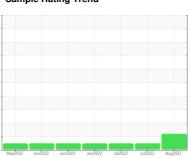


OIL ANALYSIS REPORT

Sample Rating Trend



VISUAL METAL



Machine Id 1203037

Component

Biogas Engine

Q8G8 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

Moderate concentration of visible metal present. All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION method limit/base current history1 history2			May2022	Jun2022 Jun2022	Jun2022 Jul2022 Jul2022	Aug2022	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 1677 1299 1018 Oil Age hrs Client Info 1677 1299 1018 Oil Changed Client Info N/A N/A N/A N/A Sample Status BABORMAL NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >4.0 <1.0	Sample Number		Client Info		WC0655435	WC0655529	WC0655448
Oil Age hrs Client Info 1677 1299 1018 Oil Changed Client Info N/A N/A N/A N/A N/A Sample Status Client Info N/A N/A N/A N/A N/A N/A CONTAMINATION method limit/base current history1 history2 Fuel WC Method >4.0 <1.0 <1.0 <1.0 <1.0 Glycol WC Method >4.0 <1.0 <1.0 <1.0 <1.0 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >45 4 7 6 Chromium ppm ASTM D5185m >2 4 7 6 Chromium ppm ASTM D5185m >2 0 0 0 Ilianium ppm ASTM D5185m 0 0 0 0 Glycer ppm ASTM D5185m >10<	Sample Date		Client Info		15 Aug 2022	25 Jul 2022	05 Jul 2022
Oil Changed Sample Status Client Info N/A NAMAL NCRMAL NCRMAL </td <th>Machine Age</th> <td>hrs</td> <td>Client Info</td> <td></td> <th>_</th> <td>1299</td> <td>1018</td>	Machine Age	hrs	Client Info		_	1299	1018
Sample Status	Oil Age	hrs	Client Info		1677	1299	1018
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >4.0 <1.0	Oil Changed		Client Info		N/A	N/A	N/A
Fuel	Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >45 4 7 6 Chromium ppm ASTM D5185m >2 <1 <1 <1 Nickel ppm ASTM D5185m >2 <1 <1 <1 Silver ppm ASTM D5185m 0 0 0 <1 Silver ppm ASTM D5185m 0 0 0 <1 Aluminum ppm ASTM D5185m >10 3 4 4 Lead ppm ASTM D5185m >5 <1 <1 <1 Copper ppm ASTM D5185m >13 3 4 3 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 2 Boron ppm ASTM D5185m 2 2 2 2<	CONTAMINATION	١	method	limit/base	current	history1	history2
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >4 7 6 Chromium ppm ASTM D5185m 22 -1 -1 -1 Nickel ppm ASTM D5185m 2 0 0 0 -1 Silver ppm ASTM D5185m 0 0 0 -1 -1 Aluminum ppm ASTM D5185m 0 0 0 0 -1 Aluminum ppm ASTM D5185m 5 -1 <	Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Iron	Glycol		WC Method		NEG	NEG	NEG
Chromium ppm ASTM D5185m >2 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >2 0 0 0 Titanium ppm ASTM D5185m 0 0 <1	Iron	ppm	ASTM D5185m	>45	4	7	6
Titanium ppm ASTM D5185m 0 0 <1 Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >10 3 4 4 Lead ppm ASTM D5185m >5 <1	Chromium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >10 3 4 4 Lead ppm ASTM D5185m >5 <1 <1 <1 Copper ppm ASTM D5185m >14 2 1 1 Tin ppm ASTM D5185m >13 3 4 3 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4 6 2 Barium ppm ASTM D5185m 0 0 2 Boron ppm ASTM D5185m 2 2 2 2 Magnesium ppm ASTM D5185m 20 1 <1 <1 <1 <1 <1	Nickel	ppm	ASTM D5185m	>2	0	0	0
Aluminum ppm ASTM D5185m >10 3 4 4 Lead ppm ASTM D5185m >5 <1	Titanium	ppm	ASTM D5185m		0	0	<1
Lead	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >14 2 1 1 Tin ppm ASTM D5185m >13 3 4 3 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 -1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4 6 2 Barium ppm ASTM D5185m 2 2 2 Manganese ppm ASTM D5185m 2 2 2 Magnesium ppm ASTM D5185m 2051 2426 2256 Phosphorus ppm ASTM D5185m 440 508 464 Zinc ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base <t< td=""><th>Aluminum</th><td>ppm</td><td>ASTM D5185m</td><td>>10</td><th>3</th><td>4</td><td>4</td></t<>	Aluminum	ppm	ASTM D5185m	>10	3	4	4
Tin	Lead	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4 6 2 Barium ppm ASTM D5185m 0 0 2 Molybdenum ppm ASTM D5185m 2 2 2 2 Manganese ppm ASTM D5185m 8 12 11 1 Calcium ppm ASTM D5185m 2051 2426 2256 Phosphorus ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m	Copper	ppm	ASTM D5185m	>14	2	1	1
Cadmium ppm ASTM D5185m 0 0 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4 6 2 Barium ppm ASTM D5185m 0 0 2 Molybdenum ppm ASTM D5185m 2 2 2 Manganese ppm ASTM D5185m 8 12 11 Magnesium ppm ASTM D5185m 2051 2426 2256 Phosphorus ppm ASTM D5185m 2440 508 464 Zinc ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m >20 5 </td <th>Tin</th> <td>ppm</td> <td>ASTM D5185m</td> <td>>13</td> <th>3</th> <td>4</td> <td>3</td>	Tin	ppm	ASTM D5185m	>13	3	4	3
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4 6 2 Barium ppm ASTM D5185m 0 0 2 Molybdenum ppm ASTM D5185m 2 2 2 2 Manganese ppm ASTM D5185m 8 12 11 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 <th>Vanadium</th> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>0</th> <td>0</td> <td>0</td>	Vanadium	ppm	ASTM D5185m		0	0	0
Boron	Cadmium	ppm	ASTM D5185m		0	0	<1
Barium ppm ASTM D5185m 0 0 2 Molybdenum ppm ASTM D5185m 2 2 2 Manganese ppm ASTM D5185m <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 2 2 2 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 8 12 11 Calcium ppm ASTM D5185m 2051 2426 2256 Phosphorus ppm ASTM D5185m 440 508 464 Zinc ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/.1mm *ASTM D7415	Davis				_		_
Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 8 12 11 Calcium ppm ASTM D5185m 2051 2426 2256 Phosphorus ppm ASTM D5185m 440 508 464 Zinc ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method l	poron	ppm	ASTM D5185m		4	6	2
Magnesium ppm ASTM D5185m 8 12 11 Calcium ppm ASTM D5185m 2051 2426 2256 Phosphorus ppm ASTM D5185m 440 508 464 Zinc ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m >200 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/.1mm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEG					-		
Calcium ppm ASTM D5185m 2051 2426 2256 Phosphorus ppm ASTM D5185m 440 508 464 Zinc ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 histo	Barium	ppm	ASTM D5185m		0	0	2
Phosphorus ppm ASTM D5185m 440 508 464 Zinc ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 <th>Barium Molybdenum</th> <td>ppm ppm</td> <td>ASTM D5185m ASTM D5185m</td> <td></td> <th>0 2</th> <td>0 2</td> <td>2</td>	Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m		0 2	0 2	2
Zinc ppm ASTM D5185m 492 599 558 Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 </td <th>Barium Molybdenum Manganese</th> <td>ppm ppm</td> <td>ASTM D5185m ASTM D5185m ASTM D5185m</td> <td></td> <th>0 2 <1</th> <td>0 2 <1</td> <td>2 2 <1</td>	Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1	0 2 <1	2 2 <1
Sulfur ppm ASTM D5185m 2447 3380 2946 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m 11 8 10 Potassium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08<	Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1 8	0 2 <1 12	2 2 <1 11
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m 11 8 10 Potassium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1 8 2051	0 2 <1 12 2426	2 2 <1 11 2256
Silicon ppm ASTM D5185m >200 16 15 15 Sodium ppm ASTM D5185m 11 8 10 Potassium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1 8 2051 440	0 2 <1 12 2426 508	2 2 <1 11 2256 464
Sodium ppm ASTM D5185m 11 8 10 Potassium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 2 <1 8 2051 440 492	0 2 <1 12 2426 508 599	2 2 <1 11 2256 464 558
Potassium ppm ASTM D5185m >20 5 4 9 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	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	limit/base	0 2 <1 8 2051 440 492 2447	0 2 <1 12 2426 508 599 3380	2 2 <1 11 2256 464 558 2946
INFRA-RED	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 ASTM D5185m		0 2 <1 8 2051 440 492 2447	0 2 <1 12 2426 508 599 3380 history1	2 2 <1 11 2256 464 558 2946 history2
Soot % % *ASTM D7844 0 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m		0 2 <1 8 2051 440 492 2447 current	0 2 <1 12 2426 508 599 3380 history1	2 2 <1 11 2256 464 558 2946 history2
Nitration Abs/cm *ASTM D7624 >20 8.1 8.2 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>200	0 2 <1 8 2051 440 492 2447 current 16 11	0 2 <1 12 2426 508 599 3380 history1	2 2 <1 11 2256 464 558 2946 history2 15
Sulfation Abs/.1mm *ASTM D7415 >30 17.9 18.4 16.6 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>200 >20	0 2 <1 8 2051 440 492 2447 current 16 11 5	0 2 <1 12 2426 508 599 3380 history1 15 8	2 2 <1 11 2256 464 558 2946 history2 15 10
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>200 >20	0 2 <1 8 2051 440 492 2447 current 16 11 5	0 2 <1 12 2426 508 599 3380 history1 15 8 4 history1	2 2 <1 11 2256 464 558 2946 history2 15 10 9
Oxidation Abs/.1mm *ASTM D7414 >25 12.6 12.8 11.7 Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	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 method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>200 >20 limit/base	0 2 <1 8 2051 440 492 2447 current 16 11 5 current 0	0 2 <1 12 2426 508 599 3380 history1 15 8 4 history1 0.1	2 2 <1 11 2256 464 558 2946 history2 15 10 9 history2 0.1
Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	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 method ASTM D5185m	>200 >20 limit/base >20	0 2 <1 8 2051 440 492 2447 current 16 11 5 current 0 8.1	0 2 <1 12 2426 508 599 3380 history1 15 8 4 history1 0.1 8.2	2 2 <1 11 2256 464 558 2946 history2 15 10 9 history2 0.1 7.4
Acid Number (AN) mg KOH/g ASTM D8045 0.78 1.08 0.76	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 method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	>200 >20 limit/base >20 >30	0 2 <1 8 2051 440 492 2447 current 16 11 5 current 0 8.1 17.9	0 2 <1 12 2426 508 599 3380 history1 15 8 4 history1 0.1 8.2 18.4	2 2 2 <1 11 2256 464 558 2946 history2 15 10 9 history2 0.1 7.4 16.6
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415 Method	>200 >20 limit/base >20 >30 limit/base	0 2 <1 8 2051 440 492 2447 current 16 11 5 current 0 8.1 17.9 current	0 2 <1 12 2426 508 599 3380 history1 15 8 4 history1 0.1 8.2 18.4 history1	2 2 2 <1 11 2256 464 558 2946 history2 15 10 9 history2 0.1 7.4 16.6 history2
	Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415 method *ASTM D7414	>200 >20 limit/base >20 >30 limit/base	0 2 <1 8 2051 440 492 2447 current 16 11 5 current 0 8.1 17.9 current 12.6	0 2 <1 12 2426 508 599 3380 history1 15 8 4 history1 0.1 8.2 18.4 history1 12.8	2 2 2 <1 11 2256 464 558 2946 history2 15 10 9 history2 0.1 7.4 16.6 history2 11.7



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package

cSt (100°C)

: WC0655435 : 05619027 : 10098534 : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 16 Aug 2022 Diagnosed : 18 Aug 2022

: Don Baldridge Diagnostician

OAK GROVE GA 967 CARL-BETHLEHEM RD

WINDER, GA US 30680

Contact: MATT DICKENS

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.

Viscosity @ 100°C

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Base Number

KOH/g

Aug15/22

T: F: