

NEW CRANKSHAFT  
S/N 695  
P.O. # 310552-30

Cyl #	DATA	Location	NDE method + Initials			
			Yoke	Coil EH	UT AI	LP
Cyl #1	1	main Gen Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	2	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	3	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	4	main Gov Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
Cyl #2	1	main Gen Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	2	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	3	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	4	main Gov Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
Cyl #3	1	main Gen Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	2	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	3	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	4	main Gov Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
Cyl #4	1	main Gen Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	2	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	3	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	4	main Gov Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
Cyl #5	1	main Gen Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	2	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	3	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	4	main Gov Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
Cyl #6	1	main Gen Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	2	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
	3	C.R. Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input checked="" type="checkbox"/> LP EH
	4	main Gov Journ	<input checked="" type="checkbox"/> Yoke <i>PP</i>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AI	<input type="checkbox"/> LP
			<input checked="" type="checkbox"/> No Indications			

Indications to be followed up by L.P.

NEW CRANKSHAFT  
S/N 6A5  
P.O. #310552-30

L #	A r e #	Location	N D I Method - Initials			
			Yoke	Coil EH	UT AF	LP
yl #7	1	main Gen Journ	<input checked="" type="checkbox"/> Yoke <u>LF</u>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AF	<input type="checkbox"/> LP
	2	C.R. Journ	<input checked="" type="checkbox"/> Yoke <u>LF</u>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AF	<input type="checkbox"/> LP
	3	C.R. Journ	<input checked="" type="checkbox"/> Yoke <u>LF</u>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AF	<input type="checkbox"/> LP
	4	main Gen Journ	<input checked="" type="checkbox"/> Yoke <u>LF</u>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AF	<input type="checkbox"/> LP
yl #8	1	main Gen Journ	<input checked="" type="checkbox"/> Yoke <u>LF</u>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AF	<input type="checkbox"/> LP
	2	C.R. Journ	<input checked="" type="checkbox"/> Yoke <u>LF</u>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AF	<input checked="" type="checkbox"/> LP EH
	3	C.R. Journ	<input checked="" type="checkbox"/> Yoke <u>LF</u>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AF	<input checked="" type="checkbox"/> LP EH
	4	main Gen Journ	<input checked="" type="checkbox"/> Yoke <u>LF</u>	<input checked="" type="checkbox"/> Coil EH	<input checked="" type="checkbox"/> UT AF	<input type="checkbox"/> LP



## ULTRASONIC EXAMINATION REPORT

A. MATERIAL		TYPE <u>C/S</u>	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> FORGED WORKED
		GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>
CROSS SECTION THICKNESS	MAX <u>28 INCH</u>	MIN <u>4 1/2 INCH</u>	SURFACE CONDITION	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND	<input type="checkbox"/> OTHER
				<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER	

B. TUE Procedure No. <u>8.6-2</u>	MWR/RK NO. <u>310552-30</u>	SHIPMENT TO S/N <u>211192</u>
		DATE NO. <u>112</u>

TRANSDUCER	INSTRUMENT	CALIBRATION STANDARD
TYPE <u>LONGITUDINAL</u>	MAKE <u>KRAUTKHAUER</u>	<u>CRANKSHAFT</u>
SIZE <u>75"</u>	MODEL <u>USL-38</u>	
FREQ. <u>2.25 MHZ</u>		
BEAM ANGLE <u>0°</u>		
OTHER	COUPLANT <u>ULTRAGEL II</u> <u>BATCH # 8330</u>	

REMARKS: (SKETCH INSPECTION AREA AND INDICATE RELEVANT INDICATIONS)

SEE ATTACHED SKETCHES

ASSAYED BY - Dennis D. Dulaney Level I 10-24-83

## C. EVALUATION

REPORT BELOW THOSE INDICATIONS OBSERVED AND THE PERTINENT INFORMATION REQUIRED. WHERE ADDITIONAL SPACE IS REQUIRED USE OTHER SIDE.

LOCATION	SIZE (INCHES)	DESCRIPTION	ACTION (ACCEPT, REWORK, REJECT, AND COMMENT AS NECESSARY)
1 WEB	N/A	NONE	ACCEPT
2 MAIN JOURNAL	N/A	GEOMETRIC	ACCEPT
3 CRANK PIN	N/A	GEOMETRIC	ACCEPT
4 CRANK PIN	N/A	GEOMETRIC	ACCEPT
5 MAIN JOURNAL	N/A	GEOMETRIC	ACCEPT
6 MAIN JOURNAL	N/A	GEOMETRIC	ACCEPT
7 CRANK PIN	N/A	GEOMETRIC	ACCEPT
8 CRANK PIN	N/A	GEOMETRIC	ACCEPT
9 CRANK PIN	N/A	GEOMETRIC	ACCEPT
10 CRANK PIN	N/A	GEOMETRIC	ACCEPT
11 CRANK PIN	N/A	GEOMETRIC	ACCEPT
12 CRANK PIN	N/A	GEOMETRIC	ACCEPT
13 CRANK PIN	N/A	GEOMETRIC	ACCEPT
14 CRANK PIN	N/A	GEOMETRIC	ACCEPT
15 CRANK PIN	N/A	GEOMETRIC	ACCEPT
16 CRANK PIN	N/A	GEOMETRIC	ACCEPT
17 CRANK PIN	N/A	GEOMETRIC	ACCEPT
18 CRANK PIN	N/A	GEOMETRIC	ACCEPT
19 CRANK PIN	N/A	GEOMETRIC	ACCEPT
20 CRANK PIN	N/A	GEOMETRIC	ACCEPT
21 CRANK PIN	N/A	GEOMETRIC	ACCEPT
22 CRANK PIN	N/A	GEOMETRIC	ACCEPT
23 CRANK PIN	N/A	GEOMETRIC	ACCEPT
24 CRANK PIN	N/A	GEOMETRIC	ACCEPT
25 CRANK PIN	N/A	GEOMETRIC	ACCEPT
26 CRANK PIN	N/A	GEOMETRIC	ACCEPT
27 CRANK PIN	N/A	GEOMETRIC	ACCEPT
28 CRANK PIN	N/A	GEOMETRIC	ACCEPT
29 CRANK PIN	N/A	GEOMETRIC	ACCEPT
30 CRANK PIN	N/A	GEOMETRIC	ACCEPT
31 CRANK PIN	N/A	GEOMETRIC	ACCEPT
32 CRANK PIN	N/A	GEOMETRIC	ACCEPT
33 CRANK PIN	N/A	GEOMETRIC	ACCEPT
34 CRANK PIN	N/A	GEOMETRIC	ACCEPT
35 CRANK PIN	N/A	GEOMETRIC	ACCEPT
36 CRANK PIN	N/A	GEOMETRIC	ACCEPT
37 CRANK PIN	N/A	GEOMETRIC	ACCEPT
38 CRANK PIN	N/A	GEOMETRIC	ACCEPT
39 CRANK PIN	N/A	GEOMETRIC	ACCEPT
40 CRANK PIN	N/A	GEOMETRIC	ACCEPT
41 CRANK PIN	N/A	GEOMETRIC	ACCEPT
42 CRANK PIN	N/A	GEOMETRIC	ACCEPT
43 CRANK PIN	N/A	GEOMETRIC	ACCEPT
44 CRANK PIN	N/A	GEOMETRIC	ACCEPT
45 CRANK PIN	N/A	GEOMETRIC	ACCEPT
46 CRANK PIN	N/A	GEOMETRIC	ACCEPT
47 CRANK PIN	N/A	GEOMETRIC	ACCEPT
48 CRANK PIN	N/A	GEOMETRIC	ACCEPT
49 CRANK PIN	N/A	GEOMETRIC	ACCEPT
50 CRANK PIN	N/A	GEOMETRIC	ACCEPT
51 CRANK PIN	N/A	GEOMETRIC	ACCEPT
52 CRANK PIN	N/A	GEOMETRIC	ACCEPT
53 CRANK PIN	N/A	GEOMETRIC	ACCEPT
54 CRANK PIN	N/A	GEOMETRIC	ACCEPT
55 CRANK PIN	N/A	GEOMETRIC	ACCEPT
56 CRANK PIN	N/A	GEOMETRIC	ACCEPT
57 CRANK PIN	N/A	GEOMETRIC	ACCEPT
58 CRANK PIN	N/A	GEOMETRIC	ACCEPT
59 CRANK PIN	N/A	GEOMETRIC	ACCEPT
60 CRANK PIN	N/A	GEOMETRIC	ACCEPT
61 CRANK PIN	N/A	GEOMETRIC	ACCEPT
62 CRANK PIN	N/A	GEOMETRIC	ACCEPT
63 CRANK PIN	N/A	GEOMETRIC	ACCEPT
64 CRANK PIN	N/A	GEOMETRIC	ACCEPT
65 CRANK PIN	N/A	GEOMETRIC	ACCEPT
66 CRANK PIN	N/A	GEOMETRIC	ACCEPT
67 CRANK PIN	N/A	GEOMETRIC	ACCEPT
68 CRANK PIN	N/A	GEOMETRIC	ACCEPT
69 CRANK PIN	N/A	GEOMETRIC	ACCEPT
70 CRANK PIN	N/A	GEOMETRIC	ACCEPT
71 CRANK PIN	N/A	GEOMETRIC	ACCEPT
72 CRANK PIN	N/A	GEOMETRIC	ACCEPT
73 CRANK PIN	N/A	GEOMETRIC	ACCEPT
74 CRANK PIN	N/A	GEOMETRIC	ACCEPT
75 CRANK PIN	N/A	GEOMETRIC	ACCEPT
76 CRANK PIN	N/A	GEOMETRIC	ACCEPT
77 CRANK PIN	N/A	GEOMETRIC	ACCEPT
78 CRANK PIN	N/A	GEOMETRIC	ACCEPT
79 CRANK PIN	N/A	GEOMETRIC	ACCEPT
80 CRANK PIN	N/A	GEOMETRIC	ACCEPT
81 CRANK PIN	N/A	GEOMETRIC	ACCEPT
82 CRANK PIN	N/A	GEOMETRIC	ACCEPT
83 CRANK PIN	N/A	GEOMETRIC	ACCEPT
84 CRANK PIN	N/A	GEOMETRIC	ACCEPT
85 CRANK PIN	N/A	GEOMETRIC	ACCEPT
86 CRANK PIN	N/A	GEOMETRIC	ACCEPT
87 CRANK PIN	N/A	GEOMETRIC	ACCEPT
88 CRANK PIN	N/A	GEOMETRIC	ACCEPT
89 CRANK PIN	N/A	GEOMETRIC	ACCEPT
90 CRANK PIN	N/A	GEOMETRIC	ACCEPT
91 CRANK PIN	N/A	GEOMETRIC	ACCEPT
92 CRANK PIN	N/A	GEOMETRIC	ACCEPT
93 CRANK PIN	N/A	GEOMETRIC	ACCEPT
94 CRANK PIN	N/A	GEOMETRIC	ACCEPT
95 CRANK PIN	N/A	GEOMETRIC	ACCEPT
96 CRANK PIN	N/A	GEOMETRIC	ACCEPT
97 CRANK PIN	N/A	GEOMETRIC	ACCEPT
98 CRANK PIN	N/A	GEOMETRIC	ACCEPT
99 CRANK PIN	N/A	GEOMETRIC	ACCEPT
100 CRANK PIN	N/A	GEOMETRIC	ACCEPT

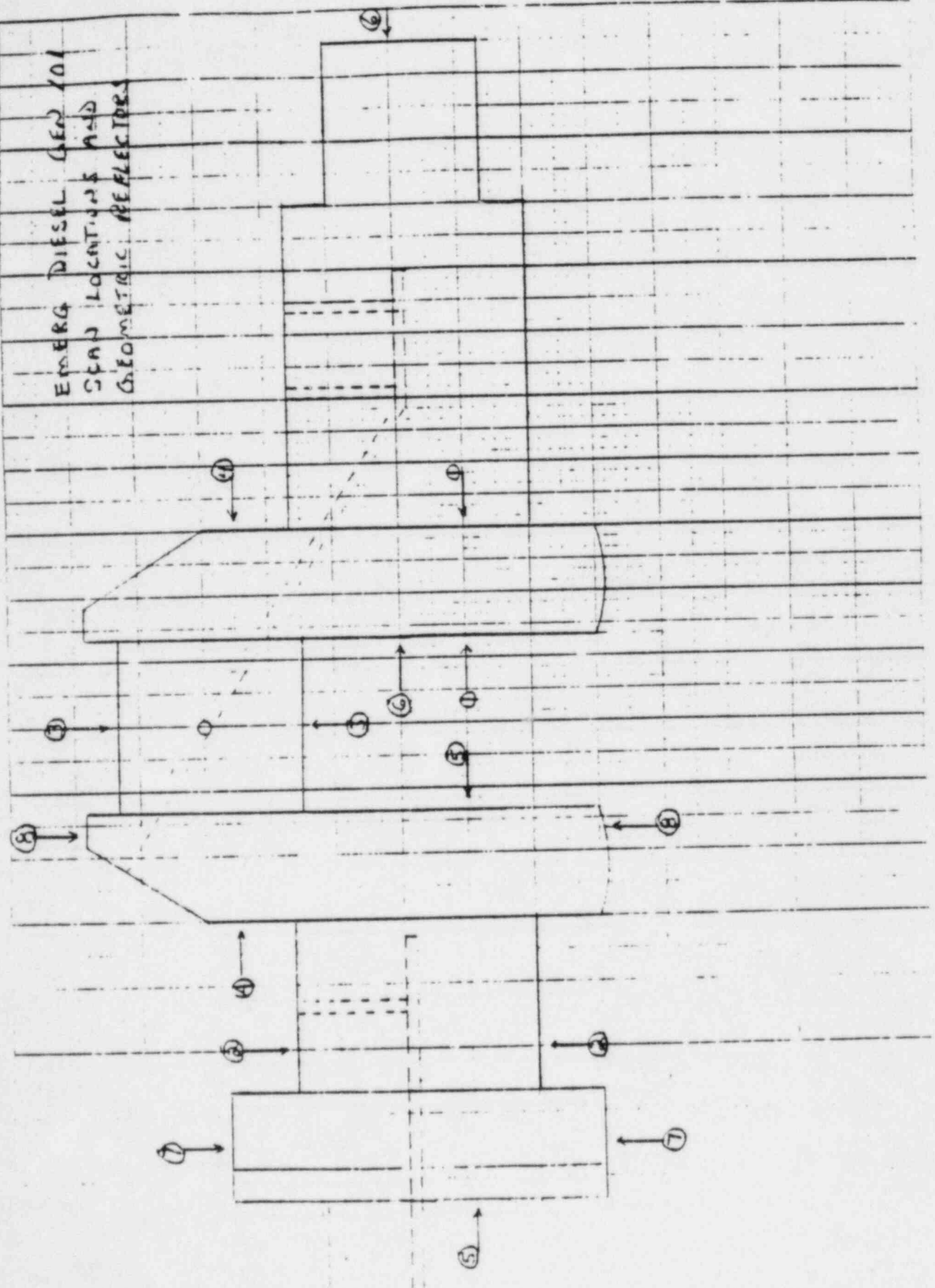
TEST

COMPONENT I.D. 3N 695  
 EDC 101 NEW CRANKSHAFT  
 SYSTEM  
 1-RH34

PLANT/LOCATION  
 SAMS / 70-63-A1C

46 0940

EMERG DIESEL GEN 101  
STAN LOCATIONS AND  
GEOMETRIC REFLECTORS





ULTRASONIC EXAMINATION REPORT  
CALIBRATION DATA SHEET

A. MATERIAL		TYPE	C/S	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> FORGED WORKED
		GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: CRANK SHAFT	
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION		<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND	
	2.8 INCH	4 1/2 INCH			<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER	

B. NDE Procedure No. 8.6-2      PO      Equipment ID S/N: 112  
No. 310552-30      DATE NO. 112

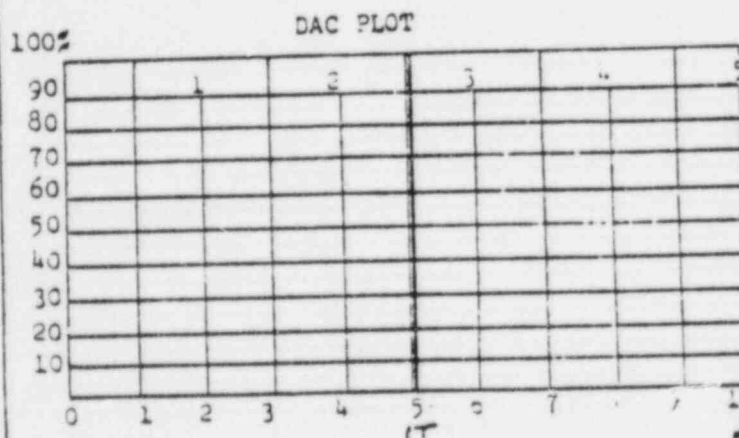
CALIBRATION BLOCK(s) CRANK SHAFT  
BLOCK TEMP. 71 °F  
COMPONENT TEMP. 71 °F

CRT CALIBRATED IN 2T

CALIBRATION CHECKS	TIME
INITIAL CAL.	1940
VERIFICATION	2004
VERIFICATION	2035
VERIFICATION	2105
VERIFICATION	2130
FINAL CAL.	2200

SCAN AREA	
0° WRV	N/A
0° Mat'l	
To Weld	N/A
⊥ To Weld	N/A
Calibration	
Axial	N/A
Circ	N/A

INSTRUMENT SETTINGS	
Mfg/Model No.:	<u>REAR TRAINED</u>
Serial No.:	<u>211182</u>
Sweep Length:	<u>8.92</u>
Sweep Delay:	<u>7.22</u>
Pulse Length/Damping:	<u>MIN</u>
Freq.:	<u>2.5</u> Rep. Rate: <u>N/A</u>
Filter:	<u>N/A</u> Video: <u>N/A</u> Jack: <u>T</u>
DEC/Gate Switch:	<u>OFF</u> Range: <u>25</u>
Mode Select:	<u>SMALL</u> Reject: <u>OFF</u>
Gain (coarse):	<u>0</u> (fine): <u>26</u>
Scan Sensitivity	<u>26</u>



SEARCH UNIT	
Scan Angle:	<u>0°</u> Mode: <u>LOW</u>
Fixturing (if any):	<u>N/A</u>
Style or Type No.:	<u>GAMMA-HA</u>
Size & Shape:	<u>75° ROUND</u>
Frequency:	<u>2.25 MHz</u>
Serial No/Brand:	<u>AEROTECH CO 9273</u>
Measured Angle:	<u>N/A</u>
Cable Type & Length:	<u>126' BNC TR 800</u>
Couplant Brand:	<u>ULTRAGEL II</u>
Couplant Batch:	<u>8330</u>

C. EVALUATION	EVALUATION REPORT REQ'D	EXAMINATION WELD/AREA	RECORDABLE INDICATIONS			ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)
			YES	NO	GEOM	
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	LOCATION ①	<u>N/A</u>	<input checked="" type="checkbox"/>	<u>N/A</u>	ACCEPT
J. ACCEPTANCE CRITERIA		NDE 8.6-2 PARA. 7.0 & 8.0				
E. ATTEST		<u>10-24-83</u>				

COMPONENT I.D. CRANK SHAFT  
SYSTEM 1843A  
PLANT/LOCATION SMS / TA-63-NF





# ULTRASONIC EXAMINATION REPORT CALIBRATION DATA SHEET

A. MATERIAL		TYPE	C/S	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> <sup>Forged</sup> WORKED
		GEOMETRY		<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION		<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND	
	28 INCH	4 1/2 INCH			<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER	
B. NDE Procedure No. <u>8.6-2</u>		Equipment ID S/N		Equipment No. <u>112</u>			
		No. <u>310552-30</u>					

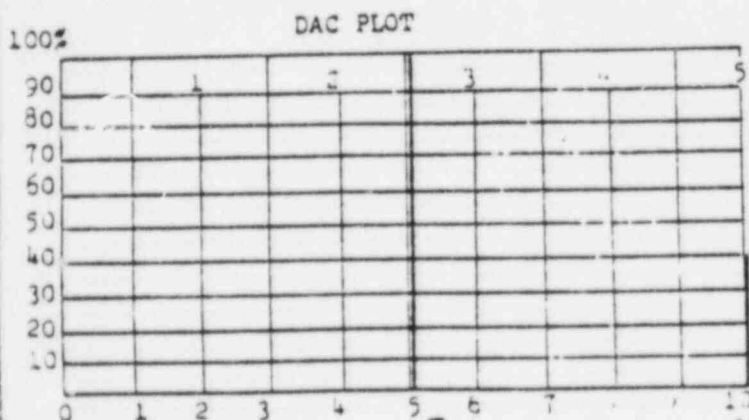
CALIBRATION BLOCK(s) CRANK SHAFT  
 BLOCK TEMP. 71 °F  
 COMPONENT TEMP. 71 °F

CRT CALIBRATED IN 2T

CALIBRATION CHECKS	TIME
INITIAL CAL.	2206
VERIFICATION	2235
VERIFICATION	NO EXAMS
	2315
VERIFICATION	2340
FINAL CAL.	2353

SCAN AREA	
0° WRV	N/A
0° Mat'l	
11 To Weld	N/A
1 To Weld	N/A
Calibration	
Axial	N/A
Circ	N/A

INSTRUMENT SETTINGS
Mfg/Model No.: <u>REDACTED</u>
Serial No.: <u>211182</u>
Sweep Length: <u>7.78</u>
Sweep Delay: <u>8.12</u>
Pulse Length/Damping: <u>min</u>
Freq.: <u>2.5</u> Rep. Rate: <u>N/A</u>
Filter: <u>N/A</u> Video: <u>N/A</u> Jack: <u>T</u>
DEC/Gate Switch: <u>OFF</u> Range: <u>10</u>
Mode Select: <u>SWEEP</u> Reject: <u>OFF</u>
Gain (coarse): <u>20</u> (fine): <u>16</u>
Scan Sensitivity <u>36</u>



SEARCH UNIT
Scan Angle: <u>0°</u> Mode: <u>Long</u>
Fixturing (if any): <u>N/A</u>
Style or Type No.: <u>GAMMA-HP</u>
Size & Shape: <u>.75" Round</u>
Frequency: <u>2.25 MHz</u>
Serial No/Brand: <u>AEROTECH CQ9273</u>
Measured Angle: <u>N/A</u>
Cable Type & Length: <u>126' GNC to GNC</u>
Couplant Brand: <u>ULTRAGEL II</u>
Couplant Batch: <u>8330</u>

C. EVALUATION		EXAMINATION		RECORDABLE INDICATIONS		ACTION	
EVALUATION REPORT REQ'D		VELD/AREA				(ACCEPT/REJECT, AND COMMENT AS NECESSARY)	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<u>LOCATION 5</u>		YES	NO	GEOM	
		<u>MAIN BEARING CIRCUMFERENTIAL</u>		N/A	N/A	<input checked="" type="checkbox"/>	<u>SEE ATTACHED SKETCH</u>
DATE <u>8.6-2</u>		PAGE <u>7.0 &amp; 8.0</u>		SIGNATURE <u>[Signature]</u>		DATE <u>10-24-83</u>	
TEST		<u>[Signature]</u>		II		<u>10-24-83</u>	

COMPONENT I.D.

SYSTEM

PLANT/LOCATION

SUPS / T8-63 NE



ULTRASONIC EXAMINATION REPORT  
CALIBRATION DATA SHEET

C-38-7

A. MATERIAL		TYPE	C/S	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> FORGED WORKED
		GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: CRACK SHAFT	
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND		
	28 INCH	4 1/2 INCH		<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER		

UT  
COMPONENT I.D.  
E06 101  
NEW CRACK SHAFT

B. NDE Procedure No. 8.6-2	Manufacturer PO No. 310552-30	Equipment ID S/N: 112
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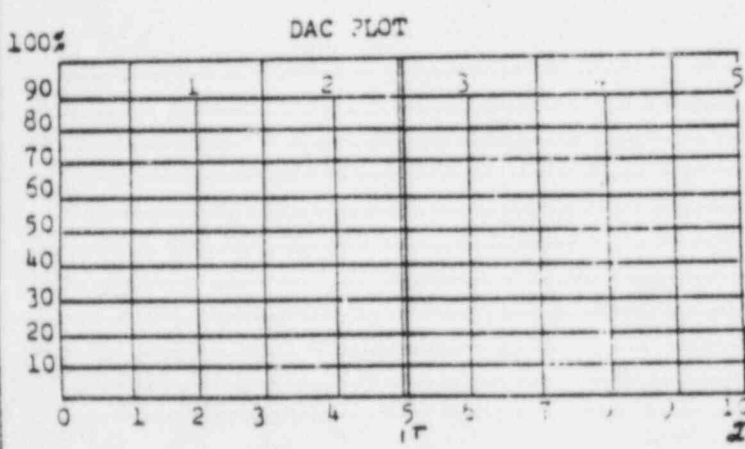
CALIBRATION BLOCK(s) CRACK SHAFT  
BLOCK TEMP. 71 °F  
COMPONENT TEMP. 71 °F

INSTRUMENT SETTINGS	
Mfg/Model No.:	KEATHRAMEZ USL 30
Serial No.:	211182
Sweep Length:	7.43
Sweep Delay:	7.95
Pulse Length/Damping:	m N
Freq.:	2.5 Rep. Rate: N/A
Filter:	N/A Video: N/A Jack: T
DEC/Gate Switch:	FF Range: 10
Mode Select:	Single Reject: 0.5
Gain (coarse):	20 (fine): 18
Scan Sensitivity:	38

CRT CALIBRATED IN 2T

CALIBRATION CHECKS	TIME
INITIAL CAL.	2358
VERIFICATION	N/A
VERIFICATION	N/A
VERIFICATION	N/A
FINAL CAL.	0020

SCAN AREA	
0° WRV	N/A
0° Mat'l	X
11 To Weld	N/A
1 To Weld	N/A
Calibration	
Axial	N/A
Circ	N/A



SEARCH UNIT	
Scan Angle:	0° Mode: Lw/Lh
Fixturing (if any):	N/A
Style or Type No.:	Gamma-HA
Size & Shape:	.75" Round
Frequency:	2.25 MHz
Serial No/Brand:	AEROTECH C-9273
Measured Angle:	N/A
Cable Type & Length:	140' AWT 0.8m
Couplant Brand:	ULTRAGEL II
Couplant Batch:	8370

SYSTEM  
1 R43 A  
PLANT/LOCATION  
S005 / T8-63-NF

C. EVALUATION		EXAMINATION WELD/AREA <u>LOCATION ③</u> <u>CRACK P.2</u> <u>Circumferential</u>	RECORDABLE INDICATIONS		ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY) <u>ACCEPT / SEE ATTACHED SKETCH</u>
EVALUATION REPORT REQ'D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		YES	NO	
		<u>N/A</u>	<u>N/A</u>	<input checked="" type="checkbox"/> GEOM	
UT NDE RANGE DATA		Operator <u>[Signature]</u> Date <u>10-25-83</u>			
NDE 8.6-1 PARA 7.0.9					
E. EST	<u>[Signature]</u>	10-25-83			



ULTRASONIC EXAMINATION REPORT  
CALIBRATION DATA SHEET

A. MATERIAL		TYPE	C/S	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> <sup>FORMED</sup> WORKED
		GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: CRANK SHAFT	
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND		
	28 INCH	4 1/2 INCH		<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER		
B. NDE Procedure No. 8.6-2		PO No. 312552-30		Equipment ID S/H DATE NO. 112			

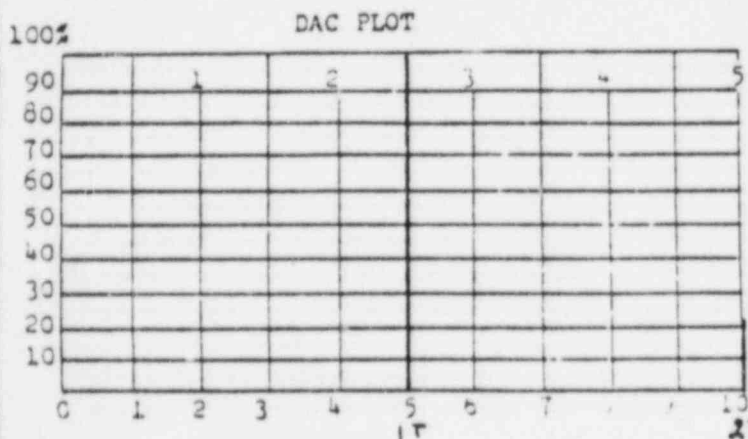
CALIBRATION BLOCK(s) CRANK SHAFT  
BLOCK TEMP. 71 °F  
COMPONENT TEMP. 71 °F

CRT CALIBRATED IN 2T

CALIBRATION CHECKS	TIME
INITIAL CAL.	0027
VERIFICATION	N/A
VERIFICATION	N/A
VERIFICATION	N/A
FINAL CAL.	0056

SCAN AREA	
0° WRV	N/A
0° Mat'l	<input checked="" type="checkbox"/>
To Weld	N/A
⊥ To Weld	N/A
Calibration	
Axial	N/A
Circ	N/A

INSTRUMENT SETTINGS	
Mfg/Model No.:	KRAUTKRAMER 38
Serial No.:	211182
Sweep Length:	8.80
Sweep Delay:	8.68
Pulse Length/Damping:	m.n
Freq.:	2.5 Rep. Rate: N/A
Filter:	N/A Video: N/A Jack: T
DEC/Gate Switch:	0 F Range: 10
Mode Select:	<sup>SINGLE</sup> DAM Reject: 0 F
Gain (coarse):	20 (fine): 4
Scan Sensitivity	24



SEARCH UNIT	
Scan Angle:	0° Mode: Low
Fixturing (if any):	N/A
Style or Type No.:	GAMMA-H2
Size & Shape:	.75 Round
Frequency:	2.25 MHz
Serial No/Brand:	AFROTECH C09273
Measured Angle:	N/A
Cable Type & Length:	1' 1/2' BNC to BNC
Couplant Brand:	ULTRAGEL II
Couplant Batch:	8330

C. EVALUATION		EXAMINATION WELD/AREA <u>LOCATION ④</u> <u>THROUGH END OF CRANK PIN</u>	RECORDABLE INDICATIONS			ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)  <u>ACCEPT / SEE ATTACHED SKETCH</u>
EVALUATION REPORT REQ'D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		YES	NO	GEOM	
J. EPTANCE (TERMS)		NDE 8.6-2 PART 7.0 & 8.0		INSPECTOR <u>[Signature]</u> DATE <u>12-25-83</u>		
K. TEST		<u>[Signature]</u>		II <u>12-25-83</u>		

COMPONENT I.D.  
ECC 101 NEW CRANK SHAFT  
SRT 1  
1-R434  
PLANT/LOCATION  
SNPS/78-62-NE





ULTRASONIC EXAMINATION REPORT  
CALIBRATION DATA SHEET

A. MATERIAL	TYPE	C/S	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> FORGED WORKED
	GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>	
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND	
	2 1/2" INCH	4 1/2" INCH		<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER	

U. NDE Procedure No. <u>8.6-2</u>	Equipment ID S/N <u>112</u>
NO. <u>312552-30</u>	NOTE NO. <u>112</u>

CALIBRATION BLOCK(s) CRANK SHAFT

BLOCK TEMP. 71 °F

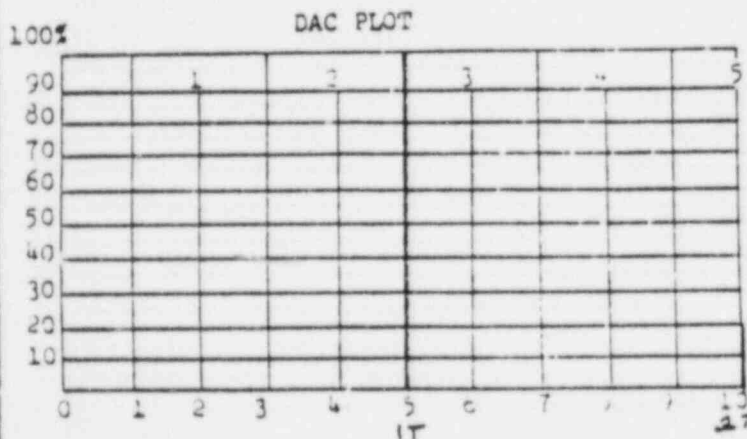
COMPONENT TEMP. 71 °F

CRT CALIBRATED IN 2T

CALIBRATION CHECKS	TIME
INITIAL CAL.	0102
VERIFICATION	N/A
VERIFICATION	N/A
VERIFICATION	N/A
FINAL CAL.	0118

SCAN AREA	
0° WRV	N/A
0° Mat'l	X
To Weld	N/A
⊥ To Weld	N/A
Calibration	
Axial	N/A
Circ	N/A

INSTRUMENT SETTINGS	
Mfg/Model No.:	KRM-KRMER
Serial No.:	21182
Sweep Length:	8.76
Sweep Delay:	8.54
Pulse Length/Damping:	M.N
Freq.:	2.5
Rep. Rate:	N/A
Filter:	N/A
Video:	N/A
Jack:	T
DEC/Gate Switch:	OFF
Range:	10
Mode Select:	2.5 MHz
Reject:	OFF
Gain (coarse):	20
(fine):	12
Scan Sensitivity	32



SEARCH UNIT	
Scan Angle:	0°
Mode:	Long
Fixturing (if any):	N/A
Style or Type No.:	Gamm-HP
Size & Shape:	.75" Rev. 24
Frequency:	2.25 MHz
Serial No/Brand:	AEROTECH Co 9273
Measured Angle:	N/A
Cable Type & Length:	1 x 6' BNC 75Ω
Couplant Brand:	ULTRAGEL II
Couplant Batch:	8370

C. EVALUATION	EVALUATION REPORT REQ'D	EXAMINATION WELD/AREA	RECORDABLE INDICATIONS			ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)
			YES	NO	GEOM	
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	LOCATED ② THROUGH END OF MAIN BRIDGINS	N/A	N/A	X	ACCEPT SEE ATTACHED SKETCH
STANDARD		NDE 8.6-2	10-25-83			
PANEL 7.6 & 8.0						
E. EST	10-25-83					

COMPONENT I.D. CRANK SHAFT

SYSTEM 1-R43

PLANT/LOCATION SMS / T8-63-2E



# ULTRASONIC EXAMINATION REPORT CALIBRATION DATA SHEET

A. MATERIAL		TYPE	C/S	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> <sup>FORGED</sup> WORKED
		GEOMETRY		<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION		<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND	
	2.8 INCH	4 1/2 INCH			<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER	

3. NDE Procedure No. 8.6-2      PO      Equipment ID S/N 112  
 No. 312552-30      DATE No. 112

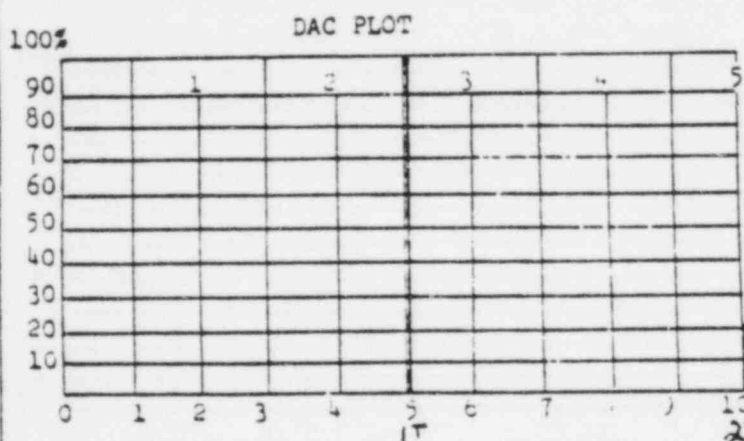
CALIBRATION BLOCK(s) CRANK SHAFT  
 BLOCK TEMP. 71 °F  
 COMPONENT TEMP. 71 °F

CRT CALIBRATED IN 2T

CALIBRATION CHECKS	TIME
INITIAL CAL.	0121
VERIFICATION	N/A
VERIFICATION	N/A
VERIFICATION	N/A
FINAL CAL.	0128

SCAN AREA	
0° WRV	N/A
0° Mat'l	<input checked="" type="checkbox"/>
To Weld	N/A
⊥ To Weld	N/A
Calibration	
Axial	N/A
Circ	N/A

INSTRUMENT SETTINGS	
Mfg/Model No.:	<u>KEWTECH</u>
Serial No.:	<u>211182</u>
Sweep Length:	<u>3.33</u>
Sweep Delay:	<u>8.64</u>
Pulse Length/Damping:	<u>min</u>
Freq.:	<u>2.5</u> Rep. Rate: <u>N/A</u>
Filter:	<u>N/A</u> Video: <u>N/A</u> Jack: <u>T</u>
DEC/Gate Switch:	<u>°F</u> Range: <u>50</u>
Mode Select:	<u>SWEEP</u> Reject: <u>°F</u>
Gain (coarse):	<u>20</u> (fine): <u>20</u>
Scan Sensitivity	<u>40</u>



SEARCH UNIT	
Scan Angle:	<u>0°</u> Mode: <u>LOCK</u>
Fixturing (if any):	<u>N/A</u>
Style or Type No.:	<u>Gamma-H</u>
Size & Shape:	<u>.75 Round</u>
Frequency:	<u>2.25 MHz</u>
Serial No/Brand:	<u>AFRORCH 009273</u>
Measured Angle:	<u>N/A</u>
Cable Type & Length:	<u>1 x 6' BNC</u>
Couplant Brand:	<u>ULTRAGEL II</u>
Couplant Batch:	<u>8330</u>

C. EVALUATION		EXAMINATION WELD/AREA		RECORDABLE INDICATIONS		ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)	
EVALUATION REPORT REQ'D		LOCATION (6)		YES	NO	GEOM	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		THROUGH MAIN BEARING TO END OF SHAFT		N/A	N/A	<input checked="" type="checkbox"/>	ACCEPT / SEE ATTACHED SKETCH

U. DEPTANCE 8.6-2      PARA 7058.0      10-25-83  
 TEST 10-25-83

COMPONENT I.D.  
 EDG 101 NEW CRANK SHAFT

SYSTEM  
 1843A

PLANT/LOCATION  
 SNOS / 713-63-NF



ULTRASONIC EXAMINATION REPORT  
CALIBRATION DATA SHEET

A. MATERIAL		TYPE <u>C/S</u>	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> <sup>FORGED</sup> WORKED
		GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND	
	<u>28 INCH</u>	<u>4 1/2 INCH</u>		<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER	
B. NDE Procedure No. <u>8.6-2</u>		MNR/MT <u>Po</u> No. <u>310.552-30</u>		Equipment ID S/N DATE No. <u>112</u>		

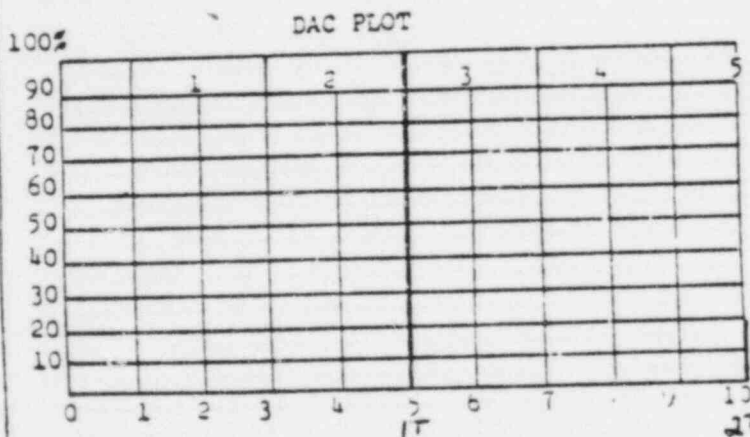
CALIBRATION BLOCK(s) CRANK SHAFT  
BLOCK TEMP. 71 °F  
COMPONENT TEMP. 71 °F

CRT CALIBRATED IN 2T

CALIBRATION CHECKS	TIME
INITIAL CAL.	0202
VERIFICATION	N/A
VERIFICATION	N/A
VERIFICATION	N/A
FINAL CAL.	0221

SCAN AREA	
0° WRV	N/A
0° Mat'l	<input checked="" type="checkbox"/>
11 To Weld	N/A
1 To Weld	N/A
Calibration	
Axial	N/A
Circ	N/A

INSTRUMENT SETTINGS	
Mfg/Model No.:	<u>KRAUTKRAMER 45L 3B</u>
Serial No.:	<u>211182</u>
Sweep Length:	<u>9.37</u>
Sweep Delay:	<u>9.34</u>
Pulse Length/Damping:	<u>m.s</u>
Freq.:	<u>2.5</u> Rep. Rate: <u>N/A</u>
Filter:	<u>N/A</u> Video: <u>N/A</u> Jack: <u>T</u>
DEC/Gate Switch:	<u>FF</u> Range: <u>10</u>
Mode Select:	<u>Single</u> Reject: <u>FF</u>
Gain (coarse):	<u>20</u> (fine): <u>20</u>
Scan Sensitivity	<u>40</u>



SEARCH UNIT	
Scan Angle:	<u>0°</u> Mode: <u>Long</u>
Fixturing (if any):	<u>N/A</u>
Style or Type No.:	<u>GAMMA-NP</u>
Size & Shape:	<u>75" ROSS</u>
Frequency:	<u>2.25 MHz</u>
Serial No/Brand:	<u>AEROTECH C09273</u>
Measured Angle:	<u>N/A</u>
Cable Type & Length:	<u>1 x 6' BULT-BNC</u>
Couplant Brand:	<u>ULTRAGEL II</u>
Couplant Batch:	<u>8330</u>

C. EVALUATION	EVALUATION REPORT REQ'D	EXAMINATION WELD/AREA <u>Location ⑦</u> <u>21" W&amp;B Section</u>	RECORDABLE INDICATIONS			ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)
			YES	NO	GEOM	
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<u>N/A</u>	<u>N/A</u>	<input checked="" type="checkbox"/>	<u>ACCEPT</u> SEE ATTACHED SHEET
J. ACCEPTANCE CRITERIA		<u>NDE 8.6-2</u> <u>Para 7.0 &amp; 8.0</u>		Operator <u>[Signature]</u> Level <u>II</u> <u>10-25-83</u>		

E. ATTEST

[Signature]

10-25-83

COMPONENT I.D.  
E66 101 NEW CRANK SHAFT

SYSTEM

1 E434

PLANT/LOCATION  
SAMS / T0-63-N/E



# ULTRASONIC EXAMINATION REPORT CALIBRATION DATA SHEET

A. MATERIAL		TYPE	C/S	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> <del>FORGED</del> WORKED
		GEOMETRY <input type="checkbox"/> PIPE <input type="checkbox"/> PLATE <input type="checkbox"/> ROD <input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>					
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION		<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND	
	28 INCH	4 1/2 INCH			<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER	

B. NDE Procedure  
No. 8.6-2

Part No. PO  
No. 310552-30

Equipment ID S/N  
NOTE NO. 112

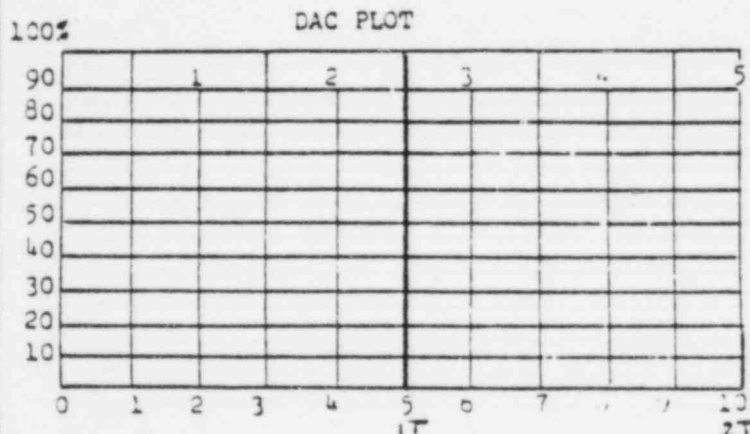
CALIBRATION BLOCK(s) CRANKSHAFT  
BLOCK TEMP. 71 °F  
COMPONENT TEMP. 71 °F

CRT CALIBRATED IN 2T

CALIBRATION CHECKS	TIME
INITIAL CAL.	0225
VERIFICATION	N/A
VERIFICATION	N/A
VERIFICATION	N/A
FINAL CAL.	0253

SCAN AREA	
0° WRV	N/A
0° Mat'l	
To Weld	N/A
⊥ To Weld	N/A
Calibration	
Axial	N/A
Circ	N/A

INSTRUMENT SETTINGS	
Mfg/Model No.:	KENUTHANES2 USL 38
Serial No.:	211182
Sweep Length:	9.80
Sweep Delay:	9.10
Pulse Length/Damping:	m.2
Freq.:	2.5 Rep. Rate: N/A
Filter:	N/A Video: N/A Jack: T
DEC/Gate Switch:	°F Range: 10
Mode Select:	SINGLE GAMPReject: °F
Gain (coarse):	20 (fine): 22
Scan Sensitivity	42



SEARCH UNIT	
Scan Angle:	0° Mode: L226
Fixturing (if any):	N/A
Style or Type No.:	Gamma-MP
Size & Shape:	75" ROUND
Frequency:	2.25 MHz
Serial No/Brand:	AEROTECH CQ9273
Measured Angle:	N/A
Cable Type & Length:	186' CMC To RNC
Couplant Brand:	ULTRAGEL II
Couplant Batch:	8230

C. EVALUATION		EXAMINATION WELD/AREA LOCATION (E) 25" WEB SECTION	RECORDABLE INDICATIONS		ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY) ACCEPT / SEE ATTACHED SHEET
EVALUATION REPORT REQ'D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		YES	NO	
			N/A	N/A	
EPITAXIAL	NDE 8.6-2	Operator <u>Chris R...</u>		Date <u>10-25-83</u>	
TEST	PA 7.0 + 2.4	II		10-25-83	

5

COMPONENT I.D.

E06 101 NEW CRANKSHAFT

SYSTEM

1 R45 \*

PLANT/LOCATION

SNPS / TR-63-NF





## ULTRASONIC INSTRUMENT LINEARITY RECORD

## ULTRASONIC INSTRUMENT

CALIBRATION BLOCK (describe) \_\_\_\_\_

Model No. USL-38 Serial No. 211182DSCS/N 789717

## TRANSDUCER

Brand AEROTECH S/N C09273 Frequency 2.25 Size .75" Straight Beam ☒ Angle Beam ☐

## VERTICAL LINEARITY

Signal amplitudes in % FSH

## HORIZONTAL LINEARITY

Back Reflect.	Grid Loc.	Accept Limits
1	1	1
2	2	1.90-2.10
3	3	2.85-3.15
4	4	3.80-4.20
5	5	4.75-5.25
6	6	5.70-6.30
7	7	6.65-7.35
8	8	7.60-8.40
9	9	8.55-9.45
10	10	10

No.	Actual Higher Signal	(Calculate)		Actual Lower Signal
		1/2 of Higher	Accept Limits*	
1	100	(50)	(55) - (45)	50
2	90	(45)	(50) - (40)	45
3	80	(40)	(45) - (35)	39
4	70	(35)	(40) - (30)	34
5	60	(30)	(35) - (25)	29
6	50	(25)	(30) - (20)	24
7	40	(20)	(25) - (15)	19
8	30	(15)	(20) - (10)	14
9	20	(10)	(15) - (5)	8
10	11	(5.5)	10.5 - (.5)	4

\*Acceptance limits are 1/2 of the Higher Signal  $\pm 5\%$  FSH

## AMPLITUDE CONTROL LINEARITY

Initial Amplitude	dB Change	Result	Limit
30% FSH	10	40	72 - 68%
80% FSH	12	21	18 - 24%
40% FSH	6	81	64.1 - 96%
20% FSH	12	81	64.1 - 96%

☒ Acceptable

This instrument is considered

☐ Not Acceptable

S. ED

C. P.

Level II

DATE 10-24-83



MAGNETIC PARTICLE EXAMINATION REPORT

A. MATERIAL		TYPE	FABRICATED PROCESS	
		<u>c/s</u>	<input type="checkbox"/> WELDED <input type="checkbox"/> CAST <input checked="" type="checkbox"/> <u>Forged</u>	
		GEOMETRY	<input type="checkbox"/> PIPE <input type="checkbox"/> PLATE <input type="checkbox"/> ROD <input checked="" type="checkbox"/> OTHER <u>Crank Shaft</u>	
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION	
	— INCH	— INCH	<input checked="" type="checkbox"/> MACHINED <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER	
			<input type="checkbox"/> AS FABRICATED	
NDE PROCEDURE NO. <u>71-3</u>		PO <u>310552-30</u>		DATE <u>112</u> <u>Thermomater</u>
TECHNIQUE	<input type="checkbox"/> PROBE <input type="checkbox"/> Yoke <input checked="" type="checkbox"/> COIL <input type="checkbox"/> OTHER	<u>(5 Turns)</u>		
CURRENT	<input type="checkbox"/> AC <input type="checkbox"/> DC <input checked="" type="checkbox"/> HW/DC			
		<u>1000</u> <u>N/A</u> <u>N/A</u>		
MATERIALS	<input type="checkbox"/> DRY <input checked="" type="checkbox"/> WET	BRAND/DESIGNATION <u>Magnaglo 14A</u> <u>Batch #83C03C</u> <u>.30 mil</u>		
SKETCH OR OTHER DETAIL: <p>MT. of entire radius and 5/8" in all journal areas (Cyl #1 through can rod + main journal).</p> <p><u>Diesel #101</u> <u>New Crank Shaft</u> <u>S/N G95</u></p>				

C. EVALUATION

REPORT BELOW THOSE INDICATIONS OBSERVED AND THE PERTINENT INFORMATION REQUIRED. WHERE ADDITIONAL SPACE IS REQUIRED USE OTHER SIDE

LOCATION	SIZE (INCHES)	DESCRIPTION	ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)
1 <u>N/A</u>	<u>None</u>	<u>N/A</u>	<u>Accept No relevant info.</u>
2			
3			
4			
Lilco NDE 71-3		Para G.1+G.2	
		<u>C. H. Hall / T. P. 25</u> <u>10/24/23</u>	

COMPONENT I.D. Diesel #101  
 New Crank Shaft S/N G95  
 IR434 Emerg. Diesel Gen.  
 PLANT/LOCATION  
 9WPS-1/EI-63 Turb Diesel



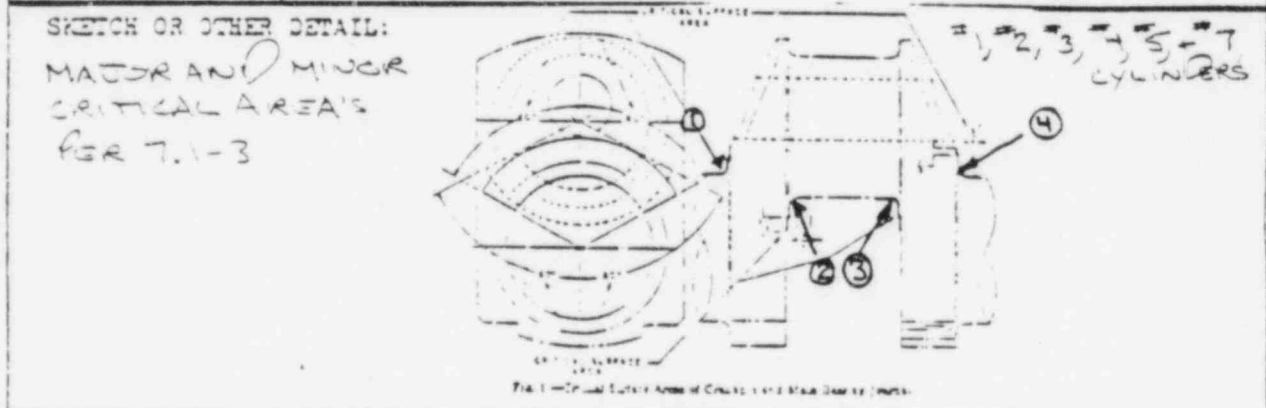
MAGNETIC PARTICLE EXAMINATION REPORT

A. MATERIAL		TYPE <u>C/S</u>	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> FORGED	<input checked="" type="checkbox"/> WORKED	
		GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>		
CROSS SECTION THICKNESS	MAX <u>13" INCH</u>	MIN <u>12" INCH</u>	SURFACE CONDITION	<input checked="" type="checkbox"/> MACHINED				<input type="checkbox"/> GROUND
				<input type="checkbox"/> AS FABRICATED				<input type="checkbox"/> OTHER

B. WDE PROCEDURE	NO. <u>7.1-3</u>	WDE NO. <u>PO#310552-30</u>	DATE <u>N/A</u>
------------------	------------------	-----------------------------	-----------------

TECHNIQUE	<input type="checkbox"/> PRODS	<input checked="" type="checkbox"/> YOKE	<input type="checkbox"/> COIL	<input type="checkbox"/> OTHER
CURRENT	<input checked="" type="checkbox"/> AC	<input type="checkbox"/> DC	<input type="checkbox"/> HW/DC	<input checked="" type="checkbox"/> 10 16 PLATE
				<input type="checkbox"/> 40 16 PLATE
AKPS <u>N/A</u>	PROD SPACING	Yoke <u>12"</u>	PRODS <u>N/A</u>	

MATERIALS	<input type="checkbox"/> DRY	<input checked="" type="checkbox"/> WET	BRAND/DESIGNATION	<u>MAGNAGLO IHA</u>
				<u>BATCH#83C036</u>
				<u>.30 MIL.</u>



C. EVALUATION

REPORT BELOW THOSE INDICATIONS OBSERVED AND THE PERTINENT INFORMATION REQUIRED. WHERE ADDITIONAL SPACE IS REQUIRED USE OTHER SIDE

LOCATION	SIZE (INCHES)	DESCRIPTION	ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)
①	NONE	N/A	Accept - NO RELEVANT INDICATIONS
②	↓	↓	↓
③	↓	↓	↓
④	↓	↓	↓
D	TANCE DIA	N/E 7.1-3	LEADS RETARDER

E. COMMENT I.D. 1, 2, 3, 4, 5, 6, 7

NEW CRANKSHAFT S/N 1695

SYSTEM

IR434

PLATE/LOCATION

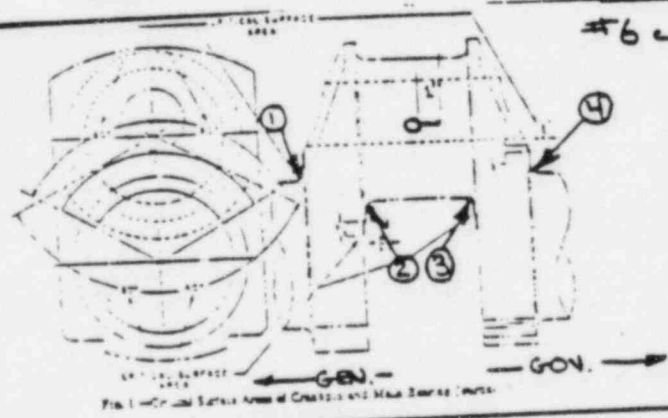
S/N 1/63 TORQUE (R)

MAGNETIC PARTICLE EXAMINATION REPORT

A. MATERIAL	TYPE <u>C/S</u>	FABRICATED PROCESS	<input type="checkbox"/> WELDED <input type="checkbox"/> CAST <input checked="" type="checkbox"/> FORGED <input checked="" type="checkbox"/> WORKED
	GEOMETRY <input type="checkbox"/> PIPE <input type="checkbox"/> PLATE <input type="checkbox"/> ROD <input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>	<input checked="" type="checkbox"/> MACHINED <input type="checkbox"/> GROUND	
CROSS SECTION THICKNESS	MAX <u>1 1/2</u> INCH	MIN <u>1/2</u> INCH	SURFACE CONDITION <input type="checkbox"/> AS FABRICATED <input type="checkbox"/> OTHER
B. TEST PROCEDURE	NO. <u>7.1-3</u>	NO. <u>310552-30</u>	EQUIPMENT I.D. <u>Y6-E</u>

TECHNIQUE	<input type="checkbox"/> PRODS <input checked="" type="checkbox"/> YOKE <input type="checkbox"/> COIL <input type="checkbox"/> OTHER
CURRENT	<input checked="" type="checkbox"/> AC <input type="checkbox"/> DC <input type="checkbox"/> HW/DC <input checked="" type="checkbox"/> 10 14 PLATE <input type="checkbox"/> 110 14 PLATE
AMPS <u>N/A</u> PROU SPACING <u>N/A</u>	
AMPS PER IN. <u>A</u> Yoke <u>12"</u> PRODS <u>N/A</u>	
MATERIALS	<input type="checkbox"/> DRY <input checked="" type="checkbox"/> WET BRAND/DESIGNATION <u>MAGNAGLO 14A BATCH #83C030 .30 MIL.</u>

SKETCH OR OTHER DETAIL:  
MAJOR AND MINOR  
CRITICAL AREAS  
PER 7.1-3



C. EVALUATION  
REPORT BELOW THOSE INDICATIONS OBSERVED AND THE PERTINENT INFORMATION REQUIRED. WHERE ADDITIONAL SPACE IS REQUIRED USE OTHER SIDE

LOCATION	SIZE (INCHES)	DESCRIPTION	ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)
①	NONE	N/A	ACCEPT - NO RELEVANT INDICATIONS
②	NONE	N/A	ACCEPT - NO RELEVANT INDICATIONS
③	1" x 1/2"	WIDE / FUZZY INDICATION	REJECTED SEE ATTACHED UP FOLLOW-UP REPORT
④	NONE	N/A	ACCEPT - NO RELEVANT INDICATIONS
D. AUTHORITY	LIT 7.1-3		

E. ATTEST

COMPONENT I.D. #6 CYL.  
NEW CRANKSHAFT SH #695  
SYSTEM IR 434  
PLANT/LOCATION SDF-1 / 631 TURBINE (C/S)



LIQUID PENETRANT EXAMINATION REPORT				
A. MATERIAL		TYPE C/S	FABRICATED PROCESS	<input type="checkbox"/> WELDED <input type="checkbox"/> CAST <input checked="" type="checkbox"/> FORGED
		GEOMETRY	<input type="checkbox"/> PIPE <input type="checkbox"/> PLATE <input type="checkbox"/> ROD <input checked="" type="checkbox"/> OTHER	<input checked="" type="checkbox"/> MACHINED <input type="checkbox"/> GROUND <input type="checkbox"/> AS FABRICATED <input type="checkbox"/> OTHER
CROSS SECTION THICKNESS	MAX INCH	MIN INCH	SURFACE CONDITION	
B. NDE PROCEDURE No. C1+G3		TEMP 63°F		DWIGHTHERMOMETER 112 PO 310552-30
INSPECTION MATERIALS		BRAND	DESIGNATION	BATCH NO.
1. PRE-CLEANER		magnaflux	SKC-NF/3C-7B	82J083
2. PENETRANT			EL-22A	83F003
3. EMULSIFIER AND/OR REMOVER			SKC-NF/3C-7B	82J083
4. DEVELOPER			SKD-NF	82D111
5. POST EXAMINATION CLEANER			SKC-NF/3C-7B	82J083
SKETCH OR OTHER DETAIL: USE OTHER SIDE IF NECESSARY Cyl. #6 - Con. Rod Journal (Oil Hole) Cyl. #8 - Con. Rod Journal Diesel #101 New Crank Shaft S/N 695 *See M.T. (Yoke) report 10/24/83 for locations.				
C. EVALUATION		REPORT BELOW THOSE INDICATIONS OBSERVED AND THE PERTINENT INFORMATION REQUIRED. WHERE ADDITIONAL SPACE IS REQUIRED USE OTHER SIDE.		
LOCATION	SIZE (INCHES)	DESCRIPTION	ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)	
Cyl. #6 Con. Rod 1 Journal (Oil Hole)	N/A	None	See M.T. report 10/24/83 for locations Accept, no relevant indications	
Cyl. #8 Con. Rod 2 Journal	N/A	None	" " " "	
3				
4				
D.A.C. N.D.E. G3	Para 4.2.2		Carl H. Hinkle 10/27/83	

COMPONENT I.D. Diesel #101

SYSTEM

IR457 Energy Dies. Gen.

PLANT/LOCATION

S/N P3-1/G1-G3 Turb. Dr.

C-38-B

## MAGNETIC PARTICLE EXAMINATION REPORT

A. MATERIAL		TYPE <u>C/S</u>	FABRICATED PROCESS	<input type="checkbox"/> WELDED	<input type="checkbox"/> CAST	<input checked="" type="checkbox"/> FORGED <input checked="" type="checkbox"/> WORKED
		GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER: <u>CRANK SHAFT</u>
CROSS SECTION THICKNESS	MAX <u>13" INCH</u>	MIN <u>12" INCH</u>	SURFACE CONDITION	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND	
				<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER	
B. WDE PROCEDURE NO. <u>7.1-3</u>		NO. <u>P.O. # 310552-30</u>		EQUIPMENT LAMP: <u>N/A</u> WAVE NO.: <u>N/A</u>		
TECHNIQUE	<input type="checkbox"/> PRODS	<input checked="" type="checkbox"/> YOKE	<input type="checkbox"/> COIL	<input type="checkbox"/> OTHER		
CURRENT	<input checked="" type="checkbox"/> AC	<input type="checkbox"/> DC	<input type="checkbox"/> HW/DC	<input checked="" type="checkbox"/> 10 16 PLATE <input type="checkbox"/> 40 16 PLATE		
AKPS <u>N/A</u> AMPS. PER. IN. <u>A</u>		PAC. SPACING Yoke <u>12"</u> PRODS <u>N/A</u>				
MATERIALS	<input type="checkbox"/> DRY	<input checked="" type="checkbox"/> WET	BRAND/DESIGNATION <u>MAGNAGLO 14A</u> <u>BATCH # 83C036</u> <u>.30 MIL.</u>			
SKETCH OR OTHER DETAIL: MAJOR AND MINOR CRITICAL AREAS PER 7.1-3 <div style="text-align: center;"> </div>						
C. EVALUATION		REPORT BELOW THOSE INDICATIONS OBSERVED AND THE PERTINENT INFORMATION REQUIRED. WHERE ADDITIONAL SPACE IS REQUIRED USE OTHER SIDE				
LOCATION	SIZE (INCHES)	DESCRIPTION	ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)			
①	NONE	N/A	ACCEPT NO RELEVANT INDICATIONS			
②	1-3" sq.	BROAD FUZZY INTRACRANIAL	REJECT SEE ATTACHED REPORT			
③	1-3" sq.	BROAD FUZZY INTRACRANIAL	REJECT			
④	NONE	N/A	ACCEPT NO RELEVANT INDICATIONS			
D.	NO. <u>7.1-3</u>		TECHNICAL PERSONNEL <u>JOHN J. KEMMEL</u> <u>6/24/63</u>			
E.			DATE <u>6/24/63</u>			

COMPONENT I.D. #8 cyl.  
NEW CRANKSHAFT 5/6 #695SYSTEM  
IR434PLANT/LOCATION  
608-1/131 TOWN

C-38-19

LIQUID PENETRANT EXAMINATION REPORT

A. MATERIAL	TYPE	FABRICATED PROCESS		WELDED <input type="checkbox"/> CAST <input type="checkbox"/> <u>Forged</u> <input checked="" type="checkbox"/>	
	GEOMETRY	<input type="checkbox"/> PIPE	<input type="checkbox"/> PLATE	<input type="checkbox"/> ROD	<input checked="" type="checkbox"/> OTHER <u>5/8" x 3/4" x 1/2"</u>
CROSS SECTION THICKNESS	MAX	MIN	SURFACE CONDITION	<input checked="" type="checkbox"/> MACHINED	<input type="checkbox"/> GROUND
	— INCH	— INCH		<input type="checkbox"/> AS FABRICATED	<input type="checkbox"/> OTHER

B. NDL DISCLOSURE	TEMPERATURE	DWELL TIME	PO
<u>61463</u>	<u>63°F</u>	<u>112</u>	<u>310552-30</u>

INSPECTION MATERIALS	BRAND	DESIGNATION	BATCH NO.
1. PRE-CLEANER	<u>magnaflux</u>	<u>SKC-NF/3C-7B</u>	<u>82J083</u>
2. PENETRANT		<u>EL-22A</u>	<u>83F003</u>
3. EMULSIFIER AND/OR REMOVER		<u>SKC-NF/3C-7B</u>	<u>82J083</u>
4. DEVELOPER		<u>SKD-NF</u>	<u>82D111</u>
5. POST EXAMINATION CLEANER		<u>SKC-NF/3C-7B</u>	<u>82J083</u>

SKETCH OR OTHER DETAILS: USE OTHER SIDE IF NECESSARY

Cyl. #6 - Con. Rod Journal (Oil Hole) Diesel #101  
Cyl. #8 - Con. Rod Journal New Crank Shaft  
S/N 695

\*See M.T. (Yoke) report 10/24/83 for locations.

C. EVALUATION	REPORT BELOW THOSE INDICATIONS OBSERVED AND THE PERTINENT INFORMATION REQUIRED. WHERE ADDITIONAL SPACE IS REQUIRED USE OTHER SIDE.
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LOCATION	SIZE (INCHES)	DESCRIPTION	ACTION (ACCEPT/REJECT, AND COMMENT AS NECESSARY)
<u>Cyl. #6 Con. Rod Journal (Oil Hole)</u>	<u>N/A</u>	<u>None</u>	<u>See M.T. report 10/24/83 for locations</u> <u>Accept, no relevant indications</u>
<u>Cyl. #8 Con. Rod Journal</u>	<u>N/A</u>	<u>None</u>	<u>" " " "</u>
<u>3</u>			
<u>4</u>			
<u>UAC</u>	<u>Likes NDE 63</u>		<u>Carl H. Hinkle</u> <u>10/27/83</u>

COMPONENT I.D. Diesel #101

SYSTEM IR454 Emergency Dies. Gen.

PLANT/LOCATION SNP3-1/G1-63 Turb. Inc.

NUCLEAR REGULATORY COMMISSION

Docket No. 50-322-02 Official Ex. No. C-39  
 In the matter of LILCO Shoreham  
 Staff \_\_\_\_\_ IDENTIFIED ✓  
 Applicant ✓ RECEIVED ✓  
 Intervenor \_\_\_\_\_ REJECTED \_\_\_\_\_  
 Cont'g Off'r \_\_\_\_\_  
 Contractor \_\_\_\_\_ DATE 9-20-84  
 Other \_\_\_\_\_ Witness Panel  
 Reporter ACE