

Infrared Inspection Report

for

Teva Paper UK Demo

Barrow Plant

27th May, 2011

Inspection No. 10916



prevention
is better than
cure



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Infrared Inspection Program Report
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INFRARED THERMOGRAPHIC INSPECTION
OF
INDUSTRIAL / COMMERCIAL ELECTRICAL
INSPECTION

Report Date: 01/06/2011

TEVA_Paper UK Demo , Barrow Plant

Overview:

The Infrared Electrical Inspection was performed by T.E.V.A. Ltd, by a certified infrared Thermographer. All of the items inspected are listed in this InspecTrend report. Any anomalies are listed in order of priority based on the component's temperature rise, as measured from a reference component of equal type and load at the time of the inspection. T.E.V.A. Ltd assumes no liability directly or indirectly as a result of this inspection.

Current Inspection No: 10916 May 27, 2011

Prior Inspection No: 10708 October 5, 2009

Priority	Temp Rise	Current Inspection	Prior Inspection	Percent of Change
1-Critical	33 - Above	2 = 50%	4 =100%	-50%
2-Serious	16 - 32	2 = 50%	0 = 0%	NA
3-Important	8 - 15	0 = 0%	0 = 0%	NA
4-Minor	1 - 7	0 = 0%	0 = 0%	NA
5-Normal	0	0 = 0%	0 = 0%	NA
Total Tested Problems:		4	4	0%
Number of New Documented Problems:		4 =100%	0 = 0%	NA
Number of Tested re-occurring Problems:		0 = 0%	0 = 0%	NA

Number of prior problems which were Not Tested this inspection : 0

Number of Total Open Problems **4**

Number of prior problems which tested Normal this inspection : 12

I hereby certify the above project was inspected by myself or under my direction and that the enclosed data is the direct result of this inspection.

T.E.V.A. Ltd

Eccles, Stuart

Certification Level/No.: Level 1

* Summary of reoccurring problems on following page(s)



INFRARED THERMOGRAPHIC INSPECTION
OF
MECHANICAL INSPECTION

Provided for

Report Date: 01/06/2011

TEVA_Paper UK Demo , Barrow Plant

Overview:

The Infrared Mechanical Inspection was performed by T.E.V.A. Ltd, by a certified infrared Thermographer. All of the items inspected are listed in this InspecTrend report. Any anomalies are listed in order of priority based on the component's temperature rise, as measured from a reference component of equal type and load at the time of the inspection. T.E.V.A. Ltd assumes no liability directly or indirectly as a result of this inspection.

Current Inspection No: 10916 May 27, 2011

Prior Inspection No: 10708 October 5, 2009

Priority	Temp Rise	Current Inspection	Prior Inspection	Percent of Change
1-Critical	33 - Above	3 = 75%	2 = 67%	50%
2-Serious	16 - 32	1 = 25%	1 = 33%	0%
3-Important	8 - 15	0 = 0%	0 = 0%	NA
4-Minor	1 - 7	0 = 0%	0 = 0%	NA
5-Normal	0	0 = 0%	0 = 0%	NA
Total Tested Problems:		4	3	33%
Number of New Documented Problems:		3 = 75%	1 = 33%	200%
Number of Tested re-occurring Problems:		1 = 25%	0 = 0%	NA

Number of prior problems which were Not Tested this inspection : 0

Number of Total Open Problems **4**

Number of prior problems which tested Normal this inspection : 9

I hereby certify the above project was inspected by myself or under my direction and that the enclosed data is the direct result of this inspection.

T.E.V.A. Ltd

Eccles, Stuart

Certification Level/No.: Level 1

* Summary of reoccurring problems on following page(s)



INFRARED THERMOGRAPHIC INSPECTION
OF
VISUAL PROBLEMS

Provided for

Report Date: 01/06/2011

TEVA_Paper UK Demo , Barrow Plant

Overview:

The Infrared Electrical Inspection was performed by T.E.V.A. Ltd, by a certified infrared Thermographer. All of the items inspected are listed in this InspecTrend report. Any anomalies are listed in order of priority based on the component's temperature rise, as measured from a reference component of equal type and load at the time of the inspection. T.E.V.A. Ltd assumes no liability directly or indirectly as a result of this inspection.

Current Inspection No: 10916 May 27, 2011

Prior Inspection No: 10708 October 5, 2009

Priority	Temp Rise	Current Inspection	Prior Inspection	Percent of Change
1-Critical		0 = 0%	0 = 0%	NA
2-Serious		1 =100%	1 =100%	0%
3-Important		0 = 0%	0 = 0%	NA
4-Minor		0 = 0%	0 = 0%	NA
Total Tested Problems:		1	1	0%
Number of New Documented Problems:		0 = 0%	1 =100%	-100%
Number of Tested re-occurring Problems:		1 =100%	0 = 0%	NA

Number of prior problems which were Not Tested this inspection : 0

Number of Total Open Problems : 1

Number of prior problems which tested Normal this inspection : 3

I hereby certify the above project was inspected by myself or under my direction and that the enclosed data is the direct result of this inspection.

T.E.V.A. Ltd

Eccles, Stuart

Certification Level/No.: Level 1

* Summary of reoccurring problems on following page(s)

Documentation/Work Order I/C Electrical

InspectionNo: 10916
Report Date: 02/06/2011

Work Order #:

10916-1

Current Prob No: I/C Electrical/1

Location/Equipment Information	
Asset ID:	
Barcode:	
Location:	MECHANICAL SURVEY PM10 BASEMENT AREA PUMP 1
Component:	Motor
Problem:	incoming phase heating on cable on connection box

Load Test Results	
Component Rated Load:	amps
incoming phase:	amps
incoming phase:	amps
incoming phase:	amps

Thermal Information	
Operation Priority:	Critical to operation
Repair Priority:	2-Serious
Ambient: 21 C	Environment: Indoors Wind:
Component Temperature On incoming phase	46 C
incoming phase Reference Temperature:	23 C
Temperature Rise Above Reference:	23 C
ANSI/EEE/NEMA Max Allowable Temp @ 100% Load:	C
Est Temp Rise over reference @ 50% Load:	0
Est Temp Rise over reference @ 100% Load:	0



IR File: IR_2010-01-15_0024.jpg

IR Date:

15/01/2010



Photo File: DC_2010-01-15_0025.jpg

Photo Date:

15/01/2010

PLEASE PROVIDE FEED BACK AFTER REPAIR Loss to Production

Yes No Unknown

Repair Information

Consequences of Failure:

Loss of PUMP 1

Repair Date:

Repaired By:

Root Cause:

Parts Req. Before Failure:

Repair

Procedure:

Parts Req. After Failure:

Repair Notes:

Repair Recommendation:

Shut down and inspect connections and cable crimps

Documentation/Work Order I/C Electrical

InspectionNo: 10916
Report Date: 02/06/2011

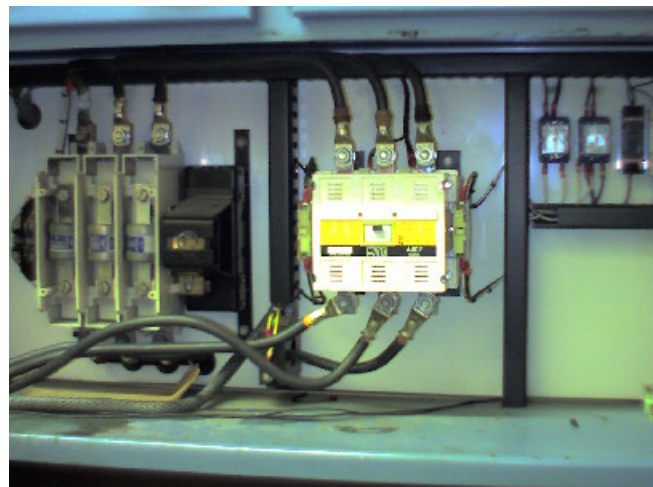
Work Order #:

10916-2 Current Prob No: I/C Electrical/2

Location/Equipment Information	
Asset ID:	
Barcode:	
Location:	ELECTRICAL SURVEY PM10 SWITCH ROOM NO2 PNL 204
Component:	contactor
Problem:	yellow phase heating on bottom connection on contactor

Load Test Results	
Component Rated Load:	amps
yellow phase:	amps
red phase:	amps
	amps

Thermal Information	
Operation Priority:	Critical to operation
Repair Priority:	1-Critical
Ambient: 21 C	Environment: Indoors Wind:
Component Temperature On yellow phase:	66 C
red phase Reference Temperature:	25 C
Temperature Rise Above Reference:	41 C
ANSI/EEE/NEMA Max Allowable Temp @ 100% Load:	C
Est Temp Rise over reference @ 50% Load:	0
Est Temp Rise over reference @ 100% Load:	0



IR File: IR_2010-11-16_0004.jpg IR Date: 16/11/2010 Photo File: DC_2010-11-16_0005.jpg Photo Date: 16/11/2010

PLEASE PROVIDE FEED BACK AFTER REPAIR		Loss to Production
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
Repair Information	Repair Date:	Repaired By:
Consequences of Failure: Loss of PNL 204	Root Cause:	
Parts Req. Before Failure:	Repair Procedure:	
Parts Req. After Failure:	Repair Notes:	
Repair Recommendation: Check the load is balanced and check the connections are clean and tight.		

Documentation/Work Order I/C Electrical

InspectionNo: 10916
Report Date: 02/06/2011

Work Order #:

10916-3

Current Prob No: I/C Electrical/3

Location/Equipment Information	
Asset ID:	
Barcode:	
Location:	ELECTRICAL SURVEY DE-INK SUBSTATION TRANSFORMER N01
Component:	Transformers
Problem:	heating on outgoing cable on Transformer

Load Test Results	
Component Rated Load:	amps
outgoing:	amps
outgoing:	amps
outgoing:	amps

Thermal Information	
Operation Priority:	Critical to operation
Repair Priority:	2-Serious
Ambient: 18 C	Environment: Indoors Wind:
Component Temperature On outgoing:	76 C
outgoing Reference Temperature:	48 C
Temperature Rise Above Reference:	28 C
ANSI/EEE/NEMA Max Allowable Temp @ 100% Load:	C
Est Temp Rise over reference @ 50% Load:	0
Est Temp Rise over reference @ 100% Load:	0



IR File: IR_2010-07-14_0055.jpg

IR Date:

14/07/2010

Photo File: DC_2010-07-14_0056.jpg

Photo Date:

14/07/2010

PLEASE PROVIDE FEED BACK AFTER REPAIR		Loss to Production	
Repair Information Consequences of Failure: Loss of TRANSFORMER N01		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
		Repair Date: <input style="width: 80px;" type="text"/>	Repaired By: <input style="width: 150px;" type="text"/>
Parts Req. Before Failure: <input style="width: 380px;" type="text"/>		Root Cause: <input style="width: 330px;" type="text"/>	
Parts Req. After Failure: <input style="width: 380px;" type="text"/>		Repair Procedure: <input style="width: 330px;" type="text"/>	
Repair Recommendation: Shut down and investigate at earliest opportunity		Repair Notes: <input style="width: 330px;" type="text"/>	

Documentation/Work Order I/C Electrical

InspectionNo: 10916
Report Date: 02/06/2011

Work Order #:

10916-4

Current Prob No: I/C Electrical/4

Location/Equipment Information	
Asset ID:	
Barcode:	
Location:	ELECTRICAL SURVEY CONVERSION AREA PERINI AREA COMPRESSOR PNL
Component:	Isolator
Problem:	Red phase heating at bottom cable connection on Main Isolator. This cable is showing advanced signs of heat damage and requires immediate attention.

Load Test Results	
Component Rated Load:	amps
red phase:	amps
yellow phase:	amps
yellow phase:	amps

Thermal Information	
Operation Priority:	Critical to operation
Repair Priority:	1-Critical
Ambient: 26 C	Environment: Indoors Wind:
Component Temperature On red phase:	413 C
yellow phase Reference Temperature:	75 C
Temperature Rise Above Reference:	338 C
ANSI/EEE/NEMA Max Allowable Temp @ 100% Load:	C
Est Temp Rise over reference @ 50% Load:	0
Est Temp Rise over reference @ 100% Load:	0



IR File: IR_2010-11-03_0003.jpg

IR Date:

03/11/2010

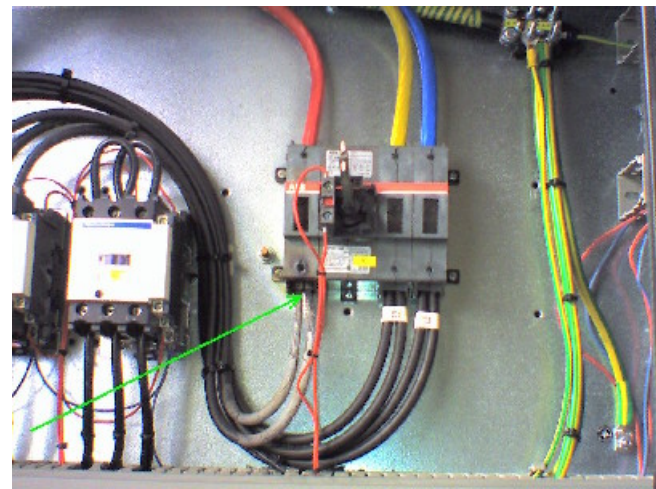


Photo File: DC_2010-11-03_0004a.jpg

Photo Date:

01/06/2011

PLEASE PROVIDE FEED BACK AFTER REPAIR Loss to Production

Yes No Unknown

Repair Information

Consequences of Failure:

Loss of COMPRESSOR PNL

Repair Date:

Repaired By:

Root Cause:

Parts Req. Before Failure:

Repair

Procedure:

Parts Req. After Failure:

Repair Notes:

Repair Recommendation:

shut down and remake/repair cable



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Documentation/ Work Order Mechanical

Work Order #:

InspectionNo: 10916
Report Date: 01/06/2011

10916-1 Current Prob No: Mechanical/1

Location/Equipment Information		Operation Priority: Critical to operation	
Asset ID: Barcode: Location: MECHANICAL SURVEY BURNER ROOM Z333 DE HOOD RECIRC FAN		Repair Priority: 1-Critical Ambient: 12 C Enviroment: Overcast Wind: 5 Component Temperature: 104 C Reference Temperature: 33 C Temperature Rise Above Reference: 71 C ANSI/EEE/NEMA Max Allowable Temp @ 100% Load: C	
Problem: Increase in temperature on casing on jack-shaft de bearing		ANSI/IEEE/NEMA Max Temp Criteria: Component Type: bearing Manufacturer: Catalog No: Model No: Oil Type: Circuit Voltage: Bearing Type: Component Rated Load: Horse Power (HP) : RPM's:	
Load Test Results			
Rated Load: Component: amps Reference: amps			



IR File: IR_2011-05-10_0016.jpg

IR Date: 10/05/2011

Photo File: DC_2009-09-15_0049.jpg

Photo Date: 15/09/2009

PLEASE PROVIDE FEED BACK AFTER REPAIR		Loss to Production	
Repair Information		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Consequences of Failure: Loss of Z333 DE HOOD RECIRC FAN	Repair Date: _____	Repaired By: _____	
Parts Req. Before Failure: _____	Root Cause: _____		
Parts Req. After Failure: _____	Repair Procedure: _____		
Repair Recommendation: Check lubrication schedule .vibration levels and continue to monitor	Repair Notes: _____		

This report was generated by InspectTrend and this inspection was performed by: T.E.V.A. Ltd

Work Order #:

InspectionNo: 10916
Report Date: 01/06/2011

10916-2 Current Prob No: Mechanical/2

Location/Equipment Information		Operation Priority: Critical to operation	
Asset ID:		Repair Priority: 2-Serious	
Barcode:		Ambient: 22 C Enviroment: Indoors	Wind:
Location:	MECHANICAL SURVEY PM10 BASEMENT AREA D227 VACUUM SEAL WATER PUMP	Component Temperature:	94 C
Problem:	high temperature on N D E bearing on vacuum pump. There is a localised high energy area on the casing possibly indicating component wear.	Reference Temperature:	75 C
		Temperature Rise Above Reference:	19 C
		ANSI/EEE/NEMA Max Allowable Temp @ 100% Load:	C
Load Test Results		ANSI/IEEE/NEMA Max Temp Criteria:	
Rated Load:		Component Type: bearing	
Component:	amps	Manufacturer:	
Reference:	amps	Catalog No:	
		Model No:	
		Oil Type:	
		Circuit Voltage:	
		Bearing Type:	
		Component Rated Load:	
		Horse Power (HP) :	
		RPM's:	



IR File: IR_2010-03-16_0036.jpg

IR Date: 16/03/2010

Photo File: DC_2010-03-16_0039.jpg

Photo Date: 16/03/2010

PLEASE PROVIDE FEED BACK AFTER REPAIR		Loss to Production	
Repair Information		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Unknown
Consequences of Failure:	Repair Date:	Repaired By:	
Loss of D227 VACUUM SEAL WATER PUMP			
Parts Req. Before Failure:	Root Cause:		
	Repair Procedure:		
Parts Req. After Failure:	Repair Notes:		
Repair Recommendation:			
Check lubrication schedule .vibration levels and continue to monitor			

This report was generated by InspecTrend and this inspection was performed by: T.E.V.A. Ltd

Work Order #:

InspectionNo: 10916
Report Date: 01/06/2011

10916-3 Current Prob No: Mechanical/3

Location/Equipment Information		Operation Priority: Critical to operation	
Asset ID: Barcode: Location: MECHANICAL SURVEY PM10 MACHINE HOUSE FLOOR EXHAUST FAN		Repair Priority: 1-Critical	Ambient: 26 C Enviroment: Indoors Wind:
Problem: High temperature through cover on guard		Component Temperature: 62 C	Reference Temperature: 28 C
		Temperature Rise Above Reference: 34 C	ANSI/EEE/NEMA Max Allowable Temp @ 100% Load: C
Load Test Results		ANSI/IEEE/NEMA Max Temp Criteria:	
Rated Load: Component: amps Reference: amps		Component Type: Guard Manufacturer: Catalog No: Model No: Oil Type: Circuit Voltage: Bearing Type: Component Rated Load: Horse Power (HP) : RPM's:	



IR File: IR_2009-04-23_0016.jpg

IR Date: 23/04/2009

Photo File: DC_2009-04-23_0017.jpg

Photo Date: 23/04/2009

PLEASE PROVIDE FEED BACK AFTER REPAIR

Repair Information Loss to Production
 Yes No Unknown

Consequences of Failure:
Repair Date:

Parts Req. Before Failure:
Repaired By:

Parts Req. After Failure:
Root Cause:

Repair Recommendation:
Repair Procedure:

Repair Notes:

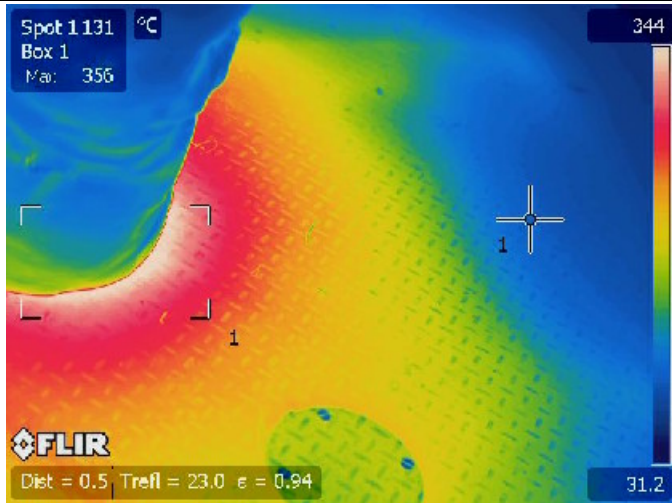
This report was generated by InspectTrend and this inspection was performed by: T.E.V.A. Ltd

Work Order #:

InspectionNo: 10916
Report Date: 01/06/2011

10916-4 Current Prob No: Mechanical/4

Location/Equipment Information		Operation Priority: Critical to operation	
Asset ID:		Repair Priority: 1-Critical	
Barcode:		Ambient: 37 C Enviroment: Indoors Wind:	
Location: MECHANICAL SURVEY BURNER ROOM TURBINE EXHAUST INSULATION		Component Temperature: 356 C	
Problem: High temperature through cover on Exhaust		Reference Temperature: 131 C	
		Temperature Rise Above Reference: 225 C	
		ANSI/EEE/NEMA Max Allowable Temp @ 100% Load: C	
Load Test Results		ANSI/IEEE/NEMA Max Temp Criteria:	
Rated Load:		Component Type: Exhaust	
Component: amps		Manufacturer:	
Reference: amps		Catalog No:	
		Model No:	
		Oil Type:	
		Circuit Voltage:	
		Bearing Type:	
		Component Rated Load:	
		Horse Power (HP) :	
		RPM's:	



IR File: IR_2011-04-26_0055.jpg

IR Date: 26/04/2011

Photo File: DC_2011-04-26_0056.jpg

Photo Date: 26/04/2011

PLEASE PROVIDE FEED BACK AFTER REPAIR

Repair Information Loss to Production
 Yes No Unknown

Consequences of Failure: Repair Date: Repaired By:

Parts Req. Before Failure: Root Cause:

Parts Req. After Failure: Repair Procedure:

Repair Recommendation: Repair Notes:

This report was generated by InspectTrend and this inspection was performed by: T.E.V.A. Ltd

InspectionNo: 10916
Report Date: 01/06/2011

Work Order #:

10916-1

Current Prob No: Visual/1

Location/Equipment Information	
Asset ID:	
Barcode:	
Location:	MECHANICAL SURVEY 1ST FLOOR CONVEYORS CONVEYOR NO1

Operation Priority:	Critical to operation
Repair Priority:	2-Serious
Hazard Type:	DANDEROUS AREA
Hazard Classification:	Injury to personel
Hazard Group:	slips .trips and falls
Hazard Issue:	oil leak under gearbox/motor area on platform
Observations:	slips .trips and falls, oil leak under gearbox/motor area on platform
What is the Cause:	oil leakage from gearbox / motor area

**PHOTO IMAGE IS NOT
AVAILABLE**



Photo File:

Photo Date:

Photo File: IMG2006-04-12-04.JPG

Photo Date: 13/04/2006

PLEASE PROVIDE FEED BAACK		Loss to Production	
Repair Information		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
		<input type="checkbox"/> Unknown	
Consequences of Failure:	Repair Date:	Repaired By:	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Parts Req. Before Failure:	Root Cause:	<input type="text"/>	
<input type="text"/>	Repair Procedure:	check gearbox for correct oil level locate leaking area and clean up	
Parts Req. After Failure:	Repair Notes:	<input type="text"/>	
<input type="text"/>			
Repair Recommendation:			
check gearbox for correct oil level locate leaking area and clean up			



Prioritized List by Temperature Rise

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Operation Priority Key

CTO = Critical to operation
 ETO = Essential to operation
 NON = Non-essential to operation
 UNC = Un-Classified

Report Date: 01/06/2011

Prior Inspection No : 10708 October 5, 2009	Operation Priority	Prior Insp#	Prior Prob#	Temp Rise	Curr Prob#	Temp Rise	% Load	Repair Priority	Repair Status
Current Inspection No : 10916 May 27, 2011	Asset ID								
Equipment: ELECTRICAL SURVEY \ CONVERSION AREA \ PERINI AREA \ COMPRESSOR PNL Component: Red phase heating at bottom cable connection on Main Isolator.This cable is showing advanced signs of heat damage and requires immediate attention.	CTO	10708		1 C	E 4	338 C		1-Critical	Open
Equipment: MECHANICAL SURVEY \ BURNER ROOM \ TURBINE EXHAUST INSULATION Component: High temperature through cover on Exhaust	CTO	10708		2 C	M 4	225 C		1-Critical	Open
Equipment: MECHANICAL SURVEY \ BURNER ROOM \ Z333 DE HOOD RECIRC FAN Component: Increase in temperature on casing on jack-shaft de bearing	CTO	10708	M 1	74 C	M 1	71 C		1-Critical	Open
Equipment: ELECTRICAL SURVEY \ PM10 SWITCH ROOM NO2 \ PNL 204 Component: yellow phase heating on bottom connection on contactor	CTO	10708		12 C	E 2	41 C		1-Critical	Open
Equipment: MECHANICAL SURVEY \ PM10 MACHINE HOUSE FLOOR \ EXHAUST FAN Component: High temperature through cover on guard	CTO	10708		4 C	M 3	34 C		1-Critical	Open
Equipment: ELECTRICAL SURVEY \ DE-INK SUBSTATION \ TRANSFORMER N01 Component: heating on outgoing cable on Transformer	CTO	10708		7 C	E 3	28 C		2-Serious	Open
Equipment: MECHANICAL SURVEY \ PM10 BASEMENT AREA \ PUMP 1 Component: incoming phase heating on cable on connection box	CTO	10708		42 C	E 1	23 C		2-Serious	Open
Equipment: MECHANICAL SURVEY \ PM10 BASEMENT AREA \ D227 VACUUM SEAL WATER PUMP Component: high temperature on N D E bearing on vacuum pump.There is a localised high energy area on the casing possibly indicating component wear.	CTO	10708		23 C	M 2	19 C		2-Serious	Open

This report was generated by InspeCTrend and this inspection was performed by: T.E.V.A. Ltd



Prioritized List by Temperature Rise

TEVA_Paper UK Demo
Barrow Plant

Operation Priority Key

CTO = Critical to operation
ETO = Essential to operation
NON = Non-essential to operation
UNC = Un-Classified

Report Date: 01/06/2011

Prior Inspection No : 10708	October 5, 2009		Operation	Prior	Prior	Temp	Curr	Temp	%		Repair
Current Inspection No : 10916	May 27, 2011	Asset ID	Priority	Insp#	Prob#	Rise	Prob#	Rise	Load	Repair Priority	Status
Equipment: MECHANICAL SURVEY \ 1ST FLOOR CONVEYORS \ CONVEYOR NO1			CTO		V 1	C	V 1			2-Serious	Open
Component: slips .trips and falls, oil leak under gearbox/motor area on platform											



List of All Open Problems

TEVA_Paper UK Demo
Barrow Plant

Operation Priority Key
CTO = Critical to operation
ETO = Essential to operation
NON = Non-essential to operation
UNC = Un-Classified

Report Date: 01/06/2011

Prior Inspection No : 10708 October 5, 2009

Current Inspection No : 10916 May 27, 2011

Asset ID	Operation Priority	Prob#	Insp#	Temp Rise	% Load	Severity	Status
Equipment: ELECTRICAL SURVEY \ CONVERSION AREA \ PERINI AREA \ COMPRESSOR PNL Component: Red phase heating at bottom cable connection on Main Isolator.This cable is showing advanced signs of heat damage and requires immediate attention.	CTO	E 4	10916	338 C		1-Critical	TESTED
Equipment: ELECTRICAL SURVEY \ DE-INK SUBSTATION \ TRANSFORMER N01 Component: heating on outgoing cable on Transformer	CTO	E 3	10916	28 C		2-Serious	TESTED
Equipment: ELECTRICAL SURVEY \ PM10 SWITCH ROOM NO2 \ PNL 204 Component: yellow phase heating on bottom connection on contactor	CTO	E 2	10916	41 C		1-Critical	TESTED
Equipment: MECHANICAL SURVEY \ 1ST FLOOR CONVEYORS \ CONVEYOR NO1 Component: slips .trips and falls, oil leak under gearbox/motor area on platform	CTO	V 1	10916			2-Serious	TESTED
Equipment: MECHANICAL SURVEY \ BURNER ROOM \ TURBINE EXHAUST INSULATION Component: High temperature through cover on Exhaust	CTO	M 4	10916	225 C		1-Critical	TESTED
Equipment: MECHANICAL SURVEY \ BURNER ROOM \ Z333 DE HOOD RECIRC FAN Component: Increase in temperature on casing on jack-shaft de bearing	CTO	M 1	10916	71 C		1-Critical	TESTED
Equipment: MECHANICAL SURVEY \ PM10 BASEMENT AREA \ D227 VACUUM SEAL WATER PUMP Component: high temperature on N D E bearing on vacuum pump.There is a localised high energy area on the casing possibly indicating component wear.	CTO	M 2	10916	19 C		2-Serious	TESTED
Equipment: MECHANICAL SURVEY \ PM10 BASEMENT AREA \ PUMP 1 Component: incoming phase heating on cable on connection box	CTO	E 1	10916	23 C		2-Serious	TESTED
Equipment: MECHANICAL SURVEY \ PM10 MACHINE HOUSE FLOOR \ EXHAUST FAN Component: High temperature through cover on guard	CTO	M 3	10916	34 C		1-Critical	TESTED

This report was generated by InspecTrend and this inspection was performed by: T.E.V.A. Ltd



List of Closed Problems For This Inspection

TEVA_Paper UK Demo
Barrow Plant

Operation Priority Key

CTO = Critical to operation
 ETO = Essential to operation
 NON = Non-essential to operation
 UNC = Un-Classified

Report Date: 01/06/2011

Prior Inspection No : 10708 October 5, 2009

Current Inspection No : 10916 May 27, 2011

Equipment	Component	<u>Asset ID</u>	<u>Operation Priority</u>	<u>Prob#</u>	<u>Insp#</u>	<u>Temp Rise</u>	<u>% Load</u>	<u>Severity</u>	<u>Status</u>
Equipment: ELECTRICAL SURVEY \ DE-INK SUBSTATION \ A6 PNL	Component: blue phase heating at top connection on fuse		CTO	E 1	10708	46C	66%	1-Critical	TESTED
Equipment: ELECTRICAL SURVEY \ DE-INK SUBSTATION \ B3 PNL	Component: L2 connection heating at connection on contactor		CTO	E 2	10708	37C		1-Critical	TESTED
Equipment: ELECTRICAL SURVEY \ DE-INK SUBSTATION \ PM10 SWITCH ROOM NO1 \ PNL 101	Component: yellow phase load side cable connection on fuse		CTO	E 4	10708	92C	63%	1-Critical	TESTED
Equipment: ELECTRICAL SURVEY \ PM10 SWITCH ROOM NO2 \ PNL 205	Component: red phase load side cable connection on fuse		CTO	E 3	10708	53C	70%	1-Critical	TESTED
Equipment: MECHANICAL SURVEY \ PM10 BASEMENT AREA \ MIXING MOTOR	Component: A further increase in temperature from last survey on motor		CTO	M 3	10708	23C		2-Serious	TESTED
Equipment: MECHANICAL SURVEY \ PM10 BASEMENT AREA \ SUCTION PRESS MOTOR	Component: high temperature on casing on motor		CTO	M 2	10708	63C		1-Critical	TESTED

This report was generated by InspecTrend and this inspection was performed by: T.E.V.A. Ltd



Current Inspection Inventory Status By Inspection Order

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Report Date: 01/06/2011

Inspected By : Eccles, Stuart

Prior Inspection No: 10708

Current Inspection No: 10916

Problem Type Key

E = I/C Electrical
TD = T/D Electrical
M = Mechanical
V = Visual Inspection

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Tested	Next Insp. Date	CTO	Problem #	Barcode	Asset ID	Equipment Designation	Test Status Notes
TESTED	25/08/2011	CTO				MECHANICAL SURVEY	
TESTED	25/08/2011	CTO				PM10 BASEMENT AREA	
TESTED	25/08/2011	CTO		0068		A221 MACHINE BROKE CHEST PUMP	
TESTED	25/08/2011	CTO				A222 MACHINE BROKE CHEST AGITATOR MOTOR	
NTNL	27/05/2011	CTO				B223 MACHINE DUMP CHEST PUMP	
NTNL	27/05/2011	CTO				B224 MACHINE DUMP CHEST AGITATOR MOTOR	
NTNL	27/05/2011	CTO				C226 FRESH WATER PUMP	
TESTED	25/08/2011	CTO	M2			D227 VACUUM SEAL WATER PUMP	
TESTED	25/08/2011	CTO				MIXING MOTOR	
TESTED	25/08/2011	CTO				M225	
TESTED	25/08/2011	CTO				SUCTION PRESS MOTOR	
TESTED	30/08/2011	CTO	E1			PUMP 1	
TESTED	25/08/2011	CTO				PM10 MACHINE HOUSE FLOOR	
TESTED	25/08/2011	CTO				FORMING ROLL MOTOR	
NTNA	27/05/2011	CTO				WIRE TURNING ROLL MOTOR	
NTNA	27/05/2011	CTO				YANKEE GEARBOX	
TESTED	30/08/2011	CTO	M3			EXHAUST FAN	
TESTED	25/08/2011	CTO				BURNER ROOM	
NTUR	27/05/2011	CTO				X330 WET END COMBUSTION FAN	
NTUR	27/05/2011	CTO				X331 DRY END COMBUSTION FAN	
TESTED	25/08/2011	CTO				Y332 HOOD EXHAUST FAN	
TESTED	30/08/2011	CTO	M1			Z333 DE HOOD RECIRC FAN	
TESTED	30/08/2011	CTO	M4			TURBINE EXHAUST INSULATION	
TESTED	25/08/2011	CTO				STOCK PREP	
TESTED	23/11/2011	ETO				ACM400 DEFLAKER	
TESTED	25/08/2011	CTO				ACM401 CLEAN STOCK AGITATOR	
TESTED	25/08/2011	CTO				ACM402 DIRTY STOCK AGITATOR	
TESTED	23/11/2011	ETO				ACM405 SLUDGE PUMP	

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TESTED	25/08/2011	CTO				DE-INK BASEMENT	
TESTED	25/08/2011	CTO				DP 100 RECIRCULATION PUMP	
TESTED	25/08/2011	CTO				DP 101 PULPER DILUTION PUMP	
TESTED	23/11/2011	ETO				DP103 SLUDGE PUMP	
TESTED	25/08/2011	CTO				DP 123 FAN MOTOR	
TESTED	25/08/2011	CTO				1ST FLOOR CONVEYORS	
TESTED	30/08/2011	CTO	V1			CONVEYOR NO1	
TESTED	25/08/2011	CTO				ELECTRICAL SURVEY	
TESTED	25/08/2011	CTO				CONVERSION AREA	
TESTED	25/08/2011	CTO				PERINI AREA	
TESTED	25/08/2011	CTO				LOG SAW PANEL	
TESTED	25/08/2011	CTO				MULTI-WRAP PANEL	
TESTED	25/08/2011	CTO				INTERNAL UNWINDER PANEL	
TESTED	25/08/2011	CTO				EXTERNAL UNWINDER PANEL	
TESTED	30/08/2011	CTO	E4			COMPRESSOR PNL	
TESTED	25/08/2011	CTO		000996		DE-INK SUBSTATION	
TESTED	25/08/2011	CTO				A1 PNL	
NTLO	27/05/2011	CTO				A2 PNL	
NTLO	27/05/2011	ETO				A3 PNL	
NTLO	27/05/2011	ETO				A4 PNL	
TESTED	26/05/2012	NON				A5 PNL	
TESTED	25/08/2011	CTO				A6 PNL	
TESTED	25/08/2011	CTO				B2 PNL	
TESTED	25/08/2011	CTO				PM10 SWITCH ROOM NO1	
TESTED	25/08/2011	CTO				DISTRIBUTION BOARD 1	
TESTED	25/08/2011	CTO				PNL 101	
TESTED	25/08/2011	CTO				PNL 102	
TESTED	25/08/2011	CTO				PNL103	

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NTNL	27/05/2011	CTO				PNL55	
NTNL	27/05/2011	CTO				MAIN INCOMER PANEL	
TESTED	25/08/2011	CTO				B3 PNL	
TESTED	26/05/2012	NON				B4 PNL	
TESTED	25/08/2011	CTO				B1 PNL	
TESTED	30/08/2011	CTO	E3			TRANSFORMER N01	
TESTED	25/08/2011	CTO				PM10 SWITCH ROOM NO2	
NTNL	27/05/2011	CTO				DISTRIBUTION BOARD NO2	
NTNL	27/05/2011	CTO				PNL201	
TESTED	25/08/2011	CTO				PNL202	
TESTED	25/08/2011	CTO				PNL 203	
TESTED	30/08/2011	CTO	E2			PNL 204	
TESTED	25/08/2011	CTO				PNL 205	
TESTED	25/08/2011	CTO				OFFICE 1	
TESTED	25/08/2011	CTO				MOTOR	