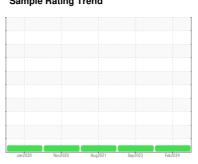


# **OIL ANALYSIS REPORT**

Sample Rating Trend



NORMAL



397834

Component **Diesel Engine** 

PETRO CANADA DURON SHP 10W30 (--- G

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the

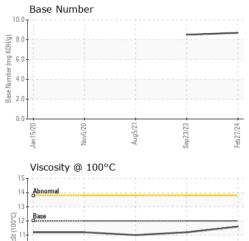
### **Fluid Condition**

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

GAL)  Jank200 Nord-020 Aug/021 Sep/023 Feb/024						
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0118992	PCA0105333	PCA0042316
Sample Date		Client Info		27 Feb 2024	23 Sep 2023	05 Aug 2021
Machine Age	mls	Client Info		63674	62689	3692
Oil Age	mls	Client Info		63674	62689	3692
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	2	23	51
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	1	3
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	<1	30
Tin	ppm	ASTM D5185m	>15	0	0	0
Antimony	ppm	ASTM D5185m				0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	13	11	18
Barium	ppm	ACTM DE10Ess	0	0	0	0
	PP	ASTM D5185m	U	U	0	0
Molybdenum	ppm	ASTM D5185m	50	54	57	62
Molybdenum Manganese						
•	ppm	ASTM D5185m	50	54	57	62
Manganese	ppm	ASTM D5185m ASTM D5185m	50	54 <1	57 <1	62 <1
Manganese Magnesium Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	54 <1 859	57 <1 971	62 <1 921
Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050	54 <1 859 1115	57 <1 971 1297	62 <1 921 1115
Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	54 <1 859 1115 1095	57 <1 971 1297 1106	62 <1 921 1115 1002
Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180	54 <1 859 1115 1095 1260	57 <1 971 1297 1106 1344	62 <1 921 1115 1002 1163
Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600	54 <1 859 1115 1095 1260 3323	57 <1 971 1297 1106 1344 3282	62 <1 921 1115 1002 1163 2809
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600	54 <1 859 1115 1095 1260 3323 current	57 <1 971 1297 1106 1344 3282 history1 4	62 <1 921 1115 1002 1163 2809 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600	54 <1 859 1115 1095 1260 3323 current	57 <1 971 1297 1106 1344 3282 history1 4	62 <1 921 1115 1002 1163 2809 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25	54 <1 859 1115 1095 1260 3323 current 3 0	57 <1 971 1297 1106 1344 3282 history1 4	62 <1 921 1115 1002 1163 2809 history2 8
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20	54 <1 859 1115 1095 1260 3323  current 3 0	57 <1 971 1297 1106 1344 3282 history1 4 2	62 <1 921 1115 1002 1163 2809 history2 8 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20	54 <1 859 1115 1095 1260 3323 current 3 0 current	57 <1 971 1297 1106 1344 3282 history1 4 2 2 history1	62 <1 921 1115 1002 1163 2809 history2 8 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  Method ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	54 <1 859 1115 1095 1260 3323 current 3 0 current 0	57 <1 971 1297 1106 1344 3282 history1 4 2 2 history1 0.1	62 <1 921 1115 1002 1163 2809 history2 8 2 8 history2 0.5
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  Method ASTM D5185m ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D7844  *ASTM D7624  *ASTM D76145	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	54 <1 859 1115 1095 1260 3323  current 3 0 0  current 0 4.8	57 <1 971 1297 1106 1344 3282 history1 4 2 2 history1 0.1 6.1	62 <1 921 1115 1002 1163 2809 history2 8 2 8 history2 0.5 9.6
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  Method ASTM D5185m ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D7844  *ASTM D7624  *ASTM D76145	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20 >30	54 <1 859 1115 1095 1260 3323 current 3 0 0 current 0 4.8 16.8	57 <1 971 1297 1106 1344 3282 history1 4 2 2 history1 0.1 6.1 17.5	62 <1 921 1115 1002 1163 2809 history2 8 2 8 history2 0.5 9.6 19.9

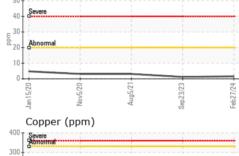


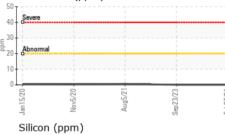
# **OIL ANALYSIS REPORT**



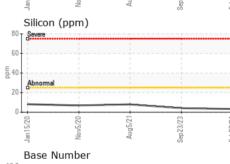
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPE	RTIES	method	limit/base	current	history1	history2

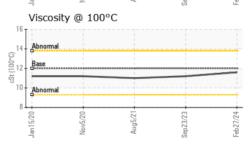
		oou.a.	7.000.			0
	FLUID PROPE	RTIES	method	limit/ba	se current	his
	Visc @ 100°C	cSt	ASTM D445	12.00	11.6	11.2
	GRAPHS					
-	Iron (ppm)				Lead (ppm)	
	Severe				Severe	
	50				E 60	
Ed 1	00 Abnormal				Abnormal	
	50	_			20	
	Jan 15,20 +	Aug5/21-	Sep23/23 +	Feb27/24	Jan 15/20	r S
	Aluminum (ppm)	1	ö	굔	Chromium (p	pm)

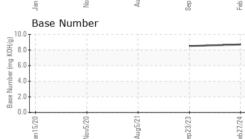




11.0









Laboratory Sample No.

Unique Number : 10910592

Lab Number : 06107095

E 200 100

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0118992

**Tested** Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

Received : 04 Mar 2024 : 04 Mar 2024

: 04 Mar 2024 - Wes Davis

PHILADELPHIA, PA US 19116 Contact: ROSTY VITER rviter@millertransgroup.com

Contact/Location: ROSTY VITER - MILPHINE

**MILLER TRUCK LEASING #118** 

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)

T: (215)552-9832 F: (215)552-9892

2196 BENNETT ROAD