



## DRAKE PENDLETON MATTHEW DOW VOLVO PENTA 3950005692 - STARBOARD IPS

Sample No: VPA049796
Oil Type: {unknown}

SAMPLE INFORMATION	CAMPLE INCOM	ISTION			
Sample Date         06 Mar 2024	SAMPLE INFORM	ATIUN			
Sample Date     06 Mar 2024	Sample Number		VPA049796	 	
Machine Hours         173			06 Mar 2024	 	
Oil Changed Sample Status         Changed NORMAL	•		173	 	
Sample Status	Oil Hours		0	 	
OIL CONDITION	Oil Changed		Changed	 	
Visc @ 40°C         cSt         105             CONTAMINATION           Water         %         NEG             Solium         ppm         c1 <th< th=""><th>Sample Status</th><th></th><th>NORMAL</th><th> </th><th></th></th<>	Sample Status		NORMAL	 	
Vater	OIL CONDITION				
Nater   %   NEG         Silicon   ppm   <1	Visc @ 40°C	cSt	■ 105	 	
Silicon       ppm       <1	CONTAMINATION	1			
Sodium	Water	%	NEG	 	
Sodium         ppm        1             WEAR METALS           PQ         10              Iron         ppm         26              Copper         ppm         0              Lead         ppm         0               Tin         ppm         0	Silicon	ppm	<1	 	
Potassium         ppm         © 0              WEAR METALS           PQ         10              Iron         ppm         26              Copper         ppm         0              Lead         ppm         0              Tin         ppm         0              Aluminum         ppm         0              Chromium         ppm         0              Molybdenum         ppm         0              Nickel         ppm         0              Silver         ppm         0              Manganese         ppm         1              Vanadium         ppm         11              ADDITIVES <td>Sodium</td> <td></td> <td><b>-</b>&lt;1</td> <td> </td> <td></td>	Sodium		<b>-</b> <1	 	
PQ	Potassium		<b>■</b> 0	 	
Iron	WEAR METALS				
Copper         ppm         2 <td>PQ</td> <td></td> <td><b>10</b></td> <td> </td> <td></td>	PQ		<b>10</b>	 	
Lead       ppm       0	Iron	ppm	<b>26</b>	 	
Tin ppm 0 Aluminum ppm 0	Copper	ppm	2	 	
Aluminum ppm 0	Lead	ppm	0	 	
Chromium         ppm         0              Molybdenum         ppm         0              Nickel         ppm         0              Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         0              Vanadium         ppm         0              ADDITIVES         Calcium         ppm         11              Magnesium         ppm         12              Zinc         ppm         4              Phosphorus         ppm         1253              Barium         ppm         0	Tin	ppm	0	 	
Molybdenum         ppm         0	Aluminum	ppm	0	 	
Nickel         ppm         0              Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         0              Vanadium         ppm         0              ADDITIVES               Calcium         ppm         11              Magnesium         ppm         12              Phosphorus         ppm         1253              Barium         ppm         0		ppm	<b>0</b>	 	
Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         1              Vanadium         ppm         0              ADDITIVES           Calcium         ppm         11              Magnesium         ppm         12              Zinc         ppm         4              Phosphorus         ppm         1253              Barium         ppm         0	Molybdenum	ppm	0	 	
Silver         ppm         0              Manganese         ppm         <1              ADDITIVES           Calcium         ppm         11              Magnesium         ppm         12              Zinc         ppm         4              Phosphorus         ppm         1253              Barium         ppm         0	Nickel	ppm		 	
Manganese         ppm         <1	Titanium	ppm	0	 	
Vanadium         ppm         0              ADDITIVES           Calcium         ppm         11              Magnesium         ppm         12              Zinc         ppm         4              Phosphorus         ppm         1253              Barium         ppm         0		ppm		 	
ADDITIVES  Calcium ppm 11  Magnesium ppm 12  Zinc ppm 4  Phosphorus ppm 1253  Barium ppm 0	<del>-</del>	ppm		 	
Calcium         ppm         11              Magnesium         ppm         12              Zinc         ppm         4              Phosphorus         ppm         1253              Barium         ppm         0	Vanadium	ppm	0	 	
Magnesium         ppm         12              Zinc         ppm         4              Phosphorus         ppm         1253              Barium         ppm         0	ADDITIVES				
Magnesium         ppm         12	Calcium	ppm	11	 	
Zinc         ppm         4              Phosphorus         ppm         1253              Barium         ppm         0			12	 	
Phosphorus         ppm         1253              Barium         ppm         0	_		4	 	
Barium ppm <b>0</b>	Phosphorus		1253	 	
	•		0	 	
	Boron	ppm	297	 	

## **Mobile Marine Services Inc**

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T: Phone 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 condition of the oil is acceptable for the time in service.

Depot:VP443016Unique No:10929990Signed:Don BaldridgeReport Date:20 Mar 2024





