

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 398662

Component **Diesel Engine**

Elui PETRO CANADA DURON SHP 10W30 (16 QTS)

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.

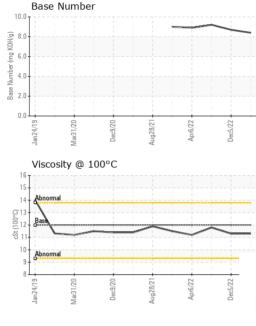
Fluid Condition

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		PCA0113611	PCA0082576	PCA0076070
Sample Date		Client Info		07 Dec 2023	05 Dec 2022	16 Aug 2022
Machine Age	mls	Client Info		210680	0	0
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	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	18	25	36
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	5	6
Lead	ppm	ASTM D5185m	>40	0	3	4
Copper	ppm	ASTM D5185m	>330	0	22	5
Tin	ppm	ASTM D5185m	>15	0	2	1
Vanadium	ppm	ASTM D5185m		0	0	0
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Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES	ppm	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 0	history1 15	history2 7
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0	current 0 4	history1 15 0	history2 7 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	current 0 4 65	history1 15 0 70	history2 7 0 81
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	current 0 4 65 0	history1 15 0 70 1	history2 7 0 81 <1
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 0 4 65 0 864	history1 15 0 70 1 879	history2 7 0 81 <1 911
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	Current 0 4 65 0 864 1233	history1 15 0 70 1 879 1329	history2 7 0 81 <1 911 1198
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	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 0 4 65 0 864 1233 1071	history1 15 0 70 1 879 1329 1023	history2 7 0 81 <1 911 1198 999
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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 50 950 1050 995 1180	Current 0 4 65 0 864 1233 1071 1235	history1 15 0 70 1 879 1329 1023 1330	history2 7 0 81 <1 911 1198 999 1256
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 ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	Current 0 4 65 0 864 1233 1071 1235 3597	history1 15 0 70 1 879 1329 1023 1330 3810	history2 7 0 81 <1 911 1198 999 1256 3391
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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 0 4 65 0 864 1233 1071 1235 3597 Current	history1 15 0 70 1 1 879 1329 1023 1330 3810 history1	history2 7 0 81 <1 911 1198 999 1256 3391 history2
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	2 0 50 0 950 1050 995 1180 2600 limit/base	current 0 4 65 0 864 1233 1071 1235 3597 current 0	history1 15 0 70 1 879 1329 1023 1330 3810 history1 4	history2 7 0 81 <1 911 1198 999 1256 3391 history2 5
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 0 950 1050 995 1180 2600 limit/base	current 0 4 65 0 864 1233 1071 1235 3597 current 0 0 0 0 0 0	history1 15 0 70 1 879 1329 1023 1330 3810 history1 4 6	history2 7 0 81 <1 911 1198 999 1256 3391 history2 5 10
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 50 950 1050 995 1180 2600 limit/base >25 >20	current 0 4 65 0 864 1233 1071 1235 3597 current 0 0 0 0 0 0 0 0 0	history1 15 0 70 1 879 1329 1023 1330 3810 history1 4 6 4	history2 7 0 81 <1 911 1198 999 1256 3391 history2 5 10 12
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	current 0 4 65 0 864 1233 1071 1235 3597 current 0 0 0 0 0 0 0 0 0 0 0 0 0	history1 15 0 70 1 879 1329 1023 1330 3810 history1 4 6 4 history1	history2 7 0 81 <1 911 1198 999 1256 3391 history2 5 10 12 history2
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 limit/base >25 >20 limit/base >3	current 0 4 65 0 864 1233 1071 1235 3597 current 0 0 0 0 0 11235 3597 current 11235 11235 11235 11235 11235 11235	history1 15 0 70 1 879 1329 1023 1330 3810 history1 4 6 4 history1 1.5	history2 7 0 81 <1 911 1198 999 1256 3391 history2 5 10 12 history2 2.3
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 50 950 1050 995 1180 2600 <i>imit/base</i> >25 >20 <i>imit/base</i> >3 >20	current 0 4 65 0 864 1233 1071 1235 3597 current 0 0 0 0 0 1.4 11.9	history1 15 0 70 1 879 1329 1023 1330 3810 history1 4 6 4 1.5 1.2.6	history2 7 0 81 <1 911 1198 999 1256 3391 history2 5 10 12 history2 2.3 16.0
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 >30	Current 0 4 65 0 864 1233 1071 1235 3597 current 0 0 0 0 0 1.4 11.9 21.4	history1 15 0 70 1 879 1329 1023 1330 3810 history1 4 6 4 history1 1.5 12.6 22.0	history2 7 0 81 <1 911 1198 999 1256 3391 history2 5 10 12 history2 2.3 16.0 27.3



OIL ANALYSIS REPORT





Certificate L2367

Laboratory

Sample No.

Lab Number

Contact/Location: ED DAVIS - MILLOG