

OIL ANALYSIS REPORT

Sample Rating Trend



Area (34256Z) Walgreens Machine Id [Walgreens] 136A62508 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

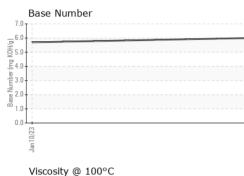
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		PCA0096043	PCA0087985	
Sample Date		Client Info		02 Jun 2023	10 Jan 2023	
Machine Age	mls	Client Info		232523	179564	
Oil Age	mls	Client Info		50000	50000	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history 1	history 2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>110	52	65	
Chromium	ppm	ASTM D5185m	>4	<1	1	
Nickel	ppm	ASTM D5185m	>2	0	<1	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m	>25	15	43	
Lead	ppm	ASTM D5185m	>45	<1	2	
Copper	ppm	ASTM D5185m	>85	4	5	
Tin	ppm	ASTM D5185m	>4	1	2	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history 1	history 2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 2	history 1 8	history 2
	ppm ppm					history 2
Boron		ASTM D5185m	2	2	8	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0 50	2 0	8	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	2 0 65	8 4 55	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	2 0 65 <1	8 4 55 1	
Boron Barium Molybdenum Manganese Magnesium	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	2 0 65 <1 940	8 4 55 1 876 1153 951	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	2 0 65 <1 940 1117	8 4 55 1 876 1153	
Boron Barium Molybdenum 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	2 0 65 <1 940 1117 1029	8 4 55 1 876 1153 951	
Boron 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	2 0 50 950 1050 995 1180	2 0 65 <1 940 1117 1029 1272	8 4 55 1 876 1153 951 1223	
Boron 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 ASTM D5185m	2 0 50 950 1050 995 1180 2600	2 0 65 <1 940 1117 1029 1272 2968	8 4 55 1 876 1153 951 1223 3001	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	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	2 0 65 <1 940 1117 1029 1272 2968 current	8 4 55 1 876 1153 951 1223 3001 history 1	 history 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	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	2 0 50 950 1050 995 1180 2600	2 0 65 <1 940 1117 1029 1272 2968 current 7	8 4 55 1 876 1153 951 1223 3001 history 1 9	 history 2
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 method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >30	2 0 65 <1 940 1117 1029 1272 2968 <u>current</u> 7 2	8 4 55 1 876 1153 951 1223 3001 history 1 9 3	 history 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >30	2 0 65 <1 940 1117 1029 1272 2968 current 7 2 2 27	8 4 55 1 876 1153 951 1223 3001 history 1 9 3 83	 history 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 Imit/base >30 \$20	2 0 65 <1 940 1117 1029 1272 2968 <u>current</u> 7 2 2 27 <u>current</u>	8 4 55 1 876 1153 951 1223 3001 history 1 9 3 83 83 history 1	 history 2 history 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 Imit/base >30 \$20	2 0 65 <1 940 1117 1029 1272 2968 <i>current</i> 7 2 27 27 <i>current</i> 0.9	8 4 55 1 876 1153 951 1223 3001 history 1 9 3 83 83 history 1 1	 history 2 history 2
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	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>limit/base</i> >30 <i>limit/base</i> >20	2 0 65 <1 940 1117 1029 1272 2968 <i>current</i> 7 2 27 27 <i>current</i> 0.9 10.5	8 4 55 1 876 1153 951 1223 3001 history 1 9 3 83 83 history 1 1 1 10.9	 history 2 history 2 history 2
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 1050 955 1050 995 1180 2600 imit/base >30 imit/base >3 20 imit/base	2 0 65 <1 940 1117 1029 1272 2968 <u>current</u> 7 2 27 27 <u>current</u> 0.9 10.5 23.5	8 4 55 1 876 1153 951 1223 3001 history 1 9 3 83 83 history 1 1 1 0.9 24.3	 history 2 history 2 history 2
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 D7844 *ASTM D7844 *ASTM D7844	2 0 0 50 0 950 1050 995 1180 2600 imit/base >30 20 imit/base >30 >20 >30	2 0 65 <1 940 1117 1029 1272 2968 <i>current</i> 7 2 2968 <i>current</i> 0.9 10.5 23.5 <i>current</i>	8 4 55 1 876 1153 951 1223 3001 history 1 9 3 83 83 history 1 1 10.9 24.3 history 1	 history 2 history 2 history 2 history 2

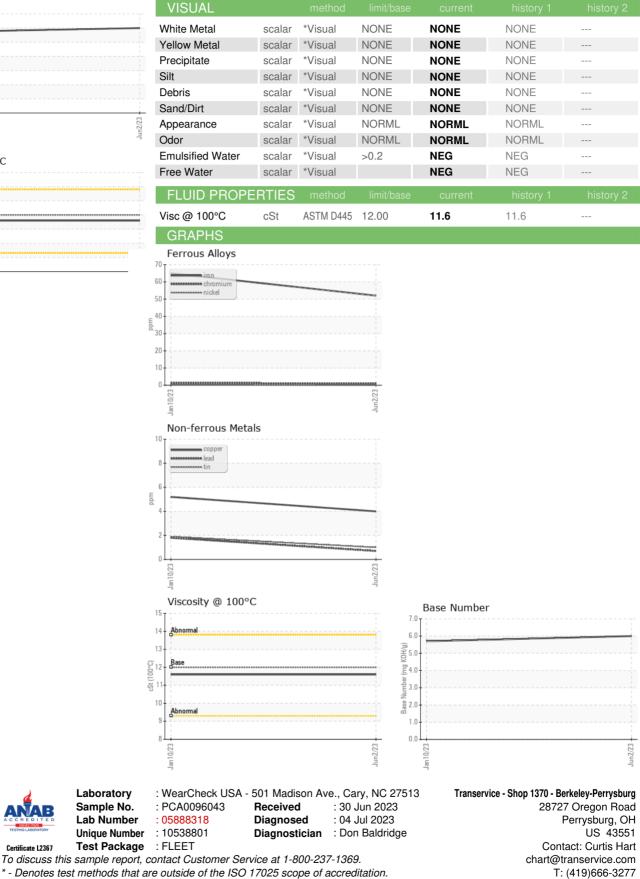


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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367

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