

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

421076 KENWORTH T880

Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- 0

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

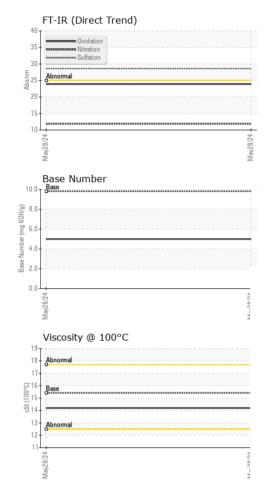
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

CONTAMINATION method limit/base current history1 history2	AL)				May2024		
Cample Date Client Info 9900	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Company Comp	Sample Number		Client Info		GFL0110972		
Machine Age			Client Info		28 May 2024		
Dil Changed	•	hrs	Client Info		-		
CONTAMINATION method mill/base current history1 history2		hrs	Client Info		89		
CONTAMINATION method mill/base current history1 history2	Oil Changed		Client Info		Changed		
Fuel	Sample Status				NORMAL		
Wester Wc Method Wc Method Wc Method Wc Method NEG Wc Method Wc Method NEG Wc Method Wc Method Neg Wc Method W	CONTAMINAT	ION	method	limit/base	current	history1	history2
WEAR METALS	⁼ uel		WC Method	>5	<1.0		
WEAR METALS method limit/base current history1 history2 ron ppm ASTM D5185m >100 61 Chromium ppm ASTM D5185m >20 1 Nickel ppm ASTM D5185m >4 0 Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >20 8 Aluminum ppm ASTM D5185m >20 8 Lead ppm ASTM D5185m >20 4 Copper ppm ASTM D5185m >20 4 Copper ppm ASTM D5185m >330 <1	Water		WC Method	>0.2	NEG		
Chromium	Glycol		WC Method		NEG		
Chromium ppm ASTM D5185m >20	WEAR METAL	S	method	limit/base	current	history1	history2
Silver		ppm			-		
STIM D5185m		ppm	ASTM D5185m	>20			
Silver	Nickel	ppm	ASTM D5185m	>4	0		
Ast Ast	Γitanium	ppm	ASTM D5185m		87		
Access	Silver	ppm	ASTM D5185m	>3	0		
Description	Aluminum	ppm	ASTM D5185m	>20	8		
Acade	_ead	ppm	ASTM D5185m	>40	4		
Anadium	Copper	ppm	ASTM D5185m	>330	<1		
ADDITIVES	⁻in	ppm	ASTM D5185m	>15	1		
ADDITIVES	/anadium	ppm	ASTM D5185m		<1		
Soron ppm ASTM D5185m 0 43	Cadmium	ppm	ASTM D5185m		0		
Description	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 60 2 Manganese ppm ASTM D5185m 0 1 Magnesium ppm ASTM D5185m 1010 423 Calcium ppm ASTM D5185m 1070 1700 Phosphorus ppm ASTM D5185m 1150 979 Zinc ppm ASTM D5185m 1270 1191 Sulfur ppm ASTM D5185m 2060 3890 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25 9 Potassium ppm ASTM D5185m >20 14 Potassium ppm ASTM D5185m >20 14 Potassium ppm ASTM D5185	Boron	ppm	ASTM D5185m	0	43		
Manganese ppm ASTM D5185m 0 1 Magnesium ppm ASTM D5185m 1010 423 Calcium ppm ASTM D5185m 1070 1700 Phosphorus ppm ASTM D5185m 1150 979 Zinc ppm ASTM D5185m 1270 1191 Sulfur ppm ASTM D5185m 2060 3890 CONTAMINANTS method limit/base current history1 history2 Solicon ppm ASTM D5185m >25 9 Solicon ppm ASTM D5185m >20 14 Potassium ppm ASTM D5185m >20 14 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3	Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 1010 423 Calcium ppm ASTM D5185m 1070 1700 Phosphorus ppm ASTM D5185m 1150 979 Zinc ppm ASTM D5185m 1270 1191 Sulfur ppm ASTM D5185m 2060 3890 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 9 Potassium ppm ASTM D5185m >20 14 Potassium ppm ASTM D5185m >20 14 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Sulfation Abs/.1mm *ASTM D741	Molybdenum	ppm	ASTM D5185m	60	2		
Delication	Manganese	ppm	ASTM D5185m	0	1		
Phosphorus ppm ASTM D5185m 1 150 979 Zinc ppm ASTM D5185m 1 270 1 191 Sulfur ppm ASTM D5185m 2060 3890 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 9 Godium ppm ASTM D5185m 10 Potassium ppm ASTM D5185m >20 14 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Sulfation Abs/.1mm *ASTM D7415 >30 28.6 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414	Magnesium	ppm	ASTM D5185m	1010	423		
Time	Calcium	ppm	ASTM D5185m	1070	1700		
Sulfur ppm ASTM D5185m 2060 3890 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 9 Sodium ppm ASTM D5185m 10 Potassium ppm ASTM D5185m >20 14 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Sulfation Abs/cm *ASTM D7624 >20 11.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.9	Phosphorus	ppm	ASTM D5185m	1150	979		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >25 9 Sodium ppm ASTM D5185m 10 Potassium ppm ASTM D5185m >20 14 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Sulfration Abs/cm *ASTM D7624 >20 11.9 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.9	Zinc	ppm	ASTM D5185m	1270	1191		
Solition ppm ASTM D5185m >25 9	Sulfur	ppm	ASTM D5185m	2060	3890		
Sodium ppm ASTM D5185m 10	CONTAMINAN	ITS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 14 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7624 >20 11.9 Sulfation Abs/.1mm *ASTM D7415 >30 28.6 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 23.9	Silicon	ppm	ASTM D5185m	>25	9		
INFRA-RED	Sodium	ppm	ASTM D5185m		10		
Soot % % *ASTM D7844 >3 0.7 Nitration Abs/cm *ASTM D7624 >20 11.9 Sulfation Abs/.1mm *ASTM D7415 >30 28.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.9	Potassium	ppm	ASTM D5185m	>20	14		
Nitration Abs/cm *ASTM D7624 >20 11.9 Sulfation Abs/.1mm *ASTM D7415 >30 28.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.9	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 28.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 23.9	Soot %	%	*ASTM D7844	>3	0.7		
Sulfation Abs/.1mm *ASTM D7415 >30 28.6 FLUID DEGRADATION method limit/base current history1 history2 Dxidation Abs/.1mm *ASTM D7414 >25 23.9	Nitration	Abs/cm	*ASTM D7624	>20	11.9		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30			
	FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 9.8 5.0	Oxidation	Abs/.1mm	*ASTM D7414	>25	23.9		
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.0		

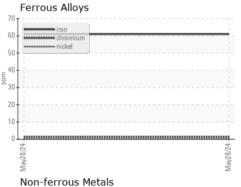


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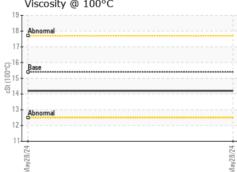


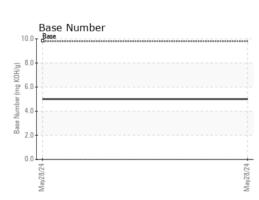
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FILLID PROPERTIES						

FLUID PROPE	ERITES	method	ilmit/base	current	nistory i	nistory2
Visc @ 100°C	cSt	ASTM D445	15.4	14.2		



10-		
8 -	copper	
6-		
4		
2-		
0	8/24	8/24
	Wisconsity @ 1009C	May28/24
19 -	Viscosity @ 100°C	
: 0 T		









Laboratory Sample No. Lab Number : 06196484

: GFL0110972 Unique Number : 11058607

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 31 May 2024 **Tested** : 03 Jun 2024

Diagnosed : 03 Jun 2024 - Don Baldridge

Test Package : FLEET Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

GFL Environmental - 642B- MCM Disposal

10450 Pease Ave Byron Center, MI US 49315 Contact: Chad Arp carp@gflenv.com T: (616)915-7901

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)