

Withhold Attachment  
From Public Disclosure  
10 CFR 2.790 INFORMATION



MAINE YANKEE  
ENGINEERING OFFICE

TURNPIKE ROAD (RT. 9)  
WESTBORO, MASSACHUSETTS 01581  
617-366-9011

November 13, 1980

United States Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Office of Nuclear Reactor Regulation  
Mr. Darrell G. Eisenhut, Acting Director  
Division of Operating Reactors

Reference: (a) License No. DPR-36 (Docket 50-309)  
(b) USNRC Letter to MYAPC dated February 25, 1980  
(c) MYAPC letter to USNRC dated March 19, 1980 (WYM 80-52)

Subject: Low Pressure Turbine Disc Integrity

Dear Sir:

This letter is written to provide updated information on disc properties and stresses of both Maine Yankee low pressure turbine rotors, inspected during the 1980 refueling outage. This information supersedes the information submitted as part of Appendix A and Appendix B entitled, "LP Turbine Disc Information" in our letter, Reference (c).

Appendix A, LP Turbine Disc Information, contains proprietary information of the Westinghouse Electric Corporation. In conformance with the requirements of 10CFR Section 2.790, as amended, of the Commission's regulations, we request this information be withheld from public disclosure. Since this information is only an update, we propose the original affidavit submitted in Reference (c) remain applicable.

Correspondence with respect to the affidavit or application for withholding should reference AW-80-7 and should be addressed to Mr. R. Williamson, Manager, Customer Order Engineering, Westinghouse Electric Corporation, Steam Turbine Divisions Lester Branch, Bcx 9175, Philadelphia, Pennsylvania 19113.

We trust this information is satisfactory, however, should you have any questions, please contact us.

Very truly yours,

D. E. Moody  
Manager of Operations

10 CFR 2.790 INFORMATION  
8011180169



APPENDIX B

C ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : 0081101701

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK B1  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LP# 2  
5. LOCATION GEN  
6. DISC# 6  
7. TEST NO. TD55532

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
(MIN. Y.S. [ (KSI) ]  
2. SUPPLIER: BETHLEHEM STEEL  
3. Y.S. (KSI)  
4. U.T.S. (KSI)  
5. ELONGATION  
6. R.A.  
7. FATT (DEG.F)  
8. R.T. IMPACT (FT.LB.)  
9. U.S. IMPACT TEMP.  
(DEG.F)  
10. U.S. IMPACT ENG.  
(FT.LB.)  
11. U.S. KIC  
(KSI\*SQRT(IN.))

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI)  
2. U.T.S. (KSI)  
3. ELONGATION  
4. R.A.  
5. FATT (DEG.F)  
6. R.T. IMPACT (FT.LB.)  
7. U.S. IMPACT TEMP.  
(DEG.F)  
8. U.S. IMPACT ENG.  
(FT.LB.)  
9. U.S. KIC  
(KSI\*SQRT(IN.))

D. CHEMISTRY

C ] MN ] SI ] P ] CR ] MO ] V ]  
NI ] AS ] SB ] SN ] AL ] CU ] S ]

E. BORE STRESS  
SPEED (RPM) STRESS

1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ])

1. A-CR-0P (1800 RPM) (IN.) [ ]  
2. A-CR-0S (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101701

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION		B. MATERIAL PROPERTIES (HUB)		C. MATERIAL PROPERTIES (RIM)	
1. BUILDING BLOCK	81	1. TYPE	TD		
		(MIN. Y.S. [	](KSI))		
2. UNIT	BAILEY PT. #1	2. SUPPLIER:	BETHLEHEM STEEL	1. Y.S. (KSI)	[ ]
3. CUSTOMER:	MAINE YANK	3. Y.S. (KSI)		2. U.T.S. (KSI)	[ ]
4. LP#	2	4. U.T.S. (KSI)		3. ELONGATION	[ ]
5. LOCATION	GEN	5. ELONGATION		4. R.A.	[ ]
6. DISC#	5	6. R.A.		5. FATT (DEG.F)	[ ]
7. TEST NO.	TD55523	7. FATT (DEG.F)		6. R.T. IMPACT (FT.LB.)	[ ]
		8. R.T. IMPACT (FT.LB.)		7. U.S. IMPACT TEMP.	[ ]
		9. U.S. IMPACT TEMP.		(DEG.F)	
		10. U.S. IMPACT ENG.		8. U.S. IMPACT ENG.	[ ]
		(FT.LB.)		(FT.LB.)	
		11. U.S. KIC		9. U.S. KIC	[ ]
		(KSI*SQRT(IN.))		(KSI*SQRT(IN.))	

D. CHEMISTRY

C	MN	SI	P	CR	MO	V
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
NI	AS	SB	SN	AL	CU	S
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

E. BORE STRESS		F. CRACK DATA (KEYWAY RADIUS (IN) [ ])
SPEED (RPM)	STRESS	
1. 1800	(KSI) [ ]	1. A-CR-OP (1800 RPM) (IN.) [ ]
2. 2160 (120%)	(KSI) [ ]	2. A-CR-OS (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F)	[ ]
2. ESTIMATED MAX DA/DT (IN/HR)	[ ]
3. ESTIMATED MAX DA/DT (IN/MONTH)	[ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.)	[ ]
2. KEYWAY CRACK DEPTH (MAX.)-(IN.)	[ ]
3. BORE CRACK DEPTH (MAX.)-(IN.)	[ ]
4. DISK STATUS	[ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101701

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LP# 2  
5. LOCATION GEN  
6. DISC# 4  
7. TEST NO. TC95197

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
(MIN. Y.S. [ ] (KSI))  
2. SUPPLIER: MIDVALE HEPPESTALL  
3. Y.S. (KSI) [ ]  
4. U.T.S. (KSI) [ ]  
5. ELONGATION [ ]  
6. R.A. [ ]  
7. FATT (DEG.F) [ ]  
8. R.T. IMPACT (FT.LB.) [ ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

E. BORE STRESS  
SPEED (RPM) STRESS

1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN.) [ ])

1. A-CR-OP (1800 RPM) (IN.) [ ]  
2. A-CR-OS (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUR (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]



[ ] INDICATES WESTINGHOUSE PROPRIETARY LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101701

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION		B. MATERIAL PROPERTIES (HUB)		C. MATERIAL PROPERTIES (RIM)	
1. BUILDING BLOCK	B1	1. TYPE (MIN. Y.S. (KSI))	TD (KSI)	1. Y.S. (KSI)	
2. UNIT	BAILEY PT. #1	2. SUPPLIER	MIDVALE HEPPENSTALL	2. U.T.S. (KSI)	
3. CUSTOMER:	MAINE YANK	3. Y.S. (KSI)		3. ELONGATION	
4. LP#		4. U.T.S. (KSI)		4. R.A.	
5. LOCATION	2 GEN	5. ELONGATION		5. FATT (DEG.F)	
6. DISC#	2	6. R.A.		6. R.T. IMPACT (FT.LB.)	
7. TEST NO.	TD65146	7. FATT (DEG.F)		7. U.S. IMPACT TEMP. (DEG.F)	
		8. R.T. IMPACT (FT.LB.)		8. U.S. IMPACT ENG. (FT.LB.)	
		9. U.S. IMPACT TEMP. (DEG.F)		9. U.S. KIC (KSI*SQRT(IN.))	
		10. U.S. IMPACT ENG. (FT.LB.)			
		11. U.S. KIC (KSI*SQRT(IN.))			

D. CHEMISTRY

C	MN	SI	P	CR	MO	V
NI	AS	SB	SN	AL	CU	S

E. BORE STRESS		F. CRACK DATA (KEYWAY RADIUS (IN))	
SPEED (RPM)	STRESS		
1. 1800	(KSI)	1. A-CR-0P (1800 RPM) (IN.)	
2. 2160 (120%)	(KSI)	2. A-CR-0S (OVERSPEED) (IN.)	

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F)	
2. ESTIMATED MAX DA/DT (IN/HR)	
3. ESTIMATED MAX DA/DT (IN/MONTH)	

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.)	
2. KEYWAY CRACK DEPTH (MAX.)-(IN.)	
3. BORE CRACK DEPTH (MAX.)-(IN.)	
4. DISK STATUS	



INDICATES WESTINGHOUSE PROPRIETARY LEVELS B,C,E

D # : D081101701

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION		B. MATERIAL PROPERTIES (HUB)			C. MATERIAL PROPERTIES (RIM)		
1. BUILDING BLOCK	#1	1. TYPE		TD			
2. UNIT	BAILEY PT. #1	2. SUPPLIER:	BETHLEHEM	STEEL	1. Y.S. (KSI)		
3. CUSTOMER:	MAINE YANK	3. Y.S. (KSI)			2. U.T.S. (KSI)		
4. LP#		4. U.T.S. (KSI)			3. ELONGATION		
5. LOCATION		5. ELONGATION			4. R.A.		
6. DISC#		6. R.A.			5. FATT (DEG.F)		
7. TEST NO.	TD55544	7. FATT (DEG.F)			6. R.T. IMPACT (FT.LB.)		
		8. R.T. IMPACT (FT.LB.)			7. U.S. IMPACT TEMP. (DEG.F)		
		9. U.S. IMPACT TEMP. (DEG.F)			8. U.S. IMPACT ENG. (FT.LB.)		
		10. U.S. IMPACT ENG. (FT.LB.)			9. U.S. KIC (KSI*SQRT(IN.))		
		11. U.S. KIC (KSI*SQRT(IN.))					

D. CHEMISTRY

C	MN	SI	P	CR	MO	V
NI	AS	SB	SN	AL	CU	S

E. BORE STRESS

SPEED (RPM)	STRESS		F. CRACK DATA (KEYWAY RADIUS (IN))
1. 1800	(KSI)		1. A-CR-OP (1800 RPM) (IN.)
2. 2160 (120*)	(KSI)		2. A-CR-OS (OVERSPEED) (IN.)

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F)	
2. ESTIMATED MAX DA/DT (IN/HR)	
3. ESTIMATED MAX DA/DT (IN/MONTH)	

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.)	
2. KEYWAY CRACK DEPTH (MAX.)-(IN.)	
3. BORE CRACK DEPTH (MAX.)-(IN.)	
4. DISK STATUS	

ID # : 0081101702

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
 2. UNIT BAILEY PT. #1  
 3. CUSTOMER: MAINE YANK  
 4. LP# 2  
 5. LOCATION GOV  
 6. DISC# 1  
 7. TEST NO. TD55542

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
 (MIN. Y.S. [ ](KSI))  
 2. SUPPLIER: MIDVALE HEPPENSTALL  
 3. Y.S. (KSI) [ ]  
 4. U.T.S. (KSI) [ ]  
 5. ELONGATION [ ]  
 6. R.A. [ ]  
 7. FATT (DEG.F) [ ]  
 8. R.T. IMPACT (FT.LB.) [ ]  
 9. U.S. IMPACT TEMP. (DEG.F) [ ]  
 10. U.S. IMPACT ENG. (FT.LB.) [ ]  
 11. U.S. KIC [ ]  
 (KSI\*SQRT(IN.))

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
 2. U.T.S. (KSI) [ ]  
 3. ELONGATION [ ]  
 4. R.A. [ ]  
 5. FATT (DEG.F) [ ]  
 6. R.T. IMPACT (FT.LB.) [ ]  
 7. U.S. IMPACT TEMP. (DEG.F) [ ]  
 8. U.S. IMPACT ENG. (FT.LB.) [ ]  
 9. U.S. KIC [ ]  
 (KSI\*SQRT(IN.))

D. CHEMISTRY

C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
 NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

E. BORE STRESS

SPEED (RPM) STRESS  
 1. 1800 (KSI) [ ]  
 2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ] )

1. A-CR-0P (1800 RPM) (IN.) [ ]  
 2. A-CR-0S (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
 2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
 3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
 2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
 3. BORE CRACK DEPTH (X.)-(IN.) [ ]  
 4. DISK STATUS [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101702

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
 2. UNIT  
 3. CUSTOMER: BAILEY PT #1  
 MAINE YANK  
 4. LP# 2  
 5. LOCATION GOV  
 6. DISC# 2  
 7. TEST NO. TD65147

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
 1 MIN. Y.S. [ ] (KSI)  
 2. SUPPLIER: MIDVALE HEPPENSTALL  
 3. Y.S. (KSI) [ ]  
 4. U.T.S. (KSI) [ ]  
 5. ELONGATION [ ]  
 6. R.A. [ ]  
 7. FATT (DEG.F) [ ]  
 8. R.T. IMPACT (FT.LB.) [ ]  
 9. U.S. IMPACT TEMP. (DEG.F) [ ]  
 10. U.S. IMPACT ENG. (FT.LB.) [ ]  
 11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
 2. U.T.S. (KSI) [ ]  
 3. ELONGATION [ ]  
 4. R.A. [ ]  
 5. FATT (DEG.F) [ ]  
 6. R.T. IMPACT (FT.LB.) [ ]  
 7. U.S. IMPACT TEMP. (DEG.F) [ ]  
 8. U.S. IMPACT ENG. (FT.LB.) [ ]  
 9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

[ ] C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V  
 [ ] NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S

E. BORE STRESS

SPEED (RPM) STRESS  
 1. 1800 (KSI) [ ]  
 2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ]

1. A-CR-OP (1800 RPM) (IN.) [ ]  
 2. A-CR-OS (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
 2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
 3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
 2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
 3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
 4. DISK STATUS C [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101702

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK B1  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LP# 2  
5. LOCATION GOV  
6. DISC# 3  
7. TEST NO. TD55604

B. MATERIAL PROPERTIES (HUB)

1. TYPE TE  
(MIN. Y.S. [ ] (KSI))  
2. SUPPLIER: MIDVALE HEPPENSTALL  
3. Y.S. (KSI) [ ]  
4. U.T.S. (KSI) [ ]  
5. ELONGATION [ ]  
6. R.A. [ ]  
7. FATT (DEG.F) [ ]  
8. R.T. IMPACT (FT.LB.) [ ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

E. BORE STRESS

SPEED (RPM) STRESS  
1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ] )

1. A-CR-OP (1800 RPM) (IN.) [ ]  
2. A-CR-OS (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. MFT. TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101702

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LP# 2  
5. LOCATION GOV  
6. DISC# 4  
7. TEST NO. TD55590

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
(MIN. Y.S. [ ] (KSI))  
2. SUPPLIER MIDVALE HEPPENSTALL  
3. Y.S. (KSI) [ ]  
4. U.T.S. (KSI) [ ]  
5. ELONGATION [ ]  
6. R.A. [ ]  
7. FATT (DEG.F) [ ]  
8. R.T. IMPACT (FT.LB.) [ ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

[ ] C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
[ ] NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

E. BORE STRESS  
SPEED (RPM) STRESS

1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ] )

1. A-CR-0P (1800 RPM) (IN.) [ ]  
2. A-CR-0S (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]

C ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : 0081101702

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION		B. MATERIAL PROPERTIES (HUB)			C. MATERIAL PROPERTIES (RIM)		
1. BUILDING BLOCK	BI	1. TYPE	Y.S. [ ]	TD			
		(M. Y.S. [ ])		(KSI)			
2. UNIT	BAILEY PT. #1	2. SUPPLIER:	BETHLEHEM	STEEL	1. Y.S. (KSI)	[ ]	] ]
3. CUSTOMER:	MAINE YANK	3. Y.S. (KSI)	[ ]	] ]	2. U.T.S. (KSI)	[ ]	] ]
4. LP#	2	4. U.T.S. (KSI)	[ ]	] ]	3. ELONGATION	[ ]	] ]
5. LOCATION	GOV	5. ELONGATION	[ ]	] ]	4. R.A.	[ ]	] ]
6. DISC#	5	6. R.A.	[ ]	] ]	5. FATT (DEG.F)	[ ]	] ]
7. TEST NO.	TD55521	7. FATT (DEG.F)	[ ]	] ]	6. R.T. IMPACT (FT.LB.)	[ ]	] ]
		8. R.T. IMPACT (FT.LB.)	[ ]	] ]	7. U.S. IMPACT TEMP. (DEG.F)	[ ]	] ]
		9. U.S. IMPACT TEMP. (DEG.F)	[ ]	] ]	8. U.S. IMPACT ENG. (FT.LB.)	[ ]	] ]
		10. U.S. IMPACT ENG. (FT.LB.)	[ ]	] ]	9. U.S. KIC (KSI*SQRT(IN.))	[ ]	] ]
		11. U.S. KIC (KSI*SQRT(IN.))	[ ]	] ]			

D. CHEMISTRY

C	MN	SI	P	CR	MO	V
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
NI	AS	SB	SN	AL	CU	S
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

E. BORE STRESS		F. CRACK DATA (KEYWAY RADIUS (IN) [ ] ])	
SPEED (RPM)	STRESS	1. A-CR-OP (1800 RPM) (IN.) [ ]	2. A-CR-OS (OVERSPEED) (IN.) [ ]
1. 1800	(KSI) [ ]		
2. 2160 (120%)	(KSI) [ ]		

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F)	[ ]	] ]
2. ESTIMATED MAX DA/DT (IN/HR)	[ ]	] ]
3. ESTIMATED MAX DA/DT (IN/MONTH)	[ ]	] ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.)	[ ]	] ]
2. KEYWAY CRACK DEPTH (MAX.) (IN.)	[ ]	] ]
3. BORE CRACK DEPTH (MAX.) (IN.)	[ ]	] ]
4. DISK STATUS	[ ]	] ]

E ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101702

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT  
3. CUSTOMER: BAILEY PT. #1  
HAINE YANK  
4. LP#  
5. LOCATION 2  
DISC# 6 GOV  
7. TEST NO. TD58931

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
(MIN. Y.S. (KSI))  
2. SUPPLIER: BETHLEHEM STEEL  
3. Y.S. (KSI)  
4. U.T.S. (KSI)  
5. ELONGATION  
6. R.A.  
7. FATT (DEG.F)  
8. R.T. IMPACT (FT.LB.)  
9. U.S. IMPACT TEMP.  
(DEG.F)  
10. U.S. IMPACT ENG.  
(FT.LB.)  
11. U.S. KIC  
(KSI\*SQRT(IN.))

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI)  
2. U.T.S. (KSI)  
3. ELONGATION  
4. R.A.  
5. FATT (DEG.F)  
6. R.T. IMPACT (FT.LB.)  
7. U.S. IMPACT TEMP.  
(DEG.F)  
8. U.S. IMPACT ENG.  
(FT.LB.)  
9. U.S. KIC  
(KSI\*SQRT(IN.))

D. CHEMISTRY

C ] MN ] SI ] P ] CR ] MO ] V ]  
NI ] AS ] SB ] SN ] AL ] CU ] S ]

E. BORE STRESS  
SPEED (RPM) STRESS

1. 1800 (KSI) ]  
2. 2160 (120%) (KSI) ]

F. CRACK DATA (KEYWAY RADIUS (IN) ]

1. A-CR-0P (1800 RPM) (IN.) ]  
2. A-CR-0S (OVERSPEED) (IN.) ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) ]  
2. ESTIMATED MAX DA/DT (IN/HR) ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) ]  
4. DISK STATUS ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101704

### LP TURBINE DISC INFORMATION

#### A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YARK  
4. LPM  
5. LOCATION 1 GEN  
6. DISC# 6  
7. TEST NO. TD55529

#### B. MATERIAL PROPERTIES (HUB)

1. TYPE (MIN. Y.S. [ ] (KSI))<sup>TD</sup>  
2. SUPPLIER: BETHLEHEM STEEL  
3. Y.S. (KSI) [ ]  
4. U.T.S. (KSI) [ ]  
5. ELONGATION [ ]  
6. R.A. [ ]  
7. FATT (DEG.F) [ ]  
8. R.T. IMPACT (FT.LB.) [ ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

#### C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

#### D. CHEMISTRY

C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

#### E. BORE STRESS

SPEED (RPM) STRESS  
1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

#### F. CRACK DATA (KEYWAY RADIUS (IN) [ ])

1. A-CR-OP (1800 RPM) (IN.) [ ]  
2. A-CR-OS (OVERSPEED) (IN.) [ ]

#### G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

#### H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]



ID # : D081101704

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION		B. MATERIAL PROPERTIES (HUB)		C. MATERIAL PROPERTIES (RIM)	
1. BUILDING BLOCK	81	1. TYPE (MIN. Y.S. [ ] (KSI))	[ ]	1. Y.S. (KSI)	[ ]
2. UNIT	BAILEY PT. #1	2. SUPPLIER: BETHLEHEM STEEL	[ ]	2. U.T.S. (KSI)	[ ]
3. CUSTOMER:	MAINE YANK	3. Y.S. (KSI)	[ ]	3. ELONGATION	[ ]
4. LP#	1	4. U.T.S. (KSI)	[ ]	4. R.A.	[ ]
5. LOCATION	1 GEN	5. ELONGATION	[ ]	5. FATT (DEG.F)	[ ]
6. DISC#	5	6. R.A.	[ ]	6. R.T. IMPACT (FT.LB.)	[ ]
7. TEST NO.	TD55522	7. FATT (DEG.F)	[ ]	7. U.S. IMPACT TEMP. (DEG.F)	[ ]
		8. R.T. IMPACT (FT.LB.)	[ ]	8. U.S. IMPACT ENG. (FT.LB.)	[ ]
		9. U.S. IMPACT TEMP. (DEG.F)	[ ]	9. U.S. KIC (KSI*SQRT(IN.))	[ ]
		10. U.S. IMPACT ENG. (FT.LB.)	[ ]		
		11. U.S. KIC (KSI*SQRT(IN.))	[ ]		

D. CHEMISTRY

C	MN	SI	P	CR	MO	V
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
NI	AS	SB	SN	AL	CU	S
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

E. BORE STRESS		F. CRACK DATA (KEYWAY RADIUS (IN) [ ])	
SPEED (RPM)	STRESS (KSI) [ ]	1: A-CR-0P (1800 RPM) (IN.) [ ]	2: A-CR-0S (OVERSPEED) (IN.) [ ]
1. 1800	[ ]		
2. 2160 (120%)	[ ]		

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F)	[ ]
2. ESTIMATED MAX DA/DT (IN/HR)	[ ]
3. ESTIMATED MAX DA/DT (IN/MONTH)	[ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.)	[ ]
2. KEYWAY CRACK DEPTH (MAX.)-(IN.)	[ ]
3. BORE CRACK DEPTH (MAX.)-(IN.)	[ ]
4. DISK STATUS	[ ]

ID # : D081101704

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK B1  
 2. UNIT  
 3. CUSTOMER: BAILEY PT. #1  
 MAINE YANK  
 4. LPM 1  
 5. LOCATION GEN  
 6. DISC# 4  
 7. TEST NO. TD55593

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
 (MIN. Y.S. [ ](KSI))  
 2. SUPPLIER: MIDVALE HEPPENSTALL  
 3. Y.S. (KSI)  
 4. U.T.S. (KSI)  
 5. ELONGATION  
 6. R.A.  
 7. FATT (DEG.F)  
 8. R.T. IMPACT (FT.LB.)  
 9. U.S. IMPACT TEMP. (DEG.F)  
 10. U.S. IMPACT ENG. (FT.LB.)  
 11. U.S. KIC (KSI\*SQRT(IN.))

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
 2. U.T.S. (KSI) [ ]  
 3. ELONGATION [ ]  
 4. R.A. [ ]  
 5. FATT (DEG.F) [ ]  
 6. R.T. IMPACT (FT.LB.) [ ]  
 7. U.S. IMPACT TEMP. (DEG.F) [ ]  
 8. U.S. IMPACT ENG. (FT.LB.) [ ]  
 9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

C ] MN ] SI ] P ] CR ] MO ] V ]  
 NI ] AS ] SB ] SN ] AL ] CU ] S ]

E. BORE STRESS SPEED (RPM) STRESS

1. 1800 (KSI) [ ]  
 2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ])

1. A-CR-OP (1800 RPM) (IN.) [ ]  
 2. A-CR-OS (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
 2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
 3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
 2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
 3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
 4. DISK STATUS [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101704

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LP# 1  
5. LOCATION GEN  
6. DISC# 3  
7. TEST NO. T058975

B. MATERIAL PROPERTIES (HUB)

1. TYPE (MIN. Y.S. [ ] TD [KSI])  
2. SUPPLIER: MIDVA, E HEPPENSTALL  
3. Y.S. (KSI) [ ]  
4. U.T.S. (KSI) [ ]  
5. ELONGATION [ ]  
6. R.A. [ ]  
7. FATT (DEG.F) [ ]  
8. R.T. IMPACT (FT.LB.) [ ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

E. BORE STRESS

SPEED (RPM) STRESS  
1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ])

1. A-CR-OP (1800 RPM) (IN.) [ ]  
2. A-CR-OS (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED M/X DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092780

ID # : D081101704

### LP TURBINE DISC INFORMATION

#### A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LPM 1  
5. LOCATION 2  
6. DISC  
7. TEST NO. TD55581

#### B. MATERIAL PROPERTIES (HUB)

1. TYPE (MIN. Y.S. [ ] TO [ ] (KSI))  
2. SUPPLIER: MIDVALE HEPPESTALL  
3. Y.S. (KSI) ]  
4. U.T.S. (KSI) ]  
5. ELONGATION ]  
6. R.A. ]  
7. FATT (DEG.F) ]  
8. R.T. IMPACT (FT.LB.) ]  
9. U.S. IMPACT TEMP. (DEG.F) ]  
10. U.S. IMPACT ENG. (FT.LB.) ]  
11. U.S. KIC (KSI\*SQRT(IN.)) ]

#### C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

#### D. CHEMISTRY

C ] MN ] SI ] P ] CR ] MO ] V ]  
NI ] AS ] SB ] SN ] AL ] CU ] S ]

#### E. BORE STRESS

SPEED (RPM) STRESS  
1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

#### F. CRACK DATA (KEYWAY RADIUS (IN) [ ] )

1. A-CR-OP (1800 RPM) (IN.) [ ]  
2. A-CR-OS (OVERSPEED) (IN.) [ ]

#### G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

#### H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]

ID # : D081101704

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
 2. UNIT BAILEY PT. #1  
 3. CUSTOMER: MAINE YANK  
 4. LP#  
 5. LOCATION 1 GEN  
 6. DISC# 1  
 7. TEST NO. TD55543

B. MATERIAL PROPERTIES (HUB)

1. TYPE (MIN. Y.S. [ ] TO [ ] (KSI))  
 2. SUPPLIER: BETHLEHEM  
 3. Y.S. (KSI) [ ] [ ]  
 4. U.T.S. (KSI) [ ] [ ]  
 5. ELONGATION [ ] [ ]  
 6. R.A. [ ] [ ]  
 7. FATT (DEG.F) [ ] [ ]  
 8. R.T. IMPACT (FT.LB.) [ ] [ ]  
 9. U.S. IMPACT TEMP. (DEG.F) [ ] [ ]  
 10. U.S. IMPACT ENG. (FT.LB.) [ ] [ ]  
 11. U.S. KIC (KSI\*SQRT(IN.)) [ ] [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ] [ ]  
 2. U.T.S. (KSI) [ ] [ ]  
 3. ELONGATION [ ] [ ]  
 4. R.A. [ ] [ ]  
 5. FATT (DEG.F) [ ] [ ]  
 6. R.T. IMPACT (FT.LB.) [ ] [ ]  
 7. U.S. IMPACT TEMP. (DEG.F) [ ] [ ]  
 8. U.S. IMPACT ENG. (FT.LB.) [ ] [ ]  
 9. U.S. KIC (KSI\*SQRT(IN.)) [ ] [ ]

D. CHEMISTRY

C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
 NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

E. BORE STRESS

SPEED (RPM) STRESS  
 1. 1800 (KSI) [ ] [ ]  
 2. 2160 (120%) (KSI) [ ] [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ] [ ])

1. A-CR-OP (1800 RPM) (IN.) [ ] [ ]  
 2. A-CR-OS (OVERSPEED) (IN.) [ ] [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ] [ ]  
 2. ESTIMATED MAX DA/DT (IN/HR) [ ] [ ]  
 3. ESTIMATED MAX DA/DT (IN/MONTH) [ ] [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ] [ ]  
 2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ] [ ]  
 3. BORE CRACK DEPTH (MAX.)-(IN.) [ ] [ ]  
 4. DISK STATUS [ ] [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101703

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK R1  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: M. LINE YANK  
4. LP# 1  
5. LOCATION GOV  
6. DISC# 6  
7. TEST NO. Y055527

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
(MIN. Y.S. [ ] (KSI))  
2. SUPPLIER: BETHLEHEM STEEL  
3. Y.S. (KSI) [ ]  
4. U.T.S. (KSI) [ ]  
5. ELONGATION [ ]  
6. R.A. [ ]  
7. FATT (DEG.F) [ ]  
8. R.T. IMPACT (FT.LB.) [ ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

E. BORE STRESS  
SPEED (RPM) STRESS

1. 1800 (KSI) [ ]  
2. 2160 (120\*) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ]

1. A-CR-OP (1800 RPM) (IN.) [ ]  
2. A-CR-OS (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101703

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LP#  
5. LOCATION GOV  
6. DISC# 5  
7. TEST NO. TD35358

B. MATERIAL PROPERTIES (HUB)

1. TYPE (MIN. Y.S. [ ] (KSI)) TD  
2. SUPPLIER: MIDVALE HEPPENSTALL  
3. Y.S. (KSI) [ ]  
4. U.T.S. (KSI) [ ]  
5. ELONGATION [ ]  
6. R.A. [ ]  
7. FATT (DEG.F) [ ]  
8. R.T. IMPACT (FT.LB.) [ ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V [ ]  
NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S [ ]

E. BORE STRESS

SPEED (RPM) STRESS  
1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN.) [ ])

1. A-CR-0P (1800 RPM) (IN.) [ ]  
2. A-CR-0S (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101703

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LPM 1  
5. LOCATION GCV 4  
6. DISC 4  
7. TEST NO. TD55594

B. MATERIAL PROPERTIES (HUB)

1. TYPE TD  
(MIN. Y.S. [ (KSI) ]  
2. SUPPLIER: MIDVALE HEPPENSTALL  
3. Y.S. (KSI) ]  
4. U.T.S. (KSI) ]  
5. ELONGATION ]  
6. R.A. ]  
7. FATT (DEG.F) ]  
8. R.T. IMPACT (FT.LB.) ]  
9. U.S. IMPACT TEMP. (DEG.F) ]  
10. U.S. IMPACT ENG. (FT.LB.) ]  
11. U.S. KIC (KSI\*SQRT(IN.)) ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) ]  
2. U.T.S. (KSI) ]  
3. ELONGATION ]  
4. R.A. ]  
5. FATT (DEG.F) ]  
6. R.T. IMPACT (FT.LB.) ]  
7. U.S. IMPACT TEMP. (DEG.F) ]  
8. U.S. IMPACT ENG. (FT.LB.) ]  
9. U.S. KIC (KSI\*SQRT(IN.)) ]

D. CHEMISTRY

C MN SI P CR MO V  
E ] E ] E ] E ] E ] E ]  
NI AS SB SN AL CU S  
E ] E ] E ] E ] E ] E ]

E. BORE STRESS

SPEED (RPM) STRESS  
1. 1800 (KSI) E ]  
2. 2160 (120%) (KSI) E ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ])

1: A-CR-08 (1000 RPM) (IN.) E ]  
2: A-CR-05 (OVERSPEED) (IN.) E ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]



[ ] INDICATES WESTINGHOUSE PROPRIETARY LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101703

### LP TURBINE DISC INFORMATION

#### A. UNIT IDENTIFICATION

1. BUILDING BLOCK B1  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LPM 1  
5. LOCATION GOV  
6. DISC 3  
7. TEST NO. TD58974

#### B. MATERIAL PROPERTIES (HUB)

1. TYPE (MIN. Y.S. [ ] TE ](KSI))  
2. SUPPLIER: MIDVALE HEPPENSTALL  
3. Y.S. (KSI) [ ] ]  
4. U.T.S. (KSI) [ ] ]  
5. ELONGATION [ ] ]  
6. R.A. [ ] ]  
7. FATT (DEG.F) [ ] ]  
8. R.T. IMPACT (FT.LB.) [ ] ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ] ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ] ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ] ]

#### C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ] ]  
2. U.T.S. (KSI) [ ] ]  
3. ELONGATION [ ] ]  
4. R.A. [ ] ]  
5. FATT (DEG.F) [ ] ]  
6. R.T. IMPACT (FT.LB.) [ ] ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ] ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ] ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ] ]

#### D. CHEMISTRY

C [ ] ] MN [ ] ] SI [ ] ] P [ ] ] CR [ ] ] MO [ ] ] V [ ] ]  
NI [ ] ] AS [ ] ] SB [ ] ] SN [ ] ] AL [ ] ] CU [ ] ] S [ ] ]

#### E. BORE STRESS

SPEED (RPM) STRESS  
1. 1800 (KSI) [ ] ]  
2. 2160 (120%) (KSI) [ ] ]

#### F. CRACK DATA (KEYWAY RADIUS (IN) [ ] ]

1. A-CR-0P (1800 RPM) (IN.) [ ] ]  
2. A-CR-05 (OVERSPEED) (IN.) [ ] ]

#### G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ] ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ] ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ] ]

#### H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ] ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ] ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ] ]  
4. DISK STATUS [ ] ]

[ ] INDICATES WESTINGHOUSE PROPRIETARY  
LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101703

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK 81  
2. UNIT BAILEY PT. #1  
3. CUSTOMER: MAINE YANK  
4. LPM 1  
5. LOCATION GOV  
6. DISC# 2  
7. TEST NO. TD55578

B. MATERIAL PROPERTIES (HUB)

1. TYPE (MIN. Y.S. [ ] TO [ ] (KSI))  
2. SUPPLIER: MIDVALE HEPPESTALL  
3. Y.S. (KSI) [ ]  
4. U.T.S. (KSI) [ ]  
5. ELONGATION [ ]  
6. R.A. [ ]  
7. FATT (DEG.F) [ ]  
8. R.T. IMPACT (FT.LB.) [ ]  
9. U.S. IMPACT TEMP. (DEG.F) [ ]  
10. U.S. IMPACT ENG. (FT.LB.) [ ]  
11. U.S. KIC (KSI\*SQRT(IN.)) [ ]

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) [ ]  
2. U.T.S. (KSI) [ ]  
3. ELONGATION [ ]  
4. R.A. [ ]  
5. FATT (DEG.F) [ ]  
6. R.T. IMPACT (FT.LB.) [ ]  
7. U.S. IMPACT TEMP. (DEG.F) [ ]  
8. U.S. IMPACT ENG. (FT.LB.) [ ]  
9. U.S. KIC (KSI\*SQRT(IN.)) [ ]

D. CHEMISTRY

[ ] C [ ] MN [ ] SI [ ] P [ ] CR [ ] MO [ ] V  
[ ] NI [ ] AS [ ] SB [ ] SN [ ] AL [ ] CU [ ] S

E. BORE STRESS  
SPEED (RPM) STRESS

1. 1800 (KSI) [ ]  
2. 2160 (120%) (KSI) [ ]

F. CRACK DATA (KEYWAY RADIUS (IN) [ ] )

1. A-CR-OP (1800 RPM) (IN.) [ ]  
2. A-CR-OS (OVERSPEED) (IN.) [ ]

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) [ ]  
2. ESTIMATED MAX DA/DT (IN/HR) [ ]  
3. ESTIMATED MAX DA/DT (IN/MONTH) [ ]

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) [ ]  
2. KEYWAY CRACK DEPTH (MAX.)-(IN.) [ ]  
3. BORE CRACK DEPTH (MAX.)-(IN.) [ ]  
4. DISK STATUS [ ]

E 3 INDICATES WESTINGHOUSE PROPRIETARY LEVELS B,C,E

DATE OF REPORT : 092280

ID # : D081101703

LP TURBINE DISC INFORMATION

A. UNIT IDENTIFICATION

1. BUILDING BLOCK RI  
 2. UNIT BAILEY PT. #1  
 3. CUSTOMER: MAINE YANK  
 4. LPM I  
 5. LOCATION GOV  
 6. DISC# I  
 7. TEST NO. TD55541

B. MATERIAL PROPERTIES (HUB)

1. TYPE (MIN. Y.S. (KSI)) TD  
 2. SUPPLIER: BETHLEHEM STEEL  
 3. Y.S. (KSI) C  
 4. U.T.S. (KSI) J  
 5. ELONGATION C  
 6. R.A. J  
 7. FATT (DEG.F) C  
 8. R.T. IMPACT (FT.LB.) J  
 9. U.S. IMPACT TEMP. (DEG.F) C  
 10. U.S. IMPACT ENG. (FT.LB.) J  
 11. U.S. KIC (KSI\*SQRT(IN.)) C

C. MATERIAL PROPERTIES (RIM)

1. Y.S. (KSI) C  
 2. U.T.S. (KSI) J  
 3. ELONGATION C  
 4. R.A. J  
 5. FATT (DEG.F) C  
 6. R.T. IMPACT (FT.LB.) J  
 7. U.S. IMPACT TEMP. (DEG.F) C  
 8. U.S. IMPACT ENG. (FT.LB.) J  
 9. U.S. KIC (KSI\*SQRT(IN.)) C

D. CHEMISTRY

C MN SI P CR MO V  
 NI AS SB SN AL CU S

E. BORE STRESS

SPEED (RPM) STRESS

1. 1800 (KSI) C  
 2. 2160 (120%) (KSI) C

F. CRACK DATA (KEYWAY RADIUS (IN) C

1. A-CR-0P (1800 RPM) (IN.) E  
 2. A-CR-0S (OVERSPEED) (IN.) E

G. SERVICE DATA

1. OPER. TEMP. METAL TEMP. HUB (DEG.F) C  
 2. ESTIMATED MAX DA/DT (IN/HR) C  
 3. ESTIMATED MAX DA/DT (IN/MONTH) C

H. INSPECTION STATUS

1. OPERATING TIME AT INSPECTION (HR.) C  
 2. KEYWAY CRACK DEPTH (MAX.)-(IN.) J  
 3. BORE CRACK DEPTH (MAX.)-(IN.) J  
 4. DISK STATUS C