

5- ULS Diesel Fuel Analysis Report (FEV)

				ULS Diesel
Current Fuel Type	ULS Diesel	Lower Limit	Upper Limit	Line sample
Density @ 15C	g/ml			0.848
Density @ 20C	g/ml			0.8444
Density @ 25C	g/ml	0.82	0.87	
Distillation				
Initial Boiling Point	Deg. F	300		335.8
5% Recovery Temperature	Deg. F			394
10% Recovery Temperature	Deg. F			411.1
20% Recovery Temperature	Deg. F			437.8
30% Recovery Temperature	Deg. F			459.6
40% Recovery Temperature	Deg. F			479.6
50% Recovery Temperature	Deg. F			498.5
60% Recovery Temperature	Deg. F			517.4
70% Recovery Temperature	Deg. F			537.8
80% Recovery Temperature	Deg. F			563.4
90% Recovery Temperature	Deg. F			598.1
95% Recovery Temperature	Deg. F			628.5
End Point	Deg. F			649.9
% Overhead Recovery	%			98.1
% Residue	%			1
% Loss	%			0.9
Cetane #	#	40	47	43.4
Flash Point	Deg. F			161
Heating Value NET	Btu/lb.			18433
Heating Value NET	MJ/kg	42.5	43	42.874
Heating Value GROSS	Btu/lb.			19656
Heating Value GROSS	MJ/kg			45.72
Sulfur	wt. %			
Sulfur	ppm wt.		15	2.8
Water	ppm wt.			<50
Carbon/Hydrogen Ratio				
Carbon	wt. %			86.59
Hydrogen	wt. %			13.41
Oxygen	wt. %			<0.05
Ash Content	wt. %			<0.0001
Carbon Residue	wt. %			<0.01
Cloud Point	Deg. C			-18
Cold Filter Plugging Point	Deg. C			-25
Molecular Mass	kg/kmol			195
Carbon number				12.94
Viscosity, Kinematic @40C	cSt			2.636
Density by Pycnometer	g/ml			

SUGGESTED CITATION: 2015 BMW 3.0L N57 Engine Diesel Fuel – Test Data Package. Version 2018-06. Ann Arbor, MI:

US EPA, National Vehicle and Fuel Emissions Laboratory, National Center for Advanced Technology, 2018.