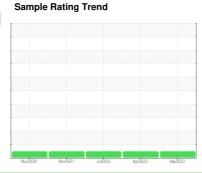


OIL ANALYSIS REPORT

RIPPEY [200005325] 82206 SITE 10

Component **Hydraulic System**

SHELL TELLUS S4 VX 32 (60 LTR)





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 component. The amount and size of particulates present in the system is acceptable.

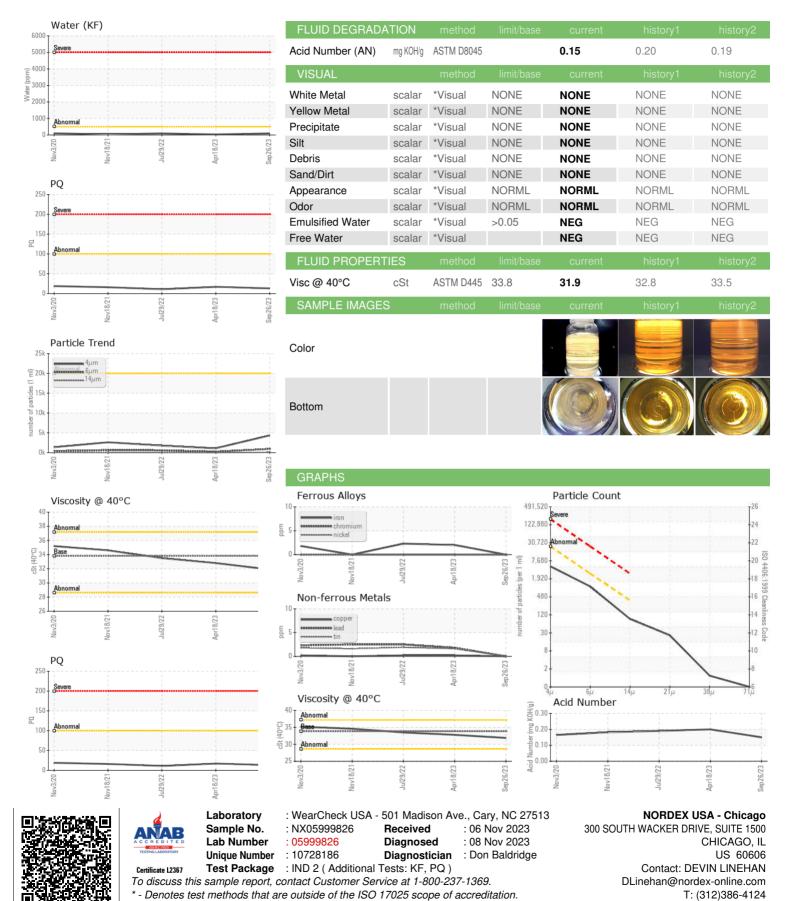
Fluid Condition

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

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		NX05999826	NX05913496	NX05672224
Sample Date		Client Info		26 Sep 2023	18 Apr 2023	29 Jul 2022
Machine Age	mths	Client Info		0	0	0
Oil Age	mths	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
PQ		ASTM D8184		13	17	11
Iron	ppm	ASTM D5185m	>20	0	2	2
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	0	<1	0
Lead	ppm	ASTM D5185m	>20	0	2	2
Copper	ppm	ASTM D5185m	>20	0	<1	<1
Tin	ppm	ASTM D5185m	>20	<1	2	2
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	<1	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	0	1
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m		0	0	1 <1
Molybdenum	ppm	ASTM D5185m		0	0	<1
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m		0	0 <1	<1 <1
Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0	0 <1 0	<1 <1 <1
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 2	0 <1 0	<1 <1 <1 <1 <1 <1
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 2 589	0 <1 0 0 559	<1 <1 <1 <1 <1 <1 524
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 2 589 58	0 <1 0 0 559 142	<1 <1 <1 <1 <1 <1 524 143
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >15	0 0 0 2 589 58 625	0 <1 0 0 559 142 683	<1 <1 <1 <1 <1 <1 <1 524 143 659
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 2 589 58 625	0 <1 0 0 559 142 683 history1	<1 <1 <1 <1 <1 524 143 659 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m		0 0 0 2 589 58 625 current	0 <1 0 0 559 142 683 history1 2	<1 <1 <1 <1 <1 <1 524 143 659 history2 2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15	0 0 0 2 589 58 625 current 2	0 <1 0 0 559 142 683 history1 2 <1	<1 <1 <1 <1 <1 524 143 659 history2 2 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15	0 0 0 2 589 58 625 current 2 0	0 <1 0 0 559 142 683 history1 2 <1 0	<1 <1 <1 <1 <1 <1 524 143 659 history2 2 0 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>15 >20 >0.05	0 0 0 2 589 58 625 current 2 0 0	0 <1 0 0 559 142 683 history1 2 <1 0 0.003	<1 <1 <1 <1 <1 <1 524
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304	>15 >20 >0.05 >500	0 0 0 2 589 58 625 current 2 0 0 0.009 94.9	0 <1 0 0 559 142 683 history1 2 <1 0 0.003 32.6	<1 <1 <1 <1 <1 <1 524
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 method	>15 >20 >0.05 >500 limit/base	0 0 0 2 589 58 625 current 2 0 0 0.009 94.9	0 <1 0 0 559 142 683 history1 2 <1 0 0.003 32.6 history1	<1 <1 <1 <1 <1 <1 <1 <524
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647	>15 >20 >0.05 >500 limit/base >20000	0 0 0 2 589 58 625 current 2 0 0 0.009 94.9 current 4347	0 <1 0 0 559 142 683 history1 2 <1 0 0.003 32.6 history1 1090	<1 <1 <1 <1 <1 <1 <1 <1 <524
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647	>15 >20 >0.05 >500 limit/base >20000 >2500 >320	0 0 0 2 589 58 625 current 2 0 0 0.009 94.9 current 4347 933	0 <1 0 0 559 142 683 history1 2 <1 0 0.003 32.6 history1 1090 239	<1 <1 <1 <1 <1 <1 <1 <1 <1 <524 143 659 history2 2 0 <1 0.009 95.4 history2 1773 584
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647	>15 >20 >0.05 >500 limit/base >20000 >2500 >320	0 0 0 2 589 58 625 current 2 0 0 0.009 94.9 current 4347 933 77	0 <1 0 0 559 142 683 history1 2 <1 0 0.003 32.6 history1 1090 239 17	<1 <1 <1 <1 <1 <1 <1 <1 <1 <524
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 ASTM D6304 ASTM D6304 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 >0.05 >500 limit/base >20000 >2500 >320 >80	0 0 0 2 589 58 625 current 2 0 0 0.009 94.9 current 4347 933 77	0 <1 0 0 559 142 683 history1 2 <1 0 0.003 32.6 history1 1090 239 17 5	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <524



OIL ANALYSIS REPORT



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

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