

FUEL REPORT

Sample Rating Trend



Machine Id

KIOTI CK3520SE 5656 (S/N PA4DA0344)

Diesel Fuel

Fluid No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

DIAGNOSIS

Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

Corrosion

All metal levels are normal indicating no corrosion in the system.

Contaminants

The water content is negligible. The amount and size of particulates present in the system are acceptable.

Fuel Condition

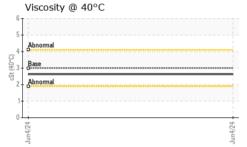
Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

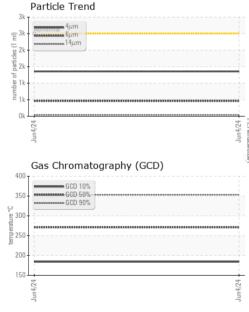
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KT0001562		
Sample Date		Client Info		04 Jun 2024		
Machine Age	hrs	Client Info		88		
Sample Status				NORMAL		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yllow	Yllow		
ASTM Color	scalar	*ASTM D1500		L3.0		
Visc @ 40°C	cSt	ASTM D445	3.0	2.63		
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	59.5		
SULFUR CONTER	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0		
Sulfur (UVF)	ppm	ASTM D5453		10		
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	171		
5% Distillation Point	°C	ASTM D86		196		
10% Distill Point	°C	ASTM D86	201	208		
15% Distillation Point	°C	ASTM D86		217		
20% Distill Point	°C	ASTM D86	216	225		
30% Distill Point	°C	ASTM D86	230	241		
40% Distill Point	°C	ASTM D86	243	254		
50% Distill Point	°C	ASTM D86	255	267		
60% Distill Point	°C	ASTM D86	267	281		
70% Distill Point	°C	ASTM D86	280	295		
80% Distill Point	°C	ASTM D86	295	310		
85% Distillation Point	°C	ASTM D86		321		
90% Distill Point	°C	ASTM D86	310	332		
95% Distillation Point	°C	ASTM D86		349		
Final Boiling Point	°C	ASTM D86	341	363		
IGNITION QUALIT	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	39		
Cetane Index		ASTM D4737	<40.0	55		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0		
Sodium	ppm	ASTM D5185m	<0.1	1		
Potassium	ppm	ASTM D5185m	<0.1	1		
Water	%	ASTM D6304	<0.05	0.003		
ppm Water	ppm	ASTM D6304	<500	29		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	0.0		



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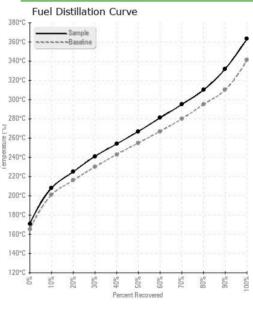
Particle Count		
491,520	126 124	
Pauma	22 8	P
a 30,720 across 7,680 abnormal 1,920 1,920 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,200 1,20	-20 64406:1999 Cleanliness Code -14 -12 sc Code -10 -10 -10 -10 -10 -10 -10 -10 -10 -10	P
	-18 1999	Ρ
480 -	-16 Clea	Ρ
120 120 30	-14 mines	Ρ
30	10 8	Ρ
2-	-8	С
0 4 6µ 14µ 21µ 38µ	71µ	
Water (KF)	Jun4/24	A N L V Ir C M P Z
Viscosity @ 40°C		

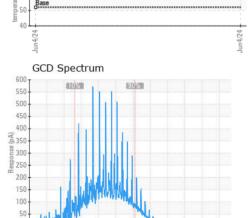




FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2		
Particles >4µm		ASTM D7647	>2500	1356				
Particles >6µm		ASTM D7647	>640	460				
Particles >14µm		ASTM D7647	>80	42				
Particles >21µm		ASTM D7647	>20	11				
Particles >38µm		ASTM D7647	>4	0				
Particles >71µm		ASTM D7647	>3	0				
Oil Cleanliness		ISO 4406 (c)	>18/16/13	18/16/13				
HEAVY METALS		method	limit/base	current	history1	history2		
Aluminum	ppm	ASTM D5185m	<0.1	0				
Nickel	ppm	ASTM D5185m	<0.1	<1				
Lead	ppm	ASTM D5185m	<0.1	0				
Vanadium	ppm	ASTM D5185m	<0.1	0				
Iron	ppm	ASTM D5185m	<0.1	0				
Calcium	ppm	ASTM D5185m	<0.1	0				
Magnesium	ppm	ASTM D5185m	<0.1	1				
Phosphorus	ppm	ASTM D5185m	<0.1	<1				
Zinc	ppm	ASTM D5185m	<0.1	0				
SAMPLE IMAGES	S	method	limit/base	current	history1	history2		
Color					no image	no image		
Bottom					no image	no image		
GRAPHS								
Fuel Distillation Curve Pensky-Martens Flash Point (°C)								

≝ 60





Time (min)

9 20

Т:

F:

SOUTHERN STAR TRACTOR



Sample No. : KT0001562 Received : 10 Jun 2024 3456 S BURLESON BLVD Lab Number : 06206045 Tested : 18 Jun 2024 ALVARADO, TX : 18 Jun 2024 - Angela Borella US 76009 Unique Number : 11073506 Diagnosed Test Package : DF-2 (Additional Tests: Fuel, Screen) Contact: GEORGE Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. GEORGE@SOUTHERNSTARTRACTOR.COM * - 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)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Report Id: SOUALVTX [WUSCAR] 06206045 (Generated: 06/22/2024 15:01:40) Rev: 1

Laboratory

Contact/Location: GEORGE ? - SOUALVTX Page 2 of 2