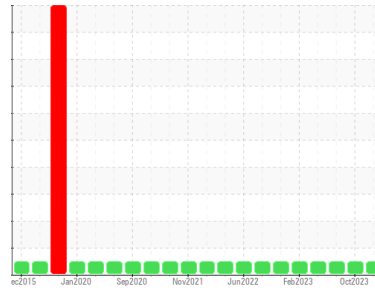


OIL ANALYSIS REPORT



Area
DE Samples - CAT LAB
 Machine Id
CATERPILLAR 980H LOADER 6583 (S/N JMS05055)
 Component
Rear Left Final Drive
 Fluid
TULCO LUBSOIL TO-4 50 (--- GAL)

Sample Rating Trend



NORMAL



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 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		TO10003059	TO10002731	TO10002308
Sample Date	Client Info		08 Jan 2024	02 Oct 2023	14 Jul 2023
Machine Age	hrs	Client Info	34718	34179	33615
Oil Age	hrs	Client Info	3115	2576	2012
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
PQ	ASTM D8184	>500	44	40	44	
Iron	ppm	ASTM D5185m	>800	57	59	70
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>15	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>75	2	<1	3
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	2	1	<1
Tin	ppm	ASTM D5185m	>8	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		3	4	5
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		14	14	13
Calcium	ppm	ASTM D5185m		3182	3102	3670
Phosphorus	ppm	ASTM D5185m		963	957	1013
Zinc	ppm	ASTM D5185m		1193	1190	1304
Sulfur	ppm	ASTM D5185m		4769	4824	6434

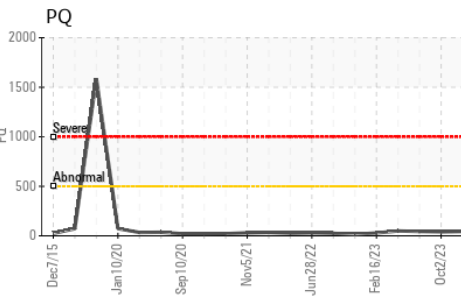
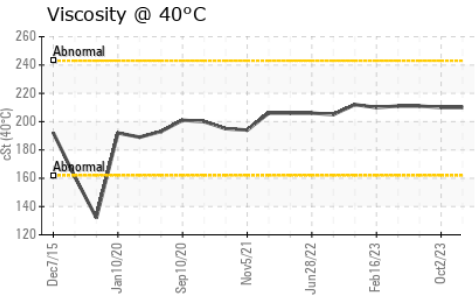
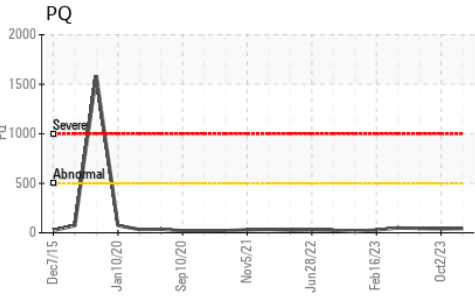
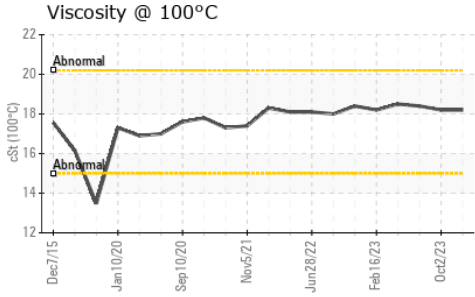
CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>400	17	18	20
Sodium	ppm	ASTM D5185m		1	5	4
Potassium	ppm	ASTM D5185m	>20	0	2	0

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045		1.29	1.09	1.32

OIL ANALYSIS REPORT

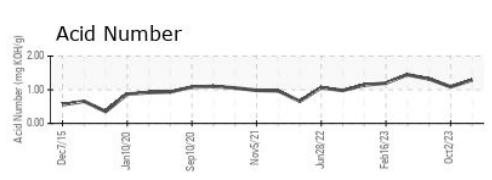
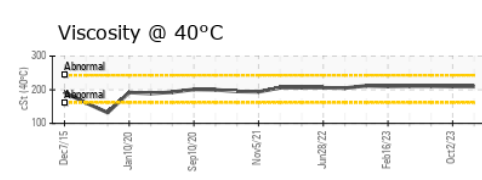
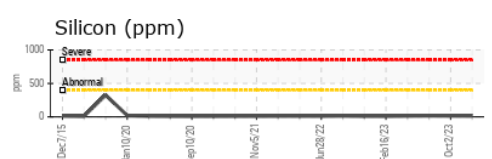
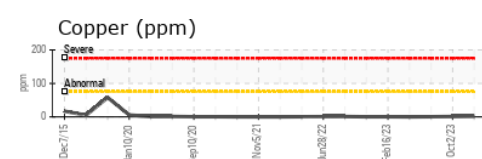
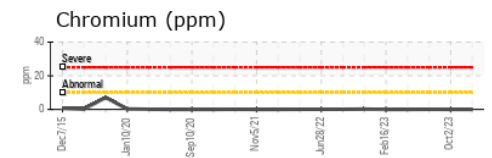
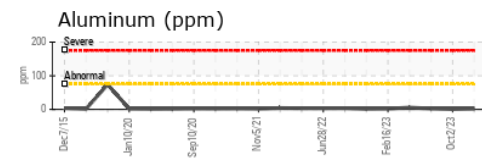
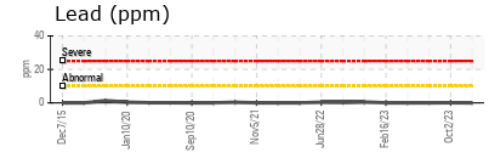
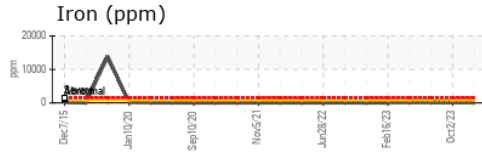


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	210	210	211
Visc @ 100°C	cSt	ASTM D445	18.2	18.2	18.4
Viscosity Index (VI)	Scale	ASTM D2270	95	95	96

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10003059 **Received** : 16 Jan 2024
Lab Number : 06061346 **Tested** : 18 Jan 2024
Unique Number : 10832728 **Diagnosed** : 18 Jan 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: KV100, PQ, VI)

ANCHOR STONE TULSA ROCK
 TULSA ROCK QUARRY, 66TH ST N 145TH AVENUE
 TULSA, OK
 US 74137

Contact: MIKE SNYDER
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 T: (417)850-9635
 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)