

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area (AU206X) Supermarket Machine Id FREIGHTLINER 107A1812 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 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.

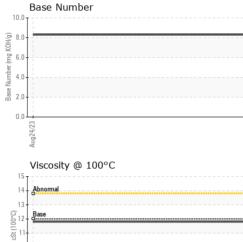
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0100417		
Sample Date		Client Info		24 Aug 2023		
Machine Age	hrs	Client Info		267709		
Oil Age	hrs	Client Info		15071		
Oil Changed	1110	Client Info		Changed		
Sample Status				NORMAL		
			11 11 11			
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Glycol		WC Method		NEG		
WEAR METALS	3	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	22		
Chromium	ppm	ASTM D5185m	>5	1		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>30	7		
Lead	ppm	ASTM D5185m	>30	0		
Copper	ppm	ASTM D5185m	>150	5		
Tin	ppm	ASTM D5185m	>5	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4		
Barium	ppm	ASTM D5185m	0	0		
Molybdenum	ppm	ASTM D5185m	50	69		
Manganese	ppm	ASTM D5185m	0	<1		
Magnesium	ppm	ASTM D5185m	950	1032		
Calcium	ppm	ASTM D5185m	1050	1228		
Phosphorus	ppm	ASTM D5185m	995	1119		
Zinc		ACTM DE10Em	1180	1050		
200	ppm	ASTM D5185m	1100	1356		
Sulfur	ppm ppm	ASTM D5185m	2600	3810		
	ppm					
Sulfur CONTAMINAN	ppm	ASTM D5185m	2600	3810		
Sulfur CONTAMINAN	ppm TS	ASTM D5185m method	2600 limit/base	3810 current		 history2
Sulfur CONTAMINAN Silicon	ppm TS ppm	ASTM D5185m method ASTM D5185m	2600 limit/base >20	3810 current 4	 history1 	 history2
Sulfur CONTAMINAN Silicon Sodium	ppm TS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	2600 limit/base >20	3810 current 4 2	 history1 	 history2
Sulfur CONTAMINANT Silicon Sodium Potassium	ppm TS ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	2600 limit/base >20 >20	3810 current 4 2 1	 history1 	 history2
Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED	ppm TS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method	2600 limit/base >20 >20 limit/base >3	3810 current 4 2 1 current	 history1 history1	history2 history2
Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot %	ppm FS ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624	2600 limit/base >20 >20 limit/base >3	3810 current 4 2 1 current 0.7	 history1 history1 	history2 history2
Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm FS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624	2600 limit/base >20 >20 limit/base >3 >20	3810 current 4 2 1 current 0.7 7.9	history1 history1 	 history2 history2
Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm FS ppm ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m method ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7624	2600 imit/base >20 20 imit/base >3 >20 >30 imit/base	3810 current 4 2 1 current 0.7 7.9 20.0	 history1 history1 	 history2 history2



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8. Aug24/23

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		
/23	Appearance	scalar	*Visual	NORML	NORML		
Aug24/23 -	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Free Water	scalar	*Visual	20.2	NEG		
	FLUID PROPE		method	limit/base	current	history1	history2
	Visc @ 100°C	cSt		12.00	11.8		
	GRAPHS	COL	AGTIM D445	12.00	11.0		
	Ferrous Alloys						
	²⁵ T						
	iron						
	20 - nickel						
	15 -						
	m dd						
	10-						
	5 -						
	0						
	Aug24/23			Aug24/23 .			
				Au			
	Non-ferrous Meta	ls					
	copper						
	8 - second lead						
	6						
	4						
	2						
	0						
				23			
	24/23			24/			
	Aug24/23			Aug24/23			
	₹ Viscosity @ 100°0	2		Aug24/	Base Number		
	Au	0		-0.e	Base Number		
	₹ Viscosity @ 100°0	C		9.0- 8.0-	Base Number		
	₹ Viscosity @ 100°(C		9.0- 8.0-	Base Number		
	Viscosity @ 100°(C		9.0- 8.0-	Base Number		
	Viscosity @ 100°(2		9.0 8.0 (9.7.0 (9.7.0 2) (9.6.0 2) (9.6.0 2) (9.0 (9.0 2) (9.0 (9.0 2) (9.0 (9.0 (9.0) (9.0 (9.0)	Base Number		
	Viscosity @ 100°(C		9.0 8.0 (9.7.0 (9.7.0 2) (9.6.0 2) (9.6.0 2) (9.0 (9.0 2) (9.0 (9.0 2) (9.0 (9.0 (9.0) (9.0 (9.0)	Base Number		
	Abnomal Base Abnomal Abnomal Abnomal	C		9.0- 8.0-	Base Number		
	Viscosity @ 100°C	C		9.0 8.0 (9.7.0 (9.7.0 2) (9.6.0 2) (9.6.0 2) (9.0 (9.0 2) (9.0 (9.0 2) (9.0 (9.0 (9.0) (9.0 (9.0)	Base Number		
	Abnomal Base Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal	C		9.0 8.0 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)00000 (0)00000 (0)00000 (0)00000 (0)00000 (0)000000 (0)00000000			
	Abnomal Base Abnomal Abnomal Abnomal Abnomal Abnomal Abnomal			9.0 8.0 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)0000 (0)00000 (0)00000 (0)00000 (0)00000 (0)00000 (0)000000 (0)00000000			
	Abnomal Base Abnomal Abnomal Abnomal			9.0 8.0 (0,7.0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0	Base Number		
Laboratory	Viscosity @ 100°C	501 Madis		9.0 8.0 (0,1/0,2 9.0 8.0 (0,1/0,2 9.0 9.0 8.0 9.0 1.0 9.0 9.0 1.0 9.0 9.0 1.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9	Aug24/23	e - Shop 1072 - Sup	
Sample No.	Viscosity @ 100°C	501 Madis Received	d : 28 /	9.0 8.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 9.0 (0,7.0 9.0 9.0 (0,7.0 9.0 9.0 9.0 (0,7.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9	Aug24/23		Division Stre
Sample No. Lab Number	Viscosity @ 100°C	501 Madia Received Diagnose	d : 28 / ed : 28 /	s. 8.0 9.0 10,10 10,00 10	Aug24/23		Division Stre Elizabeth, I
Sample No. Lab Number Unique Number	Viscosity @ 100°C	501 Madis Received	d : 28 / ed : 28 /	9.0 8.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 (0,7.0 9.0 9.0 (0,7.0 9.0 9.0 (0,7.0 9.0 9.0 9.0 (0,7.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9	Aug24/23	505	Division Stre
Sample No. Lab Number	Viscosity @ 100°C	501 Madia Received Diagnost	d : 28 / ed : 28 / tician : Wes	s Davis	Aug24/23	505 Contact: N	Division Stre Elizabeth, I US 072

