

### **OIL ANALYSIS REPORT**

# (P798319) Preferred Service-Tractor [Preferred Service-Tractor] 192A01748

**Diesel Engine** 

Fluid PETRO CANADA DURON SHP 10W30 (36 QTS)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

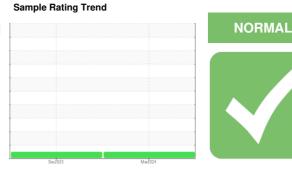
All component wear rates are normal.

#### 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 INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0120204	PCA0114382	
Sample Date		Client Info		29 Mar 2024	01 Dec 2023	
Machine Age	mls	Client Info		490649	481888	
Oil Age	mls	Client Info		8761	12888	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<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	12	17	
Chromium	ppm	ASTM D5185m	>20	<1	<1	
Nickel	ppm	ASTM D5185m	>2	<1	<1	
Titanium	ppm	ASTM D5185m	0	1	2	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>25	3	3	
Lead	ppm	ASTM D5185m	>40	<1	<1	
Copper	ppm	ASTM D5185m	>330	2	4	
Tin	ppm	ASTM D5185m	>15	1	1	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		<1	<1	
	le le				<	
ADDITIVES	le le	method	limit/base	current	history1	history2
ADDITIVES Boron	ppm		limit/base 2			history2
		method		current	history1	
Boron	ppm	method ASTM D5185m	2 0 50	current 1	history1 0 12 62	
Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0	current 1 0	history1 0 12	
Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 1 0 60 <1 949	history1 0 12 62	
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 1 0 60 <1	history1 0 12 62 <1	
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 1050 995	current     1     0     60     <1     949     1053     996	history1 0 12 62 <1 973 1095 1025	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current     1     0     60     <1     949     1053	history1 0 12 62 <1 973 1095	   
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	2 0 50 0 950 1050 995	current     1     0     60     <1     949     1053     996	history1 0 12 62 <1 973 1095 1025	   
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 50 950 1050 995 1180	current     1     0     60     <1     949     1053     996     1226	history1 0 12 62 <1 973 1095 1025 1264	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method     ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	current     1     0     60     <1     949     1053     996     1226     2968     current     6	history1   0   12   62   <1   973   1095   1025   1264   3267   history1   9	
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 50 950 1050 995 1180 2600	current     1     0     60     <1     949     1053     996     1226     2968     current     6     2	history1 0 12 62 <1 973 1095 1025 1025 1264 3267 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	2 0 50 0 950 1050 995 1180 2600 <b>limit/base</b> >25	current     1     0     60     <1     949     1053     996     1226     2968     current     6	history1   0   12   62   <1   973   1095   1025   1264   3267   history1   9	     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     1     0     60     <1     949     1053     996     1226     2968     current     6     2	history1   0   12   62   <1   973   1095   1025   1264   3267   history1   9   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   1   0   60   <1   949   1053   996   1226   2968   current   6   2   3	history1   0   12   62   <1   973   1095   1025   1264   3267   history1   9   4   3	    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> >3	current   1   0   60   <1   949   1053   996   1226   2968   current   6   2   3   current	history1   0   12   62   <1   973   1095   1025   1264   3267   history1   9   4   3   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 <b>TS</b> ppm	method     ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current   1   0   60   <1   949   1053   996   1226   2968   current   6   2   3   current   0.5	history1   0   12   62   <1   973   1095   1025   1264   3267   history1   9   4   3   history1   0.8	     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	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current   1   0   60   <1   949   1053   996   1226   2968   current   6   2   3   current   0.5   7.8	history1   0   12   62   <1   973   1095   1025   1264   3267   history1   9   4   3   history1   0.8   8.9	      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 50 950 1050 995 1180 2600 <b>imit/base</b> >25 <b>imit/base</b> >3 >20	current   1   0   60   <1   949   1053   996   1226   2968   current   6   2   3   current   0.5   7.8   18.9	history1   0   12   62   <1   973   1095   1025   1264   3267   history1   9   4   3   history1   0.8   8.9   20.3	    history2   history2  history2



3

30

2!

/ps/cu

10

10.0

6.

15 14 13 cSt (100°C) Ba

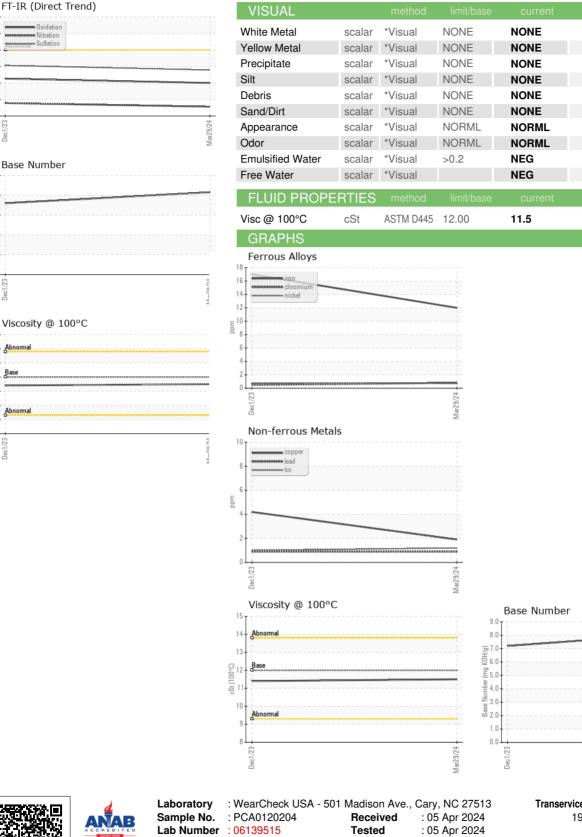
Dec1/23 -

(mg KOH/g)

mbe 4.

Base 2 Dec]

## **OIL ANALYSIS REPORT**



Transervice - Shop 1920 - Preferred Service 1955 W. North Avenue, Bldg K Melrose Park, IL US 60160 Contact: Tom Lindeman tlindemann@transervice.com T: (630)376-8946 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

11.4

Certificate 12367

Unique Number : 10964323

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.

Test Package : FLEET

Diagnosed

: 05 Apr 2024 - Wes Davis

Submitted By: Tom Lindeman

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Mar29/24