

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area Tampa Machine Id [Tampa] Oil - Port Genset Component **Port Genset**

MOBIL 15W40 (7 GAL)

Recommendation

Resample at the next service interval to monitor.

Wear

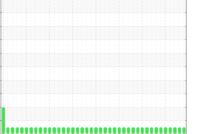
All component wear rates are normal.

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.

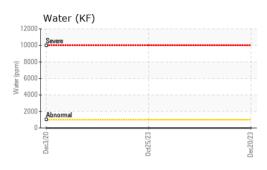


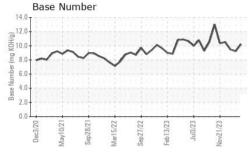


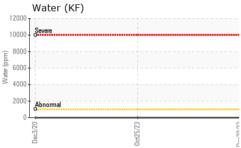
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0805292	WC0805290	WC0845933
Sample Date		Client Info		13 Mar 2024	14 Feb 2024	17 Jan 2024
Machine Age	hrs	Client Info		14780	20848	14780
Oil Age	hrs	Client Info		5720	434	5720
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	4	5	2
Chromium	ppm	ASTM D5185m	>4	<1	0	0
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>5	<1	0	<1
Aluminum	ppm	ASTM D5185m	>12	2	2	3
Lead	ppm	ASTM D5185m	>17	<1	0	3
Copper	ppm	ASTM D5185m	>70	2	4	3
Tin	ppm	ASTM D5185m	>15	<1	0	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	<1
ADDITIVES						
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	current 84	history1 76	history2 100
	ppm ppm		iimit/base			
Boron		ASTM D5185m	iimi/base	84	76	100
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limi/base	84 0	76 0	100 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	iimii/base	84 0 60	76 0 88	100 0 80
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	imi/base	84 0 60 <1	76 0 88 <1	100 0 80 2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	imi/base	84 0 60 <1 547	76 0 88 <1 597	100 0 80 2 560
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		84 0 60 <1 547 1585	76 0 88 <1 597 1658	100 0 80 2 560 1379
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		84 0 60 <1 547 1585 756	76 0 88 <1 597 1658 706	100 0 80 2 560 1379 660
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	84 0 60 <1 547 1585 756 858	76 0 88 <1 597 1658 706 845	100 0 80 2 560 1379 660 794
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	84 0 60 <1 547 1585 756 858 2898	76 0 88 <1 597 1658 706 845 3056	100 0 80 2 560 1379 660 794 2807
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	84 0 60 <1 547 1585 756 858 2898 current	76 0 88 <1 597 1658 706 845 3056 history1	100 0 80 2 560 1379 660 794 2807 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	84 0 60 <1 547 1585 756 858 2898 2898 current 4	76 0 88 <1 597 1658 706 845 3056 history1 4	100 0 80 2 560 1379 660 794 2807 history2 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >25 >118	84 0 60 <1 547 1585 756 858 2898 2898 current 4 2	76 0 88 <1 597 1658 706 845 3056 history1 4 2	100 0 80 2 560 1379 660 794 2807 kistory2 7 3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20	84 0 60 <1 547 1585 756 858 2898 <u>current</u> 4 2 2	76 0 88 <1 597 1658 706 845 3056 history1 4 2 0	100 0 80 2 560 1379 660 794 2807 history2 7 3 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 >0.1	84 0 60 <1 547 1585 756 858 2898 current 4 2 2 2 NEG	76 0 88 <1 597 1658 706 845 3056 history1 4 2 0 NEG	100 0 80 2 560 1379 660 794 2807 history2 7 3 4 NEG
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 >0.1	84 0 60 <1 547 1585 756 858 2898 <u>current</u> 4 2 2 8 NEG	76 0 88 <1 597 1658 706 845 3056 history1 4 2 0 NEG NEG	100 0 80 2 560 1379 660 794 2807 history2 7 3 4 NEG NEG
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 >0.1 limit/base	84 0 60 <1 547 1585 756 858 2898 <i>current</i> 4 2 2 NEG <i>current</i> 0.1	76 0 88 <1 597 1658 706 845 3056 history1 4 2 0 NEG history1 0.2	100 0 80 2 560 1379 660 794 2807 history2 7 3 4 8 NEG history2 0.1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Vater INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *ASTM D7844	limit/base >25 >118 >20 >0.1 limit/base	84 0 60 <1 547 1585 756 858 2898 <u>current</u> 4 2 2 NEG 0.1 6.1	76 0 88 <1 597 1658 706 845 3056 history1 4 2 0 NEG NEG history1 0.2 10.1	100 0 80 2 560 1379 660 794 2807 history2 7 3 4 NEG NEG history2 0.1 7.1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 >0.1 limit/base >20 >30	84 0 60 <1 547 1585 756 858 2898 Current 4 2 2 NEG 0.1 6.1 20.6	76 0 88 <1 597 1658 706 845 3056 history1 4 2 0 NEG NEG 0 NEG 0.2 10.1 20.6 history1	100 0 80 2 560 1379 660 794 2807 history2 7 3 4 NEG history2 0.1 7.1 19.3 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Vater INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 >0.1 limit/base >20 >30	84 0 60 <1 547 1585 756 858 2898 <u>current</u> 4 2 2 8 NEG 0.1 6.1 20.6	76 0 88 <1 597 1658 706 845 3056 history1 4 2 0 NEG history1 0.2 10.1 20.6	100 0 80 2 560 1379 660 794 2807 history2 7 3 4 NEG history2 0.1 7.1 19.3



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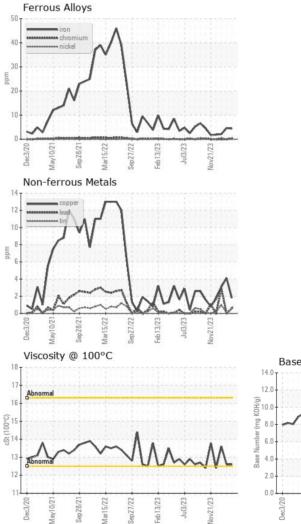


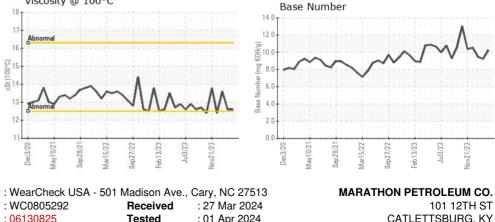




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		12.6	12.6	13.6

GRAPHS





: WC0805292 Received : 27 Mar 2024 Tested : 01 Apr 2024 CATLETTSBURG, KY Diagnosed : 01 Apr 2024 - Jonathan Hester US 41169 Test Package : IND 2 (Additional Tests: KF) Contact: CORY GUMBERT To discuss this sample report, contact Customer Service at 1-800-237-1369. cagumbert@marathonpetroleum.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (606)585-3950 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:



Laboratory

Sample No.

Lab Number : 06130825

Unique Number : 10950290

Page 2 of 2