

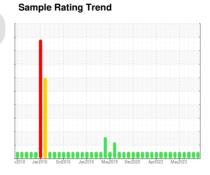
# **OIL ANALYSIS REPORT**



G.LOPES CONSTRUCTION INC./Off-Road

**L00** Component
Diesel Engine

PETRO CANADA DURON SHP 15W40 (--- 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

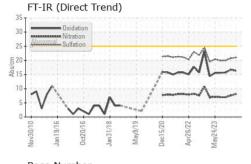
## **Fluid Condition**

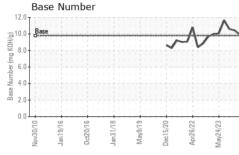
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

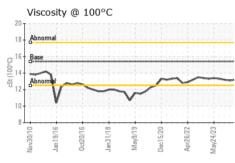
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0122683	PCA0109859	PCA0104587
Sample Date		Client Info		17 Apr 2024	20 Dec 2023	11 Oct 2023
Machine Age	hrs	Client Info		34603	34603	34603
Oil Age	hrs	Client Info		34603	34603	34603
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	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 METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	23	17	26
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	1	12
Lead	ppm	ASTM D5185m	>40	21	23	16
Copper	ppm	ASTM D5185m	>330	23	12	13
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	9	26
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	58	58	84
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	925	936	1209
Calcium	ppm	ASTM D5185m	1070	1104	1011	1354
Phosphorus	ppm	ASTM D5185m	1150	1005	1051	1331
Zinc	ppm	ASTM D5185m	1270	1108	1235	1655
Sulfur	ppm	ASTM D5185m	2060	3424	2976	4708
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	3	6
Sodium	ppm	ASTM D5185m		1	0	2
Potassium	ppm	ASTM D5185m	>20	0	0	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.7	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.6	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	20.7	20.0
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	16.7	15.7
	AUS/. ! ! ! ! ! !	A311VI D7414	>20	10.3	10.7	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.89	10.7	10.59



# **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 PROPI	ERHES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.1	13.2

130 @ 100 0	COL	AO I IVI D	140 10.4	13.2	10	). I		10.	_
GRAPHS									
Iron (ppm)				Lead (ppm	)				
Severe				100 Severe					Ш
				00	hiida		11333		
Abnormal	1 1 2 2 2 2 2 2 2 2			Abnormal			11:11	11 11	
[5555] [1001] [100.				20-					
	$\longrightarrow$		~	والمنافق المالية	9 80	- 6		$\stackrel{\sim}{\sim}$	3
Nov30/10 Jan19/16 Oct20/16	Jan31/18 May9/19	Dec15/20 Apr26/22	May24/23	Nov30/10 Jan19/16	Oct20/16 Jan31/18	May9/19	Dec15/20	Apr26/22	Mav24/23
Aluminum (ppm		Q A	M	≊ ⊸ Chromium	-	2	ă	A	×
T300000000000000	יי ברובר ברובו			50 T 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	(ppiii)				111
Severe				40 Severe					-
Abnormal				Abnormal					
				20 + 0					
			$\bot$	0					
Jan19/16 -	Jan31/18	Dec15/20	May24/23		Oct20/16	May9/19	Dec15/20	Apr26/22	May24/23
	Jan, Ma	Dec	May		-	May	Dec	Apri	May
Copper (ppm)				Silicon (ppi	n)				
Transfer of				80 - Severe					
				00	1::0000	A			
Section 1			11666111661668	40 Abnormal		1			
Total Carlotte				20+	1111111	1		30020	
91	19	20	723	01 90	18	61/	702/	722	73
Nov30/10 Jan19/16 Oct20/16	Jan31/18 May9/19	Dec15/20 - Apr26/22 -	May24/23	Nov30/10 Jan19/16	Oct20/16 Jan31/18	May9/19	Dec15/20	Apr26/22	May24/23
Viscosity @ 100			- <u> </u>	Base Numl			10000		-
Abnormal				10.0					
- Base				Base 8.0 8.0 4.0 4.0 4.0			~	プレ	
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Laboratory Sample No. Lab Number : 06154656 Unique Number : 10990079

: PCA0122683

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

Received : 19 Apr 2024 **Tested** : 23 Apr 2024

Diagnosed

: 23 Apr 2024 - Wes Davis

US 02780 Contact: BUTCH MCGRATH bmcgrath@glopes.com

Test Package : MOB 2 Certificate 12367 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)

Report Id: GLOTAU [WUSCAR] 06154656 (Generated: 04/23/2024 08:36:38) Rev: 1

Submitted By: MATT MANOLI

**G LOPES CONSTRUCTION** 

565 WINTHROP ST

TAUNTON, MA

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