

## **OIL ANALYSIS REPORT**

Sample Rating Trend



### Machine Id Hurricane Creek 3

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

Fuel content negligible. There is no indication of any contamination in the oil.

#### Fluid Condition

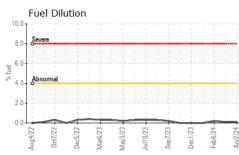
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

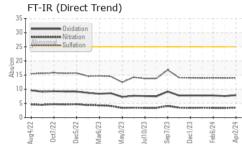
SAMPLE INFOR	MATION	method				history2
Sample Number		Client Info		PCA0112001	PCA0112006	PCA0091334
Sample Date		Client Info		02 Apr 2024	04 Mar 2024	06 Feb 2024
Machine Age	hrs	Client Info		144559	143866	143213
Oil Age	hrs	Client Info		5174	4481	3828
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS method limit/base current history1 history						history2
Iron	ppm	ASTM D5185m	>50	1	0	0
Chromium	ppm	ASTM D5185m	>4	<1	0	0
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	1	1	1
Lead	ppm	ASTM D5185m	>30	1	<1	<1
Copper	ppm	ASTM D5185m	>35	<1	0	0
Tin	ppm	ASTM D5185m	>4	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	1	0	0	0
Molybdenum	ppm	ASTM D5185m	2	2	0	0
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Magnesium	ppm	ASTM D5185m	5	7	9	10
-	1. 1					
Calcium	ppm	ASTM D5185m	1220	1280	1206	1215
0		ASTM D5185m ASTM D5185m	1220 298	1280 303	1206 272	1215 290
Calcium	ppm					
Calcium Phosphorus	ppm ppm	ASTM D5185m	298	303	272	290
Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	298 350	303 343	272 343	290 338
Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	298 350 1995	303 343 2651	272 343 2242	290 338 2297
Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	298 350 1995 limit/base >+100	303 343 2651 current	272 343 2242 history1	290 338 2297 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	298 350 1995 limit/base >+100	303 343 2651 current 2	272 343 2242 history1 1	290 338 2297 history2 1
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	298 350 1995 limit/base >+100 >20	303 343 2651 current 2 0	272 343 2242 history1 1 1	290 338 2297 history2 1 1
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	298 350 1995 limit/base >+100 >20 >20	303 343 2651 current 2 0 2	272 343 2242 history1 1 1 1 1	290 338 2297 history2 1 1 1 1
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	298 350 1995 <b>limit/base</b> >+100 >20 >20 >20 >4.0	303 343 2651 2 0 2 0.1 2 0.1 current 0	272 343 2242 history1 1 1 1 0.1 0.1 history1 0	290 338 2297 history2 1 1 1 0.2 history2 0
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	298 350 1995 limit/base >+100 >20 >20 >4.0 limit/base	303 343 2651 2 0 2 0.1 2 0.1	272 343 2242 history1 1 1 1 1 0.1 0.1 history1 0 3.4	290 338 2297 history2 1 1 1 1 0.2 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	298 350 1995 limit/base >+100 >20 >20 >4.0 limit/base	303 343 2651 2 0 2 0.1 2 0.1 current 0	272 343 2242 history1 1 1 1 0.1 0.1 history1 0	290 338 2297 history2 1 1 1 0.2 history2 0
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 *ASTM D7844 *ASTM D7624	298 350 1995 <b>limit/base</b> >+100 >20 >20 >20 >4.0 <b>limit/base</b>	303 343 2651 2 0 2 0.1 2 0.1 0.1 0 3.5	272 343 2242 history1 1 1 1 1 0.1 0.1 history1 0 3.4	290 338 2297 history2 1 1 1 1 0.2 history2 0 3.4
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm TS ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 *ASTM D7844 *ASTM D7624	298 350 1995 <i>limit/base</i> >+100 >20 >20 >4.0 <i>limit/base</i> >15 >25	303 343 2651 2 0 2 0.1 2 0.1 current 0 3.5 14.0	272 343 2242 history1 1 1 1 1 0.1 history1 0 3.4 13.9	290 338 2297 history2 1 1 1 1 0.2 history2 0 3.4 14.0
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm ppm ppm ppm TS ppm ppm ppm ppm % % Abs/cm Abs/1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 <b>method</b> *ASTM D7844 *ASTM D7844 *ASTM D7624	298 350 1995 <b>limit/base</b> >+100 >20 >20 >20 >4.0 <b>limit/base</b> <b>limit/base</b>	303 343 2651 2 0 2 0.1 2 0.1 current 0 3.5 14.0 current	272 343 2242 history1 1 1 1 1 1 0.1 history1 0 3.4 13.9 history1	290 338 2297 history2 1 1 1 1 0.2 history2 0 3.4 14.0 history2
Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI Oxidation	ppm ppm ppm ppm ppm ppm ppm % % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 ASTM D3524 *ASTM D7844 *ASTM D7624 *ASTM D7415	298 350 1995 <i>limit/base</i> >+100 >20 >20 >4.0 <i>limit/base</i> >25 <i>limit/base</i>	303 343 2651 2 0 2 0.1 2 0.1 0.1 0 3.5 14.0 current 7.9	272 343 2242 history1 1 1 1 1 1 0.1 0.1 0 3.4 13.9 history1 7.6	290 338 2297 history2 1 1 1 1 0.2 history2 0 3.4 14.0 history2 7.8

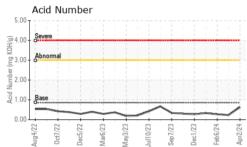


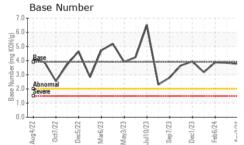
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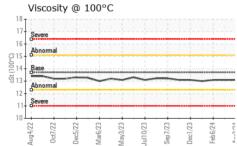
VISUAL













Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel) Certificate 12367

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

Report Id: ENEVANH [WUSCAR] 06146037 (Generated: 04/16/2024 08:59:44) Rev: 1

Contact/Location: Service Manager - ENEVANH

#### Page 2 of 2

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