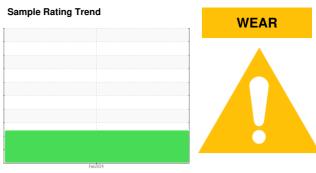


OIL ANALYSIS REPORT

Walgreens - Tractor [Walgreens - Tractor] 136A624166

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Bearing and/or bushing wear is indicated. Cylinder, crank, or cam shaft wear is indicated.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Fluid Condition

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

GAL)				Feb 2024		\
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0106529		
Sample Date		Client Info		18 Feb 2024		
Machine Age	mls	Client Info		78245		
Oil Age	mls	Client Info		78245		
Oil Changed	11110	Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method	7 0.2	NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	<u> 100</u>		
Chromium	ppm	ASTM D5185m	>5	<u> 8</u>		
Nickel	ppm	ASTM D5185m	>2	1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>30	66		
Lead	ppm	ASTM D5185m	>30	4		
Copper	ppm	ASTM D5185m	>150	<u> 171</u>		
Tin	ppm	ASTM D5185m	>5	3		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	21		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	43		
Manganese	ppm	ASTM D5185m	0	4		
Magnesium	ppm	ASTM D5185m	950	637		
Calcium	ppm	ASTM D5185m	1050	1676		
Phosphorus	ppm	ASTM D5185m	995	754		
Zinc	ppm	ASTM D5185m	1180	958		
Sulfur	ppm	ASTM D5185m	2600	1728		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	9		
Sodium	ppm	ASTM D5185m		6		
Potassium	ppm	ASTM D5185m	>20	162		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5		
Nitration	Abs/cm	*ASTM D7624	>20	12.0		
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8		
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.4		
Base Number (BN)	mg KOH/g	ASTM D2896		5.0		



OIL ANALYSIS REPORT

