

OIL ANALYSIS REPORT

Sample Number

Sample Date

Machine Age

Oil Changed

Sample Status

Oil Age

Fuel

Water

Glycol

(AU399U) Supermarket - Tractor FREIGHTLINER 107A8833 Component

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

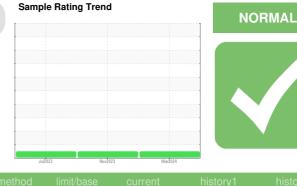
All component wear rates are normal.

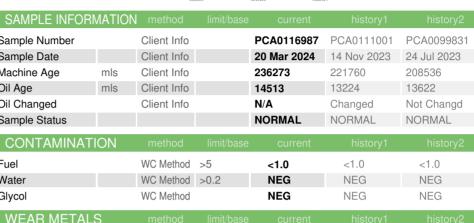
Contamination

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.





WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	11	18	11
Chromium	ppm	ASTM D5185m	>5	1	1	1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	5	6	5
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>150	6	10	7
Tin	ppm	ASTM D5185m	>5	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0

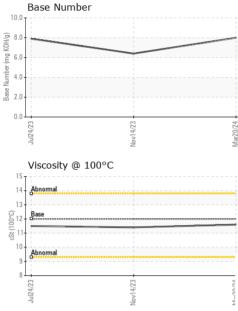
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	5	3	7
Barium	ppm	ASTM D5185m	0	0	0	2
Molybdenum	ppm	ASTM D5185m	50	67	62	68
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	950	921	889	1088
Calcium	ppm	ASTM D5185m	1050	1155	1055	1262
Phosphorus	ppm	ASTM D5185m	995	1034	907	1155
Zinc	ppm	ASTM D5185m	1180	1235	1191	1412
Sulfur	ppm	ASTM D5185m	2600	3100	2210	3971
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	5	7	5

Silicon	ppm	ASTM D5185m	>20	5	7	5
Sodium	ppm	ASTM D5185m		4	3	2
Potassium	ppm	ASTM D5185m	>20	5	2	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	7.8	8.7	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	21.7	19.1
FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	17.1	14.7
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	6.4	7.9



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
Mar20/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Ma	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROP			limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	12.00	11.6	11.4	11.5
	GRAPHS						
	Ferrous Alloys	\sim					
Veru	16- iron chromium						
C~~ # 4	14 12						
	E ¹⁰						
	6 -						
	4						
	2						
		/23 -		/24			
	Jul24/23	Vov14/23		Mar20/24			
	Non-ferrous Me	-		2			
	Non-remous me						
	10 T :						
	10 copper						
	10 _T						
	10 copper			/			
	10 copper			/			
	8 6			/			
	10 8 6 4			/			
	8 6						
	10 8 6 6 4 2 0						
	10 8 6 6 4 2 0			2024			
	udd Clypting	Viovi 1423		Mai2024			
	10 8 6 6 4 2 0	Viovi 1423		2	Base Numbe	r	
	Ud Ud Viscosity @ 100	Viovi 1423		9.0 8.0	°T 7	r	
	Viscosity @ 100	Viovi 1423		≥ 9.0 8.0		r	
	Uticosity @ 100	Viovi 1423		≥ 9.0 8.0		r	
	Uticosity @ 100	Viovi 1423		≥ 9.0 8.0		r	
	Viscosity @ 100	Viovi 1423		≥ 9.0 8.0		r	
	Uiscosity @ 100	Viovi 1423		≥ 9.0 8.0		r	
	Viscosity @ 100	Viovi 1423		9.0 8.0 (P) 7.0 (P) 6.0 (P) 6.0 (P) 7.0 (P) 7.		r	
	Viscosity @ 100	Viovi 1423		9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9		r	
	Ud 4 2 0 E2/FZIN Viscosity @ 100 15 4 Abnomal 9 8 8 8 8 8 8 8 8 8 8 8 8 8	Nov14/23		≥ 9.0 8.0 (6),7.0 HOX 60.0 10,5.0 10,5.0 10,5.0 10,5.0 10,0 10,0 10,0 10,0 10,0 10,0 10,0 10			
	Viscosity @ 100	Viovi 1423		9.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9		r Nov14/23	
Laboratory	Uiscosity @ 100	Nov14/23	on Ave. Carv	≥ 9.0 8.0 (0),7.0 H(X) (0, 6.0 (0),7.0 (0, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nov14/23	upermarket-Davi
Laboratory Sample No.	Ud 4 2 0 E2/FZIN Viscosity @ 100 15 4 Abnomal 0 0 0 0 0 0 0 0 0 0 0 0 0	Nov14/23		≥ 9.0 8.0 (0),7.0 H(X) (0, 6.0 (0),7.0 (0, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EZH 1000 vice - Shop 1071 - Si	
Sample No. Lab Number	Uiscosity @ 100 Viscosity @ 100 Viscosity @ 100	°C EZHINON 501 Madisc	ived : 28 ed : 29	≥ 9.((0,h()) (0, 0, 0) (0,h()) (0, 0, 0) (0, h()) (0, 0, 0) (0, h()) (0, 0, 0) (0, h()) (0, 0) (0, h()) (0, h()) (0, 0) (0, h()) (0, h()) (0, h()) (0, h()) (0, h()	EZIFIZINC Transer	EZH 1000 vice - Shop 1071 - Si	A Tower Ro Dayton, I
Sample No.	Viscosity @ 100 Viscosity @ 100	°C 501 Madisc Rece Teste	ived : 28 ed : 29	≥ 9.0 (0,10) (0	EZIFIZINC Transer	ezyFungy vice - Shop 1071 - Si 60	A Tower Ro

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

F: