

# **OIL ANALYSIS REPORT**

#### Sample Rating Trend

NORMAL

#### Area (37351Z) Walgreens Machine Id [Walgreens] 136A62520 Component

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.

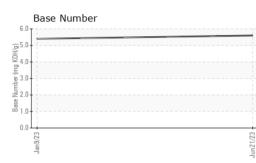
## Fluid Condition

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

SAMPLE INFOR	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		PCA0096036	PCA0087977	
Sample Date		Client Info		21 Jun 2023	09 Jan 2023	
Machine Age	mls	Client Info		160003	113220	
Oil Age	mls	Client Info		50000	30000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history 1	history 2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history 1	history 2
		ASTM D5185m	>110	31	31	
Iron	ppm			-		
Chromium Nickel	ppm	ASTM D5185m	>4	<1 0	<1	
	ppm	ASTM D5185m	>2		<1	
Titanium	ppm	ASTM D5185m	0	0	<1	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m	>25	4	12	
Lead	ppm	ASTM D5185m	>45	<1	1	
Copper	ppm	ASTM D5185m	>85	4	5	
Tin	ppm	ASTM D5185m	>4	<1	1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history 1	history 2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 1	history 1 2	history 2
	ppm ppm					
Boron		ASTM D5185m	2	1	2	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0 50	1 0	2 4	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	1 0 65	2 4 63	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	1 0 65 <1	2 4 63 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	1 0 65 <1 935	2 4 63 <1 926	
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	1 0 65 <1 935 1105	2 4 63 <1 926 1095	  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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	1 0 65 <1 935 1105 1014	2 4 63 <1 926 1095 963	  
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 50 950 1050 995 1180	1 0 65 <1 935 1105 1014 1239	2 4 63 <1 926 1095 963 1244	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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 50 950 1050 995 1180 2600	1 0 65 <1 935 1105 1014 1239 3019	2 4 63 <1 926 1095 963 1244 3041	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	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	1 0 65 <1 935 1105 1014 1239 3019 current	2 4 63 <1 926 1095 963 1244 3041 history 1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	2 0 50 950 1050 995 1180 2600	1 0 65 <1 935 1105 1014 1239 3019 current 7	2 4 63 <1 926 1095 963 1244 3041 history 1 7	     history 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>limit/base</b> >30	1 0 65 <1 935 1105 1014 1239 3019 current 7 <1	2 4 63 <1 926 1095 963 1244 3041 history 1 7 2	     history 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>limit/base</b> >30	1 0 65 <1 935 1105 1014 1239 3019 current 7 <1 16	2 4 63 <1 926 1095 963 1244 3041 history 1 7 2 2 35	     history 2  
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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >30 >20 <b>limit/base</b>	1 0 65 <1 935 1105 1014 1239 3019 current 7 <1 16 current	2 4 63 <1 926 1095 963 1244 3041 <b>history 1</b> 7 2 35 <b>history 1</b>	     history 2   history 2
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 TS	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >30 20 limit/base >20	1 0 65 <1 935 1105 1014 1239 3019 current 7 <1 16 current 0.7	2 4 63 <1 926 1095 963 1244 3041 <b>history 1</b> 7 2 35 <b>history 1</b> 0.6	     history 2  history 2
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 50 950 1050 995 1180 2600 <i>limit/base</i> >30 220 <i>limit/base</i> >3 >20	1 0 65 <1 935 1105 1014 1239 3019 current 7 <1 16 current 0.7 10.5	2 4 63 <1 926 1095 963 1244 3041 <b>history 1</b> 7 2 35 <b>history 1</b> 0.6 10.6	     history 2   history 2  history 2
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 0 950 1050 995 1180 2600 <b>imit/base</b> >30 20 <b>imit/base</b> >3 >20 >3	1 0 65 <1 935 1105 1014 1239 3019 current 7 <1 16 current 0.7 10.5 23.7	2 4 63 <1 926 1095 963 1244 3041 <b>history 1</b> 7 2 35 <b>history 1</b> 0.6 10.6 23.5	     history 2  history 2  history 2
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 *ASTM D7844	2 0 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >30 >20 >30 >20 >30 >30 imit/base	1 0 65 <1 935 1105 1014 1239 3019 current 7 <1 16 current 0.7 10.5 23.7 current	2 4 63 <1 926 1095 963 1244 3041 <b>history 1</b> 7 2 35 <b>history 1</b> 0.6 10.6 23.5 <b>history 1</b>	     history 2  history 2  history 2 

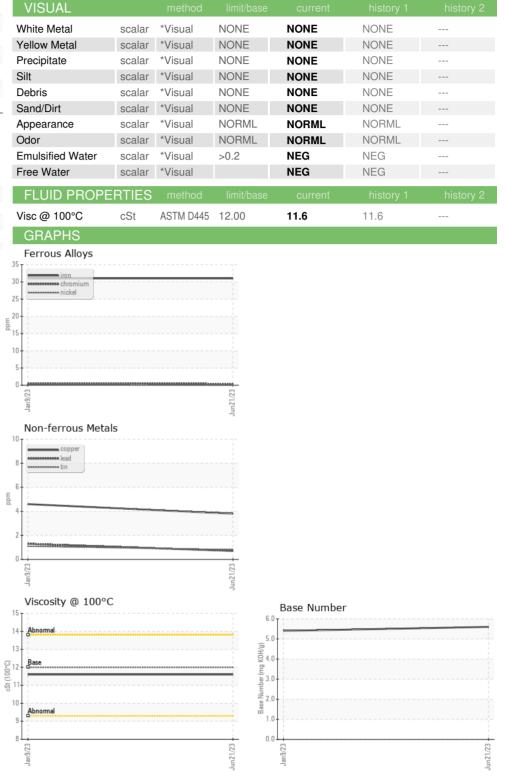


# **OIL ANALYSIS REPORT**



#### Viscosity @ 100°C







Transervice - Shop 1370 - Berkeley-Perrysburg 28727 Oregon Road Perrysburg, OH US 43551 Contact: Curtis Hart chart@transervice.com T: (419)666-3277 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (419)666-3279

Certificate L2367

Laboratory

Sample No.

Lab Number

Unique Number

Test Package : FLEET

: PCA0096036

: 05888312

: 10538795

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.

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

Diagnostician

: 30 Jun 2023

: 04 Jul 2023 : Don Baldridge

Received

Diagnosed