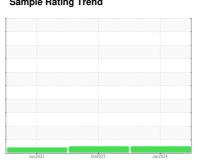


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **209372**

Component **Diesel Engine**

PETRO CANADA DURON SHP 10W30 (--- 0

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

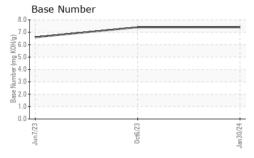
Fluid Condition

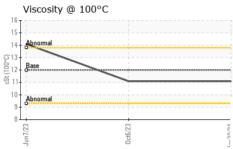
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

GAL)		Jur	2023	Oct2023 Jan 20.	14	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0114587	PCA0105317	PCA0095801
Sample Date		Client Info		30 Jan 2024	06 Oct 2023	07 Jun 2023
Machine Age	mls	Client Info		216619	203385	188260
Oil Age	mls	Client Info		0	203385	188260
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION
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	16	18	62
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		1	4	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	6	7	6
Lead	ppm	ASTM D5185m	>40	1	4	<1
Copper	ppm	ASTM D5185m	>330	2	1	2
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	2	4	5	8
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	62	61	70
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	950	958	918	1143
Calcium	ppm	ASTM D5185m	1050	1199	1178	1319
Phosphorus	ppm	ASTM D5185m	995	1085	1026	1186
Zinc	ppm	ASTM D5185m	1180	1308	1255	1535
Sulfur	ppm	ASTM D5185m	2600	3225	3373	3950
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	4	6
Sodium	ppm	ASTM D5185m		5	5	2
Potassium	ppm	ASTM D5185m	>20	4	4	8
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.2	1.3	1.8
Nitration	Abs/cm	*ASTM D7624	>20	11.4	11.5	13.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	21.5	27.9
FLUID DEGRA	OATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	18.1	25.1
Base Number (BN)	mg KOH/g	ASTM D2896		7.4	7.4	6.6



OIL ANALYSIS REPORT





VISUAL		method				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

Visc @ 100°C	cSt	ASTM D445	12.00	11.1	11.1	1 4.1
GRAPHS						
Iron (ppm)				Lead (ppm))	
200 Severe				Severe Severe		
Abnormal				Abnormal		
Abnormal				40 1		
0				20		
Jun7/23	Oct6/23 .		Jan30/24	Jun7/23	Oct6/23	Jan30/24
Aluminum (ppm)			Ť	Chromium	(ppm)	Ä
50 Severe				Severe		
E 30 -				€ 30		
20 + 0		***************************************	-	20 0		
10				10		
Jun7/23	0ct6/23		Jan30/24	Jun7/23	Oct6/23	Jan30/24 .
⁻ Copper (ppm)	0		Jan Jan	ح Silicon (ppn		J.
400 T Severe Publishmen				80 - Severe		
300				60		
돌 200 ·				Abnormal		
100				20		= = = = = = = = = = = = = = = = = = = =
0 1231	0ct6/23		1/24	0 1/23	Oct6/23 +	1774
Jun7/23			Jan30/24 -	Jun7/23	Octf	Jan30/24 -
Viscosity @ 100°0	3			Base Numb	er	
14 Abnormal			-	(B/A)		
(5,001) 12 Base				4.0 4.0		
10 Abnormal				8826 Number (mg KOH(d)		
8	23		+	0.0		4
Jun7/23	0ct6/23		Jan30/24	Jun7/23	Oct6/23	Jan30/24
			,			7





Laboratory Sample No.

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

Lab Number : 06084211 Unique Number : 10871656

: PCA0114587

Received **Tested**

: 09 Feb 2024 Diagnosed Test Package: MOB 1 (Additional Tests: TBN)

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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.

: 09 Feb 2024 - Wes Davis

: 08 Feb 2024

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

Report Id: MILPHINE [WUSCAR] 06084211 (Generated: 02/09/2024 18:44:15) Rev: 1

Contact/Location: ROSTY VITER - MILPHINE

MILLER TRUCK LEASING #118

2196 BENNETT ROAD

PHILADELPHIA, PA

F: (215)552-9892

US 19116