3

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

Ward Transformer Co., Inc.

№ 2337

TRANSFORMER DEPT.

Received From: TEXAS GULF

Original Cost:

Shop Cost:

Town: AULDER State N.C.

Incoming Freight:

Received Via:

Date: 11-20-87

Date Billed:

Card Made: JACK GAYNOR P. O. No:

Our R No:

Sold To:

Cust. Order No:

EQUIPMENT: TRANSFORMER: POLE MOUNT

Serial No. P121695-TA

Make: G.E.	K.V.A. 50	Imp. 2.34	Phase: 1	Style No.
H. Volts 13900	Type: POLE	Form:	Cycles: 60	Cat. No.
L. Volts 240/480	Gals Oil 28	Pol. SUBT.	N. P. No. 650	Spec. No.
No. Taps 4 2½ Taps	Up 2 Down 2	YEAR BUILT: JUNE 86		
	Pocket Pri Sec	Top Pri Sec	Steel ☑	Cast ☐ Cast Top Bot.
#P 140	Sub Pri Sec	Oblong ☐	Straight ☐	Round ☑ Corregated ☐ Fins ☐

COMPLETE AL WINDINGS.

Ht. top of H. V.:

Tank & Fittings:

Ht. No. H. V. Bush:

C & C Wt:

Dia: Wide:

Oil Wt:

Deep:

Total Wt:

CAME IN ON "D" POSITION.

Oil Level Gauge ☐ Thermometer ☐

Tap Changer: External ☐ Internal ☑

NEW USER:

REBUILT USER:

DEALER:

BOLTED DOWN TOP

REMARKS: NOTE, HOLE IN TANK (REAR OF UNIT NERE TOP OF TANK.) LOW ON OIL

1- 52.284 L-G- 25,000

2- 51.034 H-G- 25,000

3- 49.782 - 100% H-L- INF.

4- 48.533

5- 47.283

O.I. CLEAR, 30KV.

1% 4% LABOR

INT. STATE EXEMPT

AMT. TAXABLE

AMT. OF TAX

10816788

TRANSFORMER TEST

Continuity		Lead Clearances	✓	Exciting Current	At Volts	Core Loss	At Volts
Oil	N R	Oil Level	✓	~~50~~ 180 Cycles	At 720 L. Volts	High Pot. ✓	40 High To Grd. K.V.
Grd Terminals	1 2	Surge Tested		Radio Interference OK	Polprity A S	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	4 What % 2 1/2	Up 2 Down 2	

SECONDARY BREAKER		Position	% Tap	Connect	Pot. Difference	T.T.R. Ratio	Calculated Ratio
Breaker No:		A		53,384			
Trip and Reset	Oil Temp. °C	B		51,034			
Factory Trip Allowable	To Secs.	C	100%	49,782			
Factory Trip Current	At °C	D		48,533			
Shop Trip Current	At °C	E		47,283			
Shop Trip Time Right Side	Secs.		OUT	ON C POSITION			
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	0.5 added
High to Low	I.P.F.	M.F.	No. 1 K.V.	No. 1 K.V.	Neut No.	0.5 10 gal
Low to Grd.	I.P.F.	M.F.	No. 2 K.V.	No. 2 K.V.	I.F.T. POR	7.1 oil
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	Bad	GRD. Clamps	IN	OUT	Approved	YES
Hangers	IN	OUT	Pri. Bushing Good		OUT	Date Tested:	12-4-87
Arrestors	IN	OUT	Sec. Bushing Good		OUT	Tested	
Paint		OUT	Sec. Breaker	IN	OUT	By:	[signature]

REMARKS: SOME NEW OIL ADDED 12 GALS APP

L.G. - 25,000

H.G. - 25,000 } 2500 Volt Scale

H.L. - INF

RC

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

Ward Transformer Co., Inc.

TRANSFORMER DEPT.

№ 2338

Received From:	Original Cost: Shop Cost:
Town: State	Incoming Freight:
Received Via: Date:	Date Billed:
Card Made: P. O. No:	Our R No:
Sold To:	Cust. Order No:

EQUIPMENT: Transformer Pole mount — Serial No. P121694 YTA

Make: G.E.	K.V.A. 50	Imp. 2.34	Phase: 1	Style No.
H. Volts: 23900	Type: Pole	Form:	Cycles: 60	Cat. No.
L. Volts: 240/480	Gals Oil: 28	Pol: Subt	N. P. No. 65°C	Spec. No.
No. Taps 4 2½ Taps	Up ☑ Down ☐	YEAR BUILT: 6/86		
	Pocket Pri Sec	Top Pri Sec	Steel ☑ Cast ☐	Cast Top. Bot.
	Stud Pri Sec	Oblong ☐ Straight ☐	Round ☑ Corregated ☐	Fins ☐

#P 138	Ht. top of H. V.:	Tank & Fittings:
Complete Al. Windings	Ht. No. H. V. Bush:	C & C Wt:
	Dia: Wide:	Oil Wt:
	Deep:	Total Wt:
	Oil Level Gauge ☐	Thermometer ☐
	Tap Changer: External ☐	Internal ☒
	NEW USER:	
	REBUILT USER:	
Bolted Down Top	DEALER:	

REMARKS:

1- 52.286 L-G- 25,000
2- 51.036 H-G- 50,000
3- 49.787 H-L- INF.
4- 48.535
5- 47.286
Oil Clear. 30KV.

TRANSFORMER TEST

Continuity [ ]	Lead Clearances [✓]	Exciting Current ____ At ____ Volts	Core Loss ____ At ____ Volts
Oil [N] [R]	Oil Level [✓]	500 Cycles 180 At 720 L Volts	High Pot. [✓] High To Grd. 40 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 40 K.V.
Pri. Grd. Connected [Y] [N]	Sec. Grd. Connected [Y] [N]	Number Taps 4 What % 2 1/2	Up [2] Down [2]

SECONDARY BREAKER	Position	% Tap	Connect	Pot. Difference	T.T.R. Ratio	Calculated Ratio
Breaker No.	A		52.286			
Trip and Reset [ ] Oil Temp °C	B		51.036			
Factory Trip Allowable To Secs.	C	100%	49.787			
Factory Trip Current At °C	D		48.535			
Shop Trip Current At °C	E		47.286			
Shop Trip Time Right Side Secs.			OUT ON	"C" POSITION		
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 0.5 used same
High to Low I.P.F. M.F.	No. 1 K.V.	No. 1 K.V.	Nevt No. acid .05 oil back
Low to Grd. I.P.F. M.F.	No. 2 K.V.	No. 2 K.V.	I.F.T. PCB 6.2 in
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 [ ] Bad [ ]	GRD. Clamps [ ] [OUT]	Approved: [YES]
Hangers [IN] [OUT]	Pri. Bushing Good [ ] [OUT]	Date Tested 12-4-87
Arrestors [IN] [OUT]	Sec. Bushing Good [ ] [OUT]	Tested
Paint [OUT]	Sec. Breaker [IN] [OUT]	By: [signature]

REMARKS:

L G 25,000
H G 50,000 } 2500 VOLT SCALE
H L INF

PC

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

Ward Transformer Co., Inc.

TRANSFORMER DEPT.

No 2339

Received From:		Original Cost:	
		Shop Cost:	
Town:	State	Incoming Freight:	
Received Via:	Date: 11-20-82	Date Billed:	
Card Made:	P. O. No:	Our R No:	
Sold To:		Cust. Order No:	

EQUIPMENT: Transformer Pole Mount — Serial No. P121693YTA

Make: G.E.	K.V.A. 50	Imp. 2.34	Phase: 1	Style No.
H. Volts: 23900	Type: Pole	Form:	Cycles: 60	Cat. No.
L. Volts: 240/480	Gals Oil: 28	Pol: Sub	N. P. No: 65°C	Spec. No.
No. Taps: 4 — 2½ Taps	Up: 2 Down: 2	YEAR BUILT: 6/86		
H. P. 139	Pocket Pri Sec	Top Pri Sec	Steel ☐ Cast ☐	Cast Top Bot
	Stud Pri Sec	Oblong ☐ Straight ☐	Round ☑	Corregated ☐ Fins ☐

Complete Al. Windings	Ht. top of H. V.
	Ht. No. H. V. Bush:
	Dia: Wide:
	Deep:
	Oil Level Gauge ☐
	Tap Changer: External ☐ Internal ☑
	NEW USER:
	REBUILT USER:
Bolted Down Top.	DEALER:

Tank & Fittings:

C. & C. Wt:

Oil Wt:

Total Wt:

Thermometer ☐

REMARKS:

1- 52.277 L-G-25,000

2- 51.027 H-G-50,000

3- 49.776 H-L-INF.

4- 48.525

5- 47.274 Oil Clear 30KV.

TRANSFORMER TEST

Continuity [✓]	Lead Clearances [✓]	Exciting Current	At	Volts	Core Loss	At	Volts
Oil [N] [R]	Oil Level [✓]	500 Cycles 450	At 720	L. Volts	High Pot. [✓]	High To Grd. 40	K.V.
Grd Terminals [1] [2]	Surge Tested [✓]	Radio Interference OK [✓]	Polprity [A] [B]		Low To Grd	5	K.V.
Oil Leaks NO	Anti Siphon Joints [✓]	Impeadence Calculated	At	Volts	High To Low	40	K.V.
Pri. Grd. Connected [Y] [N]	Sec. Grd. Connected [Y] [N]	Number Taps 4	What % 2½		Up [✓]	Down [✓]	

SECONDARY BREAKER		Position	% Tap	Connect	Pot. Difference	T.T.R. Ratio	Calculated Ratio
Breaker No.		A		51.977			
Trip and Reset [✓]	Oil Temp. °C	B		51.027			
Factory Trip Allowable	To Secs.	C	100%	49.776			
Factory Trip Current	At °C	D		48525			
Shop Trip Current	At °C	E		47.974			
Shop Trip Time Right Side	Secs.	OUT	ON	C POSITION	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 .05	used
High to Low	I.P.F.	M.F.	No. 1 K.V.	No. 1 K.V.	Neut. No. acid .05	some oil
Low to Grd.	I.P.F.	M.F.	No. 2 K.V.	No. 2 K.V.	I.F.T. PCB 7.8	back in
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 [✓]	Bad [ ]			
			GRD. Clamps	[✓] OUT	Approved YES
Hangers	IN	OUT	Pri. Bushing Good	[✓] OUT	Date Tested 12-4-87
Arrestors	IN	OUT	Sec. Bushing Good	[✓] OUT	Tested
Paint	OUT		Sec. Breaker	IN OUT	By: [signature]

REMARKS:

H-G- 25,000

H-G- 50,000 / 2500 Volt Scale

H-L- INF.

Texasgulf Shipping Record

1162

PHOSPHATE OPERATIONS
P.O. BOX 48
AURORA, N.C. 27806
PHONE (919) 322-4111

SHIP TO	DATE
Ward Transformer Mt. Herman Church Rd. Raleigh, N.C. 27612	Nov. 6, 1987
	SHIPPED BY
	Vendor
PURCHASE ORDER NO.	CHARGE
D97-23531	W.O. 100732
REQUISITION NO.	B/L NO.
CM4-55087	

REASON FOR SHIPMENT

Repair Estimate

QUANTITY	UNIT	DESCRIPTION OF ITEMS SHIPPED
3	EA	Transformers
		50 KVA, Primary Volts 23900, Sec. Volts 240/480
		Tg Tag #'s P-138, S/N P-121694YTA
		P-139, S/N P-121693 YTA
		P-140, S/N P-121695YTA
		Note: Transformers flashed and megg defective.
		Note To Vendor: Repair cost for each to be provided to Robert Wetherington before making repairs.
		Ben Rappleyea

J Mahoney
WAREHOUSEMAN

009-00-103-050

ORDER SHEET

WARD TRANSFORMER CO., INC.

1 ☐ MFG. EQUIPMENT	8 ☐ PARTS	☒ OIL
2 ☐ USED EQUIPMENT	9 ☐ EXIDE ELECTRONICS	☐ DRY
3 ☒ REPAIR	10 ☐ EXIDE CORP.	☐ SWITCHGEAR
4 ☐ RENTAL	11 ☐ OEM	☐ OTHER
5 ☐ BROKER SALE - USED	12 ☐ ROC PAD MOUNT	
6 ☐ BROKER SALE - NEW	13 ☐ ROC SPECIAL	
7 ☐ CONSIGNMENT EQUIPMENT	14 ☐ MISCELLANEOUS	

OUR ORDER NUMBER: 3136648

DATE SOLD: 11/20/87

CREDIT OK:

CUSTOMER NUMBER: 007782 ~~[illegible]~~

SALESMAN: 25

SALES TERRITORY:

TERMS:

SOLD TO: Texasgulf Chemicals Co.

CUSTOMER P.O. NO.: 097-23531

ADDRESS: Phosphate Operations PO Box 48

ATTENTION: Robert Wetherington

CITY, STATE, ZIP CODE: Aurora, N.C 27806

TELEPHONE NO.: (919) 322-4111

SHIP TO:

REFERENCE NO.:

STREET ADDRESS: Same

ATTENTION:

CITY, STATE ZIP CODE:

TELEPHONE NO.:

DATE PROMISED: 1/5/88

INSTRUCTIONS:

ROUTE VIA: Ward

☐ COLLECT
☐ PREPAID
☒ PREPAID & ADD

QUAN.	DESCRIPTION	UNIT COST	TOTAL
3	Repair 50 KVA transformers, OA, 65° C rise, Pri 23900, sec 240/480 1Ø		est 2w
	We are to give EST of repair before any work will be done		
	Note Customer advised units flashed and Meg Faulty		

W/O # 01/05.01