



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 3512 ULB McClave compressor (S/N 7NJ00728)
 Component
Natural Gas Engine
 Fluid
LO-ASH ENGINE OIL SAE 40 (86 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0013825	KL0013824	KL0013066
Sample Date		Client Info		08 Apr 2024	19 Feb 2024	05 Feb 2024
Machine Age	hrs	Client Info		87354	86199	85859
Oil Age	hrs	Client Info		87354	3840	3480
Filter Age	hrs	Client Info		87354	1632	1272
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	15	18	15
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	2	1
Lead	ppm	ASTM D5185m	>30	<1	2	0
Copper	ppm	ASTM D5185m	>35	2	1	1
Tin	ppm	ASTM D5185m	>4	<1	2	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

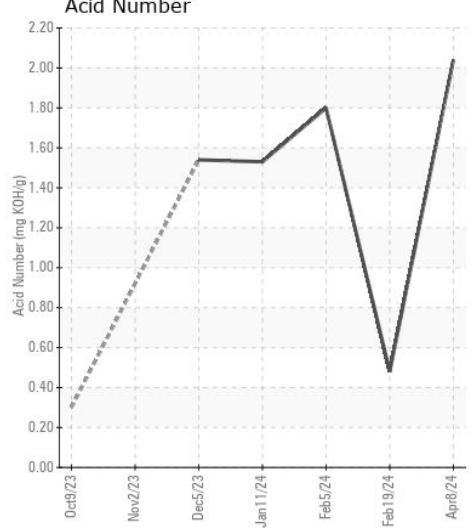
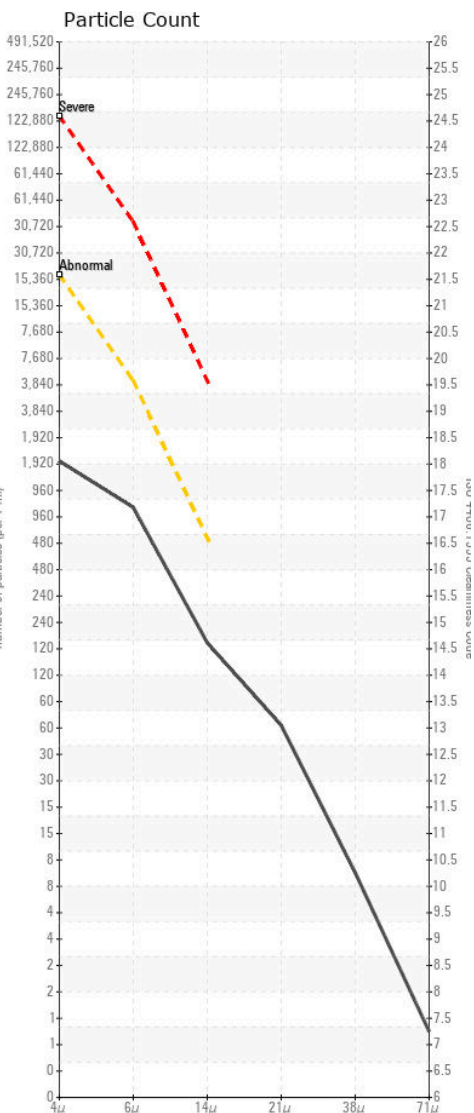
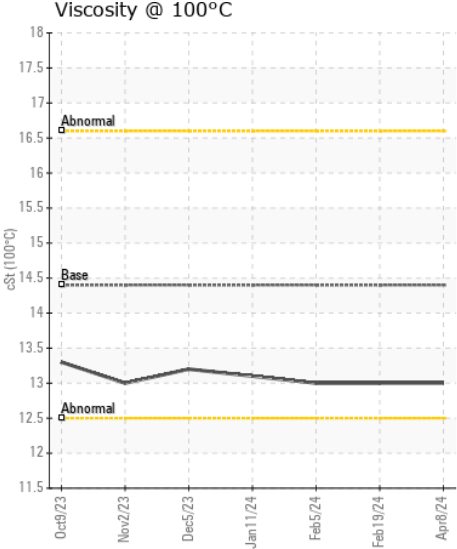
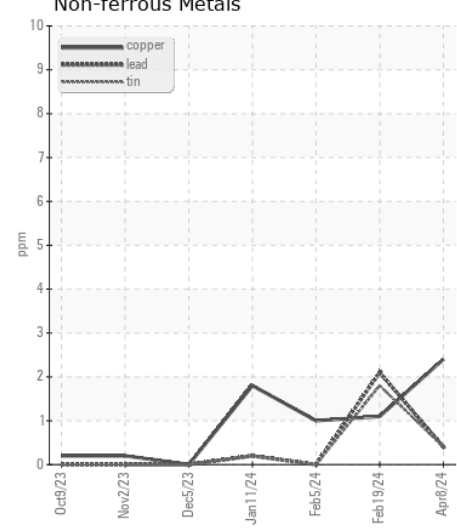
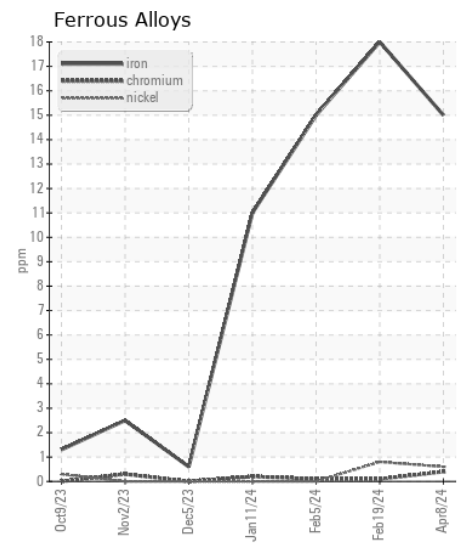
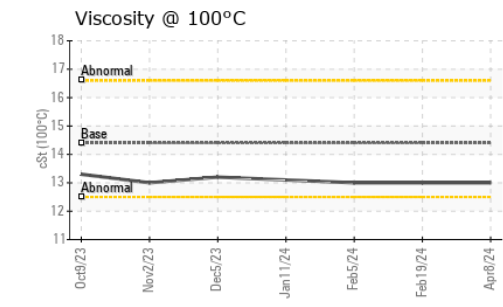
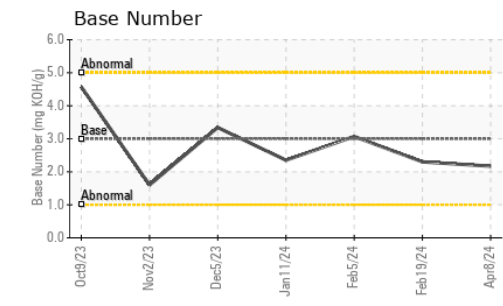
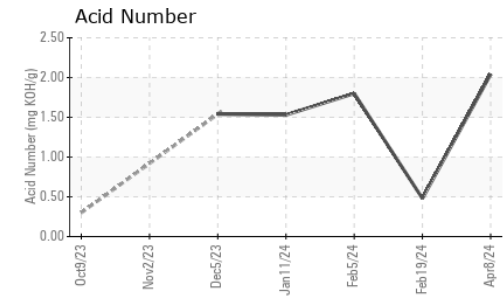
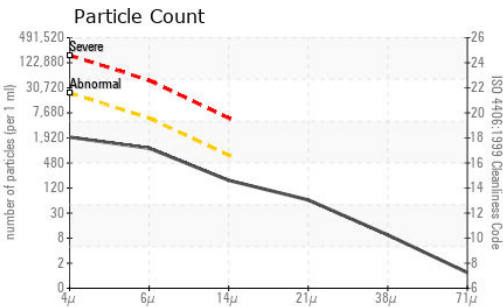
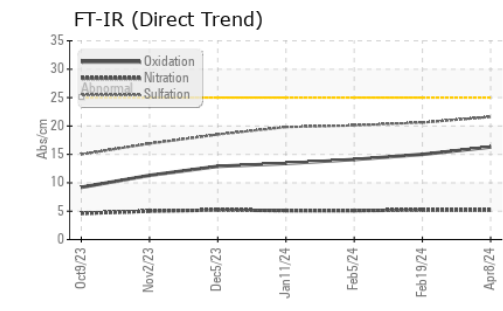
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>+100	2	3	4
Potassium	ppm	ASTM D5185m	>20	1	<1	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	5.2	5.2	5.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	20.6	20.1
Particles >4µm		ASTM D7647	>20000	1749	652	3654
Particles >6µm		ASTM D7647	>5000	953	335	1990
Particles >14µm		ASTM D7647	>640	162	60	339
Particles >21µm		ASTM D7647	>160	55	20	114
Particles >38µm		ASTM D7647	>40	8	3	18
Particles >71µm		ASTM D7647	>10	1	0	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	18/17/15	17/16/13	19/18/16
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		0	2	5
Boron	ppm	ASTM D5185m	37	2	6	3
Barium	ppm	ASTM D5185m	12	0	0	0
Molybdenum	ppm	ASTM D5185m	200	9	12	12
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	5	44	33	20
Calcium	ppm	ASTM D5185m	1600	1584	1515	1365
Phosphorus	ppm	ASTM D5185m	300	340	299	307
Zinc	ppm	ASTM D5185m	400	395	416	363
Sulfur	ppm	ASTM D5185m	2600	5131	4172	3605
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	15.0	14.1
Acid Number (AN)	mg KOH/g	ASTM D8045		2.04	0.48	1.80
Base Number (BN)	mg KOH/g	ASTM D2896	3.0	2.17	2.30	3.07
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	13.0	13.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013825 **Received** : 12 Apr 2024
Lab Number : 06148152 **Tested** : 15 Apr 2024
Unique Number : 10978230 **Diagnosed** : 16 Apr 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: PrtCount)

STRACHAN EXPLORATION
 992 S 4TH AVENUE
 BRIGHTON, CT
 US 80601
 Contact: DENNIS JACKSON

Certificate L2367
 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)