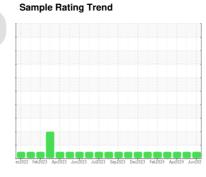


# **OIL ANALYSIS REPORT**

# (TEMP) Walgreens - Yard Horse [Walgreens - Yard Horse] 136A81260

**Diesel Engine** 

PETRO CANADA DURON SHP 15W40 (11 QTS)





### DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

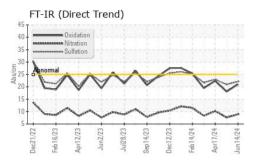
### **Fluid Condition**

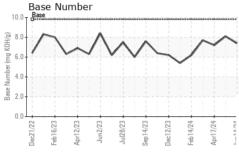
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

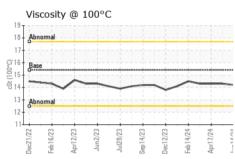
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128587	PCA0118756	PCA0118780
Sample Date		Client Info		14 Jun 2024	17 May 2024	17 Apr 2024
Machine Age	hrs	Client Info		9925	9721	9422
Oil Age	hrs	Client Info		503	299	481
Oil Changed	1110	Client Info		Changed	Not Changd	Changed
Sample Status		Onorte iriio		NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water	ON	WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method	>0.2	NEG	NEG	NEG
•		VVC IVIELLIOU		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	12	11	8
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>2	1	2	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	3	<1
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	4	<1	0
Tin	ppm	ASTM D5185m	>15	0	1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
		method	III III Dasc	Current	riistory i	Thistory 2
Boron	ppm	ASTM D5185m	0	<1	0	5
	ppm ppm	ASTM D5185m				
Boron		ASTM D5185m	0	<1	0	5
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	<1 0	0	5
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	<1 0 58	0 0 84	5 0 59
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	<1 0 58 0	0 0 84 <1	5 0 59 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	<1 0 58 0 963	0 0 84 <1 1367	5 0 59 <1 984
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	<1 0 58 0 963 1051	0 0 84 <1 1367 1459	5 0 59 <1 984 1067
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	<1 0 58 0 963 1051 1046	0 0 84 <1 1367 1459 1302	5 0 59 <1 984 1067 1052
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 ASTM D5185m	0 0 60 0 1010 1070 1150 1270	<1 0 58 0 963 1051 1046 1289	0 0 84 <1 1367 1459 1302 1769	5 0 59 <1 984 1067 1052 1238
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 ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	<1 0 58 0 963 1051 1046 1289 2955	0 84 <1 1367 1459 1302 1769 4384	5 0 59 <1 984 1067 1052 1238 3526
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	<1 0 58 0 963 1051 1046 1289 2955 current	0 84 <1 1367 1459 1302 1769 4384 history1	5 0 59 <1 984 1067 1052 1238 3526 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	<1 0 58 0 963 1051 1046 1289 2955 current	0 84 <1 1367 1459 1302 1769 4384 history1	5 0 59 <1 984 1067 1052 1238 3526 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	<1 0 58 0 963 1051 1046 1289 2955 current 3 <1	0 84 <1 1367 1459 1302 1769 4384 history1	5 0 59 <1 984 1067 1052 1238 3526 history2 0 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25	<1 0 58 0 963 1051 1046 1289 2955 current 3 <1 5	0 0 84 <1 1367 1459 1302 1769 4384 history1 4 2 3	5 0 59 <1 984 1067 1052 1238 3526 history2 0 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20 >3.0	<1 0 58 0 963 1051 1046 1289 2955 current 3 <1 5 <1.0 current	0 0 84 <1 1367 1459 1302 1769 4384 history1 4 2 3 <1.0 history1	5 0 59 <1 984 1067 1052 1238 3526 history2 0 2 0 <1.0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20 >3.0	<1 0 58 0 963 1051 1046 1289 2955 current 3 <1 5 <1.0 current 0.8	0 0 84 <1 1367 1459 1302 1769 4384 history1 4 2 3 <1.0 history1 0.6	5 0 59 <1 984 1067 1052 1238 3526 history2 0 2 0 <1.0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1150 1270 2060 limit/base >25 >20 >3.0	<1 0 58 0 963 1051 1046 1289 2955 current 3 <1 5 <1.0 current	0 0 84 <1 1367 1459 1302 1769 4384 history1 4 2 3 <1.0 history1	5 0 59 <1 984 1067 1052 1238 3526 history2 0 2 0 <1.0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7624	0 0 0 0 1010 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >6 >20 >30	<1 0 58 0 963 1051 1046 1289 2955 current 3 <1 5 <1.0 current 0.8 8.9 22.1	0 0 84 <1 1367 1459 1302 1769 4384  history1 4 2 3 <1.0  history1 0.6 7.6 20.9	5 0 59 <1 984 1067 1052 1238 3526 history2 0 2 0 <1.0 history2 1.1 10.2 23.0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7624 *ASTM D7415 method	0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base	<1 0 58 0 963 1051 1046 1289 2955 current 3 <1 5 <1.0 current 0.8 8.9 22.1 current	0 0 84 <1 1367 1459 1302 1769 4384 history1 4 2 3 <1.0 history1 0.6 7.6 20.9 history1	5 0 59 <1 984 1067 1052 1238 3526 history2 0 2 0 <1.0 history2 1.1 10.2 23.0 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844 *ASTM D7624 *ASTM D7624	0 0 0 1010 1070 1150 1270 2060 limit/base >25 >20 >3.0 limit/base >6 >20 >30 limit/base >25	<1 0 58 0 963 1051 1046 1289 2955 current 3 <1 5 <1.0 current 0.8 8.9 22.1	0 0 84 <1 1367 1459 1302 1769 4384  history1 4 2 3 <1.0  history1 0.6 7.6 20.9	5 0 59 <1 984 1067 1052 1238 3526 history2 0 2 0 <1.0 history2 1.1 10.2 23.0



## **OIL ANALYSIS REPORT**



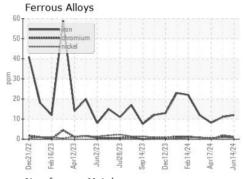


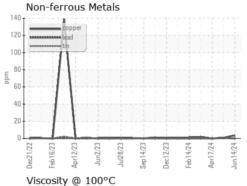


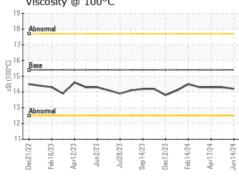
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

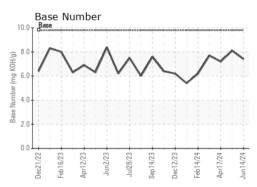
FLUID PROPERTIES		method				history2	
	Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.3	14.3

### **GRAPHS**













Certificate 12367

Laboratory Sample No.

: PCA0128587 Lab Number : 06216421

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

: 20 Jun 2024 **Tested** : 23 Jun 2024 Diagnosed

: 23 Jun 2024 - Don Baldridge

Mt. Vernon, IL US 62864 Contact: Erien White

Transervice - Shop 1364 - Berkeley-Mt. Vernon

Unique Number : 11089285 Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel) ewhite@transervice.com 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. T: (618)244-8726

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

Report Id: TSV1364 [WUSCAR] 06216421 (Generated: 06/23/2024 16:56:59) Rev: 1

Submitted By: Erien White

5100 Lake Terrace NE

F: (618)244-8791