

# **OIL ANALYSIS REPORT**

SAMPLE INFORMATION method

Sample Rating Trend



NORMAL

Machine Id **CATERPILLAR 374 10552 (S/N TNX10027)** Component **Right Swing Drive** 

{not provided} (--- GAL)

### **.** ...

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

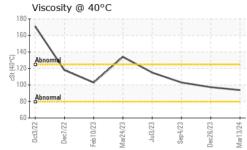
#### Fluid Condition

The condition of the oil is acceptable for the time in service.

Sample Date     Client Info     13 Mar 2024     26 Dec 2023     04 Sep 2023       Machine Age     hrs     Client Info     6361     7066     5947       Oil Age     hrs     Client Info     1295     1119     1091       Oil Changed     Client Info     Changed     Changed     Changed     Changed       Sample Status     method     Imit/base     current     NoRMAL     NORMAL     NORMAL       CONTAMINATION     method     Imit/base     current     history1     history2       Water     WC Method     >0.2     NEG     NEG     NEG       VEAR METALS     method     imit/base     current     history1     history2       Kron     ppm     ASTM D51655     >10     -1     0     0       Kron     ppm     ASTM D51655     >50     0     0     0       Silver     ppm     ASTM D51655     >50     0     0     0       Coronum     ppm     ASTM D51655     >0     0     0     0			memou	IIIIIIVDase	current	TIIStOLA	nistoryz	
Machine AgehrsClient Info836170665947Oil AgehrsClient Info129511191091Oll ChangedClient InfoChangedNoRMALNORMALNORMALSample StatusiiNoRMALNORMALNORMALNORMALCONTAMINATIONWC Method>0.2NEGNEGNEGWaterWC Method>0.2NEGNEGNEGWEAR METALSWC Method>0.2NEGNEGNEGNickelppmASTM D5185>40.01067ChromiumppmASTM D5185>10<100NickelppmASTM D5185>25200LaadppmASTM D5185>50000CopperppmASTM D5185>250000CadmiumppmASTM D5185>50000VanadiumppmASTM D5185>10<100ASTM D5185>10<10000ASTM D5185>10<100000ASTM D5185<000000ASTM D5185<000000CadmiumppmASTM D5185<0000ASTM D5185<000000ASTM D5185<200000ASTM	Sample Number		Client Info		WC0887947	WC0879344	WC0837100	
Oil Age hrs Client Info 1295 1119 1091   Oil Changed Client Info Changed Changed Changed Changed   Sample Status Imathod Imit/base current history1 history2   Water WC Method >0.2 NEG NEG NEG   WEAR METALS method Imit/base current history1 history2   Iron ppm ASTM D5185m >400 10 6 7   Chromium ppm ASTM D5185m >10 0 0 0   Nickel ppm ASTM D5185m >10 0 0 0   Silver ppm ASTM D5185m >50 0 0 0   Silver ppm ASTM D5185m >50 0 0 0   Cardmium ppm ASTM D5185m >50 0 0 0   Vanadium ppm ASTM D5185m >10 <1 0 0   Rorn ppm ASTM D5185m 0 0 0   Cardmium ppm ASTM D5185m 0 0 0   Barium ppm ASTM D5185m 0 0 0	Sample Date		Client Info		13 Mar 2024	26 Dec 2023	04 Sep 2023	
Oil Changed Sample StatusClient Info NORMALChanged NORMALChanged NORMALChanged NORMALChanged NORMALCONTAMINATIONmethodlimit/basecurrenthistory1history2WaterWC Method>0.2NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history2ItronppmASTM D51655>10<100NickelppmASTM D51655>10<100NickelppmASTM D51655>22000AuminumppmASTM D51655>25200LeadppmASTM D51655>20<100ChangedppmASTM D51655>20<100AdmiumppmASTM D51655>20<100VanadiumppmASTM D51655>0000AdmiumppmASTM D516550000AdmiumppmASTM D516550000AdmiumppmASTM D51655155166145BariumppmASTM D5165513675385BariumppmASTM D516552<12MolybdenumpmASTM D51655502<12SuffurppmASTM D51655502<12SuffurppmASTM D51655502<1	Machine Age	hrs	Client Info		8361	7066		
Sample Status     NORMAL     NORMAL     NORMAL     NORMAL     NORMAL       CONTAMINATION     method     imit/base     current     history1     history2       Water     WC Method     >0.2     NEG     NEG     NEG       WEAR METALS     method     imit/base     current     history1     history2       Iron     ppm     ASTM DS185m     >400     10     6     7       Chromium     ppm     ASTM DS185m     >10     <1	Oil Age	hrs	Client Info		1295	1119	1091	
CONTAMINATION     method     imit/base     current     history1     history2       Water     WC Method     >0.2     NEG     NEG     NEG       Wear METALS     method     imit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >400     10     6     7       Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m     >10     0     0     0       Silver     ppm     ASTM D5185m     >25     2     0     0     0       Astm D5185m     >200     <1     0     0     0     0       Capper     ppm     ASTM D5185m     >0     0     0     0       Yanadium     ppm     ASTM D5185m     >10     0     0     0       Capper     ppm     ASTM D5185m     0     0     0     0       Vanadium     ppm     ASTM D5185m     0     0     0 <td< th=""><th>Oil Changed</th><th></th><th>Client Info</th><th></th><th>Changed</th><th>Changed</th><th>Changed</th></td<>	Oil Changed		Client Info		Changed	Changed	Changed	
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WEAR METALS     method     limit/base     current     history1     history2       Iron     ppm     ASTM D5185m     >400     10     6     7       Chromium     ppm     ASTM D5185m     >10     0     0     0       Nickel     ppm     ASTM D5185m      0     0     0       Silver     ppm     ASTM D5185m     0     0     0     0       Auminum     ppm     ASTM D5185m     >50     0     0     0       Lead     ppm     ASTM D5185m     >50     0     0     0       Vanadium     ppm     ASTM D5185m     >10<     <1     0     0       Vanadium     ppm     ASTM D5185m     0     0     0     0       Vanadium     ppm     ASTM D5185m     155     166     145       Barium     ppm     ASTM D5185m     0     0     0     0       Magnesium     ppm     ASTM D5185m     2     0     4     4	CONTAMINATIO	N	method	limit/base	current	history1	history2	
Iron     ppm     ASTM D5185m     >400     10     6     7       Chromium     ppm     ASTM D5185m     >10     <1     0     0       Nickel     ppm     ASTM D5185m     <10     0     0     0       Silver     ppm     ASTM D5185m     <2     0     0     0       Aluminum     ppm     ASTM D5185m     >25     2     0     0     0       Lead     ppm     ASTM D5185m     >200     <1     0     0     0       Vanadium     ppm     ASTM D5185m     >200     <1     0     0     0       Vanadium     ppm     ASTM D5185m     0     0     0     0     0       Vanadium     ppm     ASTM D5185m     0	Water		WC Method	>0.2	NEG	NEG	NEG	
Dromium     ppm     ASTM D5185m     >10     <1	WEAR METALS		method	limit/base	current	history1	history2	
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Titanium     ppm     ASTM D5185m     <1     0     0       Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >25     2     0     0       Lead     ppm     ASTM D5185m     >50     0     0     0       Copper     ppm     ASTM D5185m     >50     0     0     0       Vanadium     ppm     ASTM D5185m     10     <1	Chromium	ppm	ASTM D5185m	>10	<1	0	0	
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Lead     ppm     ASTM D5185m     >50     0     0     0       Copper     ppm     ASTM D5185m     >200     <1	Silver	ppm	ASTM D5185m		0	0	0	
Copper     ppm     ASTM D5185m     >200     <1     0     0       Tin     ppm     ASTM D5185m     >10     <1	Aluminum	ppm	ASTM D5185m	>25	2	0	0	
Tin     ppm     ASTM D5185m     >10     <1     0     0       Vanadium     ppm     ASTM D5185m     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM D5185m     155     166     145       Barium     ppm     ASTM D5185m     0     0     0       Magaese     ppm     ASTM D5185m     2     0     4       Calcium     ppm     ASTM D5185m     136     75     385       Phosphorus     ppm     ASTM D5185m     356     347     431       Zinc     ppm     ASTM D5185m     2011     1940     3249       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >20     1     0     2       VISUAL     method     limit/base<	Lead	ppm	ASTM D5185m	>50	0	0	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     155     166     145       Barium     ppm     ASTM D5185m     0     0     0       Molybdenum     ppm     ASTM D5185m     21     0     0       Maganese     ppm     ASTM D5185m     2     0     4       Calcium     ppm     ASTM D5185m     136     75     385       Phosphorus     ppm     ASTM D5185m     356     347     431       Zinc     ppm     ASTM D5185m     2011     1940     3249       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >20     1     0     2       VISUAL     method     limit/base     current     history1<	Copper	ppm	ASTM D5185m	>200	<1	0	0	
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VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGNEG	Sodium	ppm	ASTM D5185m		0	0	1	
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Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*VisualImage: ScalarNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImage: ScalarNEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*VisualNEGNEGNEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
Emulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*VisualMEGNEGNEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Free Water scalar *Visual NEG NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG	
16:38) Rev: 1 Contact/Location: MIKE WYATT - TRANEV	Free Water	scalar	*Visual		NEG	NEG	NEG	
	:16:38) Rev: 1				Contact/Loc	ation: MIKE WY	ATT - TRANEW	



## **OIL ANALYSIS REPORT**



C	FLUID PROPERTI	ES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445		93.8	97.3	103
$\wedge$	SAMPLE IMAGES		method	limit/base	current	history1	history2
23	Color				no image	no image	no image
Mai 24/23 Jul 3/23 Sap 4/23 Dec 26/23 Mai 13/24	Bottom				no image	no image	no image
	GRAPHS						
	Ferrous Alloys		23 Sep4/23 Sep4/23 Dec26/23 Dec26/23	24 🛃 Mat1324			
	EZ/1572 Viscosity @ 40°C	Jul3/23	Sep4/23 Dec26/23	Mar13/24			
(1-0-1) 53 (1-0-1)	160 150 140 120 110 100 90						
	08 043/2/2 040/2 04/2 04/2 04		Sep4/23	Mar13/24			
	10936893 CONST contact Customer Servic re outside of the ISO 17	Receiv Tested Diagno ce at 1-80 7025 scop	ved : 19 I : 20 osed : 20 00-237-1369 be of accredi	Mar 2024 Mar 2024 Mar 2024 - W	es Davis	N Contact: mwyatt@traderco T:	DRAWER 1578 EW BERN, NC US 28563 MIKE WYATT

Contact/Location: MIKE WYATT - TRANEW