

## **OIL ANALYSIS REPORT**

### (89953X) Walgreens - Tractor Machine Id [Walgreens - Tractor] 136A69015

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (11 GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### **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.

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69015						
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GAL)		Mar202	3 Jun2023	Oct2023 De	rc2023	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0105468	PCA0105418	PCA0093807
Sample Date		Client Info		11 Dec 2023	26 Oct 2023	09 Jun 2023
Machine Age	mls	Client Info		618647	592671	562868
Oil Age	mls	Client Info		52000	25000	48442
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	<u>\</u> 5	<1.0	<1.0	<1.0
Water			>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	c	method	limit/base		history1	history2
lron Obversiver	ppm	ASTM D5185m	>80	29 3	15	21
Chromium Nickel	ppm	ASTM D5185m ASTM D5185m	>5 >2	3 1	1	1
Titanium	ppm	ASTM D5185m	>2	۱ <1	<1 <1	< 1
Silver	ppm	ASTM D5185m	>3	<1 0	<1	0
Aluminum	ppm ppm	ASTM D5185m	>30	7	4	8
Lead	ppm	ASTM D5185m	>30	0	4	0
Copper	ppm	ASTM D5185m	>150	6	5	3
Tin	ppm	ASTM D5185m	>5	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	1	2	3
Barium	ppm	ASTM D5185m	_	0	0	0
Volybdenum	ppm	ASTM D5185m	50	65	64	59
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	950	1019	945	968
Calcium	ppm	ASTM D5185m	1050	1153	1142	1230
Phosphorus	ppm	ASTM D5185m	995	1053	988	984
Zinc	ppm	ASTM D5185m	1180	1329	1280	1268
Sulfur	ppm	ASTM D5185m	2600	2729	3006	3300
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	10	6	10
Sodium	ppm	ASTM D5185m		2	0	1
Potassium	ppm	ASTM D5185m	>20	2	3	1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.8	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	10.3	8.7	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.6	20.7	22.4
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation Base Number (BN)	Abs/.1mm	*ASTM D7414	>25	20.7	17.0	19.4
Base Number (BN)	mg KOH/g	ASTM D2896		4.6	7.4	6.9

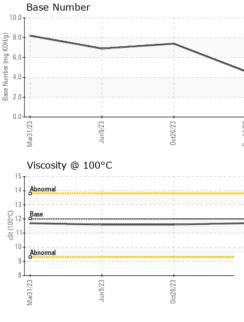
Sample Rating Trend

NORMAL



# **OIL ANALYSIS REPORT**

VISUAL



	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal		*Visual	NONE	NONE	NONE	NONE
	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
0ct26/23 Dec11/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Deci	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPE	ERTIES	method	limit/base	current	history1	history2
-	Visc @ 100°C	cSt /	ASTM D445	12.00	11.7	11.6	11.6
	GRAPHS						
	Ferrous Alloys						
0ct26/23 -	25 - chromium			/			
000	20 nickel						
	<u>لَّ</u> 15						
	d 15						
	10 -						
	5-						
	0		The surface of the local division of the surface of				
	Mar31/23 Jun9/23		0ct26/23	Dec11/23			
	Mar3 Jun		0ct2	Dec1			
	Non-ferrous Meta	ls					
	10 copper						
	8 -						
	6. mdd						
	4		1				
	2-						
			International States and States a				
	Mar31/23 Jun9/23		0ct26/23	Dec11/23			
	Marô		Oct	Deci			
	Viscosity @ 100°C	С			Base Number		
	14 Abnormal			9.0			
	13-			₽7.0			
	Base			<u>9</u> 6.0			
	60 12 - Base 50 12 - Gase 50			<u> </u>			
				(B) 1.0 (B) HOX (B) 5.0 (B) 5.0 (B) 5.0 (B) 5.0 (B) 5.0 (C) 1.0 (C) 1.	]		
	10 Abnormal			۵.0 2.0			
	9-		1	1.0-			
	1 2 3		23	0.0	2 2		3
	Mar31/23 Jun9/23		0ct26/23	Dec11/23	Mar31/23 Jun9/23	0ct26/23	
Laboratory Sample No. Lab Number Unique Number	- : WearCheck USA - : PCA0105468 : 06041842	501 Madison Ave., Cary, NC 27 Recieved : 21 Dec 2023 Diagnosed : 22 Dec 2023 Diagnostician : Wes Davis			_		

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

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