



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
TPR-Houston Port
 Machine Id
481142 112360
 Component
Rear Left Planetary
 Fluid
LIEBHERR GEAR BASIC 90 LS (--- GAL)

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

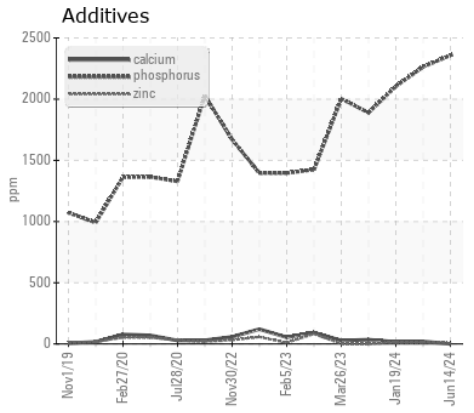
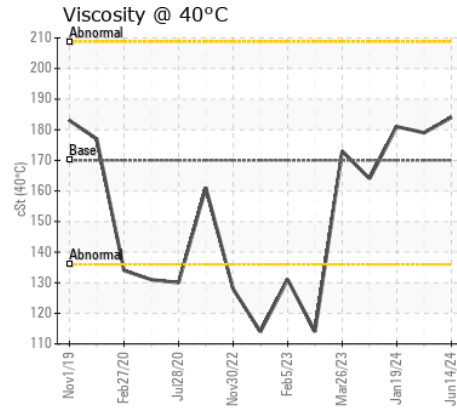
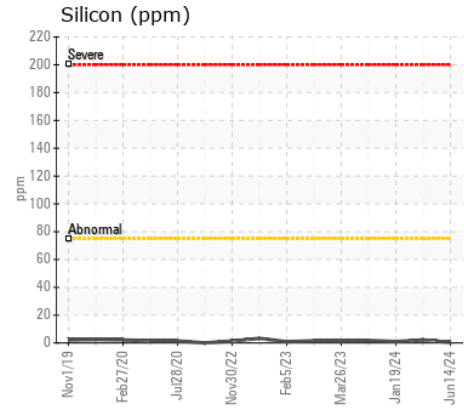
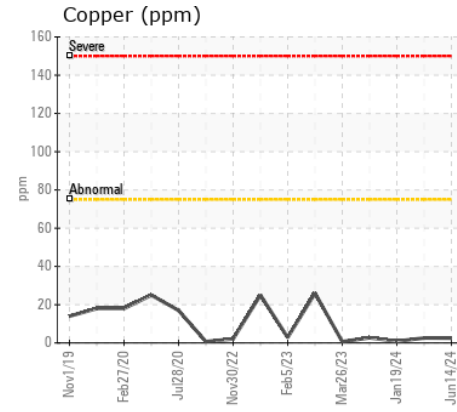
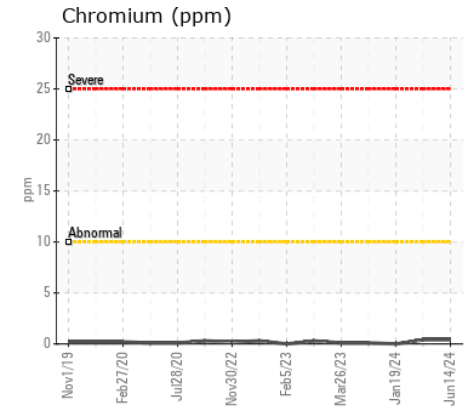
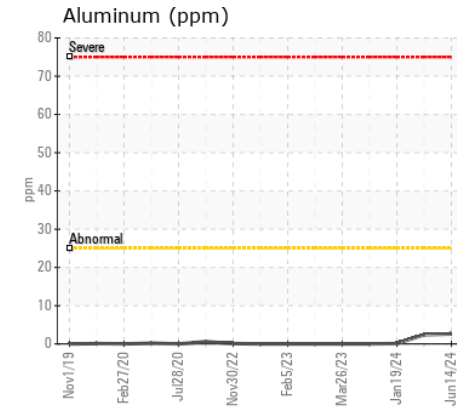
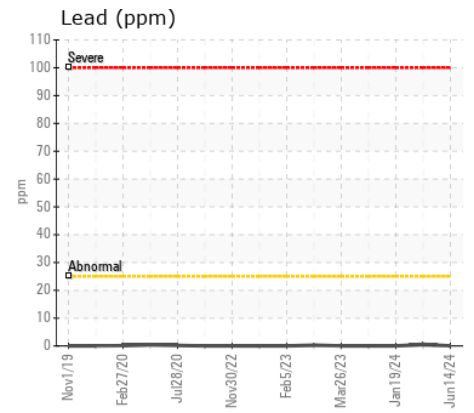
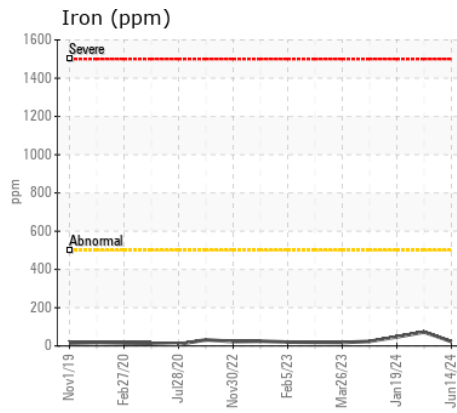
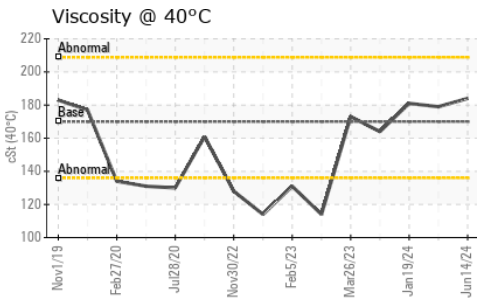
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0023358	DJJ0023391	DJJ0018821
Sample Date		Client Info		14 Jun 2024	20 Mar 2024	19 Jan 2024
Machine Age	hrs	Client Info		13308	12756	12110
Oil Age	hrs	Client Info		500	1000	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>500	23	73	47
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	3	2	<1
Lead	ppm	ASTM D5185m	>25	0	<1	0
Copper	ppm	ASTM D5185m	>75	2	3	<1
Tin	ppm	ASTM D5185m	>10	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>75	<1	2	1
Potassium	ppm	ASTM D5185m	>20	<1	2	2
Water		WC Method	>0.2	NEG	NEG	NEG
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	>0.2	NEG	NEG	NEG

Sodium	ppm	ASTM D5185m		0	<1	2
Boron	ppm	ASTM D5185m	0	9	29	29
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	1	0
Manganese	ppm	ASTM D5185m	0	0	2	1
Magnesium	ppm	ASTM D5185m	<1	<1	6	7
Calcium	ppm	ASTM D5185m	<1	0	21	17
Phosphorus	ppm	ASTM D5185m	2143	2358	2264	2105
Zinc	ppm	ASTM D5185m	<1	6	10	11
Sulfur	ppm	ASTM D5185m	23468	26836	28789	25420
Visc @ 40°C	cSt	ASTM D445	170	184	179	181



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0023358
Lab Number : 06226628
Unique Number : 11110121
Test Package : MOBCE

Received : 02 Jul 2024
Tested : 03 Jul 2024
Diagnosed : 03 Jul 2024 - Wes Davis

TEXAS PORT RECYCLING - HOUSTON PORT
 8945 MANCHESTER ST
 HOUSTON, TX
 US 77012
 Contact: Dale Shaw
 dale.shaw@tmrecycling.com

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)

T:
 F: (713)921-5545