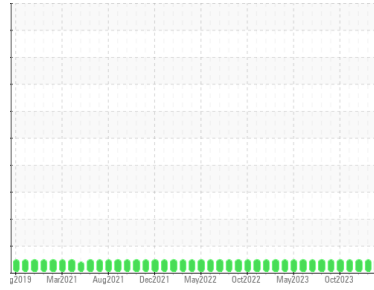




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Speedway
 Machine Id
[Speedway] Oil - Port Reduction Gear
 Component
Port Reduction Gear
 Fluid
SAE 30W (85 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Jd Ridout)

Wear

All component wear rates are normal.

Contamination

The water content is negligible. 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		WC0845771	WC0845774	WC0845775
Sample Date	Client Info		21 Feb 2024	23 Jan 2024	26 Dec 2023
Machine Age	hrs	Client Info	39354	38814	38424
Oil Age	hrs	Client Info	76802	16462	16072
Oil Changed		Client Info	Not Chngd	N/A	Not Chngd
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	16	31	31
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	0
Aluminum	ppm	ASTM D5185m >25	0	<1	1
Lead	ppm	ASTM D5185m >100	0	<1	<1
Copper	ppm	ASTM D5185m >50	7	11	13
Tin	ppm	ASTM D5185m >10	0	1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	21	39	40
Barium	ppm	ASTM D5185m	0	0	2
Molybdenum	ppm	ASTM D5185m	31	23	23
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	480	335	323
Calcium	ppm	ASTM D5185m	1408	1831	1890
Phosphorus	ppm	ASTM D5185m	763	854	825
Zinc	ppm	ASTM D5185m	848	935	914
Sulfur	ppm	ASTM D5185m	4393	6772	7546

CONTAMINANTS

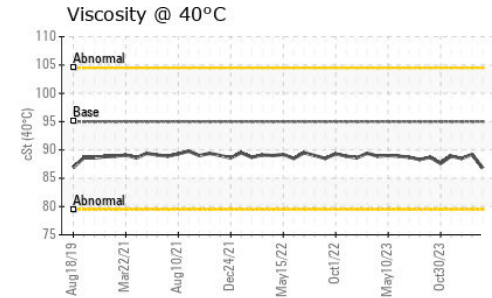
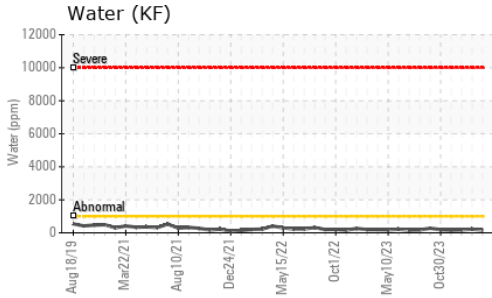
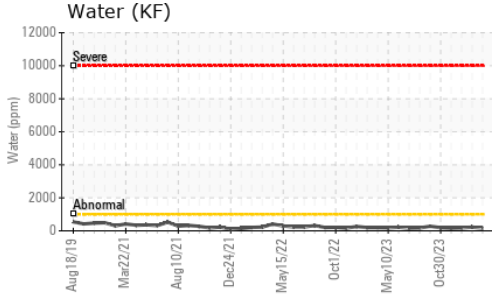
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	3	5	5
Sodium	ppm	ASTM D5185m	2	2	0
Potassium	ppm	ASTM D5185m >20	0	1	<1
Water	%	ASTM D6304 >0.1	0.015	0.022	0.017
ppm Water	ppm	ASTM D6304 >1000	158	224	175

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.02	0.92	1.04



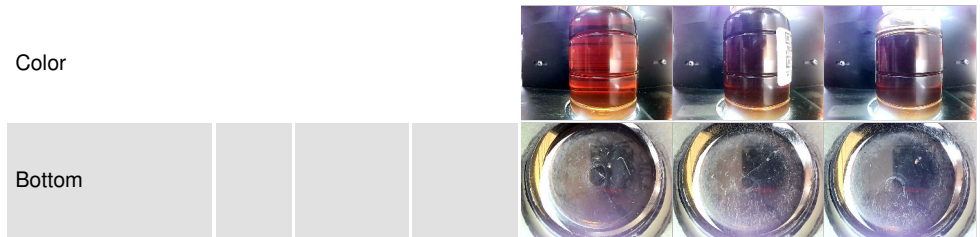
OIL ANALYSIS REPORT



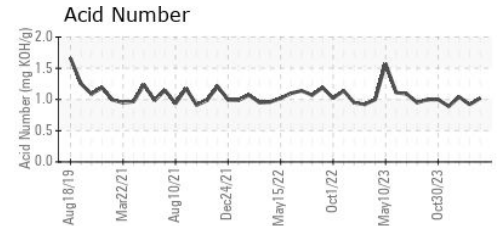
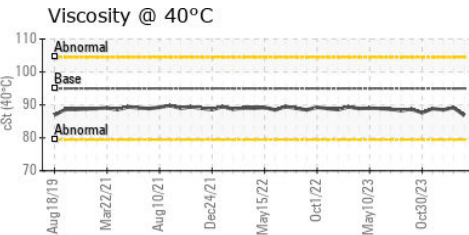
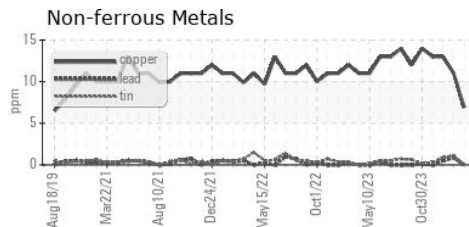
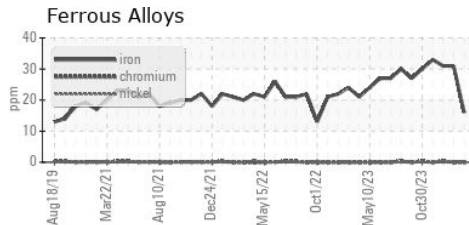
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	95.0	86.8	89.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0845771
 Lab Number : **06101737**
 Unique Number : 10899967
 Test Package : IND 2 (Additional Tests: KF)

MARATHON PETROLEUM CO.
 101 12TH ST
 CATLETTSBURG, KY
 US 41169
 Contact: CORY GUMBERT
 cagumbert@marathonpetroleum.com
 T: (606)585-3950
 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)