

OIL ANALYSIS REPORT

Area Walgreens - Tractor [Walgreens - Tractor] 136A624004

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a components first oil change.

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.

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.

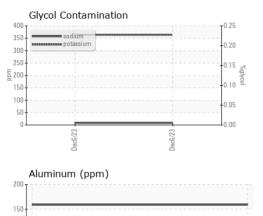
624004						
GAL)				Dec2023		
SAMPLE INFO	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0111778		
Sample Date		Client Info		06 Dec 2023		
Machine Age	mls	Client Info		69766		
Oil Age	mls	Client Info		69766		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINA	TION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR META	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	74		
Chromium	ppm	ASTM D5185m	>5	6		
Nickel	ppm	ASTM D5185m	>2	2		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>30	159		
Lead	ppm	ASTM D5185m	>30	2		
Copper	ppm	ASTM D5185m	>150	190		
Tin	ppm	ASTM D5185m	>5	7		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	22		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	40		
Manganese	ppm	ASTM D5185m	0	5		
Magnesium	ppm	ASTM D5185m	950	560		
Calcium	ppm	ASTM D5185m	1050	1588		
Phosphorus	ppm	ASTM D5185m	995	704		
Zinc	ppm	ASTM D5185m	1180	871		
Sulfur	ppm	ASTM D5185m	2600	1818		
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	10		
Sodium	ppm	ASTM D5185m		8		
Potassium	ppm	ASTM D5185m	>20	364		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1		
Nitration	Abs/cm	*ASTM D7624	>20	11.5		
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.5		
FLUID DEGRA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.2		
Base Number (BN)		ASTM D2896		5.5		
	0.101.0					

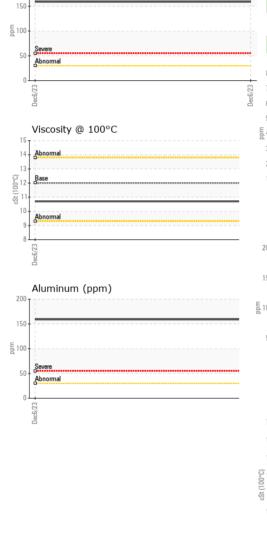
Sample Rating Trend

NORMAL



OIL ANALYSIS REPORT





tion		VISUAL		method	limit/base	current	history1	history2
	-0.20	White Metal	scalar	*Visual	NONE	NONE		
		Yellow Metal	scalar	*Visual	NONE	NONE		
	0.15 egy	Precipitate	scalar	*Visual	NONE	NONE		
	0.10 ⁸	Silt	scalar	*Visual	NONE	NONE		
	-0.05	Debris	scalar	*Visual	NONE	NONE		
	0.00	Sand/Dirt	scalar	*Visual	NONE	NONE		
Dec6/23 -	0.00	Appearance	scalar	*Visual	NORML	NORML		
Deci		Odor	scalar	*Visual	NORML	NORML		
		Emulsified Water	scalar	*Visual	>0.2	NEG		
		Free Water	scalar	*Visual		NEG		
		FLUID PROPE			limit/base			history?
		Visc @ 100°C	cSt	ASTM D445		current 10.7	history1	history2
		GRAPHS	COL	ASTIVI D445	12.00	10.7		
		Ferrous Alloys						
		⁸⁰						
	Dec6/23	70 - chromium						
	De	60 - nickel						
		50 - E 40 -						
		30						
		20						
		10						

		Dec6/23			Dec6/23			
		Dec			Dec			
		Non-ferrous Meta	s					
		200 copper						
		lead						
		150						
		E 100						
		톱 100 -						
		50 -						
		50						
		Dec6/23			Dec6/23			
		Viscosity @ 100°C	2			Base Number		
		14 - Abnormal			6.0	1		
		T			5.0			
		13- Base			(0,14,0,0 HOX Bu ta 3,0,0 W 2,0,0 Seg			
		() 12 - Base () 12 - Base () 12 - Base		******	Bm) Loo			
		ਲੁੱ 11-						
		10 Abnormal			2.0-			
		9 - Abnormal			1.0			
		8						
		Dec6/23			Dec6/23	Dec6/23		567 Joor
		Dec			Dec	Dec		
J L	aboratory	: WearCheck USA - 5	501 Madi	son Ave Ca	ry, NC 27513	Transervice	- Shop 1373 - Berkeley-/	Anderson/Pendergras
	ample No.		Recieve		Dec 2023			iance Parkwa
CCREDITED	ab Number	: 06042832	ed : 26 [Willamston, SC			
	Inique Number		Diagnos	tician : We	s Davis		-	US 2969
	est Package		ion at t	00 007 4000	1			Sonny Bouche
		contact Customer Serv						anservice.com

* - 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)

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