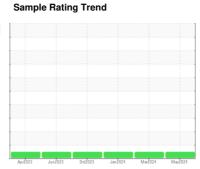


OIL ANALYSIS REPORT



NORMAL



Machine Id T011-02

Component **Hydraulic System**

CHEVRON HYDRAULIC OIL AW ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

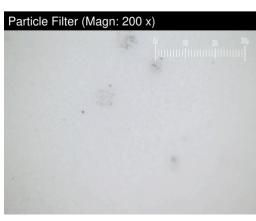
Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

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		PH0001537	PH0001543	PH0001548
Sample Date		Client Info		21 May 2024	21 Mar 2024	05 Jan 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	J	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	<1	<1
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	1
Lead	ppm	ASTM D5185m	>20	1	0	0
Copper	ppm	ASTM D5185m	>20	4	3	3
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0
Oddiniani	ррпп	AOTIVI DOTOSIII		<1	0	
ADDITIVES	ррпп	method	limit/base	current	history1	history2
	ppm		limit/base			
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current	history1	history2
ADDITIVES Boron Barium	ppm	method ASTM D5185m ASTM D5185m	limit/base	current 6 <1	history1 0 0	history2 2 0
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 6 <1 <1 0 1	history1 0 0 0 0 1	history2 2 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 6 <1 <1 0 1 65	history1 0 0 0 0 1 66	history2 2 0 0 0 <1 55
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 6 <1 <1 0 1 65 635	history1 0 0 0 0 1 66 429	history2 2 0 0 0 <1 55 801
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 6 <1 <1 0 1 65 635 538	history1 0 0 0 0 1 66 429 457	history2 2 0 0 0 <1 55 801 421
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 6 <1 <1 0 1 65 635	history1 0 0 0 0 1 66 429	history2 2 0 0 0 <1 55 801
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base	current 6 <1 <1 0 1 65 635 538	history1 0 0 0 0 1 66 429 457	history2 2 0 0 0 <1 55 801 421
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	Method ASTM D5185m		current 6 <1 <1 <1 0 1 65 635 538 4350 current 2	history1 0 0 0 0 1 66 429 457 3256	history2 2 0 0 0 <1 55 801 421 3321
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >15	current 6 <1 <1 <0 1 65 635 538 4350 current 2 11	history1 0 0 0 0 1 66 429 457 3256 history1	history2 2 0 0 0 <1 55 801 421 3321 history2 1 1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m	limit/base >15	current 6 <1 <1 <1 0 1 65 635 538 4350 current 2	history1 0 0 0 0 1 66 429 457 3256 history1	history2 2 0 0 0 <1 55 801 421 3321 history2 1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >15	current 6 <1 <1 <0 1 65 635 538 4350 current 2 11	history1 0 0 0 0 1 66 429 457 3256 history1 1 0	history2 2 0 0 0 <1 55 801 421 3321 history2 1 1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >15 >20 limit/base >10000	current 6 <1 <1 0 1 65 635 538 4350 current 2 11 2 current	history1 0 0 0 0 1 66 429 457 3256 history1 1 0 1 history1 371	history2 2 0 0 0 <1 55 801 421 3321 history2 1 1 <1 history2 571
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m	limit/base >15 >20 limit/base >10000 >2500	current 6 <1 <1 0 1 65 635 538 4350 current 2 11 2 current 2297 348	history1 0 0 0 1 66 429 457 3256 history1 1 0 1 history1 371 100	history2 2 0 0 0 <1 55 801 421 3321 history2 1 1 <1 history2 571 162
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m ASTM D7647 ASTM D7647	limit/base >15 >20 limit/base >10000 >2500 >320	current 6 <1 <1 <1 0 1 65 635 538 4350 current 2 11 2 current 2297 348 47	history1 0 0 0 0 1 66 429 457 3256 history1 1 0 1 history1 371 100 9	history2 2 0 0 0 0 <1 55 801 421 3321 history2 1 1 <1 history2 571 162 15
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m method ASTM D5185m	limit/base >15 >20 limit/base >10000 >2500 >320 >80	current 6 <1 <1 0 1 65 635 538 4350 current 2 11 2 current 2297 348	history1 0 0 0 1 66 429 457 3256 history1 1 0 1 history1 371 100	history2 2 0 0 0 <1 55 801 421 3321 history2 1 1 <1 history2 571 162



Particles >71µm ASTM D7647 >4 Oil Cleanliness 18/16/13 ISO 4406 (c) >20/18/15 16/14/10 16/15/11 FLUID DEGRADATION Acid Number (AN) 0.37

mg KOH/g ASTM D8045

0.38

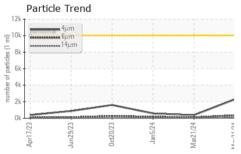
Contact/Location: JASON MYERS - PAREUG

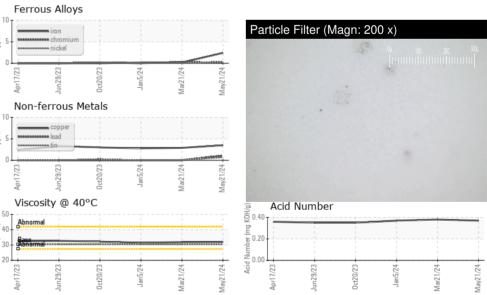
Report Id: PAREUG [WUSCAR] 06195408 (Generated: 06/04/2024 08:19:30) Rev: 1



OIL ANALYSIS REPORT











Certificate 12367

Laboratory Sample No.

: PH0001537 Lab Number : 06195408 Unique Number : 11057531

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 30 May 2024 **Tested**

: 04 Jun 2024 Diagnosed : 04 Jun 2024 - Jonathan Hester Test Package: PLANT (Additional Tests: PrtFilter)

PARKER HANNIFIN CORPORATION 29289 AIRPORT RD EUGENE, OR

> US 97402 Contact: JASON MYERS jason.myers@parker.com

To discuss this sample report, contact Customer Service at 1-800-237-1369. st - 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)

Report Id: PAREUG [WUSCAR] 06195408 (Generated: 06/04/2024 08:19:30) Rev: 1

Contact/Location: JASON MYERS - PAREUG

T:

F: