

# **OIL ANALYSIS REPORT**

# (89532X) Walgreens - Tractor [Walgreens - Tractor] 136A66203

**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.



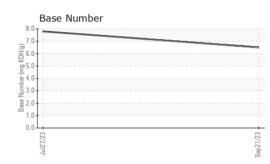
Sample Rating Trend



,			Jul2023	Sep2023		
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0105846	PCA0091553	
Sample Date		Client Info		21 Sep 2023	27 Jul 2023	
Machine Age	mls	Client Info		727740	705554	
Oil Age	mls	Client Info		705554	25000	
Oil Changed		Client Info		N/A	Oil Added	
Sample Status				NORMAL	NORMAL	
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METALS	6	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>110	28	17	
Chromium	ppm	ASTM D5185m	>4	<1	<1	
Nickel	ppm	ASTM D5185m	>2	<1	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>25	4	3	
Lead	ppm	ASTM D5185m	>45	<1	0	
Copper	ppm	ASTM D5185m	>85	4	3	
Tin	ppm	ASTM D5185m	>4	<1	<1	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES						1-1-1O
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm		limit/base	current 0	history1 0	nistory2
	ppm ppm					nistory2 
Boron		ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	0 2 65	0 0 63	
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	2 0 50 0	0 2 65 <1	0 0 63 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	0 2 65 <1 1000	0 0 63 <1 1018	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	0 2 65 <1 1000 1094	0 0 63 <1 1018 1188	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	0 2 65 <1 1000 1094 1049	0 0 63 <1 1018 1188 1066	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	0 2 65 <1 1000 1094 1049 1280	0 0 63 <1 1018 1188 1066 1263	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	0 2 65 <1 1000 1094 1049	0 0 63 <1 1018 1188 1066 1263 3564	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600	0 2 65 <1 1000 1094 1049 1280 3006 current	0 0 63 <1 1018 1188 1066 1263 3564 history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b>	2 0 50 0 950 1050 995 1180 2600	0 2 65 <1 1000 1094 1049 1280 3006 <u>current</u> 14	0 0 63 <1 1018 1188 1066 1263 3564 history1 12	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>imit/base</b> >30	0 2 65 <1 1000 1094 1049 1280 3006 <u>current</u> 14 1	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >30	0 2 65 <1 1000 1094 1049 1280 3006 <u>current</u> 14	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2 0	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>imit/base</b> >30	0 2 65 <1 1000 1094 1049 1280 3006 <u>current</u> 14 1	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >30	0 2 65 <1 1000 1094 1049 1280 3006 <i>current</i> 14 1 2 <i>current</i> 0.8	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2 0 history1 0.6	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Solicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm <b>S</b> ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >30 20 <b>imit/base</b>	0 2 65 <1 1000 1094 1049 1280 3006 <i>current</i> 14 1 2 <i>current</i>	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2 0 history1 0.6 8.7	     history2    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >30 >20 <b>limit/base</b>	0 2 65 <1 1000 1094 1049 1280 3006 <i>current</i> 14 1 2 <i>current</i> 0.8	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2 0 history1 0.6	     history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >30 >20 <b>imit/base</b> >3	0 2 65 <1 1000 1094 1049 1280 3006 <i>current</i> 14 1 2 <i>current</i> 0.8 9.7	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2 0 history1 0.6 8.7	      history2   history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>imit/base</b> >30 20 <b>imit/base</b> >3 >20	0 2 65 <1 1000 1094 1049 1280 3006 <i>current</i> 14 1 2 <i>current</i> 0.8 9.7 20.9	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2 0 history1 0.6 8.7 18.9	     history2  history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >30 >20 >30 >20 >30 >30	0 2 65 <1 1000 1094 1049 1280 3006 Current 14 1 2 Current 0.8 9.7 20.9 Current	0 0 63 <1 1018 1188 1066 1263 3564 history1 12 2 0 history1 0.6 8.7 18.9 history1	    history2  history2  history2   history2

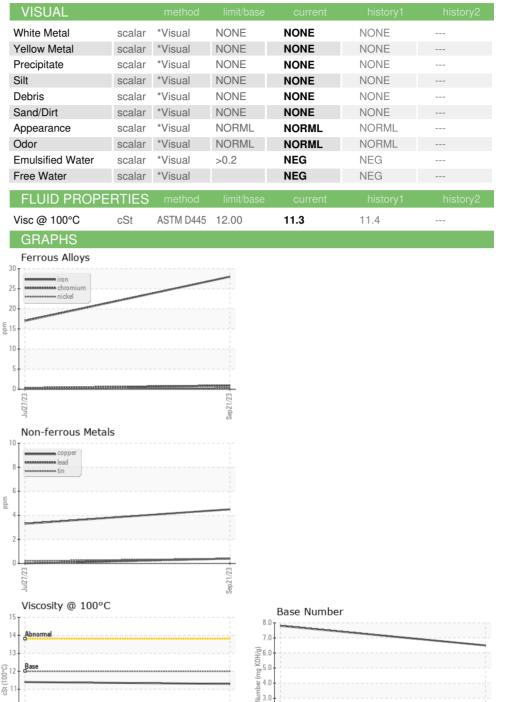


# **OIL ANALYSIS REPORT**



## Viscosity @ 100°C





88 2.0

Sep21/23.

: 28 Sep 2023

: 29 Sep 2023

: Wes Davis

1.0 0.0



: 10670697 Diagnostician Test Package : FLEET Certificate L2367 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Diagnosed

Abnorma

: PCA0105846

: 05964146

8

Laboratory

Sample No.

Lab Number

Unique Number

Transervice - Shop 1361 - Berkeley-Windsor 4400 State Road 19 Windsor, WI US 53598 Contact: Mike Hurda mhurda@transervice.com T: (608)846-2726 F: (608)846-0389

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Sep21/23