

## Test Station Installation Quality Assurance / Quality Control Document

Document No.

-	I ID:	TEST STATION
	Project No.:	Project Name:
City of Calgary	Owner:	Start Date:
	CP Company:	Site Name:
	CP Contact & Number:	ost Location (GPS):

TEST LEAD INSTALLATION							
CARRIER PIPE							
TASK	√/×	N/A	REMARKS				
Materials Inspected for Defects / Damage?							
Materials Meet CoC 503.01.00 Approved Materials?							
Pipe Coating Removed and Surface Prepared?							
Pipe Wall Thickness Measured?			Wall Thickness Measured:				
Copper Sleeve Used?							
#15CP Charge Used for Steel Pipe Welding?							
#45CP Charge Used for Non-Steel Pipe Welding?							
Thermite Weld Successful?			IF FAILED, MOVE WELD MIN. 150MM AWAY				
Slag Removed from Weld?							
Welds Pass Pull Test and Visual Inspection?							
Additional Test Lead Separated >150mm?							
Repeat Above Steps for ALL Additional Welds			# of Additional Welds:				
Resistance Measured Between Leads <1.0Ω?			Resistance:				
Continuity Between Leads Confirmed?							
Pictures of Welds Taken Before Recoating?							
	ENCASEM	ENT PIPE					
TASK	√/×	N/A	REMARKS				
Encasement Surface Cleaned and Prepared?							
Copper Sleeve Used?							
#45CP Charge Used for Welding?							
Thermite Weld Successful?			IF FAILED, MOVE WELD MIN. 150MM AWAY				
Slag Removed from Weld?							
Welds Pass Pull Test and Visual Inspection?							
Additional Test Lead Separated >150mm?							
Repeat Above Steps for ALL Additional Welds			# of Additional Welds:				
Resistance Measured Between Leads <1.0Ω?			Resistance:				
Continuity Between Leads Confirmed?							
Pictures of Welds Taken Before Recoating?							
CONCRETE-ST	TEEL ADAP	TER OR FO	DREIGN PIPE				
ТАЅК	√/×	N/A	REMARKS				
Type of Structure Identified? (Adapter or Foreign Pipe)			Structure:				



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Surface Cleaned and Prepared?					
Pipe Wall Thickness Measured?			Wall Thickness Measured:		
Copper Sleeve Used?					
#15CP Charge Used for Steel Pipe Welding	?				
#45CP Charge Used for Non-Steel Pipe We	lding?				
Thermite Weld Successful?			IF FAILED	, MOVE WELD MIN. 150MM AWAY	
Slag Removed from Weld?					
Welds Pass Pull Test and Visual Inspection?					
Additional Test Lead Separated >150mm?					
Repeat Above Steps for ALL Additional We	elds		# of Additional Welds:		
Resistance Measured Between Leads <1.00	2?		Resistanc	e:	
Continuity Between Leads Confirmed?					
Pictures of Welds Taken Before Recoating	Pictures of Welds Taken Before Recoating?				
	Test I	Leads Install Sig	n Off		
Installer Name / Initials:	CP Inspector Name / Initials: (Backfill Approval)			Date (MM/DD/YY):	

COUPLING / HARNESS INSTALLATION							
TASK		√/×	N/A		REM	ARKS	
Correct Couplings and/or Harnesses Ordered	d with						
Factory Installed Bond Straps Strap Mounts	?						
Couplings and/or Harnesses Checked for De	fects /						
Damage?							
Isolation Boot Installed on Isolating Coupling	g Towards						
the Concrete-Steel Adapter and Protrudes N	/lin. 25mm						
Outside End of Coupling?							
Isolating Coupling Tested and Confirmed to Isolated?	Be			Equipmen	t Used:	Measured Ω:	
Non-Isolating Coupling Tested and Confirme	d to Be			Equipmen	t llsod.	Measured Ω:	
Continuous?	u to be			Lquipinen	t Osed.		
All Ring Terminal Connections Attached to R	ods/Bolts						
and Nuts Torqued?							
Any Thermite Weld Pipe Connections Comp	leted						
Successfully Following "Test Lead Installatio	n″						
Section?							
All Thermite Welded Connections Recoated							
Successfully Following "Coating Installation"	Section?						
Pictures of Couplings and/or Harnesses Tak	en Before						
Wrapping?							
Couplings and Harnesses Wrapped with Der	nso Mastic						
and Tape According to Manufacturer's MQA	νP?						
Coupling / Harness Install Sign Off							
Installer Name / Initials:	CP Inspector Name / Initials: (Backfill Approval)			tials:	Date	(MM/DD/YY):	
		-					



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	COA	TING INS	TALLAT	ION	
	CA	RRIER PIP	E COATIN	G	
ТАЅК		√/×	N/A		REMARKS
Type/Brand of Recoat System to be used fo	r Welds			Brand:	
Materials Inspected for Defects / Damage?				Batch #:	
Pipe Heated Prior to Recoat System Being A	pplied?				
Primer Applied and Dry to Touch (if applica	ole)?				
Recoat System Applied According to Manuf Qualified Application Procedure (MQAP)?	acturer's				
Recoat System Successfully Adhered to Stru Including All Corners and Edges?	cture				
Pictures of Every Recoat Taken Before Bac	cfilling?				
	EN	CASEMEN <sup>®</sup>	T COATIN	G	
TASK		√/×	N/A		REMARKS
Type/Brand of Recoat System to be used fo	r Welds			Brand:	
Materials Inspected for Defects / Damage?				Batch #:	
Pipe Heated Prior to Recoat System Being A	pplied?				
Primer Applied and Dry to Touch (if applica	ole)?				
Recoat System Applied According to Manufacturer's Qualified Application Procedure (MQAP)? Recoat System Successfully Adhered to Structure					
Including All Corners and Edges?	cluie				
Pictures of Every Recoat Taken Before Bac	cfilling?				
	CONCRET	E-STEEL A	DAPTER C	OATING	
TASK		√/×	N/A		REMARKS
Type/Brand of Recoat System to be used fo	r Welds			Brand:	
Materials Inspected for Defects / Damage?				Batch #:	
Pipe Heated Prior to Recoat System Being A	pplied?				
Primer Applied and Dry to Touch (if applica					
Recoat System Applied According to Manufacturer's Qualified Application Procedure (MQAP)?					
Recoat System Successfully Adhered to Structure Including All Corners and Edges?					
Pictures of Every Recoat Taken Before Bac	cfilling?				
		ating Insta			
Installer Name / Initials:	CP Inspector Name / Initials: (Backfill Approval)			Date (MM/DD/YY):	



Document No.

	ANG	ODE INST	ALLATI	ON				
CARRIER PIPE ANODES								
ТАЅК		√/×	N/A		REMARKS			
Anodes Inspected for Defects / Damage?								
Anodes Installed According to IFC Drawing	Spacing?			Anode to	Anode Spacing: Pipe Spacing: Nearest Coupon/Electrode:			
Anodes Spliced to Header Cable Using Two Method and Splices Inspected for Integrity				2- Tape N Tape	1ethod: 130C Splicing Tape & Electrical			
Pictures of Every Anode Taken Before Bac	kfilling?							
Anodes Covered with Min. 300mm Native E Moisture Retaining Soil	Backfill or							
Anodes Soaked with Min. 10L Potable Wate Backfilling	er Prior to							
	EN	ICASEMEN	T ANODE	S				
ТАЅК		√/x	N/A		REMARKS			
Anodes Inspected for Defects / Damage?								
Anodes Installed According to IFC Drawing	Spacing?			Anode to	Anode Spacing: Pipe Spacing: Nearest Coupon/Electrode:			
Anodes Spliced to Header Cable Using Two Method and Splices Inspected for Integrity				2- Tape N Tape	1ethod: 130C Splicing Tape & Electrical			
Pictures of Every Anode Taken Before Bac	kfilling?							
Anodes Covered with Min. 300mm Native E Moisture Retaining Soil	Backfill or							
Anodes Soaked with Min. 10L Potable Wate Backfilling	er Prior to							
	CONCRET	<b>FE-STEEL A</b>	DAPTER A	ANODES				
ТАЅК		√/×	N/A		REMARKS			
Anodes Inspected for Defects / Damage?								
Anodes Installed According to IFC Drawing Spacing?				Anode to	Anode Spacing: Pipe Spacing: Nearest Coupon/Electrode:			
Anodes Spliced to Header Cable Using Two Method and Splices Inspected for Integrity	•			2- Tape N Tape	Nethod: 130C Splicing Tape & Electrical			
Pictures of Every Anode Taken Before Bac								
Anodes Covered with Min. 300mm Native B Moisture Retaining Soil								
Anodes Soaked with Min. 10L Potable Wate Backfilling	er Prior to							
	An	ode Insta	ll Sign O	ff				
Installer Name / Initials:	CP Inspector Name / Initials: (Backfill Approval)			tials:	Date (MM/DD/YY):			



Document No.

AC & DC COUPO	NS, PERMAN	IENT REF	ERENCE	ELECTROD	
TASK		√/x	N/A		REMARKS
Coupons and/or Electrodes Inspected for Damage?	Defects /				
Coupons Installed According to IFC Drawing Specifications?				Coupon to N	ipe Spacing: learest Anode: learest Coupon: learest Electrode:
Electrode Installed According to IFC Drawing Specifications (OR Manufacturers Specifications if Applicable)?				Electrode to Electrode to	Pipe Spacing: Nearest Anode: Nearest Coupon:
Pictures of Every Coupon and Electrode Backfilling?	Taken Before				
Coupons and/or Electrodes Covered with Native Backfill or Moisture Retaining Soil					
Coupons and/or Electrodes Soaked with Potable Water Prior to Backfilling	Min. 10L				
	Coupons ar	nd Electro	ode Insta	II Sign Off	
Installer Name / Initials:	CP Ins	CP Inspector Name / Initials: (Backfill Approval)		Date (MM/DD/YY):	

TEST POST INSTALLATION							
ТАЅК		√/×	N/A		REMARKS		
Test Post and Head Inspected for Defects /	Damage?						
A minimum of 2m extra cable for each lead inside post OR at base of test post if unable							
Test Post Buried 600mm – 800mm Above F	inal Grade?						
Static Potentials of Each Lead Measured an in the Tables Below Prior to Termination?	d Recorded						
Test Leads Terminated in Head According t Drawings?							
Test Leads Labelled with Weather Resistan	Test Leads Labelled with Weather Resistant Labels?						
Potentials of Each Lead Measured and Recorded in the Tables Below After Termination?							
GPS Coordinates of the Test Post Recorded	?			GPS:			
Picture of Test Post Taken Once Install is C	ompleted?						
	Test Post Install Sign Off						
Installer Name / Initials:	CP Inspector Name / Initials: (Backfill Approval)			Date (MM/DD/YY):			



Document No. \_\_\_\_\_

**Revision 00** 

TEST STATION DATA TO PORTABLE CuCuSO4 REFERENCE ELECTRODE							
Description	Cable Color	Static (mV)	Connected (mV)	Resistance Lead 1 to 2 (Ω)	Current (mA)		
Carrier Pipe Lead 1							
Carrier Pipe Lead 2							
Encasement Lead 1							
Encasement Lead 2							
Concrete-Steel Adapter Lead 1							
Concrete-Steel Adapter Lead 2							
Carrier Pipe Anode Lead 1							
Carrier Pipe Anode Lead 2							
Encasement Anode Lead 1							
Encasement Anode Lead 2							
Concrete-Steel Adapter Anode Lead 1							
Concrete-Steel Adapter Anode Lead 2							
AC Coupon (DC Volts)							
AC Coupon (AC Volts)							
DC Coupon							
Permanent Reference Electrode							

## Additional Comments:

	QA/QC DOCUMENT SIGN OFF								
`This is to be completed and signed off once all tasks associated with the identified Test Station has been completed. Both CP/Prime Contractor and Engineer Consultant approves and is confident that all CP related items have been installed according to the IFC drawings and CoC Waterworks Construction Standards.									
CP/Prime Contractor:									
	NAME	SIGNATURE	DATE (MM/DD/YY)						
Engineer Consultant:									
	NAME	SIGNATURE	DATE (MM/DD/YY)						
City Inspector:									
	NAME	SIGNATURE	DATE (MM/DD/YY)						