1K/1N
Final Report Cover

Method 1K1N VERSION 20020107
Version CC

Conducted For:
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

C	**V** = Valid
	I = Invalid
	N = Results Cannot Be Interpreted As Representative Of Oil Performance (Non-Reference) And Shall Not Be Used In Determining An Average Test Result Using Multiple Test Criteria.

Test Number		
Test Stand: CCCCC	Engine Run #: CCCC	
EOT Time: HH:MM	EOT Date: YYYYMMDD	
Oil Code [A]: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC		
Formulation/Stand Code: CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC		
Alternate Codes: CCCCCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCCCCCC

In my opinion this test CCCCCCCC been conducted in a valid manner in accordance with the 1K/1N Test Procedure (Research Report RR:D02-1273/RR:D02-1321) and the appropriate amendments through the information letter system. The remarks included in this report describe the anomalies associated with this test.

[A] CMIR or Non-Reference Oil Code

Submitted By: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Testing Laboratory

Signature Image
Signature

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Typed Name

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Title

1K/1N
Form 1
Test Report Summary

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			
Start Date YYYYMMDD	Total Test Length S1234	TMC Oil Type CCCCCC	
Laboratory Internal Oil Code CCCCCCCCCCCCCCCCCCCC			

	Correction Effective Date	WDK/WDN	TGF %	TLHC%	Transformed TLHC%	BSOC g/KW-h	EOTOC g/kW-h
Unadjusted Lab Rating		S1234.1	S123	S123	S12.123	S1.12	S1.12
Industry Correction(If Any)	YYYYMMDD	S1234.1	S123	S123	S12.123	S1.12	S1.12
Subtotal		S1234.1	S123	S123	S12.123	S1.12	S1.12
Lab Severity Adjustment(If Any)[A]	YYYYMMDD	S1234.1	S123	S123	S12.123	S1.12	S1.12
Total		S1234.1	S123	S123	S12.123	S1.12	S1.12

	Effective Date	WDK/WDN	TGF %	TLHC %	Transformed TLHC%	BSOC g/KW-h	EOTOC g/kW-h
Test Target Mean [B]	YYYYMMDD	S1234.1	S123.1		S12.123	S1.12	S1.12
Test Target STD [B]	YYYYMMDD	S1234.1	S123.1		S12.1	S1.12	S1.12
CCCCCCCCCCCC[A, C]	YYYYMMDD	S1234.1	S123.1	S123.1		S1.12	S1.12

	Referee Lab	WDK/WDN	TGF %
Referee Ratings	CC	S1234.1	S123

	Top	Int. 1	Oil	Piston	Liner
Ring Loss Of Side Clearance(mm)	S1.123	S1.123	S1.123		
Ring End Gap Increase (mm)	S1.123	S1.123	S1.123		
Is The Ring Stuck?	CCC	CCC	CCC		
Scuffed Area %	S123	S123	S123	S123	S123
Average Wear Step (µm)					S1.123
% Bore Polish					S123.1

Notes: [A] Reference oil tests or as requested by test sponsor [C] See Appendix X4
[B] Non-reference oil tests only

1K/1N
Form 2
Operational Summary

Lab CC	EOT DateYYYYMMDD	End Time HH:MM	Method CC	
Stand CCCCC	Run Number CCCC			
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC				
Oilcode/CMIR CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC				
Operating Condition	**Minimum**	**Maximum**	**Average**	**Specification**
Engine Speed r/min	S1234.1	S1234.1	S1234.1	2100 ± 10
Engine Power kW	S123.1	S123.1	S123.1	Report
Fuel Flow g/min	S123.1	S123.1	S123.1	185 ± 1
Humidity g/kg	S12.1	S12.1	S12.1	17.8 ± 1.7
Temperature °C				
Coolant Out °C	S12.1	S12.1	S12.1	93 ± 2.5
Coolant In °C	S12.1	S12.1	S12.1	Report
Coolant delta T °C	S12.1	S12.1	S12.1	5 ±1.0
Oil To Bearing °C	S123.1	S123.1	S123.1	107 ± 2.5
Oil Cooler In °C	S123.1	S123.1	S123.1	Report
Inlet Air °C	S123.1	S123.1	S123.1	127 ± 2.5
Exhaust °C	S123.1	S123.1	S123.1	550 ± 30
Fuel @ Injector Housing °C	S123.1	S123.1	S123.1	57 + 3
Pressures				
Oil To Bearing kPa	S123.1	S123.1	S123.1	482 Max
Oil To Jet kPa	S123.1	S123.1	S123.1	360 ± 13
Inlet Air kPa	S123.1	S123.1	S123.1	240 ± 1
Exhaust (ABS) kPa	S123.1	S123.1	S123.1	216 ±1
Fuel @ Filter HSG kPa	S123.1	S123.1	S123.1	210 ± 20
Crankcase Vacuum kPa	S1.12	S1.12	S1.12	0.7 ± 0.1
Coolant Jug Pressure kPa	S123.1	S123.1	S123.1	Report
Flows				
Blowby L/min	S123.1	S123.1	S123.1	Report
Coolant Flow L/min	S1234.1	S1234.1	S1234.1	65 ± 2
Air/Fuel Ratio: 24 hr.	S123.1	Air/Fuel Ratio: 252 hr.	S123.1	

Assembly Measurements And Parts Record

Piston/Head Clearance mm	S1.123	Intake Valve Open °ATC	S1234.1	
		Fuel Timing °BTC	S1234.1	
	Part No. (1)	Serial No. (2)	Date Code	Inspection Code
Liner	CCCCCCCCCCCC	CCCCCCCCCCCC	F CCCCCCCCCCCC	G CCCCCCCCCCCC
Ring Set (1)	CCCCCCCCCCCC		CCCCCCCCCCCC I	H CCCCCCCCCCCC
Piston	CCCCCCCCCCCC	CCCCCCCCCCCC	D CCCCCCCCCCCC	E CCCCCCCCCCCC

[D] Number blow "E" located on top of piston
[E] Number on top of "E" located on top of piston
[F] Four alphanumeric characters (NNAN) on liner O.D.
[G] Four digit number on liner O.D.

(1) And (2) Number On Parts Box Yellow Label

1K/1N
Form 3
Operational Summary - Offset And Deviation

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Controlled Parameter	Allowable % Out	This Test % Out	Allowable % Off	This Test % Off
Speed	5	S123.1	20	S123.1
Fuel Flow	10	S123.1	25	S123.1
Humidity	10	S123.1	25	S123.1
Coolant Flow	5	S123.1	25	S123.1
Temperatures				
Coolant Out	5	S123.1	20	S123.1
Oil To Bearing	5	S123.1	20	S123.1
Intake Air	5	S123.1	20	S123.1
Fuel At Injector Housing	5	S123.1	20	S123.1
Pressures				
Oil Jet	5	S123.1	25	S123.1
Intake Air	10	S123.1	25	S123.1
Exhaust	10	S123.1	25	S123.1
Fuel At Filter Housing	5	S123.1	20	S123.1
Crankcase Vacuum	10	S123.1	20	S123.1

1K/1N
Form 4
Piston Rating Summary

Test	Lab CC	EOT Date YYYYMMDD	END Time HH:MM	Stand CCCCC	Run No. CCCC	Method CC
Formulation/Stand Code	CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC				Oilcode CCCCCCCCCCCCCCCC CCCCCC	
Test Fuel CCCCCCCCCC	Fuel Batch CCCCCCCCCC	Date Rated YYYYMMDD		Rating Number CCCCCCCCCC	Rater CCC	

Last Stand Reference Information	**Date Completed** YYYYMMDD	**Stand No.** CCCCC	**Run No.** CCCC	**TMC Oil Code** CCCCCC	
	WDK/WDN	**TGF**	**TLHC**	**Transformed TLHC**	**BSOC**	**EOTOC**
Last Ref. This Stand	S123.1	S123	S123	S12.123	S1.12	S1.12
Industry Average	S123.1	S12.1		S12.123	S1.12	S1.12
Industry STD	S123.1	S123.1		S12.123	S1.12	S1.12

Total Piston Ratings Summary S123.12

		Grooves						**Lands**						**Upper Skirt**		**Under Crown**		**Pin Bores**			
	Dep. Factor	**NO. 1**		**NO. 2**		**NO. 3**		**NO. 1**		**NO. 2**		**NO. 3**						**Front**		**Rear**	
		A,%	**Dem.**	**A,%**	**Dem.**	**A,%**	**Dem.**	**A,%**	**Dem.**	**A,%**	**Dem.**	**A,%**	**Dem.**	**A,%**	**Dem.**	**A,%**	**Dem.**	**A,%**	**Dem.**	**A,%**	**Dem.**
CARBON																					
	HC-1.0	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	MC-0.5	S123	S123.12			S123	S123.12														
	LC-.25	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	Total	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
LACQUER																					
	8 – 9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	7 - 7.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	6 - 6.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	5 - 5.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	4 - 4.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	3 - 3.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	2 - 2.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	1 - 1.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	>0 – 0.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	Clean	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0
	Total	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
Rating				S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12	
Location Factor		1.5		1.5		25		1		1		25		50		20		0		0	
Weighted Rating		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12	

TGF %	**Intermediate Groove Fill %**	**WDK/WDN**	**Unweighted Deposit**	**T.L. Heavy Carbon %**	**T.L. Flaked Carbon %**
S123	S123	S1234.1	S1234.1	S123	S123

1K/1N
Form 4A
Piston Rating Worksheet

Lab CC	EOT Date HH:MM	END Time YYYYMMDD	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR:CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

Refer to Appendix C for an example of Piston Rating Worksheet.

1K/1N
Form 5
Supplemental Piston Deposits(Groove Sides And Rings)

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand: CCCCC		Run Number CCCC	
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC			CCCCCC

Deposit Type			Carbon			Varnish									
			HC	MC	LC	8 - 9	7 - 7.9	6 - 6.9	5 - 5.9	4 - 4.9	3 - 3.9	2 - 2.9	1 - 1.9	>0 -	Clean
Groove Top And Bottom	1	T	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		B	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
	2	T	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		B	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
	3	T	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		B	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
Top Bottom And Back Of Rings	1	T	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		B	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		BK	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
	2	T	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		B	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		BK	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
	3	T	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		B	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123
		BK	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123	S123

Additional Deposit & Condition Ratings

Piston Crown	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Rings	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Liner	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC

1K/1N
Form 5A
Referee Rating

Test Identification			
Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run No. CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC			CCCCCC
Referee Rating Information			
Company CC	Rating Number CCCCCCCCCC	Date Rated YYYYMMDD	Rater CCC

Total Piston Ratings Summary

		Grooves						Lands						Upper Skirt		Under Crown		Pin Bores			
	Dep.. Factor	No. 1		No. 2		No. 3		No. 1		No. 2		No. 3						Front		Rear	
		A,%	DEM.	A,%	DEM.	A,%	DEM.	A,%	Dem.	A,%	Dem.	A,%	Dem.	A,%	Dem.	A,%	Dem.	A,%	Dem.	A,%	Dem.
C																					
A	HC-1.0	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
R	MC-0.5	S123	S123.12			S123	S123.12														
B	LC-.25	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
O N	Total	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	8 – 9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	7 - 7.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
	6 - 6.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
L	5 - 5.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
A	4 - 4.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
C	3 - 3.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
Q	2 - 2.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
U	1 - 1.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
E	>0 - 0.9	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
R	Clean	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0	S123	0
	Total	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12	S123	S123.12
Rating		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12	
Location Factor		1.5		1.5		25		1		1		25		50		20		0		0	
Weighted Rating		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12		S123.12	

TGF %	Intermediate Groove Fill %	WDK/WDN	Unweighted Deposit	Test Lab TLHC%	Test Lab TLHC %
S123	S123	S1234.1	S1234.1	S123	S123

1K/1N
Form 6
Oil Analysis And Results Summary

Test Identification			
Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC			CCCCCC
Test Fuel CCCCCCCCCC		Fuel Batch CCCCCCCCCC	

Oil Analysis/Engine Hours	**NEW / 0**		**24**		**204**		**252**	
Visccosity @ 100°C	S123.12		S123.12		S123.12		S123.12	
TBN D4739	S123.12		S123.12		S123.12		S123.12	
Wear Metals: Fe/Al	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA
Si/Cu	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA
Cr/Pb	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA	AAAA
Fuel Dilution			S12.1		S12.1		S12.1	
Blowby (L/min)			S123.1		S123.1		S123.1	

24 Hr.. Avg. BSOC (g/kW-h) For Hours End			**0-252 Hr. Avg. BSOC (g/kW-h):** S1.12			**EOT Oil Consumption(g/kW-h):** S1.12			
24	48	72	108	132	156	180	204	228	252
S1.12	S1.12	S1.12	S1.12	S1.12	S1.12	S1.12	S1.12	S1.12	S1.12

Inspection And Measurement Summary	**Ring Gap Incr. (mm)**	**Side Cl. Loss (mm)**	**Ring Stuck (1)**	**Scuffed Area % (2)**	**% Bore Polish (With Grid)**	**Average Wear Step (mm)**
Top Ring	S1.123	S1.123	CCC	S123		
Int. Ring	S1.123	S1.123	CCC	S123		
Oil Ring	S1.123	S1.123	CCC	S123		
Piston				S123		
Cylinder Liner				S123	S123.1	S1.123
Piston Deposit Summary	**TGF %**	**Int. Gr. F.%**	**WDK/WDN**	**Un Wt Dep**	**T.L. Heavy Carb. %**	**T.L. Flaked Carb. %**
	S123	S123	S1234.1	S1234.1	S123	S123

UNWEIGHTED PISTON DEPOSITS									
Grooves			**Lands**			**Upper Skirt**	**Under Crown**	**Pin Bores**	
1	2	3	1	2	3			**Front**	**Rear**
S123.12	S123.12	S123.12	S123.12	S123.12	S123.12	S123.12	S123.12	S123.12	S123.12

1K/1N
Form 7
Unscheduled Downtime & Maintenance
Maintenance Summary

Lab CC	EOT Date YYYYMMDD	END Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Number of Downtime Occurrences		S12	
Test Hours	**Date**	**Downtime**	**Reasons**
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
		HHH:MM	Total Downtime (125 Hr. Max)

Other Comments		
Number of Comment Lines	S12	
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		
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1K/1N
Form 7A
Unscheduled Downtime & Maintenance Summary

Lab CC	EOT Date YYYYMMDD	END Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Number of Downtime Occurrences		S12	
Test Hours	**Date**	**Downtime**	**Reasons**
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
		HHH:MM	Total Downtime (125 Hr. Max)

Other Comments		
Number of Comment Lines	S12	
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		
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(Rev. 5/94)

1K/1N
Form 7B
Unscheduled Downtime & Maintenance Summary

Lab CC	EOT Date YYYYMMDD	END Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Number of Downtime Occurrences		S12	
Test Hours	**Date**	**Downtime**	**Reasons**
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCC	CCCCCCCC	CCCCCC	CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
		HHH:MM	Total Downtime (125 Hr. Max)

Other Comments		
Number of Comment Lines	S12	
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		
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(Rev. 5/94)

1K/1N
Form 8
Ring Measurements

Lab CC	EOT Date YYYYMMDD	END Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Ring Gaps (mm)	Top	Intermediate	Oil
Specifications	0.724 ± 0.076 mm	0.673 ± 0.076 mm	0.572 ± 0.190 mm
Pre-Test	S1.123	S1.123	S1.123
Post-Test	S1.123	S1.123	S1.123
Increase	S1.123	S1.123	S1.123

Ring Side Clearance*		A	B	C	D	Avg.	Min.	Specification
Top	Pre-Test	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAA	0.193+0.032 mm
	Post-Test	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAA	
	LSC	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	S1.123	AAAAAAA	
Int..	Pre-Test	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAA	0.090+0.020 mm
	Post-Test	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAA	
	LSC	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	S1.123	AAAAAAA	
Oil	Pre-Test	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAA	0.073 +0.016 mm
	Post-Test	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAA	
	LSC	AAAAAAA	AAAAAAA	AAAAAAA	AAAAAAA	S1.123	AAAAAAA	

***Notes:**

1. Write "Stuck" In Place Of Dimension When Applicable.

2. Write "<0.038 mm" For Clearance When Applicable.

3. Write ">" Before Calculated Decrease Or Average Decrease Values That Incorporate A "<0.038 mm" In Calculation.

4 LSC: Loss Of Side Clearance.

5. Min: Intermediate And Oil Ring Minimum Side Clearance Is Measured 360° Around Piston.

1K/1N
Form 9
Liner Measurements

Lab CC	EOT Date YYYYMMDD	END Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Liner Surface Finish (Micrometer)			
Distance From Top	**Transverse**	**Longitudinal**	**Average**
130 mm	S1.12	S1.12	S1.12
50 mm	S1.12	S1.12	S1.12
25 mm	S1.12	S1.12	S1.12
		Total Average	S1.12

% Liner Bore Polish - Grid (Add T/AT Values From Grid)	
Thrust	S123.1
Anti-Thrust	S123.1
Total	S123.1

Liner Bore Measurement (mm)				
Before Test – Diameter (Dial Bore Gage)				
Bore Height	**Longitudinal**		**Transverse**	
230 mm	S123.123		S123.123	
130 mm	S123.123		S123.123	
50 mm	S123.123		S123.123	
25 mm	S123.123		S123.123	
15 mm	S123.123		S123.123	
After Test - (Surface Profile)				
	Longitudinal		**Transverse**	
	Front	**Rear**	**T**	**AT**
Wear Step @ 15mm	S1.123	S1.123	S1.123	S1.123

1K/1N
Form 10
Characteristics Of The Data Acquisition System

Lab CC	EOT Date YYYYMMDD	END Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Parameter (1)	Sensing Device (2)	Calibration Frequency (3)	Record Device (4)	Observation Frequency (5)	Record Frequency (6)	Log Frequency (7)	System Response (8)
Operation Conditions							
Engine Speed (R\min)	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Engine Power (kW)	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Fuel Flow (g/min)	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Humidity (g/kg)	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Coolant Out	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Coolant In	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Oil To Bearing	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Oil Cooler In	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Inlet Air	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Exhaust	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Fuel	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Pressures (kPa)							
Oil To Bearing	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Oil To Jet	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Inlet Air	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Exhaust	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Fuel @ Filter HSG	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Crankcase VAC	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Flows (L/min)							
Blowby	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC
Coolant Flow	CCCCCCCCCCCCCCCCC	CCCCCCCCCCCCC	CCCCCCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCCCCCC	CCCCCCCC

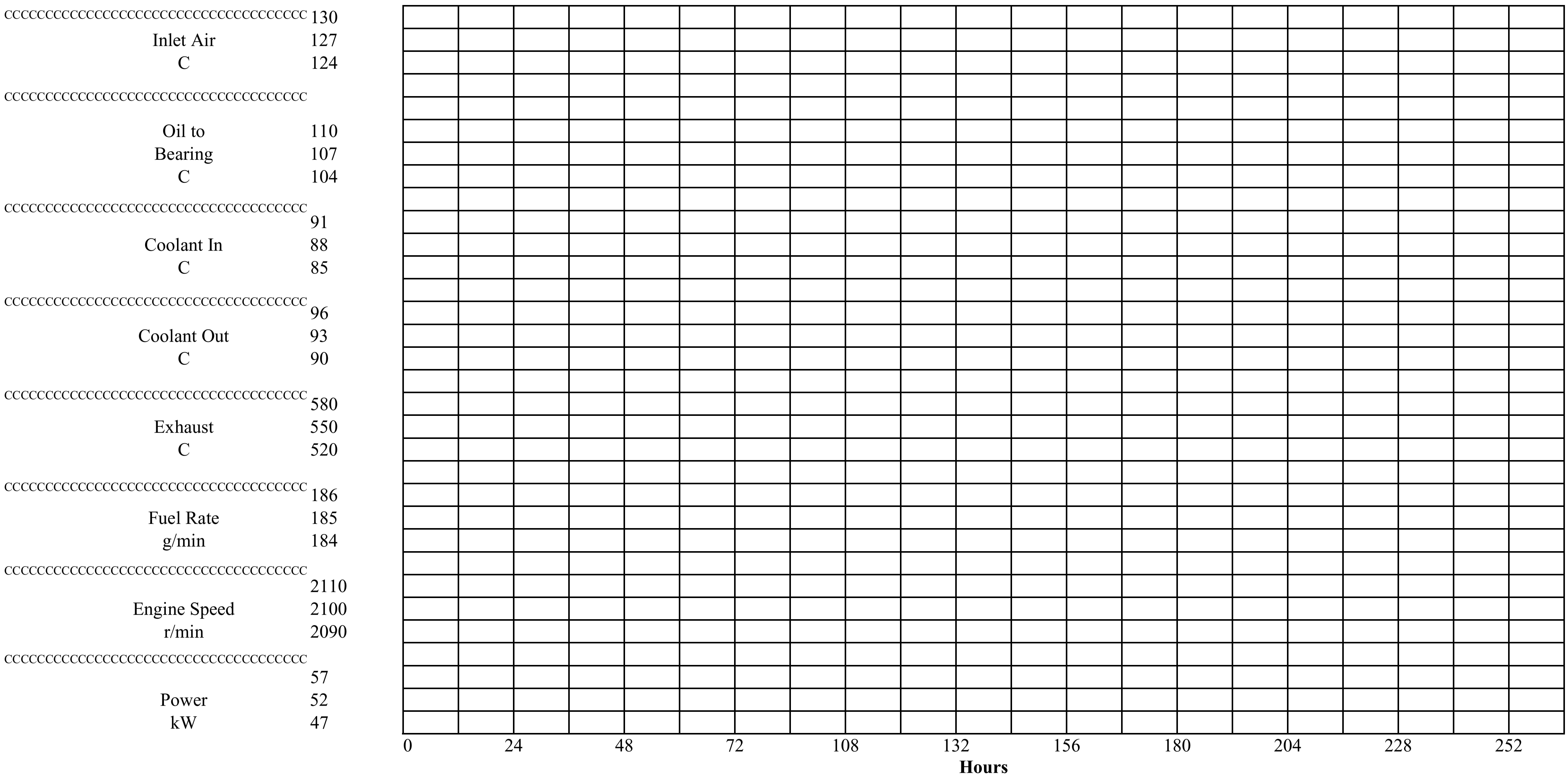
Legend:
(1) Operating Parameter
(2) The Type Of Device Used To Measure Temperature, Pressure Or Flow
(3) Frequency At Which The Measurement System Is Calibrated
(4) The Type Of Device Where Data Is Recorded
- LG – Hanglog Sheet
- DL - Automatic Data Logger
- C/M - Computer, Using Manual Data Entry
- SC - Strip Chart Recorder
- C/D - Computer, Using Direct I/O Entry

(5) Data Area Observed But Only Recorded If Off Spec.
(6) Data Are Recorded But Are Not Retained At EOT
(7) Data Are Logged As Permanent Record, Note Specify If:
- SS – Snapshot Taken At Specified Frequency
- AG/X Average Of X Data Points At Specified Frequency

(8) Time For The Output To Reach 63.2% Of Final Value For Step Change At Input

1K/1N
Form 11

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC			CCCCCC



1K/1N
Form 12

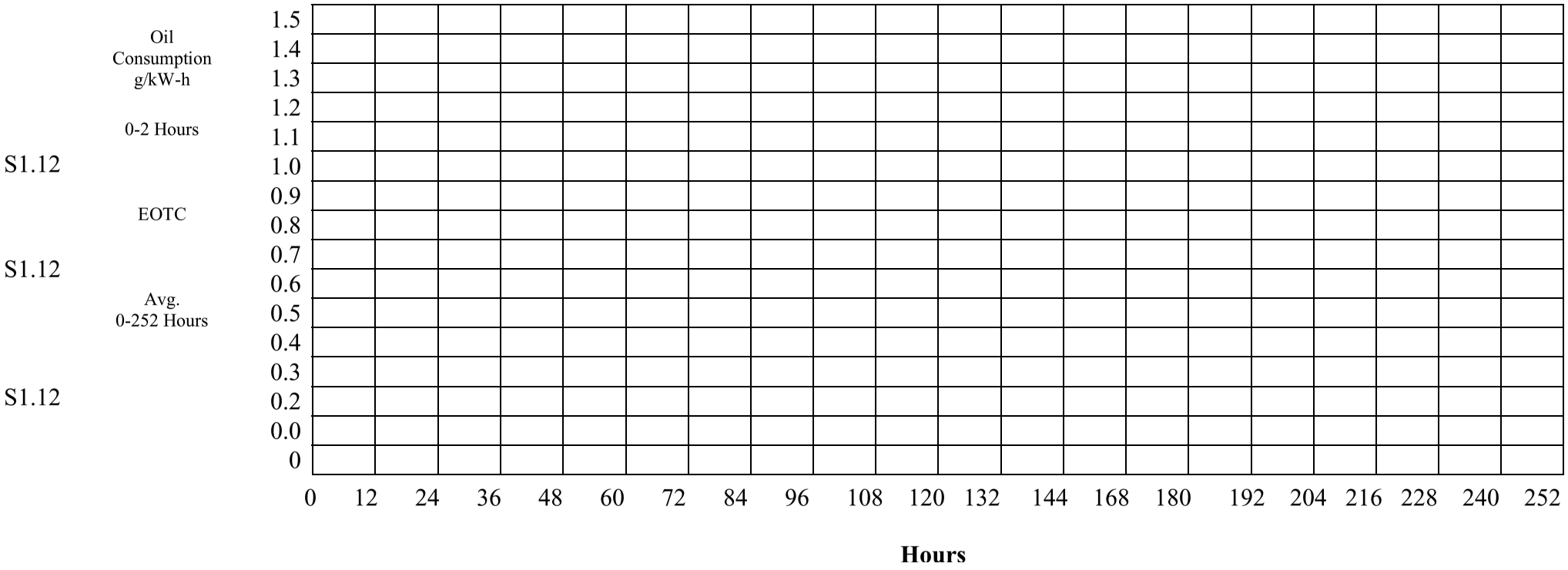
Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC			CCCCCC

cccccccccccccccccccccccccccccccccccccccc																					
Oil to	482																				
Bearing	441																				
kPa	400																				
cccccccccccccccccccccccccccccccccccccccc																					
	375																				
Oil to Jet	360																				
kPa	345																				
cccccccccccccccccccccccccccccccccccccccc																					
	241																				
Inlet Air	240																				
kPa	239																				
cccccccccccccccccccccccccccccccccccccccc																					
	217																				
Exhaust	216																				
kPa	215																				
cccccccccccccccccccccccccccccccccccccccc																					
	67																				
Humidity	65																				
grams/kg	63																				
cccccccccccccccccccccccccccccccccccccccc																					
	0.8																				
Coolant Flow	0.7																				
L/min	0.6																				
cccccccccccccccccccccccccccccccccccccccc																					
	57																				
Crankcase Vacuum	52																				
kPa	47																				
cccccccccccccccccccccccccccccccccccccccc																					
	30																				
Blowby	20																				
L/min	10																				
		0	24	48	72	108	132	156	180	204	228	252									

Hours

1K/1N
Form 13
Oil Consumption Plot

Lab CC	EOT Date: YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC			CCCCCC



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1K/1N
Form 14
Piston, Ring And Liner Photographs

Lab CC	EOT DATE: YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCC

1K/1N
Form 15
Severity Adjustment History

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Usage Dates		WDK/WDN		TGF %		Transformed TLHC %	
Start	Time	Zi	S.A.	Zi	S.A.	Zi	S.A.
CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC
CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC
CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC
CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC
CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC
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CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC

1K/1N
Form 15A
Severity Adjustment History

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Usage Dates		WDK/WDN		TGF %		Transformed TLHC %	
Start	Time	Zi	S.A.	Zi	S.A.	Zi	S.A.
CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC
CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC
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1K/1N
Form 15B
Severity Adjustment History

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC CCCCCC			

Usage Dates		WDK/WDN		TGF %		Transformed TLHC %	
Start	Time	Zi	S.A.	Zi	S.A.	Zi	S.A.
CCCCCCCC	CCCCCC	CCCCCCC	CCCCCC	CCCCCCC	CCCC	CCCCCCC	CCCCCC
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1K/1N
Form 16
TMC Control Chart Analysis

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCC

1K/1N
Form 17
Fuel Batch Aanalysis

Lab CC	EOT Date YYYYMMDD	End Time HH:MM	Method CC
Stand CCCCC	Run Number CCCC		
Formulation/Stand Code CC-CCCCCCCCCC-C-C-CCCCCC-CC-CC-CCCCC			
Oilcode/CMIR: CCCCCCCCC