



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
FREIGHTLINER 2361
Component
Hydraulic System
Fluid
PROGARD ARCTIC AW 15 (100 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0005635	RW0003719	RW0000757
Sample Date		Client Info		24 Jun 2024	08 Jun 2022	29 Apr 2020
Machine Age	hrs	Client Info		13347	10877	7012
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>40	2	3	2
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>8	2	<1	<1
Lead	ppm	ASTM D5185m	>5	<1	0	<1
Copper	ppm	ASTM D5185m	>20	3	4	3
Tin	ppm	ASTM D5185m	>2	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

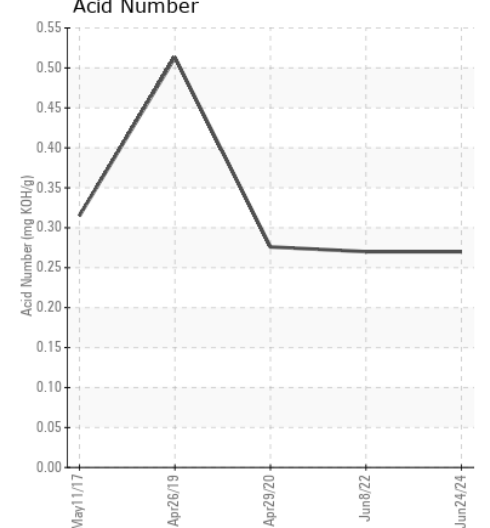
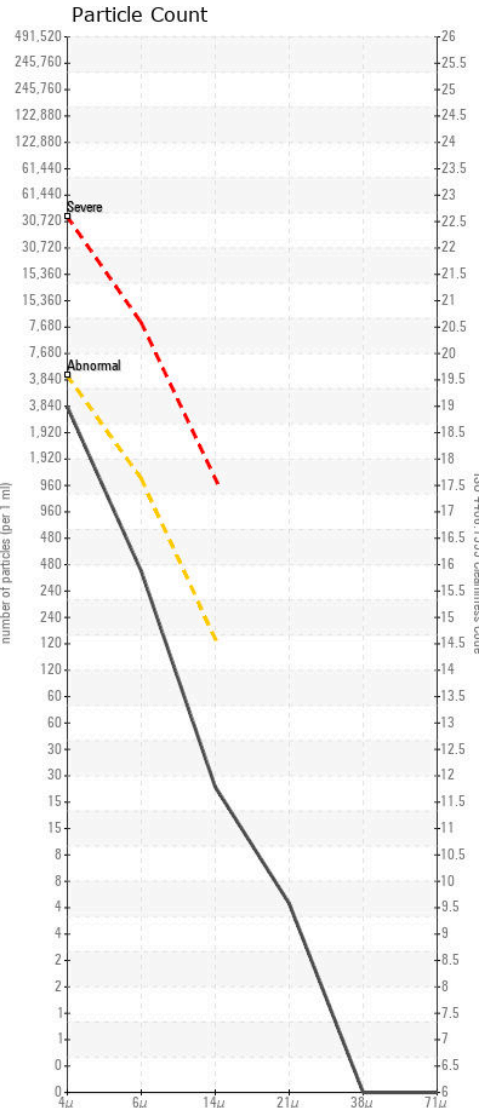
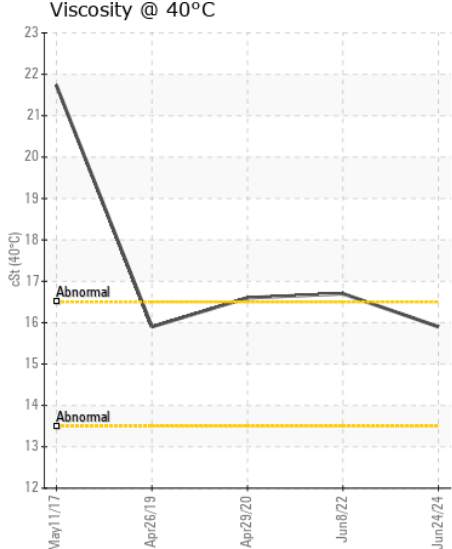
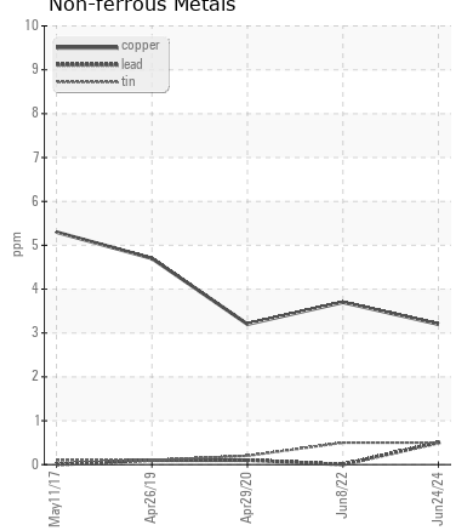
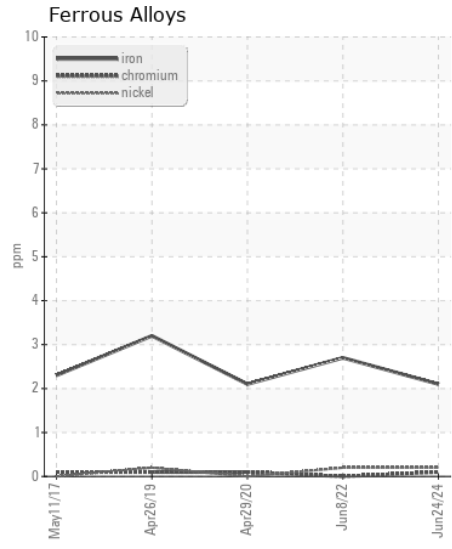
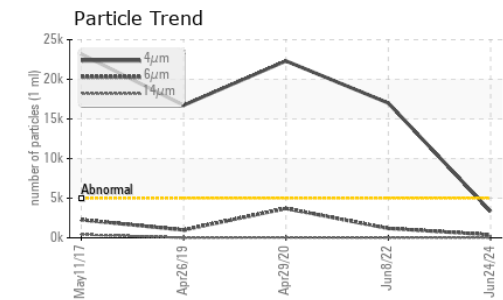
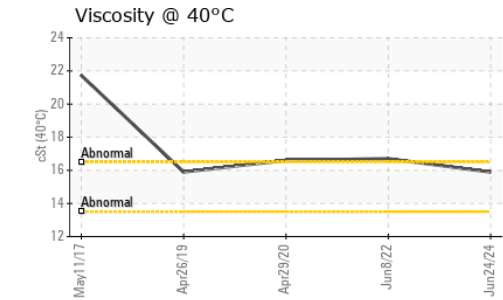
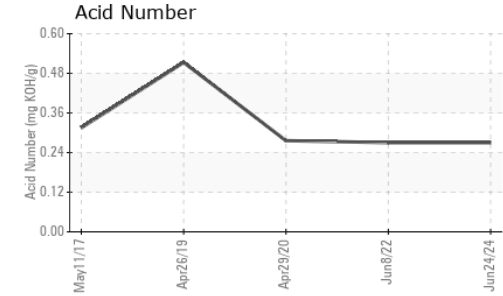
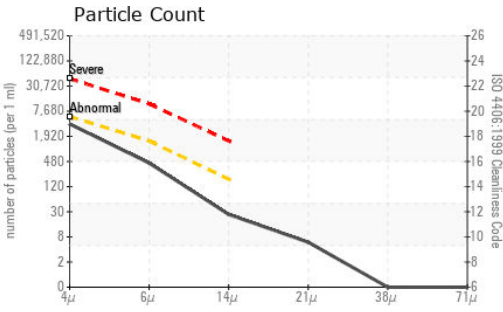
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	1	<1	1
Potassium	ppm	ASTM D5185m	>20	1	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	3329	▲ 17004	▲ 22319
Particles >6µm		ASTM D7647	>1300	387	1186	▲ 3707
Particles >14µm		ASTM D7647	>160	23	18	43
Particles >21µm		ASTM D7647	>40	5	2	7
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/16/12	▲ 21/17/11	▲ 22/19/13
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	0	0
Boron	ppm	ASTM D5185m		0	<1	<1
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		2	0	<1
Calcium	ppm	ASTM D5185m		55	50	46
Phosphorus	ppm	ASTM D5185m		339	339	337
Zinc	ppm	ASTM D5185m		396	356	395
Sulfur	ppm	ASTM D5185m		805	925	734
Acid Number (AN)	mg KOH/g	ASTM D8045		0.27	0.27	0.276
Visc @ 40°C	cSt	ASTM D445		15.9	16.7	16.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0005635 **Received** : 09 Jul 2024
Lab Number : 06231469 **Tested** : 10 Jul 2024
Unique Number : 11114962 **Diagnosed** : 10 Jul 2024 - Wes Davis
Test Package : MOB 2

NEWKIRK ELECTRIC
 1875 ROBERTS ST.
 MUSKEGON, MI
 US 49442
 Contact: ERIC KING
 ewking@newkirk-electric.com
 T: (231)206-6131
 F: (231)724-4090

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)