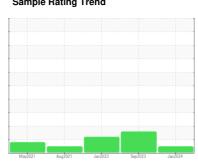


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



719684

Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (---

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

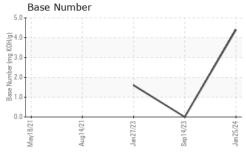
Fluid Condition

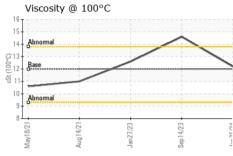
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

GAL)		May2021	Aug2021	Jan 2023 Sep 2023	Jan 2024	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0114558	PCA0105278	PCA0085237
Sample Date		Client Info		25 Jan 2024	14 Sep 2023	27 Jan 2023
Machine Age	mls	Client Info		405232	362149	23298
Oil Age	mls	Client Info		43000	362149	23298
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL
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	ppm	ASTM D5185m	>100	36	93	52
Chromium	ppm	ASTM D5185m	>20	2	5	3
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		2	2	8
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	13	9
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	6	10	10
Tin	ppm	ASTM D5185m	>15	1	1	1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	6	3
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	59	63	53
Manganese	ppm	ASTM D5185m	0	<1	1	1
Magnesium	ppm	ASTM D5185m	950	955	1012	919
Calcium	ppm	ASTM D5185m	1050	1237	1514	1530
Phosphorus	ppm	ASTM D5185m	995	1076	1165	1067
Zinc	ppm	ASTM D5185m	1180	1332	1467	1393
Sulfur	ppm	ASTM D5185m	2600	2622	2428	2589
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	7	8
Sodium	ppm	ASTM D5185m		2	4	1
Potassium	ppm	ASTM D5185m	>20	2	17	14
		method	limit/base	current	history1	history2
INFRA-RED		memou			,	
INFRA-RED Soot %	%	*ASTM D7844	>3	0.6	1.1	0.8
	% Abs/cm					0.8 19.0
Soot %		*ASTM D7844	>3	0.6	1.1	
Soot % Nitration	Abs/cm Abs/.1mm	*ASTM D7844 *ASTM D7624 *ASTM D7415	>3 >20	0.6 13.2	1.1 24.7	19.0
Soot % Nitration Sulfation	Abs/cm Abs/.1mm	*ASTM D7844 *ASTM D7624 *ASTM D7415	>3 >20 >30	0.6 13.2 25.1	1.1 24.7 36.4	19.0 29.9



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
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

I LOID I HOLL						Thotol y
Visc @ 100°C	cSt	ASTM D445	12.00	12.2	14.6	12.6

V 130	@ 100 C	COL	AOTIVI DTTO	12.00	12.2	_	17.0	12.0	
GF	RAPHS								
Iro	n (ppm)				Lead (pr	m)			
250 Seve	ere	1			80 Severe				
450					00				
100 - Abn	ormal			-	Abnormal				
50-					20				
0				24	0 12	21-	- 23	- 23	24
May18/2	Aug14/21	Jan27/23	Sep14/23	Jan25/24	May18/21	Aug14/21	Jan27/23	Sep14/23	Jan25/24 .
	ıminum (pp		•	,	Chromiu			0,	
50 T Sens					50				
10					70 7		1		
20 Abn	ormal				Abnormal				
10	_				10				
و ا	-	33	33	-	0	=	3	3	4
May18/21	Aug14/21.	Jan27/23 -	Sep14/23	Jan25/24	May18/21	Aug14/21	Jan27/23	Sep14/23	Jan25/24 -
	pper (ppm)		Ö	Ö	≥ Silicon (_I		Ť	Ø	Ö
800 T	pper (ppin)				80 Severe				
600					60				
E 400 - SEM	Ri Final				E 40				
200					Abnormal 20				
ما					0	_			
May18/21	Aug14/21	Jan27/23	Sep14/23.	Jan25/24 .	May18/21	Aug14/21	Jan27/23 .	Sep14/23.	Jan25/24 -
			S	Jar			Jar	S	Jar
16 _T :	cosity @ 10	J0°C			Base Nu	mber			
14 - Abn	ormal				Base Number (mg KOH/g)				/
(2.001) 12 Bas	e				E 3.0				
					g 2.0		_	/	
Abn	ormal				0.0			/	
May18/21	Aug14/21	Jan27/23 -	Sep14/23 -	Jan25/24	.e. May18/21	Aug14/21-	Jan27/23 +	Sep14/23	Jan25/24
May	Aug	Jan2	Sep1	Jan2	May	Aug	Jan2	Sep1	Jan2





Laboratory

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : PCA0114558

Lab Number : 06084204 Unique Number : 10871649

Received **Tested** Diagnosed

: 08 Feb 2024 : 09 Feb 2024

: 12 Feb 2024 - Don Baldridge

Contact: ROSTY VITER rviter@millertransgroup.com T: (215)552-9832

MILLER TRUCK LEASING #118

2196 BENNETT ROAD

PHILADELPHIA, PA

F: (215)552-9892

Test Package: MOB 1 (Additional Tests: 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)

US 19116