



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
PCS - PORTABLE CRUSHING SERVICES
Machine Id
CATERPILLAR GN04 GENERATOR 04
Component
Diesel Engine
Fluid
CHEVRON DELO 400 SDE SAE 15W40 (150 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KL0014736	KL0013790	KL0014079
Sample Date		Client Info		09 Jul 2024	10 Apr 2024	10 Jan 2024
Machine Age	hrs	Client Info		32894	32363	31816
Oil Age	hrs	Client Info		1128	597	50
Filter Age	hrs	Client Info		1128	597	50
Oil Changed		Client Info		Not Chngd	N/A	Changed
Filter Changed		Client Info		Not Chngd	N/A	Changed
Sample Status				NORMAL	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	21	1
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>2	0	1	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	3	2
Lead	ppm	ASTM D5185m	>40	0	2	0
Copper	ppm	ASTM D5185m	>330	81	362	14
Tin	ppm	ASTM D5185m	>15	0	<1	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

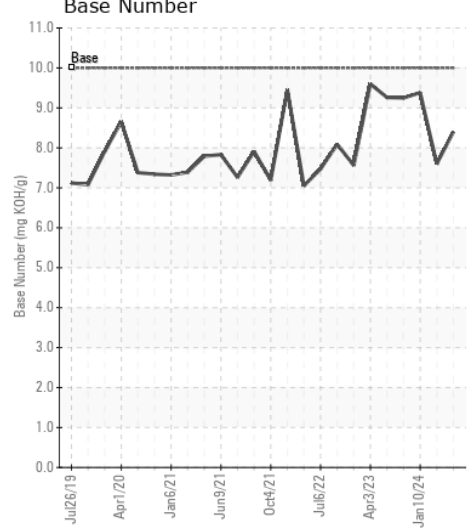
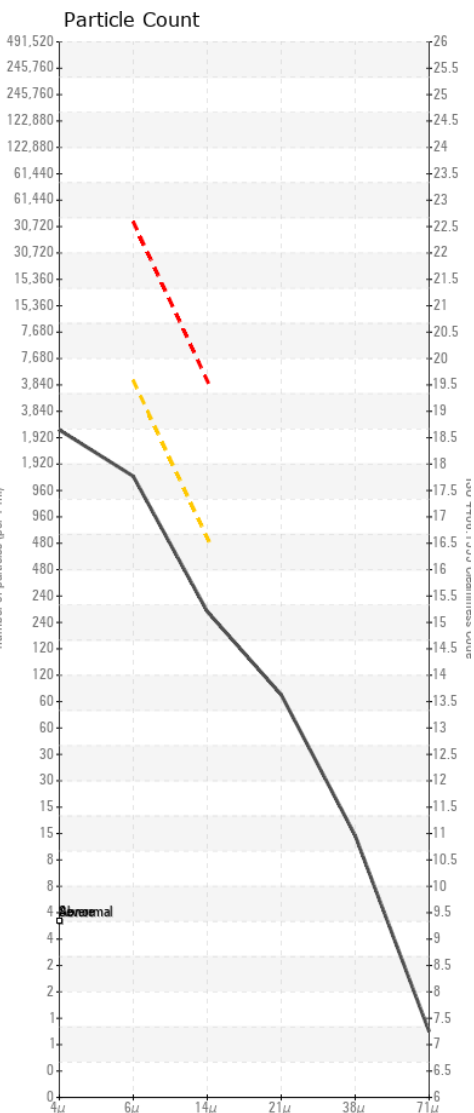
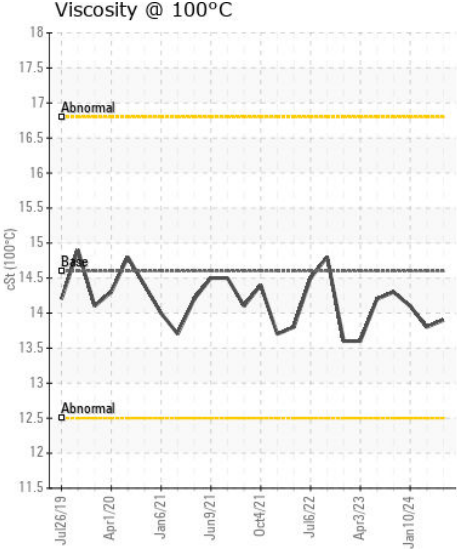
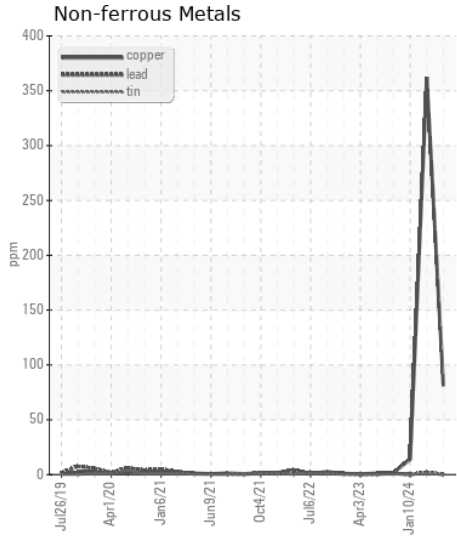
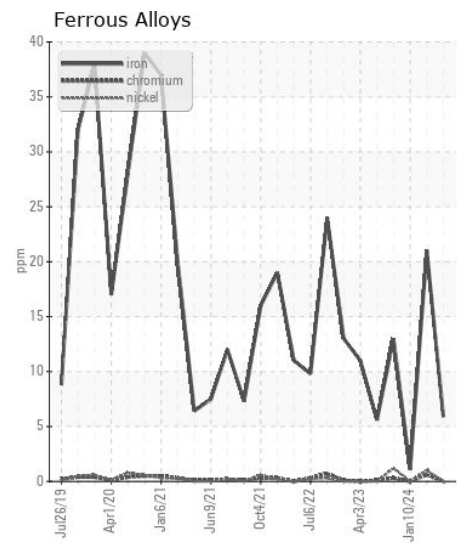
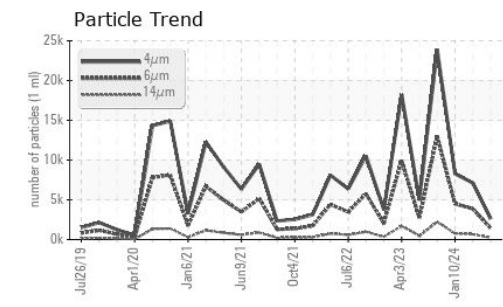
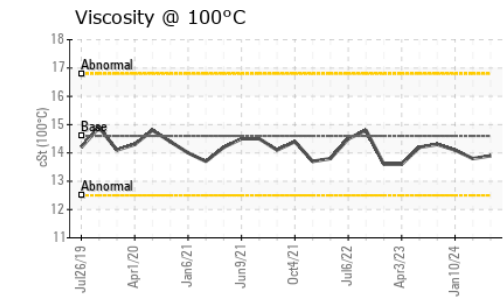
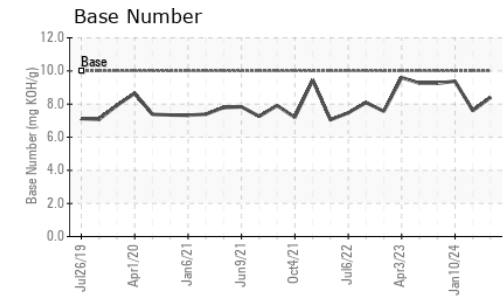
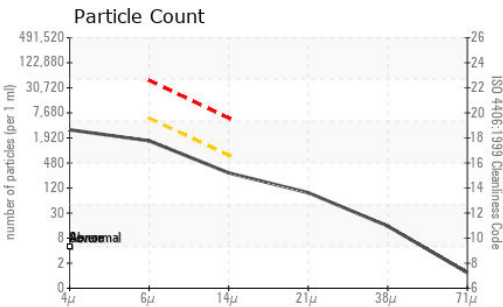
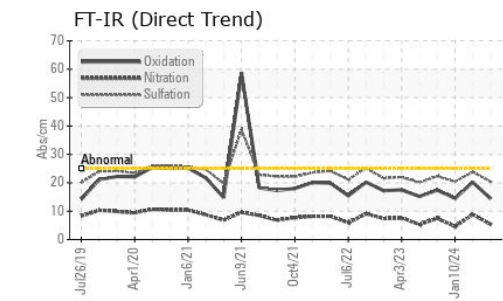
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	5
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.6	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.4	8.8	4.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	23.8	20.4
Particles >4µm		ASTM D7647		2627	7116	8273
Particles >6µm		ASTM D7647	>5000	1431	3877	4507
Particles >14µm		ASTM D7647	>640	244	660	767
Particles >21µm		ASTM D7647	>160	82	222	258
Particles >38µm		ASTM D7647	>40	13	34	40
Particles >71µm		ASTM D7647	>10	1	4	4
Oil Cleanliness		ISO 4406 (c)	>19/16	18/15	19/17	19/17
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		22	100	40
Boron	ppm	ASTM D5185m		372	275	381
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		90	116	90
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		394	416	361
Calcium	ppm	ASTM D5185m		1517	1607	1361
Phosphorus	ppm	ASTM D5185m	760	1136	1197	1002
Zinc	ppm	ASTM D5185m	800	1359	1385	1216
Sulfur	ppm	ASTM D5185m	3000	4066	3827	3588
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	20.2	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	8.40	7.60	9.38
Visc @ 100°C	cSt	ASTM D445	14.6	13.9	13.8	14.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0014736 **Received** : 16 Jul 2024
Lab Number : 06237992 **Tested** : 17 Jul 2024
Unique Number : 11126826 **Diagnosed** : 18 Jul 2024 - Don Baldridge
Test Package : MOB 2 (Additional Tests: PrtCount)
 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)

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