

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

2022 PETERBILT 520 T 911052 Component

Diesel Engine

PETRO CANADA DURON SHP 15W40 (8 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.

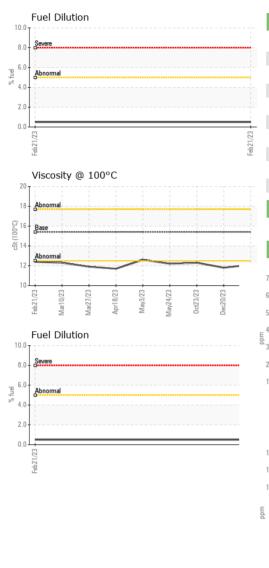
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINAT Water Glycol WEAR METAL	hrs hrs	method Client Info Client Info Client Info Client Info Client Info Client Info WC Method WC Method	limit/base	Current GFL0109066 05 Jan 2024 7849 N/A NORMAL current	history1 GFL0086254 20 Dec 2023 7555 7555 N/A NORMAL history1	history2 GFL0086196 23 Oct 2023 7097 7097 N/A NORMAL
SAMPLE INFOR Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINAT Water Glycol WEAR METAL	hrs hrs	method Client Info Client Info Client Info Client Info method WC Method	limit/base	current GFL0109066 05 Jan 2024 7849 7849 N/A NORMAL	GFL0086254 20 Dec 2023 7555 7555 N/A NORMAL	GFL0086196 23 Oct 2023 7097 7097 N/A
Sample Number Sample Date Machine Age Dil Age Dil Changed Sample Status CONTAMINAT Water Glycol WEAR METAL	hrs hrs	Client Info Client Info Client Info Client Info Method	limit/base	GFL0109066 05 Jan 2024 7849 7849 N/A NORMAL	GFL0086254 20 Dec 2023 7555 7555 N/A NORMAL	GFL0086196 23 Oct 2023 7097 7097 N/A
Sample Date Machine Age Dil Age Dil Changed Sample Status CONTAMINAT Vater Silycol WEAR METAL	hrs	Client Info Client Info Client Info Client Info method WC Method		05 Jan 2024 7849 7849 N/A NORMAL	20 Dec 2023 7555 7555 N/A NORMAL	23 Oct 2023 7097 7097 N/A
Machine Age Dil Age Dil Changed Sample Status CONTAMINAT Vater Silycol WEAR METAL	hrs	Client Info Client Info Client Info Method		7849 7849 N/A NORMAL	7555 7555 N/A NORMAL	7097 7097 N/A
Dil Age Dil Changed Sample Status CONTAMINAT Vater Silycol WEAR METAL	hrs	Client Info Client Info Method		7849 N/A NORMAL	7555 N/A NORMAL	7097 N/A
Dil Changed Sample Status CONTAMINAT Vater Glycol WEAR METAL	ION	Client Info method WC Method		N/A NORMAL	N/A NORMAL	N/A
Sample Status CONTAMINAT Vater Silycol WEAR METAL		WC Method		NORMAL	NORMAL	
Vater Alycol WEAR METAL		WC Method		current	history1	
Biycol WEAR METAL	S		>0.2		nistory i	history2
WEAR METAL	S	WC Method		NEG	NEG	NEG
	S			NEG	NEG	NEG
ron		method	limit/base	current	history1	history2
	ppm	ASTM D5185m	>100	7	8	61
Chromium	ppm	ASTM D5185m	>20	<1	0	1
lickel	ppm	ASTM D5185m	>4	0	0	<1
ītanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
luminum	ppm	ASTM D5185m	>20	2	<1	24
ead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	<1	3	14
īn	ppm	ASTM D5185m	>15	0	0	1
/anadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	20	17	20
Barium	ppm	ASTM D5185m	0	0	0	0
/lolybdenum	ppm	ASTM D5185m	60	61	55	50
langanese	ppm	ASTM D5185m		0	0	7
/lagnesium	ppm	ASTM D5185m	1010	726	759	851
Calcium	ppm	ASTM D5185m	1070	1121	1017	1261
Phosphorus	ppm	ASTM D5185m	1150	912	938	701
Zinc	ppm	ASTM D5185m		1107	1104	953
Sulfur	ppm	ASTM D5185m	2060	2896	2779	2151
CONTAMINAN			limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m ASTM D5185m	>25	3	2	18 6
Sodium Potassium	ppm	ASTM D5185m	>20	3	<1 0	57
Fuel	ppm %	ASTM D3765III ASTM D3524	>20	3 <1.0	<1.0	<1.0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	1.1	0.7
Vitration	Abs/cm	*ASTM D7624		7.5	6.9	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	18.4	23.7
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Dxidation	Abs/.1mm	*ASTM D7414	>25	13.5	12.1	24.2
Base Number (BN)	mg KOH/g		9.8	7.2	7.2	5.9



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		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
	Eeh21/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Fab	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
°C		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	12.1	11.8	12.3
		GRAPHS						
		Ferrous Alloys						
23 23	23	iron						
Apr1 8/23 May3/23 May24/23	0ct23/23 Dec20/23	50 - nickel		Λ				
4 I 2	0							
		40 30						
				/				
		20		/				
		10		1	_			
				S S S	4			
		Feb 2 1/23 Mar1 0/23 Mar2 7/23	May3/23	May24/23 0ct23/23 Dec20/23	Jan 5/24			
				De 0	7			
		Non-ferrous Meta	IS					
		12- copper		Λ				
		10 -						
				/				
		Edd						
		6		/ \				
		4						
		2-		$ \rightarrow \rangle$				
			33		54			
		Feb21/23 Mar10/23 Apr18/23	/lay3/23	May24/23 0ct23/23 Dec20/23	Jan 5/24			
				De Oc	~			
		Viscosity @ 100°C	.			Base Number		
		18 - Abnormal			10.0	Base		
		17-			.0 ^{8.0}			
		Base			KOH			
		0015- 015- 14-	¹		B 6.0		~	~
		10			.6.0 6.0 8ase Number 4.0 8			
		13 Abnormal	-		ase			
		12			⁶⁶ 2.0)		
		10						
		Feb21/23 Mar10/23 Apr18/23	May3/23	May24/23 0ct23/23 Dec20/23	Jan 5/24	Feb 21/23 Mar1 0/23 Mar27/23	Apr18/23 May3/23 May24/23	0ct23/23 Dec20/23 Jan5/24
		Febí Mar1 Mar2 Apr1	May	Mayi Octź Dec2	Jar	Feb; Mar1 Mar2	Apri May May2	Octí Decí
	l oberetere:	· MoorObask UCA	501 M"	oon Ave. Or	n. NO 0754		Nironno-t-l	000 Eairbar
4	Laboratory Sample No.	: WearCheck USA - : GFL0109066	BUI Madi		ry, NC 27513 Jan 2024	GFL E	nvironmental - 6905	Roosevelt Hwy
ANAB	Lab Number		Diagnos		Jan 2024 Jan 2024		0305	Fairburn, GA
TESTING LABORATORY	Unique Numbe		•	tician : Jon		r		US 30213
Certificate L2367	Test Package	e : FLEET (Additional	Tests: Fi	uelDilution, P	ercentFuel)			act: Eric Jones
		, contact Customer Serv						es@gflenv.com
		are outside of the ISO 1						(678)630-9927
Statements of c	ontormity to spe	ecifications are based on t	ne simple	acceptance o	ecision rule (JCGM 106:2012,)	F: