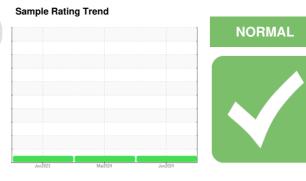


# **OIL ANALYSIS REPORT**

# PALASYN 45 SULLIVAN PALATEK 23CE003850 - BOB BELL FORD

Component Compressor



## DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

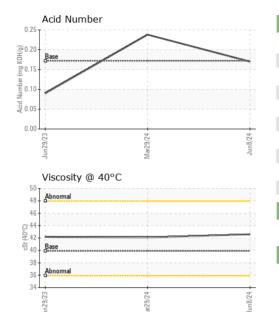
## **Fluid Condition**

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

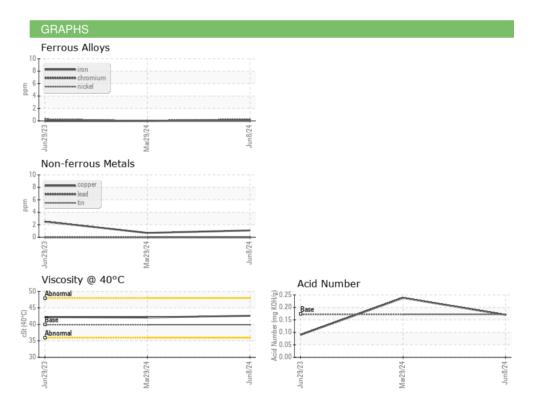
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         5496         4146         1000           Oil Age         hrs         Client Info         3000         1000         1000           Oil Changed         Client Info         Not Changd	Sample Number		Client Info		UCS06210841	UCS06138663	UCS05890372
Oil Age         hrs         Client Info         3000         1000         1000           Oil Changed         Client Info         Not Changd         Not Changd <td>Sample Date</td> <td></td> <td>Client Info</td> <td></td> <th>08 Jun 2024</th> <td>29 Mar 2024</td> <td>29 Jun 2023</td>	Sample Date		Client Info		08 Jun 2024	29 Mar 2024	29 Jun 2023
Not Change   Not Change   Not Change   Not Change   North   North	Machine Age	hrs	Client Info		5496	4146	1000
NORMAL   NORMAL   NORMAL   NORMAL   CONTAMINATION   method   limit/base   current   history1   history	Oil Age	hrs	Client Info		3000	1000	1000
CONTAMINATION         method         limit/base         current         history1         history           Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         0         0           Chromium         ppm         ASTM D5185m         >50         0         0         0           Nickel         ppm         ASTM D5185m         0         0         0         1           Silver         ppm         ASTM D5185m         0         0         0         0           Silver         ppm         ASTM D5185m         0         0         0         0           Aluminum         ppm         ASTM D5185m         0         0         0         0           Lead         ppm         ASTM D5185m         >25         2         0         0         0           Copper         ppm         ASTM D5185m         0         1         <1         2         1           Tin         ppm         ASTM D5185m         0         0         0	Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Water         WC Method         >0.1         NEG         NEG         NEG           WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         0         0           Chromium         ppm         ASTM D5185m         >10         <1         0         0           Nickel         ppm         ASTM D5185m         0         0         <1         0         0           Silver         ppm         ASTM D5185m         <1         0         0         0           Aluminum         ppm         ASTM D5185m         >25         2         0         0           Aluminum         ppm         ASTM D5185m         >25         2         0         0           Lead         ppm         ASTM D5185m         >25         2         0         0           Copper         ppm         ASTM D5185m         >50         1         <1         2           Tin         ppm         ASTM D5185m         >15         0         0         0           Cadmium         ppm         ASTM D5185m         0.0         0         0         0	Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS         method         limit/base         current         history1         history1           Iron         ppm         ASTM D5185m         >50         0         0         0           Chromium         ppm         ASTM D5185m         >10         <1	CONTAMINATIO	N	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.1	NEG	NEG	NEG
Chromium         ppm         ASTM D5185m         >10         <1         0         0           Nickel         ppm         ASTM D5185m         0         0         <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>50	0	0	0
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         >25         0         0         0           Copper         ppm         ASTM D5185m         >50         1         <1	Chromium	ppm	ASTM D5185m	>10	<1	0	0
Silver         ppm         ASTM D5185m         0         0         0           Aluminum         ppm         ASTM D5185m         >25         2         0         0           Lead         ppm         ASTM D5185m         >25         0         0         0           Copper         ppm         ASTM D5185m         >50         1         <1	Nickel	ppm	ASTM D5185m		0	0	<1
Aluminum         ppm         ASTM D5185m         >25         2         0         0           Lead         ppm         ASTM D5185m         >25         0         0         0           Copper         ppm         ASTM D5185m         >50         1         <1	Titanium	ppm	ASTM D5185m		<1	0	0
Lead         ppm         ASTM D5185m         >25         0         0         0           Copper         ppm         ASTM D5185m         >50         1         <1         2           Tin         ppm         ASTM D5185m         >15         0         0         0           Vanadium         ppm         ASTM D5185m         0         <1         0           Cadmium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0.0         0         0         0           ADDITIVES         method         limit/base         current         history1         histor           Boron         ppm         ASTM D5185m         0.0         0         0         0           Boron         ppm         ASTM D5185m         0.0         0         0         0           Boron         ppm         ASTM D5185m         0.0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0.0         0         0         0           Manganesium	Silver	ppm	ASTM D5185m		0	0	0
Copper         ppm         ASTM D5185m         >50         1         <1         2           Tin         ppm         ASTM D5185m         >15         0         0         0           Vanadium         ppm         ASTM D5185m         0         <1	Aluminum	ppm	ASTM D5185m	>25	2	0	0
Tin         ppm         ASTM D5185m         >15         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history1           Boron         ppm         ASTM D5185m         0.0         0         0         0           Barium         ppm         ASTM D5185m         0.0         <1         0         0           Barium         ppm         ASTM D5185m         0.0         <1         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0.0         <1         0         0           Calcium         ppm         ASTM D5185m         0.0         <1         0         0           Phosphorus         ppm         ASTM D5185m         0         <1         0         0           Zinc         ppm         ASTM D5185m         0         <1         0	Lead	ppm	ASTM D5185m	>25	0	0	0
Vanadium         ppm         ASTM D5185m         0         <1         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         0.0         0         0         0           Barium         ppm         ASTM D5185m         0.0         <1         0         0           Molybdenum         ppm         ASTM D5185m         0.0         0         0         0           Magnesium         ppm         ASTM D5185m         0.0         0         0         0           Magnesium         ppm         ASTM D5185m         0.0         <1         0         0           Calcium         ppm         ASTM D5185m         0.0         0         0         0         0           Phosphorus         ppm         ASTM D5185m         0.0         <1         0         0           Sulfur         ppm         ASTM D5185m         1309         1072         1536         1237           CONTAMINANTS         method         limit/base         current         history1 <t< td=""><td>Copper</td><td>ppm</td><td>ASTM D5185m</td><td>&gt;50</td><th>1</th><td>&lt;1</td><td>2</td></t<>	Copper	ppm	ASTM D5185m	>50	1	<1	2
Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         0.0         0         0         0           Barium         ppm         ASTM D5185m         0.0         <1	Tin	ppm	ASTM D5185m	>15	0	0	0
ADDITIVES         method         limit/base         current         history1         history           Boron         ppm         ASTM D5185m         0.0         0         0         0           Barium         ppm         ASTM D5185m         0.0         <1	Vanadium	ppm	ASTM D5185m		0	<1	0
Boron         ppm         ASTM D5185m         0.0         0         0         0           Barium         ppm         ASTM D5185m         0.0         <1         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0.0         <1         0         0           Calcium         ppm         ASTM D5185m         0.0         0         0         0           Phosphorus         ppm         ASTM D5185m         966         629         469         610           Zinc         ppm         ASTM D5185m         0         <1         0         0           Sulfur         ppm         ASTM D5185m         1309         1072         1536         1237           CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >25         2         <1         0           Potassium         ppm         ASTM D5185m         >20         1	Cadmium	ppm	ASTM D5185m		0	0	0
Barium         ppm         ASTM D5185m         0.0         <1         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0.0         <1	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         0         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0         0           Magnesium         ppm         ASTM D5185m         0.0         <1         0         0           Calcium         ppm         ASTM D5185m         0.0         0         0         0           Phosphorus         ppm         ASTM D5185m         966         629         469         610           Zinc         ppm         ASTM D5185m         0         <1         0         0           Sulfur         ppm         ASTM D5185m         1309         1072         1536         1237           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         <1         3           Sodium         ppm         ASTM D5185m         >20         1         0         <1           FLUID DEGRADATION         method         limit/base         current         history1         history1	Boron	ppm	ASTM D5185m	0.0	0	0	0
Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0.0         <1	Barium	ppm	ASTM D5185m	0.0	<1	0	0
Magnesium         ppm         ASTM D5185m         0.0         <1         0         0           Calcium         ppm         ASTM D5185m         0.0         0         0         0           Phosphorus         ppm         ASTM D5185m         966         629         469         610           Zinc         ppm         ASTM D5185m         0         <1         0         0           Sulfur         ppm         ASTM D5185m         1309         1072         1536         1237           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         <1         3           Sodium         ppm         ASTM D5185m         >20         1         0         <1           FLUID DEGRADATION         method         limit/base         current         history1         history1	Molybdenum	ppm	ASTM D5185m	0	0	0	0
Calcium         ppm         ASTM D5185m         0.0         0         0         0           Phosphorus         ppm         ASTM D5185m         966         629         469         610           Zinc         ppm         ASTM D5185m         0         <1	Manganese	ppm	ASTM D5185m	0	0	0	0
Phosphorus         ppm         ASTM D5185m         966         629         469         610           Zinc         ppm         ASTM D5185m         0         <1	Magnesium	ppm	ASTM D5185m	0.0	<1	0	0
Zinc         ppm         ASTM D5185m         0         <1         0         0           Sulfur         ppm         ASTM D5185m         1309         1072         1536         1237           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         <1         3           Sodium         ppm         ASTM D5185m         0         <1         0           Potassium         ppm         ASTM D5185m         >20         1         0         <1           FLUID DEGRADATION         method         limit/base         current         history1         history	Calcium	ppm	ASTM D5185m	0.0	0	0	0
Sulfur         ppm         ASTM D5185m         1309         1072         1536         1237           CONTAMINANTS         method         limit/base         current         history1         history           Silicon         ppm         ASTM D5185m         >25         2         <1	Phosphorus	ppm	ASTM D5185m	966	629	469	610
CONTAMINANTS         method         limit/base         current         history1         history1           Silicon         ppm         ASTM D5185m         >25         2         <1	Zinc	ppm	ASTM D5185m	0	<1	0	0
Silicon         ppm         ASTM D5185m         >25         2         <1         3           Sodium         ppm         ASTM D5185m         0         <1         0           Potassium         ppm         ASTM D5185m         >20         1         0         <1           FLUID DEGRADATION         method         limit/base         current         history1         history	Sulfur	ppm	ASTM D5185m	1309	1072	1536	1237
Sodium         ppm         ASTM D5185m         0         <1         0           Potassium         ppm         ASTM D5185m         >20         1         0         <1	CONTAMINANTS	;	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <b>1</b> 0 <1  FLUID DEGRADATION method limit/base current history1 history	Silicon	ppm	ASTM D5185m	>25	2	<1	3
Potassium         ppm         ASTM D5185m         >20         1         0         <1           FLUID DEGRADATION         method         limit/base         current         history1         history	Sodium	ppm	ASTM D5185m		0	<1	0
	Potassium		ASTM D5185m	>20	1	0	<1
Acid Number (AN) mg KOH/g ASTM D8045 0.172 0.17 0.238 0.09	FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.172	0.17	0.238	0.09

# **Sullivan**

## **OIL ANALYSIS REPORT**



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	LIGHT	NONE	MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.1	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	39.9	42.6	42.1	42.2
SAMPLE IMAGES	5	method	limit/base	current	history1	history2
Color						







Certificate 12367

Laboratory Sample No.

Lab Number : 06210841 Unique Number : 11083705

: UCS06210841 Test Package : IND 2

**Bottom** 

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 14 Jun 2024

**Tested** : 18 Jun 2024

Diagnosed : 18 Jun 2024 - Wes Davis

JOPPA, MD US 21085 Contact: CHRIS SCHAUM aircompservmd@verizon.net

T: (410)633-0900

F: (410)633-0901

AIR COMPRESSOR SERVICES OF MARYLAND

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)

Report Id: UCAIRJOP [WUSCAR] 06210841 (Generated: 06/18/2024 10:57:22) Rev: 1

Contact/Location: CHRIS SCHAUM - UCAIRJOP