

# **OIL ANALYSIS REPORT**

# Area FOUR MILE RIDGE [200009521] 83309 SITE 5

Hydraulic System SHELL TELLUS S4 VX 32 (--- LTR)

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

#### A Wear

The iron level is abnormal. All other component wear rates are normal.

## Contamination

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 acceptable for the time in service.

521]		Apr2015 Ma	2016 May2017 May2018	Ap:2019 Mar2020 Ap;2021 Sep20	22 Mar2024	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		NX015258	NX004182	NX004748
Sample Date		Client Info		28 Mar 2024	26 Sep 2022	05 Apr 2021
Machine Age	hrs	Client Info		72846	60798	42967
Oil Age	hrs	Client Info		72846	60798	42967
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		17	8	21
ron	ppm	ASTM D5185m	>20	<u> </u>	13	13
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	<1	0
_ead	ppm	ASTM D5185m	>20	6	4	4
Copper	ppm	ASTM D5185m	>20	<1	<1	<1
Гin	ppm	ASTM D5185m	>20	3	2	2
Antimony	ppm	ASTM D5185m				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	0	0
Barium	ppm	ASTM D5185m		0	<1	0
Volybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		1	<1	<1
Calcium	ppm	ASTM D5185m		0	<1	0
Phosphorus	ppm	ASTM D5185m		504	504	546
Zinc	ppm	ASTM D5185m		49	79	71
Sulfur	ppm	ASTM D5185m		825	919	745
CONTAMINANTS	S	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	5	7	5
Sodium	ppm	ASTM D5185m		0	1	0
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water	%	ASTM D6304	>0.05	0.004	0.005	0.009
opm Water	ppm	ASTM D6304	>500	47	54.3	93.9
FLUID CLEANLI	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	1111	1723	1186
Particles >6µm		ASTM D7647		192	303	250
Particles >14µm		ASTM D7647	>320	11	11	25
Particles >21µm		ASTM D7647		2	2	9
Particles >38µm		ASTM D7647	>20	0	0	0
Particles >71µm		ASTM D7647		0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/18/15	17/15/11	18/15/11	17/15/12

Sample Rating Trend



Water (KF)

Aav16/16

Apr17/1

PQ 250 200 Sev 150 100 Abr

/lav16/1

251 숱 201

number of particles (1

Apr17/15

6000

5000 - Sev

3000 Mater

100

40 38 36

() 34 Ba () 94 32 () 32 5 () 30

28

26

24

Apr17/15

Abnormal

Mav16/16

1/6/Jan

/Jan/3/1

May16/1 Mav9/1

Water (KF)

Apr17/1 Jav16/1

Viscosity @ 40°C

/b/w/

Particle Trend

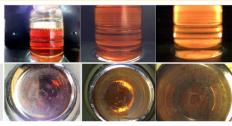
ar1 0/20 Apr5/21 sp26/22

rr23/1

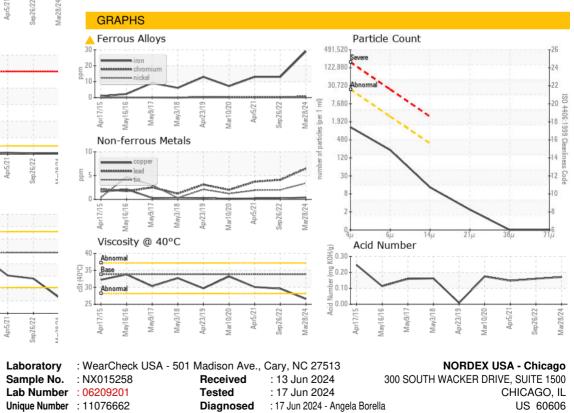
# **OIL ANALYSIS REPORT**

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.17	0.16	0.147
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	NONE	NONE	NONE
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	>0.05	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	33.8	26.56	29.6	30.1
SAMPLE IMAGES		method	limit/base	current	history1	history2
		methou	IIIIII/Dase	current	TISLOTYT	TISLOI

Color



Bottom



Test Package : IND 2 ( Additional Tests: KF, PQ )

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)

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Certificate 12367

Mar10/20

nr23/1

av 2/18

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