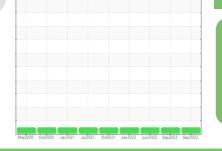


OIL ANALYSIS REPORT

Sample Rating Trend







Diesel Engine Fluid PETRO CANADA DURON HP 15W40 (11 GAL)

DIAGNOSIS

Machine Id 589 Component

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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 INFORI	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		PCA0082834	PCA0069222	PCA0058434	
Sample Date		Client Info		26 Sep 2023	19 Sep 2022	06 Jun 2022	
Machine Age	hrs	Client Info		0	2905	2905	
Oil Age	hrs	Client Info		0	2905	2905	
Oil Changed		Client Info		Not Changd	N/A	N/A	
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	>100	10	12	11	
Chromium	ppm	ASTM D5185m	>20	<1	1	<1	
Nickel	ppm	ASTM D5185m	>4	0	0	0	
Titanium	ppm	ASTM D5185m		0	0	0	
Silver	ppm	ASTM D5185m		0	0	0	
Aluminum	ppm	ASTM D5185m	>20	4	11	5	
Lead	ppm	ASTM D5185m	>40	2	<1	0	
Copper	ppm	ASTM D5185m	>330	4	2	<1	
Tin	ppm	ASTM D5185m	>15	<1	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	0	
Cadmium	ppm	ASTM D5185m		0	0	0	
ADDITIVES		mathad			المرسمة مأما	history2	
ADDITIVE3		method	limit/base	current	history1	nistory2	
Boron	ppm	ASTM D5185m	iimii/base	3	5	5	
	ppm ppm		iimi/base				
Boron		ASTM D5185m	limi/base	3	5	5	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limi/base	3 0	5 0	5	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		3 0 65	5 0 59	5 0 58	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 65 0	5 0 59 <1	5 0 58 <1	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 65 0 951	5 0 59 <1 883	5 0 58 <1 890	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 65 0 951 1108	5 0 59 <1 883 1060	5 0 58 <1 890 1069	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 65 0 951 1108 1088	5 0 59 <1 883 1060 948	5 0 58 <1 890 1069 977	
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	limit/base	3 0 65 0 951 1108 1088 1253	5 0 59 <1 883 1060 948 1164	5 0 58 <1 890 1069 977 1163	
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	limit/base	3 0 65 0 951 1108 1088 1253 3330	5 0 59 <1 883 1060 948 1164 3326	5 0 58 <1 890 1069 977 1163 3460	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	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 ASTM D5185m	limit/base	3 0 65 0 951 1108 1088 1253 3330 current 5	5 0 59 <1 883 1060 948 1164 3326 history1 6	5 0 58 <1 890 1069 977 1163 3460 history2 4	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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	limit/base	3 0 65 0 951 1108 1088 1253 3330 current	5 0 59 <1 883 1060 948 1164 3326 history1	5 0 58 <1 890 1069 977 1163 3460 history2	
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	limit/base >25 >20	3 0 65 0 951 1108 1088 1253 3330 current 5 0 9	5 0 59 <1 883 1060 948 1164 3326 history1 6 2 2	5 0 58 <1 890 1069 977 1163 3460 history2 4 2 8	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base	3 0 65 0 951 1108 1088 1253 3330 current 5 0 9	5 0 59 <1 883 1060 948 1164 3326 history1 6 2 2 21 history1	5 0 58 <1 890 1069 977 1163 3460 history2 4 2 8 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	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	3 0 65 0 951 1108 1088 1253 3330 current 5 0 9 9 current	5 0 59 <1 883 1060 948 1164 3326 history1 6 2 21 21 history1 0.5	5 0 58 <1 890 1069 977 1163 3460 history2 4 2 8 history2 0.4	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3 >20	3 0 65 0 951 1108 1088 1253 3330 current 5 0 9 2 current 0.4 8.5	5 0 59 <1 883 1060 948 1164 3326 history1 6 2 21 6 2 21 history1 0.5 9.3	5 0 58 <1 890 1069 977 1163 3460 history2 4 2 8 <u>history2</u> 0.4 8.8	
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	limit/base >25 >20 limit/base >3	3 0 65 0 951 1108 1088 1253 3330 current 5 0 9 9 current	5 0 59 <1 883 1060 948 1164 3326 history1 6 2 21 21 history1 0.5	5 0 58 <1 890 1069 977 1163 3460 history2 4 2 8 8 history2 0.4	
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	limit/base >25 >20 limit/base >3 >20	3 0 65 0 951 1108 1088 1253 3330 current 5 0 9 2 current 0.4 8.5	5 0 59 <1 883 1060 948 1164 3326 history1 6 2 21 6 2 21 history1 0.5 9.3	5 0 58 <1 890 1069 977 1163 3460 history2 4 2 8 history2 0.4 8.8	
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	Imit/base >25 >20 Imit/base >3 >20 >30	3 0 65 0 951 1108 1088 1253 3330 current 5 0 9 9 current 0.4 8.5 20.0	5 0 59 <1 883 1060 948 1164 3326 history1 6 2 21 6 2 21 0.5 9.3 22.1	5 0 58 <1 890 1069 977 1163 3460 history2 4 2 8 history2 0.4 8.8 20.9	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAC	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	limit/base >25 >20 limit/base >3 >20 >30 >30	3 0 65 0 951 1108 1088 1253 3330 current 5 0 9 current 0.4 8.5 20.0	5 0 59 <1 883 1060 948 1164 3326 history1 6 2 21 6 2 21 history1 0.5 9.3 22.1 history1	5 0 58 <1 890 1069 977 1163 3460 history2 4 2 8 history2 0.4 8.8 20.9 history2	



13 Abnorma 12

Mar11/20

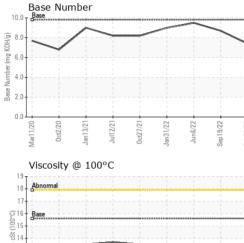
0ct2/20

OIL ANALYSIS REPORT

scalar *Visual

VISUAL

White Metal



lan31/22

	White Metal Yellow Metal Precipitate Silt Debris	scalar *Visual scalar *Visual scalar *Visual scalar *Visual scalar *Visual	NONE NONE NONE NONE	NONE NONE NONE NONE NONE NONE	NONE NONE NONE NONE	NONE NONE NONE NONE
Jun6/22 - Sap 19/22 - Sap 26/23 -	Sand/Dirt Appearance Odor Emulsified Water Free Water	scalar *Visual scalar *Visual scalar *Visual scalar *Visual scalar *Visual	NONE NORML NORML >0.2	NORML NORML NEG NEG	NONE NORML NORML NEG NEG	NONE NORML NORML NEG NEG
	FLUID PROPE Visc @ 100°C	RTIES method cSt ASTM D44		current 13.5	history1 13.5	history2 13.4
	GRAPHS Ferrous Alloys	0ei27/21 Jan31/22 Jun6/22	Sep 19/22 + Sep 26/23 +	Base Number		
NORMAN A	Abnormal Abnormal Abnormal Base Base 14 13 Abnormal 14 13 14		10.0			
Laboratory Sample No. Lab Number	: 05986191	Received : 2 Diagnosed : 2		2 1		TREADY MIX GALAXY AVE VALLEY, MN

NONE

NONE

NONE

NONE



Test Package : FLEET Certificate L2367 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)

Diagnostician

: Wes Davis

APPLE VALLEY, MN US 55124 Contact: senia zimmer avrconcrete.senia@gmail.com T: (952)953-2992 F: (952)953-2994

Unique Number : 10708853