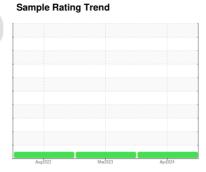


# **OIL ANALYSIS REPORT**

# **Rock Screen RS-1 145**

Diesel Engine

**DIESEL ENGINE OIL SAE 15W40 (--- GAL)** 





### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

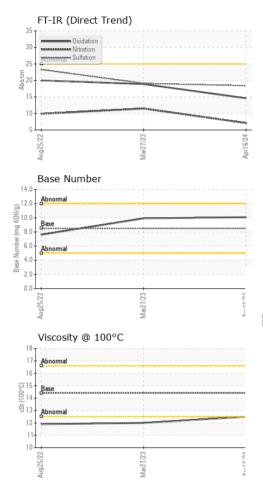
### **Fluid Condition**

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KFS0006016	KFS0002921	KFS0001185
Sample Date		Client Info		16 Apr 2024	27 Mar 2023	25 Aug 2022
Machine Age	hrs	Client Info		2484	43069	2007
Oil Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	0.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	14	30	15
Chromium	ppm	ASTM D5185m	>20	<1	3	<1
Nickel	ppm	ASTM D5185m	>4	<1	1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	31	3
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	1	6
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	9	2	130
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	68	54	84
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	906	766	679
Calcium	ppm	ASTM D5185m	3000	1151	1088	1436
Phosphorus	ppm	ASTM D5185m	1150	1027	942	788
Zinc	ppm	ASTM D5185m	1350	1188	1097	950
Sulfur	ppm	ASTM D5185m	4250	3088	2855	2414
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	7	11	6
Sodium	ppm	ASTM D5185m	>158	0	0	0
Potassium	ppm	ASTM D5185m	>20	2	2	0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.1	0.5	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.1	11.5	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	19.1	23.3
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	18.9	20.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	10.08	9.92	7.61



## **OIL ANALYSIS REPORT**



	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	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual	70.2	NEG	NEG	NEG
ï	FLUID PROPERT		method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445	14.4	12.5	12.0	11.9
	GRAPHS	001	7.01111 2 1 10		12.0	12.0	11.0
	Iron (ppm)				Lead (ppm)		
25	Sewere			100	Severe		
20					) - 0		
돌 <sup>15)</sup> 10	Abnormal			E 60	Abarana		
	l i			- 40	7		-
5				20			
	757	/23		724		/23	/24
	Aug25/22	Mar27/23		Apr16/24	Aug25/22	Mar27/23	Apr16/24
	Aluminum (ppm)	_			Chromium (p		
5	Smare			50	Severe		
4	Severe			40			
Ed 2	Abnormal	^		E 20	Abnormal		
					1		
1	The state of the s			10	1 !		
	227	73		74		73	724
	Aug25/22	Mar27/23		Apr16/24	Aug25/22	Mar27/23	Apr16/24
	Copper (ppm)	_			Silicon (ppm)	_	
40							
30				60	)		
E 20	1			E 40	, L		
	1				Abnormal		1
10	) +			20	)+		
		22		- ±			4-
	Aug25/22	Mar27/23		Apr16/24	Aug25/22	Mar27/23	Apr16/24
	₹ Viscosity @ 100°C	Σ		A	₹ Base Number		Ã
1	<sup>3</sup> T:			15.0	) <del>-</del>		
1	Abnormal			Base Number (mg KOH/g)	Abnormal		
(0.00°C)	Base				Base		
(2,001) ts	Abnormal			9 E 5.0	Abnormal		
1	2			ase			
1		60		<b></b> 0.0	) +	~	-
	Aug25/22	Mar27/23		Apr16/24	Aug25/22	Mar27/23	Apr16/24
	Au	Ĕ		Αŗ	Au	N 22	Ap





Certificate 12367

Laboratory

Sample No. : KFS0006016 Lab Number : 06155269 Unique Number : 10990692

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Apr 2024 Tested Diagnosed

: 22 Apr 2024 : 22 Apr 2024 - Wes Davis

**HARNESS LLC** 855 N JAMES CAMPBELL BLVD COLUMBIA, TN US 38401

Contact: BEN HARNESS ben@slectharness.com T: (615)733-4480

Test Package : MOB 2 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. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: HARCOLTN [WUSCAR] 06155269 (Generated: 04/23/2024 00:27:41) Rev: 1

Submitted By: BILL ENYART