

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL



Machine Id **742183** 

Component **Diesel Engine** 

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

## DIAGNOSIS

## Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

Metal levels are typical for a new component breaking in.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

### **Fluid Condition**

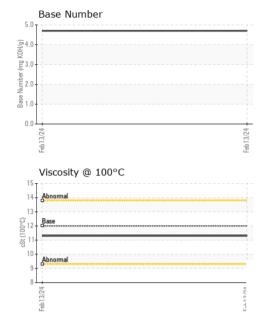
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

AL)				Feb 2024		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0118676		
Sample Date		Client Info		13 Feb 2024		
Machine Age	mls	Client Info		74183		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	112		
Chromium	ppm	ASTM D5185m	>20	6		
Nickel	ppm	ASTM D5185m	>4	2		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	74		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	260		
Tin	ppm	ASTM D5185m	>15	7		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	23		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	45		
Manganese	ppm	ASTM D5185m	0	4		
Magnesium	ppm	ASTM D5185m	950	535		
Calcium	ppm	ASTM D5185m	1050	1679		

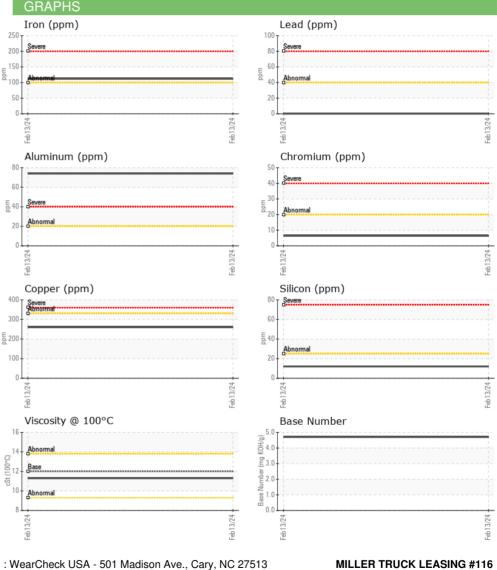
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	23		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	45		
Manganese	ppm	ASTM D5185m	0	4		
Magnesium	ppm	ASTM D5185m	950	535		
Calcium	ppm	ASTM D5185m	1050	1679		
Phosphorus	ppm	ASTM D5185m	995	741		
Zinc	ppm	ASTM D5185m	1180	927		
Sulfur	ppm	ASTM D5185m	2600	1822		
CONTAMINAN	TS	method	limit/base	current	history1	history2
CONTAMINAN Silicon	TS ppm	method ASTM D5185m	limit/base >25	current 12	history1	history2
					•	
Silicon	ppm	ASTM D5185m		12		
Silicon Sodium	ppm	ASTM D5185m ASTM D5185m	>25	12 9		
Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	12 9 173		
Silicon Sodium Potassium INFRA-RED	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>25 >20 limit/base	12 9 173 current	  history1	history2
Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	>25 >20 limit/base >3	12 9 173 current	history1	  history2
Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	>25 >20 limit/base >3 >20	12 9 173 current 1.7 15.9	  history1	  history2 
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	>25 >20 limit/base >3 >20 >30	12 9 173 current 1.7 15.9 28.4	  history1	history2



# **OIL ANALYSIS REPORT**



VISUAL		method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE			
Yellow Metal	scalar	*Visual	NONE	NONE			
Precipitate	scalar	*Visual	NONE	NONE			
Silt	scalar	*Visual	NONE	NONE			
Debris	scalar	*Visual	NONE	NONE			
Sand/Dirt	scalar	*Visual	NONE	NONE			
Appearance	scalar	*Visual	NORML	NORML			
Odor	scalar	*Visual	NORML	NORML			
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG			
Free Water	scalar	*Visual		NEG			
FLUID PROPE	RTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	12.00	11.3			
GRAPHS							
Iron (ppm)							
Severe			100	Severe			



: 04 Mar 2024

: 05 Mar 2024

: 06 Mar 2024 - Sean Felton





Report Id: MILVIN [WUSCAR] 06107201 (Generated: 03/06/2024 10:00:12) Rev: 1

Laboratory Sample No.

Lab Number : 06107201 Unique Number: 10910698

: PCA0118676

**Tested** 

Diagnosed Test Package : MOB 1 ( Additional Tests: TBN )

Received

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 #116** 

1197 NORTH MAIN ROAD VINELAND, NJ US 08360

Contact: JOHN KEEN jkeen@millertransgroup.com

T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (856)696-5629

Contact/Location: JOHN KEEN - MILVIN