

OIL ANALYSIS REPORT

(14243Z) Walgreens - Tractor [Walgreens - Tractor] 136A61450 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

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 Rating Trend



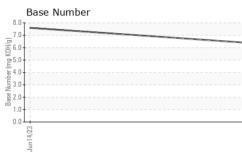
-			Jun2023	002023		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0093519	PCA0093558	
Sample Date		Client Info		10 Oct 2023	14 Jun 2023	
Machine Age	mls	Client Info		287300	261743	
Oil Age	mls	Client Info		25300	22166	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	14	9	
Chromium	ppm	ASTM D5185m	>20	1	0	
Nickel	ppm	ASTM D5185m	>4	0	0	
Titanium	ppm	ASTM D5185m		12	3	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	4	7	
Lead	ppm	ASTM D5185m	>40	3	<1	
Copper	ppm	ASTM D5185m	>330	<1	0	
Tin	ppm	ASTM D5185m	>15	<1	0	
Vanadium	ppm	ASTM D5185m		<1	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
	ppm	method ASTM D5185m	limit/base 2			history2
ADDITIVES Boron Barium				current	history1	
ADDITIVES Boron	ppm	ASTM D5185m	2	current 12	history1 11	
ADDITIVES Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	2 0	current 12 0	history1 11 0	
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 12 0 49 <1 813	history1 11 0 54	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 12 0 49 <1	history1 11 0 54 0	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	Current 12 0 49 <1 813 1196 859	history1 11 0 54 0 946 1328 1084	
ADDITIVES Boron Barium Molybdenum 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	current 12 0 49 <1 813 1196 859 1184	history1 11 0 54 0 946 1328 1084 1411	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	Current 12 0 49 <1 813 1196 859	history1 11 0 54 0 946 1328 1084	
ADDITIVES Boron 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	2 0 50 950 1050 995 1180 2600	12 0 49 <1 813 1196 859 1184 2930 current	history1 11 0 54 0 946 1328 1084 1411 4093 history1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Chosphorus 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 method	2 0 50 950 1050 995 1180 2600	current 12 0 49 <1 813 1196 859 1184 2930 current 4	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm 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 limit/base >25	current 12 0 49 <1 813 1196 859 1184 2930 current 4 2	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2 2 2 2	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	2 0 50 950 1050 995 1180 2600 limit/base >25	current 12 0 49 <1 813 1196 859 1184 2930 current 4	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm 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 limit/base >25	current 12 0 49 <1 813 1196 859 1184 2930 current 4 2	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2 2 2 2 2 2 2 2 2 4093	 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20	12 0 49 <1 813 1196 859 1184 2930 current 4 2 8	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2 2 2 2 2 0.3	 history2
ADDITIVES 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >25 -20 imit/base	current 12 0 49 <1 813 1196 859 1184 2930 current 4 2 8 current	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2 2 2 2 2 2 2 2 2 4093	 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i>	current 12 0 49 <1 813 1196 859 1184 2930 current 4 2 8 current 0.3	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2 2 2 2 2 0.3	 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Silicon Sidium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i>	current 12 0 49 <1 813 1196 859 1184 2930 current 4 2 8 current 0.3 9.6	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2 2 2 2 2 0 0.3 8.8	 history2 history2
ADDITIVES 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	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20 >30	current 12 0 49 <1 813 1196 859 1184 2930 current 4 2 8 current 0.3 9.6 20.5	history1 11 0 54 0 946 1328 1084 1411 4093 history1 2 2 2 2 0.3 8.8 19.5	 history2 history2 history2

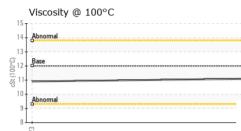


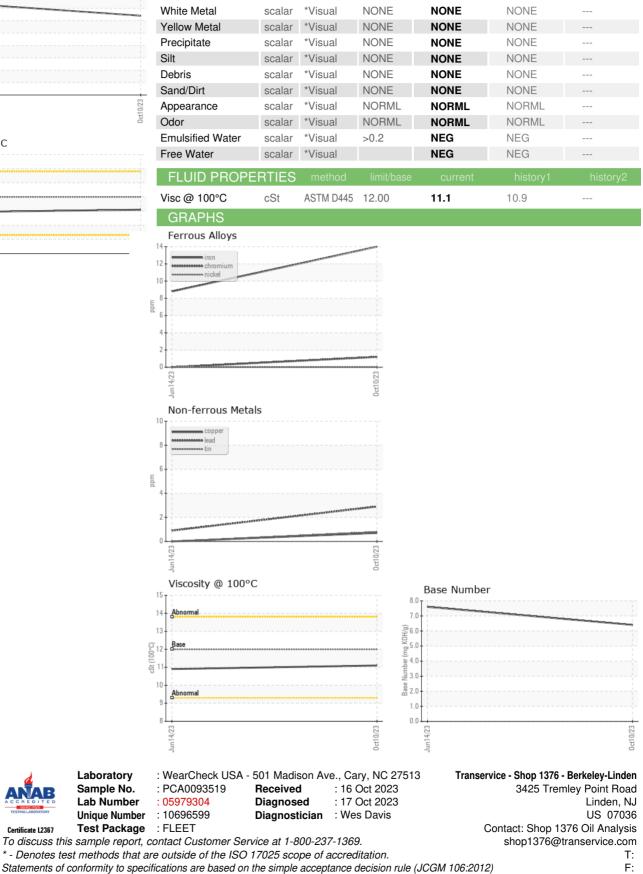
Junl

OIL ANALYSIS REPORT

VISUAL









Certificate L2367