

## **OIL ANALYSIS REPORT**

Sample Rating Trend

### NORMAL

## Area Walgreens - Tractor [Walgreens - Tractor] 136A63425

**Diesel Engine** 

Fluid 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 INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0115839	PCA0107359	
Sample Date		Client Info		07 May 2024	05 Oct 2023	
Machine Age	mls	Client Info		79824	24802	
Oil Age	mls	Client Info		55022	24802	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	34	37	
Chromium	ppm	ASTM D5185m	>20	1	1	
Nickel	ppm	ASTM D5185m	>4	0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>20	13	21	
Lead	ppm	ASTM D5185m	>40	5	3	
Copper	ppm	ASTM D5185m	>330	5	14	
Tin	ppm	ASTM D5185m	>15	2	2	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
	pp	No III Do Iooiii		U	0	
ADDITIVES	66	method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		limit/base	-	-	history2
		method		current	history1	
Boron	ppm	method ASTM D5185m	2	current 6	history1 62	
Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0	current 6 0	history1 62 5	
Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 6 0 62	history1 62 5 65	
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 6 0 62 2	history1 62 5 65 4	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 6 0 62 2 866	history1 62 5 65 4 463	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 6 0 62 2 866 1213	history1 62 5 65 4 463 1745	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	current     6     0     62     2     866     1213     993	history1 62 5 65 4 463 1745 1003	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	current     6     0     62     2     866     1213     993     1255	history1 62 5 65 4 463 1745 1003 1256	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method 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	Current 6 0 62 2 866 1213 993 1255 2722	history1 62 5 65 4 463 1745 1003 1256 3053	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m 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	current     6     0     62     2     866     1213     993     1255     2722     current	history1 62 5 65 4 463 1745 1003 1256 3053 history1	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m 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 <b>limit/base</b> >25	current     6     0     62     2     866     1213     993     1255     2722     current     13	history1     62     5     65     4     463     1745     1003     1256     3053     history1     40	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25	current     6     0     62     2     866     1213     993     1255     2722     current     13     2	history1     62     5     65     4     463     1745     1003     1256     3053     history1     40     4	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>limit/base</b> >25 >20	current     6     0     62     2     866     1213     993     1255     2722     current     13     2     39	history1   62   5   65   4   463   1745   1003   1256   3053   history1   40   4   73	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>Imit/base</b> >25 >20 <b>Imit/base</b>	current     6     0     62     2     866     1213     993     1255     2722     current     13     2     39     current	history1   62   5   65   4   463   1745   1003   1256   3053   history1   40   4   73   history1	     history2   history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current     6     0     62     2     866     1213     993     1255     2722     current     13     2     39     current     0.5	history1     62     5     65     4     463     1745     1003     1256     3053     history1     40     4     73     history1     0.2	     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	method     ASTM D5185m     ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current     6     0     62     2     866     1213     993     1255     2722     current     13     2     39     current     0.5     10.1	history1     62     5     65     4     463     1745     1003     1256     3053     history1     40     4     73     history1     0.2     8.2	     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	method     ASTM D5185m     ASTM D5185m	2 0 0 50 0 950 1050 995 1180 2600 2600 25 20 220 20 20 20 20 20 20 20 20 20 20 20	current     6     0     62     2     866     1213     993     1255     2722     current     13     2     39     current     0.5     10.1     22.9	history1   62   5   65   4   463   1745   1003   1256   3053   history1   40   4   73   history1   0.2   8.2   21.1	     history2  history2  history2



3

30

2!

Abs/cm

10

8.0

(b/H0J Bu)

unber (n 3.0

ag 2.0

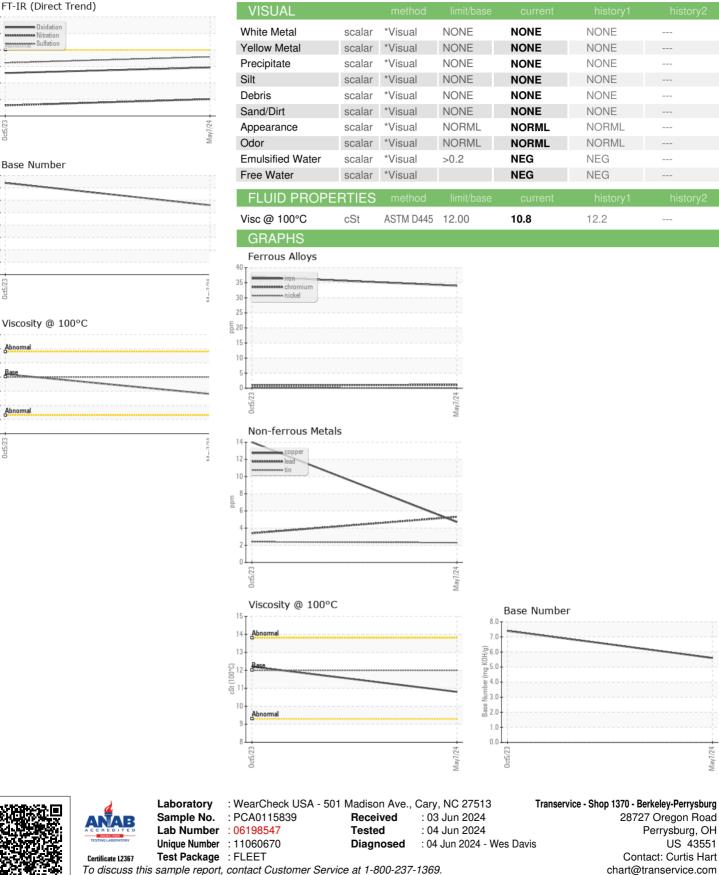
0.0

15

14

13 cSt (100°C)

# **OIL ANALYSIS REPORT**



\* - 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)

Report Id: TSV1370 [WUSCAR] 06198547 (Generated: 06/04/2024 14:36:21) Rev: 1

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