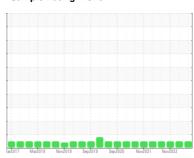


# **OIL ANALYSIS REPORT**

### Sample Rating Trend



**NORMAL** 



# VP-20 (S/N C-4254) Component

Pump Fluid

# **USPI VAC 100 (--- GAL)**

### 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 oil. The amount and size of particulates present in the system are acceptable.

#### **Fluid Condition**

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

1sr2017 Mar2018 Nov2018 Sep2019 Sep2020 Nov2021 Nov2022						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USPM27087	USPM26769	USPM24873
Sample Date		Client Info		17 Jul 2023	28 Feb 2023	15 Nov 2022
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	6	2	9
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>7	2	0	1
Lead	ppm	ASTM D5185m	>12	0	0	0
Copper	ppm	ASTM D5185m	>30	0	0	0
Tin	ppm	ASTM D5185m	>9	0	0	2
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	0	0	0	0
Calcium	ppm	ASTM D5185m	0	0	0	<1
Phosphorus	ppm	ASTM D5185m	1800	842	838	924
Zinc	ppm	ASTM D5185m	0	0	0	<1
Sulfur	ppm	ASTM D5185m	0	17	155	46
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>60	4	7	2
Sodium	ppm	ASTM D5185m		0	<1	0
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water	%	ASTM D6304		0.071	0.022	0.025
ppm Water	ppm	ASTM D6304	>.1	713.8	220.2	259.3
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1409	356	849
Particles >6µm		ASTM D7647	>1300	411	103	253
Particles >14µm		ASTM D7647	>160	24	7	14
Particles >21µm		ASTM D7647	>40	2	1	3
Particles >38µm		ASTM D7647	>10	0	0	0
Particles >71μm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/16/12	16/14/10	17/15/11
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Asid Number (AN)	I/OII/-	ACTM DODAE	0.05	0.10	0.05	0.10

0.19

mg KOH/g ASTM D8045 0.05

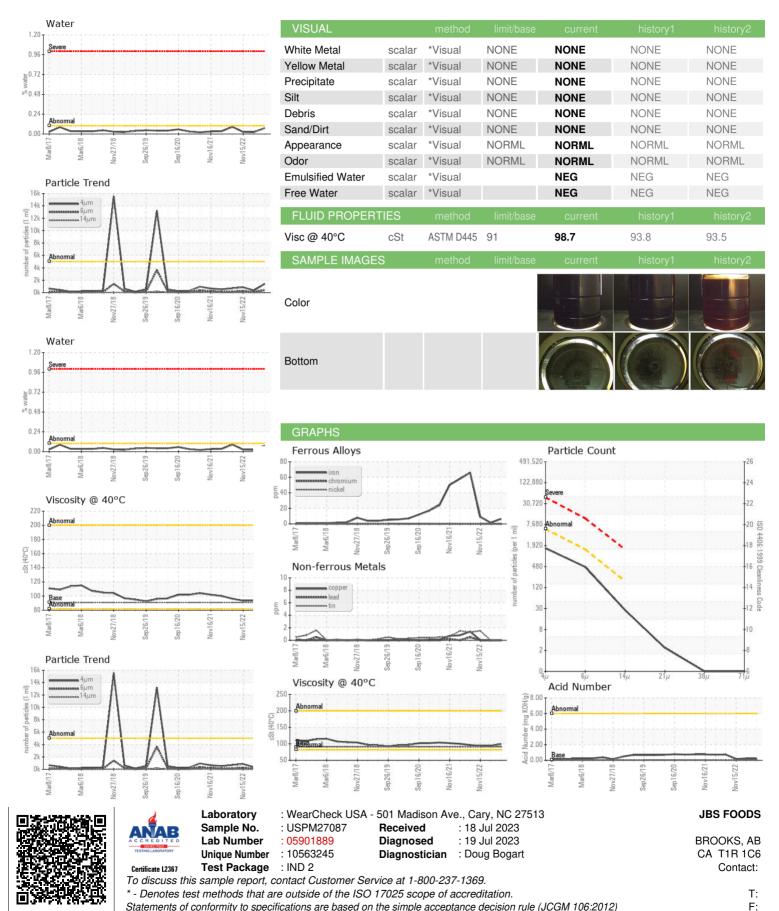
Acid Number (AN)

0.25

0.18



# **OIL ANALYSIS REPORT**



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)