



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

GOLDEN BEAR LGL

Machine Id

MRC-284

Component

Natural Gas Engine

Fluid

TULCO LUBSOIL GEO XL LOW ASH 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TO60002273	TO60002276	TO60001981
Sample Date		Client Info		09 Apr 2024	28 Feb 2024	01 Feb 2024
Machine Age	hrs	Client Info		17147	16138	15501
Oil Age	hrs	Client Info		0	1	1
Filter Age	hrs	Client Info		0	1	1
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	3	3	8
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	<1	2	1
Lead	ppm	ASTM D5185m	>30	<1	1	1
Copper	ppm	ASTM D5185m	>35	<1	<1	2
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

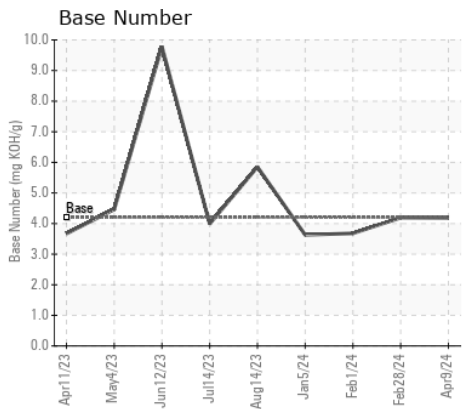
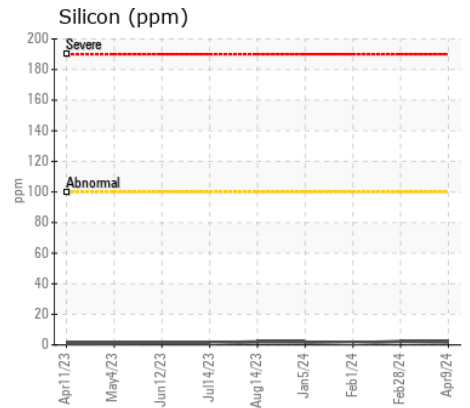
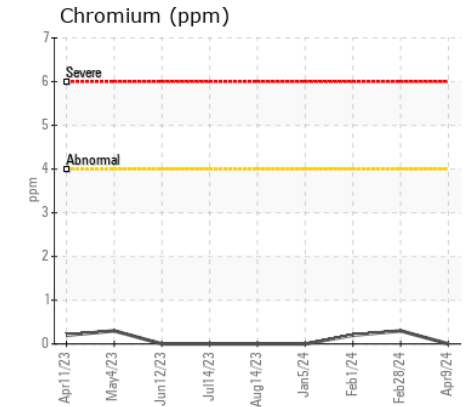
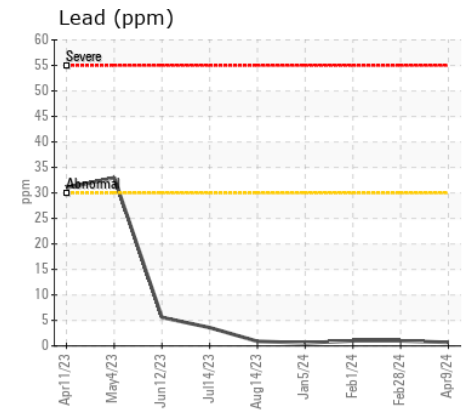
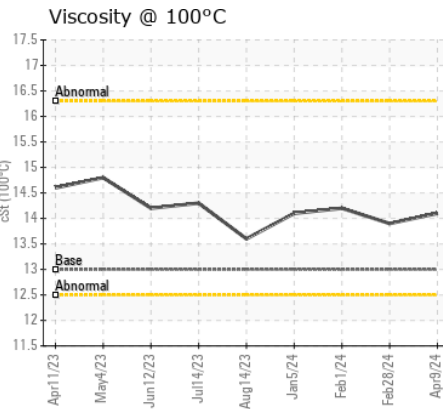
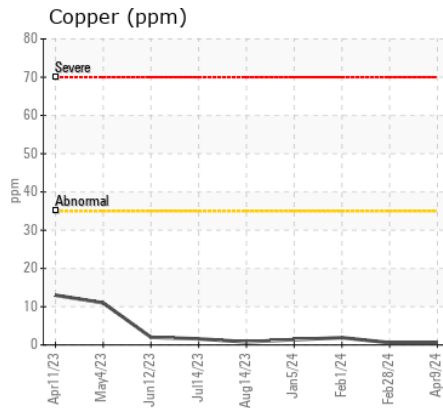
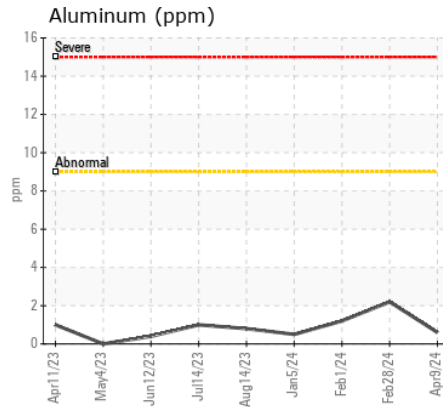
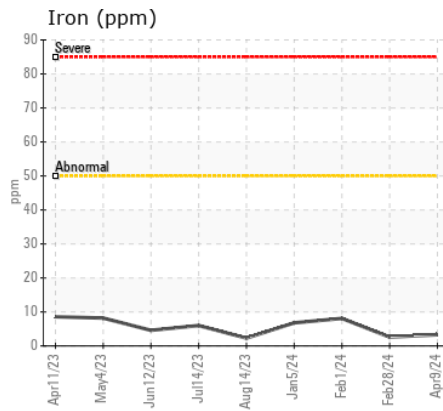
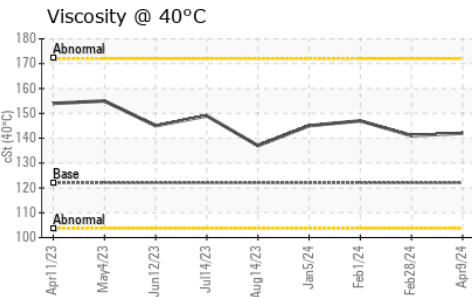
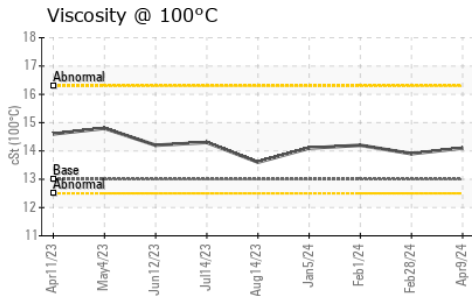
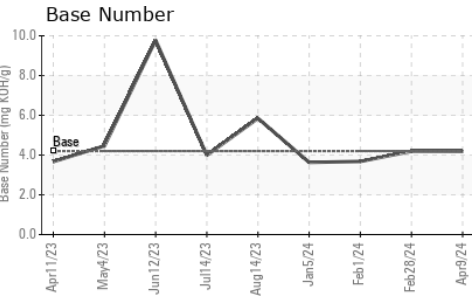
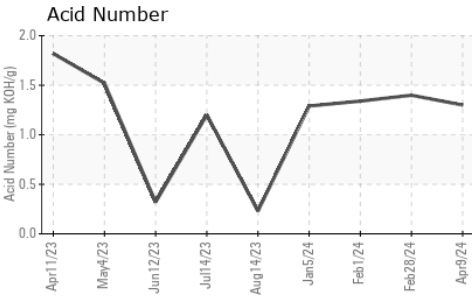
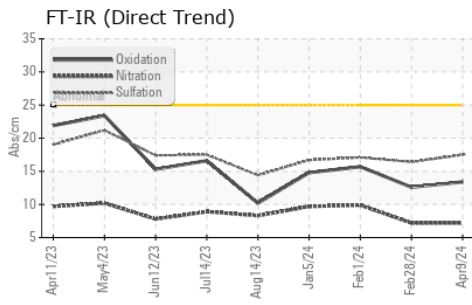
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	2	2	1
Potassium	ppm	ASTM D5185m	>20	0	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	7.2	7.2	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	16.4	17.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		4	<1	<1
Boron	ppm	ASTM D5185m	100	36	47	107
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m	1	<1	<1	<1
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	10	6	8	11
Calcium	ppm	ASTM D5185m	1150	1401	1373	1343
Phosphorus	ppm	ASTM D5185m	290	276	282	272
Zinc	ppm	ASTM D5185m	272	296	341	329
Sulfur	ppm	ASTM D5185m	1900	3196	2601	1554
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	12.6	15.7
Acid Number (AN)	mg KOH/g	ASTM D8045		1.3	1.399	1.34
Base Number (BN)	mg KOH/g	ASTM D2896	4.2	4.18	4.19	3.68
Visc @ 40°C	cSt	ASTM D445	122	142	141	147
Visc @ 100°C	cSt	ASTM D445	13	14.1	13.9	14.2
Viscosity Index (VI)	Scale	ASTM D2270	103	95	94	93



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO60002273
Lab Number : 06154635
Unique Number : 10990058
Test Package : MOB 2 (Additional Tests: 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)