

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

DOOSAN DA30 219 CORE (S/N DDA30C30740608)

Hydraulic System

DOOSAN HYDROLIC POWER VG 46 (--- GAL)

DIAGNOSIS

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.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0002945		
Sample Date		Client Info		17 Aug 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	4		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	2		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>75	3		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		<1		
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		20		
Calcium	ppm	ASTM D5185m		169		
Phosphorus	ppm	ASTM D5185m		366		
Zinc	ppm	ASTM D5185m		428		
Sulfur	ppm	ASTM D5185m		1544		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4		
Sodium	ppm	ASTM D5185m		2		
Potassium	ppm	ASTM D5185m	>20	0		
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	>0.1	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		45.1		
9:33:02) Rev: 1				Contact/L	ocation: B_SEX	TON - GRALAV

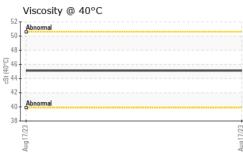
Report Id: GRALAV [WUSCAR] 05935072 (Generated: 08/25/2023 19:33:02) Rev: 1

Contact/Location: R. SEXTON - GRALAV



OIL ANALYSIS REPORT

SAMPLE IMAGES



	Color			no image	no image	no image
hug17/23 -	Bottom			no image	no image	no image
A.	GRAPHS					
	Ferrous Alloys					
	9 - iron 8 - nickel 7 - 6					
E E E E E E E E E E E E E E E E E E E	5-					
	3					
	2					
	0		23			
	Aug17/23		Aug17/23			
	Non-ferrous Meta	lls				
	9 - copper 8 - tin					
	7-					
8	6					
	4					
	3					
	1					
	, Aug17/23		Aug17/23 .			
	Viscosity @ 40°C		Ан			
	Abnormal					
	48					
0						
cSt (40°	5 46 - 3 44 -					
	42 -					
	40 - Abnormal					
	38					
	Aug17/23		Aug17/23 -			
Laboratory	: WearCheck USA -	501 Madison Ave., Ca	ary, NC 2751	3	(GRAMMER DN
Sample No. Lab Number	: KFS0002945	Received : 25	Aug 2023 Aug 2023			ISTRIAL BLVD AVERGNE, TN
Unique Number	: 10620343		es Davis			US 37066
To discuss this sample report, c				r	sexton@bobcate	
* - Denotes test methods that ar Statements of conformity to specif				(JCGM 106:2012		(270)564-5327 F:

Contact/Location: R. SEXTON - GRALAV

Page 2 of 2