



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**56E-2A**  
 Component  
**Gearbox**  
 Fluid  
**HP GEAR LIFE ISO 150 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>HPL0004128</b>	HPL007861	HPL002903
Sample Date		Client Info		<b>05 Feb 2024</b>	02 Feb 2022	26 Jan 2016
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>35</b>	82	3
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	2	<1
Lead	ppm	ASTM D5185m	>100	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	<1	5
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

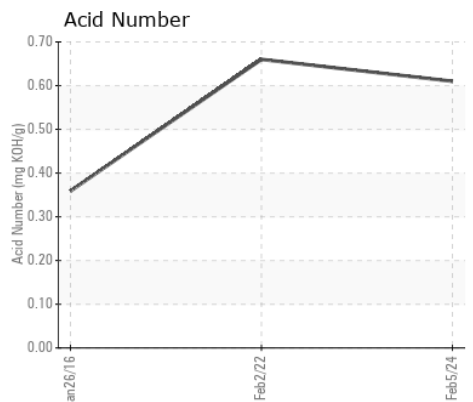
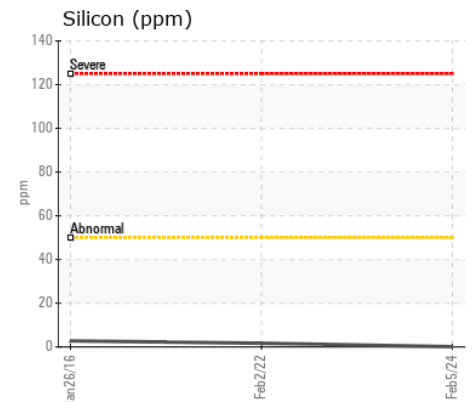
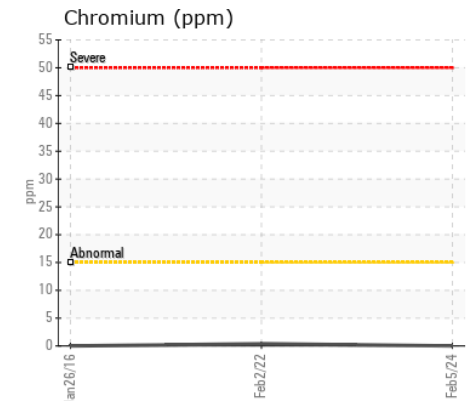
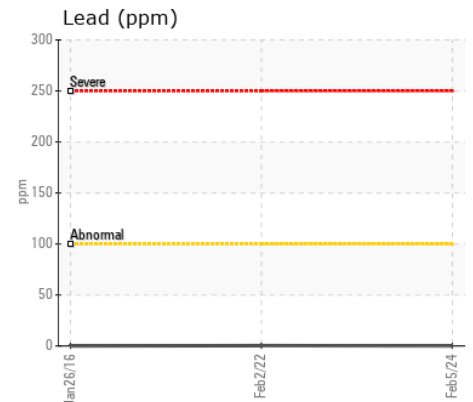
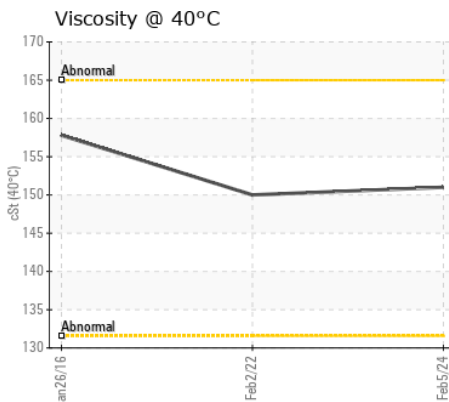
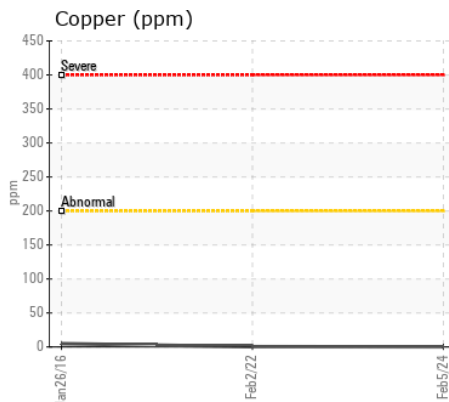
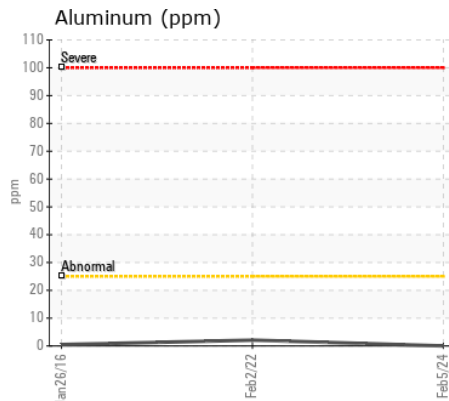
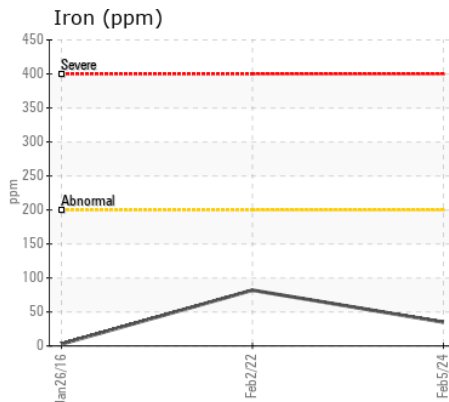
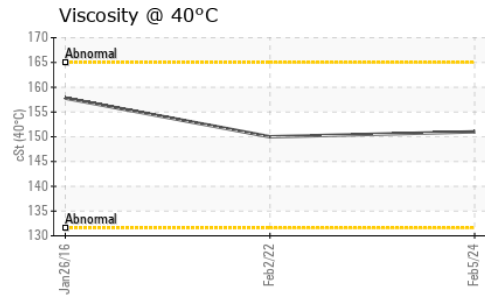
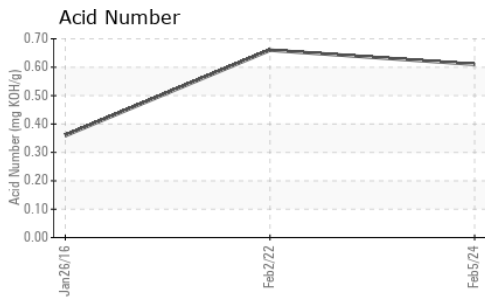
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>&lt;1</b>	2	3
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>MODER</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>&lt;1</b>	1	<1
Boron	ppm	ASTM D5185m		<b>0</b>	1	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>0</b>	2	0
Calcium	ppm	ASTM D5185m		<b>0</b>	4	<1
Phosphorus	ppm	ASTM D5185m		<b>55</b>	210	190
Zinc	ppm	ASTM D5185m		<b>0</b>	0	<1
Sulfur	ppm	ASTM D5185m		<b>21613</b>	19847	22633
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.61</b>	0.66	0.359
Visc @ 40°C	cSt	ASTM D445		<b>151</b>	150	157.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HPL0004128  
**Lab Number** : 06083094  
**Unique Number** : 10870539  
**Test Package** : MOB 2

**Received** : 07 Feb 2024  
**Tested** : 08 Feb 2024  
**Diagnosed** : 08 Feb 2024 - Wes Davis

**MARATHON PETROLEUM CO.**  
 IL. REFINING DIVISION, 400 S MARATHON AVE  
 ROBINSON, IL  
 US 62454

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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)

F: x: