

OIL ANALYSIS REPORT

Sample Rating Trend



Area (89965X) Walgreens Machine Id [Walgreens] 136A68050

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

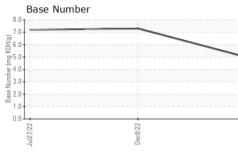
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

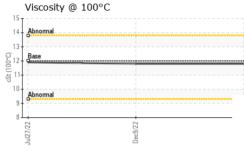
Jučozz Declozz Auglozz						
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101039	PCA0087916	PCA0078514
Sample Date		Client Info		15 Aug 2023	09 Dec 2022	27 Jul 2022
Machine Age	mls	Client Info		611351	556202	515438
Oil Age	mls	Client Info		62358	40764	33272
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	32	19	20
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	19	10	9
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	4	4	3
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 2	history1 3	history2 5
	ppm ppm		2			
Boron		ASTM D5185m	2	2	3	5
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	2 0 50	2 0	3 0	5 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	2 0 71	3 0 59	5 0 67
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	2 0 71 <1	3 0 59 <1	5 0 67 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	2 0 71 <1 996	3 0 59 <1 918	5 0 67 <1 908
Boron Barium Molybdenum 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	2 0 71 <1 996 1265	3 0 59 <1 918 1117	5 0 67 <1 908 1118
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	2 0 50 0 950 1050 995	2 0 71 <1 996 1265 1055	3 0 59 <1 918 1117 945	5 0 67 <1 908 1118 959
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 71 <1 996 1265 1055 1303	3 0 59 <1 918 1117 945 1135	5 0 67 <1 908 1118 959 1214
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	2 0 50 950 1050 995 1180 2600	2 0 71 <1 996 1265 1055 1303 3242	3 0 59 <1 918 1117 945 1135 2459	5 0 67 <1 908 1118 959 1214 2716
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	2 0 71 <1 996 1265 1055 1303 3242 current	3 0 59 <1 918 1117 945 1135 2459 history1	5 0 67 <1 908 1118 959 1214 2716 history2
Boron Barium Molybdenum 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 method	2 0 50 950 1050 995 1180 2600	2 0 71 <1 996 1265 1055 1303 3242 current 10	3 0 59 <1 918 1117 945 1135 2459 history1 6	5 0 67 <1 908 1118 959 1214 2716 history2 6
Boron Barium Molybdenum 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	2 0 50 950 1050 995 1180 2600 limit/base >20	2 0 71 <1 996 1265 1055 1303 3242 current 10 3	3 0 59 <1 918 1117 945 1135 2459 history1 6 2	5 0 67 <1 908 1118 959 1214 2716 history2 6 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >20	2 0 71 <1 996 1265 1055 1303 3242 current 10 3 2	3 0 59 <1 918 1117 945 1135 2459 history1 6 2 2 <1	5 0 67 <1 908 1118 959 1214 2716 history2 6 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 limit/base >3	2 0 71 <1 996 1265 1055 1303 3242 current 10 3 2 2	3 0 59 <1 918 1117 945 1135 2459 history1 6 2 2 <1 history1	5 0 67 <1 908 1118 959 1214 2716 history2 6 0 0 0
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 ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >20 limit/base >3	2 0 71 <1 996 1265 1055 1303 3242 <u>current</u> 10 3 2 2 <u>current</u>	3 0 59 <1 918 1117 945 1135 2459 history1 6 2 2 <1 history1 1.1	5 0 67 <1 908 1118 959 1214 2716 history2 6 0 0 0 history2 1
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> >20 <i>limit/base</i> >3 >20	2 0 71 <1 996 1265 1055 1303 3242 current 10 3 2 current 1.5 10.8	3 0 59 <1 918 1117 945 1135 2459 history1 6 2 2 <1 6 2 1 1.1 10.9	5 0 67 <1 908 1118 959 1214 2716 history2 6 0 0 0 history2 1 1 10.9
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 0 50 0 950 1050 995 1180 2600 2600 20 20 20 20 20 20 20 20 20 20 20 20 2	2 0 71 <1 996 1265 1055 1303 3242 <u>current</u> 10 3 2 <u>current</u> 1.5 10.8 24.4	3 0 59 <1 918 1117 945 1135 2459 history1 6 2 <1 6 2 <1 1.1 1.0.9 24.2	5 0 67 <1 908 1118 959 1214 2716 history2 6 0 0 0 history2 1 1 10.9 23.7
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 2600 20 20 20 20 20 20 20 20 20 20 20 20 2	2 0 71 <1 996 1265 1055 1303 3242 current 10 3 2 current 1.5 10.8 24.4 current	3 0 59 <1 918 1117 945 1135 2459 history1 6 2 2 <1 6 2 <1 1.1 1.0.9 24.2 history1	5 0 67 <1 908 1118 959 1214 2716 history2 6 0 0 0 history2 1 1 0.9 23.7 history2

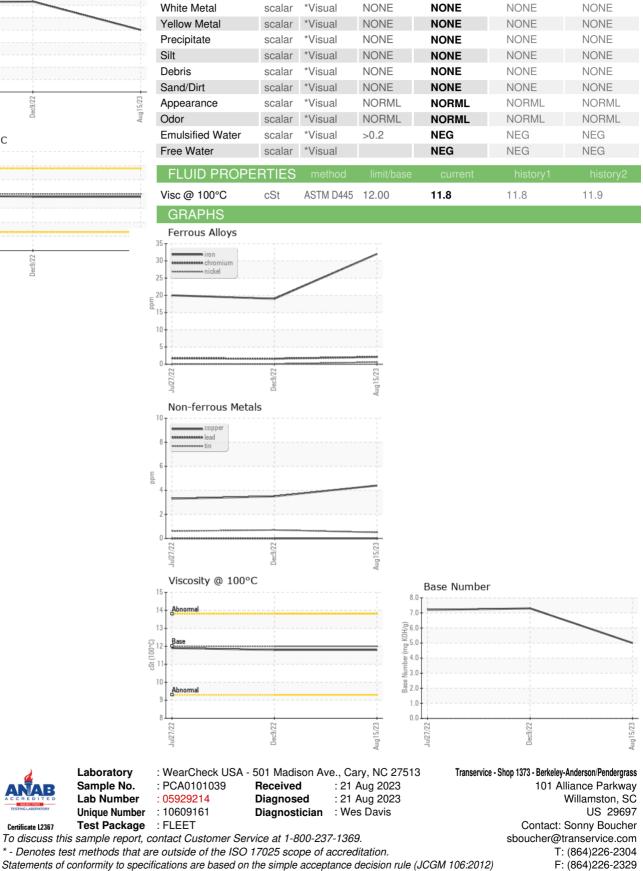


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VISUAL







Certificate L2367

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