	PROJECT	Standby SRU & Additional Tanks		
	CLIENT	INDIAN OIL CORPORATION LIMITED		
QCP-STEAM TRACING SYSTEM	Project No. 080557C001	Document No. 080557C-000-QCP-1330-001	Rev. No. A	Page 1 of 5

## QUALITY CONTROL PLAN

### STEAM TRACING SYSTEM

TYPE OF QUALITY CONTROL REPORT	CERTIFICATION EXTENT
W 12/A	SINGLE REPORT PER EACH MATERIAL
W 03 – W 04	SINGLE REPORT PER EACH EXAMINATION
HT01a - HT02a - HT02b	SINGLE REPORT PER EACH ITEM
HT01 – HT02 – HT03	SUMMARY
W13 - W14A - W14B - PL10	SINGLE REPORT PER EACH TESTING CIRCUIT



#### REFERENCE DOCUMENTS:

- 080557C-000-PP-805
  - 080557C-000-PP-814
  - 080557C-000-PP-807
  - 080557C-000-PP-804
  - QCP 1399.02
  - QCP 1399.01
  - 080557C-000-JSC-1300-001
  - 080557C-000-JSD-2300-001
  - 080557C-000-JSD-2200-001
  - 080557C-000-JSD-2200-002
  - 080557C-000-PP-820
  - 080557C-000-PP-821
  - DRAWINGS
- Site Coordination & Communication Procedure.  
Welding Specification for Fabrication of Piping  
Material Receiving Handling & Storage procedure  
Specification for Positive Material Identification at Construction Site.  
Piping Welding Activities Management (NDE / PWHT / HT / PMI Included)  
Welders Management  
Standard Specification for Fabrication and Erection of Piping  
Specification for Surface Preparation and Protective Coating  
Job Specification for Hot Insulation of Vessels, Piping and Equipment  
Job Specification for Cold Insulation of Vessels, Piping and Equipment  
Standard specification for inspection, flushing and testing of piping systems.  
Equipment  
Job Construction specification for Welder Management

A	19/10/2019	ISSUED FOR INFORMATION	SMP	PKP	LA/ANJ	JMC
REV.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED	AUTHORIZED



This document is developed by TECHNIP India Limited and the information it contains is property of Indian Oil Corporation Ltd. It shall not be used for any purpose other than that for which it is supplied.

CONFIDENTIAL – Not to disclose without Authorization

 	<b>PROJECT</b>	<b>Standby SRU &amp; Additional Tanks</b>		
	<b>CLIENT</b>	<b>INDIAN OIL CORPORATION LIMITED</b>		
<b>QCP-STEAM TRACING SYSTEM</b>	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1330-001	<b>Rev. No.</b> A	Page 2 of 5



#### LEGENDA

H	=	HOLD (RFI required - Work stop for inspection)
W	=	WITNESS (RFI required)
WC	=	100 % SUPERVISION AND EXAMINATION BY CONTRACTOR.
S	=	SURVEILLANCE (No RFI)
R	=	REVIEW OF REPORTS
N.A.	=	NOT APPLICABLE
A	=	AUTHORIZATION / APPROVAL (RFI required)
IFA	=	ISSUED FOR AUTHORIZATION/APPROVAL
INFO	=	FOR INFORMATION
RFI	=	REQUEST FOR INSPECTION
!	=	WARNING (control of document revision status)

 	PROJECT	Standby SRU & Additional Tanks		
	CLIENT	INDIAN OIL CORPORATION LIMITED		
QCP-STEAM TRACING SYSTEM	Project No. 080557C001	Document No. 080557C-000-QCP-1330-001	Rev. No. A	Page 3 of 5

<h2 style="margin: 0;">QUALITY CONTROL PLAN</h2> <h3 style="margin: 0;">STEAM TRACING SYSTEM</h3>
---

S.NO	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	COMPANY	
<b>A)</b>	<b>PRELIMINARY ACTIVITIES</b>				
A.1	CONTRACTOR DRAWINGS CHECK REVISION STATUS	N.A.	!	!	
A.2	CONTRACTOR TECHNICAL SPECIFICATION AND PROCEDURE	N.A.	!	!	
A.3	CONTRACTOR METHOD STATEMENTS	N.A.	WC	A	
<b>B)</b>	<b>BEFORE ERECTION</b>				
B.1	WELDERS MANAGEMENT	Use QCP 1399.01			(1)
B.2	WELDING, NDE/PMI/PWHT/HT MANAGEMENT	Use QCP 1399.02			(1)
B.3	MATERIALS APPROVAL AND RECEIVING INSPECTION	W 12/A	WC	W/R	
B.4	LINE SURFACE INSPECTION BEFORE TRACER INSTALLATION	Use QCP 2200.01			(1)
<b>C)</b>	<b>ERECTION</b>				
C.1	<u>STEAM AND CONDENSATE MANIFOLDS INSTALLATION</u>				
C.1.1	IDENTIFICATION	HT01a - HT01	WC	R/S	
C.1.2	POSITIONING	HT 01	WC	R/S	
C.1.3	MANIFOLDS INSPECTION	HT 01	WC	R/S	
C.1.4	FINAL DOCUMENTATION REVIEW	HT 01			
C.2	<u>TRACER FEED &amp; DISCHARGE LINES INSTALLATION</u>				
C.2.1	IDENTIFICATION	HT02a - HT02	WC	R/S	
C.2.2	POSITIONING	HT 02	WC	R/S	
C.2.3	COMPRESSION JOINT (IF TUBING)	HT 02	WC	R/S	
C.2.4	WELDING (IF PIPING)	HT 02	WC	R/S	
C.2.5	SUPPORTS	HT 02	WC	R/S	
C.2.6	NDE EXECUTION (IF PIPING)				
C.2.6a	VISUAL EXAMINATION	HT 02	WC	R/S	
C.2.6b	LIQUID PENETRANT EXAM. (where required)	W 03 - HT 02	WC	R/S	
C.2.6c	MAGNETIC PARTIC. EXAM. (where required)	W 04 - HT	WC	R/S	

 	PROJECT	Standby SRU & Additional Tanks		
	CLIENT	INDIAN OIL CORPORATION LIMITED		
QCP-STEAM TRACING SYSTEM	Project No. 080557C001	Document No. 080557C-000-QCP-1330-001	Rev. No. A	Page 4 of 5



S.NO	CHECK AND INSPECTION ITEM	QUALITY CONTROL REPORT	ACTION		NOTES
			CONTR.	COMPANY	
		02			
C.2.7	TRACER FEED & DISCHARGE LINES INSPECTION	HT 02	WC	W/R	
C.3	<u>TRACER LINES INSTALLATION</u>				
C.3.1	IDENTIFICATION	HT02b - HT02	WC	R/S	
C.3.2	POSITIONING	HT 02	WC	R/S	
C.3.3	COMPRESSION JOINT (IF TUBING)	HT 02	WC	R/S	
C.3.4	WELDING (IF PIPING)	HT 02	WC	R/S	
C.3.5	FIXING TO TRACED LINE SUPPORT	HT 02	WC	R/S	
C.3.6	EXPANSION LOOP (where required)	HT 02	WC	R/S	
C.3.7	NDE EXECUTION (IF PIPING)	HT 02	WC	R	
C.3.7a	VISUAL EXAMINATION	HT 02	WC	R	
C.3.7b	LIQUID PENETRANT EXAM. (where required)	W 03 - HT 02	WC	R	
C.3.7c	MAGNETIC PARTIC. EXAM. (where required)	W 04 - HT 02	WC	R	
C.3.8	TRACER LINES INSPECTION	HT 02	WC	W/R	
C.4	FINAL DOCUMENTATION REVIEW	HT 02			
C.5	<u>PRESSURE TEST</u>				
C.5.1	TEST PACK CREATION	HT 03	WC	R	
C.5.2	PUNCH LIST BEFORE PRESSURE TEST	PL10 – HT 03	WC	W	
C.5.3	DIMENSIONAL CHECK	W14A - HT 03	WC	W/R	
C.5.4	TEST PREPARATION (INCLUDING TESTING EQUIPMENT) & PRESSURE TEST EXECUTION	W13 - HT 03	WC	W/R	
C.5.5	WORK ACCEPTANCE OF "PUNCH LIST AFTER PRESSURE TEST" (LINE REINSTATEMENT)	W14B - HT 03	WC	W/R	
C.5.6	FINAL DOCUMENTATION REVIEW	HT 03			

NOTES:

- (1) FORMS, INSPECTION AND ATTENDANCE SHALL BE IN ACCORDANCE WITH REFERRED QCP.

#### GENERAL NOTES

- THE ENCLOSED ITP'S ARE INDICATIVE AND SHALL BE FOLLOWED FOR DEVELOPING THE JOB SPECIFIC ITP'S FOR THE WORKS TO BE PERFORMED BY THE CONTRACTOR. THE PROVISIONS INDICATED FOR STAGE WISE INSPECTION BY TECHNIP AND OWNER (FOR SPECIFIC ACTIVITIES) ARE THE MINIMUM AND THE ENGINEER-IN-CHARGE MAY DECIDE TO INCREASE HOLD POINTS/ WITNESS POINTS, WHILE APPROVING THE JOB SPECIFIC ITP'S. ACTIVITIES FOR WHICH ITP'S ARE NOT PROVIDED IN THIS SPECIFICATION. CONTRACTOR TO DEVELOP AND GET THE SAME APPROVED BY TECHNIP/OWNER BEFORE START OF THE WORK. IN

 		<b>PROJECT</b>	<b>Standby SRU &amp; Additional Tanks</b>	
		<b>CLIENT</b>	<b>INDIAN OIL CORPORATION LIMITED</b>	
<b>QCP-STEAM TRACING SYSTEM</b>	<b>Project No.</b> 080557C001	<b>Document No.</b> 080557C-000-QCP-1330-001		<b>Rev. No.</b> A
				Page 5 of 5

GENERAL ROLE OF TECHNIP HAS BEEN SPECIFIED IN THE DOCUMENT THE ROLE OF OWNER TO BE SPECIFIED DURING PREPARATION OF SITE SPECIFIC ITP'S.

- 2 CONTRACTOR TO SUBMIT JOB SPECIFIC REPORTING FORMATS AND JOB PROCEDURES FOR THE JOBS FOR EACH ACTIVITY LISTED IN THE ITP'S AND SUBMIT TO TECHNIP/OWNER FOR APPROVAL. BEFORE COMMENCEMENT OF THE ACTIVITY. IF THE CONTRACTOR HAS TO DEVIATE FROM THE GIVEN ITP FOR A VALID REASON, HE SHALL OBTAIN PRIOR WRITTEN APPROVAL OF TECHNIP/OWNER. CONTRACTOR TO CARRY OUT 100% EXAMINATION OF ALL ACTIVITIES.



PROJECT:

COMPANY:

QUALITY CONTROL FORM

HT 02a

PROJ. No.:

QCF REV. A

SH. \_\_\_\_ OF \_\_\_\_

**TRACER FEED & DISCHARGE LINES INSTALL.  
REPORT**

CONTRACTOR:

HT 02a N° \_\_\_\_\_

**TRACER FEED LINES**

ITEM

**TRACER DISCHARGE LINES**

ITEM



NOTES:



**INSPECTORS****CONTRACTOR****TECHNIP****OWNER**

NAME

SIGNATURE

DATE

 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>HT03</b>				PROJ. No.:	QCF REV. A	SH. ____ OF ____	
<b>PRESSURE TEST SUMMARY REPORT</b>				CONTRACTOR:			HT 03 N° _____
INSPECTIONS (REF. TO QCP 1330.01)			N.A.	ACC	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE	
						CONTR.	TECHNIP
						OWNER	
C.5	PRESSURE TEST						
C.5.1	TEST PACK CREATION	<input type="checkbox"/>	<input type="checkbox"/>				
C.5.2	PUNCH LIST BEFORE PRESSURE TEST	<input type="checkbox"/>	<input type="checkbox"/>	PL 10 (*)			
C.5.3	DIMENSIONAL CHECK	<input type="checkbox"/>	<input type="checkbox"/>	W 14A (*)			
C.5.4	TEST PREPARATION (INCLUDING TESTING EQUIPMENT) & PRESSURE TEST EXECUTION	<input type="checkbox"/>	<input type="checkbox"/>	W 13 (*)			
C.5.5	WORK ACCEPTANCE OF "PUNCH LIST AFTER PRESSURE TEST" (LINE REINSTATEMENT)	<input type="checkbox"/>	<input type="checkbox"/>	W 14B (*)			
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : PL10 N° _____ W14A N° _____ W14B N° _____ W13 N° _____							
C.5.6 - FINAL DOC. REVIEW	INSPECTORS		CONTRACTOR		PMC		OWNER
	NAME						
	SIGNATURE						
	DATE						

 				PROJECT:			
				COMPANY:			
QUALITY CONTROL FORM <b>HT 01</b>				PROJ. No.:	QCF REV. A	SH. ____ OF ____	
<b>MANIFOLDS INSTALLATION SUMMARY REPORT</b>				CONTRACTOR:		HT 01 N° ____	
INSPECTIONS (REF. TO QCP 1330.01)			N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE	
						CONTR.	TECHNIP
						OWNER	
C.1	<b>STEAM AND CONDENSATE MANIFOLD INSTALLATION</b>						
C.1.1	IDENTIFICATION	<input type="checkbox"/>	<input type="checkbox"/>	HT 01a (*)			
C.1.2	POSITIONING	<input type="checkbox"/>	<input type="checkbox"/>				
C.1.3	MANIFOLDS INSPECTION	<input type="checkbox"/>	<input type="checkbox"/>				
NOTES: (*) THE QC REPORT N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : HT 01a N° _____							
C.1.4 - FINAL DOC. REVIEW	<b>INSPECTORS</b>	<b>CONTRACTOR</b>		<b>PMC</b>		<b>OWNER</b>	
	NAME						
	SIGNATURE						
	DATE						





TechnipFMC



PROJECT:

COMPANY:

QUALITY CONTROL FORM

HT 01a

PROJ. No.:

QCF REV. A

SH. \_\_\_\_ OF \_\_\_\_

**STEAM & CONDENS. MANIFOLD INSTALLATION  
REPORT**

CONTRACTOR:

HT 01a N° \_\_\_\_\_

**STEAM MANIFOLD**

ITEM

**CONDENSATE MANIFOLD**

ITEM

NOTES:

**INSPECTORS**

**CONTRACTOR**

**PMC**

**OWNER**

NAME

SIGNATURE

DATE

				PROJECT:				
				COMPANY:				
<b>QUALITY CONTROL FORM                      HT 02</b>				PROJ. No.:	QCF REV. A	SH. ____ OF ____		
<b>FEEDER/DISCHARGE AND TRACER LINES INSTALL. SUMMARY REPORT</b>				CONTRACTOR:		HT 02 N° ____		
<b>INSPECTIONS (REF. TO QCP 1330.01)</b>			N.A.	ACC.	REMARKS/ REFERENCES	INSPECTORS SIGNATURE & DATE		
						CONTR.	TECHNIP	OWNER
C.2	TRACER FEED & DISCHARGE LINES INSTALLATION							
C.2.1	IDENTIFICATION	<input type="checkbox"/>	<input type="checkbox"/>	HT 02a (*)				
C.2.2	POSITIONING	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.3	COMPRESSION JOINT (IF TUBING)	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.4	WELDING (IF PIPING)	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.5	SUPPORTS	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.6	NDT EXECUTION (IF PIPING)							
C.2.6a	VISUAL EXAMINATION	<input type="checkbox"/>	<input type="checkbox"/>					
C.2.6b	LIQUID PENETRANT EXAMINATION	<input type="checkbox"/>	<input type="checkbox"/>	W 03 (*)				
C.2.6c	MAGNETIC PARTIC. EXAMINATION	<input type="checkbox"/>	<input type="checkbox"/>	W 04 (*)				
C.2.7	TRACER FEED & DISCHARGE LINES INSPECTION	<input type="checkbox"/>	<input type="checkbox"/>					
C.3	TRACER LINES INSTALLATION							
C.3.1	IDENTIFICATION	<input type="checkbox"/>	<input type="checkbox"/>	HT 02b (*)				
C.3.2	POSITIONING	<input type="checkbox"/>	<input type="checkbox"/>					
C.3.3	COMPRESSION JOINT (IF TUBING)	<input type="checkbox"/>	<input type="checkbox"/>					
C.3.4	WELDING (IF PIPING)	<input type="checkbox"/>	<input type="checkbox"/>					
C.3.5	FIXING TO TRACED LINE SUPPORT	<input type="checkbox"/>	<input type="checkbox"/>					
C.3.6	EXPANSION LOOP	<input type="checkbox"/>	<input type="checkbox"/>					
C.3.7	NDT EXECUTION (IF PIPING)							
C.3.7a	VISUAL EXAMINATION	<input type="checkbox"/>	<input type="checkbox"/>					
C.3.7b	LIQUID PENETRANT EXAMINATION	<input type="checkbox"/>	<input type="checkbox"/>	W 03 (*)				
C.3.7c	MAGNETIC PARTIC. EXAMINATION	<input type="checkbox"/>	<input type="checkbox"/>	W 04 (*)				
C.3.8	TRACER LINES INSPECTION	<input type="checkbox"/>	<input type="checkbox"/>					
NOTES: (*) THE QC REPORTS N° SHALL BE INDICATED IN THE RELEVANT HERE BELOW SPACES : <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>HT 02a N° _____</span> <span>HT 02b N° _____</span> <span>W 03 N° _____</span> <span>W 04 N° _____</span> </div>								
C.4 - FINAL DOC. REVIEW	INSPECTORS	CONTRACTOR		PMC		OWNER		
	NAME							
	SIGNATURE							
	DATE							



COMPANY:

HT 02b

SH. \_\_\_\_ OF \_\_\_\_

## HT 02b N° \_\_\_\_\_

## ITEM

[illegible]

NOTES:
--------

**OWNER**

DATE \_\_\_\_\_



PROJECT:

COMPANY:

QUALITY CONTROL FORM

PL 10

PROJ. No.:

QCF REV. A

SH. \_\_\_\_ OF \_\_\_\_

PUNCH LIST

CONTRACTOR:

PL 10 N° \_\_\_\_\_

TEST PACK N° \_\_\_\_\_

SYSTEM N° \_\_\_\_\_

ITEMS TO BE CHECKED	N.A.	YES	ITEMS TO BE CHECKED	N.A.	YES	ITEMS TO BE CHECKED	N.A.	YES
WELDING COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>	RADIOGRAPHY / ULTRASONIC (W10)	<input type="checkbox"/>	<input type="checkbox"/>	PMI (W10)	<input type="checkbox"/>	<input type="checkbox"/>
PT / MT (W10)	<input type="checkbox"/>	<input type="checkbox"/>	PWHT / HT (W10)	<input type="checkbox"/>	<input type="checkbox"/>	MATERIALS TRACEABILITY (W10)	<input type="checkbox"/>	<input type="checkbox"/>
THK CHECK BY UT	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Item N°	Drawing / Line N°	Description	Category (1)	Discipline (2)	Issued by	Cleare d by	Verified (CONTRACTOR)		Verified (TECHNIP)		Verified (OWNER)	
							Name	Date	Name	Date	Name	Date

## NOTES:

1) Category A: To be resolved before hydrotest B: To be resolved after hydrotest

2) Discipline P: Piping M: Mechanical I: Instrument PA: Painting C: Civil O: Other

INSPECTORS	CONTRACTOR	PMC	OWNER
NAME			
SIGNATURE			
DATE			



PROJECT:

COMPANY:

QUALITY CONTROL FORM (NDE-03) **W 03**

PROJ. No.:

QCF REV. A

SH. 1 OF 2

### LIQUID PENETRANT TEST REPORT (REQUIREMENTS)

CONTRACTOR:

W 03 N° \_\_\_\_\_

APPLICABLE CODES/SPEC'S

- ASME V ART 6 ☐
- ☐

ACCEPTANCE CRITERIA

- ☐
- ☐

#### FIELD OF APPLICATION

- |  |   |   |                            |
|--|---|---|----------------------------|
| • PIPING <input type="checkbox"/>          | • BEVEL <input type="checkbox"/>                | • FINAL PASS <input type="checkbox"/>   | • <input type="checkbox"/> |
| • TANKS/<br>SILOS <input type="checkbox"/> | • 1 <sup>ST</sup> PASS <input type="checkbox"/> | • OVERLAY <input type="checkbox"/>      | • <input type="checkbox"/> |
| • EQUIPMENT <input type="checkbox"/>       | • BACK GOUGING <input type="checkbox"/>         | • RAW MATERIAL <input type="checkbox"/> | • <input type="checkbox"/> |

#### MATERIAL

- |                                 |                                      |
|---------------------------------|--------------------------------------|
| • C.S. <input type="checkbox"/> | • LOW ALLOY <input type="checkbox"/> |
| • TI <input type="checkbox"/>   | • HASTELLOY <input type="checkbox"/> |
| • S.S. <input type="checkbox"/> | • <input type="checkbox"/>           |

#### INSPECTION STAGE

- |  |                            |
|--|----------------------------|
| • BEFORE PWHT <input type="checkbox"/>     | • <input type="checkbox"/> |
| • AFTER PWHT <input type="checkbox"/>      | • <input type="checkbox"/> |
| • AFTER HYD. TEST <input type="checkbox"/> | • <input type="checkbox"/> |

#### INSPECTION METHOD

- | TYPE                                       | PENETRANT                                 | DEVELOPPER                     | LIGHTING                             |
|--|---|--------------------------------|--------------------------------------|
| • COLOUR CONTRAST <input type="checkbox"/> | • WATER WASHABLE <input type="checkbox"/> | • DRY <input type="checkbox"/> | NATURAL <input type="checkbox"/>     |
| • FLUORESCENT <input type="checkbox"/>     | • POST EMUL. <input type="checkbox"/>     | • WET <input type="checkbox"/> | ARTIFICIAL <input type="checkbox"/>  |
|  | • SOLVENT <input type="checkbox"/>        | • BRAND _____                  | ULTRAVIOLET <input type="checkbox"/> |
|  | • TYPE <input type="checkbox"/>           |                                |                                      |
|  | • BRAND _____                             |                                |                                      |

- | PRECLEANING                          | REMOVABLE                          | CLEANER                           | TIME              |
|--------------------------------------|------------------------------------|-----------------------------------|-------------------|
| • GRINDING <input type="checkbox"/>  | • BRUSH <input type="checkbox"/>   | • TYPE <input type="checkbox"/>   | PENETRATION _____ |
| • MACHINING <input type="checkbox"/> | • SPRAY. <input type="checkbox"/>  | • CLOTHS <input type="checkbox"/> | DEVELOPPING _____ |
| • SOLVENT <input type="checkbox"/>   |                                    | • BRUSHY <input type="checkbox"/> | MAX READING _____ |
| PRECLEANING                          | REMOVABLE                          |                                   |                   |
| • WATER <input type="checkbox"/>     | • DIPPING <input type="checkbox"/> | • SPRAY <input type="checkbox"/>  |                   |
| • ALCOHOL <input type="checkbox"/>   | • SPRAY. <input type="checkbox"/>  | • BRAND _____                     |                   |

**INSPECTORS**

**CONTRACTOR**

**PMC**

**OWNER**

NAME

SIGNATURE

DATE



COMPANY:

SH. 2 OF 2

CONTRACTOR:

W 03 N°

- ☐ WATER WASHABLE ☐ POST EMULSIFYING
- ☐ SOLVENT REMOVABLE ☐ .....

[illegible]



PROJECT:

COMPANY:

QUALITY CONTROL FORM (NDE-04)

**W 04**

PROJ. No.:

QCF REV. A

SH. 1 OF 2

**MAGNETIC PARTICLE  
TEST REPORT**

CONTRACTOR:

**W 04 N°** \_\_\_\_\_

APPLICABLE CODES/SPEC'S

- ASME V ART 7 ☐
- OTHER ☐

ACCEPTANCE CRITERIA

- ☐
- ☐

**FIELD OF APPLICATION**

- |  |   |   |                            |
|--|---|---|----------------------------|
| • PIPING <input type="checkbox"/>      | • BEVEL <input type="checkbox"/>        | • FINAL PASS <input type="checkbox"/>   | • <input type="checkbox"/> |
| • TANKS/SILOS <input type="checkbox"/> | • 1ST PASS <input type="checkbox"/>     | • OVERLAY <input type="checkbox"/>      | • <input type="checkbox"/> |
| • EQUIPMENT <input type="checkbox"/>   | • BACK GOUGING <input type="checkbox"/> | • RAW MATERIAL <input type="checkbox"/> | • <input type="checkbox"/> |

**MATERIAL**

**INSPECTION STAGE**

- |                                 |                                      |  |                            |
|---------------------------------|--------------------------------------|--|----------------------------|
| • C.S. <input type="checkbox"/> | • LOW ALLOY <input type="checkbox"/> | • BEFORE PWHT <input type="checkbox"/>     | • <input type="checkbox"/> |
| • <input type="checkbox"/>      | • <input type="checkbox"/>           | • AFTER PWHT <input type="checkbox"/>      | • <input type="checkbox"/> |
| • <input type="checkbox"/>      | • <input type="checkbox"/>           | • AFTER HYD. TEST <input type="checkbox"/> | • <input type="checkbox"/> |

**INSPECTION METHOD**

MAGNETIZATION	PARTICLE	COLOUR	SUSPENSION
• PRODS	• DRY <input type="checkbox"/>	• GRAY <input type="checkbox"/>	• OIL <input type="checkbox"/>
CONTACTS	• WET <input type="checkbox"/>	• FLUORESCENT <input type="checkbox"/>	• WATER <input type="checkbox"/>
Cu <input type="checkbox"/> Sb <input type="checkbox"/>	• BRAND _____	• <input type="checkbox"/>	
MAX DIST. _____	<b>CURRENT TYPE</b>	<b>LIGHTING</b>	<b>METHOD</b>
• YOKE	• HALF WAVE RECTIFIED <input type="checkbox"/>	• NATURAL <input type="checkbox"/>	• CONTINUOUS <input type="checkbox"/>
FIXED LEGS <input type="checkbox"/>	• ALTERNATING <input type="checkbox"/>	• ARTIFICIAL <input type="checkbox"/>	• RESIDUAL <input type="checkbox"/>
ARTICULAT.LEGS <input type="checkbox"/>		• ULTRAVIOLET <input type="checkbox"/>	• PULSES <input type="checkbox"/>
MAX DIST. _____	<b>AMPERAGE FIELD</b>	<b>DEMAGNETIZATION</b>	<b>PRECLEANING</b>
• COIL <input type="checkbox"/>	AMP _____	YES <input type="checkbox"/> NO <input type="checkbox"/>	• BRUSHING <input type="checkbox"/>
BRAND _____	FIELD _____	RESIDUAL	• <input type="checkbox"/>

REMARKS:

**INSPECTORS**

**CONTRACTOR**

**PMC**

**OWNER**

NAME

SIGNATURE

DATE



COMPANY:

SH. 2 OF 2

## W 04 N° \_\_\_\_\_

☐ DRY

☐ WET

☐ FLUORESCENT

[illegible]





PROJECT:

COMPANY:

QUALITY CONTROL FORM

W 12/A

PROJ. No

QCF REV. A

SH. \_\_\_\_ OF \_\_\_\_

**CONSTRUCTION MATERIALS  
APPROVAL**

CONTRACTOR:

W 12/A N° \_\_\_\_

CIVIL	<input type="checkbox"/>	PIPING	<input type="checkbox"/>	MACHINERY	<input type="checkbox"/>	INSTRUMENT	<input type="checkbox"/>	INSULATION	<input type="checkbox"/>
BLDG.	<input type="checkbox"/>	MECHANIC.	<input type="checkbox"/>	ELECTRICAL	<input type="checkbox"/>	PAINTING	<input type="checkbox"/>	STEEL STR.	<input type="checkbox"/>
NDT	<input type="checkbox"/>	SUPPORT PRF.	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>

1. MATERIALS

2. SUPPLIER

3. PURPOSE

4. ATTACHMENT DATA

5. TYPE OF TEST PERFORMED

6. TEST STANDARD UTILIZED

REMARKS:

RESULT:

ACCEPTED

☐

NOT ACCEPTED

☐**INSPECTORS****CONTRACTOR****PMC****OWNER**

NAME

SIGNATURE

DATE





PROJECT:

COMPANY:

QUALITY CONTROL FORM

W 14A

PROJ. No.:

QCF REV. A

SH. \_\_\_\_ OF \_\_\_\_

### DIMENSIONAL CHECK

CONTRACTOR:

W 14A<sup>(1)</sup> N° \_\_\_\_

LINE / ISOMETRICS N° \_\_\_\_\_

TEST CIRCUIT

SYSTEM

CHECK LIST	N.A.	V. ED	CHECK LIST	N.A.	V. ED
<b>1 GENERAL</b>			<b>4. GASKETS – BOLTS</b>		
Check per P&ID	<input type="checkbox"/>	<input type="checkbox"/>	Correct type	<input type="checkbox"/>	<input type="checkbox"/>
Line routing & size	<input type="checkbox"/>	<input type="checkbox"/>	Correct bolts or studs	<input type="checkbox"/>	<input type="checkbox"/>
Materials	<input type="checkbox"/>	<input type="checkbox"/>	Bolt lubrication	<input type="checkbox"/>	<input type="checkbox"/>
Flange rating	<input type="checkbox"/>	<input type="checkbox"/>	.....	<input type="checkbox"/>	<input type="checkbox"/>
Installation level & plumb	<input type="checkbox"/>	<input type="checkbox"/>			
Line slopes per drawing	<input type="checkbox"/>	<input type="checkbox"/>	<b>5. PIPE SUPPORTS</b>		
Branches located correctly	<input type="checkbox"/>	<input type="checkbox"/>	Field supports installed	<input type="checkbox"/>	<input type="checkbox"/>
Branches reinforced	<input type="checkbox"/>	<input type="checkbox"/>	Sufficient supports	<input type="checkbox"/>	<input type="checkbox"/>
Weep holes in reinforcing pads	<input type="checkbox"/>	<input type="checkbox"/>	Anchors installed	<input type="checkbox"/>	<input type="checkbox"/>
High point vents installed	<input type="checkbox"/>	<input type="checkbox"/>	Guides installed & aligned	<input type="checkbox"/>	<input type="checkbox"/>
Low point drains installed	<input type="checkbox"/>	<input type="checkbox"/>	Proper shoes installed and welded	<input type="checkbox"/>	<input type="checkbox"/>
Reducers located correctly / orientation	<input type="checkbox"/>	<input type="checkbox"/>	Spring supports per drawing, stopped	<input type="checkbox"/>	<input type="checkbox"/>
Reducer type correct	<input type="checkbox"/>	<input type="checkbox"/>	Piping sits on	<input type="checkbox"/>	<input type="checkbox"/>
Sample connections installed	<input type="checkbox"/>	<input type="checkbox"/>	.....	<input type="checkbox"/>	<input type="checkbox"/>
Clearances for expansion	<input type="checkbox"/>	<input type="checkbox"/>			
Orifice flanges properly oriented	<input type="checkbox"/>	<input type="checkbox"/>	<b>6. INSULATING</b>		
.....	<input type="checkbox"/>	<input type="checkbox"/>	Welded insulation supports installed	<input type="checkbox"/>	<input type="checkbox"/>
			Clearances adequate for insulation	<input type="checkbox"/>	<input type="checkbox"/>
<b>2 VALVES</b>			.....	<input type="checkbox"/>	<input type="checkbox"/>
Identification code	<input type="checkbox"/>	<input type="checkbox"/>			
Flow direction	<input type="checkbox"/>	<input type="checkbox"/>	<b>7. INSTRUMENTS</b>		
Bypass installed	<input type="checkbox"/>	<input type="checkbox"/>	Correct control valves installed	<input type="checkbox"/>	<input type="checkbox"/>
Chain wheel installed	<input type="checkbox"/>	<input type="checkbox"/>	Meter runs properly installed	<input type="checkbox"/>	<input type="checkbox"/>
Extension installed	<input type="checkbox"/>	<input type="checkbox"/>	Valves at meter run installed	<input type="checkbox"/>	<input type="checkbox"/>
Steam oriented properly	<input type="checkbox"/>	<input type="checkbox"/>	Pressure gauge valves installed	<input type="checkbox"/>	<input type="checkbox"/>
Suitable access to operate & to maintain	<input type="checkbox"/>	<input type="checkbox"/>	Pressure gauges properly oriented	<input type="checkbox"/>	<input type="checkbox"/>
.....	<input type="checkbox"/>	<input type="checkbox"/>	Temp. connections properly oriented	<input type="checkbox"/>	<input type="checkbox"/>
			.....	<input type="checkbox"/>	<input type="checkbox"/>
<b>3 CONNECTION TO MACHINERY / EQUIPMENT</b>					
Flanges parallelism / Alignment	<input type="checkbox"/>	<input type="checkbox"/>	<b>8. TEST CIRCUIT PREPARATION</b>		
.....	<input type="checkbox"/>	<input type="checkbox"/>	Blinds installed	<input type="checkbox"/>	<input type="checkbox"/>
			Vents and drains installed	<input type="checkbox"/>	<input type="checkbox"/>

V.ED = VERIFIED

N.A. = NOT APPLICABLE

(1) SAME TEST CIRCUIT NUMBER

INSPECTORS

CONTRACTOR

PMC

OWNER

NAME

SIGNATURE

DATE

