INVENTORY 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95

Ward Transformer Co., Inc.

TRANSFORMER DEPT.

№ 2760

Received From:	Texas Gulf	Original Cost:	
		Shop Cost:	
Town:	Aurora	State: N.C.	Incoming Freight: Check this
Received Via:		Date: 8-6-96	Date Billed:
Card Made:	J. Stafford	P. O. No:	Our R No:
Sold To:			Cust. Order No:

EQUIPMENT: STATION TYPE

Make: ITE	K.V.A. 2500	Imp. 5.66	Phase: 3	Serial No. 12077
H. Volts: 22900 Δ	Type:	Form:	Cycles: 60	Style No.
L. Volts: 480	Gals Oil: 750	Pol:	N.P. No. 55/65	Cat. No.
No. Taps 4 Taps	Up ☒ Down ☒	YEAR BUILT:		Spec. No.
1-24100	Pocket Pri Sec	Top Pri. Sec	Steel ☒ Cast ☐	Cast Top Bot.
2-23500	Stud Pri Sec	Oblong ☐ Straight ☒	Round ☐ Corregated ☐	Fins ☒
3-22900-100%		Ht. top of H.V.		Tank & Fittings: 6650
4-22300		Ht. No. H.V. Bush: APP 110"		C & C Wt: 8900
5-21700		Dia: Wide: 90		Oil Wt: 5610
		Deep: 78"		Total Wt: 21550-390
H.V. BIL-150 L.V. BIL-45		Oil Level Gauge ☒		Thermometer ☒
NOTE Oil IS CLEAR, BURNT		Tap Changer: External ☒		Internal ☐
SMELL KV 20-20-20		NEW USER:		
SMELLS LIKE UNIT MAY HAVE		REBUILT USER:		
RUN HOT				
WELDED DOWN TOP		DEALER:		

REMARKS:

NOTE:

A	B	C
50.085	50.088	50.085
48.865	48.868	48.864
47.646	47.650	47.646
46.428	46.432	46.428
45.211	45.214	45.211

NOTE: H.V. Bushing TOO CLOSE WITHOUT 0.1 ENCLOSURE

10816800

NOTE B + C PHASE HAS SOME H.V. DAMAGE — UNIT HAD EXCESSIVE WATER CAUSING ARCING — POSSIBLY W.C.

TRANSFORMER TEST

Continuity		Lead Clearances	X	Exciting Current	At 480 Volts	Core Loss	At 480 Volts
Oil	N R	Oil Level	X	500 Cycles	At L Volts	High Pot. X	High To Grd. 20 K.V.
Grd. Terminals	1 2	Surge Tested		Radio Interference OK	Polprity A X	Low To Grd	5 K.V.
Oil Leaks	no	Anti Siphon Joints		Impeadence Calculated	At Volts	High To Low	K.V.
Pri. Grd. Connected	Y N	Sec. Grd. Connected	Y N	Number Taps	5	What %	Up X Down X

SECONDARY BREAKER		Position	% Tap	Connect	Pot. Difference	T.T.R. Ratio	Calculated Ratio
Breaker No.		A		50.095	50.118	50.095	
Trip and Reset	Oil Temp °C	B		48.875	48.897	48.875	
Factory Trip Allowable	To Secs.	C	100%	47.657	47.680	47.657	
Factory Trip Current	At °C	D		46.439	46.463	46.439	
Shop Trip Current	At °C	E		45.222	45.246	45.225	
Shop Trip Time Right Side	Secs.			out out	out Pos	out 100% Tap	
Shop Trip Time Left Side	Secs.						

INSULATION	POWER FACTOR	OIL TEST		INCOMING	OUTGOING
High to Grd.	I.P.F. M.F.	SHOT A	SHOT B	Color	Blue
High to Low	I.P.F. M.F.	No. 1 K.V.	No. 1 K.V.	and Next No.	103
Low to Grd.	I.P.F. M.F.	No. 2 K.V.	No. 2 K.V.	Left new from P.C.B. and	
Megger High to Grd.	In Out	No. 3 K.V.	No. 3 K.V.	Power Factor	
Megger Low to Grd	In Out	No. 4 K.V.	No. 4 K.V.	Oxidation	% Time
Megger High to Low	In Out	No. 5 K.V.	No. 5 K.V.	Oxidation	% Time
		TOTAL K.V.	TOTAL K.V.	Average K.V.	30-30-30

Fuse No.	Good X Bad	GRD. Clamps	OUT	Approved	YES
Hangers	IN OUT	Pri. Bushing Good	OUT	Date Tested	9/18/90
Arrestors	IN OUT	Sec. Bushing Good	OUT	Tested	
Paint	OUT	Sec. Breaker	IN OUT	By	John Lakner

REMARKS: Vacuum Filled and O.K.

L.G. 2000 - 1000 Full Scale

H.G. 3000 - " " " "

H.L. 4000 - " " " "

Ohms: 35°C M.H. ohms

H1-H2 1.39 X1-X2 0.57

H2-H3 1.39 X2-X3 0.57

H1-H3 1.39 X1-X3 0.58

CUSTOMER	CUSTOMER NUMBER	CONTACT / PHONE
TEXAS GULF, INC. P.O. BOX 48 AURORA NC 27806	856	000-000-0000

LOCATION

COMMENTS:

LOCATION	OUTDOOR	INDOOR	RIG	ROOF	VAULT	POLE	PLATFORM	PORTABLE REQ'D	HOSE LENGTH	ELECT. POWER AVAILABLE
	X		3				X		500	X

NAME PLATE DATA

MANUFACTURER	SERIAL NUMBER	KVA	PRIMARY VOLTS	SECONDARY VOLTS	PHASE	TRANS	REG.	TAPCOMP.	OIL SW.	O.C.B.	TANK
ITE	12077	2500	22900	480	3	X					

EQUIPMENT DATA

LIQUID TYPE	GALLONS	LIQUID LEVEL	IND TEMP °C	PEAK TEMP °C	PRESS LBS.	CARBON DIOXIDE	NITROGEN	OIL COOLED	FANS	WATER COOLED	WELDED LID	RADIATORS	CONSERV. TANK	FAN CHANG.	PAINT EXCEL.	FAIR	PAINT REQ.	TOP VALVE DIAM.	BOT. VALVE DIAM.	POP TOP
OIL	750	N	31	48		X						X		X		X		.001	.001	

ASTM NO.		D1500	D1524	D974	D877	D971	D1298	D924	D1533-77												
DATE	JOB NUMBER	COLOR	SLUDGE (VISUAL)	NEUT NO. MG KOH/g	DIEL. KV.	IFT DYNES/CM	SPECIFIC GRAVITY	POWER FACTOR (OPTIONAL)	WATER PPM (OPTIONAL)	DCHYD.	RECLAIM	MARGIN	PCBX	RESAMPLE 1 YEAR	E/TEST	REPAIR	SAMPLED BY	TESTED BY	REPAIR / TEST HISTORY COMMENTS	REC.
1-88	302018	1.0	CLR	.040	34	25.3	.856	.09	21			X							X	

N NORMAL
H HIGH
L LOW

N/A NOT AVAILABLE

NOTE: ASKAREL - COLOR ASTM D 2129

O OIL

A ASKAREL

RT R - TEMP

SL SILICONE

PCB ANALYSIS

DATE	11-88		
CERT NO.	15376		
P.P.M.	4		

ENSR

1700 GATEWAY BLVD. S.E., CANTON, OHIO 44707

Phone 216-452-0837

WARD TRANSFORMER CO., INC.

P.O. BOX 30009 • MT. HERMAN CHURCH ROAD
RALEIGH, N.C. 27622

PHONE: 919-787-3553
800-334-9600

FAX: 919-787-1683

ORDER SHEET

ORDER NO.	DATE SOLD	SALESMAN
00003139171	08/06/90	33

CUSTOMER NO.	TERMS
007782	.0 % Disc - 0 Days Ne

SOLD TO:
TEXAS GULF INC
PO BOX 48
AURORA, NORTH CAROLINA
27806

CUSTOMER P.O. NO: D40-16691
ATTENTION:
TELEPHONE NO.: 919-322-4111

SHIP TO:
TEXAS GULF INC
HWY 306 N
AURORA, NORTH CAROLINA
27806

SHIPPED OT/53
9/12/90

REFERENCE NO.:
ATTENTION:
TELEPHONE NO.: 919-322-8286

DATE REQUIRED: 08/20/90 | F.O.B. PT. & FREIGHT: | SHIP VIA: BW/PPA

ITEM NUMBER	QTY. ORD.	QTY. SHIP	DESCRIPTION	UNIT
83-2760	1	0	PRIMARY REWIND (3139171) OF ITE STATION TYPE, SERIAL # 12077 2500KVA, 3PH, 60HZ, 55/65 DEGREE C RISE, 5.66% IMP., HIGH VOLT: 22900 DELTA WITH 2-2.5% TAPS ABOVE AND BELOW LOW VOLT: 480 DELTA 750 GALLONS SALE PRICE FOB RALEIGH. NEW COPPER HV WINDINGS, NEW OIL, VACUUM DEHYDRATE, NEW TEMP. GAUGE, REPLACE HV BUSHINGS WITH 23KV BUSHINGS, TESTS RESULTS, NOTE: GORDON HAD SOMEONE PICK THIS UNIT UP SO BILL EM FREIGHT BOTH WAYS. ATTN: GEORGE LILLIS 322-4111	EA

WO#08/20 02

INSTRUCTIONS:

EQUIP. NO. 67 PAGE 6

CUSTOMER	CUSTOMER NUMBER	CONTACT / PHONE
TEXAS GULF INC. P.O. BOX 48 AURORA NC 27806	856	(000)000-0000

LOCATION

LOCATION

COMMENTS:

OUTDOOR	INDOOR	RIG	ROOF	VAULT	POLE	PLATFORM	PORTABLE REQ'D	HOSE LENGTH	ELECT. POWER AVAILABLE
X		3				X		500	X

NAME PLATE DATA

MANUFACTURER	SERIAL NUMBER	KVA	PRIMARY VOLTS	SECONDARY VOLTS	PHASE	TRANS	REG.	TAP COMP.	OIL SW.	O.C.B.	TANK
[illegible]TE	12077	2500	22900	480	3	X					

EQUIPMENT DATA

LIQUID TYPE	GALLONS	LIQUID LEVEL	IND TEMP °C	PEAK TEMP °C	PRESS LBS.	CAS SAMPLE SETTING	OIL FILLED BUSH	FANS	WATER COOLED	WELDED LID	RADIATORS	CONS. TANK	TAP CHANG.	PAINT EXCEL.	FAIR	PAINT REQ.	TOP VALVE DIAM.	BOT. VALVE DIAM.	POP TOP
OIL	750	N	31	48		X					X		X		X		001	001	

ASTM NO.		D1500	D1524	D974	D877	D971	D1298	D924	D1533-77	DEHYD.	RECLAIM	MARGIN	PCBX	RESAMPLE 1 YEAR	E/TEST	REPAIR	SAMPLED BY	TESTED BY	REPAIR / TEST HISTORY COMMENTS	REC.
DATE	JOB NUMBER	COLOR	SLUDGE (VISUAL)	NEUT NO. MG KOH/g	DIEL. KV.	IFT DYNES/CM	SPECIFIC GRAVITY	POWER FACTOR (OPTIONAL)	WATER PPM (OPTIONAL)											
11-88	302018	1.0	CLR	.040	34	25.3	.856	.09	21			X								
																			Texasgulf 2500 KVA.	

N NORMAL
H HIGH
L LOW

N/A NOT AVAILABLE O OIL A ASKAREL RT R - TEMP SL SILICONE

NOTE: ASKAREL - COLOR ASTM D 2129

PCB ANALYSIS

DATE	11-88		
CERT NO.	15376		
P.P.M.	4		

ENSR

1700 GATEWAY BLVD. S.E., CANTON, OHIO 707

Phone 216-452-0837

8-6-90
3139171
TEXAS

PICK LIST

W/O 08/20.02

SERIAL# 12077

GULF INC. 1-2500 KVA I.T.E. 3 PH

.091 X .258 H.P. RECTANGULAR COPPER MAGNET WIRE LB 15[illegible]

1542 Lbs.

715 GALS EXXON UNIVOLT N-61

3 23 KV BUSHINGS NMC 103-0292