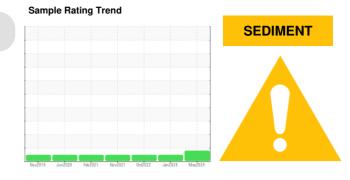


OIL ANALYSIS REPORT



Machine Id

VACPUMP-045 - WEST (S/N 1812B1604) Component Pump

Fluid SHELL MORLINA S4 B 320 (--- GAL)

DIAGNOSIS

Recommendation

The oil 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

There is a moderate amount of visible silt present in the sample.

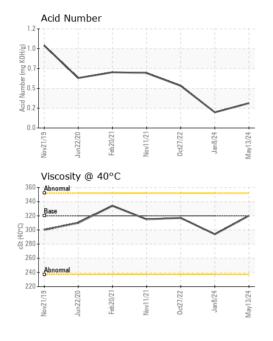
Fluid Condition

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

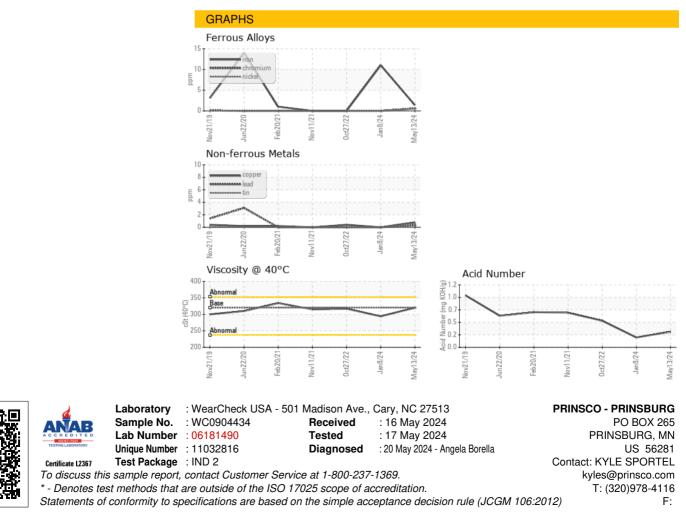
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0904434	WC0849061	WC0714787
Sample Date		Client Info		13 May 2024	08 Jan 2024	27 Oct 2022
Machine Age	hrs	Client Info		22509	23049	17550
Oil Age	hrs	Client Info		2117	2002	2238
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	1	11	0
Chromium	ppm	ASTM D5185m	>5	<1	0	0
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>7	4	0	0
Lead	ppm	ASTM D5185m	>12	<1	0	0
Copper	ppm	ASTM D5185m	>30	<1	0	<1
Tin	ppm	ASTM D5185m	>9	<1	0	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		<1	0	1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		<1	0	2
Magnesium	ppm	ASTM D5185m		<1	0	0
Calcium	ppm	ASTM D5185m		5	0	0
Phosphorus	ppm	ASTM D5185m		94	79	258
Zinc	ppm	ASTM D5185m		3	5	0
Sulfur	ppm	ASTM D5185m		177	628	510
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	4	56	1
Sodium	ppm	ASTM D5185m		<1	0	1
Potassium	ppm	ASTM D5185m	>20	2	<1	<1
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.30	0.19	0.51



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	A MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	VLITE
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	>.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	320	320	294	317
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						



Contact/Location: KYLE SPORTEL - PRIPRIMN