

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id **395140** Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

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.

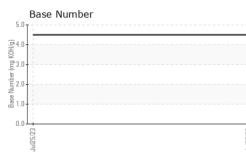
Fluid Condition

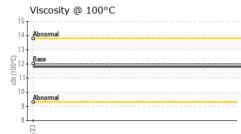
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

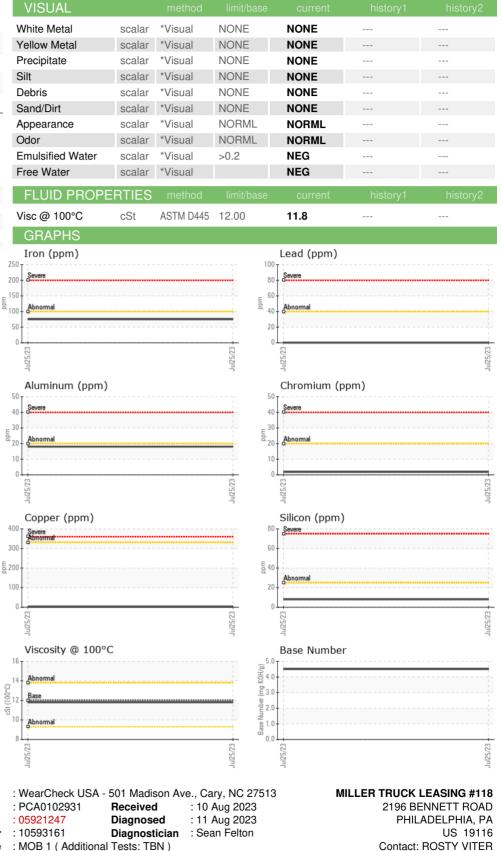
SAMPLE INFORI		method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0102931		
Sample Date		Client Info		25 Jul 2023		
Machine Age	mls	Client Info		185470		
Oil Age	mls	Client Info		185470		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	75		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	_ <1		
Titanium	ppm	ASTM D5185m		32		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	18		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	2		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	16		
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	2 0	16 1		
				-		
Barium	ppm	ASTM D5185m	0	1		
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0 50	1 41		
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0	1 41 <1 728 1479		
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 50 0 950 1050 995	1 41 <1 728 1479 1005		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180	1 41 <1 728 1479 1005 1263	 	
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	0 50 0 950 1050 995	1 41 <1 728 1479 1005	 	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180	1 41 <1 728 1479 1005 1263	 	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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 50 0 950 1050 995 1180 2600	1 41 <1 728 1479 1005 1263 3354 current 8	 	
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	0 50 0 950 1050 995 1180 2600 limit/base >25	1 41 <1 728 1479 1005 1263 3354 current	 history1	
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	0 50 0 950 1050 995 1180 2600 limit/base >25	1 41 <1 728 1479 1005 1263 3354 current 8	 history1	
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 method ASTM D5185m	0 50 0 950 1050 995 1180 2600 limit/base >25	1 41 <1 728 1479 1005 1263 3354 current 8 3	 history1	
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 50 0 950 1050 995 1180 2600 limit/base >25 >20	1 41 <1 728 1479 1005 1263 3354 current 8 3 30	 history1 	 history2
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 50 0 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3	1 41 <1 728 1479 1005 1263 3354 current 8 3 30 current	 history1 history1	 history2 history2
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	0 50 0 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3	1 41 <1 728 1479 1005 1263 3354 current 8 3 30 current 1.1	 history1 history1 history1	 history2 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	0 50 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3 >20	1 41 <1 728 1479 1005 1263 3354 <u>current</u> 8 3 30 <u>current</u> 1.1 1.1 13.6	 history1 history1 history1	 history2 history2 history2
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	ASTM D5185m ASTM D5185m	0 50 950 1050 995 1180 2600 imit/base >25 20 imit/base >3 >20 >30	1 41 <1 728 1479 1005 1263 3354 <i>current</i> 8 3 30 <i>current</i> 1.1 13.6 29.7	 history1 history1 history1	 history2 history2 history2
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 ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	0 50 950 1050 995 1180 2600 limit/base >25 20 limit/base >3 >20 >30	1 41 <1 728 1479 1005 1263 3354 current 8 3 30 current 1.1 13.6 29.7 current	 history1 history1 history1 history1 	 history2 history2 history2 history2 history2 history2 history2 history2



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Unique Number Test Package : MOB 1 (Additional Tests: TBN) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. rviter@millertransgroup.com * - 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)

Laboratory

Sample No.

Lab Number

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