



## 3573/60-24 NORTHERN LIGHTS 8442-60979 - CENTER GENSET

Sample No: VPA054064
Oil Type: SHELL 15W40

Oil Changed         Changed					
Sample Date	SAMPLE INFORMAT	TION			
Sample Date	Sample Number		VPA054064	 	
Machine Hours	•		23 Apr 2024	 	
Oil Changed Sample Status NORMAL	Machine Hours		•	 	
DIL CONDITION   Size	Oil Hours			 	
DIL CONDITION   Size	Oil Changed		Changed	 	
Visc @ 100°C   CSt	Sample Status			 	
Visc @ 100°C   CSt	OIL CONDITION				
Base Number (BN) mg KOH/g 9.5		cSt	<b>12.9</b>	 	
CONTAMINATION				 	
Net	Oxidation (PA)			 	
Net	CONTAMINATION				
Scot %		%	NFG	 	
Nitration (PA)					
Sulfation (PA)			_		
Silicon   Silicon   Silicon   Silicon   Sodium   Silicon   Sodium   Sodiu				 	
Fuel	, ,			 	
Solicon ppm   7				 	
Sodium				 	
New Netals   New	Sodium		_	 	
Copper	Potassium		_	 	
Copper	WEAR METALS				
Copper         ppm         0 <td>Iron</td> <td>maa</td> <td><b>2</b></td> <td> </td> <td></td>	Iron	maa	<b>2</b>	 	
Lead			_	 	
Tin ppm   <1	• •		_	 	
Aluminum ppm 2				 	
Chromium ppm	Aluminum		_	 	
Molybdenum         ppm         96              Nickel         ppm         0              Titanium         ppm         0              Silver         ppm         <1	Chromium			 	
Nickel ppm 0 Silver ppm 0 Silver ppm 0				 	
Titanium ppm 0 Silver ppm	Nickel			 	
Silver         ppm         I </td <td>Titanium</td> <td></td> <td>_</td> <td> </td> <td></td>	Titanium		_	 	
Manganese         ppm         <1	Silver		<b>■&lt;1</b>	 	
Vanadium         ppm         0               ADDITIVES           Calcium         ppm         1532              Magnesium         ppm         638              Zinc         ppm         1178              Phosphorus         ppm         1046              Barium         ppm         2	Manganese		<b>■&lt;1</b>	 	
Calcium         ppm         1532              Magnesium         ppm         638              Zinc         ppm         1178              Phosphorus         ppm         1046              Barium         ppm         2	Vanadium	ppm	0	 	
Calcium         ppm         1532              Magnesium         ppm         638              Zinc         ppm         1178              Phosphorus         ppm         1046              Barium         ppm         2	ADDITIVES				
Magnesium         ppm         638  -	Calcium	ppm	<b>1532</b>	 	
Zinc         ppm         1178              Phosphorus         ppm         1046              Barium         ppm         2	Magnesium			 	
Phosphorus         ppm         ■ 1046	Zinc		<b>1178</b>	 	
Barium ppm <b>□2</b>	Phosphorus			 	
	Barium			 	
	Boron	ppm		 	

## **GRAND BANKS**

450 SW SALEM RD STUART, FL US 34994 Contact: ROBERT ANTONA roberta@gbmarinegroup.com T: (609)384-5290 F:

## Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot:VP531377Unique No:11019443Signed:Don BaldridgeReport Date:11 May 2024





