



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
71E-21B

Component
Gearbox

Fluid
HIGH PERFORMANCE LUBRICANTS GEAR LIFE 150 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HPL0004549	---	---
Sample Date		Client Info		18 Mar 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	32	---	---
Chromium	ppm	ASTM D5185m	>15	0	---	---
Nickel	ppm	ASTM D5185m	>15	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	<1	---	---
Lead	ppm	ASTM D5185m	>100	11	---	---
Copper	ppm	ASTM D5185m	>200	0	---	---
Tin	ppm	ASTM D5185m	>25	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

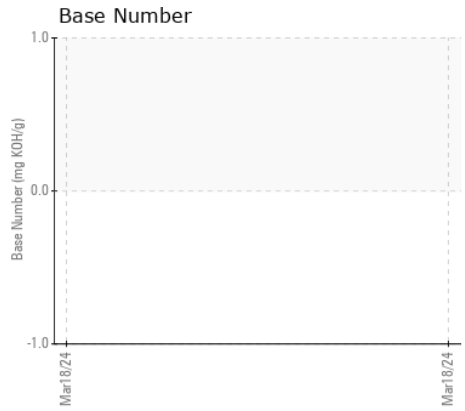
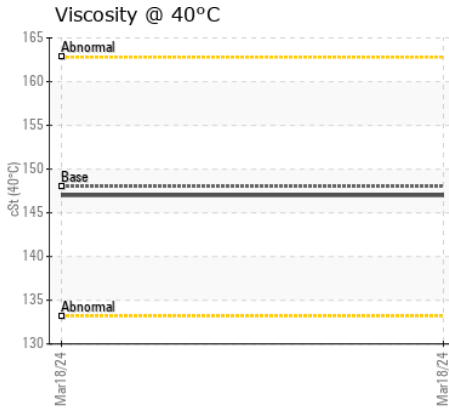
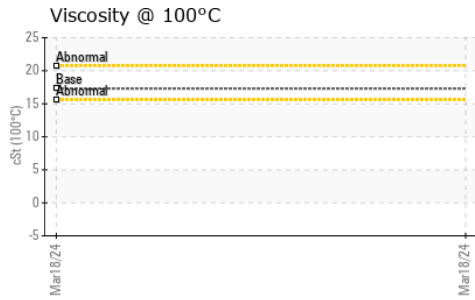
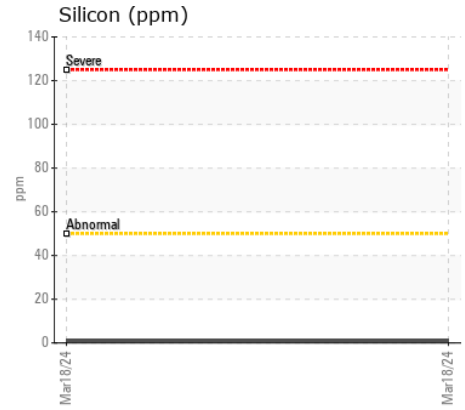
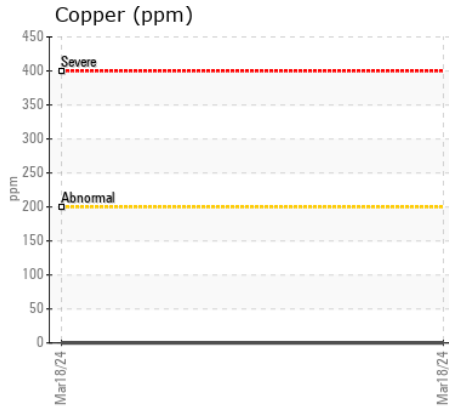
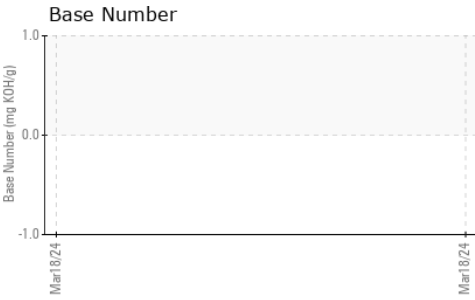
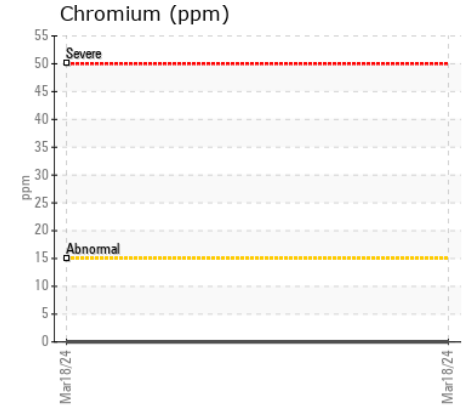
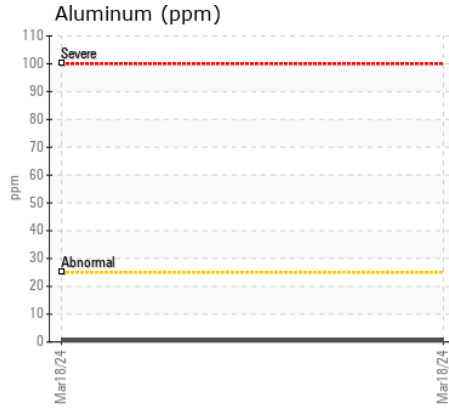
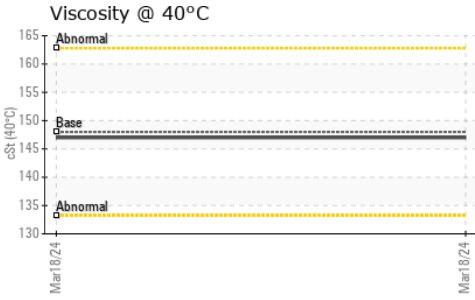
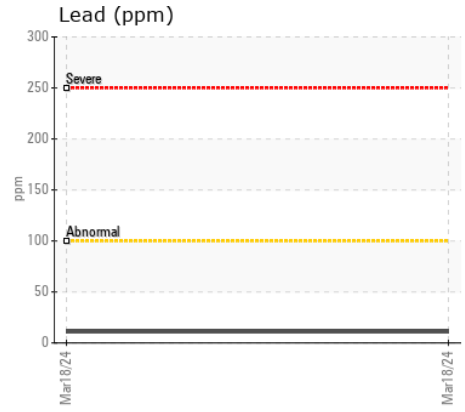
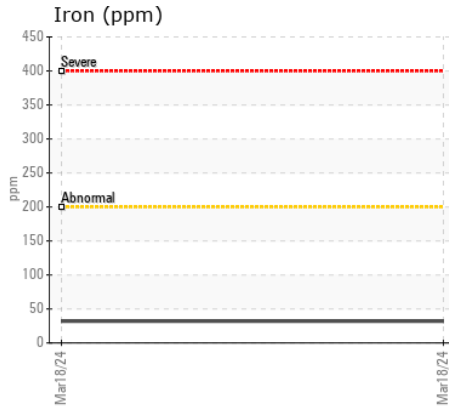
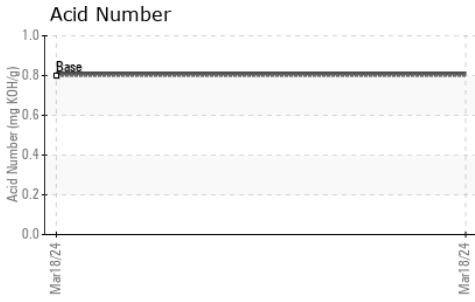
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	1	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---
Water		WC Method	>0.2	NEG	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	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		1	---	---
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		0	---	---
Calcium	ppm	ASTM D5185m		4	---	---
Phosphorus	ppm	ASTM D5185m		210	---	---
Zinc	ppm	ASTM D5185m		24	---	---
Sulfur	ppm	ASTM D5185m		22690	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.8	0.81	---	---
Visc @ 40°C	cSt	ASTM D445	148	147	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : HPL0004549

Lab Number : 06125803

Unique Number : 10939954

Test Package : MOB 2 (Additional Tests: FT-IR, KV100, TBN)

Received : 21 Mar 2024

Tested : 25 Mar 2024

Diagnosed : 25 Mar 2024 - Angela Borella

MARATHON PETROLEUM CO.

IL. REFINING DIVISION, 400 S MARATHON AVE

ROBINSON, IL

US 62454

Contact: M.S. MANHART

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F: x:

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)