



Machine Id
DENISON NNS 3051

Component
Hydraulic System

Fluid
SAFETY-KLEEN PERFORMANCE PLUS HYDRAULIC AW 46 (300 GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		ST44796	---	---
Sample Date	Client Info		01 Jun 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<1	---	---
Chromium	ppm	ASTM D5185m >20	0	---	---
Nickel	ppm	ASTM D5185m >20	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >20	0	---	---
Lead	ppm	ASTM D5185m >20	<1	---	---
Copper	ppm	ASTM D5185m >20	18	---	---
Tin	ppm	ASTM D5185m >20	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	<1	---	---
Manganese	ppm	ASTM D5185m	0	---	---
Magnesium	ppm	ASTM D5185m	2	---	---
Calcium	ppm	ASTM D5185m 48	48	---	---
Phosphorus	ppm	ASTM D5185m 340	336	---	---
Zinc	ppm	ASTM D5185m 430	433	---	---
Sulfur	ppm	ASTM D5185m	1015	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	1	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m >20	1	---	---
Water	%	ASTM D6304 >0.05	0.002	---	---
ppm Water	ppm	ASTM D6304 >500	17.0	---	---

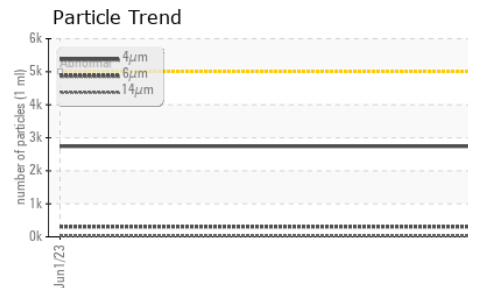
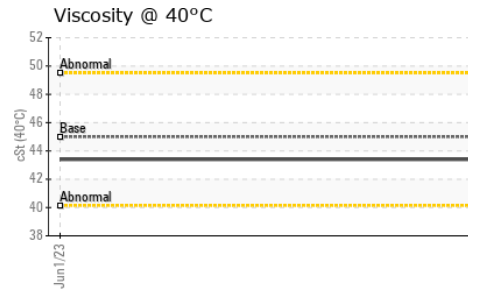
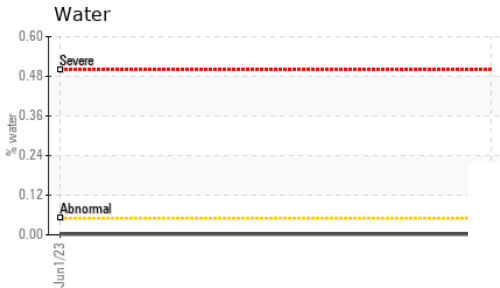
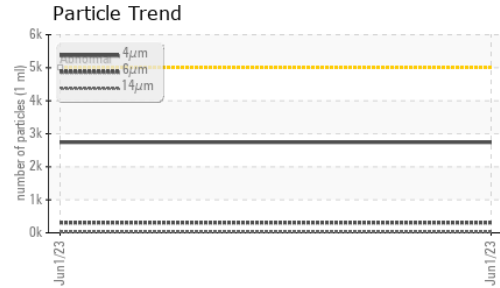
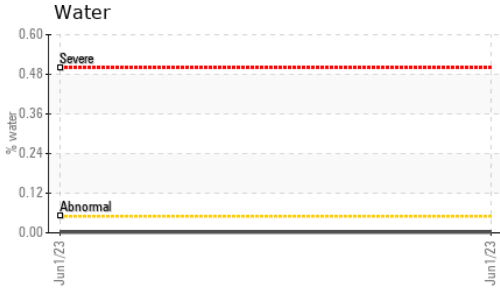
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	2741	---	---
Particles >6µm	ASTM D7647	>1300	308	---	---
Particles >14µm	ASTM D7647	>160	18	---	---
Particles >21µm	ASTM D7647	>40	4	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/15/11	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.38	---	---

OIL ANALYSIS REPORT



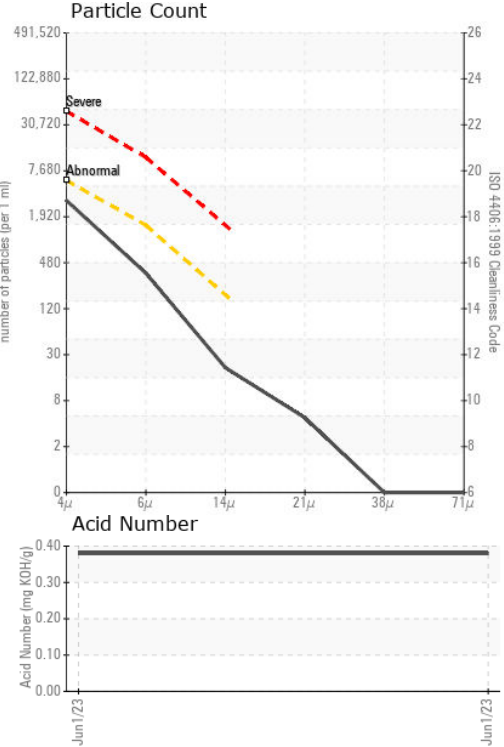
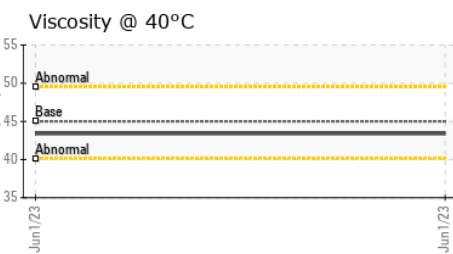
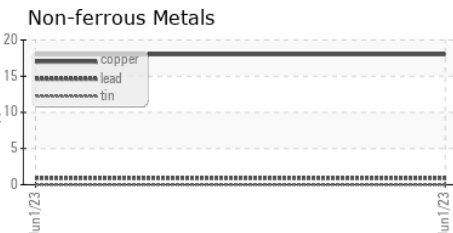
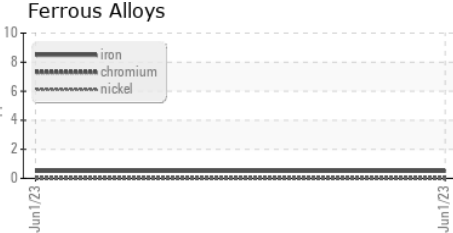
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.0	43.4	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST44796 **Received** : 07 Jun 2023
Lab Number : 05866670 **Diagnosed** : 08 Jun 2023
Unique Number : 10506454 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: KF)

FLUID POWER SOLUTIONS
 4400 Edgewyn Ave.
 Hilliard, OH
 US 43026
 Contact: NATE SCHUENKE
 nschuenke@fluidpowersolutions.net
 T: (614)777-8954
 F: (614)777-8640

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)