

OIL ANALYSIS REPORT

Area (92459X) Walgreens - Tractor Machine Id [Walgreens - Tractor] 136A62030

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

🔺 Wear

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

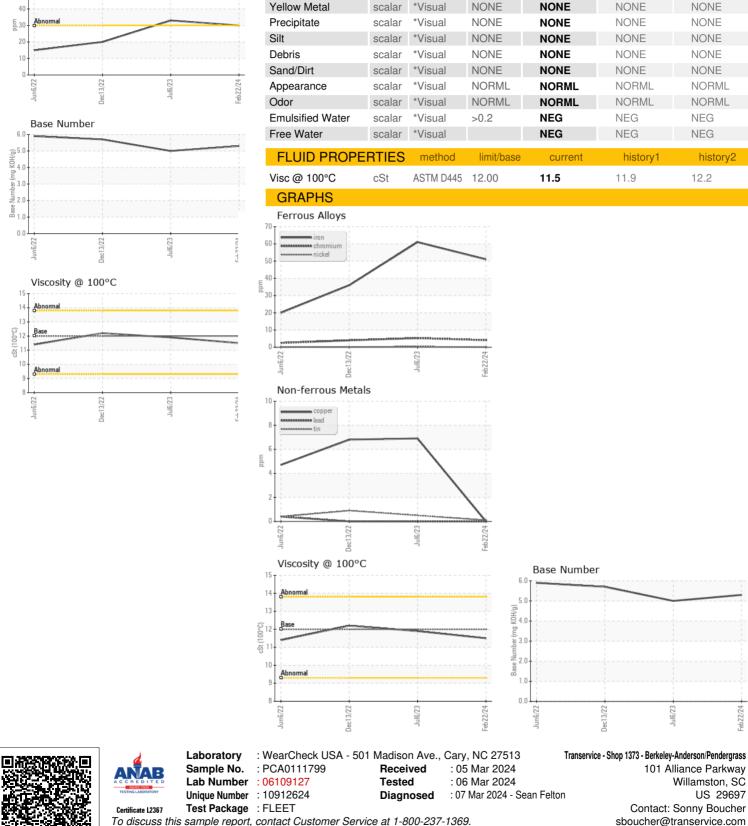
Fluid Condition

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

	/					
or						
62030						
AL)		Jun202	2 Dec2022	Jul2023 Feb	52024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0111799	PCA0101024	PCA0087922
Sample Date		Client Info		22 Feb 2024	06 Jul 2023	13 Dec 2022
Machine Age	mls	Client Info		570894	529526	453669
Oil Age	mls	Client Info		44368	72857	69682
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL
CONTAMINATI	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 METALS	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>80	51	61	36
Chromium	ppm	ASTM D5185m	>5	4	5	4
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	<u> </u>	<mark>▲</mark> 33	20
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m		0	7	7
Tin	ppm		>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES						
Boron		method	limit/base	current	history1	history2
Barium	ppm	ASTM D5185m	2	6	<mark>history1</mark> 2	history2 5
	ppm ppm		2			
,	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	6 2 61	2 0 68	5 0 55
Vanganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	6 2 61 0	2 0 68 1	5 0 55 <1
Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	6 2 61 0 852	2 0 68 1 996	5 0 55 <1 842
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	6 2 61 0 852 1133	2 0 68 1 996 1182	5 0 55 <1 842 1154
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	6 2 61 0 852 1133 980	2 0 68 1 996 1182 1060	5 0 55 <1 842 1154 903
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	2 0 50 950 1050 995 1180	6 2 61 0 852 1133 980 1172	2 0 68 1 996 1182 1060 1359	5 0 55 <1 842 1154 903 1098
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	6 2 61 0 852 1133 980 1172 2426	2 0 68 1 996 1182 1060 1359 3097	5 0 55 <1 842 1154 903 1098 2192
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	6 2 61 0 852 1133 980 1172 2426 current	2 0 68 1 996 1182 1060 1359 3097 history1	5 0 55 <1 842 1154 903 1098 2192 history2
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 ASTM D5185m method ASTM D5185m	2 0 50 950 1050 995 1180 2600	6 2 61 0 852 1133 980 1172 2426 current 7	2 0 68 1 996 1182 1060 1359 3097 history1 10	5 0 55 <1 842 1154 903 1098 2192 history2 8
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20	6 2 61 0 852 1133 980 1172 2426 current 7 <	2 0 68 1 996 1182 1060 1359 3097 history1 10 2	5 0 55 <1 842 1154 903 1098 2192 history2 8 2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20	6 2 61 0 852 1133 980 1172 2426 <u>current</u> 7 <1 <1	2 0 68 1 996 1182 1060 1359 3097 history1 10 2 5	5 0 55 <1 842 1154 903 1098 2192 history2 8 2 2 1
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 limit/base	6 2 61 0 852 1133 980 1172 2426 current 7 <1 <1 <1	2 0 68 1 996 1182 1060 1359 3097 history1 10 2 5 5 history1	5 0 55 <1 842 1154 903 1098 2192 history2 8 2 1 history2
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 limit/base >3	6 2 61 0 852 1133 980 1172 2426 current 7 <1 <1 <1 <1 .5	2 0 68 1 996 1182 1060 1359 3097 history1 10 2 5 history1 1.7	5 0 55 <1 842 1154 903 1098 2192 history2 8 2 1 history2 1.9
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20 limit/base >20	6 2 61 0 852 1133 980 1172 2426 current 7 <1 <1 <1 <1 <1 1.5 10.4	2 0 68 1 996 1182 1060 1359 3097 history1 10 2 5 5 history1 1.7 1.7 12.3	5 0 55 <1 842 1154 903 1098 2192 history2 8 2 2 1 history2 1.9 1.9 12.8
Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 limit/base >3	6 2 61 0 852 1133 980 1172 2426 current 7 <1 <1 <1 <1 .5	2 0 68 1 996 1182 1060 1359 3097 history1 10 2 5 history1 1.7	5 0 55 <1 842 1154 903 1098 2192 history2 8 2 1 history2 1.9
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm Abs/cm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20 limit/base >20	6 2 61 0 852 1133 980 1172 2426 current 7 <1 <1 <1 <1 <1 1.5 10.4	2 0 68 1 996 1182 1060 1359 3097 history1 10 2 5 5 history1 1.7 1.7 12.3	5 0 55 <1 842 1154 903 1098 2192 history2 8 2 2 1 history2 1.9 1.9 12.8
Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm Abs/cm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >20 imit/base >3 >20 >3 >30	6 2 61 0 852 1133 980 1172 2426 current 7 <1 <1 <1 <1 1.5 10.4 25.3	2 0 68 1 996 1182 1060 1359 3097 history1 10 2 5 <u>history1</u> 1.7 1.7 12.3 26.7	5 0 55 <1 842 1154 903 1098 2192 history2 8 2 1 1 history2 1.9 1.9 12.8 28.3

Sample Rating Trend

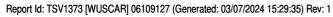
WEAR



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

T: (864)226-2304

F: (864)226-2329



OIL ANALYSIS REPORT

method

*Visual

scalar

limit/base

NONE

current

NONE

history1

NONE

history2

NONE

VISUAL

White Metal



6

50

Aluminum (ppm)