

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id VOLVO A30G 752469 Component Hydraulic System

AW HYDRAULIC OIL ISO 46 (--- GAL)

Birtarteete

Recommendation

Resample at the next service interval to monitor.

Wear

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 acceptable for the time in service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info	ML0002004				
Sample Date		Client Info		04 Jun 2024	04 Jun 2024		
Machine Age	hrs	Client Info		1889			
Oil Age	hrs	Client Info		0			
Oil Changed		Client Info		N/A			
Sample Status				NORMAL			
CONTAMINATIO	N	method	limit/base	current	history1	history2	
Water		WC Method	>0.1	NEG			
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	0			
Chromium	ppm	ASTM D5185m	>20	0			
Nickel	ppm	ASTM D5185m	>10	<1			
Titanium	ppm	ASTM D5185m		0			
Silver	ppm	ASTM D5185m		0			
Aluminum	ppm	ASTM D5185m	>20	<1			
Lead	ppm	ASTM D5185m	>20	0			
Copper	ppm	ASTM D5185m	>150	<1			
Tin	ppm	ASTM D5185m	>20	0			
Vanadium	ppm	ASTM D5185m		0			
Cadmium	ppm	ASTM D5185m		<1			
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	5	0			
Barium	ppm	ASTM D5185m	5	2			
Molybdenum	ppm	ASTM D5185m	5	0			
Manganese	ppm	ASTM D5185m		<1			
Magnesium	ppm	ASTM D5185m	25	3			
Calcium	ppm	ASTM D5185m	200	140			
Phosphorus	ppm	ASTM D5185m	300	390			
Zinc	ppm	ASTM D5185m	370	513			
Sulfur	ppm	ASTM D5185m	2500	1366			
CONTAMINANTS	;	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>20	3			
Sodium	ppm	ASTM D5185m	-	2			
Potassium	ppm		>20	3			
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2	
Particles >4µm		ASTM D7647		2376			
Particles >6µm		ASTM D7647	>5000	707			
Particles >14μm		ASTM D7647	>160	34			
Particles >21µm		ASTM D7647	>40	6			
Particles >38μm		ASTM D7647	>10	1			
Particles >71µm		ASTM D7647		0			
Oil Cleanliness		ISO 4406 (c)	>/19/14	18/17/12			
FLUID DEGRADA	TION	method		current		history2	
FLUID DEGRADA Acid Number (AN)	ATION mg KOH/g	method ASTM D8045	limit/base 0.57	current 0.48	history1	history2	

Report Id: VOLVO4589 [WUSCAR] 06204537 (Generated: 06/12/2024 17:03:18) Rev: 1

Contact/Location: DAKOTA HARTLEY - VOLVO4589



31

Jaquin 1k 0k Jun4/24 -

(B/H0) KOH/8) Ê0.60 Base

a 10.40 0.20 Abno

> 0.00 Jun4/24

> > 52 Abnormal

50 48 (0-046 tso Base

42

40 38

31

of particles (1 ml) 1k

5 11 0k Jun4/24

1.00 T Abnormal

OIL ANALYSIS REPORT

	COMPANY								
Pa	article Trend	VISUAL		method	limit/base	current	history1	history2	
	4μm 6μm	White Metal	scalar	*Visual	NONE	NONE			
-	ματιτικά ομπι ματιτικά 14μm	Yellow Metal	scalar	*Visual	NONE	NONE			
k		Precipitate	scalar	*Visual	NONE	NONE			
k		Silt	scalar	*Visual	NONE	NONE			
k		Debris	scalar	*Visual	NONE	NONE			
Ļ		Sand/Dirt	scalar	*Visual	NONE	NONE			
Jun4/24	Jun4/24	Appearance	scalar	*Visual	NORML	NORML			
٦U	۲ ٦	Odor	scalar	*Visual	NORML	NORML			
A	cid Number	Emulsified Water	scalar	*Visual	>0.1	NEG			
	normal	Free Water	scalar	*Visual		NEG			
0+		FLUID PROPERT	IES	method	limit/base	current	history1	history2	
- <u>B</u>	150	Visc @ 40°C	cSt	ASTM D445	46	44.9			
0		SAMPLE IMAGES	6	method	limit/base	current	history1	history2	
	nomal								
Jun4/24	- + 24	Color				a.	no image	no image	
2	scosity @ 40°C								
A	nomal	Bottom					no image	no image	
8- B:	27 4								
6 - 6	958	GRAPHS							
2	1	Ferrous Alloys				Particle Count			
A	onormal	¹⁰ iron			491,520	1		T ²⁶	
sĻ	<i>स</i>	o to the second			122,880	-		-24	
Jun4/24					30,720			22	
,		2-				·[-22	
Pa	article Trend	0			7,680			-20 ह	
	4μm	Jun4/24			Jun4/24. (per 1 ml)			+20 ISO 4406:1999 Cleanliness +16 16 -14	
	14μm	Non-ferrous Metals	c) saptited 480			1999 0	
k			5		of par			Deanli	
k		8 - copper			ja 120			-14 ress C	
k		E 6			2 30	-		-12 Code	
k Lin		- 4-			5			10	
Jun4/24	<i></i>				_	Bibreve mal			
7	-	Jun4/24			Jun4/24				
					Ť (4μ 6μ	14µ 21µ	38µ 71µ	
		Viscosity @ 40°C				Acid Number			
		50 - Abnormal			(BHO) 0.80)+			
		G G G G G G G G G G G G G G			Ĕ 0.60	Base			
		Abnormal			4 0.40 M 0.20 PDP 0.00	Abnormal		1	
		35			P 0.20			-	
		Jun4/24			Jun4/24	Jun4/24		Jun4/24 -	
		Jur			Jur	Jur		Jun	
	Laboratory Sample No. Lab Number Unique Number Certificate 12367 To discuss this sample report * - Denotes test methods that	: 11071998 : CONST ; contact Customer Servi are outside of the ISO 13	Recei Teste Diagn ce at 1-8 7025 sco	ved : 10 d : 11 osed : 12 00-237-1369 pe of accrea) Jun 2024 I Jun 2024 Jun 2024 - Ange 9. Iitation.	ela Borella	WING Contact: DAKC dhartley@mccl	MERE COURT CHESTER, VA US 22603 DTA HARTLEY	
	Unique Number Certificate 12367 Test Package To discuss this sample report	: 11071998 : CONST ; contact Customer Servi are outside of the ISO 13	Diagn ce at 1-8 7025 sco	osed : 12 00-237-1369 pe of accrea	Jun 2024 - Ango 9. litation.		dhart	act: DAKC ley@mccl	

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (540)722-4441

Contact/Location: DAKOTA HARTLEY - VOLVO4589

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