

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **221005** [] Component **Diesel Engine** Fluid **PFJ 10W30 (--- QTS)**

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

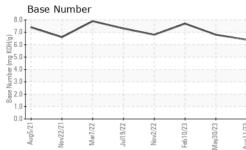
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

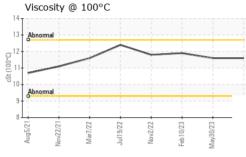
		Aug2021 M	lov2021 Mar2022 Jul202	12 Nov2022 Feb2023 May2023	Aug2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101258	PCA0073112	PCA0073088
Sample Date		Client Info		11 Aug 2023	30 May 2023	10 Feb 2023
Machine Age	mls	Client Info		282112	246616	200210
Oil Age	mls	Client Info		36000	30000	30000
Oil Changed		Client Info		N/A	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	17	24	18
Chromium	ppm	ASTM D5185m	>20	2	3	4
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	12	16
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	6	8	8
Tin	ppm	ASTM D5185m	>15	0	<1	<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	2	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		64	65	59
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		1107	1045	921
Calcium	ppm	ASTM D5185m		1268	1182	1139
Phosphorus	ppm	ASTM D5185m		1079	1087	955
Zinc	ppm	ASTM D5185m		1410	1394	1267
Sulfur	ppm	ASTM D5185m		3325	3294	3300
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	5	6
Sodium	ppm	ASTM D5185m		2	2	<1
Potassium	ppm	ASTM D5185m	>20	16	21	24
INFRA-RED		method	limit/base	current	history1	history2
	%	*ASTM D7844	>3	0.8	0.8	0.6
Soot %			0.0		0.0	8.6
	Abs/cm	*ASTM D7624	>20	8.8	9.3	0.0
Soot % Nitration Sulfation		*ASTM D7624 *ASTM D7415	>20 >30	8.8 21.1	9.3 22.1	20.1
Nitration	Abs/cm Abs/.1mm	*ASTM D7415				
Nitration Sulfation	Abs/cm Abs/.1mm	*ASTM D7415	>30	21.1	22.1	20.1



OIL ANALYSIS REPORT

VISUAL





		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
Nov2/22 - Feb10/23 -	0/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Nov Feb1	May30/23 Aug11/23	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
		Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
		Free Water	scalar	*Visual		NEG	NEG	NEG
<u> </u>		FLUID PROPI	ERTIES	method	limit/base	current	history1	history2
		Visc @ 100°C	cSt	ASTM D445		11.6	11.6	11.9
		GRAPHS						
		Ferrous Alloys						
2,22 - 1,23 -)/23 -	30 - iron						
Nov2/22 Feb10/23	May30/23	25 - nickel						
			\land	$ \land $				
		E 20	\checkmark	\sim				
		10						
		5						
		Contraction of the second seco	The spin to the state of the state	Name of Continues	The Distance			
		Aug5/21	Jul19/22 - Nov2/22 -	Feb 10/23 - May30/23 -	1/23 -			
		Aug5/21 Nov22/21 Mar7/22	Nov	Feb 10/23 May30/23	Aug11/23			
		Non-ferrous Meta	als					
		600 copper						
		500 - management lead						
		400-						
		300						
		200						
		100						
			2					
		Aug5/21 Nov22/21 Mar7/22	Jul19/22 Nov2/22	Feb 10/23 May30/23	Aug11/23			
		-		Fel Ma	Au			
		Viscosity @ 100°	С			Base Number		
					8.		\sim \sim	\sim
		13 Abnormal	~				· · · · ·	
		a ¹²			KOH	0		
		cst (100°c)			ы ш	0		
		향 10			dmuN 3	0		
		Abnormal			(B) 6. HOX Bw) Jack 10, 55. 4. Amma 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	0 -		
		9-			1	1 I I I		
		8	2	n n			12 12	
		2 21	0 0	0/2	Aug11/23	Aug5/21 Nov22/21 Mar7/22	Jul19/22 Nov2/22	Feb 10/23 May30/23
		4ug5/21 1v22/21 Mar7/22	lov2	v3	B			-9 2
		Aug5/21 Nov22/21 Mar7/22	Jul19/22 Nov2/22	Feb 10/23 May30/23	Aug	A N N	η z	Feb
	aboratory	: WearCheck USA -	501 Madis	son Ave., Ca	ry, NC 2751		Company - Hig	h Plains - 600H
NAR S	ample No.	: WearCheck USA - : PCA0101258	501 Madis Received	son Ave., Ca	ry, NC 2751 Sep 2023		Company - Hig	h Plains - 600H 7 East Loop 28
NAB S	ample No. ab Number	: WearCheck USA - : PCA0101258 : 05946312	501 Madia Received Diagnos	son Ave., Ca d : 08 ed : 11	ry, NC 2751 Sep 2023 Sep 2023		Company - Hig	h Plains - 600F 7 East Loop 28 LUBBOCK, 1
REDITED L	ample No.	: WearCheck USA - : PCA0101258	501 Madis Received	son Ave., Ca d : 08 ed : 11	ry, NC 2751 Sep 2023		Company - Higl 1717	h Plains - 600H 7 East Loop 2

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