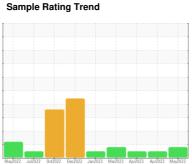


OIL ANALYSIS REPORT



SOOT



Machine Id SJB621

Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (--- 0

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is an abnormal amount of solids and carbon present in the oil.

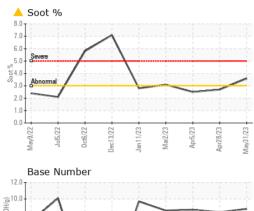
Fluid Condition

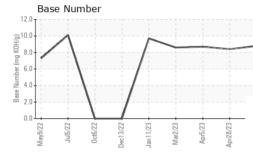
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

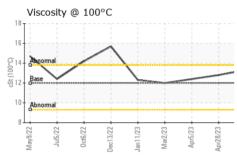
QTS)		May2022 Jul	2022 Oct2022 Dec2022	Jan 2023 Mar 2023 Apr 2023 Apr 202	13 May2023	
SAMPLE INFORM	MATION	method	limit/base	current	history 1	history 2
Sample Number		Client Info		PCA0097813	PCA0097748	PCA0094467
Sample Date		Client Info		31 May 2023	28 Apr 2023	05 Apr 2023
Machine Age	mls	Client Info		152207	0	137435
Oil Age	mls	Client Info		8513	6259	7305
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history 1	history 2
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	3	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>100	26	21	23
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	10
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	6
Lead	ppm	ASTM D5185m	>40	2	0	<1
Copper	ppm	ASTM D5185m	>330	1	2	13
Tin	ppm	ASTM D5185m	>15	<1	0	2
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	2	6	13	53
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	50	63	62	45
Manganese	ppm	ASTM D5185m	0	<1	<1	2
Magnesium	ppm	ASTM D5185m	950	850	912	515
Calcium	ppm	ASTM D5185m	1050	1128	1132	1634
Phosphorus	ppm	ASTM D5185m	995	1017	1044	928
Zinc	ppm	ASTM D5185m	1180	1186	1276	1110
Sulfur		ACTM DE10Em	0000			
	ppm	ASTM D5185m	2600	3005	3667	3488
CONTAMINAN		method	limit/base	3005 current	3667 history 1	3488 history 2
CONTAMINANT Silicon		method				
	TS	method	limit/base	current	history 1	history 2
Silicon	TS ppm	method ASTM D5185m	limit/base	current 3	history 1	history 2
Silicon Sodium	TS ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >25	current 3 0	history 1 4 <1	history 2 14 2
Silicon Sodium Potassium	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	current 3 0 1	history 1 4 <1 1	history 2 14 2 <1
Silicon Sodium Potassium Fuel	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	limit/base	current 3 0 1 <1.0	history 1 4 <1 1 <1.0	history 2 14 2 <1 <1.0
Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method	limit/base >25 >20 >5 limit/base	current 3 0 1 <1.0 current	history 1 4 <1 1 <1.0 history 1	history 2 14 2 <1 <1.0 history 2
Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm %	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844	limit/base >25 >20 >5 limit/base >3	current 3 0 1 <1.0 current ▲ 3.6	history 1 4 <1 1 <1.0 history 1 2.7	history 2 14 2 <1 <1.0 history 2 2.5
Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624	limit/base >25 >20 >5	current 3 0 1 <1.0 current ▲ 3.6 12.1	history 1 4 <1 1 <1.0 history 1 2.7 9.8	history 2 14 2 <1 <1.0 history 2 2.5 10.3
Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >25 >20 >5	current 3 0 1 <1.0 current ▲ 3.6 12.1 26.7	history 1 4 <1 1 <1.0 history 1 2.7 9.8 22.9	history 2 14 2 <1 <1.0 history 2 2.5 10.3 22.0
Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm % % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844 *ASTM D7624 *ASTM D7624 *ASTM D7415 method	limit/base >25 >20 >5 limit/base >3 >20 >3 limit/base	current 3 0 1 <1.0 current ▲ 3.6 12.1 26.7 current	history 1 4 <1 1 <1.0 history 1 2.7 9.8 22.9 history 1	history 2 14 2 <1 <1.0 history 2 2.5 10.3 22.0 history 2



OIL ANALYSIS REPORT





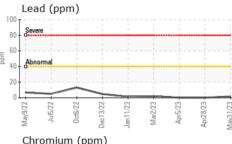


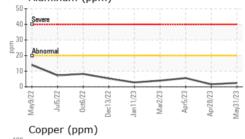
VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

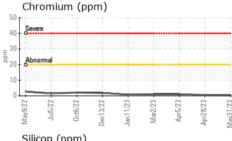
FLUID PHOP	ELLIES	memod	IIIIII/Dase	Current	TIISTOLY I	flistory 2
Visc @ 100°C	cSt	ASTM D445	12.00	13.3	12.8	12.4

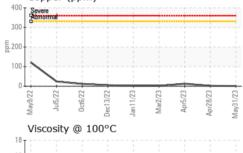
250	Iror	n (pp	m)						
200	Sever	re							
E 150	Abac	ormal							
100	0	\ <u> </u>			\				
0.	22					-33	2	20	=======================================
	May9/22	Jul5/2	0ct6/22	Dec13/23	Jan11/2	Mar2/2	Apr5/2	Apr28/23	May31/23
	Aluı	minu	m (pp	m)					

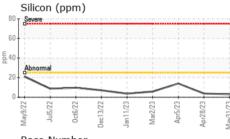
GRAPHS

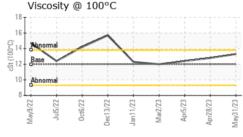


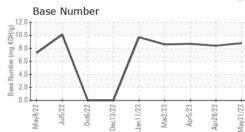














Certificate L2367

Laboratory Sample No. **Lab Number**

Unique Number

: PCA0097813 : 05888692 : 10539175

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed

: 03 Jul 2023 : 03 Jul 2023

Diagnostician : Jonathan Hester

Test Package : MOB 1 (Additional Tests: FuelDilution, 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)

MILLER TRUCK LEASING #114

63 REPAUPO STATION ROAD LOGAN TOWNSHIP, NJ US 08085

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