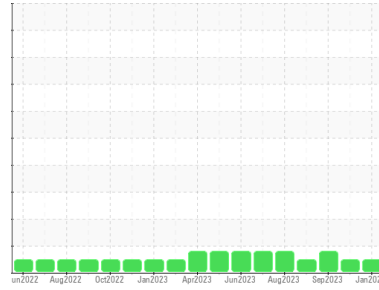


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

✓



Area
GOLDEN BEAR
Machine Id
MRC-271
Component
Natural Gas Engine
Fluid
TULCO LUBSOIL GEO XL LOW ASH 40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

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		TO60001632	TO60001640	TO60001454
Sample Date	Client Info		05 Jan 2024	01 Nov 2023	30 Sep 2023
Machine Age	hrs	Client Info	13828	12283	11540
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	Not Changd	Not Changd
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	6	7	7
Chromium	ppm	ASTM D5185m >4	0	<1	0
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	<1	<1	1
Lead	ppm	ASTM D5185m >30	20	28	▲ 31
Copper	ppm	ASTM D5185m >35	10	12	10
Tin	ppm	ASTM D5185m >4	0	<1	1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

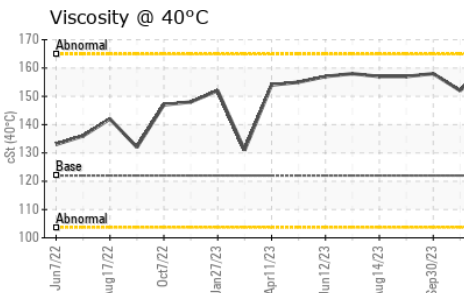
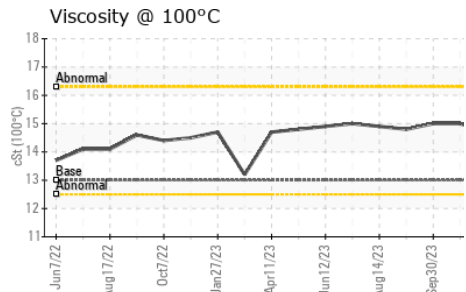
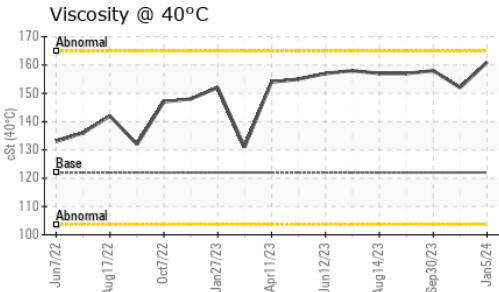
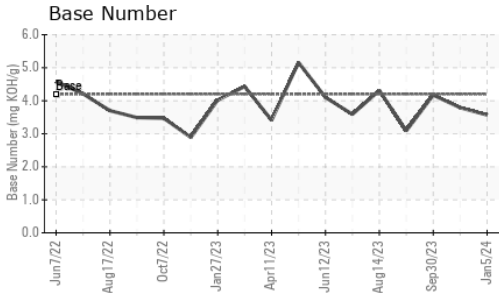
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 100	71	70	66
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m 1	<1	<1	<1
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 10	12	13	0
Calcium	ppm	ASTM D5185m 1150	1447	1516	1633
Phosphorus	ppm	ASTM D5185m 290	283	329	306
Zinc	ppm	ASTM D5185m 272	342	407	440
Sulfur	ppm	ASTM D5185m 1900	2224	2003	2113

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	2	3	2
Sodium	ppm	ASTM D5185m	6	7	6
Potassium	ppm	ASTM D5185m >20	2	2	3

INFRA-RED	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	10.5	10.6	10.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.0	20.4	20.6

FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.3	23.0	23.0
Acid Number (AN)	mg KOH/g	ASTM D8045	1.54	1.68	1.59
Base Number (BN)	mg KOH/g	ASTM D2896 4.2	3.57	3.79	4.17

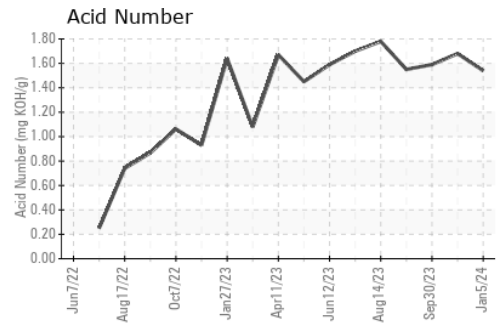
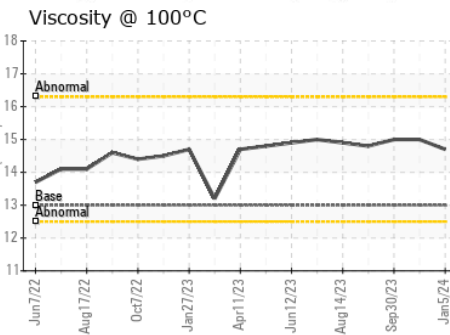
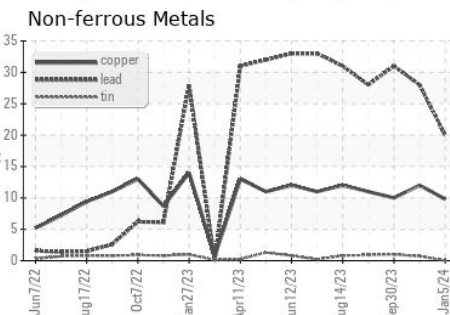
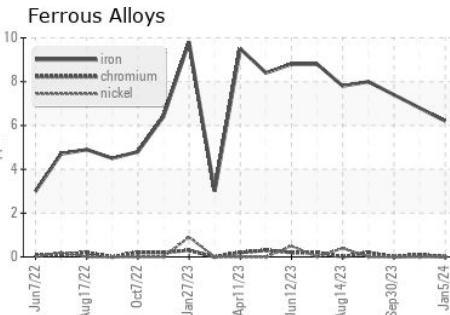
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	122	161	152	158
Visc @ 100°C	cSt	ASTM D445	13	14.7	15.0	15.0
Viscosity Index (VI)	Scale	ASTM D2270	103	88	98	94

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60001632 **Received** : 17 Jan 2024
Lab Number : **06063759** **Diagnosed** : 19 Jan 2024
Unique Number : 10835141 **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)