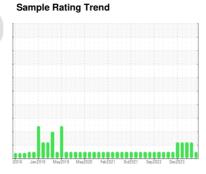


# **OIL ANALYSIS REPORT**

(71051P) 10540

Diesel Engine

## PETRO CANADA DURON SHP 15W40 (10 GAL)





## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

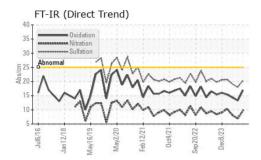
## **Fluid Condition**

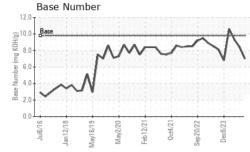
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

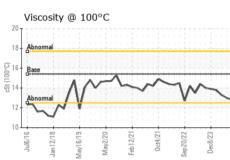
SAMPLE INFORM	MATION	mothod	limit/base	Olive ont	historia	history?
	IATION		IIIIIIVDase		history1	history2
Sample Number		Client Info		GFL0113930	GFL0113909	GFL0093751
Sample Date	la una	Client Info		20 May 2024	12 Mar 2024	13 Feb 2024
Machine Age	hrs	Client Info		15712	15238	15112
Oil Age	hrs	Client Info		Ohammad	Ola a ra a a d	Oh ana sa al
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	ABNORMAL
CONTAMINATION	NC	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	3	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	22	9	27
Chromium	ppm	ASTM D5185m	>5	1	<1	2
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	1
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>15	2	2	7
Lead	ppm	ASTM D5185m	>25	1	0	2
Copper	ppm	ASTM D5185m	>100	1	<1	2
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	5	10	15
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	62	60	98
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	914	867	1223
Calcium	ppm	ASTM D5185m	1070	1102	1046	1333
Phosphorus	ppm	ASTM D5185m	1150	979	969	1300
Zinc	ppm	ASTM D5185m	1270	1257	1167	1592
Sulfur	ppm	ASTM D5185m	2060	3094	3640	4866
CONTAMINANT	ΓS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	6	20
Sodium	ppm	ASTM D5185m		65	179	<u> </u>
Potassium	ppm	ASTM D5185m	>20	2	1	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.6	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.7	6.9	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	18.0	19.1
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	13.3	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.0	8.4	9.3
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# **OIL ANALYSIS REPORT**



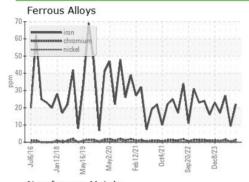


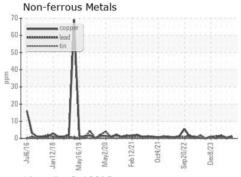


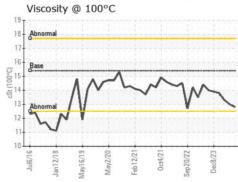
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

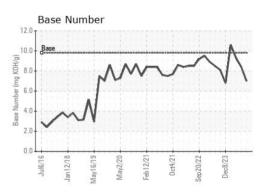
FLUID PROPE	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.8	13.0	13.3

## **GRAPHS**













Laboratory Sample No. Lab Number : 06188550 Unique Number : 11045302

: GFL0113930

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 22 May 2024

**Tested** : 24 May 2024 Diagnosed : 24 May 2024 - Wes Davis

2390 North 4th Street Wytheville, VA US 24382

Test Package : FLEET Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

charles.corvin@gflenv.com;canastasio@wearcheckusa.com T: (276)223-4476

Contact: CHARLES CORVIN

GFL Environmental - 029 - Wytheville

\* - 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: (276)223-1283 Submitted By: CHARLES CORVIN