OIL ANALYSIS REPORT

VOLVO PENTA

RITTER KOHLER SGM32JGLF - GENSET

Sample No: VPA058515

Oil Type: VOLVO PENTA SAE 15W40

Sample Date 19 Feb 2024 Machine Hours 0 Oil Hours 0 Oil Changed Changed Sample Status ABNORMAL VIsc @ 100°C cSt ■12.9 Base Number (BN) mg KOH/g 8.7 CONTAMINATION Vater % NEG Solf Xinton (PA) % 55 Sulfation (PA) % 55 Sulfation (PA) % 54 Sulfation (PA) % 54 Sulfation (PA) % 54 -	Sample Number		VPA058515	 	
Machine Hours 0 Oil Hours 0 Sample Status ABNORMAL Somple Status ABNORMAL OIL CONDITION Visc @ 100°C CSt 12.9 Base Number (BN) mg KOH/g 8.7 Oxidation (PA) % 72 Soot % % NEG Sulfation (PA) % 54 Sulfation (PA) % 55 Sulfation (PA) % 54 Sulfation (PA) % 54 Sulfation (PA) % 54 Sodium ppm 0 <				 	
Oil Changed Changed Sample Status ABNORMAL Oil CONDITION Visc @ 100°C CSt 12.9 Base Number (BN) mg KOH/g 8.7 Oxidation (PA) % 72 COTTAMINATION Water % NEG Soot % % 0.1 Sulfation (PA) % 54 Sulfation (PA) % 54 Sodium ppm 64 Veassium ppm 2 Kodium ppm 21			0	 	
Sample Status ABNORMAL OIL CONDITION Base Number (BN) mg KOH/g 8.7 Colidation (PA) % 72 CONTAMINATION Water % NEG Soot % % 0.1 Soot % % 0.1 Solfation (PA) % 54 Sulfation (PA) % 55 Soldium ppm 44 VEAR METALS Copper ppm <1	Oil Hours		0	 	
Sample Status ABNORMAL OIL CONDITION Base Number (BN) mg KOH/g 8.7 Coldation (PA) % 72 CONTAMINATION Water % NEG Soot % % 0.1 Soot % % 0.1 Soot % % 1.0 Solfation (PA) % 5.5 Silfation (PA) % 5.4 Sodium ppm 4 Sodium ppm 9 <th>Oil Changed</th> <th></th> <th>Changed</th> <th> </th> <th></th>	Oil Changed		Changed	 	
Visc @ 100°C cSt 12.9 Base Number (BN) mg KOH/g 8.7 Dxidation (PA) % 72 CONTAMINATION Water % NEG Soot % % 0.1 Soot % % 55 Sulfation (PA) % 55 Silcion ppm 54 Fuel % <1.0 Sodium ppm 0 Potassium ppm 2 Read ppm 2 Itan ppm 2	-		-	 	
Visc @ 100°C cSt 12.9 Base Number (BN) mg KOH/g 8.7 Cxidation (PA) % 72 CONTAMINATION Water % NEG Soot % % 0.1 Soot % % 54 Sulfation (PA) % 55 Sulfation (PA) % <1.0	OIL CONDITION				
Base Number (BN) mg KOH/g 8.7 Oxidation (PA) % 72 CONTAMINATION Water % NEG Soot % % 0.1 Soot % % 0.1 Soot % % 0.1 Soot % % 54 Glycol % NEG Soliton ppm 4 Soliton ppm 0 Soliton ppm 1 Soliton ppm 1 Itron pp	Visc @ 100°C	cSt	12.9	 	
Oxidation (PA) % 72 CONTAMINATION Water % NEG Soct % © 0.1 Nitration (PA) % 54 Sulfation (PA) % 55 Glycol % NEG Sulfation (PA) % 55 Glycol % NEG Sulfation (PA) % 54 Sodium ppm 4 Sodium ppm 9 WEAR METALS Aluminum ppm <1 Aluminum ppm 21 <td>Base Number (BN)</td> <td>mg KOH/g</td> <td>8.7</td> <td> </td> <td></td>	Base Number (BN)	mg KOH/g	8.7	 	
Water % NEG Soot % % 0.1 Nitration (PA) % 54 Sulfation (PA) % 55 Glycol % NEG Sulfation (PA) % Glycol % NEG Sulfation (PA) % Sulfation (PA) % Soldium ppm 44 Soldium ppm 0 Recar METALS Lead ppm			72	 	
Soot % % 0.1 Nitration (PA) % 54 Sulfation (PA) % 55 Glycol % NEG Fuel % <1.0	CONTAMINATION				
Nitration (PA) % 54 Sulfation (PA) % 55 Glycol % NEG Fuel % <1.0	Water	%	NEG	 	
Nitration (PA) % 54 Sulfation (PA) % 55 Glycol % NEG Fuel % <1.0				 	
Sulfation (PA) % 55 Glycol % NEG Fuel % <1.0	Nitration (PA)	%		 	
Glycol % NEG Fuel % <1.0	Sulfation (PA)	%	55	 	
Fuel % <1.0		%	NEG	 	
Sodium ppm 4 Potassium ppm 0 WEAR METALS Iron ppm 9 Copper ppm 2 Lead ppm <1	-	%	<1.0	 	
Sodium ppm 4 Potassium ppm 0 WEAR METALS Copper ppm 2 Lead ppm <1	Silicon		5 4	 	
Potassium ppm 0 WEAR METALS Copper ppm 9 Copper ppm 2 Lead ppm <1	Sodium		4	 	
WEAR METALS iron ppm 9 Copper ppm 2 Lead ppm <1				 	
ron ppm 9 Copper ppm 2 Lead ppm <1					
Copper pm 2 Lead ppm <1	WEAR METALS				
Lead ppm <1	Iron	ppm	9	 	
Tin ppm <1	Copper	ppm	2	 	
Aluminum ppm <1	_ead	ppm	 <1	 	
Chromium ppm 2 Molybdenum ppm 51 Nickel ppm 0 Silver ppm 0 Silver ppm 0 Manganese ppm 0 Vanadium ppm 0 ADDITIVES Calcium ppm 1037 Magnesium ppm 1124 Phosphorus ppm 927 Barium ppm 0		ppm	 <1	 	
Molybdenum ppm 51 Nickel ppm 0 Titanium ppm <1	Aluminum	ppm		 	
Nickel ppm 0 Titanium ppm <1	Chromium	ppm	2	 	
Titanium ppm <1	-	ppm	_	 	
Silver ppm 0 Manganese ppm 1 Vanadium ppm 0 ADDITIVES Calcium ppm 1037 Magnesium ppm 1037 Zinc ppm 1124 Phosphorus ppm 927 Barium ppm 0	Nickel	ppm	0	 	
Manganese ppm 1 Vanadium ppm 0 ADDITIVES Calcium ppm 1037 Magnesium ppm 1037 Zalcium ppm 1124 Phosphorus ppm 927 Barium ppm 0	Titanium	ppm	<1	 	
Vanadium ppm 0 ADDITIVES Calcium ppm 1037 Magnesium ppm 878 Zinc ppm 1124 Phosphorus ppm 927 Barium ppm 0	Silver	ppm		 	
ADDITIVES Calcium ppm 1037 Magnesium ppm 878 Zinc ppm 1124 Phosphorus ppm 927 Barium ppm 0	Manganese	ppm	1	 	
Calcium ppm 1037 Magnesium ppm 878 Zinc ppm 1124 Phosphorus ppm 927 Barium ppm 0	Vanadium	ppm	0	 	
Magnesium ppm 878 Zinc ppm 1124 Phosphorus ppm 927 Barium ppm 0					
Zinc ppm 1124 Phosphorus ppm 927 Barium ppm 0					
Phosphorus ppm 927 Barium ppm 0		ppm		 	
Barium ppm 0	Calcium				
	Calcium Magnesium	ppm	878	 	
	Calcium Magnesium Zinc	ppm ppm	■ 878 ■ 1124	 	
	Calcium Magnesium Zinc Phosphorus	ppm ppm ppm	878 1124 927	 	

BAY MARINE

3 E MADISON ST WAUKEGAN, IL US 60085 Contact: BRENDAN COWHEY brendan@baymarine.net T: (847)336-2628 E-

Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material. The BN result indicates that there is suitable alkalinity remaining in the oil.

 Depot:
 VP1174336

 Unique No:
 10886742

 Signed:
 Don Baldridge

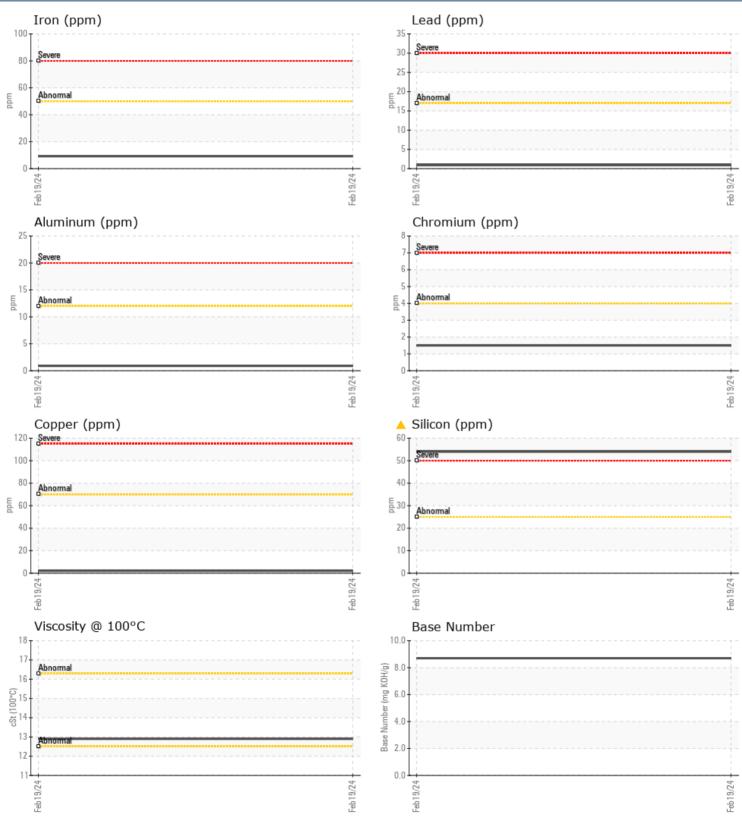
 Report Date:
 21 Feb 2024

Contact/Location: BRENDAN COWHEY - VP1174336

OIL ANALYSIS REPORT



GRAPHS



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Contact/Location: BRENDAN COWHEY - VP1174336