

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

626269 Component Diesel Engine Fluid PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

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.

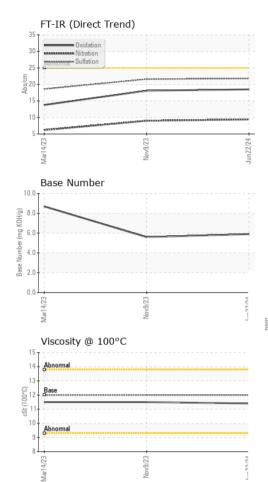
Fluid Condition

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		PCA0125172	PCA0112214	PCA0093251
Sample Date		Client Info		22 Jun 2024	09 Nov 2023	14 Mar 2023
Machine Age	mls	Client Info		146495	125929	0
Oil Age	mls	Client Info		146495	0	0
Oil Changed		Client Info		Changed	Changed	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
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	17	17	16
Chromium	ppm	ASTM D5185m		<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	~	1	3	4
Silver	ppm	ASTM D5185m	>3	، <1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	5
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>330	2	3	2
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m	210	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
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ADDITIVES		method	limit/base		-	historv2
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	current 8	history1 4	13
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0	current 8 0	history1 4 2	13 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 8 0 60	history1 4 2 56	13 0 53
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 8 0 60 <1	history1 4 2 56 0	13 0 53 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 8 0 60 <1 947	history1 4 2 56 0 832	13 0 53 <1 851
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 8 0 60 <1 947 1212	history1 4 2 56 0 832 1194	13 0 53 <1 851 1142
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	2 0 50 0 950 1050 995	current 8 0 60 <1 947 1212 934	history1 4 2 56 0 832 1194 969	13 0 53 <1 851 1142 948
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	2 0 50 0 950 1050 995 1180	current 8 0 60 <1 947 1212 934 1284	history1 4 2 56 0 832 1194 969 1198	13 0 53 <1 851 1142 948 1134
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	2 0 50 0 950 1050 995 1180 2600	Current 8 0 60 <1 947 1212 934 1284 3406	history1 4 2 56 0 832 1194 969 1198 3698	13 0 53 <1 851 1142 948 1134 3402
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	2 0 50 950 1050 995 1180 2600	current 8 0 60 <1 947 1212 934 1284 3406 current	history1 4 2 56 0 832 1194 969 1198 3698 history1	13 0 53 <1 851 1142 948 1134 3402 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	2 0 50 0 950 1050 995 1180 2600	current 8 0 60 <1 947 1212 934 1284 3406 current 6	history1 4 2 56 0 832 1194 969 1198 3698 history1 4	13 0 53 <1 851 1142 948 1134 3402 history2 6
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 method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25	current 8 0 60 <1 947 1212 934 1284 3406 current 6 2	history1 4 2 56 0 832 1194 969 1198 3698 history1 4 0	13 0 53 <1 851 1142 948 1134 3402 history2 6 <
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	2 0 50 950 1050 995 1180 2600 limit/base >25 >20	current 8 0 60 <1 947 1212 934 1284 3406 current 6 2 3	history1 4 2 56 0 832 1194 969 1198 3698 history1 4 0 8	13 0 53 <1 851 1142 948 1134 3402 history2 6 <1 10
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	2 0 50 0 950 1050 995 1180 2600 Imit/base >25 >20	current 8 0 60 <1 947 1212 934 1284 3406 current 6 2 3 current	history1 4 2 56 0 832 1194 969 1198 3698 history1 4 0 8 history1	13 0 53 <1 851 1142 948 1134 3402 history2 6 <1 10 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 8 0 60 <1 947 1212 934 1284 3406 current 6 2 3 current 0.4	history1 4 2 56 0 832 1194 969 1198 3698 history1 4 0 8 history1 0.4	13 0 53 <1 851 1142 948 1134 3402 history2 6 <1 10 history2 0.3
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 TS ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current 8 0 60 <1 947 1212 934 1284 3406 current 6 2 3 current 0.4 9.4	history1 4 2 56 0 832 1194 969 1198 3698 history1 4 0 8 history1 0.4 9.0	13 0 53 <1 851 1142 948 1134 3402 history2 6 <1 10 history2 0.3 6.2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 8 0 60 <1 947 1212 934 1284 3406 current 6 2 3 current 0.4	history1 4 2 56 0 832 1194 969 1198 3698 history1 4 0 8 history1 0.4	13 0 53 <1 851 1142 948 1134 3402 history2 6 <1 10 history2 0.3
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 ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current 8 0 60 <1 947 1212 934 1284 3406 current 6 2 3 current 0.4 9.4	history1 4 2 56 0 832 1194 969 1198 3698 history1 4 0 8 history1 0.4 9.0	13 0 53 <1 851 1142 948 1134 3402 history2 6 <1 10 history2 0.3 6.2
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 TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >25 imit/base >20 imit/base >3 >20	current 8 0 60 <1 947 1212 934 1284 3406 current 6 2 3 current 0.4 9.4 21.8	history1 4 2 56 0 832 1194 969 1198 3698 history1 4 0 8 history1 0.4 9.0 21.6	13 0 53 <1 851 1142 948 1134 3402 history2 6 <1 10 history2 0.3 6.2 18.6



OIL ANALYSIS REPORT



White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual NOR NEG NEG NEG Iron (ppm)			
Precipitate scalar *Visual NONE NONE NONE NONE NONE Sitt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML NORML More visual NORML			
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Debris scalar *Visual NONE NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML NORML NORML Cdor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG Free Water scalar *Visual >0.2 NEG NEG NEG Visc @ 100°C cSt ASTM D445 12.00 11.4 11.5 11.5 GRAPHS Iron (ppm)			
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Free Water scalar *Visual NEG NEG NEG FLUID PROPERTIES method limit/base current history1 history2 Visc @ 100°C cSt ASTM D445 12.00 11.4 11.5 11.5 GRAPHS Iron (ppm) Lead (ppm)			
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: WearCheck USA - 501 Madison Ave., Cary, NC 27513 MILLER TRUCK LEASING #1 : PCA0125172 Received : 27 Jun 2024 2196 BENNETT ROA	MILLER TRUCK LEASING #118		
: 06222063 Tested : 27 Jun 2024 2196 BENNETT ROJ			
: 11100260 Diagnosed : 28 Jun 2024 Wes Davis US 191			
: MOB 1 (Additional Tests: TBN) Contact: ROSTY VITI			
contact Customer Service at 1-800-237-1369. rviter@millertransgroup.cd			

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)

Report Id: MILPHINE [WUSCAR] 06222063 (Generated: 06/28/2024 04:27:53) Rev: 1

Certificate L2367

Laboratory Sample No. Lab Number **Unique Number Test Package**

Contact/Location: ROSTY VITER - MILPHINE

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