

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

DEMI JOHN T-2206 Component Diesel Engine

Fluid DIESEL ENGINE OIL SAE 40 (--- QTS)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

## Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

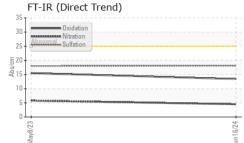
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0941904	WC0792371	
Sample Date		Client Info		16 Jun 2024	08 May 2023	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	٨	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	5	20	
Chromium	ppm	ASTM D5185m	>20	0	<1	
Nickel	ppm	ASTM D5185m	>4	<1	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	2	4	
Lead	ppm	ASTM D5185m	>40	0	1	
Copper	ppm	ASTM D5185m	>330	1	<1	
Tin	ppm	ASTM D5185m	>15	0	<1	
Vanadium	ppm	ASTM D5185m		0	<1	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method				history2
Boron	ppm	method ASTM D5185m	limit/base	current	history1 185	history2
	ppm ppm					
Boron Barium	ppm	ASTM D5185m	250	118	185	
Boron		ASTM D5185m ASTM D5185m	250 10	118 0	185 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	250 10	118 0 48	185 0 8	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	118 0 48 <1	185 0 8 <1	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	118 0 48 <1 331	185 0 8 <1 64	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000	118 0 48 <1 331 1629	185 0 8 <1 64 2037	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150	118 0 48 <1 331 1629 970	185 0 8 <1 64 2037 982	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350	118 0 48 <1 331 1629 970 1108	185 0 8 <1 64 2037 982 1167	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250	118 0 48 <1 331 1629 970 1108 3595	185 0 8 <1 64 2037 982 1167 4260	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>limit/base</b> >25	118 0 48 <1 331 1629 970 1108 3595 current	185 0 8 <1 64 2037 982 1167 4260 history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>limit/base</b> >25 >216	118 0 48 <1 331 1629 970 1108 3595 current 3	185 0 8 <1 64 2037 982 1167 4260 history1 4	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>limit/base</b> >25 >216	118 0 48 <1 331 1629 970 1108 3595 <u>current</u> 3 1	185 0 8 <1 64 2037 982 1167 4260 history1 4 2	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>limit/base</b> >25 >216 >20	118 0 48 <1 331 1629 970 1108 3595 current 3 1 5	185 0 8 <1 64 2037 982 1167 4260 history1 4 2 13	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>Imit/base</b> >25 >216 >20 <b>Imit/base</b>	118 0 48 <1 331 1629 970 1108 3595 current 3 1 5 5 current	185 0 8 <1 64 2037 982 1167 4260 history1 4 2 13 history1	     history2    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm   ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>limit/base</b> >25 >216 >20 <b>limit/base</b> >3	118 0 48 <1 331 1629 970 1108 3595 current 3 1 5 current 0.1	185 0 8 <1 64 2037 982 1167 4260 history1 4 2 13 history1 0.1	     history2  history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>i</b> mit/base >25 >216 >20 <b>i</b> mit/base >3 >20	118 0 48 <1 331 1629 970 1108 3595 <u>current</u> 3 1 5 <u>current</u> 0.1 4.5	185 0 8 <1 64 2037 982 1167 4260 history1 4 2 13 history1 0.1 5.8	history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>imit/base</b> >25 >216 >20 <b>imit/base</b> >3 >20 >30	118 0 48 <1 331 1629 970 1108 3595 <u>current</u> 3 1 5 <u>current</u> 0.1 4.5 18.1	185 0 8 <1 64 2037 982 1167 4260 history1 4 2 13 history1 0.1 5.8 18.0	     history2  history2  history2

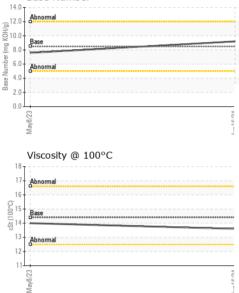


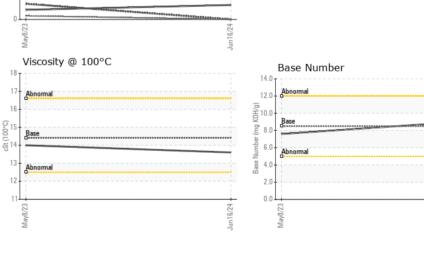
Base Number

# **OIL ANALYSIS REPORT**

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.6	14.0	
GRAPHS						
Ferrous Alloys						
20 iron						
15+						
15						
Ē.10						
<u>Ē</u> 10-						
हू 10 5						
5-			_			
5 -			16/24			
5 -			Jun16/24			
5 -	s		Jun16/24			







SIDDONS-MARTIN EMERGENCY GROUP Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : WC0941904 Received : 17 Jun 2024 4401 REX RD Lab Number : 06211279 Tested : 18 Jun 2024 FRIENDSWOOD, TX Unique Number : 11084143 Diagnosed : 18 Jun 2024 - Wes Davis US 77546 Test Package : CONST (Additional Tests: TBN) **Contact: Natalie Perrone** Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. nperrone@siddons-martin.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact/Location: Natalie Perrone - SIDFRI

16/24