

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 231311 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

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

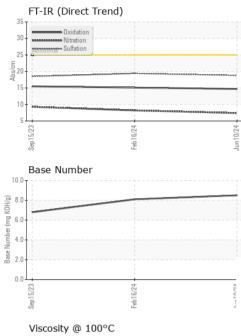
Fluid Condition

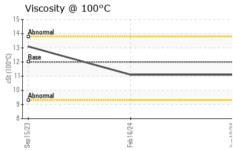
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128890	PCA0118907	PCA0106244
Sample Date		Client Info		10 Jun 2024	16 Feb 2024	15 Sep 2023
Machine Age	mls	Client Info		17502	14387	5126
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
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	29	49	37
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	4	5
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	2	6	27
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 6	history1 10	history2 101
	ppm ppm					
Boron		ASTM D5185m	2	6	10	101
Boron Barium	ppm	ASTM D5185m ASTM D5185m	2 0 50	6 0	10 0	101 2
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	6 0 62	10 0 63	101 2 117
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	6 0 62 1	10 0 63 2	101 2 117 4
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	6 0 62 1 952	10 0 63 2 880	101 2 117 4 784
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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	6 0 62 1 952 1076	10 0 63 2 880 1044	101 2 117 4 784 1296
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	6 0 62 1 952 1076 1101	10 0 63 2 880 1044 958	101 2 117 4 784 1296 804
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	2 0 50 950 1050 995 1180	6 0 62 1 952 1076 1101 1285	10 0 63 2 880 1044 958 1132	101 2 117 4 784 1296 804 1006
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	6 0 62 1 952 1076 1101 1285 3570	10 0 63 2 880 1044 958 1132 2822	101 2 117 4 784 1296 804 1006 3550
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	6 0 62 1 952 1076 1101 1285 3570 current	10 0 63 2 880 1044 958 1132 2822 history1	101 2 117 4 784 1296 804 1006 3550 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 method	2 0 50 0 950 1050 995 1180 2600 limit/base >25	6 0 62 1 952 1076 1101 1285 3570 current 7	10 0 63 2 880 1044 958 1132 2822 history1 6	101 2 117 4 784 1296 804 1006 3550 history2 25
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	2 0 50 0 950 1050 995 1180 2600 limit/base >25	6 0 62 1 952 1076 1101 1285 3570 current 7 2	10 0 63 2 880 1044 958 1132 2822 history1 6 2	101 2 117 4 784 1296 804 1006 3550 history2 25 2
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	6 0 62 1 952 1076 1101 1285 3570 current 7 2 5	10 0 63 2 880 1044 958 1132 2822 history1 6 2 2 2	101 2 117 4 784 1296 804 1006 3550 history2 25 25 2 3
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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 t ppm ppm	ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	6 0 62 1 952 1076 1101 1285 3570 current 7 2 5 5 current 0.5 7.4 18.8	10 0 63 2 880 1044 958 1132 2822 history1 6 2 2 2 history1 0.6 8.2 19.4	101 2 117 4 784 1296 804 1006 3550 history2 25 2 2 3 history2 0.4 9.3 18.5
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 ppm	ASTM D5185m ASTM D7844 *ASTM D7844	2 0 0 50 0 950 1050 995 1180 2600 imit/base >25 20 >20 >30 >30 imit/base	6 0 62 1 952 1076 1101 1285 3570 current 7 2 5 current 0.5 7.4 18.8 current	10 0 63 2 880 1044 958 1132 2822 history1 6 2 2 2 history1 0.6 8.2 19.4 history1	101 2 117 4 784 1296 804 1006 3550 history2 25 2 25 2 3 history2 0.4 9.3 18.5 history2



OIL ANALYSIS REPORT





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Image: S216651 Tested : 24 Jun 2024 HASBROUCK HEIGHT 089515 Diagnosed : 24 Jun 2024 - Wes Davis US	

- Unique Number Test Package : MOB 1 (Additional Tests: TBN)
- 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) F: (201)528-7053

Certificate L2367

Laboratory Sample No. Lab Number

Contact/Location: MIKE LONGETTE - MILRUT

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Contact: MIKE LONGETTE

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