

OIL ANALYSIS REPORT

Sample Rating Trend



Shear Harris Shear

Hydraulic System Fluid SHELL AW HYDRAULIC S2 46 (1800 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Area

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. 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 suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PE0003611	PE0000726	PE0000751
Sample Date		Client Info		18 Apr 2024	21 Mar 2024	07 Feb 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	٨	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		16	12	16
Iron	ppm	ASTM D5185m	>20	7	6	7
Chromium	ppm	ASTM D5185m	>20	2	1	1
Nickel	ppm	ASTM D5185m	>20	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	0	2
Lead	ppm	ASTM D5185m	>20	<1	0	1
Copper	ppm	ASTM D5185m	>20	7	5	8
Tin	ppm	ASTM D5185m	>20	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	13
Molybdenum	ppm	ASTM D5185m		<1	0	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		7	3	5
Calcium	ppm	ASTM D5185m		88	50	46
Phosphorus	ppm	ASTM D5185m		311	297	317
Zinc	ppm	ASTM D5185m		336	323	335
Sulfur	ppm	ASTM D5185m		833	879	791
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	2	<1	<1
Sodium	ppm	ASTM D5185m		0	<1	0
Potassium	ppm	ASTM D5185m	>20	2	0	<1
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1862	480	482
Particles >6µm		ASTM D7647	>1300	127	138	111
Particles >6μm Particles >14μm		ASTM D7647 ASTM D7647	>1300 >160	127 5	138 14	111 13
			>160			
Particles >14µm		ASTM D7647	>160 >40	5	14	13

ASTM D7647 >3

ISO 4406 (c) >19/17/14

Particles >71µm Oil Cleanliness 0

18/14/10

0

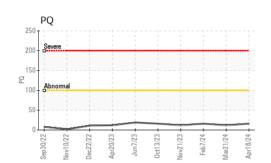
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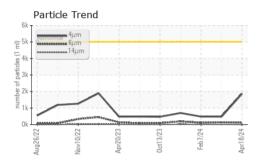
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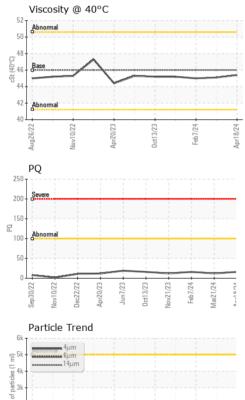
16/14/11



OIL ANALYSIS REPORT







3k 2k 1k					/
Aug26/22	Nov10/22	Apr20/23	0ct13/23	Feb7/24	ACREA
	2600. ET	1	d	Labora	atory

FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.26	0.29	0.22
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	46	45.4	45.1	45.0
SAMPLE IMAGES	S	method	limit/base	current	history1	history2

Color

Bottom

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Lab Number : 06156851

Unique Number : 10992274

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.

Tested

Test Package : PLANT (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

Diagnosed

Sample No.



GRAPHS Ferrous Alloys Particle Count 491,520 122,880 30.72 0. OSI -20 Apr18/24 Vov10/72 Feb7/24 4406:1999 Cle (per 1 1,920 18 articles 480 Non-ferrous Metals 16 120 14 30 12 8 una26/27 Feb7/24 2010/25 Apr20/73 2 Viscosity @ 40°C Acid Number (B/H0.30 55 ි 50 Ê 0.20 ਸ਼ੂ 0.10 Acid N 0000 40 0ct13/23 -Feb7/24 -Apr18/24 -Feb7/24 Apr18/24 10/01/vol Apr/20/73 Aua26/22 Vov10/22 Apr20/23 : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Seattle Iron and Metals : PE0003611 Received : 22 Apr 2024

: 23 Apr 2024

: 24 Apr 2024 - Angela Borella

601 S MYRTLE ST SEATTLE, WA US 98108 Contact: ADAM THOMAS athomas@seairon.com T: (206)682-0040 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

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Certificate 12367

Submitted By: DUANE DENOTTA

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