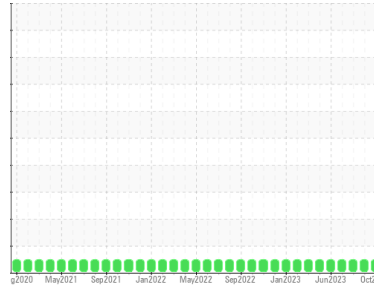




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Kenova
 Machine Id
[Kenova] Oil - Port Reduction Gear
 Component
Port Reduction Gear
 Fluid
NOT GIVEN (35 GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor. (Customer Sample Comment: Adam fields)

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		WC0805228	WC0805230	WC0719052
Sample Date	Client Info		24 Oct 2023	26 Sep 2023	30 Aug 2023
Machine Age	hrs	Client Info	37436	36966	36527
Oil Age	hrs	Client Info	246	11148	10709
Oil Changed	Client Info		Changed	Not Changd	N/A
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	8	22	26
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	<1	0	<1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	<1	1
Aluminum	ppm	ASTM D5185m >25	2	4	6
Lead	ppm	ASTM D5185m >100	<1	0	<1
Copper	ppm	ASTM D5185m >50	1	3	3
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	<1	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	8	14	20
Barium	ppm	ASTM D5185m	4	2	2
Molybdenum	ppm	ASTM D5185m	12	25	28
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	204	203	273
Calcium	ppm	ASTM D5185m	3238	3275	4387
Phosphorus	ppm	ASTM D5185m	893	890	1129
Zinc	ppm	ASTM D5185m	948	1009	1302
Sulfur	ppm	ASTM D5185m	10256	9991	11734

CONTAMINANTS

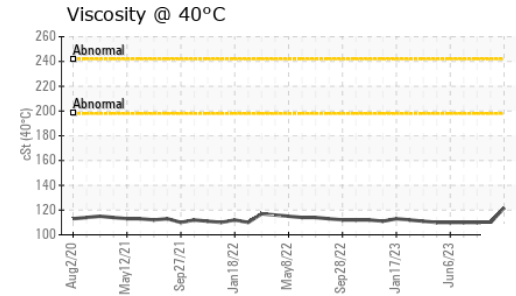
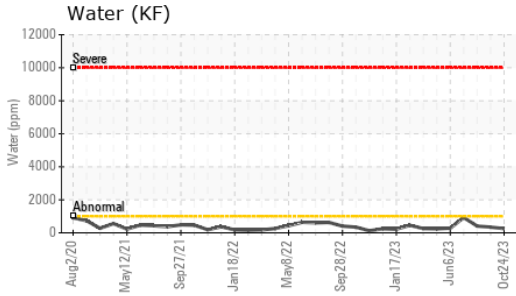
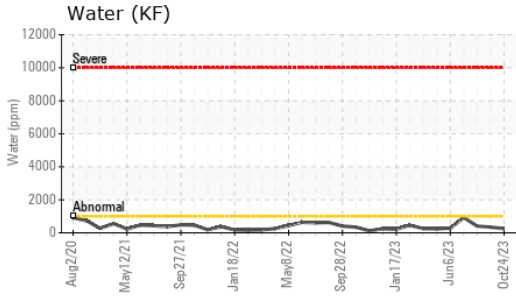
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	5	5	6
Sodium	ppm	ASTM D5185m	0	0	2
Potassium	ppm	ASTM D5185m >20	2	2	2
Water	%	ASTM D6304 >0.1	0.025	0.034	0.040
ppm Water	ppm	ASTM D6304 >1000	252.7	343.9	409.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.817	1.73	1.05



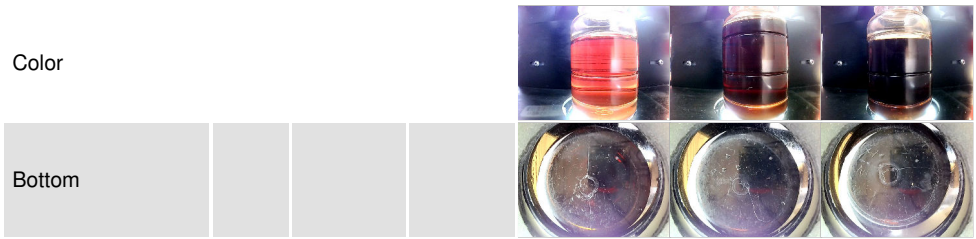
OIL ANALYSIS REPORT



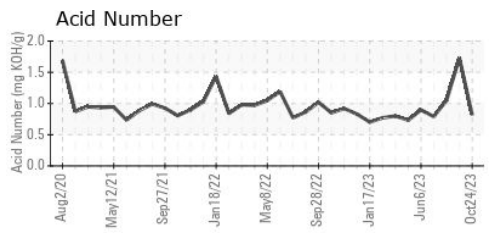
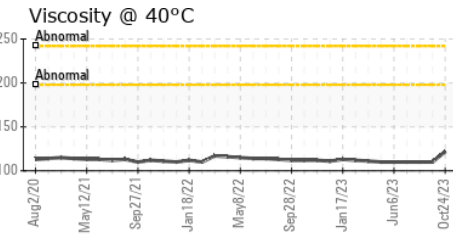
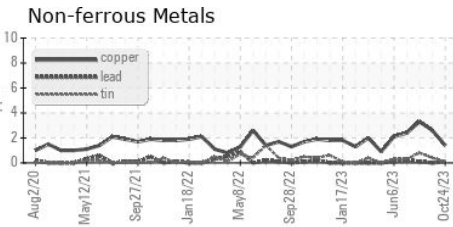
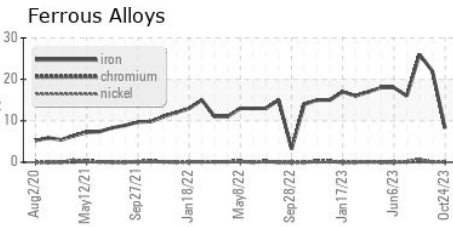
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	121.8	110	110

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0805228 **Received** : 01 Nov 2023
Lab Number : **05995694** **Diagnosed** : 07 Nov 2023
Unique Number : 10724054 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF)

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 101 12TH ST
 CATLETTSBURG, KY
 US 41169
 Contact: CORY GUMBERT
 cagumbert@marathonpetroleum.com
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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)