

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL



Machine Id 1926743

Component 1 Diesel Engine

PETRO CANADA DURON ADVANCED 10W30 (36 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

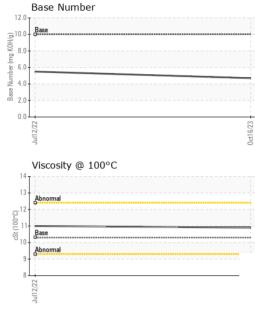
## **Fluid Condition**

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

/30 (36 QTS)			Jul2022	0ct2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108103	PCA0077089	
Sample Date		Client Info		16 Oct 2023	12 Jul 2022	
Machine Age	mls	Client Info		229915	229915	
Oil Age	mls	Client Info		229915	38000	
Oil Changed		Client Info		N/A	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel	ION	WC Method	>6.0	<1.0	<1.0	HISTOLYZ
Glycol		WC Method	>0.0	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	39	38	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>2	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>2	<1	1	
Aluminum	ppm	ASTM D5185m	>25	3	5	
Lead	ppm	ASTM D5185m	>40	2	3	
Copper	ppm	ASTM D5185m	>330	8	12	
Tin	ppm	ASTM D5185m	>15	<1	2	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	2	7	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0	2	7	
Barium	ppm	ASTM D5185m	0	0	0	
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0 60	0 59	0 64	
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0	0 59 <1	0 64 <1	
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010	0 59 <1 845	0 64 <1 921	
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070	0 59 <1 845 986	0 64 <1 921 1183	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150	0 59 <1 845 986 832	0 64 <1 921 1183 958	
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	0 60 0 1010 1070 1150 1270	0 59 <1 845 986 832 1147	0 64 <1 921 1183 958 1213	
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	0 60 0 1010 1070 1150 1270 2060	0 59 <1 845 986 832 1147 2420	0 64 <1 921 1183 958 1213 3221	
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	0 60 0 1010 1070 1150 1270 2060	0 59 <1 845 986 832 1147 2420	0 64 <1 921 1183 958 1213 3221 history1	history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 60 0 1010 1070 1150 1270 2060	0 59 <1 845 986 832 1147 2420 current	0 64 <1 921 1183 958 1213 3221 history1	    history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base	0 59 <1 845 986 832 1147 2420 current 7	0 64 <1 921 1183 958 1213 3221 history1 6 15	history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20	0 59 <1 845 986 832 1147 2420 current 7 15	0 64 <1 921 1183 958 1213 3221 history1 6 15 7	history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >3	0 59 <1 845 986 832 1147 2420 current 7 15 1 current 0.6	0 64 <1 921 1183 958 1213 3221 history1 6 15 7 history1 0.8	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m MEthod ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20	0 59 <1 845 986 832 1147 2420 current 7 15 1	0 64 <1 921 1183 958 1213 3221 history1 6 15 7	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m  method ASTM D5185m ASTM D5185m  *ASTM D5185m  *ASTM D5185m  *ASTM D5185m  *ASTM D5185m  *ASTM D5185m  *ASTM D7844  *ASTM D7624  *ASTM D76145	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >3 >20	0 59 <1 845 986 832 1147 2420 current 7 15 1 current 0.6 10.5	0 64 <1 921 1183 958 1213 3221 history1 6 15 7 history1 0.8 11.5	history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur  CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm	ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method *ASTM D7844 *ASTM D7624 *ASTM D76124 *ASTM D76115  Method	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >3 >20 >30 limit/base	0 59 <1 845 986 832 1147 2420 current 7 15 1 current 0.6 10.5 23.2	0 64 <1 921 1183 958 1213 3221 history1 6 15 7 history1 0.8 11.5 24.5 history1	history2 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m  Method  ASTM D5185m  ASTM D7185m  Method  *ASTM D7844  *ASTM D7624  *ASTM D7415  Method  *ASTM D7414	0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >3 >20 >30	0 59 <1 845 986 832 1147 2420 current 7 15 1 current 0.6 10.5 23.2	0 64 <1 921 1183 958 1213 3221 history1 6 15 7 history1 0.8 11.5 24.5	history2 history2



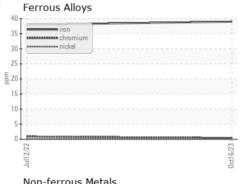
# **OIL ANALYSIS REPORT**



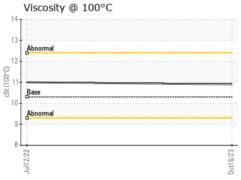
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance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

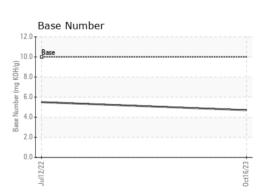
FLUID PROPI	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	10.3	10.9	11.0	

## **GRAPHS**



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6+	
4	
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2	*************************
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Juli 2/22	
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5	









Certificate L2367

Laboratory

Sample No. Lab Number Unique Number : 10729792 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 06001432

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: PCA0108103

Received Diagnosed Diagnostician : Wes Davis

: 08 Nov 2023 : 09 Nov 2023

Contact: JOHNNY WILKINS johnny.wilkins@perdue.com T:

Submitted By: KEVIN HOOKS

**PERDUE FARMS - DILLON** 

2047 HWY 9 WEST

DILLON, SC

US 29536

\* - 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)

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