

# **OIL ANALYSIS REPORT**

Sample Rating Trend

DIRT



Machine Id **7212124** 

Component **Diesel Engine** 

{not provided} (--- GAL)

### **DIAGNOSIS**

#### Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

## Wear

All component wear rates are normal.

#### Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

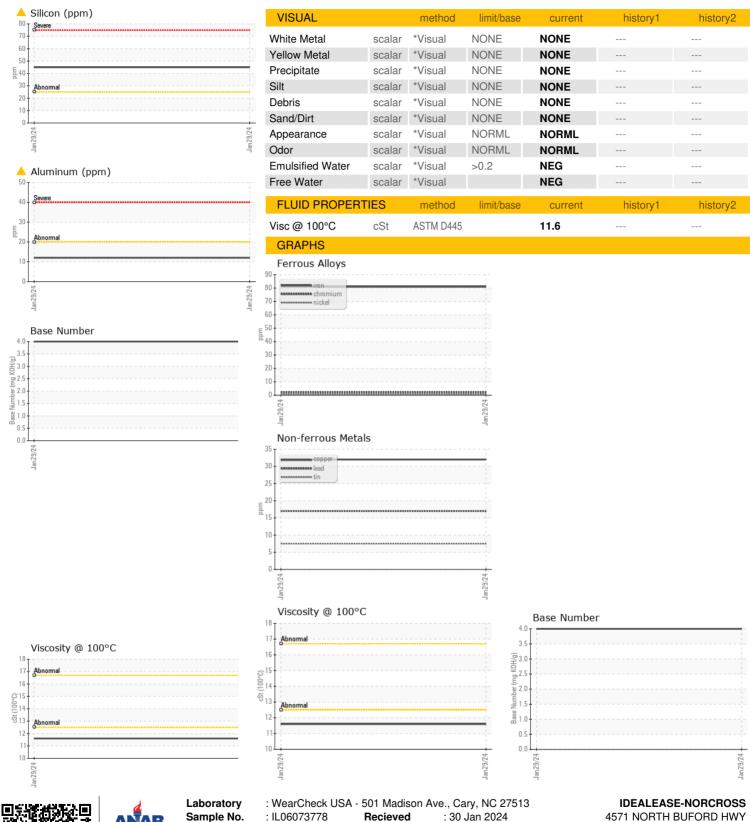
## **Fluid Condition**

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.

				lan 2024		
SAMPLE INFORM	ΛΔΤΙΩΝΙ	method	limit/base	current	history1	history2
	7771014		IIIIII Dasc			
Sample Number		Client Info		IL06073778		
Sample Date	la	Client Info		29 Jan 2024		
Machine Age Oil Age	mls mls	Client Info		0		
Oil Changed	11115	Client Info		N/A		
Sample Status		Ciletit iiiio		ABNORMAL		
·				-		
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	81		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	<b>1</b> 2		
Lead	ppm	ASTM D5185m	>40	17		
Copper	ppm	ASTM D5185m	>330	32		
Tin	ppm	ASTM D5185m	>15	8		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
Cadmium  ADDITIVES	ppm	ASTM D5185m  method	limit/base	<b>o</b> current	history1	history2
ADDITIVES	ppm		limit/base			
ADDITIVES Boron		method	limit/base	current	history1	history2
ADDITIVES Boron Barium	ppm	method ASTM D5185m	limit/base	current 23	history1	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 23 0	history1	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	23 0 63	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	limit/base	current 23 0 63	history1	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium	ppm ppm ppm ppm	method  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m  ASTM D5185m	limit/base	current 23 0 63 6 415	history1	history2   
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm	method  ASTM D5185m	limit/base	current 23 0 63 6 415 1693	history1	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	limit/base	current 23 0 63 6 415 1693 879	history1	history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	limit/base	current 23 0 63 6 415 1693 879 1181	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m		current 23 0 63 6 415 1693 879 1181 2823	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	limit/base	current  23  0  63  6  415  1693  879  1181  2823  current	history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	limit/base	current  23  0  63  6  415  1693  879  1181  2823  current  45	history1 history1	history2 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >25	current  23  0 63 6 415 1693 879 1181 2823 current  45 2	history1 history1	history2 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	limit/base >25 >20	current  23  0 63 6 415 1693 879 1181 2823  current  45 2	history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	limit/base >25 >20 >5 limit/base	current  23  0 63 6 415 1693 879 1181 2823 current  45 2 20 <1.0 current	history1 history1	history2 history2
ADDITIVES  Boron  Barium  Molybdenum  Manganese  Magnesium  Calcium  Phosphorus  Zinc  Sulfur  CONTAMINANTS  Silicon  Sodium  Potassium  Fuel  INFRA-RED  Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m ASTM D7844	limit/base >25 >20 >5 limit/base >3	current  23  0 63 6 415 1693 879 1181 2823  current  ▲ 45 2 20 <1.0  current  0.6	history1 history1 history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m	limit/base >25 >20 >5 limit/base	current  23  0 63 6 415 1693 879 1181 2823 current  45 2 20 <1.0 current	history1 history1 history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7614	limit/base >25   >20   >5   limit/base >3   >20   >30   >30	current  23  0 63 6 415 1693 879 1181 2823 current  ▲ 45 2 20 <1.0 current  0.6 12.8 27.0	history1 history1 history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m  method  ASTM D5185m ASTM D78185m ASTM D7824  *ASTM D7844  *ASTM D7624  *ASTM D7415  method	limit/base >25 >20 >5 limit/base >3 >20 >30 limit/base	current  23  0  63  6  415  1693  879  1181  2823  current  ▲ 45  2  20  <1.0  current  0.6  12.8  27.0  current	history1 history1 history1 history1	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method  ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7614	limit/base >25   >20   >5   limit/base >3   >20   >30   >30	current  23  0 63 6 415 1693 879 1181 2823 current  ▲ 45 2 20 <1.0 current  0.6 12.8 27.0	history1 history1 history1	history2 history2 history2



## **OIL ANALYSIS REPORT**







Sample No. Lab Number **Unique Number** 

: 06073778

: IL06073778 : 10855869

Recieved

Diagnosed : 31 Jan 2024 Diagnostician : Sean Felton

**Test Package**: FLEET (Additional Tests: FuelDilution) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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