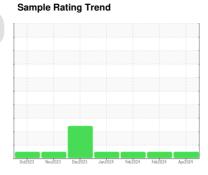


OIL ANALYSIS REPORT



Machine Id CATERPILLAR 3512 ULB McClave compressor (S/N 7NJ00728) Natural Gas Engine

LO-ASH ENGINE OIL SAE 40 (86 GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

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

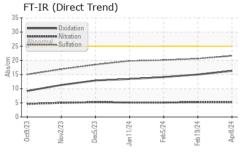
Fluid Condition

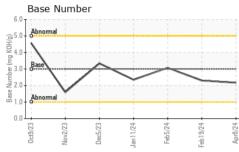
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

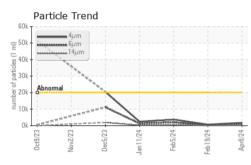
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KL0013825	KL0013824	KL0013066
Sample Date		Client Info		08 Apr 2024	19 Feb 2024	05 Feb 2024
Machine Age	hrs	Client Info		87354	86199	85859
Oil Age	hrs	Client Info		87354	3840	3480
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	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	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
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
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
CONTAMINANTS	8	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	2	3	4
Sodium	ppm	ASTM D5185m		0	2	5
Potassium	ppm	ASTM D5185m	>20	1	<1	0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	5.2	5.2	5.1

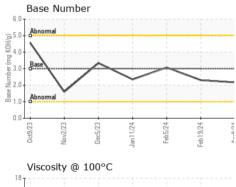


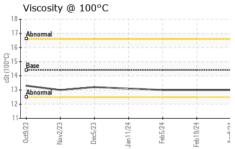
OIL ANALYSIS REPORT











FLUID CLEANLINESS	method	limit/base	current	history1	history2
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

FLUID DEGRADA	TION	method				history2
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

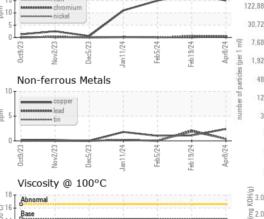
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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
Free Water	scalar	*Visual		NEG	NEG	NEG

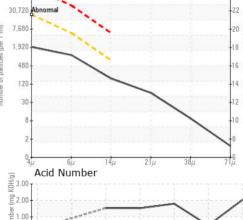
FLUID PROPERI	HES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	13.0	13.0

491,520

Particle Count

GRAPHS Ferrous Alloys









Laboratory Sample No.

Lab Number : 06148152 Unique Number : 10978230

10

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : KL0013825

Received : 12 Apr 2024 **Tested** Diagnosed

: 15 Apr 2024 : 16 Apr 2024 - Sean Felton

0.00 g

STRACHAN EXPLORATION 992 S 4TH AVENUE

BRIGHTON, CT US 80601

Contact: DENNIS JACKSON

Test Package : MOB 2 (Additional Tests: PrtCount) Certificate 12367 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)

T:

F: