	<u> </u>					INSPECT	ION FOR	RM		P	Page 1 of 1		
L '	Winnipeg					ANALO	G METEI	₹		II	D:		
Project	Facility:	·				Projec	Name:			•			
Pro	Area :					Bid Op	portunity:						
	Location					Cell #							
Meter Data	Location:								Danga				
_	Manufactu	irer:				Туре			Range				
	Cover Gas	sket:		Good [Accepta	able 🗌 Poo	Cover G	ass:	☐ Good ☐ Accep				
/ uc	Spiral Spri	ng:		Good [Accepta	able 🗌 Poo	r Disc Cle	arance:		I ☐ Acceptable ☐ Poor			
pectic	Contacts:			Good [Accepta	able 🗌 Poo	Case Sh	orting Contacts:	□ N/A □	Good	Acceptable Poor		
Visual Inspection / Cleaning	Rotating Disc Good Acceptable				able 🗌 Poo	General	Condition:] Good	I ☐ Acceptable ☐ Poor			
Visu	Cleanlines	s (as four	nd): 🗆	Good [Accepta	able 🗌 Poo	Unit Clea	aned:	☐ Yes				
	Connectio	ns (as fou	ınd): 🗆	Good [Accepta	able 🗌 Poo	Connecti	ons Torqued:	☐ Yes				
	Test Value Reading Read As Found As L				Units								
	0	ASI	Found	As Le	eft								
Accuracy	0												
Accı													
	Unit Calibrated	Ye	es 🗌 No										
	T Campiano						1						
<u>.s</u>	Returned				☐ Yes	s □ No	Comme	nts:					
Final Analysis	Monitoring Required:	j / Further	Inspection	on	☐ Yes	s □ No							
	Repair / R	Replacement Required:			S □ No								
		Compan	ıy		Name			Signature			Date (yyyy/mm/dd)		
Perfo	rmed By												
Check	ked By												

,	Q .					CTION FC				Page	1 of 2			
\	Vinnipeg				AIR CIRCUI	TBREAK	ER, 600V			ID:				
Project	Facility:					Project Nam	e:							
Proj	Area:					Bid Opportu	nity:							
<u> </u>	1	(1				1	'							
TZ.	Location:					Switchgear	:				Cell #:			
ır Dai	Manufact	urer:				Type: Serial								
Breaker Data	Rated Vo	ltage:	V	Fran	ne Size:	A Interrupting Rating					kA			
Br	Momenta Closing A		ń	Α	Trip Unit	Туре:		Con	trol V	oltage:	V			
	Bassland	-1 41 -6 1 41 -	T	4-111-										
		dentificatio			Yes	□ No Visual Signs of Overheating:					Y	_		
	Cleanline	ss (As Fou	und):	∐G	iood	Electro/Mechanical				∐ G	ood	table ∐ Poor		
ත	Connection	ons:		□G	iood	table ☐ Poor				N/A G	ood	able 🗌 Poor		
anin	Ground C	onnection	:	☐ G	ood 🗌 Accepta	able Poor Arc Chutes:					ood 🗌 Accept	able 🗌 Poor		
n / Cle	Door Med	hanical:		☐ G	ood	able 🗌 Poor	Contact Alig	ınment a	and	□G	ood	table 🗌 Poor		
Visual Inspection / Cleaning	Cell Fit ar	nd Alignme	ent:	☐ G	ood 🗌 Accepta	able 🗌 Poor	Operating N	1echanis	sm:	□ G	ood	table 🗌 Poor		
	Racking N	/lechanisn	n:	☐ G	ood	able 🗌 Poor	Contact Fin	gers:		G	ood	table 🗌 Poor		
/isual	Shutter:			☐ G	ood	able 🗌 Poor	Arcing Cont	acts:		G	ood	table Poor		
_	Cables S	upported A	Appropri	ately:] Yes □ No	Auxiliary De	vices:		□ G	ood	table 🗌 Poor		
						Unit Cleaned: ☐ Yes Ph				Photograp	n Taken:	☐ Yes		
	Comments:													
L	I .)											
Test	Temperatu	ıre:	°C —	ource:	☐ Disconned						s required, prior nected during t			
gy	Test						ion Resistan							
stan	Voltage	Phas	e To GN	ID (Brea	ker Closed)	Phase To	Phase (Brea	ker Clo	sed)	Line to	o Load (Break	er Open)		
Resi	(VDC)	Α		В	С	A – B	B – C	Α-	С	Α	В	С		
Insulation Resistanc	1000													
sula	Test Sum	mary	□те	est Passe	ed 🔲 Test I	nconclusive.	Further Invest	tigation	Requi	ired. [Test Failed			
u	Comments	::												
ance g)	Wire	Tag		sulation stance (N		re Tag	Insulation Resistance		Test	Summary				
ulation Resistance (Control Wiring)									T 🗆	est Passed est Inconclus Further Invest est Failed	ve igation Require	d.		

Comments:



INSPECTION FORM AIR CIRCUIT BREAKER, 600V

Page	2 of 2	
ID:		

s					As Fou	ınd		As Left				
nent	Measurer	ment		Α	В		С	ļ	1	В		С
uren	Resistanc	e (μΩ)										
Meas	Arcing Co	ntact Gap	(mm)									
Pole	Main Con	tact Gap (r	mm)									
Contact/Pole Measurements	Test Sum	ımary	☐ Test F	Passed	Test Incond	lusive. Fu	ırther Investiga	ation Rec	uired.	☐ Tes	t Failed	
Con	Co	mments:										
								-				
	Plug Ra		A	Sensor Tap		Ground	Fault					
ings	Rela	y Setting	(As Left)		Setpoint		Dela	y	Er	nabled		I ² T
Sett		Long Tir	me	Х	A =	Α		sec	☐ Ye	es 🗌 No		On 🗌 Off
Breaker Settings		Short Tir	me	Х	A =	Α		sec	☐ Ye	es 🗌 No		On 🗌 Off
Bre	Instantaneous			X A =		Α	N/A		☐ Yes ☐ No			
		Ground F	ault		Α			sec	☐ Ye	es 🗌 No		On 🗌 Off
							•	•			•	
	TCC NO:					T		T				
	Test Test Cur		Test Current	Time		A Found As Loft		B As Found A				С
Breaker Test				Min. (sec)	Max. (sec)	As-Foun (sec)	d As-Left (sec)	As-Left As-Four		s-Left (sec)	As-Foun (sec)	d As-Left (sec)
aker	Long	Time	А									
Bre	Short	Time	А									
	Instant	aneous	А									
	Ground	d Fault	А									
	Returned	to Service	e:	☐ Yes	□ No	Commer	nts:					
Final Analysis	Monitorin	ng / Furthei	r Inspection	 ☐ Yes	 ☐ No							
Ans	Required		ent Required:	☐ Yes	□ No							
	1	1			· · · · · · · · · · · · · · · · · · ·					<u> </u>		
		Company	у	Name			Signature			Da	ate (yyyy	/mm/dd)
Perfo	rmed By											
Checked By												

	_														1
	V		_	10: 5-					000	.,	Р	Page 1 of 2			
'	winnipeg		N	NOLDE	D CASE	: CIF	KCUIT BRE	AKER, < 1	000	V	IC	D:			
Project	Facility:				Pi	roject	Name:								
Pro	MOLDED CASE CIRCUIT BREAKER, < 1000V Facility: Project Name: Area: Bid Opportunity: Panelboard/MCC: Cell #: Manufacturer: Manufacturer: Type: Serial #: Rated Voltage: V Frame Size: A Trip Unit: Interrupting Rating: KA Comments: Breaker Identification Tag Installed:														
					•										
ta	Location:					Pane	elboard/MCC:			ı	(Cell #:			
Breaker Data	Manufactu	rer:				Тур	e:			Serial #	:				
reak	Rated Volt	age:	V	Fran	ne Size:		Α			Trip Uni	it:				
В	Interrupting	g Rating:		kA	(Comn	nents:								
						Yes ☐ No Visual Signs of Overheating:							Ш	Yes	∐ No
ion /	Cleanlines	s (As Foun	ıd):	☐ G	ood 🗌 Ad									Yes	□No
Visual Inspection / Cleaning	Connection	ns:		☐ G	ood 🗌 Ad						N/A 🗆	☐ Good ☐ Acceptable ☐ Poor			
ıal In Cle≀	Ground Co	nnection:		☐ G	ood 🗌 Ad	cepta	able 🗌 Poor	Exercise Circ	uit B	reaker:				Yes	
Visu	Door Mech	anical:		☐ Go	ood 🗌 Ad	cepta	able 🗌 Poor	Other:							
Comments:															
		111													
	Trip Unit	t Rating:	A		Trip Unit T	ype:	☐ None [☐ Thermal Ma	agnet	tic 🗌 Ele	ectronic		_I □ LSI	LS	ilG
ngs	Breaker Setting (As Left)						Range		Setp	oint			Delay		I ² T
Breaker Settings	Lo	ng Time		☐ Fixe	ed 🗌 Adj.		-	Х		A =	Α		sec	☐ O	n 🗌 Off
aker	Sh	ort Time		☐ Fixe	ed 🗌 Adj.	∖dj		Х	X A =		Α	A sec		□ O	n 🗌 Off
Bre	Inst	antaneous		☐ Fixe	αed □ Adj.		-	Х		A =	А		N/A		
	Gro	und Fault		☐ Fixe	d 🗌 Adj.		-			Α			sec	□ O	n 🗌 Off
	Dorform in	oulation ro	oiotono	- magaur	romonto fo	r broc	okoro > - 250A	or on anonific	od.						
);			9					<u> </u>		olated)	Annroi	val ic	required or	ior to l	eaving
e Te	Temperatu	ire:	°C												
anc	Test		ı				Insulati	on Resistanc	e (Mg	Ω)					
sist	Voltage	Phase	To GN	ID (Brea	ker Close	d)	Phase To	Phase (Break	er Cl	losed)	Liı	ne to	Load (Brea	aker O	pen)
n Re	(VDC)	Α		В	С		A – B	B – C	A	\ - C	А	١	В		С
latio															
Insulation Resistance Test	Test Sum	mary	□те	est Passe	ed 🔲	Γest Iι	nconclusive. F	urther Investi	gatior	n Require	ed.] Test Faile	t	
_	Comments	:													
	5.6				,										
t ce	Perform co	ntact mea	sureme	nts for bi		250/	A, or as specif			Took O	1110000000	n,			
Contact Resistance	Res	istance (n	nΩ)		Α	+	В		C Test Summary ☐ Test Passed						
Co Resis	0											Inconclusive her Investigation Required.			
-	Comments:														

Winnipeg

INSPECTION FORM MOLDED CASE CIRCUIT BREAKER, < 1000V

Page	2 of 2	
ID:		

al sis	Returned	to Service:	☐ Yes	☐ No	Comme	ents:			
Final	Monitorin	g / Further Inspection	Required:	☐ Yes	☐ No				
Ā	Repair / I	Repair / Replacement Required:			☐ No				
		_		,		•			
		Company Nar		ne			Signature		Date (yyyy/mm/dd)
Perfo	rmed By								
Checl	ked By								
		· /				41 44	1	1.6 (1.1 1.2)	

-	<u> </u>		1							Р	Page 1 of 2		
V	Vinnipeg			BUS	SWAY,	600\	V			IC	D:		
ect	Facility:				Project	Name	e :			•			
Proj	BUSWAY, 600V Dest. / Load:												
	I	II.			L		1						
	Source:					Des	t. / Load:						
	Manufactu	urer:		Type:					Conduc	ductor: Copper Aluminu			ninum
ay Data	Ampacity:	А	Configuration:	□ 39	Ø, 4W	ð, 4W					Neutral		□ N/A, or %
Msng	Grounding	g: 🔲 Integr	al to Housing	☐ Inter	rnal - Nor	ı-Isola	ated 🗌 In	nternal -	Isolated	d	Ground	Rating:	%
ш	Rated Vol	tage: V			V	With	nstand Ratii	ng:		kA D	ate Installe	ed:	
	Length:		m	red 🗌	From Dr	awing	gs 🗌 Prev	vious Da	ata	Installat	ion:		doors utdoors
	Physical F	Damage on Expos	sed Ends:	Yes	П №		Identificati	ion Tag	Installe	d:		☐ Yes	□ No
	-											☐ Yes	□ No
_	Cover Pla	tes in Place:	Yes	□ No		Physical C	Orientati	ion Con			☐ Yes	□No	
ectior	Grounding	j :	☐ Good ☐	Accept	table	Poor							
lnsp	Ventilation Openings : ☐ Good ☐ Acceptable ☐ Poor Ventilation Opening											☐ Yes	□ N/A
/isual	The follow	ing inspection ite	ms are only requ	uired for	busway	busway routed through outdoors or through wet / cold					cold enviro	onments.	
_	Condition	of Gaskets:	☐ Good ☐	Accept	table	Poor	Joint Shie	eld Insta	llation:		Good 🗆	Acceptabl	e 🗌 Poor
	Weep Hol	e Plugs Removed	d:	Yes	☐ No		Heaters C)perate:				☐ Yes	☐ No
	Comments:												
	1												
st	Test Preparation	Source: Disconne Connecte	cted ed with Source Is	solated	Cable D Disc	onne		d Isolate	ed				
Insulation Resistance Test	Busway T	emperature:	°C Tempera	ture Co	rrection F	actor	r for 20°C:			ound all co	onductors n	ot under te	st for each
sistar	Test			Insu	ılation R	esista	ance (MΩ)	I		Test Sur	nmary		
on Re	Voltage		A-GND	B-	GND		C-GND	N-G	IND	☐ Test I			
ulatio	1000V	Reading								Furth	nconclusive ner Investig		ired.
lns		Corrected to 20	°C		☐ Tes			i ⊓ resti	alleu				
	Comment	s:			Comments:								



INSPECTION FORM BUSWAY, 600V

Page	2 of 2	
ID:		

					-					
	Test		Pha	ise			Units			
	1991	Α	В	С	N		· · · · · · · · · · · · · · · · · · ·			
F	Resistance									
I	nductance									
Test										
Busway I	Returned to Service:	□ Y	es 🗌 No	Comments:						
		□ Y	es 🗌 No							
Repair / I	Replacement Required	:	☐ Yes ☐ No							
	Company	Name		Sig	gnature		Date (yyyy/mm/dd)			
med By										
ed By										
	Busway I Monitorin Required Repair / I	Busway Returned to Service: Monitoring / Further Inspection Required: Repair / Replacement Required Company med By	Resistance Inductance Comments: Busway Returned to Service: Y Monitoring / Further Inspection Required: Y Repair / Replacement Required: Y Company Name med By	Resistance Inductance Comments: Busway Returned to Service: Yes No Monitoring / Further Inspection Required: Yes No Repair / Replacement Required: Yes No Company Name med By	Resistance Inductance Comments: Busway Returned to Service: Yes No Monitoring / Further Inspection Yes No Required: Yes No Comments: Monitoring / Further Inspection Yes No Repair / Replacement Required: Yes No Company Name Signed By	Test A B C N Resistance Inductance Comments: Busway Returned to Service: Yes No Comments: Monitoring / Further Inspection Required: Yes No Repair / Replacement Required: Yes No Company Name Signature med By	Test A B C N Resistance Inductance Comments: Busway Returned to Service:			

	<u> </u>					ECTION						Page 1 of	1	
	Winnipeg				APACI	TOR BA	ANK, 60	UV				ID:		
Project	Facility:				Р	roject Nan	ne:							
Prc	Area :				В	id Opportu	unity:							
논	Location:					Switchgea	ar/MCC:					Cell #:		
or Ba	Manufactu	rer:				Model:				Serial	#:			
Capacitor Bank Data	Size:		VAR	Rated Voltag	ge:		V		Capacita	nce:		μF		
Ca	Configurat	ion:	Delta	Wye-Ungro	unded [☐ Wye-G	irounded		•					
	Capacito	· Identificat	tion Tag Ins	talled:	Yes	☐ No	Cables	Sup	oported App	opriate	ly:		∕es □ No	
ual ction/	Cleanline	ss (As Fou	ınd):	☐ Good ☐	Acceptat	table Poor Anchorage, alignment:					□G	ood	ptable Poor	
Visual Inspection/	Cleanline Connecti	ons:		☐ Good ☐	Acceptal	table Poor Required Clearances:				☐ Go	ood 🗌 Accep	otable Poor		
_	Ground 0	Connection	:	☐ Good ☐	Acceptab	le 🗌 Poo	Poor Unit Cleaned: Yes Photogr					aph Taken:	☐ Yes	
Insulation Resistance Test	Test Prepa	ration:	Source Ca		rce Isolate	ed						epresentative nected during		
sistan	Test		lr	nsulation Res		(ΜΩ)			Test Sumn	nary				
on Re	Voltage	Α	(A-B)	В (В	i-C)	С	(C-A)		☐ Test Pas	onclusiv				
ulati	1000 V								Further Test Fai		gation R	equired.		
l su	Comments	:		-		•								
			Capac	citance (µF)			Те	st S	ummary					
ance	A (A	л-B)	_	(B-C)				☐ Test Passed ☐ Test Inconclusive						
apacitance								Further Investigation Require						
ပိ	Comments	::												
			Resi	stance (Ω)			Те	st S	ummary					
rge	A (A	л-B)	В	(B-C)		C (C-A)			st Passed st Inconclusiv	10				
Discharge Resistance								Fu	rther Investig st Failed		Required			
0 &	Comments	::							A T GIIOG					
	Returned t	o Service		Y	es 「] No C	omments	:						
Final Analysis			nspection	Y] No								
Ans	Required: Yes				es [] No								
Company Name							0	iana	ture			Date (100	/y/mm/dd)	
Perf	Company Name Performed By						.y.10				Jate (yy)	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	cked By													

V	Vinnipeg			INSP POWER	ECTION CABLE		V			Page	1 of 1	
					<u> </u>					Cable ID:		
Project	Facility:				Project I							
۵	Area :	ı <u>.</u>			Bid Opp	ortunity:						
	Source:					Dest. / Lo	ad:					
_	Manufact	urer:		Туре) :			Conduc	tor:	□ Сор	oper	ninum
Data	No. of		Size:		AWG	Length	ı:		Measu		Previou	s Data
Cable Data	Conducto		Operating	<u>L</u>] MCM V			Ш	Jacke	t Markings	□ TDR	
	Rated Vo	itage: v	Voltage:				nstalled:	Dina at l	D mi a. al			
	Installatio	n: Cable Tra] EMT] Steel Cond	luit [Alum. Co PVC Co		☐ Direct I		Duct O	ther:	
_	Physical I	Damage on Expose	ed Ends:	☐ Yes	□ No	Cable Id	entificatio	n Tag Instal	lled:		☐ Yes	П No
Visual Inspection	•	gns of Overheating		☐ Yes	No			Appropriatel			□ Yes	П No
Vis	`	dius Acceptable:		☐ Yes	□ No	Comme	•••		.,.			
	20.10.1.00											
	Test	Source:	cted			est. / Load onnected	d:				of City's Repre to leaving cab	
st	Preparation	On: Connected	d with So	urce Isolated	☐ Conr	nected with	Load Iso	lated	conne	cted during	g the test. rs not under te	
Insulation Resistance Test	Cable Te	mperature:	mperature C	orrection F	actor for 2	20°C:		ding.	Conductor	is not under te	St ioi eacii	
stano	Test Voltage			Ins	ulation Re	esistance	(ΜΩ)		Test S	ummary		
Resi	Voitage		A-G	ND E	-GND	C-GN	D	N-GND		st Passed	al va	
lation	V	Reading							Fu		stigation Requi	ired.
Insu		Corrected to 20°								ot i alleu		
		00VDC Test Voltag	ge for 600	V rated cabl	es, 500VD	C for cable	es rated <	= 300V.				
	Commen	ts:										
Ф	Note: Tor	que check required	d for all ca	ables. Conn	ection Res	istance Te	st require	d for cables	4/0 AV	VG or large	er.	
stanc	Te	ermination		Connection	on Resista	ance (μΩ)	- As Left	:		Tor	que Check	
Resis			Α		В	С		N			quo onoon	
tion		Source									□ ок	
Connection Resistance	D	est. / Load									□ ок	
ပိ	Comment	ts:										
	Coble De	turned to Service:			s 🗆 No	Comm	ents:					
ıal ysis			D	☐ Ye:			orno.					
Final Analysis		g / Further Inspecti				_						
	Repair / F	Replacement Requ	irea:	☐ Yes	S No		·					
		Company		Name			Signatui	re			Date (yyyy/m	m/dd)
Perfor	med By											
Check	od By											

	<u> </u>					ECTION						Page 1 c	of 1	
V	Vinnipeg		CO	NTROL F	POW	ER TRAN	NSFC	ORME	ER	, 600V		ID:		
Project	Facility:					Project N	lame:							
Pro	Area :					Bid Oppo	ortunit	y:						
	l							Pri. V	olta	age		Sec. Volt	age	
ata	Location:							Ratin		-9-		Rating:		
PT Data	Manufact	turer:						Pri. F	use	e Size:		Sec. Fus	e Size:	
	Size:				Ту	pe:					Other:			
	Physical	Dama	ge:		Yes	☐ No	Defe	ctive C	Con	nections/Wiring	g:		☐ Yes	□No
ial	Visual Si	gns of	Overheating:		Yes	□No	Grou		an	d Shorting Con	nections	Provide	☐ Yes	□No
Visual Inspection	_				Yes	□No							□No	
_	Fuse Sizes Match Drawings:				Yes	□No	Com	ments	:					
Insulation Resistance Test	Test Prepa	Те	☐ Connect	ected ed with Sou Voltage		solated Insulation I (M		tance	16	prior to leaviremperature:	val of Citing cables	y's Repres s connecte	sentative is re	quired, est.
n Re	Pr	imary [*]	To GND	1000 VD	С				łΓ	est Summary Test Passed				
latio	Sec	ondary	/ To GND	500 VD0	0					Test Inconclus Further Inves	sive stigation	Required.		
lusi	Prima	ary To	Secondary	1000 VD	С				L	Test Failed				
	Comments	S:												
	Returned	I to Se	rvice:		r'es	☐ No	Com	ments	:					
Final Analysis	Monitorin Required		rther Inspection		⁄es	☐ No								
Ā	Repair / I	Replac	ement Required:		⁄es	□ No								
		Com	pany	Name)			Si	ign	ature		1	Date (yyyy/mr	n/dd)
Perfor	med By								_					·
Check	ed By													

,	Winnipeg				(SPECTION TRA			R				Page ID:	e 1 of 1			
t	Facility:						Project N	Name:						1				
Project	Area :						Bid Opp	ortunity:										
	Location:					Curr	ent Ratio:			A		Volt	age Clas	e ·	V			
CT Data	Manufact				Mode		ent ivalio.		·	ype:	☐ Bar		Window			Core		
CT	Burden R				BIL:		kV				cy Class:			(Colla)	,			
	<u> </u>							1										
al	Physical] Yes	□ No	Clean ar	nd Insp	ect In	sulators:				☐ Yes	□ No		
Visual Inspection	Visual Si] Yes	□ No			ions a	re Corre	ct:			☐ Yes	☐ No		
_=	Adequate	Mountin	ıg Sup _l	port:] Yes	☐ No	Commer	nts:									
Test	Test Prepa	aration:		rce: Disconnecte Connected v Isolated		ource	☐ Disc	Dest. / Loa connected nnected wi		d Isola		is re		rior to	City's Repre leaving cab le test.			
Insulation Resistance Test		Test		Voltag	je		Insul	ation Res	istanc	e (MΩ	2)		Tempera	ature:	°C			
esist							Α	В			С		Test Su					
ion R		ry To GN		1000 '									☐ Test	est Passed est Inconclusive Further Investigation Required				
sulat		ary To G		500 \										Further Investigation Required Test Failed				
<u> </u>	Primary 7		dary	1000	V													
	Comments):																
uo	Note: Atta	ch suppo	rting da	ata and satu	ıration	curve.												
turati				Α		E		ase	С			N			Summary st Passed			
on, Saturation Tests	Calculate	d Ratio		A								IN		Tes	st Inconclus orther Inves	-		
itation arity T	Measured													Re	equired. st Failed	gao		
Turns Ratio, Excitati and Polarity	Exciting (Current																
Ratio	(mA Polarity 0	<u> </u>	□Y€	es 🗌 No] Yes	□ No	☐ Yes		do.	☐ Yes] No					
Turns	CT Satu							☐ Yes			☐ Yes] No					
	Test Perf	ormed:	☐ Ye	es 🗌 No] Yes	□ No	☐ Yes	<u> </u>	NO	☐ Yes		NO					
Ŋ	CT Retur	ned to S	ervice:			Yes	□No	Commer	nts:									
Final Analysis	Monitorin Required		er Insp	ection		Yes	□No											
_ ₹	Repair / I	Replacen	nent Re	equired:		Yes	□No											
		Compa	ny		Nam	ne	•		Signa	ature				D	ate (yyyy/m	nm/dd)		
Perfo	rmed By																	
Checl	ked By																	

	0					ION F				Page	1 of 1
l w	Vinnipeg			DI	GITA	L MET	ER			ID:	
ect	Facility:	•			Project	t Name:					
Project	Area :				Bid Op	portunit	/ :				
		*)=		<u> </u>			-(-				
Meter Data	Location:				Cell #	# :					
ğΔ	Manufact	urer:			Mode	el:					
	Cover C	Sasket:		d ☐ Acceptab	е П Б	Poor	Cover G	lass.	Пе		Acceptable Poor
_ 'u		l Conditi		d			00101 0	1400.			7.00cptable
Visual Inspection /	Classia						Linit Ola				
V dsul	Cleanlin			d			Unit Clea	ions			
	Connec	tions (as	found) Good	d	le 🗌 F		Torqued		Yes		
			Pi	nase A			Pha	ıse B		Pha	se C
		Test Value		Readir	ng	Read		Reading	Readi		Reading
	Voltage	(V)	As Found (V)	As Le		As Fo	ound	As Left (V)	As Fou (V)	ınd	As Left (V)
		0									
>>											
Accuracy Accuracy		Test	Pi	nase A			Pha	se B		Pha	se C
Acc		Value (A)		Readir	ig	Read		Reading	Readi		Reading
	Current	(A)	As Found (A)	As Le (A)	rt	As Fo		As Left (A)	As Fou (A)	ind	As Left (A)
		0									
	Unit Calib	rated:	☐ Yes ☐ No	•	<u> </u>						
			•		—	Com	monto:				
= <u>sis</u>	Returned			☐ Yes	☐ No	Com	ments:				
Final Analysis	Monitorin Required	g / Furth :	er Inspection	☐ Yes	☐ No						
<	Repair / I	Replace	nent Required:	☐ Yes	☐ No						
		Compa	nv	Name		•	Sign	nature		Date	(yyyy/mm/dd)
Porform	ned By	Jonipe	•••				Joigh	iusal v		Date	(3) y y / 11111/ (du)
Checke	ed By										

	<u> </u>		CTION FORM	Page 1 of 1
	Vinnipèg	GROUNDING/BONDING	G CONNECTION RESISTANCE	Area:
oject	Facility:		Project Name:	
Pro	Area :		Bid Opportunity:	

	P	Point A	Point B		Resistance (mΩ)		Acce	ptable
						☐ Yes	□No	☐ Inconclusive
						☐ Yes	☐ No	☐ Inconclusive
						☐ Yes	☐ No	☐ Inconclusive
						☐ Yes	☐ No	☐ Inconclusive
cks						☐ Yes	□No	☐ Inconclusive
Resistance Checks (Ductor Test)						☐ Yes	☐ No	☐ Inconclusive
tance						☐ Yes	☐ No	☐ Inconclusive
Resist (Du						☐ Yes	☐ No	☐ Inconclusive
Ľ						☐ Yes	☐ No	☐ Inconclusive
						☐ Yes	☐ No	☐ Inconclusive
						☐ Yes	☐ No	☐ Inconclusive
						☐ Yes	□No	☐ Inconclusive
	Comments:	·						
				Comments:				1
- <u>is</u>	Monitoring / Ins	pection Required:	Yes No	Comments.				
Final Analysis	Repair / Replac	cement Required:	Yes No					
∢								
		Company	Name		:	Signature		Date (yyyy/mm/dd)
Perform	ned By							
Checke	ed By							

	<u> </u>					CTION F				Page	1 of 3	
V	Vinnipèg			GRO	UNI	DING S'	YSTEM			ID:		
Project	Facility:				Proj	ect Name	:					
Pro	Area :				Bid	Opportun	ity:					
	Connection to	Groun	d Flectrode is								1_	
u	Visible:			☐ Yes		No	Facility C	Contains a Main Gr	ound Bus:		☐ Yes	□ No
pecti	Connecting C	onduct	or: Size:	Qty:			Torque C	Fround Connection	ns:		☐ Yes	☐ No
Visual Inspection	Visual signs o	f Corro	sion:	☐ Yes		No						
Visu	Soil Type:						Soil Con	dition: Dry D	Damp [] Wet		
	Comments:											
	Date of Test:						Time of	Гest:				
	Weather and	Tempe	rature:				Terrain:					
	Grounding Sy Connection Po	stem oint:			И GF ordina		Е	N				
	Current Probe Injection Point				M GF ordina		Е	N				
	Test Condition	ns:					Test La	yout:				
	Voltage Pro Distance (meters)		UTM GPS Coordinate:				Current nA)	Test Voltage (mV)	Resistand I (Ω)	ce @ Hz	Resista	Hz
st #1			E		N							
Fall Of Potential Test #1			E		N							
otenti			E		N							
Of Pc			E		N							
Fall			E		N							
			E		N							
			Е		N							
			E		N							
			E		N							
			E		N							
			E		N							
			E		N							
	Comments:				_	_	_					



INSPECTION FORM GROUNDING SYSTEM

Page	2 of 3
ID:	

	Date of Test:				Time of Test:						
	Weather and Tempe	erature:			Terrain:						
-	Grounding System Connection Point:		UTM GP Coordina	S te:	Е	N					
	Current Probe Injection Point:		UTM GP Coordina		E	N					
	Test Conditions:				Test La	yout:					
-	Voltage Probe Distance (meters)	Distance UTM GPS Coor (meters)			Current nA)	Test Voltage (mV)	Resistance @ Hz (Ω)	Resistance @ Hz (Ω)			
st #2		E	N								
Fall Of Potential Test #2		E	N								
otenti		E	N								
Of Po		E	N								
Fall		E	N								
=		E	N								
		E	N								
=		E	N								
		E	N								
•		E	N								
•		E	N								
-		E	N								
ļ	Comments:			•							



Checked By

INSPECTION FORM GROUNDING SYSTEM

Page	3 of 3
ID:	

	Poi	nt A		Point B	3		Resistance (mΩ)	Test Summary ☐ Test Passed ☐ Test Inconclusive	
	Facility Grou	ınd Electrode	Ma	in Ground	d Bus			Further Investigation	on Required.
	Facility Grou	ınd Electrode	4160V S	witchgea	r GND B	Bus			
	Facility Grou	ınd Electrode	S	stem Ne	utral				
S	Facility Grou	ınd Electrode	600V S	vitchgear	GND Bu	us			
Resistance Checks (Ductor Test)	Facility Grou	ınd Electrode	MCC	: G	ND Bus				
sistance Chec (Ductor Test)	Facility Grou	ınd Electrode	MCC	: G	ND Bus				
ssista (Duc	Facility Grou	ınd Electrode	(ther	:				
ď	Facility Grou	ınd Electrode	(ther	:				
	Facility Grou	ind Electrode	(ther	:				
	Comments:								
				_	I	Comm	vonto:		
= :8	Monitoring / Ins	pection Required	: <u></u>	Yes] No	Comm	iens.		
Final Analysis	Repair / Replac	ement Required:		Yes [] No				
٩									
		Ī							T
		Company		Name				Signature	Date (yyyy/mm/dd)
Perforr	ned By								

	<u> </u>				PECTION				Page	e 1 of 6	
V	Vinnipèg			M	CC/CDP, 6	00V			ID:		
ect	Facility:				Project Name	э:					
Project	Area :				Bid Opportun	nity:					
	1 46								# - 4 0		
MCC/CDP Data	Location:				T			T	# of C	elis:	
CDP	Manufacturer:				Model:			Serial #:			
ICC/	Rated Voltage:	V	Main Bus I	Rating:		Α	Main Bus	Neutral Rating	:	Α	
	Bus Conductor	: Copper	Aluminum	Cui	rrent Withstar	nd Rating:	Α				
	Identification Ta	ag Installed:		☐ Yes	□No	Visual Signs	of Overhe	eating:		☐ Yes	□No
	Visual Signs of	Moisture:		☐ Yes	□No	Visual Signs	of Corona	:		☐ Yes	□No
	Fuse/Breaker S	Sizes Match Di	awings:	☐ Yes	□No	PT and CT r	atios matc	h drawings:		☐ Yes	□No
aning	Elevation Draw	ings Correct:		☐ Yes	□No	Cables Supp	orted App	ropriately:		☐ Yes	☐ No
/ Cle	Cleanliness (As	s Found):	☐ Good [☐ Accept	able 🗌 Poor	Insulators Co	ondition:		Good [Acceptab	le 🗌 Poor
Visual Inspection / Cleaning	Connections:		☐ Good [☐ Accept	able Poor	Electro/Mech Interlock Sys		□G	ood [] Acceptable	e 🗌 Poor
lnspe	Ground Conne	ction:	☐ Good [Accepta	able 🗌 Poor	Vents/Filters	:	□G	ood [] Acceptable	e 🗌 Poor
isual	Doors Mechan	ical:	☐ Good ☐	Accepta	able 🗌 Poor	Exercise Act	ive Compo	onents:		☐ Yes	□No
>	Cell Fit and Alig	gnment:	☐ Good [Accepta	able Poor						
	Required Clear Met:	rances are	☐ Good ☐	Accepta	able 🗌 Poor						
	Indicating mecl	hanisms:	☐ Good ☐] Accepta	able 🗌 Poor	Unit Cleaned	d: Y	es Photograp	h Take	en:	Yes
	Type:	Inspecti	on.								
				h!:							
wer	Main Break	-			nspection for						
g Po	Disconnect	Complet	e appropriate		ect inspection						
Incoming Power		Visual In	spection:	☐ Go	ood	otable 🗌 Poor	•				
l nc	☐ Main Lugs		ons Torqued	:		1	1		1		
		Connect Resistan As Left	on ce (μΩ)		Α	В		С		N	<u> </u>



Page	2 of 6
ID:	

	Test Preparatio	Source: Disconnected Connected Isolated	cted d with Source	Cable Dest. / Lo ☐ Disconnecte ☐ Connected v			proval of City's Representative is prior to leaving cables connected during				
est	Temperati	ıre: °(С								
ance 1	Test Voltage	Insul	ation Resistand Phase To Phas		Test Summar	Test Summary					
n Resistar (Buswork)	(dc)	A - B	B - C	C - A	☐ Test Passe						
n Re Bus	1000 V				Further Inv	☐ Test Inconclusive Further Investigation Required. ☐ Test Failed					
Insulation Resistance Test (Buswork)	Test Voltage	Insul	ation Resistand Phase To GND		☐ Test Failed						
Ĕ	Tollage	A - GND	B - GND	C - GND							
	1000 V										
	Comments	3:									
	<u> </u>		1	1							
ce ist)		Point A	Poir	nt B	Resistand (μΩ)	ce	Test Summary ☐ Test Passed				
stano or Te							Test Inconclusive Further Investigation Required.				
Resi	MCC/	CDP GND Bus	Facility Groun	nd Electrode			Test Failed				
Ground Resistance Checks (Ductor Test)	MCC/	CDP GND Bus	MCC/CDP	Enclosure							
Gro	MCC/	CDP GND Bus	System	Neutral							
	Comments	3:									
	Vieual Incr	pect Requirements:	C=Cood	A=Acceptable	D-Door Comments	ara raquiras	d for all items identified in Poor condition.				
	visuai iiisį	·			/ lamacoid is installe		i for all items identified in Poor Condition.				
				visual signs of o							
				nd torque conne	-						
S.			·	·	tro/mechanical interl	ocks.					
der Breakers		į		disconnect opera							
er Br		6	6. Check do	or mechanical o	condition.						
Feede		7	7. Exercise	circuit breaker.							
		8	3. Confirm o	ables are suppo	orted and routed app	oropriately.					
		ę	9. Visually a	ssess the gene	ral condition of the ir	nstallation.					
	Note:				r Inspection Form fo ettings, or > 250A fra		s with separate adjustable Long and				
				·	nued on next page						



Page	3 of 6
ID:	

		_				Continued	from previous	s page			
	ID	Loc./ Cell	Frame Rating (A)	Trip Rating (A)	Manuf.	Model	Trip Unit Type	Inst Setting	Visual Inspection	Cleaned	Comments
S											
Feeder Breakers											
er Br											
eede											
"											
	General Comments:							,			



Page	4 of 6	
ID:		

	Overcurrent Protection Type:	B=Breaker (Thermal Magnetic), M=breaker(Motor Circuit Protector), F=Fuse					
	Overload Protection Type:	T=Thermal, SS=Solid State					
	Visual Inspect Requirements:	G=Good, A=Acceptable, P=Poor Comments are required for all items identified in Poor condition.					
	1.	Confirm identification tag / lamacoid is installed.					
	2.	Look for visual signs of overheating.					
Starters	3.	Inspect and torque connections.					
. Staı	4.	Inspect and test any electro/mechanical interlocks.					
Motor	5.	Confirm disconnect operation.					
2	6.	Check door mechanical condition.					
	7.	Exercise circuit breaker.					
	8.	Confirm cables are supported and routed appropriately.					
	9.	Visually assess the general condition of the installation.					
	Note: Comp Starte	olete a Motor Starter Inspection Form for all Motor Starters Size 4 or larger, with VFDs, or with Soft ers.					

	ID			Overcu	ırrent Pro	tection	Contactor		Overload			
		Loc./ Cell	Type	Rating (A)	Manuf.	Model	Size / Rating	Type	Model	Visual Insp.	Cleaned	Comments
ទ												
Motor Starters												
or S												
Mof												
	General Comments:											



Page	5 of 6	
ID.		

				Overcu	ırrent Pro	tection	Contactor		Overload			
	ID	Loc./ Cell	Type	Rating (A)	Manuf.	Model	Size / Rating	Type	Model	Visual Insp.	Cleaned	Comments
ទ												
tarte												
Motor Starters												
Mot												
	General Comments:											

	<u> </u>		INSPECTION FORM								
Ì	Winnipèg			MCC/CE	P, 600V	1	ID:				
	Returned	to Service:	☐ Yes	□No	Commer	its:					
Final Analysis	Monitoring	g / Inspection Required:	☐ Yes	□No	_						
I An	Repair / R	eplacement Required:	☐ Yes	□No							
		Company	Name			Signature		Date (yyyy/mm/dd)			
Perfo	ormed By										
Chec	ked By										

	<u> </u>							ON FC						Page 1 o	f 2		
\	Vinnipèg			MC	TOR	STA	RTE	R, FV	/NR, 6	00V				ID:			
Project	Facility:					Р	rojec	t Name) :								
Pro	Area :					В	id Op	portun	ity:								
	Load:					Starte	er Lo	cation:							Cell	#:	
	Manufacturer	r:	-	Гуре:								Serial #	:		<u> </u>		
	Size:	ı		Voltage:	,	V		Current	t Rating	:	A		Conf	trol Voltage:		V	/
		☐ Fused	l Disc	Rating:	Rating:			Fuse S	ize.	A	Fuse	Mfg.					
ata	Circuit Protection:				rvating.			A Fuse Si		M		Model:					
Starter Data		☐ Break	er	Rating:		Α		Inst. Setting	:	Α	Mode	ufacturer: el:					
Sta	Overload	□ Theorem	-1			0		C =445 =	. /		Manu	ufacturer:					
	Protection:	☐ Therm		Class:	□ 3	.u 80 Jnknov		Setting Rating:		Α	Mode	j.					
	Control Pow	/er	Cia	<u> </u>						Drimor			Λ	Casandani	Fuee		
	Transformer		Size		VA	Sec.		ige:	V	Primar	y Fusi	e: 	A	Secondary	ruse	<u> </u>	Α
	Current Tran	nstormer:	Rat	10:		Type	:										
or	ID:					Size:			kW /		HF	D	٧	oltage:			V
Motor Data	Full Load Am	ips:	Α	Service Fa	actor:	☐ 1. ☐ 1.		Other:									
	I														_		
	Starter Identi				<u> </u>		□ N					rheating:		70	`] No
ıning	Cleanliness (As Found)):	☐ Good						/Mecha				Good 🗆			
/ Clea	Connections			☐ Good	☐ Ac	ceptat	ole 🗌	Poor	Interlo		ariicai			Good 🗌	Acce	otable [] Poor
tion	Ground Conr	nection:		Good	☐ Acc	eptab	le [] Poor	Contac	tor Cor	ndition	:		Good	Acce	otable [] Poor
nspec	Door Mechar			Good	☐ Acc	eptab	le 🗆	Poor	Contac	t Alignr	ment:		[☐ Good ☐	Acce	ptable [] Poor
Visual Inspection / Cleaning	Verify O/L ele	ement is co	orrecti	y sized for			Yes	☐ No	Exercis	se Circu	uit Bre	aker/MCF	P/Disc	connect			☐ Yes
ž	Cables Supp	orted Appr	opriat	ely:			Yes	☐ No	Unit Cl	eaned:		Yes P	Photog	graph Taken	:	☐ Yes	3
	Comments:																
		Test			Α		E	3		С		Ta =4 C:					
e its			/··C\					-	-			Test Sun □ Test F		-			
t/Pol	Disconnect	Resistance / Breaker))								Test I	ncond	clusive	equir	ha [.]	
Contact/Pole Measurements		tance (μΩ)										Further Investigation Required. Test Failed					
ပ နို	Fuse Re	sistance (µ	ιΩ)														
	Comme	ents:															



INSPECTION FORM MOTOR STARTER, FVNR, 600V

Page	2 of 2		
ID:			

Test	Test Prepa		rce:	ated Disco	est. / Load onnected ected with		prior to le		epresentative is required, ected during the test.	
nce T		Test	V	oltage		Insu	lation Resistand	ce (MΩ)	Ground all phases not	
sista		1000	•	onago		A	В	С	under test!	
on Re	Contacto	r Line To GND	100	00 VDC					Test Summary ☐ Test Passed	
Insulation Resistance	Contactor	Load To GND	100	00 VDC					Test Inconclusive Further Investigation	
lns	Contacto	for Line to Load 1000 VDC							Required. Test Failed	
	Comments	s:								
	1					ı				
<u>.v</u>	Returned	to Service:		☐ Yes	□No	Comme	nts:			
Final Analysis	Monitorir Required	ng / Further Inspe I:	ection	☐ Yes	□No					
٩	Repair /	Replacement Re	quired:	☐ Yes	□No					
		1		T						
		Company		Name			Signature		Date (yyyy/mm/dd)	
Perfo	rmed By									
Check	ced By									

								N FOI	RM				Page 1	of 1		
V	Vinnipeg			MOT	OR S	TART	ΓER	R, FVN	IR, E	ASIC			ID:			
Project	Facility:					Pr	rojec	t Name) :				•			
Pro	Area :					Bi	id Op	pportun	ity:							
	Load:				Starter Location:								Cell #:			
	Manufact	uror:			Typo:						Rated Vo	ltago:		V		
, m	Manufact		_	<u> </u>	Type:							Raied VC	mage.		V	
Data	Circuit		Fused Disc.	Fuse S	Size:		Α		T							
Starter Data	Protection		Breaker MCP	Rating	•		Α	Inst. S	Setting: A Manufactur Model:			rer:				
	Overload	ı	Thermal	۵.	□ 1 □ 2	-				Manufactu	rer:					
	Protection	n: 🗖	Electronic	Class:	□ 3	30 Jnknow	Setting / Rating: A Model:									
									Γ							
5	Starter Identification Tag Installed:] No	Visu	al Signs o	f Ove	rheating:			☐ Yes	□No
Visual Inspection / Cleaning	Cleanline	ss (As	Found):	Good	☐ Acc	eptable	le [Poor	Elec Inter	tro/Mecha lock:	nical		☐ Good	□ A	cceptable	Poor
n/ د	Connection	ons		Good	☐ Acc	Acceptable Poor Contactor Condition:			n:	☐ Good	ΠА	cceptable	Poor			
ectio	Ground C	onnec	etion:	Good	☐ Acc	eptable	eptable Poor Overload Conditi			dition	:	☐ Good	ΠА	cceptable	Poor	
lnsp	Cables R	outed	Appropriately:		☐ Yes	5] No	Dooi	Mechanio	cal		☐ Good	□ A	cceptable	Poor
isual	Exercise	Circuit	Breaker/MCP/Di	isconne	ct			Yes	Unit	Cleaned:] Yes				
>	Comment	ts:							ı			•				
									to							
_ <u>s</u>		eturned to Service: Yes] No	Cor	mmer	its:						
Final Analysis	Monitoring / Further Inspection ☐ Yes Required:] No									
•	Repair / Replacement Required: Yes] No									
	1	Com	nany	N:	ame					Signature				Date	(yyyy/mm	n/dd)
Porfo	mod Pv	55111	-u.iy	140						-ignatule	•			Date	(УУУУ/11111	,, 44)
remori	med By															
Checke	ed By															



INSPECTION FORM AC MOTOR, LOW VOLTAGE

Page:	1 of 2		
ID:			

Project	Facility:			Р	Project Nam					
Pro	Area :			В	Bid Opportur	nity:	_			
								<u> </u>		
~	Size: kW		HP	Volta	age:	V		R.P.M:		
. Dat	Manufacturer:			Mod				Serial Nu	mber:	
Motor Data	Frame Type:			Servi Facto	or:			Other:		
	Cooling:	☐ Air ☐ Fan	# Cooling Fans:			Vinding Material:				
	Motor Identification	า Tag Instal	lled:	/es	□No	Visual Signs of C	Overhe	ating:] Yes □ No
ing	Connections:		☐ Good ☐ Ad	cepta:	able Poc	r Air Baffles:			☐ Good ☐ A	cceptable Poor
Clean	Paint:		☐ Good ☐ Ad	cepta	able Poc	r Filter Media:		□ N/A	☐ Good ☐ A	cceptable Poor
Visual Inspection / Cleaning	Cooling Fans:	N	I/A ☐ Good ☐ Ad	cepta	able Poc	Fan Controls:		□ N/A	Good A	cceptable
spect	Anchorage/Alignme	ent:	☐ Good ☐ Ad	cepta	able Poc	r				
lal In	Ground Connection	n:	☐ Good ☐ Ad	cepta	able Poc	r				
Visu	Mechanical/Electric Operation:	cal Noise D	Ouring \	es_	□No	Lubrication Requ	uired:	_	□ Y	′es □ No
	Cleanliness (As Fo	ound):	☐ Good ☐ A	ccepta	able 🗌 Poc	r Unit Cleaned:	☐ Ye	es Photo	graph Taken:	☐ Yes
							-			
_	1	Tost		$\overline{\top}$		Pacietance (MO	`		Diolectric	
	Stator Winding	Test Voltage (Vdc)	Winding Temperature (°0	;)	30 Sec	Resistance (MΩ		min. (a)	Dielectric Absorption Ratio	Polarization Index (a)
921	Stator Winding	Voltage (Vdc)		2)	30 Sec			min. (a)	Absorption	
sistance	Stator Winding	Voltage		2)	30 Sec			min. (a)	Absorption	
n Resistance	Stator Winding	Voltage (Vdc) 500	Temperature (°C	C)	30 Sec			min. (a)	Absorption	
ulation Resistance	Stator Winding	Voltage (Vdc)	Temperature (°C	C)	30 Sec			min. (a)	Absorption Ratio	
g Insulation Resistance	Stator Winding	Voltage (Vdc) 500	Temperature (°C	C)	30 Sec			min. (a)	Absorption Ratio	
nding Insulation Resistance	Stator Winding	Voltage (Vdc) 500	Temperature (°C	C)	30 Sec			min. (a)	Absorption Ratio	
Winding Insulation Resistance	Stator Winding Notes:	Voltage (Vdc) 500	40 40	c)	30 Sec			min. (a)	Absorption Ratio	
Winding Insulation Resistance	Notes: (a) Testing to	500 500 500 500	40 40 40 s and calculation of	f Polar	rization Inde	1 min.	10	ors > 150 k	Absorption Ratio	
Winding Insulation Resistance	Notes:	500 500 500 500	40 40 40 s and calculation of	f Polar	rization Inde	1 min.	10	ors > 150 k	Absorption Ratio - - -	
Winding Insulation Resistance	Notes: (a) Testing to	500 500 500	40 40 40 s and calculation of	f Polar	rization Inde	1 min.	or motogation F	ors > 150 k	Absorption Ratio	
	Notes: (a) Testing to	500 500 500	40 40 40 s and calculation of Test Passed	f Polar	rization Inde	ax is only required force. Further Investig	or motogation F	ors > 150 k Required.	Absorption Ratio	
Winding Winding Insulation Resistance	Notes: (a) Testing to Test Summary	500 500 500	Temperature (°C 40 40 40 s and calculation of Test Passed sistance (μΩ)	f Polar	rization Inde	ax is only required force. Further Investig Test Summa	or motogation F	ors > 150 k Required.	Absorption Ratio W (200 HP) Test Fa	



INSPECTION FORM AC MOTOR, LOW VOLTAGE

Page:	2 of 2	
ID:		

	_									
u.	☐ Not Ap	plicable	T		T .	ı				
atio e	E	Bearing	Test Vo (Vdd		Bearing Temperature (°C)			istance (MΩ)		
sul			(Vac	خ)	remperature (C)		1 min.	Co	rrected	to 40°C
ng In Sist			500)						
Bearing Insulation Resistance			500)						
В	Test Sum	mary [Test Pas	sed	☐ Test Inconclusiv	e. Fu	rther Investigation Requ	ired.	Test F	ailed
								•		
	☐ Not Ap	plicable								
	Actual W	/inding Temperatu	ıre:		°C	Actu	al Bearing Temperature			°C
	RT	-D	Resistance (Ω)	9	Calculated Temperature (°C)		RTD	Resistan (Ω)	ice	Calculated Temperature (°C)
ance										
sista										
RTD Resistance										
R										
	Test Sum	mary [Test Pas	sed	☐ Test Inconclusiv	e. Fu	rther Investigation Requ	ired.	Test F	ailed
Note:	Test co	nnection resistan	ce of bolted	d conne	ctions. Report on ca	able in:	spection sheet.			
s	Returned	I to Service:			Yes	Co	omments:			
Final Analysis	Monitorin Required	g / Further Inspec :	ction		Yes					
٩	Repair / I	Replacement Req	uired:		Yes No					
		Company		Name			Signature		Date (yyyy/mm/dd)
Perfo	rmed By						-		,	
Check	ked By									

	<u> </u>			INSPECTION FORM Page										Page 1 of 2			
	Winni	peg			PA	ANELBO					AGE	•		ID:			
ect	Faci	lity:	<u>, , , , , , , , , , , , , , , , , , , </u>				ı	Proje	ct Name	:							
Project	Area	a :					E	Bid O)pportun	ity:							
		4:	·					-							No. of (Dinaita	
		ation:							From:				<u> </u>	No. of Circuits:			
Jata		ufactu				. 5 .:		Mod	del:			1464	Serial				
oard [-	ed Volt		V		nt Rating:		A Withstand Rating: 3 Phase, 4 Wire Neutral Bonded to Groun							A		
Panelboard Data		Single I		3 PI	nase, 3 V	vire	3	3 Phase, 4 Wire Neutral Bonded to Groun					<u> </u>	☐ Yes	□ INO		
Pa	_	Main Lu	reaker:	Rating:	A	Manuf	actur							Inet	Sotting:		
									Model: Inst. Setting: nain breaker if >= 250A, or has long, short, or ground fault settings.								
				-									-				
	Iden	tification	on Tag In	stalled:			Yes		□ No			ns of Overl				☐ Yes	☐ No
Visual Inspection /			s of Mois				Yes	3 [□ No Visual Signs of Corona:							☐ Yes	☐ No
al Inspect Cleaning	Fuse			Match D			Yes									☐ Yes	☐ No
ual Ir	Clea	nlines	s (As Fou	und):		od 🗌 Ac					nectio				Good [Acceptabl	e 🗌 Poor
Vis	Doo	r Mech	nanical:	cepta	ble [Poor	Grou	nd Co	onnection:			Good [Acceptabl	e 🗌 Poor			
	Exe	rcise A	II Circuit	Breakers:			Yes	s [☐ No	No Comments:							
	- .			urce:		Note: /	Appro	val o	f City's F	Repre	senta	tive is	Equipme	nt Te	mperatu	re:	°C
st	Test Prepa	ration:		Disconne Connecte Source	d with	require during			leaving o	ables	conn	ected	Tempera			n	
esistance Test				Source		ulation F	Pesist	ance	(MO)				Factor to				
istan	Tes Volta	-				d all Pha		ot u	nder tes	t!			☐ Test I		-		
		_	A-G	ı		SND		C-G		<u> </u>		GND	Test I			on Require	d.
Insulation R		_	RDG	20°C	RDG	20°C	RD)G	20°C	R	DG	20°C	☐ Test I			·	
nsu	Test V	oltage/	es: 120	l 0-300V →	500 VD	C Test Vo	ltage			301-	600V	→ 1000 VI	C Test Vo	ltage			
	Comm																
																	
	List h	, mode	of bread	kar Multi	nle breal	Bre cers of va						st. Setting	1				
Sis	Type		// or brear			del Series		In	terrupti	ng		ositions/C	ircuits	Not	es		
reak	A							R	ating (k	A)							
der B	В																
.oad/Feeder Breakers	С																
oac	D																

E F



INSPECTION FORM PANELBOARD, LOW VOLTAGE

Page	2 of 2	
ID:		

				Brea	kers >= 1	00A	or with In:	st. Setting			
	List each b		ividually. Comple	te separate in	spection f	orm (F-BKR-M	C-LV) for b	reaker if >= 1	250A, or I	nas long, short, or ground
Load/Feeder Breakers	ID	Pos.	Manufacturer	Model	Tr Rat (A	ing	Int. Rating (kA)	Inst. Setting	Separate Form	Notes	
Bre											
eede											
ad/F											
Ľ											
1	1										
<u></u>	Returned	to Service:		☐ Yes	☐ No	Con	nments:				
Final Analysis	Monitoring	/ Inspection	on Required:	☐ Yes	□No						
Ī	Repair / Replacement Required:										
											T
		Company	/	Name			Sigr	nature			Date (yyyy/mm/dd)
Perfo	rmed By										
Chec	ked By										



INSPECTION FORM POTENTIAL TRANSFORMER, 600V

Page	1 of 2	
ID:	•	

Project	Facility:		Project I	Name:											
Proj	Area :					Bid Opp	ortunit	y:							
a	PT Location or D	Designati	on:					Pri. Volta Rating:	ge			Sec. \	Voltage g:		
PT Data	Manufacturer:			Catalogu	e #:			Pri. Fuse	Size:			Sec. I	. Fuse Size:		
•	Size:	\	/A		Тур	e:					Other				
				_											
_	Physical Damag			L	Yes	☐ No		y Connec				o Drovid	☐ Yes ☐ No		
Visual Inspection	Visual Signs of 0	Overheat	ing:] Yes	☐ No	Con	unding and tact:	Snorting	Con	nection	is Provid	e ☐ Yes ☐ No		
Vi Insp	Verify Ground C	onnectio	n:] Yes	☐ No	Verit	fy Withdra	wal Mech	anisn	n Func	tion:	☐ Yes ☐ No		
	Fuse Sizes Mato	ch Drawii	ngs:] Yes	□No	Com	ments:	- in						
Test	Test Preparation:		Disconne	ected ed with Sc	ource Iso	olated							presentative is required, ected during the test.		
Insulation Resistance Test	Test		Vo	Itage							emperat	nperature: °C			
esist					Р	T 1		PT 2	P	PT 3	1	est Sun			
ion R	Primary To GND 1000 V											Test Ir	Passed nconclusive		
sulat	Secondary To			00 V								☐ Test F	er Investigation Required. ailed		
드	Primary To Seco	ondary	10	00 V											
	Comments:														
	Test 🔲 I	irce: Disconne Connecte Isolated	ed with S	Source											
larity						Pł	nase						Test Summary		
			PT	1		Р	T 2			P.	Т 3		☐ Test Passed☐ Test Inconclusive		
Turns Ratio and F	Calculated Ratio												Further Investigation Required.		
s Rat	Measured Ratio	asured Ratio											Test Failed		
Turn	Polarity Correct Yes No						[□No	☐ Ye	es] No			
	Comments:														
s	PT Returned to	Service:			Yes	□No	Com	ments:							
Monitoring / Further Inspection Yes Required:						□No									
Repair / Replacement Required:					□No										
	Comp	any		Nam	ne			Sian	ature				Date (yyyy/mm/dd)		

@
Winnipeg

INSPECTION FORM POTENTIAL TRANSFORMER, 600V

Page	2 of 2	
ID.		

Performed By		
Checked By		

	<u>@</u>			INSPE	CTION	FORM			Page 1	of 3	
	Winnipeg TIME OVERCURRENT PROTECTION RELAY								ID:		
ect	Facility:	Project Name:									
Project	Area:		Bio	d Opporti	unity:						
	Location: C						☐ Electro-mecha	anical	☐ Electro	onic	
Data	Manufacturer:			Model:				Type:			
Relay Data	Style:			Serial No	D:						
œ	Comments:		L								
Data	Current Ratio: :				·			Τ.	T _		·
Data	Current Ratio: :	: A	В	С	N			A	В	С	N
Data	Current Ratio: : Moisture/Rust:		В	С	N	Relay Cleane	ed:	A	В	С	N
CI			В	С	N	Relay Cleane Screws Tight		A	В	С	N
	Moisture/Rust:		В	С	N		ened:	A	В	С	N
spection CT Data	Moisture/Rust: Spiral Spring:		В	С	N	Screws Tight	ened: & Reset	A	В	С	N
	Moisture/Rust: Spiral Spring: Disk Clearance:		В	С	N	Screws Tight	ened: & Reset	A	В	С	N
Visual Inspection CI Data	Moisture/Rust: Spiral Spring: Disk Clearance: Over-heating:		В	С	N	Screws Tight Trip Indicator Zero Adjustm	ened: & Reset ent Check:	A	В	С	N
	Moisture/Rust: Spiral Spring: Disk Clearance: Over-heating: Cover/Case:		В	С	N	Screws Tight Trip Indicator Zero Adjustm Magnet:	ened: & Reset ent Check:	A	В	C	N

		Phase		Neutral			
	Parameter	Setting (As Found)	Setting (As Left)	Parameter	Setting (As Found)	Setting (As Left)	
	Curve			Curve			
gs	TOC Tap			TOC Tap			
Settings	TOC Multiplier			TOC Multiplier			
Relay 8	Time Dial/Delay			Time Dial/Delay			
Ř	Inst. Tap			Inst. Tap			
	Seal-in			Seal-in			



INSPECTION FORM TIME OVERCURRENT PROTECTION RELAY

Page	2 of 3
ID:	

	Parameter	Calculated Value		Measured Pick-Up (Amps	5)
	P	hase	Α	В	С
	TOC Pick-up				
	Seal-in Pick-up				
ts	IOC Pick-up				
p Tes					
Relay Pick-up Tests	Ne	eutral	N		
lay P	TOC Pick-up				
Re	Seal-in Pick-up				
	IOC Pick-up				
	Comments:				

	Parameter	x PU	Test Value (Amps)	Calculated Value (sec.)		Measured Timing (sec.)	
			Phase		Α	В	С
	TOC						
sts	TOC						
Relay Timing Tests	IOC						
Timi			Neutral		N		
ЗеІау	TOC						
	TOC						
	IOC						
	Comments:					1	



INSPECTION FORM TIME OVERCURRENT PROTECTION RELAY

Page	3 of 3
ID:	

ance	Test Preparation		onnected nected with So	urce Isolated	looving		of City's Representative is required, priconnected during the test.	or to
esist t	Test		Insulation	Resistance	(ΜΩ)		Test Summary	
Insulation Resistance Test	Voltage	A-GND	B-GND	C-GN	C-GND N-GNI		☐ Test Passed☐ Test Inconclusive	
nsulat	500V						Further Investigation Required. Test Failed	
=	Comments	s:						
ø	Returned to Service:							
Final Analysis	Monitoring Required:	g / Further Insp	pection	☐ Yes	□ No			
•	Repair / R	eplacement R	Required:	☐ Yes	□ No			
		1						
		Company		Name			Signature	Date (yyyy/mm/dd)
Perfor	rmed By							
Check	red By							

	<u> </u>				INSPEC	TION	FORM			Page 1	of 2	
1	Winnipeg		UNDE	ER-VO	OLTAGE	E PRO	TECTION R	ELAY		ID:		
ect	Facility:		Project Name:									
Project	Area :			Bi	d Opportu	ınity:						
	I anation.				Cell #:			☐ Electro-mechan	inal .			
ata	Location: Manufacturer:				Model:					☐ Electro	JIIIC	
Relay Data							Type:					
Rel	Style:				Serial No):						
<u>. </u>	Comments:											
PT Data	Voltage Ratio:	:	V									
				Α	В	С				Α	В	С
	Moisture/Rust:						Relay Clean	ed:				
	Spiral Spring:						Screws Tight	ened:				
ion	Disk Clearance:						Trip Indicator & Reset					
spect	Over-heating:						Zero Adjustn	nent Check:				
Visual Inspection	Cover/Case:						Magnet:					
Visu	Paddle:						Jewel Bearin	g:				
	Trip Function Tes	st:										
	I	_egend: A-Acc	eptable	C-Co	orrected	N-Need	s Repair NA	Not Applicable		•		
	Comments:											
s		Ph	ase				7					
Relay Settings	Paramete	er (A	Setting As Foun	d)	Set (As	ting Left)						
elay (U.V. Pick-	up										
œ	U.V. Dela	у										
д	Paramet	ter	Calcula	nted Va	alue			Measured Pick-L	Jp (Volt	s)		
Relay Pick-up Tests		Phase					Α	В			С	
lay P Tes	U.V. Pick	-up										
a.	Comments:	L						•		1		

Fiming sts	Parameter	Injected Value (Voltage)	Calculated Value (sec.)	Measured Timing (sec.)			
Relay Ti		Phase		Α	В	С	
8	U.V. Delay						



INSPECTION FORM UNDER-VOLTAGE PROTECTION RELAY

Page	2 of 2
ID:	

Test	Test Preparati	Source: Disconnected Connected with So	ource Isolated	looving o		City's Representative is required, prionnected during the test.	r to
ance	Test		Resistance	(ΜΩ)		Test Summary	
esist	Voltage	A-GND	B-GND	C-GI	ND	☐ Test Passed	
Insulation Resistance Test	500V	,				☐ Test Inconclusive Further Investigation Required. ☐ Test Failed	
<u>r</u>	Commen	ts:		1			
φ.	Returned	to Service:	☐ Yes	□No	Comme	nts:	
Final Analysis	Monitoring Required:	g / Further Inspection	☐ Yes	□No			
∢	Repair / R	eplacement Required:	☐ Yes	☐ No			
		Company	Name			Signature	Date (yyyy/mm/dd)
Perfor	rmed By		1141110				
Check	ed By						

	<u> </u>		INSP	ECTION FO	DRM			Page 1 of 2			
7	Winnipeg		SWIT	CHGEAR, (600V		-	ID:			
Project	Facility:			Project Name	e:						
Pro	Area:	,		Bid Opportur	nity:						
aar	Location:			No. of Cells	:						
Switchgear Data	Manufactu	rer:		Type:			Serial #:	t:			
Swi	Rated Volt	age: V	Current Rating:		Α	Interrupting	Rating:	А			
	Identification	on Tag Installed:	☐ Yes	□No	Visual Sign	ns of Overheati	ng:		Yes	□No	
	Visual sign	s of Moisture:	☐ Yes	☐ No	Visual Sign	ns of Corona:			Yes	□No	
	Fuse/Brea	ker Sizes Match Dra	awings:	□ No	PT and CT	Γ ratios match o	Irawings:		Yes	☐ No	
aning	Elevation [Drawings Correct:	☐ Yes	□ No	Cables Su	pported Approp	oriately:		Yes	☐ No	
/ Cle	Cleanlines	s (As Found):	☐ Good ☐ Accep	table Poor	Insulators	Condition:		☐ Good ☐ Acc	eptabl	e 🗌 Poor	
Visual Inspection / Cleaning	Connection	ns:	☐ Good ☐ Accep	table 🗌 Poor	Electro/Me Interlock S			Good ☐ Acce	eptable	e 🗌 Poor	
lnsp	Ground Co	nnection:	☐ Good ☐ Accept	table Poor	Vents/Filte	ers:		☐ Good ☐ Acceptable ☐ Poor			
/isual	Doors Med	hanical:	☐ Good ☐ Accept	table Poor	Exercise A	Active Compone	ents:	☐ Yes ☐ No			
	Cell Fit and	d Alignment:	☐ Good ☐ Accept	table Poor							
	Required (Met:	Clearances are	☐ Good ☐ Accept	table 🗌 Poor							
	Indicating	mechanisms:	☐ Good ☐ Accept	table 🗌 Poor	Unit Clean	ned: Yes	Photog	raph Taken:		Yes	
	Test Prepara	ation: Conne	nnected Disc	est. / Load: onnected nected with Lo	ad Isolated			s Representative			
e Test	Test		Insulation Resistan Phase To GN			Temperature:	°C				
stanc	Voltage	A	В		С						
n Resi	1000 V					Test Summa				<u> </u>	
Insulation Resistance Te	Test		Insulation Resistan Phase To Phas			☐ Test Incon	clusive	n Required.			
lnsu	Voltage	A – B	B – C	А	C	☐ Test Failed					
	1000 V										
	Comments:										



INSPECTION FORM SWITCHGEAR, 600V

Page	2 of 2	
ID:		

ance		Point A			Point B			Resist (µΩ		Test Summary ☐ Test Passed ☐ Test Inconclusive Further Investigation Required				
Ground Resistance	Switch	ngear GN	ID Bus	Facilit	ty Ground E	lectrode					vestigation Required.			
Ind R	Switch	ngear GN	ID Bus	Swi	tchgear Enc	losure								
Grot	Switch	ngear GN	ID Bus	9	System Neu	tral								
	Comment	ts:												
	To)	Fro	om			Resista (μΩ)			Test Sumr	nary			
		10 110			A		В		С	☐ Test Pa				
										Further	Investigation Required.			
nnce														
sista														
Connection Resistance														
necti														
Con														
	Comment	s:								L				
<u> </u>		,												
sis	Returned	to Service	e:		☐ Yes	☐ No	Commer	its:						
Final Analysis	Monitoring	g / Inspec	tion Requir	ed:	☐ Yes	☐ No								
٩	Repair / R	eplaceme	ent Require	ed:	☐ Yes	☐ No								
		Compa	ny		Name			Signa	ture		Date (yyyy/mm/dd)			
Perfor	med By	•	-								,			
Check	ed By													

V	Winnipeg TRANS					_		ON FO		/ VO	ΙΤΔ	GE		Page			
				IVANO	OKI	ηLIX,					LIA	<u>GL</u>		ID:			
Project	Facility:						Project	Name:									
Ŗ	Area :						Bid Op	portunity	:								
	12) (A.		Dh				Duine					V	Seconda	ıry	V		
_	KVA:		Pna	ase:				y Voltage	:				Voltage:		V		
Data	Manufacturer:		1 -				Type:						Serial Nu				
rmer	Primary Winding:	□ Δ □ Υ	۷	Secondar Winding:	У		A Impe	edance:			%Z	Tem	p Rise:	•	°C K Facto	r:	
Transformer Data	Winding Mater	rial:	Copp	oer 🗌 Al	luminu	m					<u>.</u>						
Tra	No Load Tap	Тар		1	2		3	4 5						Tap Setting			
	Changer	Voltage												(As Found):		
			ı					1				ı					
<u> 5</u>	Transformer Id	dentificati	on Ta						Visua	Sign	s of O	verh	eating:		☐ Y	es [] No
eanin	Bushings:			☐ Go	od 🗌	Accep	otable [ort Ins		s:		☐ Good	d	table [] Poor
) C	Paint:			☐ God	od 🗌	Accep	otable [No Lo Chanç	ad Ta ger:	ıp		□ N/A □ Good □ Acceptable □ P] Poor
ection	Fans:		□ N/	A 🗌 Go	od 🗌	Accep	otable [Poor	Fan C	ontrol	ls:		□ N/A	√ ☐ Good	☐ Good ☐ Acceptable ☐ Poor		
lnspe	Temp. Gauge:	:	□ N/	A 🗌 Go	od 🗌	Accep	otable [] Poor	Conne	ection	s:			☐ Good ☐ Acceptable ☐ Pool] Poor
Visual Inspection / Cleaning	Ground Connection:			☐ God	od 🗌	Accep	otable [Poor									
_	Cleanliness (A	s Found):	☐ God	od 🗌	Accep	otable [Poor	Unit C	leane	ed:		es Pho	tograph Ta	aken:	☐ Yes	
	0		/ NI - 4					•					•				
_	Operational C	ı															
ectio	Primary Voltage		H1:H:		V				+					ured at:			
lnsp	Secondary Vo	_	H1:H		V			\						ured at:			
onal	Current:		Ph A:	ppears Sa	A		B:	P	Ph	C:			A Measu	ured at:			
Operational Inspection	Tap Setting:			ommeno Tap.	led.		Тар	Settir	ng (A	s Left):							
	Thermographi Performed:	Attach separa	report ately	Results		No Iss Poten			d dentified.								
Ф							R	esista	nce	(MΩ)			electric				
ulation Resistance		Windi		/oltage dc)				`Abso				ption R 0s/30s	latio				
n Re	Primary to Gi	round, Se	econd	ary Guar	ded												
ulatic	Secondary to	Ground,	Prim	ary Guar	ded												

Primary to Secondary, Ground Guarded

©
Winnipeg

INSPECTION FORM TRANSFORMER, DRY TYPE, LOW VOLTAGE

Page	2 of 2	
ID:		

ĺ	S	Returned	I to Service:	☐ Yes	□No	Comme	nts:	
	Fir	Monitorin Required	ng / Further Inspection :	☐ Yes	□No			
l	⋖	Repair / Replacement Required:		☐ Yes	☐ No			
L								
L		- 1	<u> </u>		ľ			
L			Company	Name			Signature	Date (yyyy/mm/dd)
	Perforr	med By		Name			Signature	Date (yyyy/mm/dd)

V	Winnipeg TRANS					_		ON FO		/ VO	ΙΤΔ	GE		Page			
				IVANO	OKI	ηLIX,					LIA	<u>GL</u>		ID:			
Project	Facility:						Project	Name:									
Ŗ	Area :						Bid Op	portunity	:								
	12) (A.		Dh				Duine					V	Seconda	ıry	V		
_	KVA:		Pna	ase:				y Voltage	:				Voltage:		V		
Data	Manufacturer:		1 -				Type:						Serial Nu				
rmer	Primary Winding:	□ Δ □ Υ	۷	Secondar Winding:	У		A Impe	edance:			%Z	Tem	p Rise:	•	°C K Facto	r:	
Transformer Data	Winding Mater	rial:	Copp	oer 🗌 Al	luminu	m					<u>.</u>						
Tra	No Load Tap	Тар		1	2		3	4 5						Tap Setting			
	Changer	Voltage												(As Found):		
			ı					1				ı					
<u> 5</u>	Transformer Id	dentificati	on Ta						Visua	Sign	s of O	verh	eating:		☐ Y	es [] No
eanin	Bushings:			☐ Go	od 🗌	Accep	otable [ort Ins		s:		☐ Good	d	table [] Poor
) C	Paint:			☐ God	od 🗌	Accep	otable [No Lo Chanç	ad Ta ger:	ıp		□ N/A □ Good □ Acceptable □ P] Poor
ection	Fans:		□ N/	A 🗌 Go	od 🗌	Accep	otable [Poor	Fan C	ontrol	ls:		□ N/A	√ ☐ Good	☐ Good ☐ Acceptable ☐ Poor		
lnspe	Temp. Gauge:	:	□ N/	A 🗌 Go	od 🗌	Accep	otable [Poor	Conne	ection	s:			☐ Good ☐ Acceptable ☐ Pool] Poor
Visual Inspection / Cleaning	Ground Connection:			☐ God	od 🗌	Accep	otable [Poor									
_	Cleanliness (A	s Found):	☐ God	od 🗌	Accep	otable [Poor	Unit C	leane	ed:		es Pho	tograph Ta	aken:	☐ Yes	
	0		/ NI - 4					•					•				
_	Operational C	ı															
ectio	Primary Voltage		H1:H:		V				+					ured at:			
lnsp	Secondary Vo	_	H1:H		V			\						ured at:			
onal	Current:		Ph A:	ppears Sa	A		B:	P	Ph	C:			A Measu	ured at:			
Operational Inspection	Tap Setting:			ommeno Tap.	led.		Тар	Settir	ng (A	s Left):							
	Thermographi Performed:	Attach separa	report ately	Results		No Iss Poten			d dentified.								
Ф							R	esista	nce	(MΩ)			electric				
ulation Resistance		Windi		oltage dc)				`Abso				ption R 0s/30s	latio				
n Re	Primary to Gi	round, Se	econd	ary Guar	ded												
ulatic	Secondary to	Ground,	Prim	ary Guar	ded												

Primary to Secondary, Ground Guarded



INSPECTION FORM TRANSFORMER, DRY TYPE, LOW VOLTAGE

Page	2 of 2	
ID:		

v	Returned	d to Service:	☐ Yes	☐ No	Comme	nts:	
Fir	Monitorir Required	ng / Further Inspection I:	☐ Yes	□ No			
⋖	Repair / Replacement Required:		☐ Yes	□No			
	repair /	replacement required.					
	терап 7	rteplacement required.					
	теран /	Company	Name			Signature	Date (yyyy/mm/dd)
Perfori	med By					Signature	Date (yyyy/mm/dd)

-	<u> </u>							ON FC							Page:	1 o	of 3	
V	Vinnipeg		TRA	NSFC	RMEF	R, LI	QUID	-FILLE	D,	LOW	VOL	TAG	E		ID:			
ect	Facility:						Projec	t Name:										
Project	Area :						Bid Op	portunit	y:									
	•	,																
	KVA:	′ /		Phas	se:			Primar	y Vo	oltage:			V See	conda	ıry Volta	age:		V
	Manufacturer:					M	lodel:						Serial I	Numbe	er:			
er Data	Primary Winding:	□ Δ □ Υ		econdar /inding:	у	□ Δ □ Υ	Imp	edance:			%Z	Tem	p Rise:	Rise: °C K Fa			Factor:	
Transformer Data	Cooling:	□ ONAI □ ONAI		Cooling	Fans:		Winding Material:							Oil -	Type:			
Tran	BIL Rating Pri	mary:		BIL	BIL Rating Secondary:							Oil	Capaci	ty:				
	No Load Tap	Тар		1	2		3	4		5							Setting	
	Changer	Voltage	:													(As	Found):	
																	.,	
	Transformer lo	dentificat	ion Ta	g Installe	ed:	ΠY	es [□No	Vis	sual Sig	gns of C	verhe	eating:				☐ Yes	☐ No
bu	Bushings:			☐ Go	od 🗆 A	Accep	table [☐ Poor	Su	pport I	nsulato	rs:] Good		Acceptable	☐ Poor
Visual Inspection / Cleaning	Paint:			☐ Go	od 🗌 A	Ассер	table [] Poor		Load anger:	Тар		□N	/A 🗆] Good		Acceptable	☐ Poor
/ uoi	Fans:		□ N/A	√ □ Go	od 🗆 A	Accep	cceptable Poor I] Good		Acceptable	☐ Poor
spect	Temp. Gauge:		□ N/A	√ □ Go	od 🗆 A	Accep	table [Poor	Со	nnectio	ons:] Good		Acceptable	☐ Poor
sual Ins	Ground Connection:			☐ Go	od 🗌 A	Ассер	table [] Poor	Liq	uid Le	vel Cori	rect:					☐ Yes	□No
Vis	Ground Condu	uctor Size	e:						Ra	diators	:] Good		Acceptable	☐ Poor
	Cleanliness (A	s Found):	☐ Go	ood 🔲 i	Accep	table [Poor	Un	it Clea	ned:	ΠΥ	es Pl	hotogr	raph Ta	ken:	□ Y	es
	1											,						
	Operational C	onditions	/ Note	es:														
	Primary Voltag	ge:	H1:H2	:	V	H2:F	l3:		V	H3:H1:		,	V Mea	sured	at:			
ion	Secondary Vo	ltage:	H1:H2	:	V	H2:F	13:		V I	H3:H1:		,	V Mea	sured	at:			
pect	Current:		Ph A:		Α	Ph B	:		A	Ph C:			A Mea	sured	at:			
Operational Inspection	Tap Setting:		☐ Fui	ther Mo	atisfacto nitoring nd Chan	Reco		ded.		Tá	ap Setti	ng (As	s Left):					
perat			Coolin	g Temp	erature:					C	oolant L	_evel:						
0	Gauges:	-	Currer	nt	°C	Ma	ximum		°C									
				ure/Vacu				I			ther:							
	Thermographi Performed:	c Inspec	tion	☐ Yes			ch report Results: No Issues Found Dentified.											



TRANSFORMER INSPECTION FORM TRANSFORMER, LIQUID-FILLED, LOW VOLTAGE

Page:	2 of 3
ID:	

		or (20°C):					
		PRI	-GND	SEC-	nce (MΩ) GND	PR	I-SEC
	Time	Test Voltage:		Test Volta	ge:	Test Voltage:	
		Reading	Corrected to 20°C	Reading	Corrected to 20°C	Reading	Corrected to 20°C
	1 min.						
nce	2 min.						
Insulation Resistance	3 min.						
on Re	4 min.						
ulatic	5 min.						
ıı	6 min.						
	7 min.						
	8 min.						
	9 min.						
	10 min.						
	Polarization Index						

a	Winding Temperature: °C								
anc	Time	Winding Resistance (mΩ)		Winding	Winding Resistance (mΩ)				
Resistance		Reading	Corrected to 20°C	winding	Reading	Corrected to 20°C			
	H2 – H1			X0 – X1					
Winding	H3 – H2			X0 – X2					
>	H3 – H1			X0 – X3					

	☐ Core Ground Strap Not Accessible			Core Temperature: °C		Temperature Correction Factor (20°C):		
ore	Time	Test		Resistance (MΩ)				
ပိ		Voltage		Reading		Corrected to 20°C		
	1 min.	500 VDC						

	Note: Torque check required for all cables. Connection Resistance Test required for cables 250MCM or larger.								
ion	Termination	Coi	nection Resista	nce (μΩ) - As	Torque Check				
Connection Resistance		Α	В	С	N	Torque oneck			
Cor	Source					□ок			
	Dest. / Load					□ок			



TRANSFORMER INSPECTION FORM TRANSFORMER, LIQUID-FILLED, LOW VOLTAGE

Page:	3 of 3
ID:	

þį	Dielectric Voltage:	c Breakdown			Co	lour:		
g Liqu its	Acid Neu Number:	ıtralization			Vis	ual Condition:		
Insulating Liquid Tests	Specific	Gravity:		-	Power Factor or Dissipation Factor:			
su _l	Dissolve Analysis:			Oth	Other:			
-		·				·		
	Returned	to Service:	☐ Yes	□No	Comme	ents:		
Final Analysis	Monitorir Required	ng / Further Inspection I:	☐ Yes	□No				
٧	Repair /	Replacement Required:	☐ Yes	□No				
			·			-		
		Company	Name			Signature		Date (yyyy/mm/dd)
Performed By								
Check	ed By							