

OIL ANALYSIS REPORT

Hendrickson Spring - H00200 Az403095

Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (--- LTR)

DIAGNOSIS

Recommendation

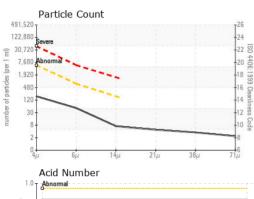
We certify this oil to be clean, that the additives are at acceptable levels and the oil is suitable for use.

		<u>r</u>		Mar2024		
SAMPLE INFORM	NATION	method	limit/base	current	history1	history2
Batch #		Client Info		2024 02 0420		
Department		Client Info		Production		
Sample From		Client Info		Machine		
Production Stage		Client Info		Final		
Sent to WC		Client Info		03/14/2024		
Sample Number		Client Info		E30001689		
Sample Date		Client Info		14 Mar 2024		
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 D5185(m)	>20	12		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	1		
Lead	ppm	ASTM D5185(m)	>20	5		
Copper	ppm	ASTM D5185(m)	>20	14		
Tin	ppm	ASTM D5185(m)	>20	5		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	<1		
Barium	ppm	ASTM D5185(m)	5	0		
Molybdenum	ppm	ASTM D5185(m)	5	0		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)	25	95		
Calcium	ppm	ASTM D5185(m)	200	123		
Phosphorus	ppm	ASTM D5185(m)	300	641		
Zinc	ppm	ASTM D5185(m)	370	680		
Sulfur	ppm	ASTM D5185(m)	2500	1896		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	2		
Sodium	ppm	ASTM D5185(m)		5		
Potassium	ppm	ASTM D5185(m)	>20	1		
Water	%	ASTM D6304*	>0.05	0.002		
ppm Water	ppm	ASTM D6304*	>500	18		

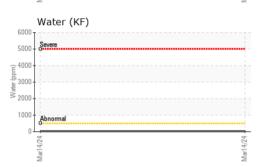
Sample Rating Trend

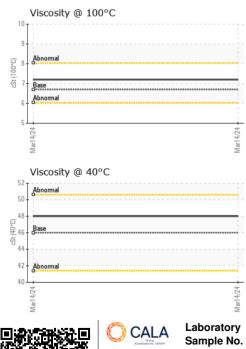


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ESS	method	limit/base	current	history1	history2
	ASTM D7647	>5000	161		
	ASTM D7647	>640	44		
	ASTM D7647	>160	6		
	ASTM D7647	>40	4		
	ASTM D7647	>10	3		
	ASTM D7647	>3	2		
	ISO 4406 (c)	>19/16/14	15/13/10		
TION	method	limit/base	current	history1	history2
mg KOH/g	ASTM D974*	0.57	0.83		
	method	limit/base	current	history1	history2
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NONE	NONE		
scalar	Visual*	NORML	NORML		
scalar	Visual*	NORML	NORML		
scalar	Visual*	>0.05	NEG		
scalar	Visual*		NEG		
IES	method	limit/base	current	history1	history2
cSt	ASTM D7279(m)	46	48.0		
cSt	ASTM D7279(m)	6.7	7.2		
Scale	ASTM D2270*	97	109		
;	method	limit/base	current	history1	history2
		-			
				no image	no image
				no image	no image
	ng KOH/g scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ISO 4406 (c) TION method mg KOH/g ASTM D974* Scalar Visual* scalar ASTM D7279(m) cSt ASTM D7279(m) Scale ASTM D7279(m)	ASTM D7647 >640 ASTM D7647 >160 ASTM D7647 >160 ASTM D7647 >40 ASTM D7647 >10 ASTM D7647 >10 ASTM D7647 >3 ISO 4406 (c) >19/16/14 TION method limit/base mg KOH/g ASTM D974* 0.57 scalar Visual* NONE scalar Visual* NORML scalar Visual* NORML scalar Visual* NORML scalar Visual* NORML scalar Visual* Socio scalar Visual* Socio scalar	ASTM D7647 >640 44 ASTM D7647 >160 6 ASTM D7647 >160 6 ASTM D7647 >40 4 ASTM D7647 >10 3 ASTM D7647 >3 2 ISO 4406 (c) >19/16/14 15/13/10 TION method limit/base current mg KOH/g ASTM D974* 0.57 0.83 method limit/base current scalar Visual* NONE NONE scalar Visual* NOR NORE scalar Visual* NORML NORML scalar Visual* NORML NORML scalar Visual* >0.05 NEG scalar Visual* 0.05<	ASTM D7647 >640 44 ASTM D7647 >160 6 ASTM D7647 >40 4 ASTM D7647 >10 3 ASTM D7647 >3 2 ASTM D7647 >3 2 ISO 4406 (c) >19/16/14 15/13/10 TION method limit/base current history1 mg KOH/g ASTM D974* 0.57 0.83 scalar Visual* NONE NONE scalar Visual* NORML NORML scalar Visual* NORML NORML scalar Visual*

