

# **OIL ANALYSIS REPORT**

Sample Rating Trend

## NORMAL

Area [20-170] Machine Id 20-170 (S/N 5KJJAEDR4HPJB1160) Component

Diesel Engine Fluid NOT GIVEN (--- GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. 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.

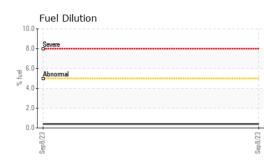
#### Fluid Condition

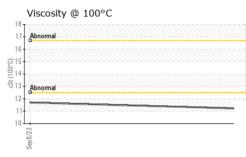
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

			Sep2023	Dec2023		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0104623	PCA0104616	
Sample Date		Client Info		02 Dec 2023	08 Sep 2023	
Machine Age	mls	Client Info		359601	348614	
Oil Age	mls	Client Info		359601	348614	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	ABNORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron		ASTM D5185m	>100	14	13	
Chromium	ppm ppm	ASTM D5185m	>20	14	2	
Nickel		ASTM D5185m	>20	0	0	
	ppm	ASTM D5185m	>4	0	<1	
Titanium Silver	ppm	ASTM D5185m	>3	0	<1	
	ppm		>3 >20	6	10	
Aluminum	ppm	ASTM D5185m		-		
Lead	ppm	ASTM D5185m	>40	0	0	
Copper	ppm	ASTM D5185m	>330	1	2	
Tin	ppm		>15	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 7	history1 4	history2
	ppm ppm		limit/base			history2 
Boron		ASTM D5185m	limit/base	7	4	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	7 0	4 0	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 59	4 0 65	
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 59 0	4 0 65 <1	 
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 59 0 886	4 0 65 <1 927	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 59 0 886 1026	4 0 65 <1 927 1163	  
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	limit/base	7 0 59 0 886 1026 998	4 0 65 <1 927 1163 1046	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	7 0 59 0 886 1026 998 1209	4 0 65 <1 927 1163 1046 1316	    
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	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		7 0 59 0 886 1026 998 1209 3027	4 0 65 <1 927 1163 1046 1316 3711	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	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	limit/base	7 0 59 0 886 1026 998 1209 3027 current	4 0 65 <1 927 1163 1046 1316 3711 history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base	7 0 59 0 886 1026 998 1209 3027 current 6	4 0 65 <1 927 1163 1046 1316 3711 history1 7	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	limit/base >25	7 0 59 0 886 1026 998 1209 3027 current 6 1	4 0 65 <1 927 1163 1046 1316 3711 history1 7 2	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	limit/base >25 >20	7 0 59 0 886 1026 998 1209 3027 <u>current</u> 6 1 5	4 0 65 <1 927 1163 1046 1316 3711 history1 7 2 4	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	limit/base >25 >20 >5	7 0 59 0 886 1026 998 1209 3027 current 6 1 5 <<1.0	4 0 65 <1 927 1163 1046 1316 3711 <b>history1</b> 7 2 4 4 0.4	     history2  
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm <b>TS</b>	ASTM D5185m ASTM D5185m	limit/base >25 >20 >5 limit/base	7 0 59 0 886 1026 998 1209 3027 current 6 1 5 <1.0 current	4 0 65 <1 927 1163 1046 1316 3711 history1 7 2 4 4 0.4 history1	     history2    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm <b>TS</b> ppm ppm ppm %	ASTM D5185m ASTM D5185m	limit/base >25 >20 >5 limit/base >3	7 0 59 0 886 1026 998 1209 3027 <i>current</i> 6 1 5 <1.0 <i>current</i> 0.2	4 0 65 <1 927 1163 1046 1316 3711 history1 7 2 4 0.4 history1 0.3	     history2    history2   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >5 limit/base >3 >20	7 0 59 0 886 1026 998 1209 3027 current 6 1 5 <1.0 current 0.2 6.9	4 0 65 <1 927 1163 1046 1316 3711 history1 7 2 2 4 0.4 history1 0.3 7.0	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >20 >5 limit/base >3 >20 >30 >30	7 0 59 0 886 1026 998 1209 3027 current 6 1 5 <1.0 current 0.2 6.9 18.2 current	4 0 65 <1 927 1163 1046 1316 3711 <b>history1</b> 7 2 4 0.4 <b>history1</b> 0.3 7.0 18.4 <b>history1</b>	      history2   history2  history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >5 limit/base >3 >20 >3 >20	7 0 59 0 886 1026 998 1209 3027 <i>current</i> 6 1 5 <1.0 <i>current</i> 0.2 6.9 18.2	4 0 65 <1 927 1163 1046 1316 3711 history1 7 2 4 0.4 history1 0.3 7.0 18.4	      history2   history2  history2  history2

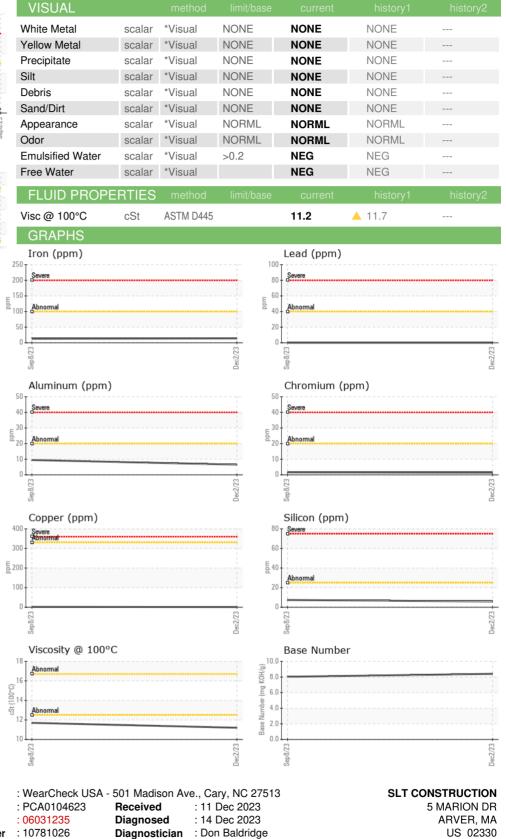


# **OIL ANALYSIS REPORT**









Unique Number Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel) Contact: MARC CARVALHO Certificate L2367 marcc@sltconstruction.net 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)

Laboratory

Sample No.

Lab Number

T:

F: