OIL REPORT

LAB NUMBER: [redacted] **UNIT ID:** VIKING-PORT
REPORT DATE: 10/9/2025 **CLIENT ID:** 1[redacted]
CODE: 20/1,193 **PAYMENT:** CC Online

UNIT

MAKE/MODEL: Detroit Marine 6-71
FUEL TYPE: Diesel
ADDITIONAL INFO: 1987 44 CPMY

OIL TYPE & GRADE: 40W
OIL USE INTERVAL: 150 Hours

CLIENT

[redacted]

PHONE: [redacted]
FAX:
ALT PHONE:
EMAIL: [redacted]

COMMENTS

MARK: Copper is still elevated on the port side (and at a normal level on the starboard) and is joined this time by elevated lead. Lead is a sacrificial bearing material with bronze being the next layer, so it's curious lead wasn't reading high first. This makes us wonder if we're actually seeing harmless oil cooler oxides instead. Keep an eye out for low oil pressure, just in case. The other wear metals stack up nicely against averages and there's no harmful contamination to worry about. Air and oil filtration systems are working well.

ELEMENTS IN PARTS PER MILLION

			UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
MI/HR on Oil	150		110	70					
MI/HR on Unit	550		378	150					
Sample Date	8/26/2025		9/12/2022	9/8/2019					
Make Up Oil Added	3 qts		0 qts	0 qts					
ALUMINUM	1	1	1	1					2
CHROMIUM	1	1	1	0					1
IRON	20	14	14	12					33
COPPER	**20**	9	**21**	3					5
LEAD	**4**	2	2	0					2
TIN	5	3	5	0					3
MOLYBDENUM	69	61	105	1					54
NICKEL	0	0	0	0					0
MANGANESE	0	0	0	0					0
SILVER	0	0	0	0					0
TITANIUM	0	0	0	0					0
POTASSIUM	1	1	0	1					1
BORON	117	45	5	4					49
SILICON	10	8	9	5					7
SODIUM	4	5	5	5					7
CALCIUM	1238	2188	2555	2700					1635
MAGNESIUM	370	164	69	14					548
PHOSPHORUS	641	797	987	742					975
ZINC	707	909	1083	879					1103
BARIUM	0	0	0	0					0

PROPERTIES

		Values Should Be*					
SUS Viscosity @ 210°F	70.5	70-82	73.4	76.5			
cSt Viscosity @ 100°C	13.08	13.0-16.3	13.83	14.63			
Flashpoint in °F	465	>420	490	445			
Fuel %	<0.5	<3.0	<0.5	<0.5			
Antifreeze %	0.0	0.0	0.0	0.0			
Water %	0.0	0.0	0.0	0.0			
Insolubles %	0.2	<0.6	0.2	0.3			
TBN				7.6			
TAN							
ISO Code							

*** THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE**

416 E. PETTIT AVE. FORT WAYNE, IN 46806 (260) 744-2380 www.blackstone-labs.com