

## **OIL ANALYSIS REPORT**

Sample Rating Trend





Component

Diesel Engine Fluid

PETRO CANADA DURON SHP 10W30 (--- GAL)

### 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.

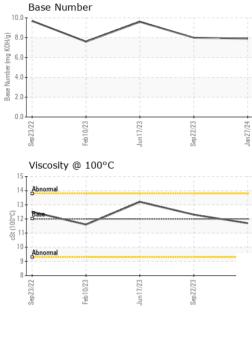
#### Fluid Condition

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

iAL)		Sep2022	Feb2023	Jun2023 Sep2023	Jan2024	
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0117086	PCA0106259	PCA0097995
Sample Date		Client Info		27 Jan 2024	22 Sep 2023	17 Jun 2023
Machine Age	mls	Client Info		112685	91601	73078
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	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	5	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	30	30	35
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	1	2	<1
Aluminum	ppm	ASTM D5185m	>20	4	9	4
Lead	ppm	ASTM D5185m	>40	3	5	4
Copper	ppm	ASTM D5185m	>330	7	12	16
Tin	ppm	ASTM D5185m	>15	1	1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	1	0	21
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	50	70	68	61
Manganese	ppm	ASTM D5185m	0	<1	2	2
Magnesium	ppm	ASTM D5185m	950	1038	1101	793
Calcium	ppm	ASTM D5185m	1050	1180	1253	1436
Phosphorus	ppm	ASTM D5185m	995	1117	1162	1067
Zinc	ppm	ASTM D5185m	1180	1322	1543	1324
Sulfur	ppm	ASTM D5185m	2600	3224	3383	3419
CONTAMINAN	ΓS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	5	6
Sodium	ppm	ASTM D5185m		0	5	6
	ppm	ASTM D5185m	>20	8	14	6
Potassium INFRA-RED		method	limit/base	current	history1	history2
Potassium INFRA-RED Soot %	%	method *ASTM D7844	limit/base >3	current 2.2	history1 2.6	history2 1.9
Potassium INFRA-RED Soot % Nitration	% Abs/cm	method *ASTM D7844 *ASTM D7624	limit/base >3 >20	current 2.2 13.5	history1 2.6 14.0	history2 1.9 12.0
Potassium INFRA-RED Soot % Nitration	%	method *ASTM D7844	limit/base >3 >20	current 2.2	history1 2.6	history2 1.9
Potassium INFRA-RED Soot % Nitration	% Abs/cm Abs/.1mm	method *ASTM D7844 *ASTM D7624	limit/base >3 >20	current 2.2 13.5 25.1	history1 2.6 14.0	history2 1.9 12.0
Potassium INFRA-RED Soot % Nitration Sulfation	% Abs/cm Abs/.1mm	method *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >3 >20 >30	current 2.2 13.5 25.1	history1 2.6 14.0 25.8	history2 1.9 12.0 24.8



# **OIL ANALYSIS REPORT**



		VISUAL		method	limit/base	current	history1	history2		
$\frown$		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		
Jun17/23	Sep 22/23	Appearance	scalar *	Visual	NORML	NORML	NORML	NORML		
Jun	Sep	Odor	scalar *	Visual	NORML	NORML	NORML	NORML		
		Emulsified Water	scalar *	Visual	>0.2	NEG	NEG	NEG		
		Free Water	scalar *	Visual		NEG	NEG	NEG		
/		FLUID PROPE	RTIES	method	limit/base	current	history1	history2		
		Visc @ 100°C	cSt A	ASTM D445	12.00	11.7	12.3	13.2		
		GRAPHS								
		Iron (ppm)				Lead (ppm)				
<u></u>		250 Severe		1	10	Severe		1		
Jun17/23	Sep 22/23	200	1							
٦L	S	150 - Abnormal			L L	Abnormal	1			
		50				10				
		0				0				
		Sep 23/22 Feb 10/23	Jun17/23 -	Sep22/23 -	Jan 27/24 -	Sep23/22 -	Jun17/23 -	Sep22/23 .		
		Sep 2 Feb 1	Jun1	Sep2	Jan2	Sep2	Junl	Sep2		
		Aluminum (ppm)				Chromium (pp	om)			
		50 Severe				Severe				
			1							
		and abnormal	1	1		Abnormal	1			
		10				0				
		0			the second se	0				
		Sep 23/22 Feb 10/23	Jun17/23 -	Sep22/23 .	Jan27/24 .	Sep23/22 - Feb10/23	Jun17/23 .	Sep22/23 .		
		Sep 2	Junl	Sep2	Jan2	Sep 2	Junl	Sep2		
		Copper (ppm)				Silicon (ppm)				
		400 Severe				<sup>10</sup> Severe				
		300			G	0				
		튭 200 - · · · · · · · · · · · · · · · · · ·			ud 4	10 -				
		100		1		Abnormal				
						0				
		Sep 23/22 Feb 10/23	Jun17/23 -	Sep22/23 -	Jan 27/24 -	Sep23/22 - Feb10/23 -	Jun17/23 -	Sep22/23 .		
		Sep2 Feb1	Jun1	Sep 2	Jan2	Sep2 Feb1	Jun1	Sep22/23		
		Viscosity @ 100°C				Base Number				
		<sup>16</sup>			(界。		$\sim$			
		୍ର 14 - Abnormal			JOX 8	-				
		(3-001) 12- 8	-		u a aquita					
		<sup>23</sup> <sup>10</sup> Abnormal			Base Number (mg KOH/d) 9 8 8					
		8	I I	I I		.0				
		Sep 23/22 Feb 10/23	Jun17/23	Sep22/23	Jan 27/24	Sep 23/22 Feb 10/23	Jun17/23	Sep22/23		
		Feb	Jun	Sep	Jan	Sep	Jun	Sep		
d				501 Madison Ave., Cary, NC 27513 Recieved : 02 Feb 2024			3 MILLER TRUCK LEASING #119 39 INDUSTRIAL AVE			
NAP		: 06078939	Diagnosed		Feb 2024	HASBROUCK HEIGHTS, N US 07604				
	Lab Number Unique Numbe		Diagnostic		s Davis		0			
	Unique Numbe Test Package s sample report		Tests: TBN ce at 1-80	l) 0-237-1369	9.	ml		US 0760 KE LONGETTI transgroup.cor T		



Contact/Location: MIKE LONGETTE - MILRUT