

OIL ANALYSIS REPORT

Area (EEY621) Machine Id PETERBILT 10777 Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (7 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

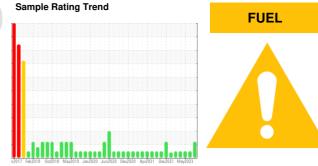
Wear

All component wear rates are normal.

Contamination Light fuel dilution occurring.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.



SAMPLE INFORMATION method limit/base current history1 history2 GFL0109110 GFL0086263 GFL0057610 Sample Number **Client Info** Sample Date Client Info 25 Jan 2024 30 Aug 2023 18 May 2023 Machine Age hrs Client Info 17499 17411 15532 Oil Age hrs Client Info 1967 17411 17118 Oil Changed Client Info N/A N/A N/A NORMAL Sample Status ABNORMAL NORMAL CONTAMINATION method limit/base current history1 history2 >0.2 NEG NEG Water WC Method NEG Glycol WC Method NEG NEG NEG WEAR METALS method limit/base current historv1 history2 24 Iron ASTM D5185m >100 12 27 ppm ASTM D5185m >20 Chromium ppm n <1 <1 Nickel ASTM D5185m 0 0 0 ppm >4 ASTM D5185m <1 0 Titanium ppm <1 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ASTM D5185m >20 4 4 5 ppm ASTM D5185m >40 0 0 Lead ppm <1 ASTM D5185m Copper >330 <1 1 ppm <1 0 0 0 Tin ppm ASTM D5185m >15 Vanadium ASTM D5185m 0 0 ppm <1 Cadmium ppm ASTM D5185m 0 0 0 **ADDITIVES** method limit/base current history1 history2 0 15 11 Boron ppm ASTM D5185m 27 Barium ppm ASTM D5185m O 0 0 0 ASTM D5185m 60 60 64 66 Molybdenum ppm Manganese ppm ASTM D5185m 0 0 <1 <1 1010 870 672 774 Magnesium ppm ASTM D5185m Calcium ASTM D5185m 1070 1068 1087 1051 ppm Phosphorus ppm ASTM D5185m 1150 949 989 927 Zinc ppm ASTM D5185m 1270 1059 1240 1131 Sulfur 2060 3618 2796 ppm ASTM D5185m 2777 **CONTAMINANTS** method limit/base current history1 history2 Silicon ASTM D5185m >25 5 5 8 ppm 4 Sodium ASTM D5185m 5 13 ppm Potassium ASTM D5185m >20 9 15 ppm <1 Fuel % ASTM D3524 >5 2.5 <1.0 <1.0 **INFRA-RED** method limit/base current history1 history2 0.4 % 0.9 1.4 Soot % *ASTM D7844 >3 Nitration Abs/cm *ASTM D7624 >20 6.2 7.7 9.3 16.8 20.9 Sulfation *ASTM D7415 >30 18.7 Abs/.1mm **FLUID DEGRADATION** method limit/base current history1 history2 Abs/.1mm *ASTM D7414 >25 11.4 12.7 14.6 Oxidation

Base Number (BN) mg KOH/g ASTM D2896

9.8

7.0

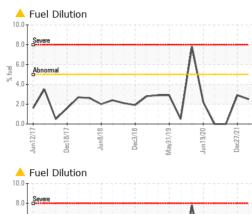
7.9

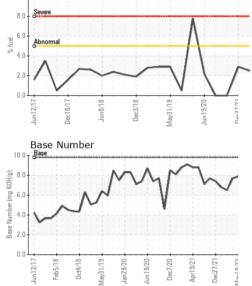
7.4



OIL ANALYSIS REPORT

VISUAL





	VISUAL		method	limit/base	current	nistory i	nistory2
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
٨	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Λ	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
1	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
$\neg \land$	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
$\vee \setminus /$							
	_ Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
May31/19 Jun19/20 Dec27/21	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Ma Jui	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	BTIES	method	limit/base	current	history1	history2
Λ	Visc @ 100°C	cSt	ASTM D445		▲ 11.5	12.7	13.0
		COL	ASTIVI D445	13.4	11.5	12.7	13.0
$\neg \land \land$	GRAPHS						
$\vee \setminus /$	Ferrous Alloys						
	70 iron		Mar Maria				
Jun 19/20	70 - chromium		110 011 0				
Jur Ma							
	50						
	튭40-		. 1				
\sim	30	۸.	N	1			
1 h	20	VWV	WN				
V	10	V .	• •	00000			
				5			
	Jun 12/17 Feb 5/18 0ct4/18 May3 1/19	Jan 29/20 Jun 19/20	Dec7/20 Apr19/21 Dec27/21	May18/23			
	un Jun Mar	Jar	Ar Ar De	Mar			
	Non-ferrous Meta	als					
Dec7/20 Apr19/21 Dec27/21 M⇒⊶18.72	40 copper						
Apr	35 - management lead						
	30						
	25						
	툞 20						
	15- 10-000000000000000000000000000000000						
	10						
	5- i. Churchander		personapers				
		Yohn -	4~~~~	-			
	un 12/17 Feb5/18 Oct4/18 ay31/19	9/20	Dec7/20 Apr19/21 Dec27/21	8/23			
	Jun 12/17 Feb 5/18 Oct4/18 May31/19	Jan 29/20 Jun 19/20	Dec7/20 Apr19/21 Dec27/21	May18/23			
	Viscosity @ 100°	50 BF			D		
	¹⁹		111111000000000	10	Base Number	inconstant in the case of the second s	
	18 - Abnormal	4	1	10.	~ Unaversity of the second sec		\sim
	17				0	MA.M	1
	16 Base			Base Number (mg KOH(g)		1.041	N
	5: 15 - 0 14 - 5: 13 - 40 - 0 5: 13 - 40 - 0 5: 13 - 40 - 0 5: 15 - 0 5:			у Bш)	Δ	4 V	
		nN	~	nber	N'	80.90.90 .4 0	
	45 13 Abnormal	V	41				
	11-	V.	V	en alle alle alle alle alle alle alle al	0		
	10-		iii		04		<u></u>
	94	<u>. </u>		2010	31	20	9/2 7/2 3/23
	94	29/20 -	c7/20 19/21 27/21	18/2	12 15/	29	- 0
	Jun 12/17	Jan29/20	Dec7/20 Apr19/21 Dec27/21	May18/23	Jun12/17 Feb5/18 0ct4/18 Mav31/19	Jan 29/20 Jun 19/20 Dec7/20	Apr19/21 Dec27/21 May18/23
	Jun12/17				ב ר		~
Laboratory	s WearCheck USA -	501 Madi	son Ave., Ca	ry, NC 2751	ב ר	nvironmental -	009 - Fairbu
Sample No.	ورارا 100 ۱/۱۶۹۹ ۲/۱۶۹۹	501 Madia	son Ave., Ca d : 29 c	ry, NC 2751 Jan 2024	ב ר	nvironmental -	009 - Fairbu Roosevelt Hv
Sample No. Lab Number	: WearCheck USA - : GFL0109110 : 06072493	501 Madia Recieved Diagnos	son Ave., Ca d : 29 c ed : 31 c	ry, NC 2751 Jan 2024 Jan 2024	ב ר	nvironmental -	009 - Fairbu Roosevelt Hv Fairburn, G
Sample No. Lab Number Unique Numbe	: WearCheck USA - : GFL0109110 : 06072493 r : 10849170	501 Madia Recieved Diagnos Diagnos	son Ave., Ca d : 29 c ed : 31 c tician : Wes	ry, NC 2751 Jan 2024 Jan 2024 s Davis	ב ר	nvironmental - 6905	009 - Fairbu Roosevelt Hy Fairburn, G US 302
Sample No. Lab Number Unique Numbe Test Package	: WearCheck USA - : GFL0109110 : 06072493 r : 10849170 e : FLEET (Additional	501 Madia Recieved Diagnos Diagnost Tests: Fu	son Ave., Ca d : 29 v ed : 31 v itician : We relDilution, P	ry, NC 2751 Jan 2024 Jan 2024 s Davis ercentFuel)	ב ר	nvironmental - 6905 Cont	009 - Fairbu Roosevelt Hy Fairburn, C US 302 act: Eric Jon
Sample No. Lab Number Unique Number Test Package ss this sample report	: WearCheck USA - : GFL0109110 : 06072493 r : 10849170	501 Madia Recieved Diagnos Diagnos Tests: Fu vice at 1-8	son Ave., Ca d : 29 c ed : 31 c ician : We relDilution, P 200-237-1365	ry, NC 2751 Jan 2024 Jan 2024 s Davis ercentFuel) 9.	ב ר	nvironmental - 6905 Cont erjone	009 - Fairbu Roosevelt Hv

method limit/base current

history1 history2