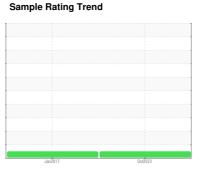


OIL ANALYSIS REPORT

PROGRAM PROGRAM LINE 8A (S/N 4697 R25-400)

Hydraulic System

ESSO NUTO H ISO 46 (50 GAL)





Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

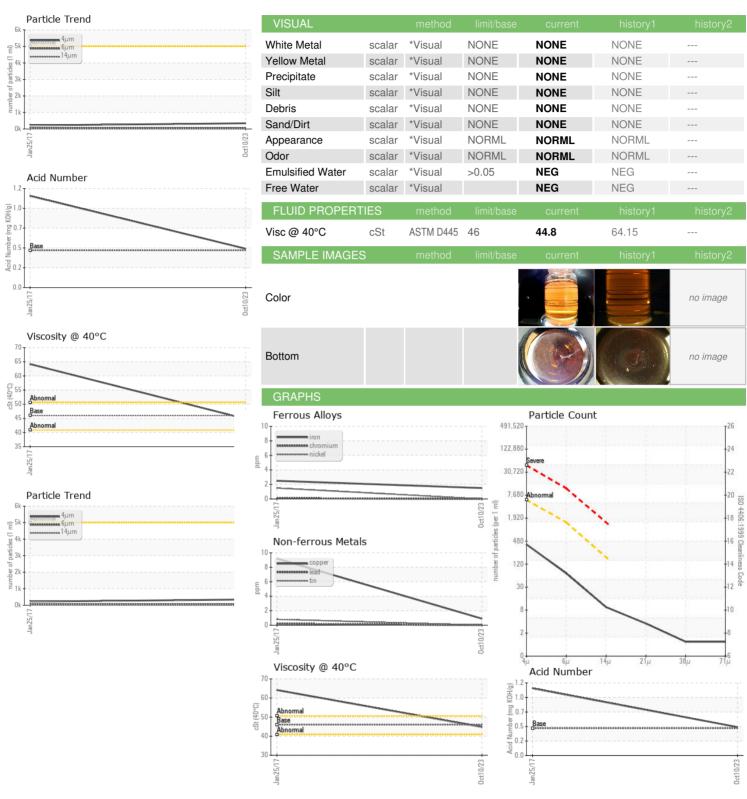
Fluid Condition

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

			Jan 2017	0 <i>d</i> 2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0633605	WCI2305998	
Sample Date		Client Info		10 Oct 2023	25 Jan 2017	
Machine Age	mths	Client Info		6	0	
Oil Age	mths	Client Info		6	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	2	
Chromium	ppm	ASTM D5185m	>20	0	<1	
Nickel	ppm	ASTM D5185m	>20	0	2	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>20	0	<1	
Lead	ppm	ASTM D5185m	>20	0	<1	
Copper	ppm	ASTM D5185m	>20	<1	9	
Tin	ppm	ASTM D5185m	>20	0	<1	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
	ρρ					
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	0	0	
Manganese	ppm	ASTM D5185m		<1	0	
Magnesium	ppm	ASTM D5185m	5	<1	0	
Calcium	ppm	ASTM D5185m	50	77	126	
Phosphorus	ppm	ASTM D5185m	330	378	494	
Zinc	ppm	AOTA DE LOS				
0 11	1-1-	ASTM D5185m	410	520	730	
Sulfur	ppm	ASTM D5185m ASTM D5185m	410 2700	520 5641	730 8051	
CONTAMINANTS	ppm					
	ppm	ASTM D5185m	2700	5641	8051	
CONTAMINANTS	ppm	ASTM D5185m method	2700 limit/base	5641 current	8051 history1	history2
CONTAMINANTS Silicon	ppm ppm	ASTM D5185m method ASTM D5185m	2700 limit/base >15	5641 current <1	8051 history1	history2
CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	2700 limit/base >15	5641 current <1	8051 history1 1 3	history2
CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	2700 limit/base >15 >20	5641 current <1 1 0	8051 history1 1 3 2	 history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647	2700 limit/base >15 >20 limit/base	5641 current <1 1 0 current	8051 history1 1 3 2 history1	history2 history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647	2700 limit/base >15 >20 limit/base >5000	5641 current <1 1 0 current 346	8051 history1 1 3 2 history1 219	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647	2700 limit/base >15 >20 limit/base >5000 >1300 >160	5641	8051 history1 1 3 2 history1 219 56	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647	2700 limit/base >15 >20 limit/base >5000 >1300 >160	5641	8051 history1 1 3 2 history1 219 56 16	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2700 limit/base >15 >20 limit/base >5000 >1300 >160 >40	5641 current <1 1 0 current 346 61 8 3	8051 history1 1 3 2 history1 219 56 16 10	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2700 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10	5641 current <1 1 0 current 346 61 8 3 1	8051 history1 1 3 2 history1 219 56 16 10 7	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	2700 limit/base >15 >20 limit/base >5000 >1300 >160 >40 >10 >3	5641 current <1 1 0 current 346 61 8 3 1 1	8051 history1 1 3 2 history1 219 56 16 10 7	history2 history2 history2



OIL ANALYSIS REPORT







Certificate L2367

Laboratory Sample No. Lab Number

Unique Number

: WC0633605 : 05978852 : 10696147 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 13 Oct 2023 Diagnosed Diagnostician

: 16 Oct 2023 : Wes Davis

Altium Packaging - THOMASVILLE - Plant 1071A 1408 UNITY ST

THOMASVILLE, NC US 27360

Contact: CRAWFORD MOORE crawford.moore@altiumpkg.com

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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F: