

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

Poplar Gap B

Component • Natural Gas Engine Fluid PETRO CANADA SENTRON LD 3000 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

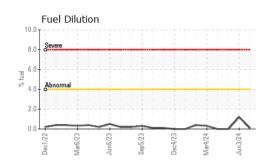
Fluid Condition

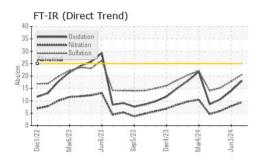
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

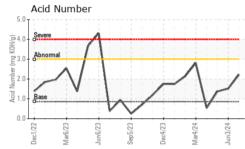
Sample Date Client Info 08 Jul 2024 03 Jun 2024 01 May 2024 Machine Age hrs Client Info 89278 88449 87696 Dil Age hrs Client Info 2707 1878 1125 Dil Changed Client Info Not Changd Not Changd Not Changd Not Changd Sample Status Client Info Not RMAL Not Changd Not Changd Not MAL CONTAMINATION method imit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >0 0 <1 1 Nickel ppm ASTM D5185m >0 0 <1 1 Namium ppm ASTM D5185m >3 0 <1 1 Namium ppm ASTM D5185m 3 1 0 <1	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
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Sample Status NORMAL NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method >0.1 NEG NEG NEG WEAR METALS method limit/base current history1 history2 tron ppm ASTM 05185m >50 6 6 4 Nickel ppm ASTM 05185m >2 0 0 <1 Titanium ppm ASTM 05185m >3 0 0 0 Aluminum ppm ASTM 05185m >3 0 0 <1 Silver ppm ASTM 05185m >3 0 0 <1 Copper ppm ASTM 05185m >3 0 0 <1 Vanadium ppm ASTM 05185m 2 1 0 <1 Copper ppm ASTM 05185m 2 3 6 4 </th <th>Oil Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>2707</th> <th>1878</th> <th>1125</th>	Oil Age	hrs	Client Info		2707	1878	1125
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Nickel ppm ASTM D5185m >2 0 0 <1	Iron	ppm	ASTM D5185m	>50	6	6	4
Titanium ppm ASTM D5185m <1	Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
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Tin ppm ASTM D5185m >4 0 1 1 Vanadium ppm ASTM D5185m 0 0 <1	Lead	ppm	ASTM D5185m	>30	2	4	2
Vanadium ppm ASTM D5185m 0 0 <1	Copper	ppm	ASTM D5185m	>35	1	5	2
Cadmium ppm ASTM D5185m 0 < <1	Tin	ppm	ASTM D5185m	>4	0	1	1
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Boron ppm ASTM D5185m 5 <1	Cadmium	ppm	ASTM D5185m		0	0	<1
Barium ppm ASTM D5185m 1 0 0 0 Molybdenum ppm ASTM D5185m 2 3 6 4 Manganese ppm ASTM D5185m 1 0 2 <1 Magnesium ppm ASTM D5185m 5 25 28 24 Calcium ppm ASTM D5185m 1220 1461 1561 1386 Phosphorus ppm ASTM D5185m 298 321 342 316 Zinc ppm ASTM D5185m 350 4113 425 385 Sulfur ppm ASTM D5185m 1995 2455 3025 2734 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 0 2 0 Potassium ppm ASTM D5185m >20 2 5 2 Fuel % ASTM D5185m >20 <t< th=""><th>ADDITIVES</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	ADDITIVES		method	limit/base	current	history1	history2
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Zinc ppm ASTM D5185m 350 413 425 385 Sulfur ppm ASTM D5185m 1995 2455 3025 2734 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >+100 2 4 3 Sodium ppm ASTM D5185m >+20 0 2 0 Potassium ppm ASTM D5185m >20 2 5 2 Fuel % ASTM D5185m >20 0.1 1.2 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >15 9.5 7.8 5.9 Sulfation Abs/.1mm *ASTM D7415 >25 20.6 17.8 15.2 FLUID DEGRADATION method limit/base	Magnesium				-		
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Potassium ppm ASTM D5185m >20 2 5 2 Fuel % ASTM D3524 >4.0 0.1 1.2 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7844 >15 9.5 7.8 5.9 Sulfation Abs/.1mm *ASTM D7415 >25 20.6 17.8 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >20 18.1 14.0 10.6 Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	5 1220 298 350 1995 limit/base	25 1461 321 413 2455 current	28 1561 342 425 3025 history1	24 1386 316 385 2734 history2
Fuel % ASTM D3524 >4.0 0.1 1.2 0.0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7844 0 0 0 0 Sulfation Abs/.1mm *ASTM D7624 >15 9.5 7.8 5.9 Sulfation Abs/.1mm *ASTM D7415 >25 20.6 17.8 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >20 18.1 14.0 10.6 Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 1220 298 350 1995 <i>limit/base</i> >+100	25 1461 321 413 2455 current 2	28 1561 342 425 3025 history1 4	24 1386 316 385 2734 history2 3
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >15 9.5 7.8 5.9 Sulfation Abs/.1mm *ASTM D7415 >25 20.6 17.8 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >20 18.1 14.0 10.6 Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 1220 298 350 1995 <i>limit/base</i> >+100	25 1461 321 413 2455 current 2 0	28 1561 342 425 3025 history1 4 2	24 1386 316 385 2734 history2 3 0
Soot % % *ASTM D7844 0 0 0 0 Nitration Abs/cm *ASTM D7624 >15 9.5 7.8 5.9 Sulfation Abs/.1mm *ASTM D7415 >25 20.6 17.8 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >20 18.1 14.0 10.6 Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 1220 298 350 1995 limit/base >+100 >20 >20	25 1461 321 413 2455 <u>current</u> 2 0 2	28 1561 342 425 3025 history1 4 2 5	24 1386 316 385 2734 history2 3 0 2
Nitration Abs/cm *ASTM D7624 >15 9.5 7.8 5.9 Sulfation Abs/.1mm *ASTM D7615 >25 20.6 17.8 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >20 18.1 14.0 10.6 Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 1220 298 350 1995 limit/base >+100 >20 >20	25 1461 321 413 2455 <u>current</u> 2 0 2	28 1561 342 425 3025 history1 4 2 5	24 1386 316 385 2734 history2 3 0 2
Sulfation Abs/.1mm *ASTM D7415 >25 20.6 17.8 15.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >20 18.1 14.0 10.6 Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 1220 298 350 1995 limit/base >+100 >20 >20 >20 >20	25 1461 321 413 2455 current 2 0 2 0 2 0.1 current	28 1561 342 425 3025 history1 4 2 5 1.2 history1	24 1386 316 385 2734 history2 3 0 2 0.0 history2
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >20 18.1 14.0 10.6 Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm TS ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	5 1220 298 350 1995 limit/base >+100 >20 >20 >20 >4.0	25 1461 321 413 2455 current 2 0 2 0.1 2 0.1 current 0	28 1561 342 425 3025 history1 4 2 5 1.2 history1 0	24 1386 316 385 2734 history2 3 0 2 0.0 history2 0
Oxidation Abs/.1mm *ASTM D7414 >20 18.1 14.0 10.6 Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	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 ASTM D3524 method *ASTM D7844	5 1220 298 350 1995 limit/base >+100 >20 >20 >20 >4.0	25 1461 321 413 2455 <u>current</u> 2 0 2 0.1 2 0.1 <u>current</u> 0 9.5	28 1561 342 425 3025 history1 4 2 5 1.2 5 1.2 history1 0 7.8	24 1386 316 385 2734 history2 3 0 2 0.0 history2 0 5.9
Acid Number (AN) mg KOH/g ASTM D8045 0.86 2.22 1.51 1.37	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	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 ASTM D3524 method *ASTM D7844	5 1220 298 350 1995 imit/base >+100 >20 >20 >20 >4.0 imit/base	25 1461 321 413 2455 <u>current</u> 2 0 2 0.1 2 0.1 <u>current</u> 0 9.5	28 1561 342 425 3025 history1 4 2 5 1.2 5 1.2 history1 0 7.8	24 1386 316 385 2734 history2 3 0 2 0.0 history2 0 5.9
	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	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 ASTM D3524 *ASTM D7844 *ASTM D7844	5 1220 298 350 1995 Imit/base >+100 >20 >20 >20 >4.0 Imit/base >15 >25	25 1461 321 413 2455 current 2 0 2 0.1 2 0.1 current 0 9.5 20.6	28 1561 342 425 3025 history1 4 2 5 1.2 5 1.2 history1 0 7.8 17.8	24 1386 316 385 2734 history2 3 0 2 0.0 history2 0 5.9 15.2
	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm TS ppm ppm ppm % % Abs/cm Abs/cm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 ASTM D3524 *ASTM D7844 *ASTM D7624 *ASTM D7415	5 1220 298 350 1995 imit/base >20 >20 >20 >4.0 imit/base >15 >25 imit/base	25 1461 321 413 2455 current 2 0 2 0.1 2 0.1 current 0 9.5 20.6 current	28 1561 342 425 3025 history1 4 2 5 1.2 history1 0 7.8 17.8 history1	24 1386 316 385 2734 history2 3 0 2 0.0 history2 0 5.9 15.2 history2
	Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm Abs/.1mm	ASTM D5185m ASTM D7844 *ASTM D7644 *ASTM D7415	5 1220 298 350 1995 imit/base >20 >20 >20 >4.0 imit/base >25 imit/base	25 1461 321 413 2455 <u>current</u> 2 0 2 0.1 2 0.1 <u>current</u> 0 9.5 20.6 <u>current</u> 18.1	28 1561 342 425 3025 history1 4 2 5 1.2 history1 0 7.8 17.8 history1 14.0	24 1386 316 385 2734 history2 3 0 2 0.0 history2 0 5.9 15.2 history2 10.6

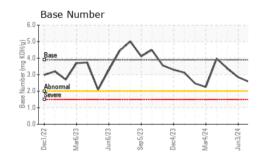


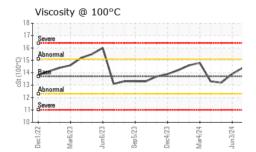
OIL ANALYSIS REPORT



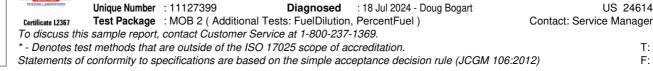












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Laboratory

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