WEAR CONTAMINATION FLUID CONDITION

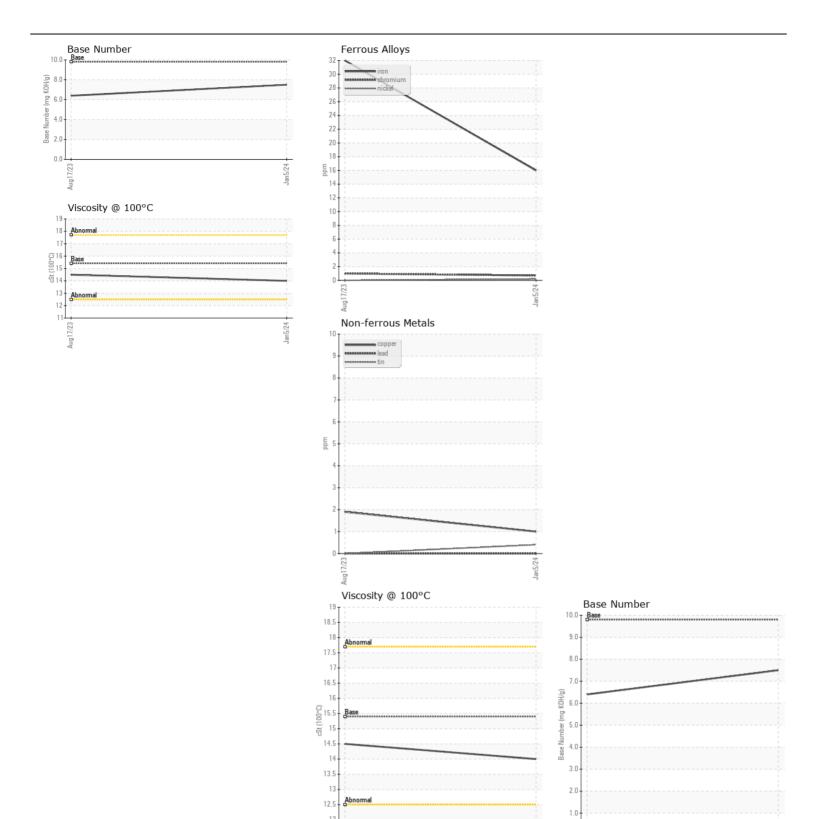
NORMAL NORMAL



Machine Id
4649M
Component
Diesel Engine
Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

Resample at the next service interval to monitor. Sample Number Collect Info Collect Inf	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age hrs Client Info 571 14141 Filter Age hrs Client Info 571 14141 Filter Age hrs Client Info 571 14141 Oil Changed Client Info Changed	Pocample at the next carries interval to meniter	Sample Number		Client Info		GFL0106643		
Oil Age hrs Client Info 571 14141	nesample at the next service interval to monitor.			Client Info		05 Jan 2024		
Filter Age hrs Client Info Changed C		_	hrs	Client Info				
Oil Changed Client Info Changed Change		-	hrs					
Filter Changed Sample Status		_	hrs			571	14141	
NORMAL N		_		Client Info		Changed	Changed	
Iron		_		Client Info		_		
All component wear rates are normal. Chromium ppm ASTM DSISS 2		Sample Status				NORMAL	NORMAL	
All component wear rates are normal. Chromium ppm ASTM DSISS 2	WEAR	Iron	maa	ASTM D5185m	>90	16	32	
Nickel ppm ASTM 05185m >2 <1 0				ASTM D5185m	>20			
Titanium ppm ASTM D585m >2 <1 <1	All component wear rates are normal.						0	
Silver ppm ASTM D5185m >20 2 <1		Titanium	• •	ASTM D5185m	>2	<1	<1	
Aluminum ppm ASTM D5186m >20 2 <1								
Lead		Aluminum		ASTM D5185m	>20	2	<1	
Copper		Lead				0	0	
The continuation of any contamination in the oil.		Copper				1	2	
Vanadium ppm ASTM D5185m NONE NONE				ASTM D5185m	>15	<1	0	
Silicon ppm ASTM D5185m >25 4 5		Vanadium		ASTM D5185m		0	<1	
Potassium ppm ASTM D5185m 22 2 1		White Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium ppm ASTM D5165m 20 2 1		Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Potassium ppm ASTM D5185m 2-0 2 1	CONTAMINATION	Ciliana		ACTM DE10E	05	4		
Fuel WC Method VC Method	CONTAMINATION						5	
Water WC Method Substitute WC Method Substitute WC Method Substitute WC Method Substitute	There is no indication of any contamination in the oil.		ppm				1.0	
Glycol	,							
Soot % % "ASTM D7844 > 6					>0.2			
Nitration		•	0/		. 6			
Sulfation Abs/.fmm *ASTM D7415 >30 20.5 22.4								
Silt Scalar *Visual NONE NO								
Debris Scalar *Visual NONE NORML N								
Sand/Dirt Scalar *Visual NONE NONE NONE Appearance Scalar *Visual NORML NORM								
Appearance Odor scalar *Visual NORML NORML NORML Emulsified Water scalar *Visual NORML N								
Odor Scalar *Visual NORML NEG NEg								
Emulsified Water scalar *Visual >0.2 NEG NEG								
Sodium ppm ASTM D5185m 0								
Boron ppm ASTM D5185m 0 0 0 0 0 0 0 0 0								
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. Barium ppm ASTM D5185m 0 0 0 0 0 0 0 0 0	FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	10	
oil. The condition of the oil is suitable for further service. Molybdenum ppm ASTM D5185m 60 55 65	The DN years the indicates that there is suitable all clinits remaining in the	Boron	ppm	ASTM D5185m	0	<1	<1	
Molybdenum ppm ASIM D5185m 60 55 65 Manganese ppm ASTM D5185m 0 <1 <1 Magnesium ppm ASTM D5185m 1010 881 1049 Calcium ppm ASTM D5185m 1070 1010 1194 Phosphorus ppm ASTM D5185m 1150 1011 1083 Zinc ppm ASTM D5185m 1270 1179 1354 Sulfur ppm ASTM D5185m 2060 3014 3412 Oxidation Abs/.1mm *ASTM D7414 >25 17.5 19.8 Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.4	· · · · · · · · · · · · · · · · · · ·	Barium	ppm	ASTM D5185m	0	0	0	
Magnesium ppm ASTM D5185m 1010 881 1049 Calcium ppm ASTM D5185m 1070 1010 1194 Phosphorus ppm ASTM D5185m 1150 1011 1083 Zinc ppm ASTM D5185m 1270 1179 1354 Sulfur ppm ASTM D5185m 2060 3014 3412 Oxidation Abs/.1mm *ASTM D7414 >25 17.5 19.8 Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.4	on. The condition of the on is suitable for further service.	Molybdenum	ppm	ASTM D5185m	60	55	65	
Calcium ppm ASTM D5185m 1070 1010 1194 Phosphorus ppm ASTM D5185m 1150 1011 1083 Zinc ppm ASTM D5185m 1270 1179 1354 Sulfur ppm ASTM D5185m 2060 3014 3412 Oxidation Abs/.1mm *ASTM D7414 >25 17.5 19.8 Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.4		Manganese	ppm	ASTM D5185m	0		<1	
Phosphorus ppm ASTM D5185m 1150 1011 1083 Zinc ppm ASTM D5185m 1270 1179 1354 Sulfur ppm ASTM D5185m 2060 3014 3412 Oxidation Abs/.1mm *ASTM D7414 >25 17.5 19.8 Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.4		•	ppm					
Zinc ppm ASTM D5185m 1270 1179 1354 Sulfur ppm ASTM D5185m 2060 3014 3412 Oxidation Abs/.1mm *ASTM D7414 >25 17.5 19.8 Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.4								
Sulfur ppm ASTM D5185m 2060 3014 3412 Oxidation Abs/.1mm *ASTM D7414 >25 17.5 19.8 Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.4		•						
Oxidation Abs/.1mm *ASTM D7414 >25 17.5 19.8 Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.4								
Base Number (BN) mg KOH/g ASTM D2896 9.8 7.5 6.4								
Visc @ 100°C cSt ASTM D445 15.4 14.0 14.5								
		Visc @ 100°C	cSt	ASTM D445	15.4	14.0	14.5	







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number**

: 06058605 : 10829987 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0106643 Recieved : 11 Jan 2024 : 12 Jan 2024 Diagnosed

Diagnostician : Wes Davis

GFL Environmental - 405 - Arbor Hills 7400 Napier Rd NORTHVILLE, MI

US 48168 Contact: Anthony Hopkins ahopkins@gflenv.com T:

F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

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* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)