

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id

cummins 912085

Front Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- 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.

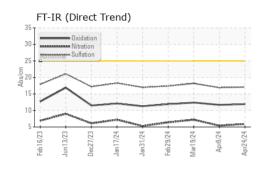
Fluid Condition

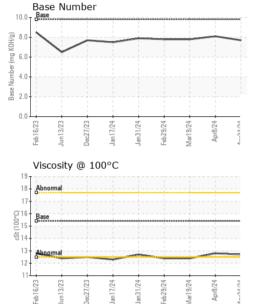
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sample Date Client Info 24 Apr 2024 08 Apr 2024 19 Mar 2024 Machine Age hrs Client Info 4729 4618 4143 Oil Age hrs Client Info 4729 4618 4143 Oil Age Client Info Not Changd N/A N/A Sample Status Not Changd NORMAL NORMAL NORMAL CONTAMINATION method imit/base current history1 history2 Fuel WC Method >0.2 NEG NEG NEG Water WC Method >0.2 NEG NEG NEG Wear MSTM 05185m >90 15 6 20 Chromium ppm ASTM 05185m >2 0 0 0 Trainum ppm ASTM 05185m >2 0 0 0 Silver ppm ASTM 05185m >2 0 0 0 Cadmium ppm ASTM 05185m >20 <t< th=""><th>SAMPLE INFORI</th><th>MATION</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
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Sulfation Abs/.1mm *ASTM D7415 >30 17.1 16.9 18.2 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.9 11.7 12.4	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	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20	8 0 58 <1 852 1111 991 1204 3574 current 2 2 2 6	12 0 55 <1 797 1025 908 1063 3022 history1 2 2 <1 3	11 0 56 0 767 1199 966 1146 3504 history2 3 1 1
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 11.9 11.7 12.4	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 225 >25	8 0 58 <1 852 1111 991 1204 3574 current 2 2 2 6 6	12 0 55 <1 797 1025 908 1063 3022 history1 2 <1 3 3 history1	11 0 56 0 767 1199 966 1146 3504 history2 3 1 14 14 history2
Oxidation Abs/.1mm *ASTM D7414 >25 11.9 11.7 12.4	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	0 0 60 0 1010 1070 1150 1270 2060 limit/base >25 >20 limit/base >20	8 0 58 <1 852 1111 991 1204 3574 <u>current</u> 2 2 6 <u>current</u> 0.4	12 0 55 <1 797 1025 908 1063 3022 history1 2 <1 3 history1 0.3	11 0 56 0 767 1199 966 1146 3504 history2 3 1 1 4 history2 0.8
	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 ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >25 >20 <i>limit/base</i> >20	8 0 58 <1 852 1111 991 1204 3574 <i>current</i> 2 2 2 6 <i>current</i> 0.4 5.9	12 0 55 <1 797 1025 908 1063 3022 history1 2 <1 3 history1 0.3 5.4	11 0 56 0 767 1199 966 1146 3504 history2 3 1 14 14 history2 0.8 7.2
Base Number (BN) mg KOH/g ASTM D2896 9.8 7.7 8.1 7.8	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	0 0 0 1010 1070 1150 1270 2060 2060 225 20 225 20 limit/base >20 limit/base >20 >20	8 0 58 <1 852 1111 991 1204 3574 <u>current</u> 2 2 6 <u>current</u> 0.4 5.9 17.1	12 0 55 <1 797 1025 908 1063 3022 history1 2 <1 3 history1 0.3 5.4 16.9	11 0 56 0 767 1199 966 1146 3504 history2 3 1 14 history2 0.8 7.2 18.2
	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 TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 0 1010 1070 1150 1270 2060 2060 225 20 220 220 20 20 20 20 20 20 20 20 20 2	8 0 58 <1 852 1111 991 1204 3574 <i>current</i> 2 2 2 6 <i>current</i> 0.4 5.9 17.1 <i>current</i>	12 0 55 <1 797 1025 908 1063 3022 history1 2 <1 3 <i>history1</i> 0.3 5.4 16.9 history1	11 0 56 0 767 1199 966 1146 3504 history2 3 1 14 history2 0.8 7.2 18.2 history2



OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	12.8	12.4
GRAPHS						

