

(P1132782) Preferred Service-Tractor [Preferred Service-Tractor] 192A32021B Component

Diesel Engine

PETRO CANADA DURON UHP 5W30 (11 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

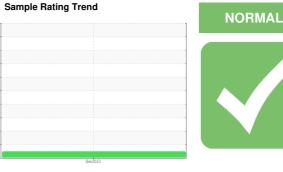
All component wear rates are normal.

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.





,				Dec2023		
SAMPLE INFORM	<u>/IATION</u>	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0115806		
Sample Date		Client Info		31 Dec 2023		
Machine Age	mls	Client Info		92142		
Oil Age	mls	Client Info		20295		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	5	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	40		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>2	1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>25	6		
Lead	ppm	ASTM D5185m	>40	4		
Copper	ppm	ASTM D5185m	>330	6		
Tin	ppm	ASTM D5185m	>15	4		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES	1-1-	method	limit/base	ourront	history1	history2
				current	Thistory I	
Boron	ppm	ASTM D5185m	0	16		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m	64	62		
Manganese	ppm	ASTM D5185m	0	<1		
Magnesium	ppm	ASTM D5185m	1160	1153		
Calcium	ppm	ASTM D5185m	820	875		
Phosphorus	ppm	ASTM D5185m	1160	1088		
Zinc	ppm	ASTM D5185m	1260	1379		
Sulfur	ppm	ASTM D5185m	3000	3388		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	10		
Sodium	ppm	ASTM D5185m		5		
Potassium	ppm	ASTM D5185m	>20	15		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4		
Nitration	Abs/cm	*ASTM D7624	>20	10.7		
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3		
FLUID DEGRAD		method	limit/base	current	history1	history2
FLUID DEGRAD						
		*ASTM D7414	>25			
Oxidation Base Number (BN)	Abs/.1mm mg KOH/g			22.2 4.1		, i i i i i i i i i i i i i i i i i i i



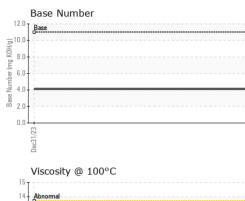
13 cSt (100°C) 11 Base

10 Abnormal

> 8. Dec31/23

OIL ANALYSIS REPORT

VISUAL



	VISUAL		method	limit/base	current	nistory i	nistory2
	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 -		scalar	*Visual	NORML	NORML		
Dec31/23	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
				>0.2			
	Free Water	scalar	*Visual		NEG		
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	11.9	11.6		
	GRAPHS						
	Ferrous Alloys						
	40 iron 1						
	35 measure chromium						
	30						
	25						
	톱 20						
	15-						
	10-						
	5						
	0++						
	Jec31/23			Dec31/23			
	⊔ Non-ferrous Meta						
	10 _T						
	copper						
	8 - tin						
	6						
	E dd						
	4 -						
	2						
	1						
	0			~			
				11/2			
	Dec31/23			Dec31/23			
	Viscosity @ 100°C	2		Dec31/2	Base Number		
	Viscosity @ 100°C	2		2/ 0 12.	Base Number		
	Viscosity @ 100°C	2		12.	Base		
	Viscosity @ 100°C	5		12.	0 Base		
	Viscosity @ 100°C	6		12.	0 Base		
	Viscosity @ 100°C	C		12.	0 0 0		
	Viscosity @ 100°C	2		12.	0		
	Viscosity @ 100°C	2		12. 10. (0,0) (0,0)(0,0)	0 Base		
	Viscosity @ 100°C	2		12.	0 Base		
	Viscosity @ 100°C	2		12.) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Base		
	Viscosity @ 100°C			12.) (0)HOX 00 aquun 4.) 2.)	0 Base		