

OIL ANALYSIS REPORT

Sample Rating Trend





Component Diesel Engine

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

DIAGNOSIS Recommendation

Resample at the next service interval to monitor.

Machine Id

Wear

Metal levels are typical for a new component breaking in.

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	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0093705	GFL0087700	
Sample Date		Client Info		12 Oct 2023	24 Aug 2023	
Machine Age	hrs	Client Info		500	197	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Not Changd	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	46	35	
Chromium			>5	1	0	
Nickel	ppm	ASTM D5185m	>0	1	<1	
Titanium	ppm	ASTM D5185m	~~	י <1	0	
Silver	ppm	ASTM D5185m	>3	<1 <1	0	
Aluminum	ppm	ASTM D5185m		5	3	
Lead	ppm	ASTM D5185m	>30	2	3 <1	
	ppm			2 19	15	
Copper	ppm	ASTM D5185m		19 2		
Tin Vanadium	ppm	ASTM D5185m	>5	_	<1 0	
	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	8	24	history2
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	0	8 8	24 0	· · · · · · · · · · · · · · · · · · ·
Boron Barium Molybdenum		ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	8 8 51	24 0 45	
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	8 8 51 14	24 0 45 12	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	8 8 51 14 726	24 0 45 12 764	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	8 8 51 14 726 1132	24 0 45 12 764 1154	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	8 8 51 14 726 1132 613	24 0 45 12 764 1154 695	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	8 8 51 14 726 1132	24 0 45 12 764 1154	
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	8 8 51 14 726 1132 613	24 0 45 12 764 1154 695	
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	0 0 60 0 1010 1070 1150 1270	8 8 51 14 726 1132 613 846	24 0 45 12 764 1154 695 861 2736 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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	8 8 51 14 726 1132 613 846 2039	24 0 45 12 764 1154 695 861 2736	
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	0 0 60 1010 1070 1150 1270 2060	8 8 51 14 726 1132 613 846 2039 current	24 0 45 12 764 1154 695 861 2736 history1	 history2
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	0 0 60 1010 1070 1150 1270 2060 kimit/base >20	8 8 51 14 726 1132 613 846 2039 current 38	24 0 45 12 764 1154 695 861 2736 history1 32	 history2
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 >20	8 8 51 14 726 1132 613 846 2039 current 38 5	24 0 45 12 764 1154 695 861 2736 history1 32 3	 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	0 0 0 1010 1070 1150 1270 2060 limit/base >20	8 8 51 14 726 1132 613 846 2039 current 38 5 11	24 0 45 12 764 1154 695 861 2736 history1 32 3 9	 history2
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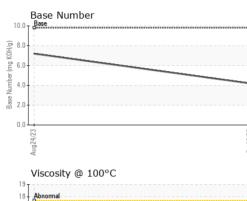
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Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 837 - H Sample No. : GFL0093705 Received : 16 Oct 2023 22820 S State Lab Number : 05980263 Diagnosed : 18 Oct 2023 Harriss Unique Number : 10697558 Diagnostician : Angela Borella	larrison TS Route 291 onville, MO US 64701
Laboratory Sample No. Lab Number Unique Number Test Package Sample L2367 Lab Number Sample L2367 Lab Number Sample No. Lab Number Sample No. Lab Number Sample No. Lab Number Surger L2367 Lab Number Sample No. Lab Number Surger L2367 Lab Number L	larrison TS Route 291 pnville, MO US 64701 SWANSON
Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 837 - H Sample No. : GFL0093705 Received : 16 Oct 2023 22820 S State Lab Number : 05980263 Diagnosed : 18 Oct 2023 Harriss Unique Number : 10697558 Diagnostician : Angela Borella	larrison TS Route 291 pnville, MO US 64701 SWANSON

Contact/Location: BRYAN SWANSON - GFL837