

List of Committee D02.01 on Combustion Characteristics Research Reports on File with ASTM

Research Report No.	Title
21:D-2	Detection of Small Differences in Octane Number in ASTM Knock Test Reference Fuels
23:D-2	Weak Mixture Rating of Aviation Gasoline; Aviation Method vs. Motor (Above 100 and Below 100 O.N.) 1955–1965
31:D-2	Octane Number Conversion for Standardized Fuel Blends of Toluene, <i>Is</i> ooctane, and <i>n</i> -Heptane
69:D-2	Aviation Gasoline Anti-knock Quality by ASTM Methods D 614 and D 357
78:D-2	Evaluation of Non-Standard Instrumentation for the ASTM Cetane Method (Test for Ignition Quality of Diesel Fuels by the Cetane Method, D 613)
92:D-2	Cooperative Altitude Study
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94:D-2	Cooperative Program to Evaluate Falling Level Procedure
D2-1000 ^A	Proposed Methods Knock Test Manual (Precision and Accuracy Statement for the Falling Level Procedure for Determining Motor and Research Octanes on Small Samples)
D2-1001	Proposed Cetane Manual Modified Cetane Method Program
D2-1006	Effect of Fuel Temperature on Octane Number
D2-1016	Report of a Program to Determine the Effect of Controlling Mixture Temperature on the Precision of Research Method Ratings above 100 Octane Number (1957)
D2-1017	Report of a Program to Investigate the Feasibility of Using Aromatic Standard Fuels to Establish Individual Cylinder Guide Curves for Research Method Above 100 Octane Number (1957)
D2-1018	Report of a Program to Study the Effect of Sensitivity and Continuous Reference Fuel Systems on the Precision of Research Method Ratings Above 100 Octane Number (1958)
D2-1019	Report of a Program to Determine the Effect of Reference Fuel Blending Procedures on the Precision of Research Method Ratings Above 100 Octane Number (1958)
D2-1020	Report of a Program to Study the Effect on Precision of Research Method Ratings Above 100 Octane Number, of Using an Oscilloscope to Determine the Compression Pressure to Be Used for Rating
D2-1021	Report of a Program to Study the Effect of Using Ethylbenzene as a Standardization Fuel on the Precision of Research Method Ratings Above 100 Octane Number
D2-1022	Reports of Three Programs to Determine the Effect on the Precision of Research Method Ratings Above 100 Octane Number Caused by Changes in Compression Pressure and Inlet Air Temperature
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D2-1028	Report on a Program to Investigate the Effects of Jacket Temperature on Research Method Octane Number Ratings
D2-1029	Report on a Program to Compare the Effect of Inlet Air Heat and Mixture Heat on ASTM Motor Method Ratings
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D2-1032	Report on a Program to Investigate the Motor Method Rating Reproducibility Using Different Types of Reference Fuels
D2-1033	Report on a Program to Investigate the Possibility of Varying Spark Advance to Standardize Research Method Knock Test Engines
D2-1034	History of ASTM Primary Knock-Test Reference Fuels and the RDD-I Financial Accounts
D2-1035	Report of Five Programs Used to Establish a Precision Statement for D 2886-76, Test for Knock Characteristics of Motor Fuels by the Distribution Octane Number (DON) Method
D2-1037	Annual Precision Reports on NEG Fuel Ratings Covering 1970–1975
D2-1038	Annual Precision Reports on NEG Fuel Ratings Covering 1960–1969
D2-1039	Annual Precision Reports on NEG Fuel Ratings Covering 1950–1959
D2-1040	Annual Precision Reports on NEG Fuel Ratings Covering 1942–1949
1041	Annual Precision Report on NEG Fuel Ratings for 1976–1982
1042	Interlaboratory Test Data for D 3603, Test for Benzene and Toluene in Finished Motor and Aviation Gasoline by Gas Chromatography
1043	Report on a Program to Evaluate a Modified 501-A Detonation Meter (1963)
1044	Report on a Program to Determine the Effect of Spark Advance on ASTM Motor Method Octane Number Ratings 1960–61
1045	Report on a Program to Evaluate Multiple Ignition as a Means for Improving the Precision of the Motor and Research Methods (1963)
1046	Report on Programs (1964–66) to Compare Cyclic Repeatability and Rating Characteristics of Split-Head Cylinders with those Obtained in the Standard Integral Head Cylinders Used in Research and Motor Method Octane Number Determinations
1047	Report on Motor (LP) Method Test Program to Determine the Precision of the Proposed Motor (LP) Test Method and the Motor (LP) Octane Numbers of Five Pure Light Hydrocarbons (1965–66)
1048	Report on 1967 Program to Establish the Precision and Rating Level of the Compression Ratio Methods Compared to the Standard Research and Motor Methods
1049	Report on Program to Evaluate the Effects of Mixture Temperature Variations on Motor Method Ratings and Actions taken in Attempt to Incorporate Temperature Tuning in the Motor Method (1968–69)
1051	Report on Five Programs to Evaluate the Detonation Time Lag Procedure for Determining Octane Ratings of Fuels
1052	Report on the Correlation Study of Handwheel Setting vs. Cetane Number
1057	Report on a Program for Recalibration of Blends of <i>is</i> ooctane and <i>n</i> -Heptane plus 2.0 mL TEL by the Motor and Research Methods (1962–1964)
1058	Report on Program to Calibrate Secondary Diesel Reference Fuels T-16 and U-9 by ASTM Method D 613-59T (1962–1963)
1059	Report on the Use of Chrome Plated Cylinders in the ASTM Knock Test Methods (1961–1962)
1060	Report on a Program to Compare the Operation of the Modified (500–2000) 501 Detonation Meter with the Standard 501 Detonation Meter Using the Research Method (1963–1964)
1061	Report on a Program to Develop an Improved Expression for Fuel Knock Ratings (1960–1961)
1062	Report on a Program to Investigate the Performance of the Pickup Used with the Detonation Meter to Obtain ASTM Motor and Research Ratings (1960)
1063	Programs on the Calibration of the Cetane Check Fuel Lot 875 and 952 (1960–61)
1064	Report on a Possible Problem in Determining the Purity of <i>n</i> -Cetane by the Freezing Point Method (1962)
1065	Program to Investigate the Champion D-6 Spark Plug in the Aviation and Supercharge Methods (1961–1962)
1066	Reports on the Effect of Humidity on Research and Motor Octane Number Ratings (1965)
1067	Report on the Expression of Octane Numbers Above 100 in Terms of Grams of Pb Instead of mL TEL (1965–66)

Research Report No.	Title
1068	Report on Programs to Develop New Methods for Evaluating the Knocking Characteristics of Motor Fuels (1960–1966) Part III-C Motor Rich Study Group of Group III of RD-1 Section D
1069	Report on Programs to Develop New Methods for Evaluating the Knocking Characteristics of Motor Fuels (1960–66) Part III B-Distribution Octane Number Sub-Panel of Group III of RD-1 Section D
1070	Report on a Program to Study the Reproducibility of the Research Method Just Above and Below 100 Octane Number (1956–1957)
1071	Report on Programs to Evaluate the ASTM Aviation and Supercharge Methods with Respect to Full Scale Engine Performance (1952–1953)
1072	Report on Programs to Develop a Guide Curve for the Split-Head Cylinder (1958–1959)
1073	Report on Programs to Extend the Octane Range of the Toluene Standardization Fuels from the Basic Standardization Fuel and Two Calibration Programs on X-8 Standardization Fuel (1956–1959)
1074	Report on a Panel Discussion of Anti-knock Ratings Above 100 Octane Number (1958)
1075	Report on a Program to Investigate a Number of Experimental Cylinders for Use in Research Anti-knock Rating Tests (1957)
1076	Report on a Program to Investigate the Use of the Curved Inlet Air Pipe on the Research and Motor Method Engines (1959–1960)
1077	Report on Programs to Study the Effect of Variations in Intake Air Temperature on the Research Method Ratings of Standardization Fuels and Test Fuels (1955–57)
1078	Report on a Program on Extension of the Spark Advance Table for the Motor Method (1959)
1079	Programs to Study Various Modifications of the Detonation Meter to Determine if Improvement in its Operation and Accuracy can be Obtained (1957–1959)
1080	Report on the Program to Calibrate the Anchor Point Fuels by the Motor and Research Methods (1955)
1081	Report on Program to Study Standardization Fuels for the Aviation and Supercharge Methods (1954–55)
1082	Report on a Program to Study the Use of Benzene Blends as Standardization Fuels for the Aviation and Supercharge Methods (1955–57)
1083	Report on Four Programs Aimed at Development of an Improved Procedure for Establishing the Match Temperature Line for the Aviation Method
1084	Report on a Program to Evaluate the Split Head Cylinder Rating Characteristics on the Research Method in the Octane Range Above 100 (1956)
1085	Report on a Series of Programs to Investigate the Effects of Barometric Pressure and Other Variables on Determinations of Octane Number and Possible Methods for Reducing the Effect of Barometric Pressure in the Measurement of Octane Number (1949–1954)
1086	Report on a Series of Programs to Develop Some Toluene Standardization Fuels for the Motor Method for Ratings Over 100.8 Octane Number (1960–1961)
1087	Report on Programs to Develop New Methods for Evaluating the Knocking Characteristics of Motor Fuels (1960–66) Part I-RD-I Section D and its Group I
1088	Report on Programs to Develop New Methods for Evaluating the Knocking Characteristics of Motor Fuels (1960–66) Part II-Group II of RD-I Section D
1089	Report on Programs to Develop New Methods for Evaluating the Knocking Characteristics of Motor Fuels (1960–66) Part III-Group III of RD-I Section D
1090	Report on Programs to Develop New Methods for Evaluating the Knocking Characteristics of Motor Fuels (1960–66) Part III A-Controlled Severity Subgroup of Group III of RD-I Section D
1091	Report on the Development of the Antiknock Scale Above 100 Octane Number (1930–1958)
1092	Report on Programs to Develop Improved Primary Reference Fuels for the Determination of Cetane Number (1959–1961)
1093	Report on a Program to Investigate the Guide Curve for the Research Method Above 100 Octane Number at Various Altitudes (1959–1962)
1094	Report on the API Automotive Research Committee Subcommittee on 100 Plus Octane Methods (1959–1960)
1095	Report on a Symposium on Current Research on Motor Gasoline Which May Affect Future Specifications (1961)
1096	Report on a Program on a Comparison of the Champion 813 and UD-16 Spark Plugs in the Research and Motor Methods (1959–1960)
1097	Report on a Program to Test the Transistorized Ignition Delay Meter for the Cetane Method (1959–1960)
1098	Report on a Program to Investigate the Effect of Injector Pick-Up Gap on Cetane Ratings (1960)
1099	Report on Effect of Carburetor Jet Size on Air-Fuel Ratios and Research and Motor Octane Numbers (1967)
1100	Report on a Program to Check the 103.3 Toluene Standardization Fuel Calibration by the Research Test Method (1967–1968)
1101	Report on the Questionnaire to Determine the Extent to Which the Standardization Fuels are Used in the Research and Motor Knock Test Methods (1965–1967)
1102	Report on the Programs to Calibrate 40 and 45 Cetane Number Check Fuels for the Cetane Method D 613 (1966–1967)
1103	Report on Programs to Investigate and Improve the Guide Curves for the Motor and Research Methods (1959–1967)
1105	Report on Studies of the Detonation 501-A Meter and Various Modifications of it when Operating under Research Method Conditions (1961–1963)
1106	Report on Studies of the Detonation 501-A Meter and Various Modifications of it when Operating under Motor Method Conditions (1961–1963)
1109	Reports on Obtaining Road Octane Ratings in a Single-Cylinder Engine (1956–1961)
1110	Reports on the Evaluation Studies of the Split-Head Cylinder (1959–1962)
1111	Report on the Size of Octane Numbers at Different Levels in Relation to Engine Performance (1955)
1112	Report on the Reproducibility of CFR Research Method Above 100 Octane Number (1959)
1113	Reports on the Effect of Compression Ratio and Intake-Air Temperature on Research Method Ratings (1960–1961)
1114	Report on the Form of Distribution of Octane Number Requirements (1965)
1115	Reports on Possible Alternative Reference Fuels for the Research and Motor Methods (1961–1964)
1116	Report on a Cooperative Altitude Program to Determine if Revisions Could be Made to Improve the Operation and Reproducibility of the Research and Motor Knock Test Methods Over a Wide Range of Altitude, Sea Level to 7200 Feet (1967–1968)
1117	Report on Guide Curve Discontinuity at 100 Research Octane Number (1970)
1118	Reports on the Cyclic Repeatability of Knock and Octane Ratings in the Research Method and of Knock and Combustion in the Motor Method (1962–1963)
1119	Reports on Project to Consider New Methods for Determining the Anti-knock Characteristics of Motor Fuels (1961–1962)
1120	Report on a Program to Determine if Improved Standardization Fuels for the Aviation and Supercharge Methods could be Developed (1952–1954)
1121	Report on a Program to Determine if an Improved Standardization Fuel for the Motor and Research Methods Could be Developed (1952–1954)
1122	Reports on Du Pont Knock Count Meter and a Gating Knockmeter with an SLM Pickup for Determining the Knocking Characteristics of Fuels (1961–1963)
D2-1208	Toluene Standardization Fuel Blend Octane Number Recalibration Research and Motor Methods of Test (December 1986)
D2-1299	National Exchange Group Reports, 1983 through 1987 Motor, Diesel and Aviation Programs
D2-1300	National Exchange Group Reports, 1988 and 1989 Motor, Diesel and Aviation Programs
D2-1301	Cetane Task Force Activities Report, 1981–1986 Interlaboratory Tests of Proposed Improvements to D 613
D2-1302	Calibration Programs for Cetane Number of Diesel Secondary Reference Fuels (T/U Fuel Batches)
D2-1303	Cetane Method Precision Study Report, 1976 through Mid-1992
D2-1304	A Single Supercharged Test Engine Procedure for Measuring Aviation Fuel Knock Characteristics Varying Mixture Response and Engine Severity—The F-21 technique and DCC-6 Procedure
D2-1305	Cetane Method Ignition Delay Sensitivity Test Program Report
D02-1326	Model 501-C Detonation Meter Performance Qualification Procedure—March 1994
D02-1330	Program 3R for On-Line Octane Analysis System Check-Out—1991/1993 April 1994

Research Report No.	Title
D02-1336	Round Robin Data for D 2699 and D 2700
D02-1341	Effect of Intake Air Temperature Tuning on Research Method Precision—November 1994
D02-1342	National Exchange Group Report, 1990 through 1992, Diesel Program—November 1994
D02-1343	Validation Study of the Falling Level Technique for Research and Motor Octane Determinations—November 1994
D02-1344	Cetane Engine Handwheel Indexing for Oversize Cylinders—November 1994
D02-1354	Program TCD93 Toluene Calibration Data-1993—April 1995
D02-1355	Summary Report on Investigation of Detonation Meter, Model 501-1948 April 1995
D02-1383	Research and Motor Octane Number Precision Study Report—December 1995
D02-1400	Aviation Gasoline National Exchange Group Annual Summary Reports 1990–1995
D02-1401	Cetane Improvement ASTM/PF-26 Test Program Report
D02-1480	Research Report for Biodiesel Fuel Cetane Number Testing Program
D02-1481	Research Report for Tutorial for Generalized Extreme Studentized Deviate Many-Outlier Procedure
D02-1482	Research Report for Calibration Programs for Cetane Numbers of Diesel Secondary Reference Fuels

^AStart of revised Research Report numbering system.