

OIL ANALYSIS REPORT







Component Diesel Engine

Fluid 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.

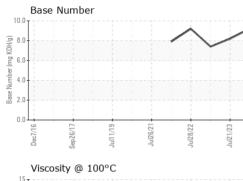
Fluid Condition

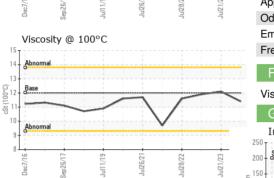
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0113324	PCA0103063	PCA0094250
Sample Date		Client Info		28 Nov 2023	21 Jul 2023	20 Mar 2023
Machine Age	mls	Client Info		0	268070	256110
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		ASTM D5185m	>100	12	29	25
Chromium	ppm	ASTM D5185m	>100	<1	<1	1
Nickel	ppm		>20	<1 0	<1	0
	ppm	ASTM D5185m ASTM D5185m	>4	0	<1	0
Titanium Silver	ppm	ASTM D5185m ASTM D5185m	>3	0	0	0
Aluminum	ppm		>3 >20	0 5	9	10
	ppm					
Lead	ppm	ASTM D5185m	>40 >330	0	3 1	2
Copper	ppm			-		
Tin Vanadium	ppm	ASTM D5185m ASTM D5185m	>15	<1 0	<1 0	<1 0
Cadmium	ppm	ASTM D5185m		0	0	0
	ppm	ASTIVI DOTODIII		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	19	65	41
Barium	ppm	ASTM D5185m	0	0	1	0
Molybdenum	ppm	ASTM D5185m	50	59	56	35
Manganese	ppm	ASTM D5185m	0	<1	<1	1
Magnesium	ppm	ASTM D5185m	950	830	675	552
Calcium	ppm	ASTM D5185m	1050	1279	1486	1675
Phosphorus	ppm	ASTM D5185m	995	1060	1072	969
Zinc	ppm	ASTM D5185m	1180	1292	1303	1284
Sulfur	ppm	ASTM D5185m	2600	3214	3370	3356
				ULIT		
CONTAMINAN		method	limit/base	current	history1	history2
CONTAMINAN Silicon			limit/base	-	history1 4	history2 5
	TS	method	limit/base	current		
Silicon	TS ppm	method ASTM D5185m	limit/base >25	current 4	4	5
Silicon Sodium	TS ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >25	current 4 3	4 3	5 4
Silicon Sodium Potassium	TS ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	current 4 3 6	4 3 13	5 4 17
Silicon Sodium Potassium INFRA-RED	TS ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base >25 >20 limit/base	current 4 3 6 current	4 3 13 history1	5 4 17 history2
Silicon Sodium Potassium INFRA-RED Soot %	TS ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	limit/base >25 >20 limit/base >3	current 4 3 6 current 0.6	4 3 13 history1 1.1	5 4 17 history2 1.1
Silicon Sodium Potassium INFRA-RED Soot % Nitration	TS ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m • ASTM D7844 *ASTM D7824	limit/base >25 >20 limit/base >3 >20	current 4 3 6 current 0.6 9.4	4 3 13 history1 1.1 12.2	5 4 17 history2 1.1 12.5
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	TS ppm ppm ppm % Abs/cm Abs/cm Abs/1mm	method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7615 method	limit/base >25 >20 limit/base >3 >20 >30 limit/base	current 4 3 6 current 0.6 9.4 19.6 current	4 3 13 history1 1.1 12.2 23.0 history1	5 4 17 history2 1.1 12.5 23.8 history2
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	TS ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >25 >20 limit/base >3 >20 >30 limit/base	current 4 3 6 current 0.6 9.4 19.6	4 3 13 history1 1.1 12.2 23.0	5 4 17 history2 1.1 12.5 23.8



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Certificate L2367

Laboratory

Sample No.

Lab Number

Unique Number

* - 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)

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