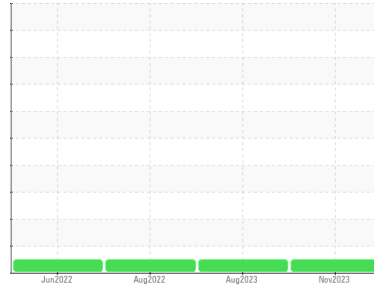


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**JAL NM**  
 Machine Id  
**MRC-202**  
 Component  
**Natural Gas Engine**  
 Fluid  
**NOT GIVEN (--- GAL)**

## 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 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
Sample Number	Client Info		<b>TO60001645</b>	TO60001174	TO60000208
Sample Date	Client Info		<b>02 Nov 2023</b>	15 Aug 2023	17 Aug 2022
Machine Age	hrs	Client Info	<b>20877</b>	19527	13529
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>7</b>	9	7
Chromium	ppm	ASTM D5185m >4	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m >2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >9	<b>&lt;1</b>	2	1
Lead	ppm	ASTM D5185m >30	<b>12</b>	15	20
Copper	ppm	ASTM D5185m >35	<b>2</b>	3	3
Tin	ppm	ASTM D5185m >4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>78</b>	97	75
Barium	ppm	ASTM D5185m	<b>0</b>	1	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	2	3
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>16</b>	17	13
Calcium	ppm	ASTM D5185m	<b>1404</b>	1646	1472
Phosphorus	ppm	ASTM D5185m	<b>223</b>	320	312
Zinc	ppm	ASTM D5185m	<b>343</b>	406	372
Sulfur	ppm	ASTM D5185m	<b>1393</b>	1808	1707

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	<b>1</b>	2	1
Sodium	ppm	ASTM D5185m	<b>3</b>	0	3
Potassium	ppm	ASTM D5185m >20	<b>0</b>	2	0

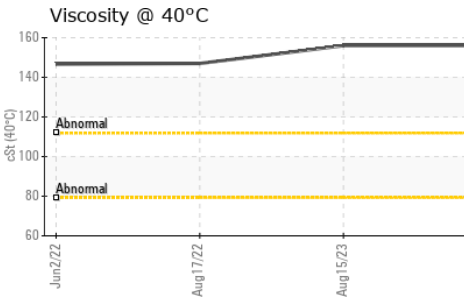
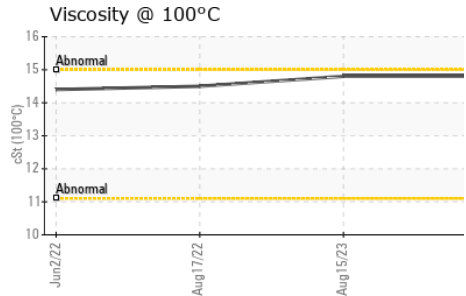
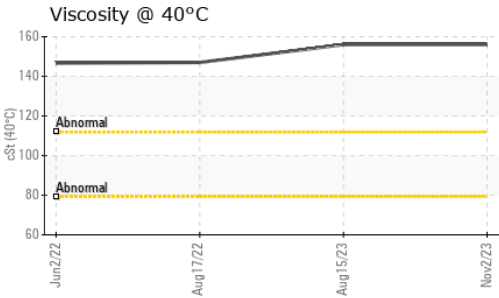
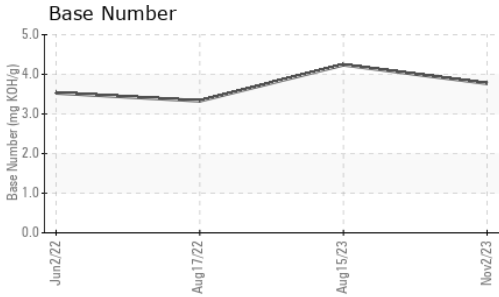
## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	<b>10.9</b>	10.9	10.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.9</b>	19.9	20.9

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>21.6</b>	21.8	21.3
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.60</b>	1.95	1.54
Base Number (BN)	mg KOH/g	ASTM D2896	<b>3.77</b>	4.24	3.33

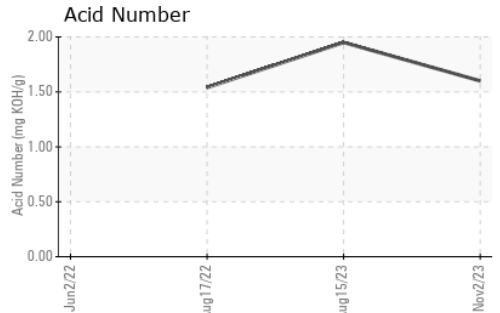
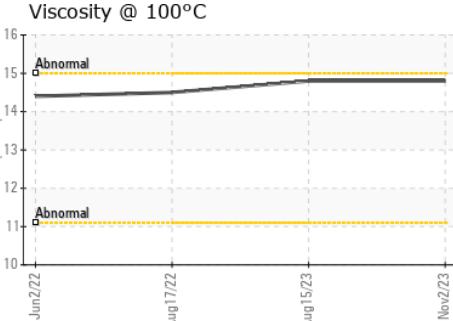
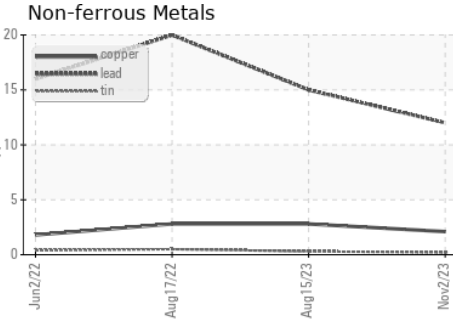
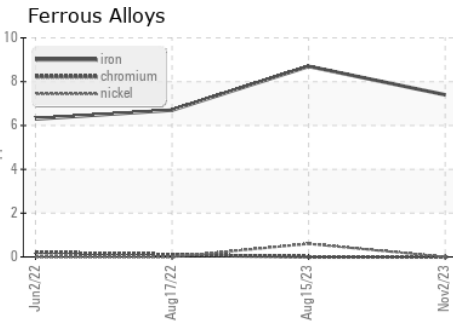
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>156</b>	156	147
Visc @ 100°C	cSt	ASTM D445	<b>14.8</b>	14.8	14.5
Viscosity Index (VI)	Scale	ASTM D2270	<b>93</b>	93	96

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO60001645 **Received** : 15 Nov 2023  
**Lab Number** : **06008526** **Diagnosed** : 17 Nov 2023  
**Unique Number** : 10742288 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: FT-IR, KV40, VI )

**MIDLAND - EOG RESOURCES INC.**  
 5509 CHAMPIONS DRIVE  
 MIDLAND, TX  
 US 79706  
 Contact: HERMAN GARZA  
 herman\_garza@eogresources.com  
 T: (432)686-3600  
 F:

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)