

OIL ANALYSIS REPORT

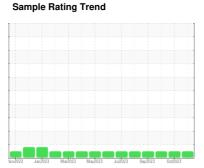
[West Virginia] Oil - Port Reduction Gear

West Virginia

MARATHON 15W40 (35 GAL)

Port Reduction Gear

condition of the oil is suitable for further service.





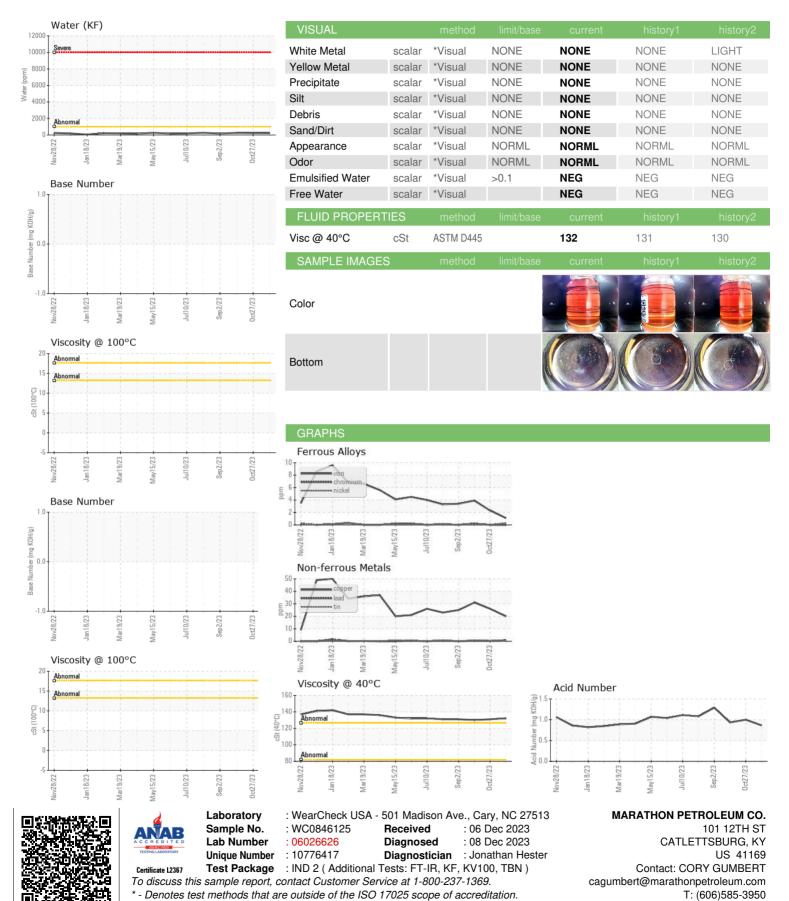
DIAGNOSIS	SAMPLE INFORM	MATION	method	limit/base	current	
Recommendation	Sample Number		Client Info		WC0846125	W
Resample at the next service interval to monitor.	Sample Date		Client Info		27 Nov 2023	27
Wear	Machine Age	hrs	Client Info		39820	39
All component wear rates are normal.	Oil Age	hrs	Client Info		1232	75
Contamination	Oil Changed		Client Info		Not Changd	N/
The water content is negligible. There is no	Sample Status				NORMAL	NO
indication of any contamination in the oil.	WEAR METALS		method	limit/base	current	
Fluid Condition The AN level is acceptable for this fluid. The	Iron	ppm	ASTM D5185m	>150	1	
The Air level is acceptable for this huid. The	Olaya yasiyyya		ACTM DE10E	40	•	

					/	,
Sample Number		Client Info		WC0846125	WC0805455	WC0804880
Sample Date		Client Info		27 Nov 2023	27 Oct 2023	01 Oct 2023
Machine Age	hrs	Client Info		39820	39163	38654
Oil Age	hrs	Client Info		1232	75	1228
Oil Changed		Client Info		Not Changd	N/A	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>150	1	2	4
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	0
Lead	ppm	ASTM D5185m	>100	<1	<1	<1
Copper	ppm	ASTM D5185m	>50	20	26	31
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		14	14	16
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		86	85	91
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		221	196	227
Calcium	ppm	ASTM D5185m		2246	2104	2180
Phosphorus	ppm	ASTM D5185m		889	862	868
Zinc	ppm	ASTM D5185m		1012	932	995
Sulfur	ppm	ASTM D5185m		4419	4150	4436
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	4	3	3
Sodium	ppm	ASTM D5185m		4	2	3

Pnospnorus	ppm	ASTIVI D5185M		889	862	868
Zinc	ppm	ASTM D5185m		1012	932	995
Sulfur	ppm	ASTM D5185m		4419	4150	4436
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	4	3	3
Sodium	ppm	ASTM D5185m		4	2	3
Potassium	ppm	ASTM D5185m	>20	0	<1	<1
Water	%	ASTM D6304	>0.1	0.021	0.024	0.026
ppm Water	ppm	ASTM D6304	>1000	218	241.9	262.9
FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.864	1.00	0.934



OIL ANALYSIS REPORT



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: x: