

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

## CTL74 Machine Id CTL 74 SCRAP CHOPPER MAIN B/S

#### Gearbox Fluid

## ESSO SPARTAN EP 220 (20 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.

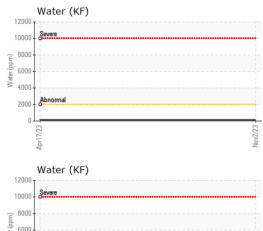
### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

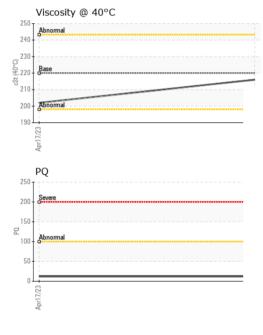
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RP0038596	RP0030552	
Sample Date		Client Info		02 Nov 2023	17 Apr 2023	
Machine Age	mths	Client Info		2	2	
Oil Age	mths	Client Info		2	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		12	12	
Iron	ppm	ASTM D5185m	>200	7	10	
Chromium	ppm	ASTM D5185m	>15	<1	0	
Nickel	ppm	ASTM D5185m	>15	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	2	0	
Lead	ppm	ASTM D5185m	>100	0	0	
Copper	ppm	ASTM D5185m	>200	<1	<1	
Tin	ppm	ASTM D5185m	>25	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	.5	9	0	
Barium	ppm	ASTM D5185m		19	0	
Molybdenum	ppm	ASTM D5185m	0	<1	1	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m	0	6	6	
Calcium	ppm	ASTM D5185m	1.7	11	26	
Phosphorus	ppm	ASTM D5185m	250	210	159	
Zinc	ppm	ASTM D5185m	.3	16	33	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	2	2	
Sodium	ppm	ASTM D5185m		0	1	
Potassium	ppm	ASTM D5185m	>20	<1	<1	
Water	%	ASTM D6304	>0.2	0.009	0.008	
ppm Water	ppm	ASTM D6304	>2000	93.2	84.3	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.75	0.44	0.24	



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Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Ddor Emulsified Water	scalar *Vis scalar *Vis scalar *Vis scalar *Vis scalar *Vis scalar *Vis scalar *Vis scalar *Vis	sual M sual M sual M sual M sual M	limit/base NONE NONE NONE NONE NONE	currentNONENONENONENONE	history1 LIGHT NONE NONE NONE	history2  
Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Ddor Emulsified Water Free Water	scalar *Vis scalar *Vis scalar *Vis scalar *Vis scalar *Vis scalar *Vis scalar *Vis	sual M sual M sual M sual M sual M	NONE NONE NONE NONE	NONE NONE	NONE	
Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water	scalar *Via scalar *Via scalar *Via scalar *Via scalar *Via scalar *Via	sual M sual M sual M sual M	NONE NONE NONE	NONE	NONE	
Silt Debris Sand/Dirt Appearance Ddor Emulsified Water Free Water	scalar *Vis scalar *Vis scalar *Vis scalar *Vis scalar *Vis	sual M sual M sual M	NONE	-		
Debris Sand/Dirt Appearance Ddor Emulsified Water Free Water	scalar *Vis scalar *Vis scalar *Vis scalar *Vis	sual N sual N	NONE	NONE	NONE	
Sand/Dirt Appearance Odor Emulsified Water Free Water	scalar *Vis scalar *Vis scalar *Vis	sual N		NONE		
Appearance Ddor Emulsified Water Free Water	scalar *Vis scalar *Vis			NONE	NONE	
Ddor Emulsified Water Free Water	scalar *Vi		NONE	NONE	NONE	
Emulsified Water Free Water			NORML	NORML	NORML	
Free Water			NORML	NORML	NORML	
			>0.2	NEG	NEG	
FLUID PROPERTI		sual		NEG	NEG	
		lethod	limit/base	current	history1	history2
/isc @ 40°C	cSt AST	FM D445 2	220	216	202	
SAMPLE IMAGES	m	lethod	limit/base	current	history1	history2
Color						no image
Bottom						no image
GRAPHS						
Ferrous Alloys			ļ	νQ		
			220			
chromium			200 -	Severe		
nickel			180-			
			160-			
//23			140- 52/2			
Apr1 7/23			EZ/Z^ON 120-			
Non-ferrous Metals			100-	Abnormal		
			80-			
copper			60-			
tin			40 -			
			20-			
23				3		
Apr1 7/23			Nov2/22	April // 23		
✓ Viscosity @ 40°C				े Acid Number		
Abnormal			2.50-			
			HO 2.00 -	Severe Abnormal		
Base			(B/2.50 HOX 2.00 Junear 1.50 March 1.50 Variant 1.00 Variant 1.00 Variant 1.00 Variant 1.00 Variant 1.00			
			a 1.00-	Base		
Abnormal			N 0.50			
			0.00	22		
Apr17/23			Nav2/23	77/11/27		
05998074 D	eceived iagnosed iagnostician sts: PQ) ee at 1-800-2	: 03 No : 06 No n : Angel 2 <i>37-1369.</i>	ov 2023 ov 2023 la Borella		Contact: MARIC ario.johnson@out	HWY 43 ALVERT, A US 3651 D JOHNSO

\* - 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)

Certificate L2367

Laboratory

Sample No. Lab Number Unique Number Test Package

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