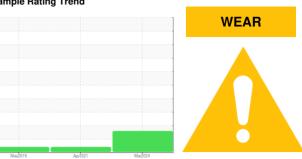


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

NATIONAL OILWELL VAR CHEYENNE N NO 1

Component **Gearbox**

ROYAL PURPLE SYNFILM GT 150 (25 GAL)

DIAGNOSIS

Recommendation

We recommend an early resample to monitor this condition.

Wear

Bearing and/or gear wear is indicated.

Contamination

There is no indication of any contamination in the oil.

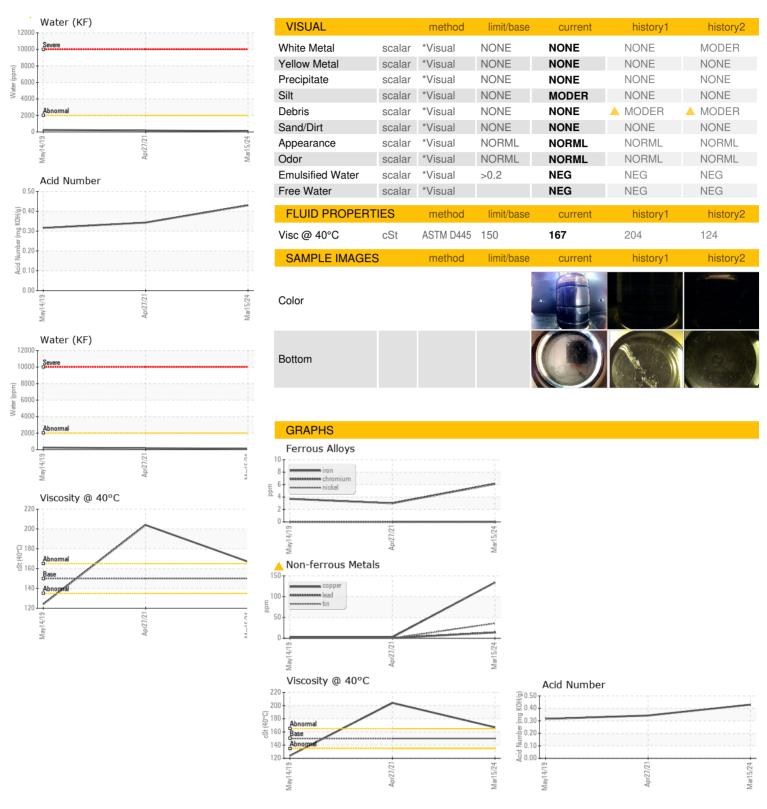
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		RP0032632	RP0005144	RP195767
Sample Date		Client Info		15 Mar 2024	27 Apr 2021	14 May 2019
Machine Age	hrs	Client Info		0	380	200
Oil Age	hrs	Client Info		0	75	200
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	6	3	4
Chromium	ppm	ASTM D5185m	>15	0	0	0
Nickel	ppm	ASTM D5185m	>15	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	0	0	<1
Lead	ppm	ASTM D5185m	>100	14	<1	<1
Copper	ppm	ASTM D5185m	>200	<u> </u>	3	3
Tin	ppm	ASTM D5185m	>25	△ 36	<1	<1
Antimony	ppm	ASTM D5185m	>5		0	0
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	<1	<1
	ppm	ASTM D5185m ASTM D5185m		0 <1	<1 0	<1 0
Barium						
Barium Molybdenum	ppm	ASTM D5185m		<1	0	0
Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m		<1 0 <1 81	0 0 0 0 91	0 0 0 <1 89
Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 <1	0 0 0	0 0 <1
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 <1 81	0 0 0 91 3 4	0 0 <1 89 6 4
Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 <1 81	0 0 0 0 91 3	0 0 <1 89 6
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 0 <1 81 4	0 0 0 91 3 4	0 0 <1 89 6 4
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >50	<1 0 <1 81 4 0	0 0 0 91 3 4	0 0 <1 89 6 4
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 0 <1 81 4 0 18	0 0 0 91 3 4 0	0 0 <1 89 6 4 2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m		<1 0 <1 81 4 0 18 current	0 0 0 91 3 4 0 history1	0 0 0 <1 89 6 4 2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	>50	<1 0 <1 81 4 0 18 current 1 2	0 0 0 91 3 4 0 history1	0 0 -<1 89 6 4 2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>50 >20	<1 0	0 0 0 91 3 4 0 history1 2 0	0 0 0 <1 89 6 4 2 history2 3 2 <1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>50 >20 >0.2	<1 0 <1 81 4 0 18	0 0 0 91 3 4 0 history1 2 0 0	0 0 0 <1 89 6 4 2 history2 3 2 <1 0.025



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

Lab Number : 06175590 Unique Number : 11021643

: RP0032632 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 10 May 2024 **Tested** : 13 May 2024

Diagnosed

: 13 May 2024 - Doug Bogart

Contact: JASON LEFTWICH jason.leftwich@magellanlp.com T:

SADDLEHORN PIPELINE

23634 COUNTY RD 30

HUDSON, CO

US 80642

F:

To discuss this sample report, contact Customer Service at 1-800-237-1369. st - 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)