

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

#### Area [62005494099] Machine Id 95

#### Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 40 (--- QTS)

### DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. Please specify the component make and model with 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.

				Jan2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0723361		
Sample Date		Client Info		23 Jan 2023		
Machine Age	mls	Client Info		249147		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	4		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	0		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
oddinidini	1.1			v		
ADDITIVES	<b>FF</b>	method	limit/base	current	history1	history2
	ppm		limit/base 250	-		history2
ADDITIVES		method		current	history1	
ADDITIVES Boron	ppm	method ASTM D5185m	250	current 99	history1	
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	250 10	current 99 0	history1 	
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	250 10	current 99 0 8	history1  	
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	current 99 0 8 <1	history1   	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	current 99 0 8 <1 680	history1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000	Current 99 0 8 <1 680 1334	history1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150	Current 99 0 8 <1 680 1334 1001	history1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350	current           99           0           8           <1           680           1334           1001           1208	history1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250	Current 99 0 8 <1 680 1334 1001 1208 4082	history1	
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method 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	current           99           0           8           <1           680           1334           1001           1208           4082           current	history1	     history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method 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 imit/base >25	current           99           0           8           <1           680           1334           1001           1208           4082           current           7	history1 history1	    history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>limit/base</b> >25 >216	current           99           0           8           <1           680           1334           1001           1208           4082           current           7           2	history1	      history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>limit/base</b> >25 >216 >20	current           99           0           8           <1           680           1334           1001           1208           4082           current           7           2           3	history1 history1	     history2  
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>Imit/base</b> >25 >216 >20 <b>Imit/base</b>	current           99           0           8           <1           680           1334           1001           1208           4082           current           7           2           3           current	history1 history1 history1 history1	     history2   history2
ADDITIVES 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	method           ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>limit/base</b> >25 >216 >20 <b>limit/base</b> >3	current           99           0           8           <1           680           1334           1001           1208           4082           current           7           2           3           current           0.1	history1 history1 history1 history1	    history2  history2  history2
ADDITIVES 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	method           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	current           99           0           8           <1           680           1334           1001           1208           4082           current           7           2           3           current           0.1           6.8	history1                        history1            history1            history1               history1	     history2   history2
ADDITIVES 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	method           ASTM D5185m           ASTM D5185m	250 10 100 450 3000 1150 1350 4250 <b>imit/base</b> >216 >216 >20 <b>imit/base</b> >3 >20 >30	current           99           0           8           <1           680           1334           1001           1208           4082           current           7           2           3           current           0.1           6.8           18.5	history1                        history1            history1            history1               history1 </th <th>     history2  history2  history2</th>	     history2  history2  history2
ADDITIVES 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	method           ASTM D5185m           ASTM D7185           method           *ASTM D7624           *ASTM D7415           method	250 10 100 450 3000 1150 1350 4250 20 216 >216 >20 >20 imit/base >3 >20 >30	current           99           0           8           <1           680           1334           1001           1208           4082           current           7           2           3           current           0.1           6.8           18.5           current	history1                           history1            history1               history1               history1            history1            history1	     history2  history2  history2  history2



1

100-c)

13

12

Ba

Jan 23/23

# **OIL ANALYSIS REPORT**

scalar

scalar

scalar

scalar

scalar

White Metal

Precipitate

Silt

Debris

Sand/Dirt

Yellow Metal

\*Visual

\*Visual

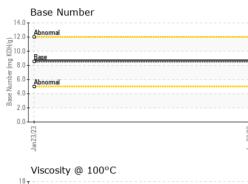
\*Visual

\*Visual

\*Visual

scalar \*Visual

NONE





Contact/Location: DEBRA MOORE - CASYANNC