CONST

PetroCard™ MORE THAN JUST FUEL.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
GM Seattle Off Raod Shop
Machine Id
[GM Seattle Off Raod Shop] 28-433
Component
Transmission (Auto)
Fluid
LIEBHERR GEAR MF 80W (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment:
Top Up Amount: 3 gallons)

WEAR

All component wear rates are normal.

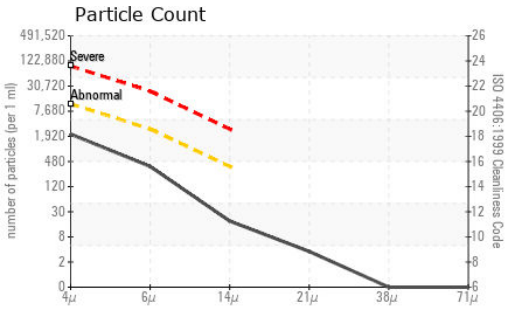
CONTAMINATION

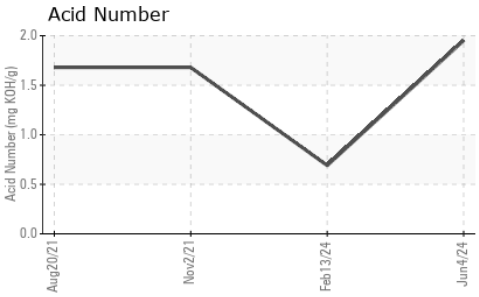
There is no indication of any contamination in the fluid. The amount and size of particulates present in the system are acceptable.

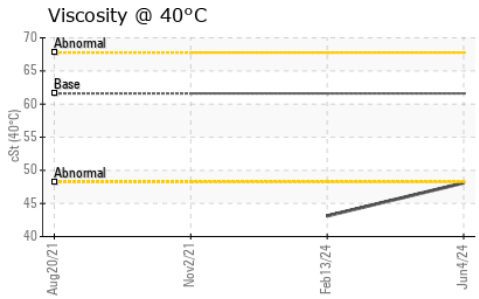
FLUID CONDITION

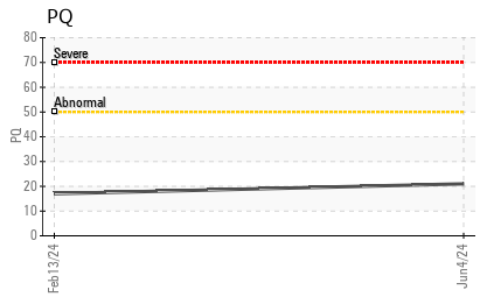
The AN level is acceptable for this fluid. The condition of the fluid is acceptable for the time in service.

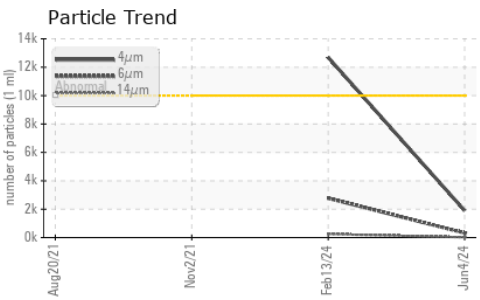
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PE0003028	PE0003374	PE12291090
Sample Date		Client Info		04 Jun 2024	13 Feb 2024	02 Nov 2021
Machine Age	hrs	Client Info		5353	4699	1165
Oil Age	hrs	Client Info		654	4699	1165
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Oil Added	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ATTENTION	NORMAL
PQ		ASTM D8184	>50	21	17	---
Iron	ppm	ASTM D5185m	>160	15	17	14
Chromium	ppm	ASTM D5185m	>5	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>5	0	0	<1
Aluminum	ppm	ASTM D5185m	>50	2	2	1
Lead	ppm	ASTM D5185m	>50	0	8	1
Copper	ppm	ASTM D5185m	>225	1	5	3
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>20	5	6	8
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>10000	1901	12693	---
Particles >6µm		ASTM D7647	>2500	321	2779	---
Particles >14µm		ASTM D7647	>320	16	246	---
Particles >21µm		ASTM D7647	>80	3	74	---
Particles >38µm		ASTM D7647	>20	0	3	---
Particles >71µm		ASTM D7647	>4	0	0	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	18/16/11	21/19/15	20/16/11
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	---
Sodium	ppm	ASTM D5185m		0	1	8
Boron	ppm	ASTM D5185m		22	0	108
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		16	6	7
Calcium	ppm	ASTM D5185m		3430	829	3829
Phosphorus	ppm	ASTM D5185m		1345	464	1295
Zinc	ppm	ASTM D5185m		1577	500	1642
Sulfur	ppm	ASTM D5185m		7434	2491	---
Acid Number (AN)	mg KOH/g	ASTM D8045		1.951	0.69	1.68
Visc @ 40°C	cSt	ASTM D445	61.6	48.1	43.12	---

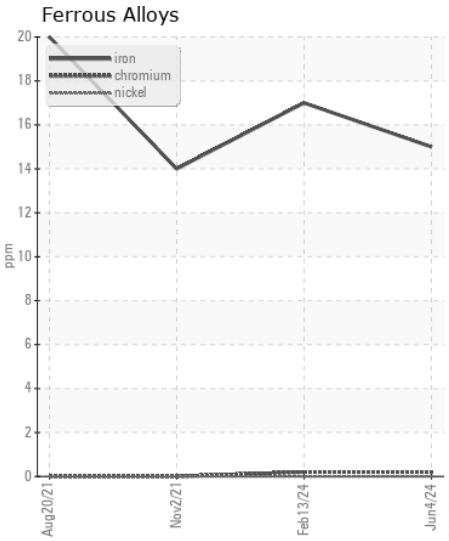


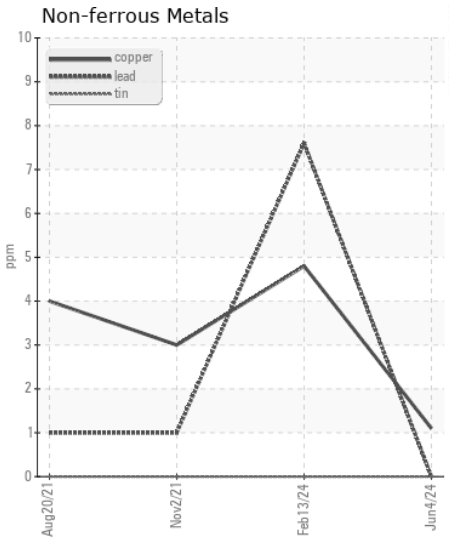


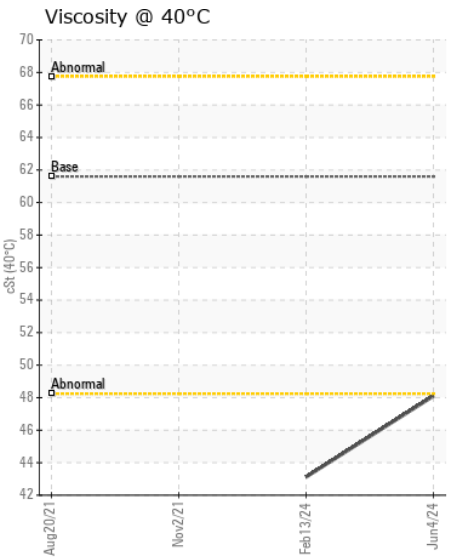


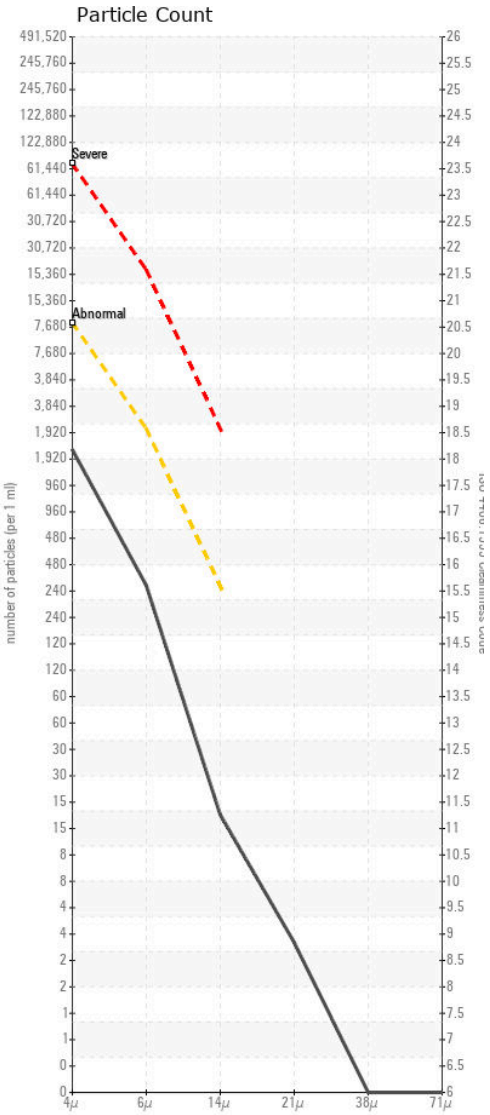


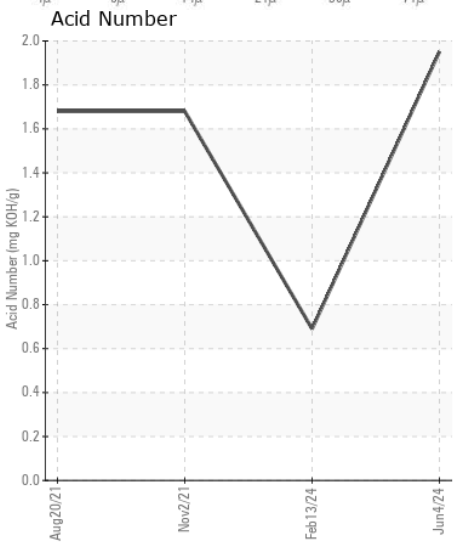












Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0003028
Lab Number : 06210676
Unique Number : 11083540
Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

Received : 14 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Angela Borella

Certificate L2367

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)

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