

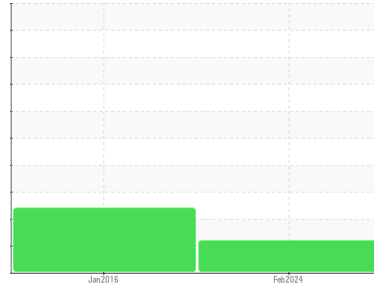
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id
CATERPILLAR 312CL 06311 (S/N CBA03691)
Component
Pump Hydraulic System
Fluid
CAT HYDO (130 LTR)



DIAGNOSIS

▲ Recommendation

Nous avons pris note que le filtre a été remplacé au moment de l'échantillonnage. Confirmez la source du lubrifiant utilisé pour l'appoint/remplissage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

Les taux d'usure de tous les composants sont normaux.

▲ Contamination

Il y a une quantité modérée de particules (de 4 à 14 microns) dans l'huile.

Fluid Condition

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. Le AN est acceptable pour ce fluide. L'huile peut encore servir si la contamination peut être réduite à un niveau acceptable.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC353185	PC353179	---
Sample Date	Client Info			14 Feb 2024	13 Jan 2016	---
Machine Age	hrs	Client Info		8283	4422	---
Oil Age	hrs	Client Info		3860	4422	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

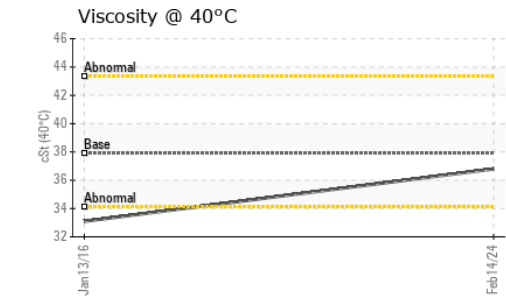
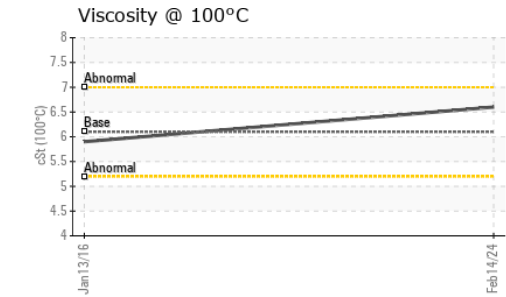
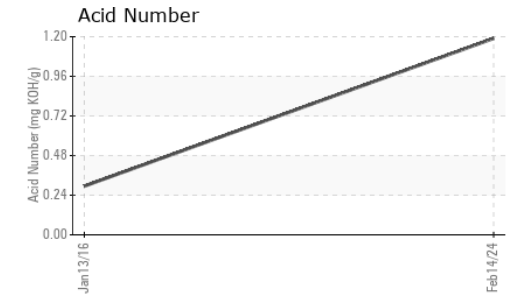
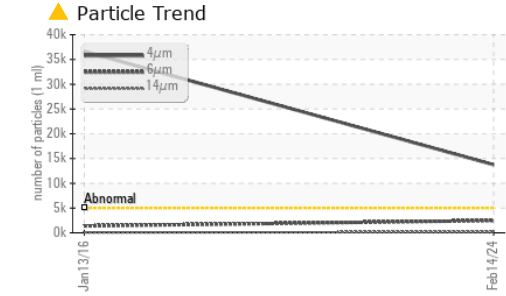
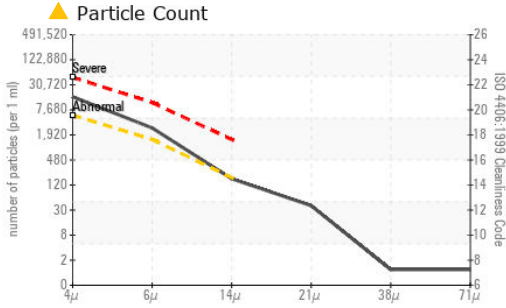
CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	23	---
Iron	ppm	ASTM D5185(m)	>20	28	▲ 69	---
Chromium	ppm	ASTM D5185(m)	>10	6	▲ 13	---
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>10	4	3	---
Lead	ppm	ASTM D5185(m)	>10	2	4	---
Copper	ppm	ASTM D5185(m)	>75	13	14	---
Tin	ppm	ASTM D5185(m)	>10	<1	<1	---
Antimony	ppm	ASTM D5185(m)		0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		4	14	---
Barium	ppm	ASTM D5185(m)		0	<1	---
Molybdenum	ppm	ASTM D5185(m)		2	1	---
Manganese	ppm	ASTM D5185(m)		0	<1	---
Magnesium	ppm	ASTM D5185(m)		34	29	---
Calcium	ppm	ASTM D5185(m)		2292	393	---
Phosphorus	ppm	ASTM D5185(m)	1100	945	574	---
Zinc	ppm	ASTM D5185(m)	1210	949	225	---
Sulfur	ppm	ASTM D5185(m)		3232	1230	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	10	10	---
Sodium	ppm	ASTM D5185(m)		5	25	---
Potassium	ppm	ASTM D5185(m)	>20	2	2	---

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC353185 **Received** : 21 Feb 2024
Lab Number : **02617138** **Tested** : 23 Feb 2024
Unique Number : 5734248 **Diagnosed** : 23 Feb 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: KV100, PQ, VI)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

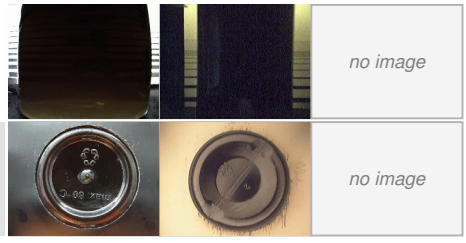
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 13749	▲ 36625	---
Particles >6µm	ASTM D7647	>1300	▲ 2464	▲ 1382	---
Particles >14µm	ASTM D7647	>160	150	65	---
Particles >21µm	ASTM D7647	>40	34	13	---
Particles >38µm	ASTM D7647	>10	1	1	---
Particles >71µm	ASTM D7647	>3	1	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/18/14	▲ 22/18/13	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*		1.19	0.295	---

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	NONE	NONE	---
Sand/Dirt	scalar Visual*	NONE	VLITE	NONE	---
Appearance	scalar Visual*	NORML	NORML	NORML	---
Odor	scalar Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar Visual*	>0.1	NEG	NEG	---
Free Water	scalar Visual*		NEG	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	37.9	36.8	33.1	---
Visc @ 100°C	cSt ASTM D7279(m)	6.1	6.6	5.9	---
Viscosity Index (VI)	Scale ASTM D2270*	106	135	123	---

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



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