

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

11SHAFT LOUVERS #22 FAN

Hydraulic System Fluid ESSO NUTO H ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

A Wear

Copper ppm levels are noted. All other 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

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

				Nov2023		
SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0300588		
Sample Date		Client Info		28 Nov 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ATTENTION		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	<1		
Lead	ppm	ASTM D5185(m)	>20	11		
Copper	ppm	ASTM D5185(m)	>20	▲ 57		
Tin	ppm	ASTM D5185(m)	>20	0		
		ASTM D5185(m)	>20	0		
Antimony Vanadium	ppm	()				
	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		3		
Calcium	ppm	ASTM D5185(m)		30		
Phosphorus	ppm	ASTM D5185(m)		249		
Zinc	ppm	ASTM D5185(m)				
				282		
Sulfur	ppm	ASTM D5185(m)		282 1718		
		()				
Sulfur Lithium CONTAMINANTS	ppm ppm	ASTM D5185(m)	limit/base	1718 <1		
Lithium CONTAMINANTS	ppm ppm	ASTM D5185(m) ASTM D5185(m)	limit/base	1718 <1		
Lithium CONTAMINANTS Silicon	ppm ppm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)		1718 <1 current	 history1	 history2
Lithium CONTAMINANTS Silicon	ppm ppm	ASTM D5185(m) ASTM D5185(m) method	>15	1718 <1 current 0	 history1 	 history2
Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m)	>15	1718 <1 current 0 0 <1	 history1 	 history2
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>15 >20	1718 <1 current 0 0 <1	 history1 	 history2
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) Method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) Method	>15 >20 limit/base >5000	1718 <1 current 0 0 <1 <1	 history1 history1	 history2 history2
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D7647	>15 >20 limit/base >5000	1718 <1 current 0 0 <1 <1 current 1199	 history1 history1 	 history2 history2
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160	1718 <1 current 0 0 <1 current 1199 283	 history1 history1 history1	 history2 history2 history2
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160	1718 <1 current 0 0 <1 current 1199 283 15	 history1 history1 	 history2 history2 history2
Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10	1718 <1 current 0 0 <1 current 1199 283 15 3 0	 history1 history1 	 history2 history2 history2
Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>15 >20 limit/base >5000 >1300 >160 >40 >10	1718 <1 current 0 0 <1 current 1199 283 15 3	 history1 history1 	 history2 history2 history2



OIL ANALYSIS REPORT

Particle Trend	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D974*	.40	0.33		
14μm	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	NONE		
288	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
Additives	Sand/Dirt	scalar scalar	Visual* Visual*	NONE	NONE		
	Appearance Odor	scalar	Visual*	NORML	NORML		
Researcher phosphorus	Emulsified Water	scalar	Visual*	>0.05	NEG		
	Free Water	scalar	Visual*		NEG		
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D7279(m)	32.6	34.0		
	SAMPLE IMAGES	6	method	limit/base	current	history1	history2
Nov2					1		
id Number	Color					no image	no image
158	· -			5			
	Bottom					no image	no image
	Dottom					no inage	no image
	GRAPHS						
e1	Ferrous Alloys				Particle Count		
1	0 T			491,520			[²⁶
iscosity @ 40°C	iron sessessesses chromium 5 - nickel			122,880	Course		-24
				30,720	pevele		-22
bnormal				\$ € 7,680	Abnormal		-20
ase	Nov28/23			Nov28/23 s (per 1 m)	1		-18
lase	≥ Non-ferrous Metal	s		Nov28/23 006'1 ml) 1000'1	1.		16
	Copper]			re. jo 120-			-20 -18 -16 -14
4 E	0 - consection lead			aquine 30.			-12
ä 2	0						12 10
				- 3		1	
article Trend	Nov28/23			2. 2/82/00			
οποιπια, 4μm	≥ Viscosity @ 40°C			4	Acid Number	4μ 21μ	38µ 71µ
	⁸ T			(^B €0.60	Acia Number		
				¥ 0.40	Base		
(1-0-1) -0-1) -0-1 -0-3 -0-1 -0-1 -0-1 -0-1 -0-1 -0-1				рен представительно представи представительно представительно представительно представительно			
3	0						
	v28/23			v28/23	v28/23		Nov28/23
	No			No	No		- North
22 22 23 24 25 25 25 25 25 25 25 25 25 25	WearCheck - C8-11 WC0300588 02607823 5708909 IND 2 ntact Customer Servi	Recieved Diagnose Diagnost	d : 10 . ed : 11 . ician : Kev	Jan 2024 Jan 2024 rin Marson	7L 5H9 CREIGHT	Contae igor.boz	

Contact/Location: Igor Bozhyk - INCCRE