

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id FREIGHTLINER 2420 Component

Transmission (Auto) Fluid ATF (--- QTS)

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

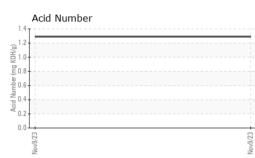
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

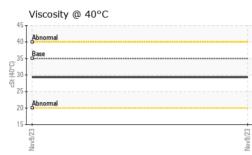
SAMPLE INFORM		method	limit/base		bi na muđ	bieter v0
	ATION		innivoase		history1	history2
Sample Number		Client Info		RW0004865		
Sample Date		Client Info		09 Nov 2023		
Machine Age	hrs	Client Info		9336		
Oil Age	hrs	Client Info		3000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	43		
Chromium	ppm	ASTM D5185m	>5	0		
Nickel	ppm	ASTM D5185m	>5	<1		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>5	0		
Aluminum	ppm	ASTM D5185m	>50	8		
Lead	ppm	ASTM D5185m	>50	<1		
Copper	ppm	ASTM D5185m	>225	19		
Tin	ppm	ASTM D5185m	>10	2		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		105		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		4		
Calcium	ppm	ASTM D5185m		134		
Phosphorus	ppm	ASTM D5185m		311		
Zinc	ppm	ASTM D5185m		0		
Sulfur	ppm	ASTM D5185m		1679		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	7		
Sodium	ppm	ASTM D5185m		4		
Potassium	ppm	ASTM D5185m	>20	1		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		1.29		



OIL ANALYSIS REPORT

VISUAL





				00.110111			
White Metal	scalar	*Visual	NONE	NONE			
Debris	scalar	*Visual	NONE	NONE			
Sand/Dirt	scalar	*Visual	NONE	NONE			
Appearance	scalar	*Visual	NORML	NORML			
Odor	scalar	*Visual	NORMI	NORMI			
			>0.1				
Free water	scalar	" VISUAI		NEG			
FLUID PROPERT	IES	method	limit/base	current	historv1	history2	
Visc @ 40°C	cSt	ASTM D445	35.0	29.3			
SAMPLE IMAGES	2	method	limit/hase	current	history1	history2	
	<i>,</i>	method	minubase	ouncint	Thotory I	nistory2	
Color				no image	no image	no image	
00101				no inago	no intago	no imago	
Pottom				no imoro		na imagaa	
DOLLOITI				no image	no image	no image	
GRAPHS							
	<u></u>						
				Service of			
			d ,	Abnormal			
			9/23 -	3/23			
Nove			Nové	Nove			
Aluminum (nnm)				Chromium (n	nm)		
0.0							
1			F	10 - Severe			
50 + 0			Idd	5 - Abnormal			
0				0			
/9/23			/9/23	/9/23			
Nov			Nov	Nov		:	
Copper (ppm)				Silicon (ppm)			
00 т				40 Severe			
00 - Severe				1			
			84	20 - 0			
.2/6/			v9/2.	/6/v			
Na			Na	No			
Viscosity @ 40°C			(B/H	Acid Number			
60 T			·····;- §1	.5 T			
			<u>Ĕ</u> 1	.0			
			ĝ	.5 -			
			23 + 0	.0 1.			
7/6/10			ov9/2 Ac	2/6/0			
		on Ave. Ca	Novê	Novê	NEWKI	RK ELECTR	
: 06016617	Received Diagnose	: 24 d : 28	Nov 2023 Nov 2023	Nr.		ROBERTS ST USKEGON, M	
: RW0004865 F : 06016617 C : 10755761 C	Received	: 24 d : 28	Nov 2023	er	М	USKEGON, M US 4944	
: RW0004865 F : 06016617 C : 10755761 C : MOB 2	Received Diagnosee Diagnostic	: 24 d : 28 cian : Jon	Nov 2023 Nov 2023 nathan Heste	er	M Conta	USKEGON, I US 4944 act: ERIC KIN	
: RW0004865 F : 06016617 C : 10755761 C	Received Diagnosed Diagnostic	: 24 d : 28 cian : Jon 00-237-1369	Nov 2023 Nov 2023 nathan Heste 9.	er	M Conta ewking@newk	USKEGON, US 494 act: ERIC KIN	
	Appearance Odor Emulsified Water Free Water FLUID PROPERT Visc @ 40°C SAMPLE IMAGES Color Bottom GRAPHS Iron (ppm) GRAPHS Iron (ppm) Graves Abnormal Copper (ppm) Graves Copper (ppm) Copper (ppm)	Yellow Metal scalar Precipitate scalar Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar Free Water cSt SAMPLE IMAGES Color GRAPHS Iron (ppm) Severe Ahnomal Aluminum (ppm) Severe Ahnomal Severe Abnomal Severe Abnomal Severe Severe Ahnomal Severe Severe Abnomal Severe Severe Severe Sever	Yellow Metal scalar *Visual Precipitate scalar *Visual Silt scalar *Visual Debris scalar *Visual Sand/Dirt scalar *Visual Appearance scalar *Visual Odor scalar *Visual Emulsified Water scalar *Visual Free Water scalar *Visual Free Water scalar *Visual SAMPLE IMAGES method Color Color Sammal GRAPHS Iron (ppm)	Yellow Metal scalar *Visual NONE Precipitate scalar *Visual NONE Silt scalar *Visual NONE Silt scalar *Visual NONE Debris scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual >0.1 FLUID PROPERTIES method imit/base Visc @ 40°C cSt ASTM D445 35.0 SAMPLE IMAGES method imit/base Color Iron (ppm)	Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Sand/Dirt scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML Codor scalar *Visual >0.1 NEG Free Water scalar *Visual >0.1 NEG FLUID PROPERTIES method imit/base current Visc @ 40°C cSt ASTM D445 35.0 29.3 SAMPLE IMAGES method imit/base current Color Iron (ppm) no image no image Aluminum (ppm) for for for for Goggen for for for for for Goggen for for for for for	Yellow Metal scalar *Visual NONE Precipitate scalar *Visual NONE NONE Sitt scalar *Visual NONE NONE Bobris scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML Appearance scalar *Visual NORML NORML Free Water scalar *Visual NORML NORML Free Water scalar *Visual NORML NORML FLUID PROPERTIES method Imit/base current history1 Color Iran (ppm)	

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

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