

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area {UNASSIGNED} Machine Id 933042

Component Natural Gas Engine

PETRO CANADA DURON SHP 15W40 (8 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Fluid

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

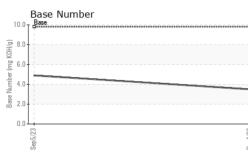
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

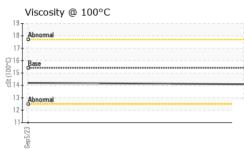
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SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0101239	GFL0091439	
Sample Date		Client Info		04 Dec 2023	05 Sep 2023	
Machine Age	hrs	Client Info		592	347	
Oil Age	hrs	Client Info		592	347	
Oil Changed		Client Info		Changed	Not Changd	
Sample Status				NORMAL	ABNORMAL	
CONTAMINATI	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	64	63	
Chromium	ppm	ASTM D5185m	>4	1	1	
Nickel	ppm	ASTM D5185m	>2	<1	2	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	<1	<1	
Aluminum	ppm	ASTM D5185m	>9	18	17	
Lead	ppm	ASTM D5185m	>30	<1	2	
Copper	ppm	ASTM D5185m	>35	17	19	
Tin	ppm	ASTM D5185m	>4	<1	1	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
			Prest la reserve		1.1.1.1.1.1	le i e t e m . O
ADDITIVES		method				history2
Boron	mag	ASTM D5185m	limit/base	10	18	nistory2
	ppm ppm					
Boron Barium		ASTM D5185m	0	10	18	
Boron	ppm	ASTM D5185m ASTM D5185m	0	10 5	18 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	10 5 55	18 0 51	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	10 5 55 13	18 0 51 16	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	10 5 55 13 706	18 0 51 16 847	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	10 5 55 13 706 986	18 0 51 16 847 1138	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	10 5 55 13 706 986 615	18 0 51 16 847 1138 725	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270	10 5 55 13 706 986 615 894	18 0 51 16 847 1138 725 979	
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 ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060	10 5 55 13 706 986 615 894 2436	18 0 51 16 847 1138 725 979 2913	
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	0 0 60 1010 1070 1150 1270 2060 >+100	10 5 55 13 706 986 615 894 2436 current	18 0 51 16 847 1138 725 979 2913 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN 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 ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 kimit/base	10 5 55 13 706 986 615 894 2436 current 30	18 0 51 16 847 1138 725 979 2913 history1 ▲ 37	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	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 ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 kimit/base	10 5 55 13 706 986 615 894 2436 current 30 3	18 0 51 16 847 1138 725 979 2913 bistory1 ▲ 37 5	
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 >+100 >20	10 5 55 13 706 986 615 894 2436 2436 current 30 3 3 72	18 0 51 16 847 1138 725 979 2913 history1 ▲ 37 5 72	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 >timit/base >+100 >20	10 5 55 13 706 986 615 894 2436 current 30 3 72 current	18 0 51 16 847 1138 725 979 2913 bistory1 37 5 72 72 bistory1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 >timit/base >+100 >20	10 5 55 13 706 986 615 894 2436 <u>current</u> 30 3 72 <u>current</u> 0	18 0 51 16 847 1138 725 979 2913 bistory1 37 5 72 72 history1 0.1	 history2 history2 history2
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	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >+100 <i>limit/base</i>	10 5 55 13 706 986 615 894 2436 <i>current</i> 30 3 72 <i>current</i> 0 11.3	18 0 51 16 847 1138 725 979 2913 history1 ▲ 37 5 72 72 history1 0.1 10.9	 history2 history2
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 Abs/cm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >+100 <i>limit/base</i> >20 >30	10 5 55 13 706 986 615 894 2436 <i>current</i> 30 3 72 <i>current</i> 0 11.3 22.8	18 0 51 16 847 1138 725 979 2913 history1 37 5 72 history1 0.1 10.9 20.3	 history2 history2 history2
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 D7844 *ASTM D7844	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >+100 <i>limit/base</i> >20 >30	10 5 55 13 706 986 615 894 2436 <u>current</u> 30 3 72 <u>current</u> 0 11.3 22.8	18 0 51 16 847 1138 725 979 2913 history1 ▲ 37 5 72 history1 0.1 10.9 20.3 history1	 history2 history2 history2 history2

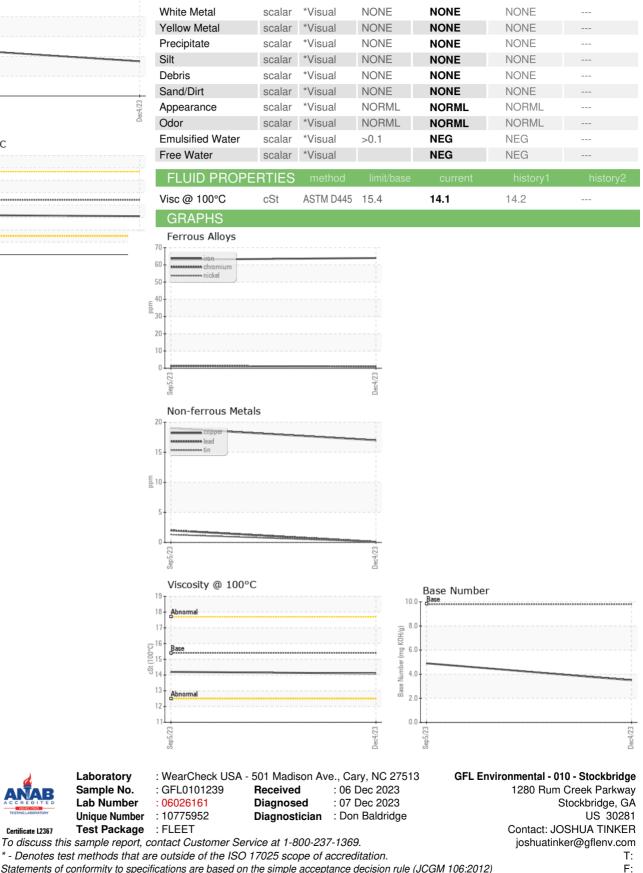


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VISUAL







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

Certificate L2367

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