

### **OIL ANALYSIS REPORT**

#### Sample Rating Trend





# FREIGHTLINER 470357

Component

Diesel Engine

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

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil

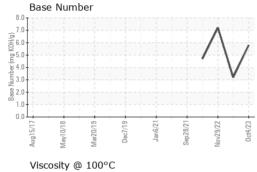
### **Fluid Condition**

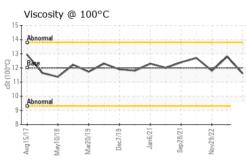
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		lug2017 Ma		9 Jan2021 Sep2021 Nov20.	22 0ct2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101951	PCA0093181	PCA0082245
Sample Date		Client Info		04 Oct 2023	27 Apr 2023	29 Nov 2022
Machine Age	mls	Client Info		210507	195204	177333
Oil Age	mls	Client Info		15303	0	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>130	50	125	59
Chromium	ppm	ASTM D5185m	>10	1	5	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	20	10
_ead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>125	1	2	3
Γin	ppm	ASTM D5185m	>4	<1	0	0
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	6	4	8
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	50	69	75	72
Manganese	ppm	ASTM D5185m	0	0	2	<1
Magnesium	ppm	ASTM D5185m	950	837	983	936
Calcium	ppm	ASTM D5185m	1050	1071	1327	1246
Phosphorus	ppm	ASTM D5185m	995	975	1075	1047
Zinc	ppm	ASTM D5185m	1180	1172	1345	1284
Sulfur	ppm	ASTM D5185m	2600	2678	2777	3385
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	8	6
Sodium	ppm	ASTM D5185m		0	6	4
Potassium	ppm	ASTM D5185m	>20	6	12	7
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	1.6	3.6	2.1
Nitration	Abs/cm	*ASTM D7624	>20	13.2	18.9	14.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.4	34.9	28.1
FLUID DEGRA	NOITAC	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.6	31.0	23.4



### **OIL ANALYSIS REPORT**



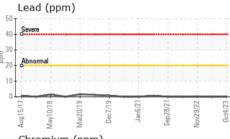


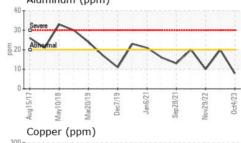
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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

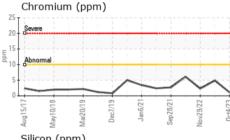
FLUID FNOF	EULIES	memod			HISTORY	HISTORYZ
Visc @ 100°C	cSt	ASTM D445	12.00	11.6	12.8	11.8

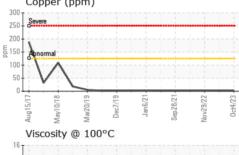
Iron (ppm)						
Severe Severe		7				
200						
150 - Abnormal						
100					\ /	\
50	~	_/		_	~	1
0		-				_
Aug15/17 May10/18	Mar20/19	Dec7/19	Jan6/21	Sep28/21	Nov29/22	0ct4/23
Aug15/ May10/	Mar	o o	-B	Sep	Nov	00
Aluminum	(ppm)					
40 T						
Course 🌦						

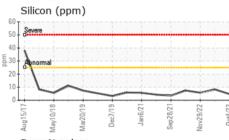
**GRAPHS** 

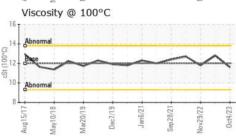


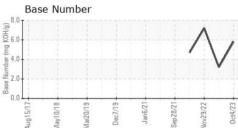














Laboratory Sample No. Lab Number **Unique Number** 

: 05981031

: PCA0101951 : 10698326

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Oct 2023 Diagnosed

: 17 Oct 2023 Diagnostician : Wes Davis

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. **MILLER TRUCK LEASING #112** 

1504 MAINLINE DR CINNAMINSON, NJ US 08077

Contact: MIKE BOYER mboyer@millertransgroup.com

T: (856)662-4264

F: (856)663-4898

Report Id: MILPEN [WUSCAR] 05981031 (Generated: 10/23/2023 02:33:24) Rev: 1

Contact/Location: MIKE BOYER - MILPEN