

OIL ANALYSIS REPORT

Sample Rating Trend





ADT-1 Component Diesel Engine Fluid

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

Recommendation

Resample at the next service interval to monitor.

Machine Id

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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0006087	KFS0004088	
Sample Date		Client Info		05 Jun 2024	22 Nov 2023	
Machine Age	hrs	Client Info		5402	4964	
Oil Age	hrs	Client Info		438	4964	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	0.3	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<1	14	
Chromium	ppm	ASTM D5185m	>20	0	<1	
Nickel	ppm	ASTM D5185m	>2	0	<1	
Titanium	ppm	ASTM D5185m	>2	0	<1	
Silver	ppm	ASTM D5185m	>2	0	0	
Aluminum	ppm	ASTM D5185m	>25	1	6	
Lead	ppm	ASTM D5185m	>40	2	2	
Copper	ppm	ASTM D5185m	>330	0	35	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	<1	
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ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base			history2
			limit/base	current	history1	
Boron	ppm	ASTM D5185m	limit/base	current 4	history1 10	
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	limit/base	current 4 0	history1 10 0	
Boron Barium Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 4 0 56 <1 963	history1 10 0 52 <1 812	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 4 0 56 <1	history1 10 0 52 <1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 4 0 56 <1 963 1203 1124	history1 10 0 52 <1 812 1091 910	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 4 0 56 <1 963 1203 1124 1316	history1 10 0 52 <1 812 1091 910 1133	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		Current 4 0 56 <1 963 1203 1124	history1 10 0 52 <1 812 1091 910	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 4 0 56 <1 963 1203 1124 1316 3749 current	history1 10 0 52 <1 812 1091 910 1133 3135 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m		current 4 0 56 <1 963 1203 1124 1316 3749 current 3	history1 10 0 52 <1 812 1091 910 1133 3135 history1 16	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >25	current 4 0 56 <1 963 1203 1124 1316 3749 current 3 2	history1 10 0 52 <1 812 1091 910 1133 3135 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >25	current 4 0 56 <1 963 1203 1124 1316 3749 current 3	history1 10 0 52 <1 812 1091 910 1133 3135 history1 16	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >25	current 4 0 56 <1 963 1203 1124 1316 3749 current 3 2 3 2 3 current	history1 10 0 52 <1 812 1091 910 1133 3135 history1 16 5 4 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	current 4 0 56 <1 963 1203 1124 1316 3749 current 3 2 3 2 3 2 3	history1 10 0 52 <1 812 1091 910 1133 3135 history1 16 5 4 history1 0.1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	current 4 0 56 <1 963 1203 1124 1316 3749 current 3 2 3 current 0.1 6.0	history1 10 0 52 <1 812 1091 910 1133 3135 history1 16 5 4 history1 0.1 10.5	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	current 4 0 56 <1 963 1203 1124 1316 3749 current 3 2 3 current 0 0.1	history1 10 0 52 <1 812 1091 910 1133 3135 history1 16 5 4 history1 0.1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS 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	current 4 0 56 <1 963 1203 1124 1316 3749 current 3 2 3 current 0.1 6.0	history1 10 0 52 <1 812 1091 910 1133 3135 history1 16 5 4 history1 0.1 10.5	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS 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 >20 >3 >30	current 4 0 56 <1 963 1203 1124 1316 3749 current 3 2 3 current 0.1 6.0 17.5	history1 10 0 52 <1 812 1091 910 1133 3135 history1 16 5 4 history1 0.1 10.5 15.0	 history2 history2 history2



35

30

25

Abs/cm

10

10.0

(B/HOX Bu

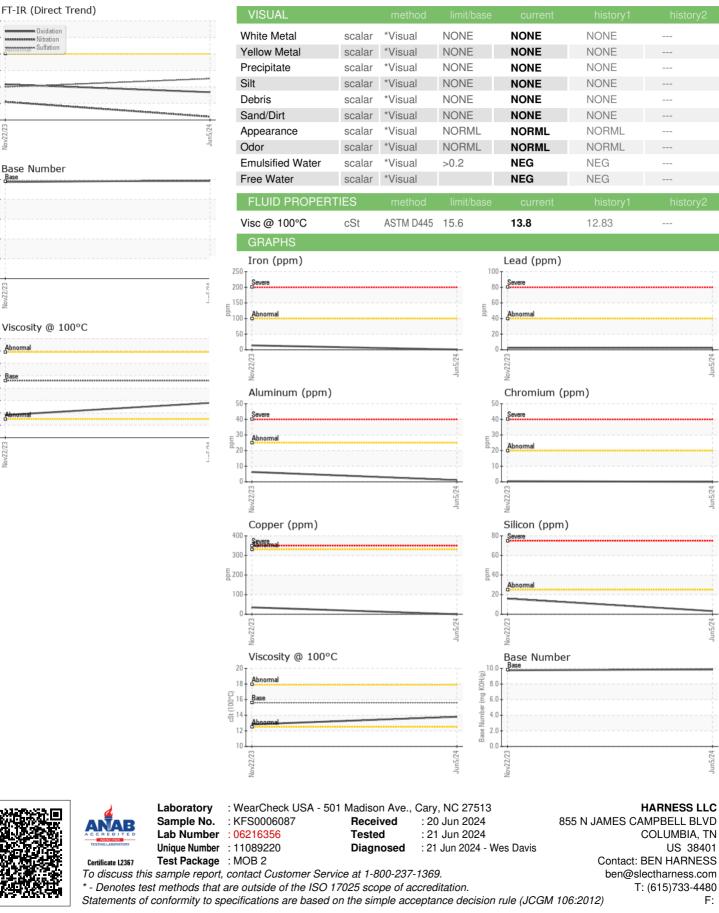
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ase 2.0

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Submitted By: BILL ENYART

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