

Oxidation

(TEMP) Walgreens - Yard Horse [Walgreens - Yard Horse] 136A81260 Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (11 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

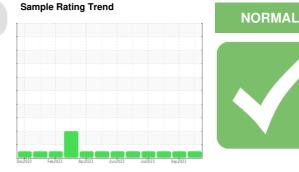
All component wear rates are normal.

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.





(CIE		Dec2022	Feb2023 Apr2023	Jun2023 Jul2023 S	ep2023	
SAMPLE INFOR	RMATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103811	PCA0103815	PCA0103804
Sample Date		Client Info		17 Oct 2023	14 Sep 2023	21 Aug 2023
Machine Age	hrs	Client Info		7564	7248	6898
Oil Age	hrs	Client Info		666	350	664
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINA	TION	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR META	LS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	12	8	17
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	1	1	1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	4
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	<1	1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	56	59	61
Manganese	ppm	ASTM D5185m	0	0	0	<1
Magnesium	ppm	ASTM D5185m	1010	919	1012	984
Calcium	ppm	ASTM D5185m	1070	974	1128	1081
Phosphorus	ppm	ASTM D5185m	1150	920	1074	972
Zinc	ppm	ASTM D5185m	1270	1198	1348	1248
Sulfur	ppm	ASTM D5185m	2060	2863	4084	3579
CONTAMINA	NTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	3	2	3
Sodium	ppm	ASTM D5185m		2	3	2
Potassium	ppm	ASTM D5185m	>20	4	2	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	1	0.6	1.2
Nitration	Abs/cm	*ASTM D7624	>20	9.6	7.8	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	22.1	25.7
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
	AL / 4		05		00 7	00 5

24.3

6.4

Abs/.1mm *ASTM D7414 >25

Base Number (BN) mg KOH/g ASTM D2896 9.8

26.5

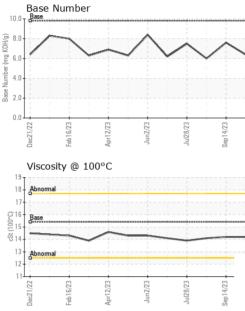
6.0

20.7

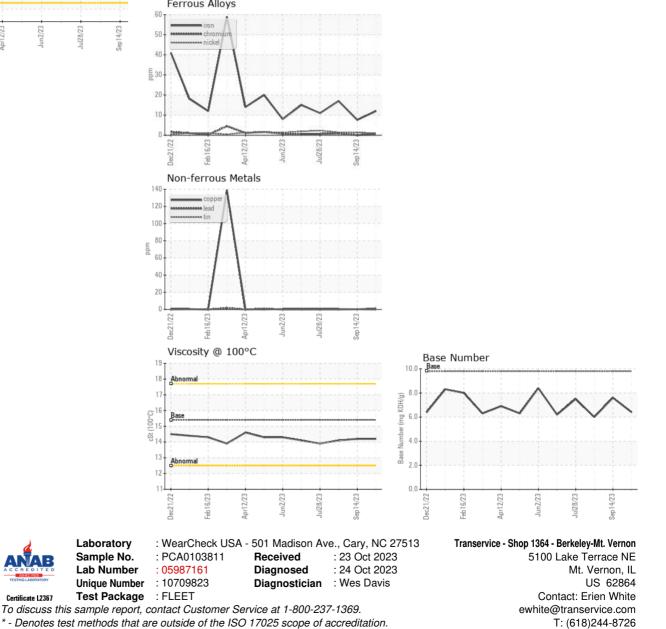
7.6



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
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.2	14.1
GRAPHS						
Ferrous Allovs						



* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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