ASCENDUM

OIL ANALYSIS REPORT

Sample Rating Trend

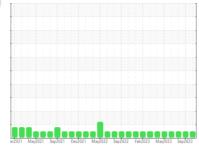
NORMAL



Area Ascendum Machinery VOLVO L180H 14 (S/N 5269) Component

Diesel Engine

VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

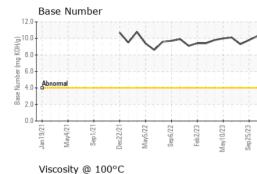


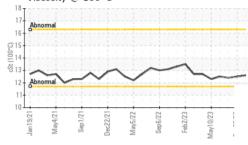


Sample at the next service interval to monitor. Sample Date Client Inio 26 Oct 2023 25 Sep 2023 31 Jul 2023 Component wear rates are normal. Oil Age This Client Inio 13507 13907 12512 Dir Age This Client Inio Stangel Status 13907 12512 Dir Age This Client Inio Stangel Status NORMAL NOR	DIAGNOSIS	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
esample 1 the next service interval to monitor. Sample Date Client Info 26 0c1023 28 Sep 2023 31 Juli 2023 icomponent wear rates are normal. Oil Age hrs Client Info 13017 13007 12512 inter is in indication of any contamination in the last indication of any contamination of the point indicates that there is suitable kainly remaining in the oil. The condition of the Sinuble Kainly remaining rema	Recommendation	Sample Number		Client Info		ASC0005427	ASC0000726	ASC0000333
Bear Icomponent war rates are normal. Machine Age hrs Client Info 13517 1907 12512 Did Age hrs Client Info 510 495 455 Did Changed Client Info 510 495 455 Did Changed Client Info NORMAL NORMAL NORMAL NORMAL Did Changed Control Instructure NORMAL NORMAL NORMAL NORMAL NORMAL Did Changed Control Instructure Normal 4.0 -1.0	Resample at the next service interval to monitor.	Sample Date		Client Info		26 Oct 2023	25 Sep 2023	31 Jul 2023
Loomponent wear rates are normal. ontamination the is no indication of any contamination in the di Condition the Bh result indicates that there is suitable is suitable for further service. Normal maining in the oil The condition of the is suitable for further service. Normal maining in the oil The condition of the suitable for further service. Normal maining in the oil The condition of the suitable for further service. Normal maining in the oil The condition of the suitable for further service. Normal maining in the oil The condition of the suitable for further service. Normal maining in the oil The condition of the suitable for further service. Normal maining in the oil The condition of the Normal maining in the oil The	Wear	•	hrs			13517		
Differinged Client Into Changed Changed Changed Changed Changed NORMAL NORMAL <t< th=""><th></th><th>Oil Age</th><th>hrs</th><th>Client Info</th><th></th><th>510</th><th>495</th><th>456</th></t<>		Oil Age	hrs	Client Info		510	495	456
Sample Status NORMAL NORMAL NORMAL uil Condition me is no indicates that there is suitable Full With Method 6.0 <1.0 <1.0 <1.0 is is suitable for further service. The condition of the suitable With Method 6.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <th></th> <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th></th> <th>Changed</th> <th>Changed</th>		Oil Changed		Client Info			Changed	Changed
CONTAMINATION method imit/base current history1 history2 Fuel WC Method >6.0 <1.0 <1.0 <1.0 <1.0 Bits suitable for further service. WC Method >6.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0 <1.0		Sample Status				-	NORMAL	
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Be bit result indicates into the is suitable for further service.	Fluid Condition	Fuel		WC Method	>6.0	<10	<10	<10
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM05185m >100 <1					, 010			
Iron ppm ASTM D5185m >100 <1 2 2 Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m >10 0 0 0 Titanium ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >10 <1	alkalinity remaining in the oil. The condition of the oil is suitable for further service.	-			limit/base			history2
Chromium ppm ASTM D5185m >10 0 0 0 Nickel ppm ASTM D5185m 10 0 0 0 Titanium ppm ASTM D5185m >2 0 0 0 Silver ppm ASTM D5185m >10 <1 <1 <1 Lead ppm ASTM D5185m >10 <1 <1 <1 Copper ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 ADDITIVES method Imit/base current History1 History2 Boron ppm ASTM D5185m 37 40 40 Barium ppm ASTM D5185m 37 42 38 Maganesie ppm ASTM D5185m 502 501 451 Caloium			maa		>100		· · · · ·	
Nickel ppm ASTM D5185m >10 0 0 0 Ttranium ppm ASTM D5185m >2 0 0 0 Aluminum ppm ASTM D5185m >2 0 0 0 Auminum ppm ASTM D5185m >20 0 <1 <1 Lead ppm ASTM D5185m >20 0 <1 <1 Tin ppm ASTM D5185m >10 <1 0 0 Vanadium ppm ASTM D5185m 10 <1 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 ADDITVES method imit/base current history2 38 Barium ppm ASTM D5185m 0 0 0 0 Magnesium ppm ASTM D5185m 502 501 481 Calcium ppm ASTM D5185m 522 501 481 CONTAMINANT								
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Magnesium ppm ASTM D5185m 502 501 481 Calcium ppm ASTM D5185m 1627 1757 1627 Phosphorus ppm ASTM D5185m 927 940 874 Zinc ppm ASTM D5185m 927 940 874 Zinc ppm ASTM D5185m 2890 3141 3171 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 4 3 3 Sodium ppm ASTM D5185m >20 4 3 3 Sodium ppm ASTM D5185m >20 4 3 3 Sodium ppm ASTM D5185m >20 0 <1 0 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7824 >3 0.1 0.1 0.1 Nitration Abs/.mm *ASTM D7415 >30 21.8 21.5 21.4								
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PotassiumppmASTM D5185m>200<1		Silicon	ppm	ASTM D5185m	>20	4	3	3
INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D7844>30.10.10.1NitrationAbs/cm*ASTM D7624>206.96.96.6SulfationAbs/lmm*ASTM D7415>3021.821.521.4FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2		Sodium	ppm	ASTM D5185m		<1	2	2
Soot % % *ASTM D7844 >3 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 6.9 6.9 6.6 Sulfation Abs/.1mm *ASTM D7415 >30 21.8 21.5 21.4 FLUID DEGRADATION method limit/base current history1 history2		Potassium	ppm	ASTM D5185m	>20	0	<1	0
NitrationAbs/cm*ASTM D7624>206.96.96.6SulfationAbs/.1mm*ASTM D7415>3021.821.521.4FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2		INFRA-RED		method	limit/base	current	history1	history2
SulfationAbs/.1mm*ASTM D7415>3021.821.521.4FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2		Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
FLUID DEGRADATION method limit/base current history1 history2		Nitration	Abs/cm	*ASTM D7624	>20	6.9	6.9	6.6
		Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	21.5	21.4
		FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation Abs/1mm *ASTM D7414 >25 20.5 20.1 19.4		Oxidation	Abs/.1mm	*ASTM D7414	>25	20.5	20.1	19.4
Base Number (BN) mg KOH/g ASTM D2896 10.3 9.8 9.3		Base Number (BN)	mg KOH/g	ASTM D2896		10.3	9.8	9.3

ASCENDUM

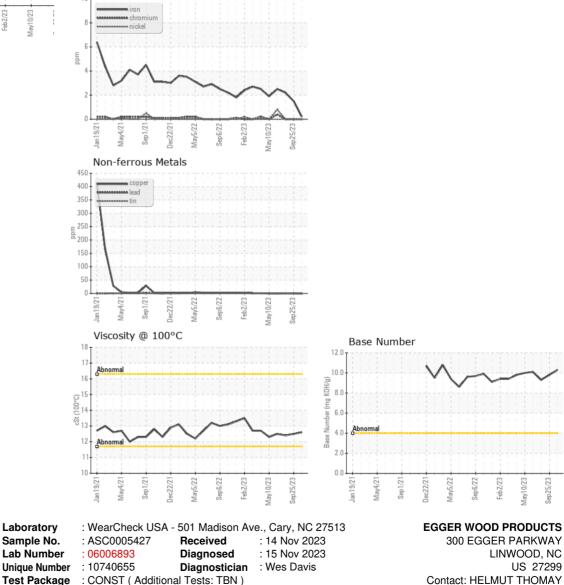
OIL ANALYSIS REPORT





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	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPER	TIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		12.6	12.5	12.4
GRAPHS						

Ferrous Alloys





 Certificate 12307
 Test Package
 : CONST (Additional Tests: TBN)

 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)

helmut.thomay@egger.com

Т:

F: