

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id 4687M Component Diesel Engine Fluid DETEC CANADA DUBON SHD 15W40

PETRO CANADA DURON SHP 15W40 (--- GAL)

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.

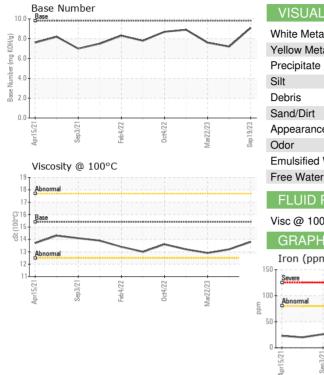
Fluid Condition

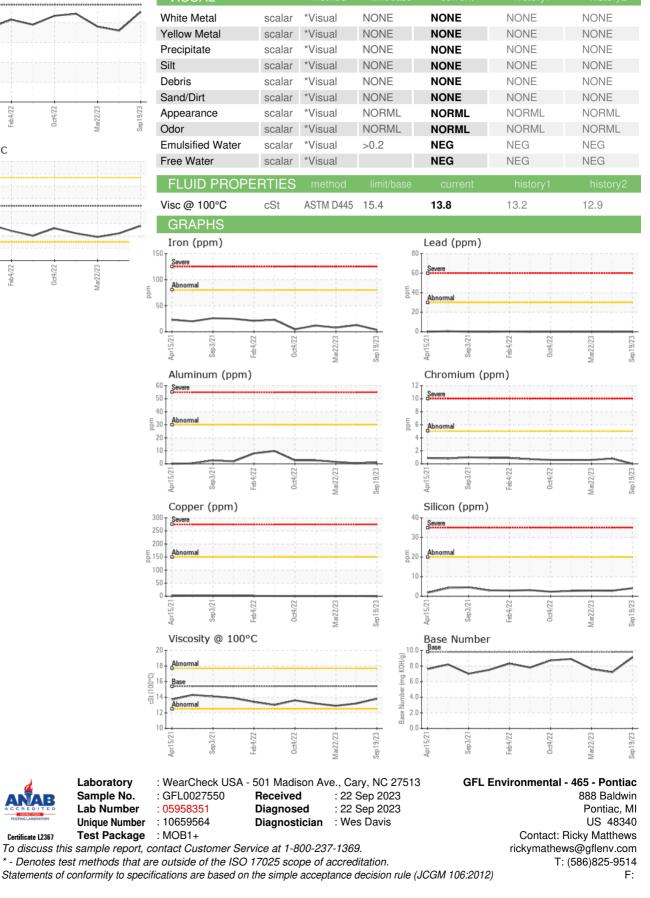
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION method limit/base current history1 history2 Sample Number Client Info 19 Sep 2023 05 Jun 2023 22 Mar 2023 Machine Age hrs Client Info 19793 13596 12983 Oil Age hrs Client Info 600 600 600 Oil Age hrs Client Info NORMAL NORMAL NORMAL Sample Status Imit/base current History1 History2 Fuel WC Method >5 <1.0 <1.0 <1.0 Glycol WC Method >5 <1.0 <1.0 <1.0 WEAR METALS method Imit/base current History1 History2 Iron ppm ASTM 05155m >20 0 <1 <1 Nickel ppm ASTM 05155m >20 0 <1 <1 Iron ppm ASTM 05155m >30 0 0 0 Astmore ppm </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
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Oxidation Abs/.1mm *ASTM D7414 >25 13.8 18.3 17.0	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 t ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 imit/base >20 imit/base >3 >20	<1 0 53 0 908 1032 982 1217 3694 <i>current</i> 4 5 6 <i>current</i> 0.2 6.0	<1 0 58 <1 925 1044 952 1211 3331 history1 3 6 <1 history1 0.6 10.1	1 0 55 0 817 965 918 1113 2381 history2 3 5 1 history2 0.4 9.9
	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 t t t t t t	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 imit/base >20 imit/base >3 >20 s3 >20	<1 0 53 0 908 1032 982 1217 3694 <u>current</u> 4 5 6 <u>current</u> 0.2 6.0 17.8	<1 0 58 <1 925 1044 952 1211 3331 history1 3 6 <1 0.6 10.1 21.3	1 0 55 0 817 965 918 1113 2381 history2 3 5 1 history2 0.4 9.9 19.9
Base Number (BN) mg KOH/g ASTM D2896 9.8 9.1 7.2 7.6	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	0 0 0 1010 1070 1150 1270 2060 imit/base >20 imit/base >3 >20 >30 imit/base	<1 0 53 0 908 1032 982 1217 3694 Current 4 5 6 Current 0.2 6.0 17.8 Current	<1 0 58 <1 925 1044 952 1211 3331 history1 3 6 <1 5 history1 0.6 10.1 21.3 history1	1 0 55 0 817 965 918 1113 2381 history2 3 5 1 history2 0.4 9.9 19.9 19.9
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7414	0 0 0 1010 1070 1150 1270 2060 imit/base >20 imit/base >3 >20 >30 imit/base	<1 0 53 0 908 1032 982 1217 3694 <i>current</i> 4 5 6 <i>current</i> 0.2 6.0 17.8 <i>current</i> 13.8	<1 0 58 <1 925 1044 952 1211 3331 history1 3 6 <1 history1 0.6 10.1 21.3 history1 18.3	1 0 55 0 817 965 918 1113 2381 history2 3 5 1 history2 0.4 9.9 19.9 19.9 history2 17.0



OIL ANALYSIS REPORT





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