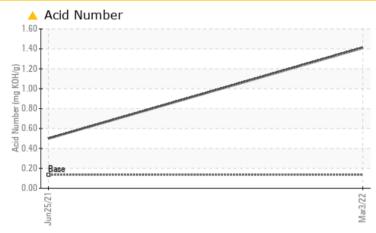


### COMPONENT CONDITION SUMMARY



#### RECOMMENDATION

The oil is near the end of it's useful service life, recommend schedule an oil change. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS							
Sample Status				ATTENTION	NORMAL		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.135	<b>1.41</b>	0.500		

Customer Id: UCLIFSIO Sample No.: UCS05483902 Lab Number: 05483902 Test Package: IND 2



To manage this report scan the QR code

*To discuss the diagnosis or test data:* Doug Bogart +1 (800)237-1369 x4016 <u>dougb@wearcheckusa.com</u>

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED A	CTIONS			
Action	Status	Date	Done By	Descri
Service/change Fluid	MISSED	Jul 15 2022	?	The oil change

#### ription

il is near the end of it's useful service life, recommend schedule an oil change.

## HISTORICAL DIAGNOSIS

## 25 Jun 2021 Diag: Angela Borella





Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



# Sullivan Palatek

# **OIL ANALYSIS REPORT**

SAMPLE INFORMATION

Sample Number

#### Area PALEXTRA 44 [852448] Machine Id SULLIVAN PALATEK 1808240002 - STARMARK Component

Compressor

# DIAGNOSIS

#### Recommendation

The oil is near the end of it's useful service life, recommend schedule an oil change. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

## Contamination

Moderate concentration of visible dirt/debris present in the oil.

#### Fluid Condition

The AN level is at the top-end of the recommended limit.



Machine Age         hrs         Client Info         19943         14861            Oil Age         hrs         Client Info         4775         5635            Sample Status         Client Info         ATTENTION         NORMAL            WEAR METALS         method         limit/base         current         history1            Iton         ppm         ASTM 05185m         >50         1         0            Iton         ppm         ASTM 05185m         >50         1         0            Itanium         ppm         ASTM 05185m         >50         1         0            Aluminum         ppm         ASTM 05185m         >25         <1         0            Itada         ppm         ASTM 05185m         >25         <1         -            Aluminum         ppm         ASTM 05185m         >50         <1             Aluminum         ppm         ASTM 05185m         >50         <1             Antimony         ppm         ASTM 05185m         0         0         0	Sample Date		Client Info		03 Mar 2022	25 Jun 2021	
Oil Age     hrs     Client Info     AT75     5635        Oil Changed     Client Info     Not Changed     Changed        Sample Status     Client Info     ATTENTION     NORMAL        WEAR METALS     method     limit/base     current     history1     history2       Icon     ppm     ASTM 05185m     >50     1     0        Chromium     ppm     ASTM 05185m     >0     0        Nickel     ppm     ASTM 05185m     >25     <1     0        Silver     ppm     ASTM 05185m     >25     <1         Aluminum     ppm     ASTM 05185m     >25     <1         Silver     ppm     ASTM 05185m     >50     <1         Aluminum     ppm     ASTM 05185m     >50     <1         Copper     ppm     ASTM 05185m     >15     2     0        Cadmium     ppm     ASTM 05185m     0     0        ADDTIVES     method     limit/base     current     history1     history2       Barium     ppm     ASTM 05185m     0     0		hrs			19943	14861	
Sample Status         Image         ATTENTION         NORMAL            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         1         0            Chromium         ppm         ASTM D5185m         >10         0         0            Nickel         ppm         ASTM D5185m         0         0             Aluminum         ppm         ASTM D5185m         >25         0         <1            Aluminum         ppm         ASTM D5185m         >550         <1         <1            Aduminum         ppm         ASTM D5185m         >550         <1         <1            Lead         ppm         ASTM D5185m         550         <1         <1            Copper         ppm         ASTM D5185m         550         <1         <1            Codedium         ppm         ASTM D5185m         0         0         0            Adminony         ppm         ASTM D5185m         0.3         0         0	Oil Age	hrs	Client Info		4775	5635	
Sample Status         Image         ATTENTION         NORMAL            WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >50         1         0            Chromium         ppm         ASTM D5185m         >10         0         0            Nickel         ppm         ASTM D5185m         0         0             Aluminum         ppm         ASTM D5185m         >25         0         <1            Aluminum         ppm         ASTM D5185m         >550         <1         <1            Aduminum         ppm         ASTM D5185m         >550         <1         <1            Lead         ppm         ASTM D5185m         550         <1         <1            Copper         ppm         ASTM D5185m         550         <1         <1            Codedium         ppm         ASTM D5185m         0         0         0            Adminony         ppm         ASTM D5185m         0.3         0         0	Oil Changed		Client Info		Not Changd	Changed	
Iron         ppm         ASTM D5185m         >50         1         0            Chromium         ppm         ASTM D5185m         0         0         0            Nickel         ppm         ASTM D5185m         0         0            Silver         ppm         ASTM D5185m         0            Auminum         ppm         ASTM D5185m         >25         0	Sample Status				-	NORMAL	
Iron         ppm         ASTM D5185m         >50         1         0            Chromium         ppm         ASTM D5185m         >10         0         0            Nickel         ppm         ASTM D5185m         0         0         0            Silver         ppm         ASTM D5185m         >25         <1	WEAR METALS		method	limit/base	current	history1	history2
Dromium         ppm         ASTM D5185m         >10         0         0	Iron	ppm	ASTM D5185m	>50	1	0	
Nickel         ppm         ASTM D5185m         0         0            Titanium         ppm         ASTM D5185m         0         <1            Aluminum         ppm         ASTM D5185m         >25         <1         0            Aluminum         ppm         ASTM D5185m         >25         0         <1            Lead         ppm         ASTM D5185m         >50         <1         <1            Copper         ppm         ASTM D5185m         >50         <1         <1            Antimony         ppm         ASTM D5185m         >15         2         0            Antimony         ppm         ASTM D5185m         0         0         0            Admium         ppm         ASTM D5185m         0.3         1         0            Admium         ppm         ASTM D5185m         0.3         0         0	-						
Titanium         ppm         ASTM D5185m         0            Silver         ppm         ASTM D5185m         >25         <1				,			
SilverppmASTM D5185m0<1AluminumppmASTM D5185m>25<1							
Aluminum       ppm       ASTM D5185m       >25       <1       0          Lead       ppm       ASTM D5185m       >25       0       <1	Silver						
LeadppmASTM D5185m>250<1CopperppmASTM D5185m>50<1	Aluminum			>25			
Copper         ppm         ASTM D5185m         >50         <1         <1            Tin         ppm         ASTM D5185m         >15         2         0            Antimony         ppm         ASTM D5185m         0         0            Vanadium         ppm         ASTM D5185m         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0.3         1         0            Maganese         ppm         ASTM D5185m         0.3         0         0            Maganese         ppm         ASTM D5185m         0.3         0         0            Calcium         ppm         ASTM D5185m         0.3         0         0            Phosphorus         ppm         ASTM D5185m         0.4         0         0            Sulfur         ppm         ASTM D5185m         0         0         0            Sulfur         ppm         ASTM D5185m         2.5         2         <1							
Tin         ppm         ASTM D5185m         >15         2         0            Antimony         ppm         ASTM D5185m         0         0            Vanadium         ppm         ASTM D5185m         0         0            ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0.3         1         0							
AntimonyppmASTM D5185m00VanadiumppmASTM D5185m00CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m00<1							
VanadiumppmASTM D5185m00CadmiumppmASTM D5185m00ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m00<1							
CadmiumpmASTM D5185m00ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0.310BariumppmASTM D5185m0.310MolybdenumppmASTM D5185m0.300ManganeseppmASTM D5185m0.300MagnesiumppmASTM D5185m0.400CalciumppmASTM D5185m0.400CalciumppmASTM D5185m00PhosphorusppmASTM D5185m000SulfurppmASTM D5185m1237181738CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>252<1	•						
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m0.310BariumppmASTM D5185m0.310MolybdenumppmASTM D5185m0.300MagneseppmASTM D5185m0.300MagnesiumppmASTM D5185m0.400CalciumppmASTM D5185m0.400PhosphorusppmASTM D5185m000SulfurppmASTM D5185m1237181738SulfurppmASTM D5185m22<1							
Boron         ppm         ASTM D5185m         0         0         <1            Barium         ppm         ASTM D5185m         0.3         1         0            Molybdenum         ppm         ASTM D5185m         0         0         0            Manganese         ppm         ASTM D5185m         0.3         0         0            Magnesium         ppm         ASTM D5185m         0.4         0         0            Calcium         ppm         ASTM D5185m         0.4         0         0            Calcium         ppm         ASTM D5185m         0.4         0         0            Calcium         ppm         ASTM D5185m         0         0         0            Sulfur         ppm         ASTM D5185m         1237         181         738            Sulfur         ppm         ASTM D5185m         >25         2         <1		ppin			Ū		
Barium         ppm         ASTM D5185m         0.3         1         0            Molybdenum         ppm         ASTM D5185m         0         0         0            Manganese         ppm         ASTM D5185m         0.3         0         0            Magnesium         ppm         ASTM D5185m         0.4         0         0            Calcium         ppm         ASTM D5185m         0         0         <-1            Calcium         ppm         ASTM D5185m         0         0         0         <           Phosphorus         ppm         ASTM D5185m         689 <b>375</b> 566            Sulfur         ppm         ASTM D5185m         1237         181         738            Soldium         ppm         ASTM D5185m         >25         2         <1            FLUID DEGRADATION         method         limit/base         current         history1         history2           Acid Number (AN)         mg KOHg         ASTM D5185m         >20         <1         <1            VISUAL         method         limit/base	ADDITIVES		method	limit/base	current	history1	history2
MolybdenumppmASTM D5185m0000ManganeseppmASTM D5185m0.300MagnesiumppmASTM D5185m0.400CalciumppmASTM D5185m000<1	Boron	ppm	ASTM D5185m	0	0	<1	
MaganesseppmASTM D5185m0.300MagnesiumppmASTM D5185m0.400CalciumppmASTM D5185m00<-1	Barium	ppm	ASTM D5185m	0.3	1	0	
MagnesiumppmASTM D5185m0.400CalciumppmASTM D5185m00<1	Molybdenum	ppm	ASTM D5185m	0	0	0	
Astm D5185m00<1PhosphorusppmASTM D5185m689375566ZincppmASTM D5185m000SulfurppmASTM D5185m1237181738CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>252<1	Manganese	ppm	ASTM D5185m	0.3	0	0	
PhosphorusppmASTM D5185m689 <b>375</b> 566ZincppmASTM D5185m000SulfurppmASTM D5185m1237 <b>181</b> 738CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>252<1	Magnesium	ppm	ASTM D5185m	0.4	0	0	
ZincppmASTM D5185m000SulfurppmASTM D5185m1237181738CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>252<1	Calcium	ppm	ASTM D5185m	0	0	<1	
SulfurppmASTM D5185m1237181738CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>252<1	Phosphorus	ppm	ASTM D5185m	689	375	566	
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>252<1	Zinc	ppm	ASTM D5185m	0	0	0	
SiliconppmASTM D5185m>252<1	Sulfur	ppm	ASTM D5185m	1237	181	738	
SodiumppmASTM D5185m10PotassiumppmASTM D5185m>20<1<1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.135<1.410.500VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONEVLITEYellow Metalscalar*VisualNONENONENONEPrecipitatescalar*VisualNONENONENONESiltscalar*VisualNONEMODERLIGHTDebrisscalar*VisualNONENONENONESand/Dirtscalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	CONTAMINANTS	}	method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>20<1<1FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.1351.410.500VISUALmethodlimit/basecurrenthistory1history1history2White Metalscalar*VisualNONENONEVLITEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONESiltscalar*VisualNONENONENONEDebrisscalar*VisualNONEMODERLIGHTAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORML	Silicon	ppm	ASTM D5185m	>25	2	<1	
FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.1351.410.500VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONEVLITEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONESiltscalar*VisualNONENONENONEDebrisscalar*VisualNONEMODERLIGHTAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORML	Sodium	ppm	ASTM D5185m		1	0	
Acid Number (AN)mg KOHgASTM D80450.135▲ 1.410.500VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONEVLITEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONESiltscalar*VisualNONENONENONEDebrisscalar*VisualNONEMODERLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORML	Potassium	ppm	ASTM D5185m	>20	<1	<1	
VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONEVLITEYellow Metalscalar*VisualNONENONENONEPrecipitatescalar*VisualNONENONENONESiltscalar*VisualNONENONENONEDebrisscalar*VisualNONEMODERLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
White Metalscalar*VisualNONENONEVLITEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONEDebrisscalar*VisualNONEMODERLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Acid Number (AN)	mg KOH/g	ASTM D8045	0.135	<b>1.41</b>	0.500	
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONEMODERLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	VISUAL		method	limit/base	current	history1	history2
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONEMODERLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	White Metal	scalar	*Visual	NONE	NONE	VLITE	
Precipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONEDebrisscalar*VisualNONEMODERLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Yellow Metal	scalar		NONE		NONE	
Siltscalar*VisualNONENONENONEDebrisscalar*VisualNONEMODERLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Precipitate	scalar					
Debrisscalar*VisualNONEMODERLIGHTSand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Silt	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirtscalar*VisualNONENONENONEAppearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Debris						
Appearancescalar*VisualNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORML	Sand/Dirt	scalar					
Odor scalar *Visual NORML NORML NORML	Appearance						
	Odor	scalar		NORML			
	Emulsified Water						

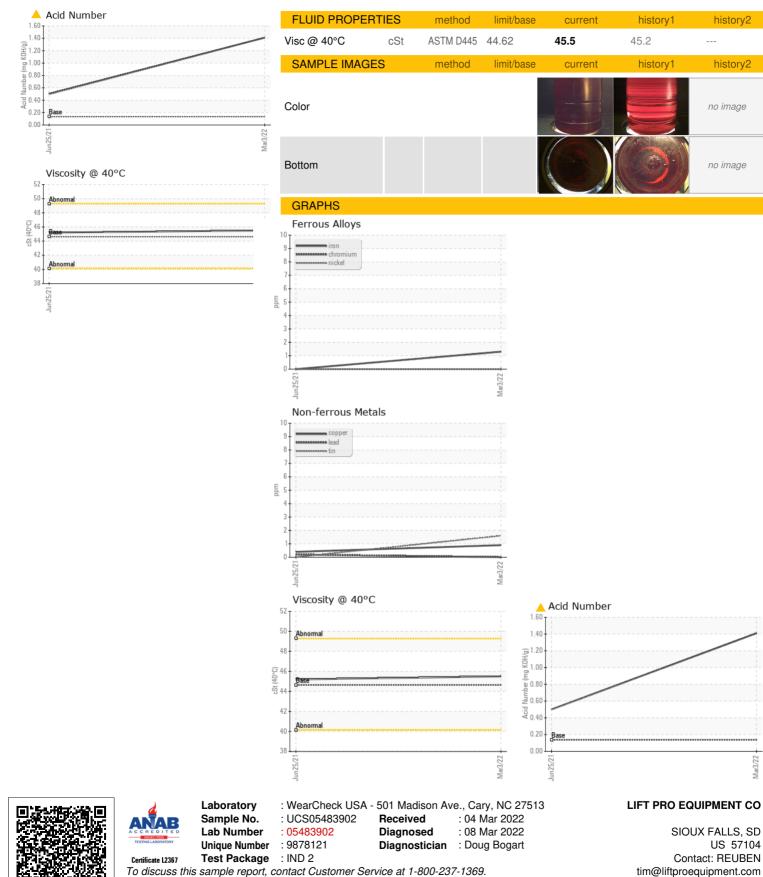
Locate: REUBEN - UCLIFSIO

NEG

scalar \*Visual



# **OIL ANALYSIS REPORT**



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)

US 57104

SIOUX FALLS, SD

Contact: REUBEN

T: (605)339-6494

Mar3/22

F:

history2

history2

no image

no image