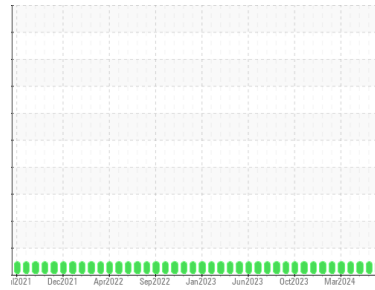




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

Martinsville

Machine Id

[Martinsville] Oil - Port Reduction Gear

Component

Port Reduction Gear

Fluid

MOBIL DELVAC 1640 (28 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: George Willis)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0859997	WC0845894	WC0845882
Sample Date	Client Info		06 Jul 2024	07 Jun 2024	11 May 2024
Machine Age	hrs	Client Info	25910	25478	24769
Oil Age	hrs	Client Info	2036	1604	994
Oil Changed	Client Info		Not Chngd	Filtered	Not Chngd
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	8	9	9
Chromium	ppm	ASTM D5185m >10	0	0	<1
Nickel	ppm	ASTM D5185m >10	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	<1	2	1
Lead	ppm	ASTM D5185m >100	0	0	<1
Copper	ppm	ASTM D5185m >50	8	11	9
Tin	ppm	ASTM D5185m >10	0	<1	1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	12	14	21
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	36	43	39
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	533	619	549
Calcium	ppm	ASTM D5185m	1221	1402	1259
Phosphorus	ppm	ASTM D5185m	825	911	897
Zinc	ppm	ASTM D5185m	916	1071	935
Sulfur	ppm	ASTM D5185m	3250	3682	3756

CONTAMINANTS

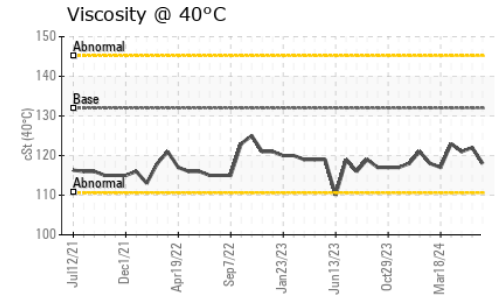
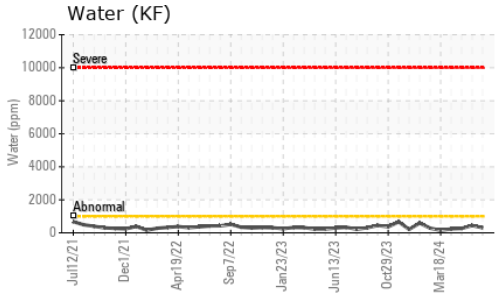
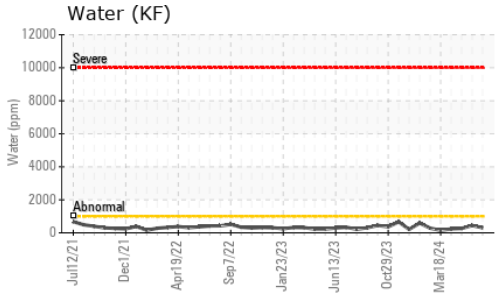
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	2	3	4
Sodium	ppm	ASTM D5185m	3	3	1
Potassium	ppm	ASTM D5185m >20	<1	3	2
Water	%	ASTM D6304 >0.1	0.030	0.044	0.026
ppm Water	ppm	ASTM D6304 >1000	306	443	266

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.21	1.02	1.06



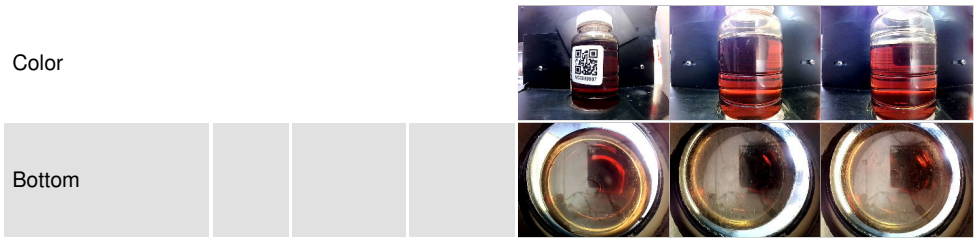
OIL ANALYSIS REPORT



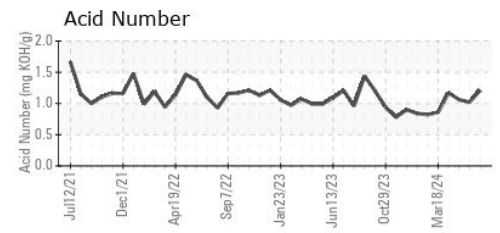
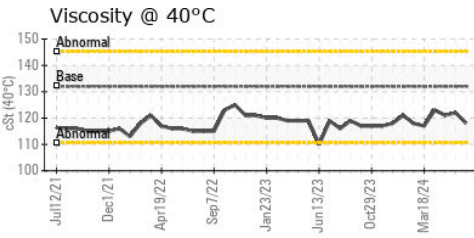
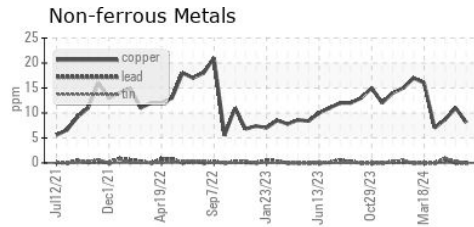
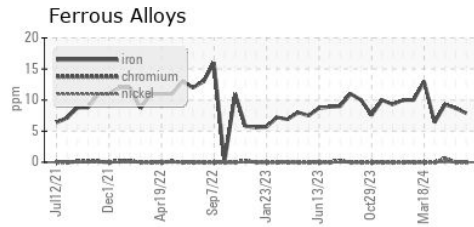
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	132	118	122	121

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0859997 **Received** : 15 Jul 2024
Lab Number : **06236087** **Tested** : 16 Jul 2024
Unique Number : 11124921 **Diagnosed** : 17 Jul 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF)

MARATHON PETROLEUM CO.
 101 12TH ST
 CATLETTSBURG, KY
 US 41169
 Contact: CORY GUMBERT
 cagumbert@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.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)