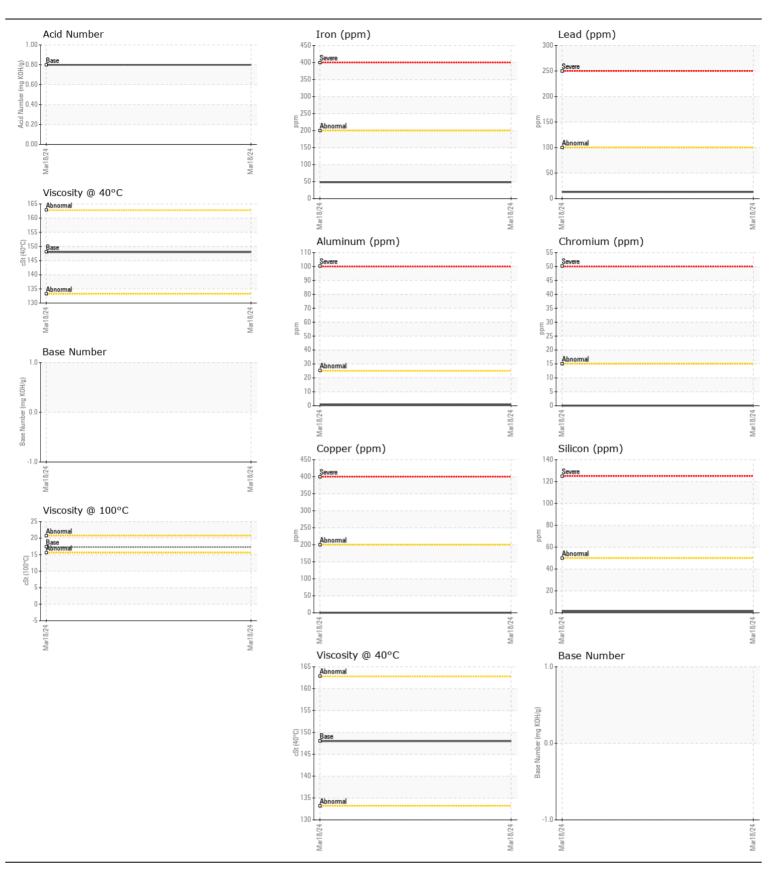
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id **71E-21A**

Component Gearbox

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		HPL0004548		
	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		
VEAR	Iron	ppm	ASTM D5185m		48		
All component wear rates are normal.	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		<1		
	Lead	ppm	ASTM D5185m		13		
	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		
ONTAMINATION	Silicon	ppm	ASTM D5185m	<u> </u>	1		
	Potassium	ppm	ASTM D5185m		0		
There is no indication of any contamination in the oil.	Water	ррпп	WC Method		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		*Visual	>0.2	NEG		
·	Linuisilled water		visuai	>0.2			
LUID CONDITION	Sodium	ppm	ASTM D5185m		<1		
The AN level is acceptable for this fluid. The condition of the oil is	Boron	ppm	ASTM D5185m		0		
suitable for further service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		0		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		0		
	Calcium	ppm	ASTM D5185m		3		
	Phosphorus	ppm	ASTM D5185m		252		
	Zinc	ppm	ASTM D5185m		38		
	Sulfur	ppm	ASTM D5185m		23259		
				0.0			
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.0	0.80		





Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : HPL0004548 Lab Number : 06125804

Received **Tested** Unique Number: 10939955

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

: 21 Mar 2024 : 25 Mar 2024 : 25 Mar 2024 - Angela Borella Diagnosed

MARATHON PETROLEUM CO. IL. REFININF DIVISION, 400 S MARATHON AVE

ROBINSON, IL US 62454 Contact: M.S. MANHART

Test Package: MOB 2 (Additional Tests: FT-IR, KV100, TBN) mmanhart@marathonpetroleum.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. T: (618)544-2121

F: x: