

## **OIL ANALYSIS REPORT**

Particles >21µm

Particles >38µm

Particles >71µm

**Oil Cleanliness** 

# **GRINDING** 004-003-000-0000 - TOOLMATIC CONNULA GRINDER

Component **Hydraulic System** 

MOBIL VELOCITE OIL NO.3 (25 GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

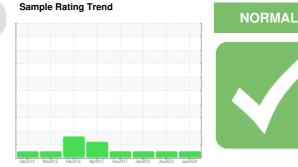
All component wear rates are normal.

#### Contamination

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

### Fluid Condition

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



Sample Number   Client Info   WC08888550   WC0776331   WC06     Sample Date   Client Info   09 Jan 2024   05 Jan 2023   06 Jan     Machine Age   yrs   Client Info   0   20   0     Oil Age   yrs   Client Info   2   4   22     Oil Changed   Client Info   Not Changd   Changed   Changed     Sample Status   Client Info   NORMAL   NORMAL   NORM     CONTAMINATION   method   limit/base   current   history1   history1     Water   WC Method<>0.05   NEG   NEG   NEG   NEG	MAL nistory2 EG nistory2
Sample DateClient Info09 Jan 202405 Jan 202306 JanMachine AgeyrsClient Info0200Oil AgeyrsClient Info0200Oil ChangedClient Info2422Oil ChangedClient InfoNot ChangdChangedChangedSample StatusImathematical Client InfoNorRMALNORMALNORMALCONTAMINATIONmethodlimit/basecurrenthistory1history1WaterWC Method>0.05NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history1IronppmASTM D5185m>20000NickelppmASTM D5185m>20000NickelppmASTM D5185m>20000SilverppmASTM D5185m>20200AluminumppmASTM D5185m>20200AluminumppmASTM D5185m>20000AluminumppmASTM D5185m>20000AluminumppmASTM D5185m>20000AluminumppmASTM D5185m>20000AluminumppmASTM D5185m>20000	nged MAL history2 EG
Machine AgeyrsClient Info0200Oil AgeyrsClient Info2422Oil ChangedClient InfoNot ChangedChangedChangedSample StatusIImit/baseCurrentNORMALNORMALCONTAMINATIONmethodlimit/basecurrenthistory1history1WaterWC Method>0.05NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history1IronppmASTM D5185m>20000NickelppmASTM D5185m>20000NickelppmASTM D5185m>20000SilverppmASTM D5185m>20000AluminumppmASTM D5185m>20200AluminumppmASTM D5185m>20000AluminumppmASTM D5185m>20000AluminumppmASTM D5185m>20000	nged MAL history2 EG history2
Oil AgeyrsClient Info2422Oil AgeyrsClient InfoNot ChangedChangedChangedChangedSample StatusClient InfoNORMALNORMALNORMALNORMALCONTAMINATIONmethodlimit/basecurrenthistory1hitWaterWC Method>0.05NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1hitIronppmASTM D5185m>2000<1ChromiumppmASTM D5185m>20000NickelppmASTM D5185m>20000SilverppmASTM D5185m0000AluminumppmASTM D5185m>202000AluminumppmASTM D5185m>202000AluminumppmASTM D5185m>200000	MAL nistory2 EG nistory2
Oil ChangedClient InfoNot ChangedChangedChangedSample StatusClient InfoNORMALNORMALNORMALNORMALCONTAMINATIONmethodlimit/basecurrenthistory1history1WaterWC Method>0.05NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history1IronppmASTM D5185m>2000<1ChromiumppmASTM D5185m>20000NickelppmASTM D5185m>20000SilverppmASTM D5185m0000AluminumppmASTM D5185m>2020<1LeadppmASTM D5185m>2000<1	MAL nistory2 EG nistory2
Sample StatusnormationNORMALNORMALNORMALNORMALCONTAMINATIONmethodlimit/basecurrenthistory1history1WaterWC Method>0.05NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history1IronppmASTM D5185m>2000<1ChromiumppmASTM D5185m>20000NickelppmASTM D5185m>20000SilverppmASTM D5185m0000AluminumppmASTM D5185m>2020<1LeadppmASTM D5185m>20000	MAL nistory2 EG nistory2
CONTAMINATIONmethodlimit/basecurrenthistory1history1WaterWC Method>0.05NEGNEGNEGWEAR METALSmethodlimit/basecurrenthistory1history1IronppmASTM D5185m>2000<1ChromiumppmASTM D5185m>20000NickelppmASTM D5185m>20000SilverppmASTM D5185m0000AluminumppmASTM D5185m>2020<1LeadppmASTM D5185m>20000	nistory2 EG nistory2
Water     WC Method     >0.05     NEG     NEG     NEG       WEAR METALS     method     limit/base     current     history1     history1     history1       Iron     ppm     ASTM D5185m     >20     0     0     <1       Chromium     ppm     ASTM D5185m     >20     0     0     0     0       Nickel     ppm     ASTM D5185m     >20     0     0     0     0       Titanium     ppm     ASTM D5185m     >20     0     0     0     0       Silver     ppm     ASTM D5185m     0     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     0     <1       Lead     ppm     ASTM D5185m     >20     0     0     0	EG history2
WEAR METALS     method     limit/base     current     history1     history1       Iron     ppm     ASTM D5185m     >20     0     0     <1       Chromium     ppm     ASTM D5185m     >20     0     0     0     0       Nickel     ppm     ASTM D5185m     >20     0     0     0     0       Titanium     ppm     ASTM D5185m     >20     0     0     0     0       Silver     ppm     ASTM D5185m     0     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     0     <1       Lead     ppm     ASTM D5185m     >20     0     0     0	nistory2
Iron     ppm     ASTM D5185m     >20     0     0     <1	
Chromium     ppm     ASTM D5185m     >20     0     0     0       Nickel     ppm     ASTM D5185m     >20     0     0     0     0       Titanium     ppm     ASTM D5185m     >20     0     0     0     0       Silver     ppm     ASTM D5185m     0     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     0     <1       Lead     ppm     ASTM D5185m     >20     0     0     0	
Nickel     ppm     ASTM D5185m     >20     0     0     0       Titanium     ppm     ASTM D5185m     <1     0     0       Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     0     <1       Lead     ppm     ASTM D5185m     >20     0     0     0	
Titanium     ppm     ASTM D5185m     <1	
Silver     ppm     ASTM D5185m     0     0     0       Aluminum     ppm     ASTM D5185m     >20     2     0     <1	
Aluminum     ppm     ASTM D5185m     >20     2     0     <1	
Lead ppm ASTM D5185m >20 0 0	
Copper ppm ASTM D5185m >20 -1 -1	
Tin     ppm     ASTM D5185m     >20     <1	
Antimony ppm ASTM D5185m 0	
Vanadium     ppm     ASTM D5185m     0     0     0	
Cadmium     ppm     ASTM D5185m     <1	
ADDITIVES method limit/base current history1 history1	nistory2
Boron     ppm     ASTM D5185m     0     <1	
Barium     ppm     ASTM D5185m     0     0     0	
Molybdenum     ppm     ASTM D5185m     <1	
Manganese     ppm     ASTM D5185m     0     0     0	
Magnesium     ppm     ASTM D5185m     1     <1	
Calcium     ppm     ASTM D5185m     26     27     32	
Phosphorus     ppm     ASTM D5185m     345     330     346	.6
Zinc ppm ASTM D5185m 406 404 422	2
	82
Sulfur     ppm     ASTM D5185m     1592     1726     138	
CONTAMINANTS method limit/base current history1 hi	nistory2
CONTAMINANTSmethodlimit/basecurrenthistory1history1SiliconppmASTM D5185m<>1522<1SodiumppmASTM D5185m01<1	
CONTAMINANTS method limit/base current history1 history1   Silicon ppm ASTM D5185m >15 2 2 <1	
CONTAMINANTSmethodlimit/basecurrenthistory1history1SiliconppmASTM D5185m<>1522<1SodiumppmASTM D5185m01<1PotassiumppmASTM D5185m<>20100	
CONTAMINANTSmethodlimit/basecurrenthistory1history1SiliconppmASTM D5185m<>1522<1SodiumppmASTM D5185m01<1PotassiumppmASTM D5185m<>20100	nistory2
CONTAMINANTSmethodlimit/basecurrenthistory1history1SiliconppmASTM D5185m<>1522<1SodiumppmASTM D5185m01<1PotassiumppmASTM D5185m<>20100FLUID CLEANLINESSmethodlimit/basecurrenthistory1history1	nistory2

2

1

0

16/13/10

ASTM D7647 >40

ASTM D7647 >10

ASTM D7647 >3

ISO 4406 (c) >19/17/14

4

0

0

16/14/11

5

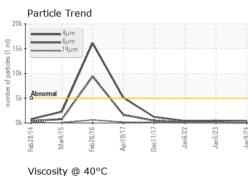
0

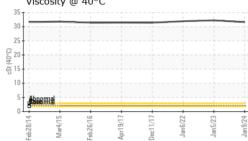
0

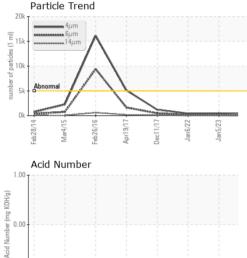
16/14/11



# **OIL ANALYSIS REPORT**







-1.00

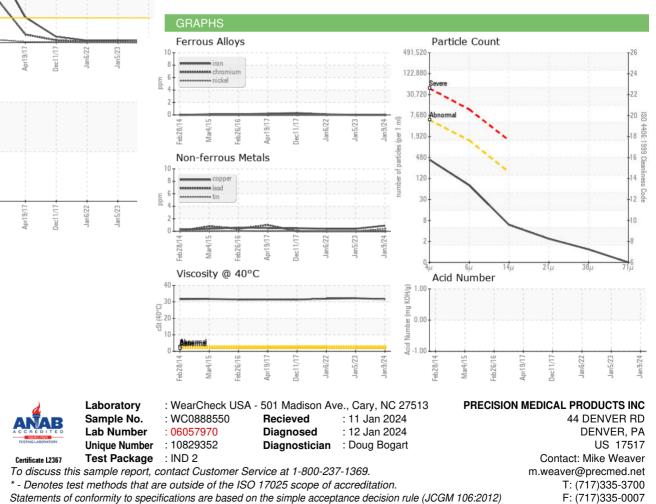
Feb28/14

Mar4/15

Feb 26/16

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	>0.05	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	2	31.6	32.2	31.9
SAMPLE IMAGES	;	method	limit/base	current	history1	history2
Color						
Bottom						

tom



Submitted By: SEAN BATTITO

Page 2 of 2