



## LEHRMAN VOLVO PENTA 39400020137 - PORT IPS

Sample No: VPA021382

**Oil Type:** GEAR OIL SAE 75W90

Sample Number  Sample Date  06 Dec 2023  Machine Hours  0	SAMPLE INFORM	ΙΔΤΙΛΝ			
Sample Date         06 Dec 2023		MIUN			
Machine Hours         0 <t< td=""><td></td><td></td><td></td><td> </td><td></td></t<>				 	
Oil Hours         0	•			 	
Oil Changed Sample Status         Changed ABNORMAL					
Sample Status				 	
Oil CONDITION  Visc @ 40°C	•		_		
Visc @ 40°C   cSt   104	Sample Status		ABNORMAL	 	
CONTAMINATION	OIL CONDITION				
Water         %         ▲ 0.265             Soliticon         ppm         12   <	Visc @ 40°C	cSt	<b>104</b>	 	
Silicon       ppm       12 <t< td=""><td>CONTAMINATION</td><td>1</td><td></td><td></td><td></td></t<>	CONTAMINATION	1			
Silicon       ppm       12 <t< td=""><td>Water</td><td>%</td><td><b>△</b> 0.265</td><td> </td><td></td></t<>	Water	%	<b>△</b> 0.265	 	
Sodium         ppm         ■9              WEAR METALS           WEAR METALS           PQ         ■29              Iron         ppm         ●218              Copper         ppm         •11              Lead         ppm         •0              Aluminum         ppm         •0              Aluminum         ppm         •2              Chromium         ppm         •2              Molybdenum         ppm         •2              Nickel         ppm         •1              Nickel         ppm         •0              Silver         ppm         •0              Manganese         ppm         •13	Silicon		12	 	
Potassium         ppm         ■ <1              WEAR METALS           PQ         ■ 29              Iron         ppm         ● 218              Copper         ppm         0              Lead         ppm         0              Aluminum         ppm         0              Aluminum         ppm         2               Chromium         ppm         2               Molybdenum         ppm         1               Nickel         ppm         0               Silver         ppm         0               Wanganese         ppm         0               ADDITIVES            <	Sodium		<b>■</b> 9	 	
WEAR METALS         PQ       ■29            Iron       ppm       ▲ 218            Copper       ppm       11            Lead       ppm       0            Tin       ppm       0            Aluminum       ppm       2            Chromium       ppm       2            Molybdenum       ppm       1            Nickel       ppm       1            Nikel       ppm       0            Silver       ppm       0            Manganese       ppm       0            Vanadium       ppm       45            Magnesium       ppm       13            Phosphorus       ppm       1514	Potassium		<b>■&lt;1</b>	 	
PQ	WEAR METALS				
Iron         ppm         ▲ 218              Copper         ppm         0              Tin         ppm         0              Aluminum         ppm         2              Chromium         ppm         2              Molybdenum         ppm         1              Nickel         ppm         0              Silver         ppm         0              Manganese         ppm         0              Vanadium         ppm         0              ADDITIVES               Calcium         ppm         45              Magnesium         ppm         13              Phosphorus         ppm         1514			<b>□</b> 29	 	
Copper         ppm         11 </td <td>-</td> <td>nnm</td> <td>_</td> <td></td> <td></td>	-	nnm	_		
Lead         ppm         0					
Tin ppm 0 Aluminum ppm 2			_		
Aluminum       ppm       2            Chromium       ppm       2            Molybdenum       ppm            Nickel       ppm       1            Titanium       ppm       0            Silver       ppm       3            Manganese       ppm       0            Vanadium       ppm       45            Magnesium       ppm       13            Zinc       ppm       24            Phosphorus       ppm       1514            Barium       ppm       0					
Chromium         ppm         2              Molybdenum         ppm         <1				 	
Molybdenum         ppm              Nickel         ppm         1              Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         3              Vanadium         ppm         0              ADDITIVES           Calcium         ppm         45              Magnesium         ppm         13              Zinc         ppm         24              Phosphorus         ppm         1514              Barium         ppm         0				 	
Nickel         ppm         1 <td></td> <td></td> <td>_</td> <td> </td> <td></td>			_	 	
Titanium         ppm         0              Silver         ppm         0              Manganese         ppm         3              Vanadium         ppm         0              ADDITIVES           Calcium         ppm         45              Magnesium         ppm         13              Zinc         ppm         24              Phosphorus         ppm         1514              Barium         ppm         0			_		
Silver         ppm         0              Manganese         ppm         3              Vanadium         ppm         0              ADDITIVES           Calcium         ppm         45              Magnesium         ppm         13              Zinc         ppm         24              Phosphorus         ppm         1514              Barium         ppm         0			_	 	
Manganese         ppm         3				 	
Vanadium         ppm         0              ADDITIVES           Calcium         ppm         45              Magnesium         ppm         13              Zinc         ppm         24              Phosphorus         ppm         1514              Barium         ppm         0				 	
ADDITIVES         Calcium       ppm       45            Magnesium       ppm       13            Zinc       ppm       24            Phosphorus       ppm       1514            Barium       ppm       0	-			 	
Calcium         ppm         45              Magnesium         ppm         13              Zinc         ppm         24              Phosphorus         ppm         1514              Barium         ppm         0	ANNITIVES				
Magnesium         ppm         13               Zinc         ppm         24               Phosphorus         ppm         1514               Barium         ppm         0					
Zinc         ppm         24              Phosphorus         ppm         1514              Barium         ppm         0			_	 	
Phosphorus         ppm         1514              Barium         ppm         0	_	ppm	_	 	
Barium ppm <b>0</b>			_	 	
	·	ppm	_	 	
Boron ppm <b>309</b>	Barium	ppm	_	 	
	Boron	ppm	■309	 	

## **FULL KEEL MARINE SERVICES**

314 LEGION AVE

ANNAPOLIS, MD US 21401 Contact: Service Manager FULLKEELMARINESERIVES@GMAIL.COM T: (410)507-3542 F:

## Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Gear wear is indicated. There is a light concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

Depot:VP1298996Unique No:10782300Signed:Jonathan HesterReport Date:15 Dec 2023

## **OIL ANALYSIS REPORT**



