

OIL ANALYSIS REPORT

[1003006] LCT-2 Diesel Engine

oil is suitable for further service.

PHILLIPS 66 Fleet Supreme EC 15W40 (--- GAL)



Sample Rating Trend



Trincell 3 00 Fleet Supreme Lo 13W40 (UAL)	.5 11042023					
DIAGNOSIS	SAMPLE INFORM	MATION	method	limit/base	current	history1	64 WC0865375 24 10 Nov 2023 2976 92 d Not Changd NORMAL
Recommendation	Sample Number		Client Info		WC0926841	WC0843464	WC0865375
Resample at the next service interval to monitor.	Sample Date		Client Info		15 May 2024	04 Jan 2024	10 Nov 2023
Wear	Machine Age	hrs	Client Info		3040	2986	2976
All component wear rates are normal.	Sample Date Machine Age Oil Age Oil Changed Sample Status Client Info Client Info Client Info Client Info Client Info		50	102	92		
Contamination	Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
There is no indication of any contamination in the	Sample Status				NORMAL	NORMAL	NORMAL
oil.	CONTAMINATION	J	method	limit/base	current	history1	history2
Fluid Condition The BN result indicates that there is suitable	Fuel		WC Method	>5	<1.0	<1.0	<1.0
alkalinity remaining in the oil. The condition of the	Water		WC Method	>0.2	NEG	NEG	NEG
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Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<1	<1	3
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	0	2	2
Copper	ppm	ASTM D5185m	>330	0	0	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2

ADDITIVES		method			riistory i	HIStoryZ
Boron	ppm	ASTM D5185m		82	76	79
Barium	ppm	ASTM D5185m		0	0	13
Molybdenum	ppm	ASTM D5185m		87	92	94
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		36	24	20
Calcium	ppm	ASTM D5185m		2234	2371	2251
Phosphorus	ppm	ASTM D5185m	1116	1107	1201	1072
Zinc	ppm	ASTM D5185m	1250	1227	1391	1223
Sulfur	ppm	ASTM D5185m		4367	4349	3929
CONTAMINANTS		method	limit/base	current	history1	history2

CONTAMINANT	S	method				history2
Silicon	ppm	ASTM D5185m	>25	3	3	3
Sodium	ppm	ASTM D5185m		2	2	0
Potassium	ppm	ASTM D5185m	>20	0	0	2

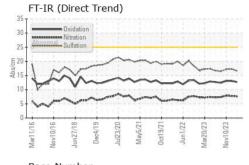
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.8	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.6	17.3	17.2
FLUID DEGRADA	ATION	method				history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.7	13.1	13.1

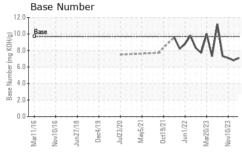
7.1

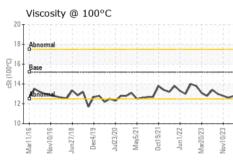
Base Number (BN) mg KOH/g ASTM D2896 9.7



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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		NEG	NEG	NEG

FLUID PROPER	ITIES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.2	12.8	12.6	12.8

	_	00°C			251		211/11		15.2		2.8			12.	_				
GF	API	HS																	
Iro	n (p	pm)								Le	ad (į	opm))						
Seve	ere									1	vere								
Δhn	ormal									E 60-	normal								
Coll	omia			Ш		Ш				10 7	il dinida					Щ	Щ		Ī
9	مبر	~	6	0:	12		2	27	23	0	9		6	0.0	21	21	2	23	
Mar11/1	Nov10/1	Jun27/1	Dec4/1	Jul23/2	May5/7	Oct19/	Jun1/2	Mar20/2	Nov10/2	Mar11/1	Nov10/1	Jun27/1	Dec4/1	Jul23/2	May5/7	0ct19/	Jun1/2	Mar20/2	
		um ((ppm	1)						Cl			(ppn	1)					Nov10/23 Nov10/23
Seve	ere						Ш			1	vere						1111		
Δhn	ormal									E 30 -	normal								
Coll	omia						Щ					Щ				Щ		Ш	
9	9	-	- 6	02	21	~ 1z	22	<u></u>	53	0	9		6	02	21	21	22	23	
Marl 1/	Nov10/	Jun27/	Dec4/	Jul23/	May5/	0ct19/	Jun1/	Mar20/7	Nov10/2	Mar11/	Nov10/	Jun27/	Dec4/	Jul23/	May5/	0ct19/	Jun1/	Mar20/7	
Co	oper	(pp	m)							Si	licon	(ppn	n)						
Seve	ere omnal									-	vere								-
		Ш		Ш		Ш				E. 40		Ш		Ш		Ш			
										20 - At	normal								
9	٩	8	19	20	21	21	22	23	23	0	<u></u>	- 10 m		- OZ	21		72	~	-
Mar11/	Nov10/	Jun27/	Dec4/	Jul23/	May5,	Oct19,	Jun1/	Mar20/	Nov10/	Mar11/	Nov10/	Jun27/	Dec4/	Jul23/	May5,	0ct19/	Jun1/	Mar20/	
Vis	cosit	у @	100	°C							se N	umb	er					Mar20/23 + Mar20/23 - Nev10/23 - Nev10/24 -	
Abn	ormal									(B/HOX)	ise						17		A
Bas				0010	400	- ole	24444		33000	8.0 6.0 et (mg							Ň	V	
AGn	osmal	^	V		^	^	~	V	_	4.0 - 88 Mml									
9	9	- 80	- 61		21+	21+	22	- 53	53	0.0	9	00	6	- 02	21+	21+	22	23	-
Mar11/16	Nov10/1	Jun27/1	Dec4/1	Jul23/2	May5/	Oct19/	Jun1/2	Mar20/2	Nov10/2	Mar11/1	Nov10/1	Jun27/1	Dec4/1	Jul23/2	May5/4	Oct19/	Jun1/2	Mar20/2	
	Abn Alliew Vis	Abnormal Abnormal Severe Severe	Abnormal 91/11 IEW Abnormal	Abnormal Abnormal Severe Abnormal Abnormal	Abnormal Abnormal BUZZINF Abnormal BUZZINF Abnormal BUZZINF Abnormal BUZZINF BUZZINF	Abnormal Base Abnormal	Abnormal Abnormal Bullium (ppm) Severe Bullium (ppm) Severe	Copper (ppm) Severe Abnormal Severe Severe	Copper (ppm) Copp	Abnormal Severe Severe	Continue Continue	Lead (pm) Lead	Lead (ppm) Severe Abnormal Abnorm	Lead (ppm) Lea	Common C	Copper (ppm) Copp	Company Comp	Company Comp	Comman C





Certificate 12367

Sample No. : WC0926841 Lab Number : 06196433 Unique Number : 11058556

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 31 May 2024

Tested : 03 Jun 2024 : 03 Jun 2024 - Don Baldridge Diagnosed

AES USA - NORTH CHARLESTON 5400 INTERNATIONAL BLVD, BLDG 88-20

NORTH CHARLESTON, SC

US 29418 Contact: Maxime Banctel maxime.banctel@aes-gse.com

Test Package : MOB 1 (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)

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