PASS			[redacted]			[redacted]			
[redacted]	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	[redacted]	DATE	VT P/F	DATE	[redacted]	MT / PT P/F	DATE	[redacted]	RT P/F	DATE	INSPECTOR
INITIAL	FILLET WELD							[redacted]	05 / 04 / 2023	P	05 / 04 / 2023	[redacted]	P	05 / 04 / 2023	[redacted]			
REWORK 1								[redacted]	STRUCTURAL WELD			[redacted]			[redacted]			
REWORK 2								[redacted]				[redacted]			[redacted]			

REPAIR ID	ROOT PASS							[redacted]	COVER PASS			[redacted]			[redacted]			
[redacted]	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	[redacted]	DATE	VT P/F	DATE	[redacted]	MT / PT P/F	DATE	[redacted]	RT P/F	DATE	INSPECTOR
INITIAL	FILLET WELD							[redacted]	05 / 04 / 2023	P	05 / 04 / 2023	[redacted]	P	05 / 04 / 2023	[redacted]			
REWORK 1								[redacted]	STRUCTURAL WELD			[redacted]			[redacted]			
REWORK 2								[redacted]				[redacted]			[redacted]			

REPAIR ID	ROOT PASS							[redacted]	COVER PASS			[redacted]			[redacted]			
[redacted]	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	[redacted]	DATE	VT P/F	DATE	[redacted]	MT / PT P/F	DATE	[redacted]	RT P/F	DATE	INSPECTOR
INITIAL	FILLET WELD							[redacted]	05 / 04 / 2023	P	05 / 04 / 2023	[redacted]	P	05 / 04 / 2023	[redacted]			
REWORK 1								[redacted]	STRUCTURAL WELD			[redacted]			[redacted]			
REWORK 2								[redacted]				[redacted]			[redacted]			

REPAIR ID	ROOT PASS							[redacted]	COVER PASS			[redacted]			[redacted]			
[redacted]	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	[redacted]	DATE	VT P/F	DATE	[redacted]	MT / PT P/F	DATE	[redacted]	RT P/F	DATE	INSPECTOR
INITIAL	FILLET WELD							[redacted]	05 / 04 / 2023	P	05 / 04 / 2023	[redacted]	P	05 / 04 / 2023	[redacted]			
REWORK 1								[redacted]	STRUCTURAL WELD			[redacted]						
REWORK 2								[redacted]				[redacted]						

REPAIR ID	ROOT PASS							[redacted]	COVER PASS			[redacted]						
[redacted]	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	[redacted]	DATE	VT P/F	DATE	[redacted]	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	INSPECTOR
INITIAL	P	05 / 02 / 2023	WL	05 / 02 / 2023	P	AW	05 / 02 / 2023	[redacted]	05 / 03 / 2023	P	05 / 03 / 2023	[redacted]				P	05 / 04 / 2023	[redacted]
REWORK 1								[redacted]				[redacted]						[redacted]
REWORK 2								[redacted]				[redacted]						[redacted]

REPAIR ID	ROOT PASS							[redacted]	COVER PASS			[redacted]						[redacted]
[redacted]	FITUP P/F	DATE	WELDER	DATE	VT P/F	INSPECTOR	DATE	[redacted]	DATE	VT P/F	DATE	[redacted]	MT / PT P/F	DATE	INSPECTOR	RT P/F	DATE	I[redacted]
INITIAL	P	05 / 02 / 2023	WL	05 / 02 / 2023	P	AW	05 / 02 / 2023	[redacted]	05 / 03 / 2023	P	05 / 03 / 2023	[redacted]				P	05 / 04 / 2023	[redacted]
REWORK 1								[redacted]				[redacted]						
REWORK 2								[redacted]				[redacted]						

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

(b) (3) (A)

(b) (4)

RADIOGRAPHIC INSPECTION REPORT

(b) (4)

W. O. No.: 73-034

Report No.: 6550423

Page 3 of 3

WELD #	VIEW #	GEOMETRIC UNSHARPNESS "UG"	ACCEPT	REJECT	Porosity	Slag Inclusions	Cracks	Lack of Fusion	Lack of Penet.	Undercut	Burn Thru	Suck Back	T.I.	Film Artifact	REMARKS
W-07	0-1	.020	X												(b) (3) (A)
(b) (3) (A)	1-2		X												
	2-3		X												
	3-0		X												
W-1	0-14	.020	X												JP5
(b) (3) (A)	14-28		X												ITEM JP5.A21.51
	28-42		X												
	42-0		X												
W2	0-14	.020	X												JP5
	14-28		X												ITEM JP5.A21.51
	28-42		X												
	42-0		X												

(b) (6)

Film Interpreter

II

SNT-TC-1A Level

5/4/23

Date of Inspection

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 004
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted]C.K.pp
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]/C [redacted]	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Missing HPV f[redacted]nality [redacted]ateral with curre[redacted] [redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Socket welds 100% inspection via VT and PT or MT.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments
Contractor instal[redacted](b) (3) (A)[redacted]ing[redacted]
[redacted]port, weld [redacted] included for reference.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	19 JUL 2023

(b) (3) (A)

WELD INFORMATION									INSPECTION INFORMATION			
Weld ID	Number	SIZE	TYPE	JOINT		JOINT	WELDER ID	DATE	NDE TYPE	INITIALS	DATE	RESULTS
(b) (3) (A)	4	(b) (3) (A)	SW	PIPE		90* SW ELBOW	(b) (6)	6/21/2023	CWI VT	(b) (6)		PASSED
									PT		6/29/2023	PASSED
	5		SW	90* SW ELBOW		PIPE		6/21/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	6		SW	PIPE		90* SW ELBOW		6/21/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	7		SW	90* SW ELBOW		PIPE NIPPLE (TOE)		6/21/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	1		BW	(b) (3) (A) Pipe	-	(b) (3) (A) vessel-o-let		6/30/2023	CWI VT			PASSED
									RT		7/5/2023	PASSED
	2		BW	(b) (3) (A) vessel-o-let	-	RFWN Flange		6/30/2023	CWI VT			PASSED
									RT		7/5/2023	PASSED
	3		SW	RFSW Flange		PIPE		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	4		SW	PIPE		90* SW ELBOW		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	5		SW	90* SW ELBOW		PIPE		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	6		SW	PIPE		90* SW ELBOW		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	7		SW	90* SW ELBOW		PIPE NIPPLE (TOE)		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	1		BW	(b) (3) (A) Pipe	-	(b) (3) (A) vessel-o-let		6/15/2023	CWI VT		6/15/2023	PASSED
									RT		6/30/2023	PASSED
	2		BW	(b) (3) (A) vessel-o-let	-	FWN Flange		6/9/2023	CWI VT			PASSED
									RT		6/12/2023	PASSED
	3		SW	RFSW Flange		PIPE		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	4		SW	PIPE		90* SW ELBOW		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	5		SW	90* SW ELBOW		PIPE		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	6		SW	PIPE		90* SW ELBOW		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED
	7		SW	90* SW ELBOW		PIPE NIPPLE (TOE)		6/22/2023	CWI VT			PASSED
									PT		6/29/2023	PASSED

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

(b) (3) (A)

[redacted]

RADIOGRAPHIC INSPECTION REPORT

[redacted] W. O. No.: 23-034

Report No.: GS62723

WELD #	VIEW #	GEOMETRIC UNSHARPNESS *UG*	ACCEPT	REJECT	Porosity	Slag Inclusions	Cracks	Lack of Fusion	Lack of Penet.	Undercut	Burn Thru	Suck Back	T.I.	Film Artifact	REMARKS
[redacted]	1-2	.020	X												[redacted]
	2-3		X												
	3-4		X												
	4-1		X												
	1-2	.020	X												
	2-3		X												
	3-4		X												
	4-1		X												
	1-2	.020	X												
	2-3		X												
	3-4		X												
	4-1		X												
	1-2	.020	X												
	2-3		X												
	3-4		X												
	4-1		X												
	1-2	.020	X												
	2-3		X												
	3-4		X												
	4-1		X												

[redacted]

Film Interpreter

II

SNT-TC-1A Level

6/30/23

Date of Inspection

(b) (4)

RADIOGRAPHIC INSPECTION REPORT

(b) (4) W. O. No.: 23-034
Report No.: GSW1223
Date: 6/12/23
Page 1 of 1

FORM NDT-005.1

CUSTOMER (b) (4)	CUST JOB#	SPECIFICATION ASME V	ACCEPTANCE ASME B31.3		
PROJECT Red Hill emergent	DWG. NO.	PROCEDURE NDT006 REV C	ACC. PROC. B31.3 REV 2015		
RT SOURCE Ir-192	FILM AGFA D5	PB SCREENS	PENS: ASTM	SHIMS MAT'L/THKNS	MATERIAL CS
SOURCE (b) (3) (A)				TECHNIQUE USED 6	THICKNESS (b) (3) (A)
FOCAL S				EXPOSURE TIME 1:15	JOINT TYPE
SFD				PROCESSING [X] MANUAL [ ] AUTOMATIC	PIPE DIA.

WELD#	VIEW #	GEOMETRIC UNSHARPNESS "UG"	ACCEPT	REJECT	Porosity	Slag Inclusions	Cracks	Lack of Fusion	Lack of Penet.	Undercut	Burn Thru	Suck Back	T.I.	Film Artifact	REMARKS
(b) (3) (A)	0	.020	X												(b) (3) (A)
	60		X												
	120		X												
(b) (3) (A)	0	.020	X												
	60		X												
	120		X												
	0	.020	X												
	60		X												
	120		X												

1. Single Wall — Panoramic
2. Single Wall — Offset
3. Double Wall
4. Double Wall 0/90 — Elliptical
5. Plate
6. Other

(b) (6) II 6/12/23

Radiographer | Date | Film Interpreter | SNT-TC-1A Level | Date of Inspection | Customer

(b) (4)

LIQUID PENETRANT EXAMINATION RECORD

Client: (b) (4)	Location: Red Hill	Page 1 of 1
P.O. No.:	Job No.: 23-034	
(b) (4) ocedure: NDT002.2 Rev C	Code: ASME B31.3	
Report No. KM6292023d		

ITEM: VSLT socket welds

MATERIAL		PENETRANT MATERIAL				TECHNIQUE
TYPE: CS FW		BRAND	DESIGNATION	PO#	BATCH #	Preclean Drying Time: 5 MIN
Surface Condition: ☐ As Welded ☐ Ground ☐ Other Weld Prep ☒ New weld	Cleaner	Magnaflux	SKC-S	N/A	21002K 002711	Method of Application: Brush
	Penetrant	Magnaflux	SKL-SP1	N/A	19G04K 01755	Dwell Time: 10 Min
	Emulsifier	N/A	N/A	N/A	N/A	Emulsification Time: N/A
	Developer	Magnaflux	SKD-S2	N/A	20L02U	Developing Time: 15 Min
Temperature: X 60° F – 125° F Other ____		Illumination: ☒ White		FC 150		E & I Control # UV Meter ☐ N/A ☐

Item(s)	Accept	Reject	Sketch/Notes
(b) (3) (A) socket weld	☒	☐	No indications noted at time of inspection.
socket weld	☒	☐	
socket weld	☒	☐	
socket weld	☒	☐	
socket weld	☒	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	
	☐	☐	

Performed By (b) (6) Level III Date: 6/29/2023

Reviewed By: Date:

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 005
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted]C.K.qq
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]/C [redacted]	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Loose dresse[redacted]ing r[redacted]nt harness nuts[redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in CQCP.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against Work Plan.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor equal[redacted] (b) (3) (A) [redacted] s[redacted]r co[redacted]

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.

QV ENGINEER SIGNATURE	(b) (6) [redacted]
DATE	19 JUL 2023

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 006
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted]C.K.rr
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engine	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]/C [redacted]	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Damaged gro[redacted]eath (b) (3) (A) base plate. Re[redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in CQCP.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor remo[redacted] (b) (3) [redacted]

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.

QV ENGINEER SIGNATURE	(b) (6) [redacted]
DATE	19 JUL 2023

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 007
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].MM.02
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	13 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C [redacted]	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Threaded cap[redacted]00 is[redacted]ng valve. Rem[redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in QCP.	Contractor QC Records Reviewed	QCP and Daily Reports.
Description of QA Validation and Observations	QA methods outlined in QASP. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repair & reviewed contractor QC documentation. Final acceptance by government. Date: 18 MAY 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor remo[redacted]c [redacted]inst[redacted](b) (3) (A) [redacted]l [redacted]cap. [redacted]

Crews will monitor threaded connections for weeps during repacking.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	13 JUL 2023

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 008
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].MM.03
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	13 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C [redacted]	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Unsupported (b) (3) (A) pipe [redacted]ll shims and U[redacted]t (b) (3) (A) (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in QCP.	Contractor QC Records Reviewed	QCP and Daily Reports.
Description of QA Validation and Observations	QA methods outlined in QASP. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repair & reviewed contractor QC documentation. Final acceptance by government. Date: 22 MAY 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor instal[redacted](b) (3) (A)[redacted]cket[redacted](b) (3) (A)[redacted]

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	13 JUL 2023

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 009
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	CAR.MM.04
Co ntract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	13 JUL 2023
QV Engineer	(b) (6)		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
EXWC	N/A	(b) (3) (A)	(b) (3) (A)

Repair Description	Unsupported (b) (3) (A) pipe. Install shims and u bolt at existing support for (b) (3) (A) pipe connected to (b) (3) (A) (b) (3) (A)	Source Contrac Referenc	
Description of Contractor QC Method(s) Used	Methods outlined in QCP.	Contractor QC Records Reviewed	QCP and Daily Reports.
Description of QA Validation and Observations	QA methods outlined in QASP. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repair & reviewed contractor QC documentation. Final acceptance by government. Date: 22 MAY 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor installed u bolt brackets and shims for (b) (3) (A) (b) (3) (A) to existing support bracket.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6)
	DATE	13 JUL 2023

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 010
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	CAR.MM.07
Co ntract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	13 JUL 2023
QV Engineer	(b) (6)		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
EXWC	N/A	(b) (3) (A)	(b) (3) (A)

Repair Description	Unsupported (b) (3) (A) pipe. Install shims and U bolt at existing support for (b) (3) (A) pipe connected to (b) (3) (A) (b) (3) (A)	Source Contract Reference	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in QCP.	Contractor QC Records Reviewed	QCP and Daily Reports.
Description of QA Validation and Observations	QA methods outlined in QASP. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repair & reviewed contractor QC documentation. Final acceptance by government. Date: 22 MAY 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor installed u bolt brackets and shims for (b) (3) (A) [redacted] to existing bracket.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6)
	DATE	13 JUL 2023

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 011
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].MM.08
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	13 JUL 2023
QV Engineer	(b) (6)		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C [redacted]	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Four unsuppo[redacted]nk sa[redacted] pipes. Provide[redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in QCP.	Contractor QC Records Reviewed	QCP and Daily Reports.
Description of QA Validation and Observations	QA methods outlined in QASP. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repair & reviewed contractor QC documentation. Final acceptance by government. Date: 22 MAY 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor fabric[redacted]ver[redacted] [redacted]ere install[redacted]iping to the uni strut bracket supports.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	13 JUL 2023

(b) (3) (A)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC-012
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	CAR.STR.01
Contract No.	FA890315D0007, D.O. FA8903-19-F-0027	Report Date	19 JUL 2023
QV Engineer	(b) (6)		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
EXWC / 2022 (b) (4)	N/A	(b) (3) (A)	(b) (3) (A)

Repair Description	The lower section of pipe support column and cross bracing is heavily corroded (greater than 50% metal loss). Ground [redacted] Weld (b) (3) (A) plate, (b) (3) (A) in height, on inside flange of steel beam (side facing camera).	Source Contract Reference	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Structural welds 50% inspection via VT and MT.	Contractor QC Records Reviewed	CQCP and Daily Reports.
Description of QA Validation and Observations	Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports. JTF-RH secondary QA and 3rd Party QV completed. JTF-RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports). Final acceptance by government. Date: 14 JUN 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor added a section angle to connect the cr[redacted]g to the base of (b) (3) (A) [redacted]. Contractor welded a (b) (3) (A) plate to the side of the existing structural [redacted]or reinforcement.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6)
	DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	06 / 06 / 2023	(b) (6)	P	06 / 27 / 2023	(b) (4)
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	04 / 07 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 22 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 29 / 2023		P	04 / 27 / 2023	
	P	03 / 30 / 2023		P	04 / 27 / 2023	
	P	03 / 23 / 2023		P	04 / 27 / 2023	
	P	03 / 24 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

MAGNETIC PARTICLE EXAMINATION RECORD

Client: (b) (4)	Location: Red Hill; JBPHH	Date: 06-30-2023
P.O. No.: NA	Job No. 23-034	
(b) (4) Procedure: NDT 003.2 revD	Code: AWS D1.1	
Report No.: KS06302023		

MATERIAL	MAGNETIZING TECHNIQUE	MAGNETIZING EQUIPMENT
Type: C/S	Prod: ☒ AC ☐ DC Spacing (b) (3) (A)	Mfg.: Parker Serial #: 23962
Thickness: STD	Amps fixed Coil Dia. ____	Calibration Date 06/01/2023
Geometry: ☐ Pipe ☒ Plate ☐ Rod ☐ Other: ____	Longitudinal Turns n/a Amp Turns ____	Field Verification By: Pie Gauge
	Direct n.a	
	Circular n/a	UV Meter: n/a
Item: Repairs on Pipe Supports	Central Conductor n/a	MODEL: n/a Serial #: n/a
	Amps n/a	
Stage of Mfg.: New	Inspection Medium ☒ Dry Powder	Color: RED
	☐ Wet Visible	Type Batch No.: 22A006
Surface Condition: Buffed Clean	Illumination ☒ White ☐ Ultraviolet	

Item(s)	Accept	Reject	Item(s)	Accept	Reject
Pipe Supports/Braces					
(b) (3) (A)	☒	☐			
	☒	☐			
	☒	☐			
	☒	☐			
	☒	☐			

Sketch/Notes

MT Inspection was requested and performed on Repairs made on Pipe Supports.

No relevant indications were found during this inspection.

Performed By: (b) (6) Date 06/30/2023 Reviewed By: Date: Page 1 of 1

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 013
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	CAR.STR.02
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6)		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
EXWC / 2022 (b) (4)	N/A	(b) (3) (A)	(b) (3) (A)

Repair Description	Horizontal beam is 100% corroded through at the wall interface. Install a column beneath beam, approximately (b) (3) (A) out f[redacted]wall, to [redacted]e beam.	Source Contract Reference	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Structural welds 50% inspection via VT and MT.	Contractor QC Records Reviewed	CQCP and Daily Reports.
Description of QA Validation and Observations	Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports). Final acceptance by government. Date: 14 JUN 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor installed a column beam approximately (b) (3) (A) from the wall (to[redacted]e for opening existing e[redacted] panel), anchored to the tunnel floor with (b) (3) (A) anchor bolts. Grout installed beneath new column baseplate.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6)
	DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID		VT P/F	FINAL ACCEPTANCE DATE	(b) (6)	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)		P	06 / 06 / 2023		P	06 / 27 / 2023	(b) (4)
		P	06 / 06 / 2023		P	06 / 27 / 2023	
		P	06 / 06 / 2023		P	06 / 27 / 2023	
		P	06 / 06 / 2023		P	06 / 27 / 2023	
		P	06 / 06 / 2023		P	06 / 30 / 2023	
		P	04 / 07 / 2023		P	04 / 27 / 2023	
		P	04 / 14 / 2023		P	04 / 27 / 2023	
		P	04 / 14 / 2023		P	04 / 27 / 2023	
		P	04 / 14 / 2023		P	04 / 27 / 2023	
		P	06 / 06 / 2023		P	06 / 30 / 2023	
		P	03 / 22 / 2023		P	04 / 27 / 2023	
		P	03 / 28 / 2023		P	04 / 27 / 2023	
		P	03 / 28 / 2023		P	04 / 27 / 2023	
		P	03 / 29 / 2023		P	04 / 27 / 2023	
		P	03 / 30 / 2023		P	04 / 27 / 2023	
		P	03 / 23 / 2023		P	04 / 27 / 2023	
		P	03 / 24 / 2023		P	04 / 27 / 2023	
		P	06 / 06 / 2023		P	06 / 30 / 2023	
		P	06 / 06 / 2023		P	06 / 30 / 2023	
		P	03 / 20 / 2023		P	04 / 27 / 2023	
		P	03 / 20 / 2023		P	04 / 27 / 2023	
		P	02 / 28 / 2023		P	03 / 07 / 2023	
		P	02 / 28 / 2023		P	03 / 07 / 2023	
		P	02 / 28 / 2023		P	03 / 07 / 2023	
		P	02 / 28 / 2023		P	03 / 07 / 2023	
		P	02 / 28 / 2023		P	03 / 07 / 2023	

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

MAGNETIC PARTICLE EXAMINATION RECORD

Client: (b) (4)	Location: Red Hill; JBPHH	Date: 06-30-2023
P.O. No.: NA	Job No. 23-034	
(b) (4) Procedure: NDT 003.2 revD	Code: AWS D1.1	
Report No.: KS06302023		

MATERIAL	MAGNETIZING TECHNIQUE	MAGNETIZING EQUIPMENT
Type: C/S	Prod: ☒ AC ☐ DC Spacing (b)(3)(A)	Mfg.: Parker Serial #: 23962
Thickness: STD	Amps fixed Coil Dia. _____	Calibration Date 06/01/2023
Geometry: ☐ Pipe ☒ Plate ☐ Rod ☐ Other: _____	Longitudinal Turns n/a Amp Turns _____	Field Verification By: Pie Gauge
	Direct n.a	
	Circular n/a	UV Meter: n/a
Item: Repairs on Pipe Supports	Central Conductor n/a	MODEL: n/a Serial #: n/a
	Amps n/a	
Stage of Mfg.: New	Inspection Medium ☒ Dry Powder	Color: RED
	☐ Wet Visible	Type Batch No.: 22A006
Surface Condition: Buffed Clean	Illumination ☒ White ☐ Ultraviolet	

(b) (3) (A)

Item(s)	Accept	Reject
	☒	☐
	☒	☐
	☒	☐
	☒	☐
	☒	☐

Sketch/Notes

MT Inspection was requested and performed on Repairs made on Pipe Supports.

No relevant indications were found during this inspection.

Performed By: (b) (6) Date 06/30/2023 Reviewed By: Date: Page 1 of 1

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC-014
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.03
Contract No.	FA890315D0007, D.O. FA8903-19-F-0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C/ 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Horizontal be[redacted]s 40%[redacted]al loss on botto[redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Structural welds 50% inspection via VT and MT.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports.
JTF-RH secondary QA and 3rd Party QV completed.
JTF-RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments
Contractor instal[redacted]ate, [redacted]th (b) (3) (A) [redacted]but installe[redacted]ate.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.

QV ENGINEER SIGNATURE	(b) (6) [redacted]
DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	06 / 06 / 2023	(b) (6)	P	06 / 27 / 2023	(b) (4)
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	04 / 07 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 22 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 29 / 2023		P	04 / 27 / 2023	
	P	03 / 30 / 2023		P	04 / 27 / 2023	
	P	03 / 23 / 2023		P	04 / 27 / 2023	
	P	03 / 24 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

MAGNETIC PARTICLE EXAMINATION RECORD

Client: (b) (4)	Location: Red Hill; JBPHH	Date: 06-30-2023
P.O. No.: NA	Job No. 23-034	
(b) (4) Procedure: NDT 003.2 revD	Code: AWS D1.1	
Report No.: KS06302023		

MATERIAL	MAGNETIZING TECHNIQUE	MAGNETIZING EQUIPMENT
Type: C/S	Prod: ☒ AC ☐ DC Spacing (b) (3)	Mfg.: Parker Serial #: 23962
Thickness: STD	Amps fixed Coil Dia. ____	Calibration Date 06/01/2023
Geometry: ☐ Pipe ☒ Plate ☐ Rod ☐ Other: ____	Longitudinal Turns n/a Amp Turns ____	Field Verification By: Pie Gauge
	Direct n.a	
	Circular n/a	UV Meter: n/a
Item: Repairs on Pipe Supports	Central Conductor n/a	MODEL: n/a Serial #: n/a
	Amps n/a	
Stage of Mfg.: New	Inspection Medium ☒ Dry Powder	Color: RED
	☐ Wet Visible	Type Batch No.: 22A006
Surface Condition: Buffed Clean	Illumination ☒ White ☐ Ultraviolet	

Item(s)	Accept	Reject	Item(s)	Accept	Reject
Pipe Supports/Braces					
(b) (3) (A)	☒	☐			
	☒	☐			
	☒	☐			
	☒	☐			
	☒	☐			

Sketch/Notes

MT Inspection was requested and performed on Repairs made on Pipe Supports.

No relevant indications were found during this inspection.

Performed By: (b) (6) Date 06/30/2023 Reviewed By: Date: Page 1 of 1

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 015
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.04
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C / 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Significant co[redacted] obse[redacted] on top flange c[redacted] (b) (3) (A) [redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Structural welds 50% inspection via VT and MT.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor welde[redacted] (b) (3) (A) [redacted] p[redacted] info[redacted] (b) (3) [redacted]

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.

QV ENGINEER SIGNATURE	(b) (6) [redacted]
DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	06 / 06 / 2023	(b) (6)	P	06 / 27 / 2023	(b) (4)
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	04 / 07 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 22 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 29 / 2023		P	04 / 27 / 2023	
	P	03 / 30 / 2023		P	04 / 27 / 2023	
	P	03 / 23 / 2023		P	04 / 27 / 2023	
	P	03 / 24 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

MAGNETIC PARTICLE EXAMINATION RECORD

Client: (b) (4)	Location: Redhill	Date: 06/26/2023
P.O. No.	Job No.: 23-034	
(b) (4) rocedure: NDT-003.2 REV E	Code: AWS D1.1	
Report No.: GS06/26/23		

MATERIAL	MAGNETIZING TECHNIQUE	MAGNETIZING EQUIPMENT
Type: Plate	Prod: ☒ AC ☐ DC Spacing (b) (3) (A)	Mfg.: Parker Serial #: 340
Thickness: Various	Amps ____ Coil Dia. ____	Calibration Due Date: 12/20/23
Geometry ☐ Pipe ☒ Plate ☐ Rod ☐ Other: ____	Longitudinal Turns ____ Amp Turns ____ Direct ____ Circular Central Conductor ____ Amps ____	Field Verification By: Pie Gauge UV Meter: MODEL: Serial #:
Item; Steel Plate		
Stage of Mfg.:	Inspection Medium ☒ Dry Powder Color: Gray ☐ Wet Fluorescent Type Batch No.: 14B108	
Surface Condition: Clean	Illumination ☒ White ☐ Ultraviolet	

Item(s)	Accept	Reject	Item(s)	Accept	Reject	Sketch/Notes
(b) (3) (A)	☒	☐		☐	☐	No indications noted at time of inspection.
	☒	☐		☐	☐	
	☒	☐		☐	☐	
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	☐	☐		☐	☐	
	☐	☐		☐	☐	
	☐	☐		☐	☐	

Performed By (b) (6) Level: II Date: 06/26/2023 Reviewed By: Date: Page 1 of 1

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 016
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.05
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C / 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Significant co[redacted] obse[redacted] on top flange c[redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Structural welds 50% inspection via VT and MT.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor welde[redacted] (b) (3) (A) [redacted] p[redacted] info[redacted] (b) (3) [redacted]

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.

QV ENGINEER SIGNATURE	(b) (6) [redacted]
DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	06 / 06 / 2023	(b) (6)	P	06 / 27 / 2023	(b) (4)
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	04 / 07 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 22 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 29 / 2023		P	04 / 27 / 2023	
	P	03 / 30 / 2023		P	04 / 27 / 2023	
	P	03 / 23 / 2023		P	04 / 27 / 2023	
	P	03 / 24 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

MAGNETIC PARTICLE EXAMINATION RECORD

Client: (b) (4)	Location: Redhill	Date: 06/26/2023
P.O. No.	Job No.: 23-034	
(b) (4) Procedure: NDT-003.2 REV E	Code: AWS D1.1	
Report No.: GS06/26/23		

MATERIAL	MAGNETIZING TECHNIQUE	MAGNETIZING EQUIPMENT
Type: Plate	Prod: ☒ AC ☐ DC Spacing: (b) (3) (A)	Mfg.: Parker Serial #: 340
Thickness: Various	Amps ____ Coil Dia. ____	Calibration Due Date: 12/20/23
Geometry ☐ Pipe ☒ Plate ☐ Rod ☐ Other: ____	Longitudinal Turns ____ Amp Turns ____ Direct ____ Circular	Field Verification By: Pie Gauge
Item; Steel Plate	Central Conductor ____ Amps ____	UV Meter: MODEL: Serial #:
Stage of Mfg.:	Inspection Medium ☒ Dry Powder Color: Gray ☐ Wet Fluorescent Type Batch No.: 14B108	
Surface Condition: Clean	Illumination ☒ White ☐ Ultraviolet	

Item(s)	Accept	Reject	Item(s)	Accept	Reject	Sketch/Notes
(b) (3) (A)	☒	☐		☐	☐	No indications noted at time of inspection.
	☒	☐		☐	☐	
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	☐	☐		☐	☐	

Performed By; (b) (6) Level: II Date: 06/26/2023 Reviewed By: Date: Page 1 of 1

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 017
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.06
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C / 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Significant co[redacted] obse[redacted] on top flange c[redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Structural welds 50% inspection via VT and MT.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor welde[redacted] (b) (3) (A) [redacted] p[redacted] info[redacted] (b) (3) [redacted]

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.

QV ENGINEER SIGNATURE	(b) (6) [redacted]
DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	06 / 06 / 2023	(b) (6)	P	06 / 27 / 2023	(b) (4)
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	04 / 07 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 22 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 29 / 2023		P	04 / 27 / 2023	
	P	03 / 30 / 2023		P	04 / 27 / 2023	
	P	03 / 23 / 2023		P	04 / 27 / 2023	
	P	03 / 24 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

MAGNETIC PARTICLE EXAMINATION RECORD

Client: (b) (4)	Location: Redhill	Date: 06/26/2023
P.O. No.	Job No.: 23-034	
(b) (4) Procedure: NDT-003.2 REV E	Code: AWS D1.1	
Report No.: GS06/26/23		

MATERIAL	MAGNETIZING TECHNIQUE	MAGNETIZING EQUIPMENT
Type: Plate	Prod: ☒ AC ☐ DC Spacing: (b) (3) (A)	Mfg.: Parker Serial #: 340
Thickness: Various	Amps ____ Coil Dia. ____	Calibration Due Date: 12/20/23
Geometry ☐ Pipe ☒ Plate ☐ Rod ☐ Other: ____	Longitudinal Turns ____ Amp Turns ____ Direct ____ Circular	Field Verification By: Pie Gauge
		UV Meter:
Item; Steel Plate	Central Conductor ____ Amps ____	MODEL: Serial #:
Stage of Mfg.:	Inspection Medium ☒ Dry Powder Color: Gray	
	☐ Wet Fluorescent Type Batch No.: 14B108	
Surface Condition: Clean	Illumination ☒ White ☐ Ultraviolet	

Item(s)	Accept	Reject	Item(s)	Accept	Reject	Sketch/Notes
(b) (3) (A)	☒	☐		☐	☐	No indications noted at time of inspection.
	☒	☐		☐	☐	
	☒	☐		☐	☐	
	☒	☐		☐	☐	
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	☐	☐		☐	☐	
	☐	☐		☐	☐	

Performed By: (b) (6) Level: II Date: 06/26/2023 Reviewed By: Date: Page 1 of 1

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 018
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.07
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C/ 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Significant co[redacted] obse[redacted] on top flange c[redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Structural welds 50% inspection via VT and MT.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor welde[redacted] (b) (3) (A) [redacted] p[redacted] info[redacted] (b) (3) (A) [redacted]

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.

QV ENGINEER SIGNATURE	(b) (6) [redacted]
DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	06 / 06 / 2023	(b) (6)	P	06 / 27 / 2023	(b) (4)
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	04 / 07 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 22 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 29 / 2023		P	04 / 27 / 2023	
	P	03 / 30 / 2023		P	04 / 27 / 2023	
	P	03 / 23 / 2023		P	04 / 27 / 2023	
	P	03 / 24 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

MAGNETIC PARTICLE EXAMINATION RECORD

Client: (b) (4)	Location: Redhill	Date: 06/26/2023
P.O. No.	Job No.: 23-034	
(b) (4) Procedure: NDT-003.2 REV E	Code: AWS D1.1	
Report No.: GS06/26/23		

MATERIAL	MAGNETIZING TECHNIQUE	MAGNETIZING EQUIPMENT
Type: Plate	Prod: ☒ AC ☐ DC Spacing (b) (3) (A)	Mfg.: Parker Serial #: 340
Thickness: Various	Amps ____ Coil Dia. ____	Calibration Due Date: 12/20/23
Geometry ☐ Pipe ☒ Plate ☐ Rod ☐ Other: ____	Longitudinal Turns ____ Amp Turns ____ Direct ____ Circular Central Conductor ____ Amps ____	Field Verification By: Pie Gauge UV Meter: MODEL: Serial #:
Item; Steel Plate		
Stage of Mfg.:	Inspection Medium ☒ Dry Powder Color: Gray ☐ Wet Fluorescent Type Batch No.: 14B108	
Surface Condition: Clean	Illumination ☒ White ☐ Ultraviolet	

Item(s)	Accept	Reject	Item(s)	Accept	Reject	Sketch/Notes
(b) (3) (A)	☒	☐		☐	☐	No indications noted at time of inspection.
	☒	☐		☐	☐	
	☒	☐		☐	☐	
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	☐	☐		☐	☐	
	☐	☐		☐	☐	

Performed By; (b) (6) Level: II Date: 06/26/2023 Reviewed By: Date: Page 1 of 1

PCP-04.1
Rev. B (06/04/03)

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 019
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.08
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C / 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Significant co[redacted] obse[redacted] on top flange a[redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Visual inspection and Magnetic Particle Inspection (MT) was performed on the structural welds IAW AWS D1.1 code, 50% random.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports.
JTF RH secondary QA and 3rd Party QV completed.
JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments
Contractor welde[redacted] (b) (3) (A) [redacted] p[redacted] info[redacted] (b) (3) (A) [redacted] erformed [redacted] elds IAW AWS D1.1 code, 50% random.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	06 / 06 / 2023	(b) (6)	P	06 / 27 / 2023	(b) (4)
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	04 / 07 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	04 / 14 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 22 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 28 / 2023		P	04 / 27 / 2023	
	P	03 / 29 / 2023		P	04 / 27 / 2023	
	P	03 / 30 / 2023		P	04 / 27 / 2023	
	P	03 / 23 / 2023		P	04 / 27 / 2023	
	P	03 / 24 / 2023		P	04 / 27 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	03 / 20 / 2023		P	04 / 27 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

MAGNETIC PARTICLE EXAMINATION RECORD

Client: (b) (4)	Location: Red Hill; JBPHH	Date: 06-30-2023
P.O. No.: NA	Job No. 23-034	
(b) (4) Procedure: NDT 003.2 revD	Code: AWS D1.1	
Report No.: KS06302023		

MATERIAL	MAGNETIZING TECHNIQUE	MAGNETIZING EQUIPMENT
Type: C/S	Prod: ☒ AC ☐ DC Spacing (b) (3) (A)	Mfg.: Parker Serial #: 23962
Thickness: STD	Amps fixed Coil Dia. ____	Calibration Date 06/01/2023
Geometry: ☐ Pipe ☒ Plate ☐ Rod ☐ Other: ____	Longitudinal Turns n/a Amp Turns ____	Field Verification By: Pie Gauge
	Direct n.a	
	Circular n/a	UV Meter: n/a
Item: Repairs on Pipe Supports	Central Conductor n/a	MODEL: n/a Serial #: n/a
	Amps n/a	
Stage of Mfg.: New	Inspection Medium ☒ Dry Powder	Color: RED
	☐ Wet Visible	Type Batch No.: 22A006
Surface Condition: Buffed Clean	Illumination ☒ White ☐ Ultraviolet	

Item(s)	Accept	Reject	Item(s)	Accept	Reject
Pipe Supports/Braces					
(b) (3) (A)	☒	☐			
	☒	☐			
	☒	☐			
	☒	☐			
	☒	☐			

Sketch/Notes

MT Inspection was requested and performed on Repairs made on Pipe Supports.

No relevant indications were found during this inspection.

Performed By: (b) (6) Date 06/30/2023 Reviewed By: Date: Page 1 of 1

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 020
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.09
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C / 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Base of the ve[redacted]supp[redacted]re heavily corro[redacted] (b) (3) (A) [redacted] (b) (3) (A) [redacted] (b) (3) (A) high on the outside c[redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Visual inspection and Dye Penetrant Testing (PT) was performed on the structural welds IAW AWS D1.1 code, 50% random.	Contractor QC Records Reviewed	CQCP and Daily Reports.
Description of QA Validation and Observations	Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports). Final acceptance by government. Date: 14 JUN 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor welde[redacted] (b) (3) (A) [redacted] the [redacted] erformed [redacted] elds IAW AWS D1.1 code, 50% random.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	19 JUL 2023

(b) (3) (A)

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	02 / 28 / 2023	(b) (6)	P	03 / 07 / 2023	(b) (4)
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		N/A		
	P	06 / 06 / 2023		N/A		
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

LIQUID PENETRANT EXAMINATION RECORD

Client: (b) (4)	Location: Red Hill	Page 1 of 1
P.O. No.:	Job No.: 23-034	
(b) (4) Procedure: NDT002.2 Rev C	Code: AWS D1.1	
Report No. GS070723		

ITEM: Emergent Pipeline repair

MATERIAL		PENETRANT MATERIAL				TECHNIQUE
TYPE: CS FW		BRAND	DESIGNATION	PO#	BATCH #	Preclean Drying Time: 5 MIN
Surface Condition: ☐ As Welded ☐ Ground ☐ Other ____ ☒ New weld	Cleaner	Magnaflux	SKC-S	N/A	21002K 002711	Method of Application: Brush
	Penetrant	Magnaflux	SKL-SP1	N/A	19G04K 01755	Dwell Time: 10 Min
	Emulsifier	N/A	N/A	N/A	N/A	Emulsification Time: N/A
	Developer	Magnaflux	SKD-S2	N/A	20L02U	Developing Time: 15 Min
Temperature: X 60° F – 125° F Other ____		Illumination: ☒ White		FC 150		(b) (4) Control # UV Meter ☐ N/A ☐

Item(s)	Accept	Reject	Sketch/Notes
(b) (3) (A)	☒	☐	No indications noted at time of inspection.
	☒	☐	
	☒	☐	
	☒	☐	
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	☒	☐	
	☒	☐	
	☐	☐	

Performed By (b) (6) Level II Date: 7/07/2023

Reviewed By: Date:

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 021
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.10
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report	19 JUL 2023
QV Engineer	[redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C / 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Base of the ve[redacted] supp[redacted]re heavily corro[redacted] (b) (3) (A) [redacted] (b) (3) (A) [redacted] (b) (3) (A) [redacted]rt and replace in kind. (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Structural welds inspection via VT and PT, 50% random.	Contractor QC Records Reviewed	CQCP and Daily Reports.
Description of QA Validation and Observations	Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports). Final acceptance by government. Date: 14 JUN 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor remo[redacted] (b) (3) (A) [redacted] [redacted]nd (b) (3) (A) [redacted] [redacted]welds insp[redacted] PT, 50% random.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	[redacted]
	DATE	19 JUL 2023

(b) (3) (A)

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	02 / 28 / 2023	(b) (6)	P	03 / 07 / 2023	(b) (4)
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		N/A		
	P	06 / 06 / 2023		N/A		
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

LIQUID PENETRANT EXAMINATION RECORD

Client: (b) (4)	Location: Red Hill	Page 1 of 1
P.O. No.:	Job No.: 23-034	
(b) (4) Procedure: NDT002.2 Rev C	Code: AWS D1.1	
Report No. GS070723		

ITEM: Emergent Pipeline repair

MATERIAL		PENETRANT MATERIAL				TECHNIQUE
TYPE: CS FW		BRAND	DESIGNATION	PO#	BATCH #	Preclean Drying Time: 5 MIN
Surface Condition: ☐ As Welded ☐ Ground ☐ Other ____ ☒ New weld	Cleaner	Magnaflux	SKC-S	N/A	21002K 002711	Method of Application: Brush
	Penetrant	Magnaflux	SKL-SP1	N/A	19G04K 01755	Dwell Time: 10 Min
	Emulsifier	N/A	N/A	N/A	N/A	Emulsification Time: N/A
	Developer	Magnaflux	SKD-S2	N/A	20L02U	Developing Time: 15 Min
Temperature: X 60° F – 125° F Other ____		Illumination: ☒ White		FC 150		(b) (4) Control # UV Meter ☐ N/A ☐

Item(s)	Accept	Reject	Sketch/Notes
(b) (3) (A)	☒	☐	No indications noted at time of inspection.
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☐	☐	

Performed By (b) (6) Level II Date: 7/07/2023

Reviewed By: Date:

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC 022
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.11
Contract No.	FA890315D0007, D.O. FA8903 19 F 0027	Report Date	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C / 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Vertical suppo[redacted]amag[redacted]uckled. Weld a (b) (3) (A) [redacted] (b) (3) (A) [redacted]	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in detail in CQCP. Visual inspection and Dye Penetrant Testing (PT) was performed on the structural welds IAW AWS D1.1 code, 50% random.	Contractor QC Records Reviewed	CQCP and Daily Reports.
Description of QA Validation and Observations	Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals. Reviewed NDE reports. JTF RH secondary QA and 3rd Party QV completed. JTF RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports). Final acceptance by government. Date: 14 JUN 2023		

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

Contractor welde[redacted](b) (3) (A) [redacted] [redacted]the [redacted] [redacted]erformed [redacted]elds IAW AWS D1.1 code, 50% random.

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.	QV ENGINEER SIGNATURE	(b) (6) [redacted]
	DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	02 / 28 / 2023	(b) (6)	P	03 / 07 / 2023	(b) (4)
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		N/A		
	P	06 / 06 / 2023		N/A		
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL

(b) (4)

LIQUID PENETRANT EXAMINATION RECORD

Client: Oceanic	Location: Red Hill	Page 1 of 1
P.O. No.:	Job No.: 23-034	
(b) (4) Procedure: NDT002.2 Rev C	Code: AWS D1.1	
Report No. GS070723		

ITEM: Emergent Pipeline repair

MATERIAL		PENETRANT MATERIAL				TECHNIQUE
TYPE: CS FW		BRAND	DESIGNATION	PO#	BATCH #	Preclean Drying Time: 5 MIN
Surface Condition: ☐ As Welded ☐ Ground ☐ Other ____ ☒ New weld	Cleaner	Magnaflux	SKC-S	N/A	21002K 002711	Method of Application: Brush
	Penetrant	Magnaflux	SKL-SP1	N/A	19G04K 01755	Dwell Time: 10 Min
	Emulsifier	N/A	N/A	N/A	N/A	Emulsification Time: N/A
	Developer	Magnaflux	SKD-S2	N/A	20L02U	Developing Time: 15 Min
Temperature: X 60° F – 125° F Other ____		Illumination: ☒ White		FC 150		(b) (4) Control # UV Meter ☐ N/A ☐

Item(s)	Accept	Reject	Sketch/Notes
(b) (3) (A)	☒	☐	No indications noted at time of inspection.
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☒	☐	
	☐	☐	

Performed By: (b) (6) Level II Date: 7/07/2023

Reviewed By: Date:

QUALITY VALIDATION (QV) REPORT

Red Hill Bulk Fuel Storage Facility Defuel

Validation Firm	HDR Environmental, Operations and Construction, Inc.	Repair No.	INC-024
Address	9781 S. Meridian Blvd., Suite 400, Englewood, CO 80112	Repair ID	[redacted].STR.13
Contract No.	FA890315D0007, D.O. FA8903-19-F-0027	Report	19 JUL 2023
QV Engineer	(b) (6) [redacted]		

VALIDATION

Source	PDF Page No.	Facility Geographic Area	Location Reference
[redacted]C / 2022 (b) (4)	N/A	(b) (3) (A) [redacted]	(b) (3) (A) [redacted]

Repair Description	Nut [on ancho[redacted]at gur[redacted]all] is less than [redacted] anchor rod. An atten[redacted] (b) (3) (A) [redacted].	Source Contra Referen	[redacted]
Description of Contractor QC Method(s) Used	Methods outlined in QCP.	Contractor QC Records Reviewed	CQCP and Daily Reports.

Description of QA Validation and Observations

Government Quality Assurance is documented by the QSR's in the daily CQC reports using NAVFAC Form 4296/2. Visually inspected completed installation; matched completed construction against design and material submittals.
JTF-RH secondary QA and 3rd Party QV completed.
JTF-RH QV visually inspected repairs and reviewed contractor QC documentation (Work Plan, submittals, daily reports).
Final acceptance by government. Date: 14 JUN 2023

Rework Needed				Photo Record Attached	Repair Work Validated as Complete			
○	Yes	◉	No	See Page 2.	◉	Yes	○	No

Comments

At Pipe Support (b) (3) (A) [redacted] a[redacted]w ta[redacted] [redacted]t. [redacted]

CERTIFICATION

I hereby certify that repair work validated in this report was personally substantiated and this report is true.

QV ENGINEER SIGNATURE	(b) (6) [redacted]
DATE	19 JUL 2023

(b) (3) (A)

EMERGENT PIPELINE REPAIRS
STRUCTURAL WELD LOG

LOCATION / REPAIR ID	VT P/F	FINAL ACCEPTANCE DATE	INSPECTOR	MT / PT / UT P/F	DATE	INSPECTOR
(b) (3) (A)	P	02 / 28 / 2023	(b) (6)	P	03 / 07 / 2023	(b) (4)
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	02 / 28 / 2023		P	03 / 07 / 2023	
	P	06 / 06 / 2023		P	06 / 30 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		N/A		
	P	06 / 06 / 2023		N/A		
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 06 / 2023		P	06 / 26 / 2023	
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		
	P	06 / 15 / 2022		N/A		

VISUAL INSPECTIONS PERFORMED BY AWS-CWI
NDE PERFOMED BY ASNT LEVEL II PERSONNEL