# **OIL ANALYSIS REPORT**

# NADINE URCIUOLI KOHLER KOHLER 13EOZD (S/N NOT GIVEN) - GENSET

Sample No: VPA051506

Oil Type: DIESEL ENGINE OIL SAE 15W40

## SAMPLE INFORMATION

Machine Hours       139            Dil Hours       0            Dil Changed       N/A            ample Status       NORMAL            OIL CONDITION             fisc @ 100°C       cSt       13.8            fisc @ 100°C       cSt       13.8            oxidation (PA)       Mg KOH/g       8.0            oxidation (PA)       %       0.1            cott%       %       0.1            ulfation (PA)       %       51            silycol       %       47             ulfation (PA)       %       <1.0              silycol       %       <1.0               odium       ppm<					
ample Date       03 Aug 2023            Aachine Hours       139            Dil Hours       0            Dil Hours       0            Dil Changed       N/A            ample Status       NORMAL            OIL CONDITION             fisc @ 100°C       cSt       13.8            asse Number (BN)       mg KOH/g       8.0            Did dation (PA)       %       48            cont %       %       0.1            Dif fation (PA)       %       47            ulfation (PA)       %       47            ilicon       % <tl>            uel       %       <tl><tl>            odium       ppm<td>Sample Number</td><td></td><td>VPA051506</td><td> </td><td></td></tl></tl></tl>	Sample Number		VPA051506	 	
Machine Hours       139            Dil Hours       0            Dil Changed       N/A            ample Status       NORMAL            OIL CONDITION             fisc @ 100°C       cSt       13.8            fisc @ 100°C       cSt       13.8            oxidation (PA)       Mg KOH/g       8.0            oxidation (PA)       %       0.1            oot %       %       0.1            ulfation (PA)       %       47            silycol       %       NEG             uel       %       <1.0	Sample Date		03 Aug 2023	 	
N/A            ample Status       NORMAL            OIL CONDITION             risc @ 100°C       cSt       13.8            sase Number (BN)       mg KOH/g       8.0            oxidation (PA)       %       48            oot %       %       0.1            oot %       %       47            silycol       %       NEG            uel       %       <1.0	Machine Hours			 	
NORMAL              OIL CONDITION              risc @ 100°C         cSt         13.8             ase Number (BN)         mg KOH/g         8.0             oxidation (PA)         %         48              cONTAMINATION         -               oot %         %         0.1               oot %         %         0.1               oot %         %         0.1               litration (PA)         %         47               slycol         %         NEG               uel         %         <1.0	Oil Hours		0	 	
OIL CONDITION         OIL CONDITION         Instantion of the second sec	Oil Changed		N/A	 	
Tisc @ 100°C       cSt       13.8            ase Number (BN)       mg KOH/g       8.0            oxidation (PA)       %       48            CONTAMINATION             soot %       %       0.1            Nitration (PA)       %       51            ulfation (PA)       %       47            slycol       %       NEG            uel       %       <1.0	Sample Status		NORMAL	 	
Tisc @ 100°C       cSt       13.8            ase Number (BN)       mg KOH/g       8.0            oxidation (PA)       %       48            CONTAMINATION             soot %       %       0.1            Nitration (PA)       %       51            ulfation (PA)       %       47            slycol       %       NEG            uel       %       <1.0					
ase Number (BN)       mg KOH/g       8.0            oxidation (PA)       %       48            CONTAMINATION             oot %       %       0.1            litration (PA)       %       51            ulfation (PA)       %       47            silycol       %       NEG            uel       %       <1.0	OIL CONDITION				
ase Number (BN)       mg KOH/g       8.0            oxidation (PA)       %       48            CONTAMINATION              oot %       %       0.1            litration (PA)       %       51            ulfation (PA)       %       47            silycol       %       NEG            uel       %       <1.0	Visc @ 100°C	cSt	13.8	 	
Dxidation (PA)       %       48            CONTAMINATION              oot %       %       0.1             litration (PA)       %       51             litration (PA)       %       47             silycol       %       NEG             uel       %       <1.0	-			 	
CONTAMINATION         oot %       %       0.1            Nitration (PA)       %       51            ulfation (PA)       %       47            Silycol       %       NEG            uel       %       <1.0	. ,	5 . 5	-	 	
oot %       %       0.1           litration (PA)       %       51           ulfation (PA)       %       47           slycol       %       NEG           uel       %       <1.0           odium       ppm       8           odium       ppm       3           otassium       ppm       5					
oot %         %         0.1             litration (PA)         %         51              ulfation (PA)         %         47              slycol         %         NEG              uel         %         <1.0	CONTAMINATION				
Nitration (PA)       %       51            ulfation (PA)       %       47            silycol       %       NEG            uel       %       <1.0					
ulfation (PA)       %       47            slycol       %       NEG            uel       %       <1.0				 	
%       NEG            uel       %       <1.0	Nitration (PA)	%	51	 	
uel       %       <1.0	Sulfation (PA)	%	47	 	
ilicon       ppm       8            odium       ppm       3            otassium       ppm       5	Glycol	%	NEG	 	
odium         ppm         3              otassium         ppm         5	Fuel	%	<1.0	 	
otassium ppm <b>5</b>	Silicon	ppm	8	 	
	Sodium	ppm	3	 	
	Potassium	ppm	5	 	

#### WEAR METALS

Iron	ppm	2	 	
Copper	ppm	■ <1	 	
Lead	ppm	■ <1	 	
Tin	ppm	0	 	
Aluminum	ppm	<b></b> <1	 	
Chromium	ppm	0	 	
Molybdenum	ppm	<b></b> <1	 	
Nickel	ppm	0	 	
Titanium	ppm	<b></b> <1	 	
Silver	ppm	0	 	
Manganese	ppm	<b></b> <1	 	
Vanadium	ppm	<1	 	

### ADDITIVES

Calcium	ppm	<b>1290</b>	 	
Magnesium	ppm	684	 	
Zinc	ppm	<b>784</b>	 	
Phosphorus	ppm	654	 	
Barium	ppm	0	 	
Boron	ppm	97	 	

#### **Helmuts Marine Service**

619 Canal Street SAN RAFAEL, CA US 94901-3545 Contact: NADINE URCIUOLI SERVICE@HELMUTSMARINE.COM T: x: F: x:

### 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:
 VP152741

 Unique No:
 10587860

 Signed:
 Don Baldridge

 Report Date:
 07 Aug 2023

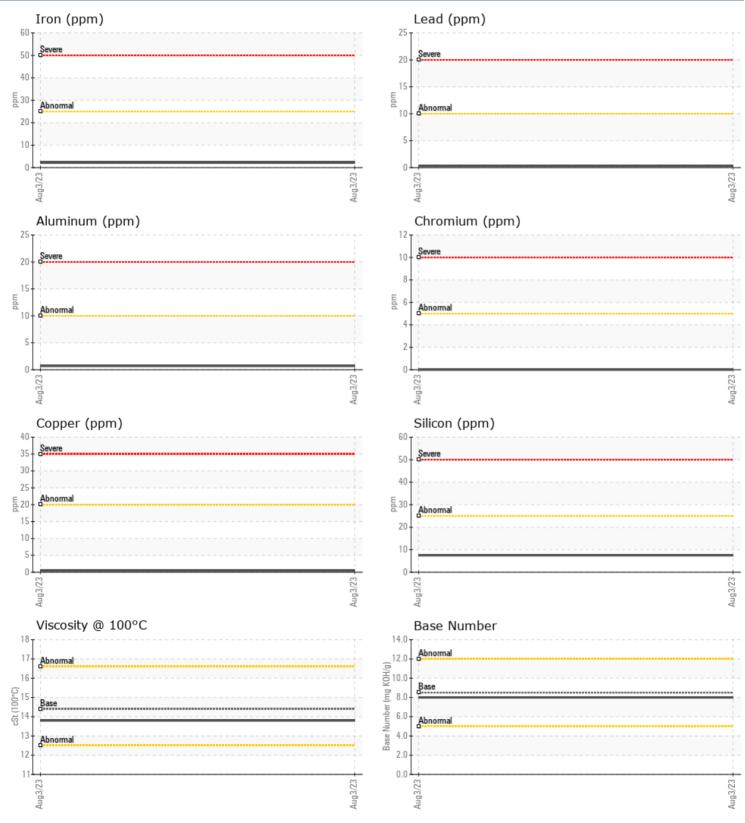
Contact/Location: NADINE URCIUOLI - VP152741



# **OIL ANALYSIS REPORT**



#### GRAPHS



Report Id: VP152741 [WUSCAR] 05915946 (Generated: 08/08/2023 15:45:01) Rev: 1

Contact/Location: NADINE URCIUOLI - VP152741