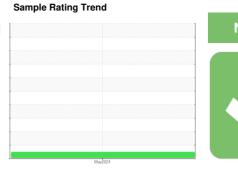


# **OIL ANALYSIS REPORT**

# **Walgreens - Tractor** [Walgreens - Tractor] 136A624065

**Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (11 G





## DIAGNOSIS

#### Recommendation

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

#### Wear

All component wear rates are normal.

### 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. There is no indication of any contamination in the oil.

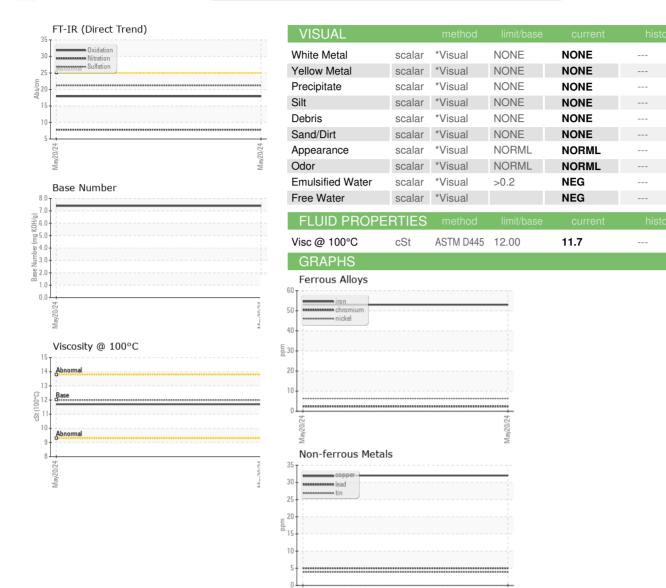
#### **Fluid Condition**

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

Cample Date   Client Info   20 May 2024	iAL)			1	May/2024		
Cample Date   Client Info   20 May 2024	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age   mls   Client Info   21428	Sample Number		Client Info		PCA0107540		
Dil Age	Sample Date		Client Info		20 May 2024		
Contained   Client Info   Changed   Client Info   NORMAL   Contained   Conta	Machine Age	mls	Client Info		21428		
CONTAMINATION   method   milibase   current   history1   history2	Oil Age	mls	Client Info		21428		
CONTAMINATION	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	CONTAMINATI	ON	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>2.0	<1.0		
WEAR METALS	Water		WC Method	>0.2	NEG		
Chromium	Glycol		WC Method		NEG		
Chromium   ppm   ASTM D5185m   >20   2	WEAR METALS	S	method	limit/base	current	history1	history2
Strickel	ron	ppm	ASTM D5185m	>100			
Silver	Chromium	ppm	ASTM D5185m	>20	2		
Astroper	Nickel	ppm	ASTM D5185m	>4			
Astroper	Titanium	ppm	ASTM D5185m		<1		
December   December	Silver	ppm	ASTM D5185m	>3	1		
Copper	Aluminum	ppm	ASTM D5185m	>20	37		
ASTM D5185m   STM D5185m   ST	_ead	ppm	ASTM D5185m	>40	5		
Anadium         ppm         ASTM D5185m         <1             Cadmium         ppm         ASTM D5185m         <1             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         2         53             Barium         ppm         ASTM D5185m         0         5             Molybdenum         ppm         ASTM D5185m         50         62             Manganese         ppm         ASTM D5185m         0         5             Manganesium         ppm         ASTM D5185m         950         428             Calcicium         ppm         ASTM D5185m         950         428             Phosphorus         ppm         ASTM D5185m         995         975             Phosphorus         ppm         ASTM D5185m         2600         3345             Cinc         ppm         ASTM D5185m         26	Copper	ppm	ASTM D5185m	>330	32		
ADDITIVES	Γin	ppm	ASTM D5185m	>15	4		
ADDITIVES	Vanadium	ppm	ASTM D5185m		<1		
Serium	Cadmium	ppm	ASTM D5185m		<1		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         50         62             Manganese         ppm         ASTM D5185m         0         5             Magnesium         ppm         ASTM D5185m         950         428             Calcium         ppm         ASTM D5185m         1050         1753             Phosphorus         ppm         ASTM D5185m         995         975             Zinc         ppm         ASTM D5185m         1180         1208             Sulfur         ppm         ASTM D5185m         2600         3345             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         42             Potassium         ppm         ASTM D5185m         >20         100             Potassium         ppm         ASTM D5185m         >20         100             Potassium         ppm         ASTM D51	Boron	ppm	ASTM D5185m	2	53		
Manganese         ppm         ASTM D5185m         0         5             Magnesium         ppm         ASTM D5185m         950         428             Calcium         ppm         ASTM D5185m         1050         1753             Phosphorus         ppm         ASTM D5185m         995         975             Zinc         ppm         ASTM D5185m         2600         3345             Sulfur         ppm         ASTM D5185m         2600         3345             CONTAMINANTS         method         limit/base         current         history1         history2           Soldium         ppm         ASTM D5185m         >25         42             Soldium         ppm         ASTM D5185m         >20         100             Potassium         ppm         ASTM D5185m         >20         100             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844	Barium	ppm	ASTM D5185m	0	5		
Magnesium         ppm         ASTM D5185m         950         428             Calcium         ppm         ASTM D5185m         1050         1753             Phosphorus         ppm         ASTM D5185m         995         975             Zinc         ppm         ASTM D5185m         1180         1208             Sulfur         ppm         ASTM D5185m         2600         3345             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         42             Potassium         ppm         ASTM D5185m         6             Potassium         ppm         ASTM D5185m         >20         100             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7624         >20         7.8             Sulfation         Abs/.1mm         *ASTM D7414         >2	Molybdenum	ppm	ASTM D5185m	50	62		
Calcium         ppm         ASTM D5185m         1050         1753             Phosphorus         ppm         ASTM D5185m         995         975             Zinc         ppm         ASTM D5185m         1180         1208             Sulfur         ppm         ASTM D5185m         2600         3345             CONTAMINANTS         method         limit/base         current         history1         history2           Solicon         ppm         ASTM D5185m         >25         42             Solium         ppm         ASTM D5185m         6             Potassium         ppm         ASTM D5185m         >20         100             Potassium         ppm         ASTM D7844         >3         0.3             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3             Sulfation         Abs/.1mm         *ASTM D7415         >30	Manganese	ppm	ASTM D5185m	0	5		
Phosphorus         ppm         ASTM D5185m         995         975             Zinc         ppm         ASTM D5185m         1180         1208             Sulfur         ppm         ASTM D5185m         2600         3345             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         42             Sodium         ppm         ASTM D5185m         6             Potassium         ppm         ASTM D5185m         >20         100             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.2             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         <	Magnesium	ppm	ASTM D5185m	950	428		
Time	Calcium	ppm	ASTM D5185m	1050	1753		
Sulfur         ppm         ASTM D5185m         2600         3345             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         42             Sodium         ppm         ASTM D5185m         6              Potassium         ppm         ASTM D5185m         >20         100             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3             Sulfation         Abs/.1mm         *ASTM D7624         >20         7.8             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.9	Phosphorus	ppm	ASTM D5185m	995	975		
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         42             Sodium         ppm         ASTM D5185m         6             Potassium         ppm         ASTM D5185m         >20         100             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3             Nitration         Abs/cm         *ASTM D7624         >20         7.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.2             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.9	Zinc	ppm	ASTM D5185m	1180	1208		
Solition   ppm   ASTM D5185m   >25   42	Sulfur	ppm	ASTM D5185m	2600	3345		
Sodium	CONTAMINAN <sup>*</sup>	TS	method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         100             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.3             Nitration         Abs/cm         *ASTM D7624         >20         7.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.2             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.9	Silicon	ppm	ASTM D5185m	>25	42		
INFRA-RED	Sodium	ppm	ASTM D5185m		6		
Soot %	Potassium	ppm	ASTM D5185m	>20	100		
Nitration         Abs/cm         *ASTM D7624         >20         7.8             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.2             FLUID DEGRADATION method limit/base current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.9	INFRA-RED		method	limit/base	current	history1	history2
Sulfation         Abs/.1mm         *ASTM D7415         >30         21.2             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         17.9	Soot %	%	*ASTM D7844	>3	0.3		
FLUID DEGRADATION method limit/base current history1 history2  Oxidation Abs/.1mm *ASTM D7414 >25 17.9	Nitration	Abs/cm	*ASTM D7624	>20	7.8		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2		
	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 7.4	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.9		
	Base Number (BN)	mg KOH/g	ASTM D2896		7.4		



# **OIL ANALYSIS REPORT**



Viscosity @ 100°C





Certificate 12367

Laboratory Sample No.

: PCA0107540 Lab Number : 06194757 Unique Number : 11056880 Test Package : FLEET

:St (100°C)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 May 2024

**Tested** : 30 May 2024 Diagnosed : 31 May 2024 - Sean Felton

Transervice - Shop 1367 - Berkeley-Jupiter

Base Number

4.0

1.0 0.0

> 15998 Walgreens Drive Jupiter, FL US 33478

Contact: Manny Gonzalez egonzalez@transervice.com

 $^st$  - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (561)776-0755 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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

F: (561)776-0799