



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PUTZ 38M 169
 Component
1 Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0032419	DC06068719	DC0023691
Sample Date		Client Info		11 Jun 2024	15 Dec 2023	09 Mar 2023
Machine Age	hrs	Client Info		11520	10727	8192
Oil Age	hrs	Client Info		0	0	7596
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

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

Iron	ppm	ASTM D5185m	>120	6	8	10
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	4
Lead	ppm	ASTM D5185m	>40	<1	<1	1
Copper	ppm	ASTM D5185m	>330	1	1	1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

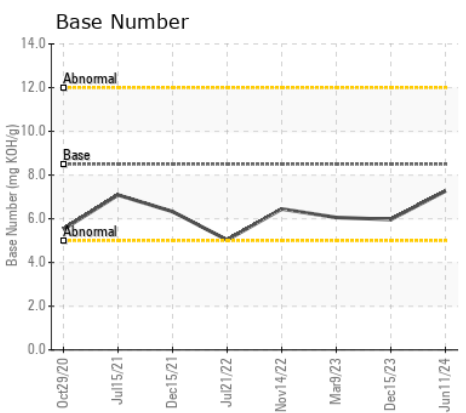
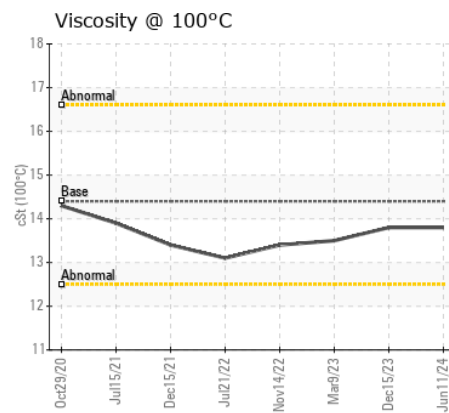
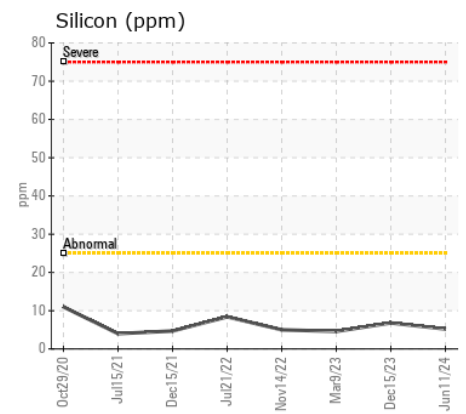
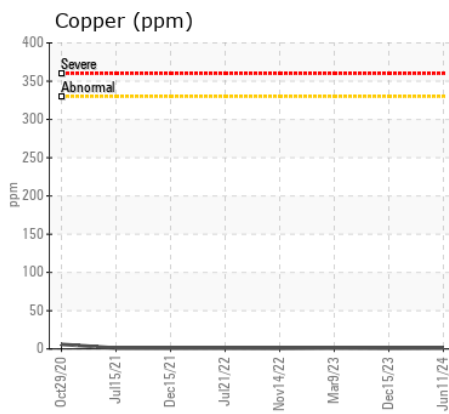
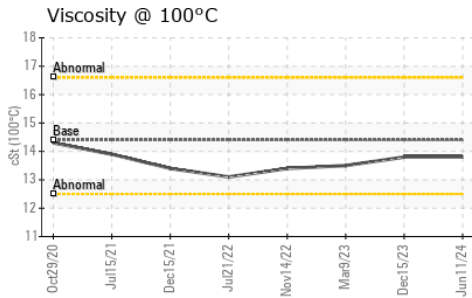
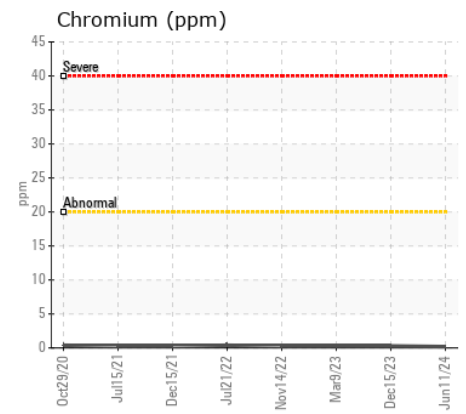
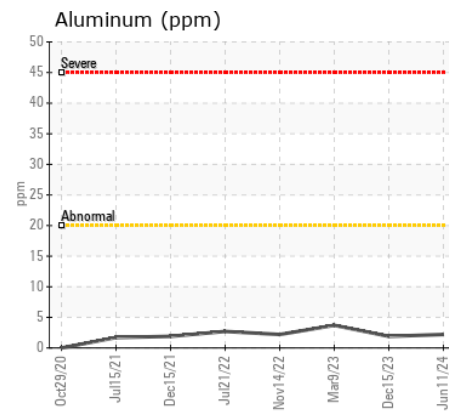
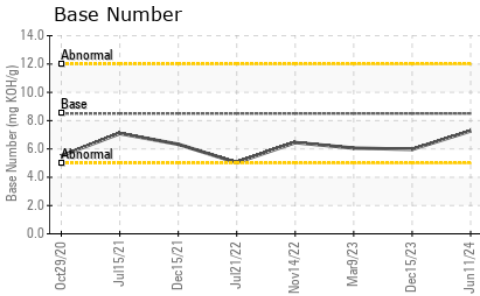
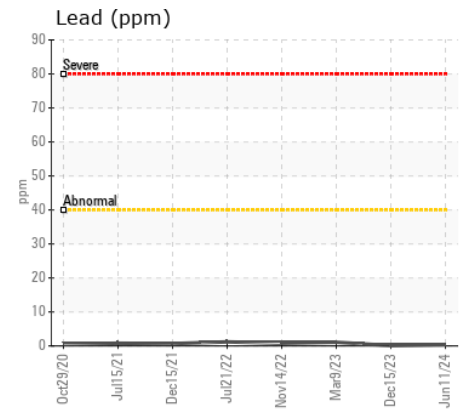
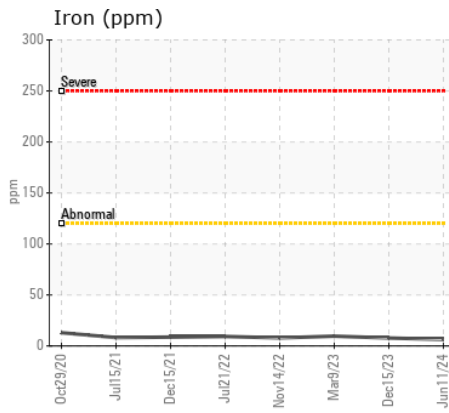
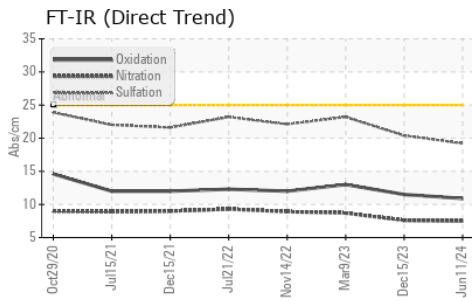
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	7	5
Potassium	ppm	ASTM D5185m	>20	4	<1	4
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.3	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.5	7.6	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	20.4	23.2
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>216	22	2	<1
Boron	ppm	ASTM D5185m	250	0	2	9
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	6	3	7
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	80	46	56
Calcium	ppm	ASTM D5185m	3000	2567	2216	2423
Phosphorus	ppm	ASTM D5185m	1150	970	872	887
Zinc	ppm	ASTM D5185m	1350	1139	1044	1101
Sulfur	ppm	ASTM D5185m	4250	4200	3437	3551
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.9	11.5	13.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.27	5.97	6.06
Visc @ 100°C	cSt	ASTM D445	14.4	13.8	13.8	13.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0032419
Lab Number : 06228857
Unique Number : 11112350
Test Package : MOB 2
Received : 05 Jul 2024
Tested : 08 Jul 2024
Diagnosed : 08 Jul 2024 - Don Baldrige

BLANCHET CONCRETE PUMPING
 9585 LYNN BUFF CT
 LAUREL, MD
 US 20723
 Contact: ED BAILEY
 EBAILEY@PUMPCONCRETE.COM
 T: (301)708-1159
 F: (301)206-4470

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)