

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

738613 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

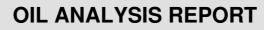
There is no indication of any contamination in the oil.

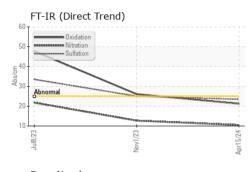
Fluid Condition

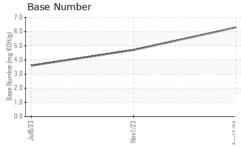
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

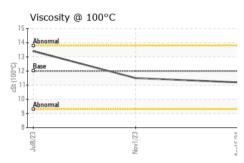
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0121438	PCA0093260	PCA0100777
Sample Date		Client Info		15 Apr 2024	01 Nov 2023	08 Jul 2023
Machine Age	mls	Client Info		173137	43743	74014
Oil Age	mls	Client Info		173137	43743	74014
Oil Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
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	41	63	1 98
Chromium	ppm	ASTM D5185m	>20	1	2	8
Nickel	ppm	ASTM D5185m	>4	0	0	2
Titanium	ppm	ASTM D5185m		16	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	5	15	53
Lead	ppm	ASTM D5185m	>40	0	0	3
Copper	ppm	ASTM D5185m	>330	11	53	242
Tin	ppm	ASTM D5185m	>15	<1	0	4
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history1	0 history2
	ppm ppm		limit/base	-	-	-
ADDITIVES		method		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	2	current 14	history1 4	history2 21
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	2 0 50	current 14 0	history1 4 0	history2 21 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 14 0 54	history1 4 0 57 <1 824	history2 21 0 48
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	current 14 0 54 <1 868 1292	history1 4 0 57 <1	history2 21 0 48 5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	current 14 0 54 <1 868 1292 1079	history1 4 0 57 <1 824	history2 21 0 48 5 588 2082 863
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	current 14 0 54 <1 868 1292 1079 1304	history1 4 0 57 <1 824 1277 917 1153	history2 21 0 48 5 588 2082 863 1092
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	current 14 0 54 <1 868 1292 1079	history1 4 0 57 <1 824 1277 917	history2 21 0 48 5 588 2082 863
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180	current 14 0 54 <1 868 1292 1079 1304	history1 4 0 57 <1 824 1277 917 1153	history2 21 0 48 5 588 2082 863 1092
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method 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 14 0 54 <1 868 1292 1079 1304 3254 current 6	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7	history2 21 0 48 5 588 2082 863 1092 2432 history2 10
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m 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 14 0 54 <1 868 1292 1079 1304 3254 current 6 2	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7 4	history2 21 0 48 5 588 2082 863 1092 2432 history2 10 7
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 14 0 54 <1 868 1292 1079 1304 3254 current 6	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7	history2 21 0 48 5 588 2082 863 1092 2432 history2 10
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 950 1050 995 1180 2600 limit/base >25	current 14 0 54 <1 868 1292 1079 1304 3254 current 6 2 10 current	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7 4 39 history1	history2 21 0 48 5 588 2082 863 1092 2432 history2 10 7 150 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >25 >20 Imit/base >3	current 14 0 54 <1 868 1292 1079 1304 3254 current 6 2 10 current 1	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7 4 39 history1 1.3	history2 21 0 48 5 588 2082 863 1092 2432 history2 10 7 150 history2 1.9
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >25 >20 Imit/base >3	current 14 0 54 <1 868 1292 1079 1304 3254 current 6 2 10 current 1 10.5	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7 4 39 history1 1.3 12.7	history2 21 0 48 5 588 2082 863 1092 2432 history2 10 7 150 history2 1.9 21.8
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 Imit/base >25 >20 Imit/base >3	current 14 0 54 <1 868 1292 1079 1304 3254 current 6 2 10 current 1	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7 4 39 history1 1.3	history2 21 0 48 5 588 2082 863 1092 2432 history2 10 7 150 history2 1.9
ADDITIVES 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	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current 14 0 54 <1 868 1292 1079 1304 3254 current 6 2 10 current 1 10.5	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7 4 39 history1 1.3 12.7	history2 21 0 48 5 588 2082 863 1092 2432 history2 10 7 150 history2 1.9 21.8
ADDITIVES 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	method ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 imit/base >25 imit/base >3 >20	current 14 0 54 <1 868 1292 1079 1304 3254 current 6 2 10 current 1 10.5 23.4	history1 4 0 57 <1 824 1277 917 1153 2085 history1 7 4 39 history1 1.3 12.7 25.0	history2 21 0 48 5 588 2082 863 1092 2432 history2 10 7 150 history2 1.9 21.8 33.5

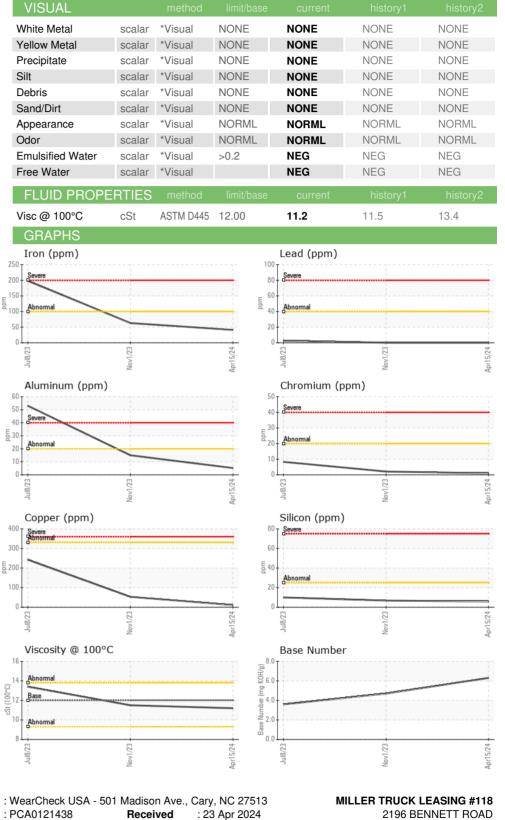


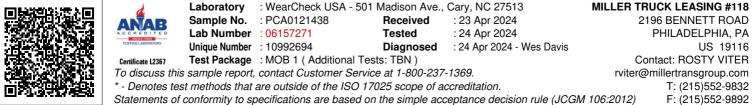












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