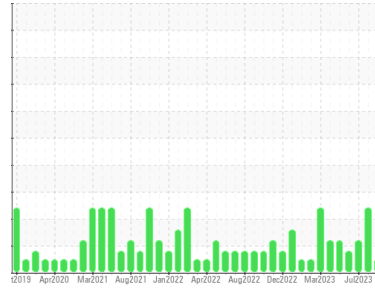




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Louisville
 Machine Id
[Louisville] Oil - Port Genset
 Component
Port Genset
 Fluid
MOBIL 15W40 (35 GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is no indication of any contamination in the oil.

Fluid Condition
 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0805351	WC0769115	WC0769310
Sample Date	Client Info			30 Aug 2023	12 Aug 2023	05 Jul 2023
Machine Age	hrs	Client Info		0	337	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<1.0	▲ 3.7	▲ 6.7
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1	7	7
Chromium	ppm	ASTM D5185m	>4	<1	1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>5	0	<1	0
Aluminum	ppm	ASTM D5185m	>12	1	2	<1
Lead	ppm	ASTM D5185m	>17	<1	1	0
Copper	ppm	ASTM D5185m	>70	<1	2	2
Tin	ppm	ASTM D5185m	>15	<1	1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		35	36	24
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		56	67	63
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		1368	1637	1545
Calcium	ppm	ASTM D5185m		1112	1349	1264
Phosphorus	ppm	ASTM D5185m		972	1148	1041
Zinc	ppm	ASTM D5185m		1158	1404	1312
Sulfur	ppm	ASTM D5185m		3431	4400	4013

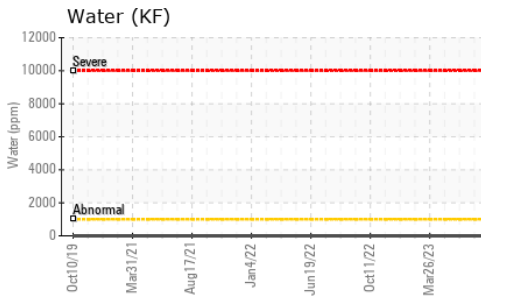
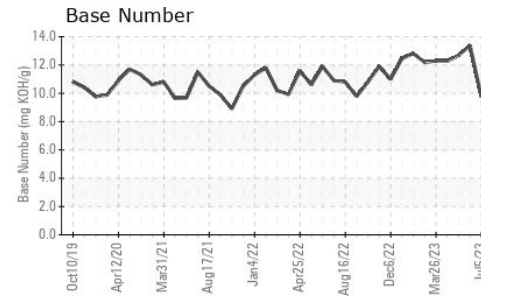
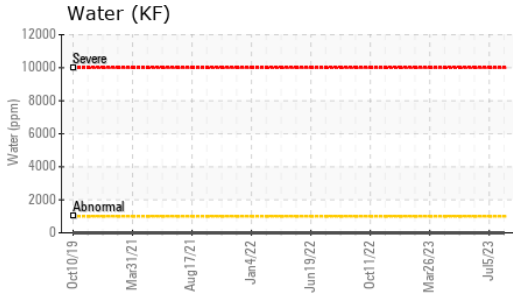
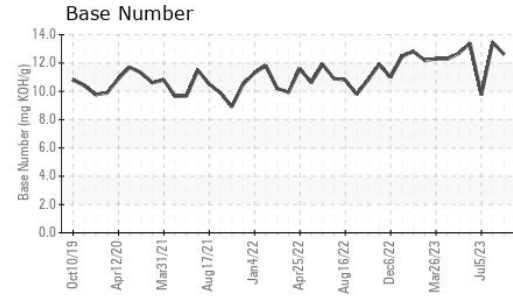
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	8	4	3
Sodium	ppm	ASTM D5185m	>118	2	4	<1
Potassium	ppm	ASTM D5185m	>20	1	2	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.7	8.6	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	20.0	21.0

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.1	16.6	19.4
Base Number (BN)	mg KOH/g	ASTM D2896		12.61	13.45	9.75



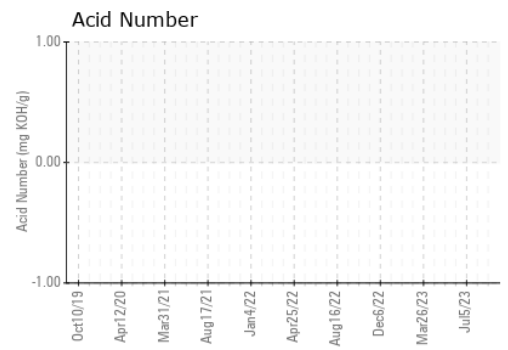
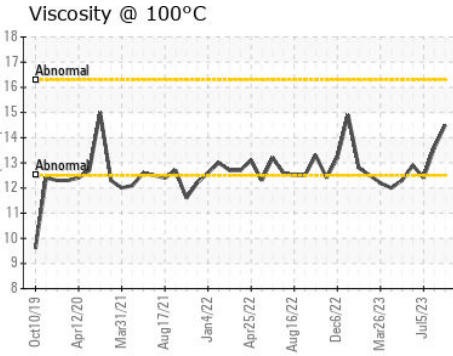
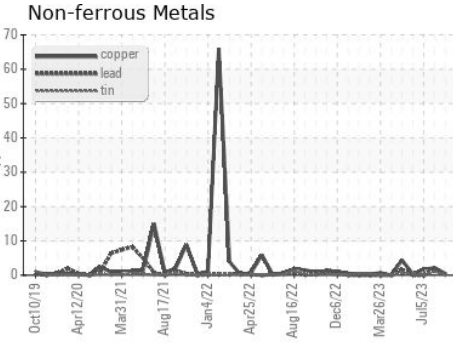
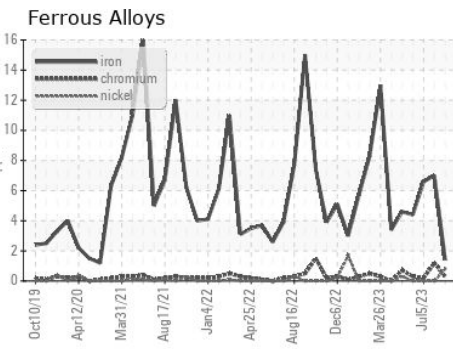
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.5	13.6	▲ 12.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0805351 **Received** : 25 Sep 2023
Lab Number : 05960770 **Diagnosed** : 27 Sep 2023
Unique Number : 10661983 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF)

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 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)