

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

FREIGHTLINER 1229

Component Diesel Engine Fluid MOBIL 15W40 (--- 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.

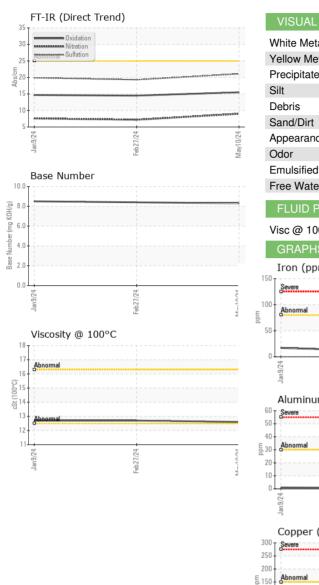
Fluid Condition

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

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0917235	WC0909299	WC0878835
Sample Date		Client Info		10 May 2024	27 Feb 2024	09 Jan 2024
Machine Age	mls	Client Info		285460	268885	260835
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	23	11	17
Chromium	ppm	ASTM D5185m	>5	2	1	2
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	2	<1	1
Lead	ppm	ASTM D5185m	>30	6	2	3
Copper	ppm	ASTM D5185m	>150	<1	<1	<1
Tin	ppm	ASTM D5185m	>5	0	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		4	1	4
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		59	54	54
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		907	874	957
Calcium	ppm	ASTM D5185m		1051	1006	1042
Phosphorus	ppm	ASTM D5185m		1100	914	999
Zinc	ppm	ASTM D5185m		1250	1059	1159
Sulfur	ppm	ASTM D5185m		2962	3188	2945
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	6	2	3
Sodium	ppm	ASTM D5185m	>118	<1	3	1
Potassium	ppm	ASTM D5185m	>20	3	0	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.4	0.7	1
Nitration	Abs/cm	*ASTM D7624	>20	9.0	7.2	7.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	19.3	19.9
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	14.5	14.7
Base Number (BN)	mg KOH/g	ASTM D2896		8.3	8.4	8.5



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nd)	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
7/24 -		scalar	*Visual	NORML	NORML	NORML	NORML
Feb27/24	Appearance Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPER		method	limit/base		history1	
				IIIIII/Dase	current		history2
	Visc @ 100°C GRAPHS	cSt	ASTM D445		12.6	12.7	12.7
					Load (nnm)		
	Iron (ppm)			80	Lead (ppm)		
7/24 -	Severe			60	Severe		
Feb27/24	Abnormal						
				튭.40	Abnormal		
				20)		
	0	+				+	
	Jan 9/24	Feb27/24		May10/24	Jan 9/24	Feb 27/24	
	Aluminum (ppm)			Ma	Chromium (p	—	
	60 Severe	/		12	I same	,	
	50			10	, -		*********************
4	Abnormal			udd 6	Abnormal		
Feb 27/24	20-			4	+-		
La.	2 10			2	2		
	0 + +	1/24 -		0/24		- 1/24 -	
	Jan	Feb27/24		May10/24	Jan 9/24	Feb27/24	
	Copper (ppm)			40	Silicon (ppm))	
	300 Severe				Severe		
	200-			30)		
	톱 150 - Abnormal			틀 20	Abnormal	1	
	100			10			
	50						
	Jan 9/24	Feb27/24 -		0/24	Jan 9/24	Feb27/24 -	
	Jan	Feb 2		May10/24			
	Viscosity @ 100°	С		10.0	Base Numbe	r	
	Abnormal			(b)H0,8.0 (b)H0,9 (b)H0,9 (b)H0,8.0 (b)H0,8.0 (b)H0,8.0 (c)H0,8.0		·	
	다. 00114 전 Abnormal			Ē 6.0)		
	Abnormal			- ²⁰ g 4.0)+		
	12-			2.0)		
	10	+		0.0			
	Jan 9/24	Feb27/24		May10/24	Jan 9/24	Feb27/24	
	7	E		Ma	7	æ	
Laborato	ory : WearCheck USA - 5	01 Madico		/ NC 27513	CONC	RETE SERVICE C	
		Rece		9 Jun 2024	CONC		JILDERS BLV
Lab Num	nber : 06214245	Teste	ed : 20) Jun 2024			TTEVILLE, N
	mber : 11087109) Jun 2024 - W	les Davis	_	US 2830
	kage : MOB 1 (Additional T			0		Contact: BRY	
	eport, contact Customer Ser					bryanvanniman	
	that are outside of the ISO to specifications are based				rule (JCGM 10		(800)326-919 F
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Report Id: CONFAY [WUSCAR] 06214245 (Generated: 06/21/2024 12:57:30) Rev: 1

Contact/Location: BRYAN VANNIMAN - CONFAY