

RANDY HOOPER [RANDY HOOPER] 008 622755-8

Starboard Genset

MOBIL DELVAC 1300 SUPER15W40 (7 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		MW0064656	MW0067957	MW0061283
	Sample Date		Client Info		11 Apr 2024	18 Mar 2024	15 Jan 2024
	Machine Age	hrs	Client Info		3065	2701	2069
	Oil Age	hrs	Client Info		364	0	424
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				ATTENTION	ATTENTION	ATTENTION
WEAR	Iron	ppm	ASTM D5185m	>50	8	3	6
	Chromium	ppm	ASTM D5185m		0	0	0
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>5	0	0	0
	Aluminum	ppm	ASTM D5185m		4	2	3
	Lead	ppm	ASTM D5185m		0	<1	0
	Copper	ppm	ASTM D5185m		3	1	4
	Tin	ppm	ASTM D5185m		<1	<1	<1
	Vanadium	ppm	ASTM D5185m	1.0	0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		6	6	6
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	4	<1	0
	Fuel	%	ASTM D3524	>4.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.1	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.1	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	6.8	6.2	7.4
	Sulfation	Abs/.1mm	*ASTM D7415		22.7	22.7	22.9
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
LUID CONDITION	Sodium	ppm	ASTM D5185m		2	<1	2
	Boron	ppm	ASTM D5185m	0	414	331	320
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	0	126	128	124
	Manganese	ppm	ASTM D5185m		2	1	2
	Magnesium	ppm	ASTM D5185m	0	653	705	596
	Calcium	ppm	ASTM D5185m		1513	1653	1493
	Phosphorus	ppm	ASTM D5185m		734	726	638
	Zinc	ppm	ASTM D5185m		828	907	666
	Sulfur	ppm	ASTM D5185m		2944	3129	2268
	Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	16.6	17.5
		1/01//		0.4			0.0

Base Number (BN) mg KOH/g ASTM D2896 9.4

ASTM D445 14

Visc @ 100°C cSt

9.1

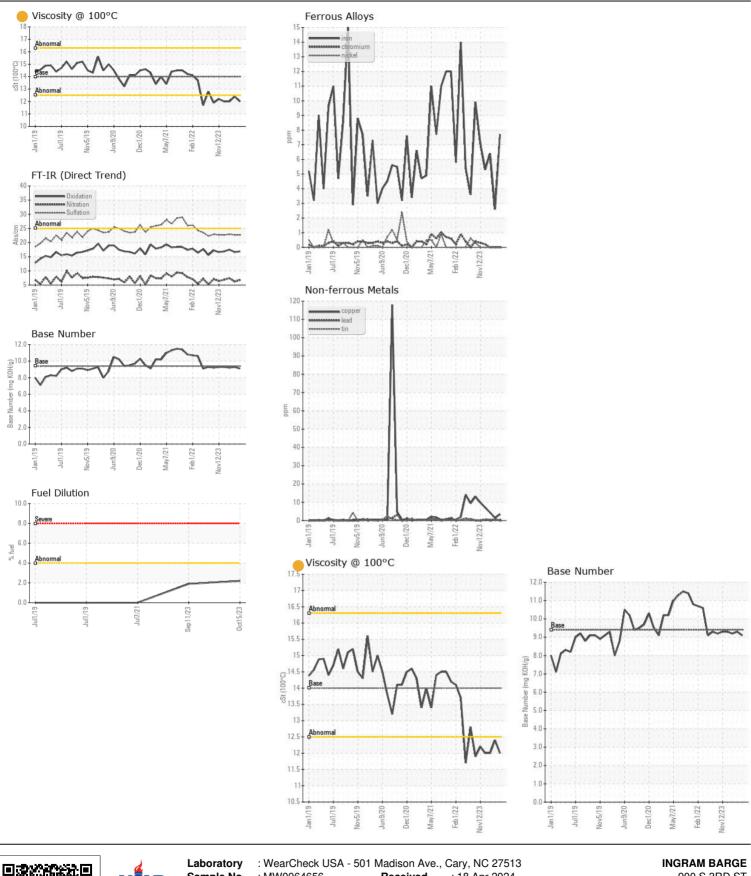
12.0

9.3

12.4

9.2

12.0



Sample No. : MW0064656 Received 900 S 3RD ST : 18 Apr 2024 Lab Number : 06153697 Tested : 23 Apr 2024 PADUCAH, KY Unique Number : 10983775 Diagnosed : 23 Apr 2024 - Don Baldridge US 42003 Test Package : MAR 2 (Additional Tests: FuelDilution, PercentFuel) Contact: JEFF BISHOP Certificate L2367 jeff.bishop@ingrambarge.com 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. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (615)695-3697

Contact/Location: JEFF BISHOP - INGPAD Page 2 of 2