

## Standards Manager Web Standards List

### GPA-Gas Processors Association

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1	STD 2140	Liquefied Petroleum Gas Specifications and Test Methods	2023	GPA	
2	STD 8182	Mass Measurement of Natural Gas Liquids	2023	GPA	
3	RR-253	Solubility of Light Ends in Heavy Condensate	2023	GPA	
4	RR-252	NGL Color: Source, Analysis and Removal	2022	GPA	0
5	STD 2166	Obtaining Natural Gas Samples for Analysis by Gas Chromatography	2022	GPA	109
6	STD 2186	Method for the Extended Analysis of Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Temperature Programmed Gas Chromatography	2022	GPA	48
7	TP-34	Wet Gas Sampling Testing û Performance of Dry Gas Sampling Methods for Wet Gas Applications	2022	GPA	139
8	TP-33	CALCULATION OF PRECISION STATEMENT FOR GPA 2103, GPA 2186, GPA 2286, AND GPA 2261 (WITH PORTABLE GC) METHODS	2021	GPA	57
9	RR-247	Comparison of GPA Midstream Data to Simulation Software Predictions	2021	GPA	0
10	RR-248	State of Art Survey for Methanol Removal from Natural Gas, NGLs, and Natural Gas Condensate	2021	GPA	0
11	RR-249	Effect of Gas Gravity, H <sub>2</sub> S, and Salinity on the Water Content in Natural Gas: Part III, Effect of Brine	2021	GPA	0
12	RR-250	Comparison of GPA Midstream Data to Simulation Software Predictions	2021	GPA	0
13	RR-251	Methanol in Gas Conditioning Systems	2021	GPA	0
14	RR-244	High Pressure Hydrocarbon Mixtures Thermophysical Properties Data	2020	GPA	0
15	RR-245	Mercaptan Solubility in Glycols	2020	GPA	0
16	RR-246	Solubility of Mercury in Selected Gas Processing Solvents	2020	GPA	0
17	STD 2119	Tentative Standard for Compositional Analysis by Optical Spectroscopy	2020	GPA	17
18	STD 2103	Tentative Method for the Analysis of Natural Gas Condensate Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography	2020	GPA	46
19	STD 2177	Analysis of Natural Gas Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography	2020	GPA	33
20	STD 2261	Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography	2020	GPA	46
21	STD 8117	A Simplified Vapor Pressure Correlation for Commercial NGLs	2020	GPA	30
22	STD 2108	GPA Fractionation Grade Product Specifications	2020	GPA	12
23	STD 2174	Obtaining Liquid Hydrocarbon Samples for Analysis by Gas Chromatography	2020	GPA	27
24	STD 2377	Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes	2019	GPA	15
25	STD 2261	Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography	2019	GPA	47
26	STD 2172	Calculation of Gross Heating Value, Relative Density, Compressibility and Theoretical Hydrocarbon Liquid Content for Natural Gas Mixtures for Custody Transfer	2019	GPA	48
27	STD 2188	Method for the Determination Of Ethyl Mercaptan in LP-Gas Using Length of Stain Tubes	2019	GPA	18
28	STD 2194	Low-Pressure Field Method for Determining Ethyl Mercaptan Odorant in LP-Gas Using Length of Stain Tubes	2019	GPA	10
29	STD 8217	Temperature Correction for the Volume of NGL and LPG Tables 23E, 24E, 53E, 54E, 59E, and 60E	2019	GPA	151
30	TP-32	Water Content in Gaseous and Liquid Carbon Dioxide and its Mixtures with Methane in Equilibrium with Hydrate	2019	GPA	26
31	RR-241	A Physics-of-Failure Approach to Life-Prediction, Fatigue Study and Failure Prevention in Brazed-Aluminum Based Heat Exchangers	2019	GPA	0
32	RR-242	Solubility of Hydrocarbons in Amine Treating Solutions	2019	GPA	0
33	RR-243	Solubility of Heavy Hydrocarbons in Cryogenic Fluids	2019	GPA	0

34	RR-238	Extended Mercaptan VLE in Loaded Amines - Part I	2018	GPA	0
35	RR-239	Extended Mercaptan VLE in Loaded Amines - Part II	2018	GPA	0
36	RR-240	CO2 Freezing in Cryogenic Processes	2018	GPA	0
37	RR-224.1	Elemental Mercury Equilibrium in Selected Saturated Hydrocarbons	2018	GPA	0
38	STD 8182	Mass Measurement of Natural Gas Liquids	2018	GPA	13
39	STD 8186	Measurement of Liquid Hydrocarbon by Truck Scales	2017	GPA	14
40	STD 2166	Obtaining Natural Gas Samples for Analysis by Gas Chromatography	2017	GPA	43
41	STD 8173	Method for Converting Mass of Natural Gas Liquids and Vapors to Equivalent Liquid Volumes	2017	GPA	20
42	STD 2140	Liquefied Petroleum Gas Specifications and Test Methods	2017	GPA	8
43	RR-233	Measurements of Densities, Viscosities, Thermal Conductivities, Enthalpies and Hydrate Melt Temperatures for Four Acid Gas Blends	2017	GPA	0
44	RR-234	State of Art Survey for Heavy Hydrocarbon Removal and Disposition Associated with LNG Production Facilities	2017	GPA	0
45	RR-235	Distribution of Methanol in Amine Treating Systems	2017	GPA	0
46	RR-236	Acid Gas Transport Properties Near Critical Phase Envelope	2017	GPA	0
47	RR-237	Effect of Gas Gravity, H2S, and Salinity on the Water Content in Natural Gas: Part I, Effect of Gas Gravity	2017	GPA	0
48	RR-226	Solubility of Amines and TEG In Dense Phase Gases	2016	GPA	0
49	RR-229	Impacts of Inhibitors on Hydrates	2016	GPA	0
50	RR-230	Impact of Aromatics on Acid Gas Injection	2016	GPA	0
51	RR-231	Propane-Water-Methanol Mutual Solubilities & Freeze Protection	2016	GPA	0
52	RR-232	State-of-the-Art Review of Mercaptan Removal Technologies	2016	GPA	0
53	STD 2145	Table of Physical Properties for Hydrocarbons and Other Compounds of Interest to the Natural Gas Industry	2016	GPA	64
54	PSNGL&LRG		2016	GPA	27
55	STD 2198	Selection, Preparation, Validation, Care and Storage of Natural Gas and Natural Gas Liquids Reference Standard Blends	2016	GPA	27
56	STD 2100	Tentative Method for the Qualitative Determination of Carbonyl Sulfide in Propane	2016	GPA	11
57	RR-227	Organic Sulfur Species Distribution In Glycols and Amines	2015	GPA	0
58	RR-228	Sulfur Species Distribution in Separators and Fractionators	2015	GPA	0
59	RR-225	Solubility of Hydrocarbons in Aqueous Piperazine and Aqueous Piperazine/MDEA Systems and Associated Properties	2015	GPA	0
60	RR-215	Equilibrium Data (SLE and VLE) for Heavy and Light Hydrocarbons at Cryogenic Temperatures	2014	GPA	0
61	RR-220	Solubility of Heavy Hydrocarbons in Loaded Amine Solutions	2014	GPA	0
62	RR-221	Distribution of Sulfur Species in 3-Phase Separators	2014	GPA	0
63	RR-222	Corrosion in Acid Gas Injection Systems	2014	GPA	0
64	RR-223	Freeze Valve Water Content in LPG Systems	2014	GPA	0
65	TP-31		2014	GPA	17
66	STD 2174	Obtaining Liquid Hydrocarbon Samples for Analysis by Gas Chromatography	2014	GPA	26
67	STD 2108	GPA Fractionation Grade Product Specifications	2014	GPA	8
68	STD 2188	Method for the Determination Of Ethyl Mercaptan in LP-Gas Using Length of Stain Tubes	2014	GPA	17
69	STD 2194	Low-Pressure Field Method for Determining Ethyl Mercaptan Odorant in LP-Gas Using Length of Stain Tubes	2014	GPA	11
70	STD 2186	Method for the Extended Analysis of Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Temperature Programmed Gas Chromatography	2014	GPA	42
71	STD 2286	Method for the Extended Analysis of Natural Gas and Similar Gaseous Mixtures by Temperature Program Gas Chromatography	2014	GPA	23
72	STD 2377	Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes	2014	GPA	15

73	STD 2177	Analysis of Natural Gas Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography	2013	GPA	18
74	STD 2261	Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography	2013	GPA	16
75	RR-218	Loaded Amine Transport Properties	2013	GPA	0
76	RR-219	Methanol Distribution (as a contaminant) in Fractionation Products and Freeze Out Boundaries	2013	GPA	0
77	RR-216	Hydrates in High Inhibitor Concentration Systems	2012	GPA	0
78	RR-217	GPA Technical Data Development Committee Support for GPSA Data Book 13th Edition	2012	GPA	0
79	STD 8182	Mass Measurement of Natural Gas Liquids	2012	GPA	13
80	RR-206	Hydrocarbon Solubility in Glycol and Amine Solutions	2012	GPA	0
81	RR-209	Solubility of H <sub>2</sub> S and CO <sub>2</sub> in EG and TEG	2012	GPA	0
82	RR-210	Acid Gas Water Content, An Update of Engineering Databook I	2012	GPA	0
83	RR-211	Equilibrium Water Content in Natural Gas with Hydrates or MEG Solutions	2011	GPA	0
84	RR-212	Glycol Systems with Impurities	2011	GPA	0
85	RR-213	Practical Hydrocarbon Dew Point Specification For Natural Gas Transmission Line	2011	GPA	0
86	RR-214	Solubility of Non-Aromatic Hydrocarbons in TEG Solutions	2011	GPA	0
87	RR-207	Vapor-Liquid Equilibrium Studies of Organic Sulfur Species in MDEA, DEA Aqueous Solutions	2011	GPA	0
88	RR-208	Methanol Solubility in Natural Gas	2011	GPA	0
89	RR-203	High Pressure Demethanizer Physical Properties	2010	GPA	0
90	RR-201	Oxygen Removal in Natural Gas Systems	2010	GPA	0
91	RR-205	Hydrates in High Inhibitor Concentration Systems	2010	GPA	0
92	RR-202	Vapour-Liquid Equilibrium, Interfacial Tension and Transport Properties of Aqueous Solutions of Ethylene Glycol, in the presence of Methane, Carbon Dioxide and Hydrogen Sulfide	2009	GPA	0
93	STD 2145	Table of Physical Properties for Hydrocarbons and Other Compounds of Interest to the Natural Gas Industry	2009	GPA	15
94	STD 2172	Calculation of Gross Heating Value, Relative Density, Compressibility and Theoretical Hydrocarbon Liquid Content for Natural Gas Mixtures for Custody Transfer - Third Edition	2009	GPA	48
95	RR-204	Impact of Sulfur Species on Glycol Dehydration (GPA 992-3): Solubility Study of Certain Sulfur Species in Glycol Aqueous Solutions	2008	GPA	0
96	RR-193	High Pressure Gas Separation and Conditioning	2008	GPA	0
97	RR-194	Gas Hydrate Dissociation Kinetics and Calorimetry Measurements of Hydrate Enthalpies of Dissociation	2008	GPA	0
98	RR-195	Mutual Solubility of Hydrocarbons and Amines	2008	GPA	0
99	RR-196	Tests of Instruments for Measuring Hydrocarbon Dew Points in Natural Gas Streams, Phase 1	2008	GPA	0
100	RR-197	Moisture Analyzers Survey	2008	GPA	0
101	RR-198	Water and Inhibitor Distribution in Gas Production Systems	2008	GPA	0
102	RR-199	Tests of Instruments for Measuring Hydrocarbon Dew Points in Natural Gas Streams, Phase 2	2008	GPA	0
103	RR-200	Water Content of High Pressure, High Temperature Methane, Ethane and Methane + CO <sub>2</sub> , Ethane + CO <sub>2</sub>	2008	GPA	0
104	RR-166	Enthalpies of Mixing of CO <sub>2</sub> /CH <sub>4</sub> or H <sub>2</sub> S/CH <sub>4</sub> Mixtures with Aqueous Solutions of Methyl-diethanolamine and Diethanolamine	2007	GPA	0
105	TP-30	FOAMING IN GLYCOL AND AMINE SYSTEMS	2007	GPA	99
106	TP-27	Temperature Correction for the Volume of NGL and LPG Tables 23E, 24E, 53E, 54E, 59E & 60E - First Edition	2007	GPA	162
107	TP-15	Manual of Petroleum Measurement Standards Chapter 11 - Physical Properties Data - Section 2, Part 5 - Simplified Vapor Pressure Correlation for Commercial NGL's	2007	GPA	40
108	RR-190	An Examination of Interfering Factors in the ASTM D-1838 Copper Strip Test	2006	GPA	0
109	RR-191	State of Mercury Removal Technology	2006	GPA	0
110	RR-192	Carbonyl Sulfide (COS) Removal from Propane	2006	GPA	0

111	RR-187	Low Temperature V-L-E Data for Water, CO2 and Light Hydrocarbon Systems	2005	GPA	0
112	RR-188	GPA Round Robin Chromatograph Test Project	2005	GPA	0
113	RR-189	The Impact of Sulfur Species on Glycol Dehydration - A Study of the Solubility of Certain Gases and Gas Mixtures in Glycol Solutions at Elevated Pressures and Temperatures	2005	GPA	0
114	STD 2166	Obtaining Natural Gas Samples for Analysis by Gas Chromatography	2005	GPA	42
115	RR-185	Solubility of Hydrocarbons in Amine Solutions	2004	GPA	0
116	RR-186	The Determination of VLE Data on CO2 & H2S in MDEA & Blends with Other Amines	2004	GPA	0
117	RR-181	Enthalpy of Hydrate Formation from Multicomponent Gases	2003	GPA	0
118	RR-183	The Impact of Sulfur Species on Glycol Dehydration - A Study of the Solubility of Certain Gases and Gas Mixtures in Glycol Solutions at Elevated Pressures and Temperatures	2003	GPA	0
119	RR-184	Vapor-Liquid Equilibrium Studies on Water-Methanol-MDEA-Hydrocarbon Systems	2003	GPA	0
120	STD 2103	Tentative Method for the Analysis of Natural Gas Condensate Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography	2003	GPA	9
121	STD 2198	Selection, Preparation, Validation, Care and Storage of Natural Gas and Natural Gas Liquids Reference Standard Blends	2003	GPA	11
122	TP-28	Water Content of the CO2-rich Phase of Gaseous Mixtures Containing 10 and 20 Mole Percent CH4 in CO2 in Equilibrium with Water and/or Hydrate	2003	GPA	11
123	TP-29	Hydrocarbon/Water and Hydrocarbon/Aqueous Amines Mutual Solubilities	2003	GPA	76
124	USED PLANTS & EQUIP	Guidelines for Reapplying Used Plants and Equipment	2002	GPA	53
125	RR-182	Kinetics of Sulfur Species - Hydrocarbon - Aqueous Amine Systems	2002	GPA	0
126	RR-177	Vapor-Liquid Equilibrium Studies on Water-Methanol-TEG-Hydrocarbon Systems	2002	GPA	0
127	RR-180	Amine BTEX Solubility	2002	GPA	0
128	RR-179	Vapor Liquid Equilibrium Measurements on Propane, n-Butane, Isobutane, Ethane, n-Pentane, and n-Hexane	2001	GPA	0
129	RR-174	Water Content of Natural Gas Systems Containing Acid Gas	2001	GPA	0
130	RR-175	COS Removal from Propane	2001	GPA	0
131	RR-176	Removal of Propylene from Fuel-Grade Propane/LPG	2001	GPA	0
132	OPERATIONS MANUAL	Operations and Maintenance Practices Manual	2001	GPA	83
133	STD 2100	Tentative Method for the Qualitative Determination of Carbonyl Sulfide in Propane	2000	GPA	7
134	TP-26		2000	GPA	48
135	RR-170	Prediction of Sulfur Compound Distribution in Fractionators	2000	GPA	0
136	RR-171	Solids Deposition in Natural Gas Systems	2000	GPA	0
137	RR-173	GPA Thermodynamic Data Base	2000	GPA	0
138	RR-167	CO2 & H2S Thermodynamics and Kinetics in Aqueous Alkanolamines	2000	GPA	0
139	RR-160	Mutual Solubility in Gas Condensate - EG Solution Systems	2000	GPA	0
140	RR-163	Diffusion Coefficients in Aqueous Amines	1999	GPA	0
141	RR-168	Hydrate Phase Composition for Multicomponent Gases	1999	GPA	0
142	RR-169	GPSA Engineering Data Book Revitalization and Maintenance - Water-Hydrocarbon Mutual Solubility Data	1999	GPA	0
143	STD 2199	Determination of Specific Sulfur Compounds by Capillary Gas Chromatography and Sulfur Chemiluminescence Detection	1999	GPA	12
144	TP-22	Convergence Pressure and Vapor-Liquid Equilibrium Ratios	1999	GPA	131
145	TP-17	Table of Physical Properties of Hydrocarbons for Extended Analysis of Natural Gases	1998	GPA	56
146	FACILITY SAFETY	Gas Processing Facility Safety Inspection Checklist	1998	GPA	95

147	RR-164	Phase Equilibria and Kinetics of Sulfur Species - Hydrocarbon-Aqueous Amine Systems	1998	GPA	0
148	RR-155	Solubility of H <sub>2</sub> S and CO <sub>2</sub> in Alkanolamines	1998	GPA	0
149	RR-162	Vapor-Liquid Equilibria fo Volatile-Sulfur-Containing Systems III. Butane-Sulfur Compounds Containing Systems IV. Hydrocarbon-Hydrocarbon-Sulfur Compounds Containing Systems V. Hydrocarbon(s) - Hydrogen Sulfide-Sulfur Compounds Containing Systems	1998	GPA	0
150	RR-157	Acid Gas Treating with Aqueous Alkanolamines - Part I: A Mass Transfer Model for Predicting Rates of Absorption of Stripping of H <sub>2</sub> S and CO <sub>2</sub> in MDEA, DEA, and Blends of DEA and MDEA	1997	GPA	0
151	RR-158	AcidGas Treating with Aqueous Alkanolamines - Part II: Physical Property Data Important in Modeling H <sub>2</sub> S and CO <sub>2</sub> Absorption into Aqueous DEA, MDEA, and Blends of DEA and MDEA	1997	GPA	0
152	RR-159	Acid Gas Treating with Aqueous Alkanolamines - Part III: Experimental Absorption Rate Measurements and Reaction Kinetics for H <sub>2</sub> S and CO <sub>2</sub> in Aqueous DEA, MDEA, and Blends of DEA and MDEA	1997	GPA	0
153	RR-165	Collection of VLE Data for Acid Gas - Alkanolamine Systems Using Fourier Transform Infrared Spectroscopy	1997	GPA	0
154	RR-161	Kinetics of Gas Hydrates with and Without Inhibitors	1997	GPA	0
155	RR-154	Experimental Enthalpies of Light/Heavy Hydrocarbon Systems: Methane/n-Heptane, Methane/Methylcyclohexane, Methane/Toluene	1997	GPA	0
156	PLANT PROJECT	Plant Project and Design Check List	1997	GPA	172
157	STD 2140	Liquefied Petroleum Gas Specifications and Test Methods	1997	GPA	56
158	TP-24	Solubility and Vapor-Liquid Equilibrium Data for Systems Containing Diamondoids, Gas Mixtures, Feed Stock Oil and Triethylene Glycol - Addendum	1997	GPA	95
159	TP-20	Effect of Ammonia on LP-Gas Odorant	1996	GPA	21
160	TP-21	Trace Contaminants in Natural Gas Liquids	1996	GPA	64
161	RR-151	Reaction Kinetics of CO <sub>2</sub> with MEA, DEA and MDEA-Based Blends	1996	GPA	0
162	RR-152	Physical Properties of MEA, DEA, MDEA and MDEA-Based Blends Loaded with CO <sub>2</sub>	1996	GPA	0
163	RR-153	Enhancement Factors for Acid Gas Removal with Single and Mixed Amines	1996	GPA	0
164	RR-144	Enthalpies of Mixing of Systems Containing Methane, Methanol and C <sub>7</sub> Hydrocarbons	1996	GPA	0
165	RR-156	Hydrate Phase Equilibria in Inhibited & Brine Systems	1996	GPA	0
166	RR-146	Fluoride Contamination in LP Gas	1995	GPA	0
167	RR-147	Density Measurements on Natural Gas Liquids	1995	GPA	0
168	RR-148	Volume Correction Factors for Natural Gas Liquids - Phase II	1995	GPA	0
169	RR-149	Vapour-Liquid & Vapour-Liquid-Liquid Equilibria for H <sub>2</sub> S, CO <sub>2</sub> , Selected Light Hydrocarbons and a Gas Condensate in Aqueous Methanol or Ethylene Glycol Solutions	1995	GPA	0
170	RR-150	Mutual Solubility in Water-Hydrocarbon Systems	1995	GPA	0
171	RR-138	Thermodynamic Properties of CO <sub>2</sub> + CH <sub>4</sub> Mixtures	1995	GPA	0
172	RR-139	Thermodynamic Properties of CO <sub>2</sub> + C <sub>2</sub> H <sub>6</sub> Mixtures	1995	GPA	0
173	RR-140	Thermodynamic Properties of CO <sub>2</sub> + N <sub>2</sub> Mixtures	1995	GPA	0
174	RR-141	Thermodynamic Properties of CO <sub>2</sub> + H <sub>2</sub> S Mixtures	1995	GPA	0
175	RR-130	A Thermodynamically Consistent Model for the Prediction of Solubilities and Enthalpies of Solution of Acid Gases in Aqueous Alkanolamine Solutions	1995	GPA	0
176	STD 8195	Tentative Standard for Converting Net Vapor Space Volumes to Equivalent Liquid Volumes - Reprinted 1997-1998; Errata: September 1, 1999	1995	GPA	14
177	RR-145	Enthalpies of C <sub>7</sub> +Methane+Methanol Mixtures Between 180 and 320 K	1995	GPA	0
178	RB-194	Tentative NGL Loading Practices	1994	GPA	19
179	STD 8173	Method for Converting Mass of Natural Gas Liquids and Vapors to Equivalent Liquid Volumes	1994	GPA	5

180	RR-142	Experimental Enthalpies of Nitrogen-Rich Systems	1994	GPA	0
181	RR-143	A Study of Passivation Agents for Odorized Propane Containers	1994	GPA	0
182	RR-135	Vapor Liquid Equilibria for Volatile-Sulfur-Containing Systems	1994	GPA	0
183	RR-136	Predictive Model for the Thermophysical Properties of Carbon Dioxide Rich Mixtures	1994	GPA	0
184	RR-137	The Solubility of Selected Aromatic Hydrocarbons in Monoethylene Glycol	1994	GPA	0
185	RR-64C	GPA Data Bank of Selected Enthalpy & Equilibria Values	1993	GPA	0
186	STD 2174	Obtaining Liquid Hydrocarbon Samples for Analysis by Gas Chromatography	1993	GPA	15
187	RR-134	Evaluation of Four Methods for Predicting Hydrate Equilibria	1992	GPA	0
188	RR-128	Enthalpies of Water + Methanol Mixtures between 180 and 320 K	1991	GPA	0
189	RR-131	The Solubility of Selected Aromatic Hydrocarbons in Triethylene Glycol	1991	GPA	0
190	RR-132	Water Content of Ethane, Propane, and Their Mixtures in Equilibrium with Liquid Water or Hydrates	1991	GPA	0
191	RR-133	Volume Correction Factors for Natural Gas Liquids Phase 1	1991	GPA	0
192	REPORT INVESTIGATIONS	Report of Investigations of Odorization of LP-Gas	1991	GPA	30
193	LP GAS SYMPOSIUM	Symposium on LP-Gas Odorization Technology Proceedings	1990	GPA	112
194	STD 2290	Tentative Method for the Determination of Carbonyl Sulfide (COS) in Unodorized Liquid Propane	1990	GPA	2
195	RR-127	Enthalpies of Solution of H <sub>2</sub> S in Aqueous Methyl-diethanolamine Solutions	1990	GPA	0
196	RR-118	GPSWAT: GPA Sour Water Equilibria Correlation & Computer Program	1990	GPA	0
197	RR-129	Human Response Research Evaluation of Alternate Odorants for LP-Gas	1990	GPA	0
198	RR-119	Triethylene Glycol Vaporization Losses In Supercritical CO <sub>2</sub>	1989	GPA	0
199	RR-120	H <sub>2</sub> O Content Values of a CO <sub>2</sub> -5.31 Mol Percent Methane Mixture	1989	GPA	0
200	RR-121	Experimental Enthalpies of Pentanes-plus Fractions	1989	GPA	0
201	RR-122	Properties of CO <sub>2</sub> Mixtures with N <sub>2</sub> and with CH <sub>4</sub>	1989	GPA	0
202	RR-123	NULL	1989	GPA	0
203	RR-124	Equilibrium Solubility of CO <sub>2</sub> or H <sub>2</sub> S in Aqueous Solutions of DEA at Low Partial Pressures	1989	GPA	0
204	RR-125	Equilibrium Solubility of CO <sub>2</sub> or H <sub>2</sub> S in Protonated Solutions of DEA	1989	GPA	0
205	RR-126	Phase Behavior and Properties of an Aromatic Condensate Containing 20 Mole Percent Nitrogen	1989	GPA	0
206	RR-113	Vapor Liquid Equilibrium in Propane-Odorant Systems	1989	GPA	0
207	GUIDE PERFORMANCE	Guide for Performance Testing of Plant Equipment	1989	GPA	183
208	TP-18	GPA Experimental Enthalpy Values Referred to Two Base Levels from Excess Enthalpy Data	1989	GPA	43
209	RR-123.1	Reference State Heat Capacities of Three C-8 Compounds	1989	GPA	0
210	TP-19	Vapor-Solid Equilibrium Ratios for Structure I and II Natural Gas Hydrates	1988	GPA	61
211	STD 9175	Standard for Computer Program Documentation and Development Standards	1988	GPA	3
212	RR-114	Enthalpies of Solution of H <sub>2</sub> S in Aqueous Diethanolamine Solutions	1988	GPA	0
213	RR-116	Vapor-Liquid Equilibrium and Condensing Curves for a Highly Aromatic Gas Condensate	1988	GPA	0
214	RR-117	Solubility of Methanol or Glycol in Water-Hydrocarbon Systems	1988	GPA	0
215	RR-115	Liquid-Liquid-Vapor Equilibria in Cryogenic LNG Mixtures - Phase VI	1987	GPA	0
216	RR-104	Equilibrium Solubility of Carbon Dioxide or Hydrogen Sulfide in Aqueous Solutions of Monoethanolamine, Diglycolamine, Diethanolamine and Methyl-diethanolamine	1987	GPA	0

217	RR-105	Vapor-Liquid Equilibrium and Condensing Curves for a Gas Condensate Containing Nitrogen, H-J. Ng, H. Schroeder, D. B. Robinson	1987	GPA	0
218	RR-106	Influence of High Concentrations of Methanol on Hydrate Formation and the Distribution of Glycol in Liquid-Liquid Mixtures	1987	GPA	0
219	RR-107	Thermodynamic Properties of Pure Hydrogen Sulfide and Mixtures Containing Hydrogen Sulfide with Methane, Carbon Dioxide, Methylcyclohexane and Toluene	1987	GPA	0
220	RR-108	Enthalpies of Solution of CO <sub>2</sub> in Aqueous Diethanolamine Solutions	1987	GPA	0
221	RR-109	Acoustic Determination of the Thermodynamic Reference State Heat Capacity of n-Heptane Vapor	1987	GPA	0
222	RR-110	Thermophysical Properties for Special High CO <sub>2</sub> Content Mixtures	1987	GPA	0
223	RR-111	Additional Evaluation of GPA*SIM Computer Program with GPA Data Bank of Selected VLE Data	1987	GPA	0
224	RR-112	Evaluation of Equi-Phase (Peng Robinson) Computer Program with GPA Data Bank of Selected VLE Data	1987	GPA	0
225	TP-14	Energy Functions for Gaseous CO <sub>2</sub> -H <sub>2</sub> O Mixtures	1987	GPA	31
226	STD 2187	Tentative Method for the Determination of Ammonia in Liquid Propane - Reprinted 1989, 1994, 1997, 1998	1987	GPA	5
227	STD 8186	Measurement of Liquid Hydrocarbon by Truck Scales	1986	GPA	6
228	RB-181	Tentative Reference Bulletin Heating Value as a Basis for Custody Transfer of Natural Gas	1986	GPA	40
229	RR-93	Gas Solubilities and Vapor-Liquid Equilibrium Measurements of H <sub>2</sub> , CO <sub>2</sub> and NH <sub>3</sub> in Water-Phenol Mixtures from 110 degrees F to 550 degrees F	1986	GPA	0
230	RR-94	Phase Equilibrium Studies for Processing of Gas from CO <sub>2</sub> EOR Projects (Phase III): A. The Effect of Toluene as an Extractive Agent; B. The Effect of Methane on V-L-E Behavior in CO <sub>2</sub> -Rich Gas n-Pentane Quasi-binary Mixtures	1986	GPA	0
231	RR-95	Application of High Pressure, Multiproperty Apparatus for the Measurement of Thermodynamic and Transport Properties to Measure the Phase and Volumetric Properties of a Supercritical Extractive System: The Carbon Dioxide-n-Hexadecane System	1986	GPA	0
232	RR-96	Vapor-Liquid Equilibrium & Condensing Curves in the Vicinity of the Critical Point for a Typical Gas Condensate	1986	GPA	0
233	RR-97	Excess Enthalpy Experimental Data Binary Systems: Water + Ethylene, Water + Ethane, Water + Propane, Water + n-Butane - Ternary System: Water + Methane + Carbon Dioxide	1986	GPA	0
234	RR-98	Glycol Vaporization Loss-Super-Critical CO <sub>2</sub>	1986	GPA	0
235	RR-99	Water Content of CO <sub>2</sub> -Rich Fluids in Equilibrium with Liquid Water and/or Hydrates	1986	GPA	0
236	RR-100	Water Content of NGL in Presence of Hydrates	1986	GPA	0
237	RR-101	Vapor-Liquid Equilibria Measurements on the Systems Methane-Methylcyclohexane, Nitrogen-n-Propylbenzene, Hydrogen Sulfide-n-Propylbenzene, Propane-Toluene, Propane-m-Xylene and Propane-Methylcyclohexane	1986	GPA	0
238	RR-102	Enthalpies of Solution of CO <sub>2</sub> in Aqueous Methyl-diethanolamine Solutions	1986	GPA	0
239	RR-103	Enthalpies and Phase Boundary Measurements: Equal Molar Mixtures of n-Pentane with Carbon Dioxide and Hydrogen Sulfide	1986	GPA	0
240	RR-83	Excess Enthalpy Experimental Data Binary Systems: Water + Carbon Monoxide, Water + Carbon Dioxide	1985	GPA	0
241	RR-84	Evaluation of Equi-Phase (Peng-Robinson) Computer Program with GPA Data Bank of Selected V-L-E Data	1985	GPA	0
242	RR-85	Enthalpies of Solutions of CO <sub>2</sub> in Aqueous Diglycolamine Solutions	1985	GPA	0
243	RR-87	Hydrate Formation and Equilibrium Phase Compositions in the Presence of Methanol: Selected Systems Containing Hydrogen Sulfide, Carbon Dioxide, Ethane or Methane	1985	GPA	0
244	RR-88	Vapor-Liquid Equilibria Measurements on the Systems Ethane-n-Propylcyclohexane, Propane-Cyclohexane, Propane-N-Propylcyclohexane, Propane-N-Propylbenzene and Propane-Mesitylene	1985	GPA	0
245	RR-89	Vapor-Liquid Equilibrium and Condensing Curves for a Typical Gas Condensate	1985	GPA	0
246	RR-90	Vapor-Liquid Equilibrium Measurements on the Ammonia-Water System from 313K to 589K	1985	GPA	0
247	RR-91	Liquid-Liquid-Vapor Equilibria in Cryogenic LNG Mixtures - Phase V	1985	GPA	0
248	RR-92	Effect of Ethylene Glycol or Methanol on Hydrate Formation in Systems Containing Ethane, Propane, Carbon Dioxide, Hydrogen Sulfide or a Typical Gas Condensate	1985	GPA	0

249	TP-12	Liquid Densities of Ethane - Propane Mixtures	1985	GPA	104
250	TP-13	Experimental Orifice Meter Studies	1985	GPA	14
251	STD 3132	Natural Gasoline Specifications and Test Methods	1984	GPA	33
252	RR-80	Water Content of CO <sub>2</sub> -Rich Fluids in Equilibrium with Liquid Water or Hydrate	1984	GPA	0
253	RR-81	Evaluation of Peng-Robinson Computer Program with GPA Data Bank of Selected Enthalpy Values	1984	GPA	0
254	RR-82	Vapor-Liquid Equilibria Measurements on the Systems Ethane-Toluene, Ethane-N-Propylbenzene, Ethane-Metaxylene, Ethane-Mesitylene, Ethane-Methylcyclohexane	1984	GPA	0
255	RR-74	The Influence of Methanol on Hydrate Formation at Low Temperatures	1984	GPA	0
256	RR-75	Vapor-Liquid Equilibria Measurements on the Systems N <sub>2</sub> -n-propyl-cyclohexane, CO <sub>2</sub> -n-propylcyclohexane, CH <sub>4</sub> -n-propylcyclohexane, CH <sub>4</sub> -n-propylbenzene, and CO <sub>2</sub> -n-propylbenzene	1984	GPA	0
257	RR-76	Phase Equilibrium Studies for Processing of Gas from CO <sub>2</sub> EOR Projects (Phase II)	1984	GPA	0
258	RR-77	Evaluation of GPA*SIM Computer Program with GPA Data Bank of Selected V-L-E Data	1984	GPA	0
259	RR-78	Sulfur Compounds and Water V-L-E and Mutual Solubility MESH-H <sub>2</sub> O; ETSH-H <sub>2</sub> O; CS <sub>2</sub> -H <sub>2</sub> ); and COS-H <sub>2</sub> O	1984	GPA	0
260	RR-65	Vapor-Liquid Equilibria for Sour Water Systems at High Temperatures	1983	GPA	0
261	RR-66	Equilibrium Phase Composition and Hydrating Conditions in Systems Containing Methanol, Light Hydrocarbons, Carbon Dioxide, and Hydrogen Sulfide	1983	GPA	0
262	RR-67	Liquid-Liquid-Vapor Equilibria in Cryogenic LNG Mixtures Phase III-Nitrogen Rich Systems	1983	GPA	0
263	RR-68	Excess Enthalpy Experimental Data-Binary Systems: Water+n-Pentane, Water + n-Hexane, Water + n-Heptane, Water + n-Octane	1983	GPA	0
264	RR-70	Phase Equilibrium Studies for Processing of Gas from CO <sub>2</sub> EOR Projects	1983	GPA	0
265	RR-71	Water Content of NGL in Presence of Hydrates	1983	GPA	0
266	RR-72	Measurement of Ethane and Propane Recovery and Total Fraction Condensed for a Simulated Natural Gas in the Retrograde Region	1983	GPA	0
267	RR-73	Heats of Mixing Steam with N <sub>2</sub> , CO <sub>2</sub> , H <sub>2</sub> , CH <sub>4</sub> and CO at High Temperatures and Pressures Using a New High Temperature Calorimeter	1983	GPA	0
268	STD 1167	Glossary Definition of Words and Terms Used in the Gas Processing Industry	1983	GPA	23
269	TP-11	Vapor-Liquid-Equilibria Study of Light Gases in Hydrogen-Coal Liquid Model Compound Systems	1983	GPA	54
270	RR-64	Development of GPA Data Bank of Selected Enthalpy and Equilibria Values	1983	GPA	0
271	TP-6	Experimentally Based Thermodynamic Properties of Propane	1982	GPA	88
272	TP-7	Excess Enthalpy Experimental Data Binary Systems: Water + Hydrogen Water + Methane Water + Nitrogen Water + Argon	1982	GPA	57
273	TP-8	Solubility of Carbon Dioxide in Propylene Carbonate at Elevated Pressures & Higher Than Ambient Temperatures	1982	GPA	14
274	TP-9	Water Content and the Solubility of CO <sub>2</sub> in Equilibrium with DEG-Water and TEG-Water Solutions at Feasible Absorption Conditions	1982	GPA	51
275	TP-10	Hydrate Decomposition Conditions in the System Hydrogen Sulfide-Methane, and Propane	1982	GPA	17
276	RR-40A	Phase Equilibria of a High Nitrogen Content Synthetic Natural Gas	1982	GPA	0
277	RR-48	Vapor-Liquid and Liquid-Liquid Equilibria: Water-Methane, Water-Carbon Dioxide, Water-Hydrogen Sulfide, Water-nPentane, Water-Methane-nPentane	1982	GPA	0
278	RR-49A	NULL	1982	GPA	0
279	RR-50	Measurement and Interpretation of the Water Content of a Methane-5.31 Mol% Propane Mixture in the Gaseous State in Equilibrium with Hydrate	1982	GPA	0
280	RR-52	Vapor-Liquid Equilibria for Sour Water Systems with Inert Gases Present	1982	GPA	0
281	RR-56	Measurement of Total Fraction Condensed and Phase Boundary for a Simulated Natural Gas	1982	GPA	0
282	RR-57	Phase Behavior of Two Mixtures of Methane, Carbon Dioxide, Hydrogen Sulfide, and Water	1982	GPA	0



283	RR-60	Liquid-Liquid-Vapor Equilibria in Cryogenic LNG Mixtures - Phase II	1982	GPA	0
284	RR-61	Evaluation of the GPSA Engineering Data Book Volume Correction Factor Table for Light Ends	1982	GPA	0
285	RR-62	Water-Hydrocarbon Liquid-Liquid-Vapor Equilibrium Measurements in 530 degrees F	1982	GPA	0
286	RR-63	Experimental Enthalpies for Pure Toluene and Pure Methylcyclohexane	1982	GPA	0
287	RR-58	Equil. Phase Properties of Selected Naphthenic Binary Systems: Ethylcyclohexane-Carbon Dioxide, Ethylcyclohexane-Nitrogen, Ethylcyclohexane-Methane	1981	GPA	0
288	RR-47	Behavior of CH <sub>4</sub> -CO <sub>2</sub> -H <sub>2</sub> S Mixtures at Sub-Ambient Temperatures	1981	GPA	0
289	RR-53	Experimental Densities and Enthalpies for Water-Natural Gas Systems	1981	GPA	0
290	RR-53A	Thermophysical Properties Tables for Wet, Sweet, and Sour Natural Gases	1981	GPA	0
291	RR-54	Equilibrium Phase Behavior of Several Solute Gases in the Solvent Phenanthrene	1981	GPA	0
292	RR-55	Phase Equilibrium Studies for Methane/Synthesis Gas Separation: The Hydrogen-Carbon Monoxide-Methane System	1981	GPA	0
293	RR-51	Equilibrium Phase Properties of Selected Napthenic Binary Systems: Methylcyclohexane - Nitrogen, Ethylcyclohexane-Hydrogen Sulfide, n-Propylcyclohexane-Hydrogen Sulfide	1981	GPA	0
294	CHECKLISTS FOR ENERGY	Check Lists for Energy Conservation in Gas Processing Plants; 1981	1981	GPA	45
295	RR-41	Vapor-Liquid Equilibrium Data on Water-Substitute Gas Components: N <sub>2</sub> -H <sub>2</sub> O, H <sub>2</sub> -H <sub>2</sub> O, CO-H <sub>2</sub> O, H <sub>2</sub> -CO-H <sub>2</sub> O, and H <sub>2</sub> S-H <sub>2</sub> O	1980	GPA	0
296	RR-42	Predicting Synthetic Gas and Natural Gas Thermodynamic Properties Using a Modified Soave Redlich Kwong Equation of State	1980	GPA	0
297	RR-43	Equilibrium Phase Properties of Selected m-Xylene and Mesitylene Binary Systems: m-Xylene-Hydrogen Sulfide, Mesitylene-Hydrogen Sulfide, Mesitylene-Carbon Dioxide	1980	GPA	0
298	RR-44	Vapor-Liq and Liq-Liq Equil in the Methane-Toluene System and Relation of Liq-Liq Equil Behavior at Low Temperatures to Vapor-Liq Equil Behavior at High Temps and Elevated Pressures	1980	GPA	0
299	RR-45	I. Water Content and Correlation of Methane in Equilibrium with Hydrates II. The Water Content of a High Carbon Dioxide Simulated Prudhoe Bay Gas In Equil with Hydrates	1980	GPA	0
300	RR-46	Vapor Liquid Equilibrium Study of the H <sub>2</sub> -CH <sub>4</sub> System at Low Temperatures and Elevated Pressures	1980	GPA	0
301	RR-40	Measurement of Ethane and Propane Recovery & Total Fraction Condensed in the Bubble Point Region of 2 Simulated Natural Gas Mixtures	1980	GPA	0
302	RR-35	Computer Simulations of Vapor-Liquid Compositions of Propane-Butane Mixtures in Cold Weather Field Tests	1979	GPA	0
303	RR-36	Literature Survey for Synthetic Gas Components - Thermodynamic Properties	1979	GPA	0
304	RR-37	Enthalpy Measurements on Synthetic Gas Systems: Hydrogen-Methane, Hydrogen-Carbon Monoxide	1979	GPA	0
305	RR-38	Preliminary Version of the PHC Equation of State Computerized for Engineering Calculations	1979	GPA	0
306	RR-39	Equilibrium Phase Properties of Selected m-Xylene and Mesitylene Binary Systems: m-Xylene-Methane, m-Xylene-Carbon Dioxide, Mesitylene-Methane	1979	GPA	0
307	RR-28	Characterization of the Heptanes and Heavier Fractions for the GPA Peng-Robinson Programs	1978	GPA	0
308	RR-29	Equilibrium Phase Compositions of Selected Aromatic and Naphthenic Binary Systems	1978	GPA	0
309	RR-30	High Temperature V-L-E Measurements for Substitute Gas Components	1978	GPA	0
310	RR-31	Equilibrium Phase Properties of a Synthetic Sour Gas Mixture and a Simulated Natural Gas Mixture	1978	GPA	0
311	RR-32	Vapor-Liquid Compositions of Propane-Butane Mixtures in Cold Weather Field Tests	1978	GPA	0
312	RR-33	Solubility of Hydrocarbons in Cryogenic LNG and NGL Mixtures	1978	GPA	0
313	RR-34	Sour Water Equilibria: Ammonia Volatility pH vs. Composition	1978	GPA	0
314	TP-5	Relation of Liquid-Liquid Equilibrium Behavior at Low Temperatures to Vapor-Liquid Equilibria Behavior at High Temperatures and Elevated Pressures	1978	GPA	30
315	RR-23	Measurement of Ethane and Propane Recovery and Total Fraction Condensed for Simulated Natural Gas Mixtures	1977	GPA	0

316	RR-24	Enthalpy and Phase Boundary Measurements on Mixtures of Nitrogen with Methane, Carbon Dioxide, and Hydrogen Sulfide	1977	GPA	0
317	RR-25	Vapor-Liquid Equilibrium of the CH <sub>4</sub> -CO <sub>2</sub> System at Low Temperatures	1977	GPA	0
318	RR-26	Statistical Thermodynamics of Solutions in Natural Gas and Petroleum Refining	1977	GPA	0
319	RR-27	Solubility of Hydrocarbons in Cryogenic LNG and NGL Mixtures	1977	GPA	0
320	RR-13	Prediction of Absorber Oil K-Values and Enthalpies	1977	GPA	0
321	RR-17	Smoothed Experimental Enthalpy Data for Three Methane-Ethane Binaries and a Methane-Ethane Propane Ternary	1976	GPA	0
322	RR-18	Equilibrium Phase Properties of Selected Binary Systems: n-Heptane - Hydrogen Sulfide, n-Heptane-Carbon Dioxide, i-Butane-Nitrogen	1976	GPA	0
323	RR-19	Vapor Phase Data for the Binary Systems of Methane with n-Butane, n-Pentane, n-Hexane, and n-Heptane	1976	GPA	0
324	RR-20	K-Values for the Methane-n-Butane, Methane-n-Pentane, and Methane -n-Hexane Systems	1976	GPA	0
325	RR-21	Dew-Point Values for the Methane-Carbon System	1976	GPA	0
326	RR-22	Solubility of Hydrocarbons in Cryogenic LNG and NGL Mixtures	1976	GPA	0
327	RR-12	Enthalpy and Phase Boundary Measurements on Carbon Dioxide and Mixtures of Carbon Dioxide with Methane, Ethane, and Hydrogen Sulfide	1975	GPA	0
328	RR-9	Enthalpies of Hydrogen Sulfide-Methane-Ethane Systems.	1975	GPA	0
329	RR-14	Solubility of Heavier Hydrocarbons in Liquid Methane	1975	GPA	0
330	RR-15	Equilibrium Phase Properties of Selected Binary Systems at Low Temp.: Nitrogen - Hydrogen Sulfide, Ethane - Hydrogen Sulfide, n-Butane - Carbon Dioxide	1975	GPA	0
331	RR-16	Solubility Limits of Heavy Hydrocarbons in NGL and LNG Mixtures	1975	GPA	0
332	CORROSION DETECTION	Corrosion Detection Report; 1975	1975	GPA	69
333	TP-4	Low Temperature Data from Rice University for Vapor-Liquid and P-V-T Behavior	1974	GPA	153
334	RR-10	Solubility of Solid Carbon Dioxide in Pure Light Hydrocarbons and Mixtures of Light Hydrocarbons	1974	GPA	0
335	RR-11	GPA Experimental Enthalpy Values Referred to Two Base Levels	1974	GPA	0
336	TP-3	Model for the Precise Calculation of Liquefied Natural Gas Densities	1973	GPA	51
337	TP-2	Liquid Densities of High-Ethane Raw Make Streams	1972	GPA	131
338	RR-7	Equilibrium Phase Properties of the Binary Systems:Nitrogen-Hydrogen Sulfide, Isobutane-Hydrogen Sulfide , Isobutane-Carbon Dioxide, Isobutane-Ethane	1972	GPA	0
339	RR-8	1971-1972 Enthalpy Correlation Evaluation Study	1972	GPA	0
340	RR-1	Bibliography of Data Sources for Low-Temperature Vapor-Liquid Equilibria in Non-Absorber Oil Systems	1971	GPA	0
341	RR-2	K-Values in Highly Aromatic and Highly Naphthenic Real Oil Absorber Systems	1971	GPA	0
342	RR-3	Enthalpy and Entropy of Non-Polar Liquids at Low Temperatures	1971	GPA	0
343	RR-4	Evaluation of Eight Enthalpy Correlations	1971	GPA	0
344	RR-5	Experimental Measurements of Vapor-Liquid Equilibrium Data for the Ethane-Carbon Dioxide and Nitrogen-n-Pentane Binary Systems	1971	GPA	0
345	RR-6	Enthalpies of Methane-C <sub>7</sub> Systems	1971	GPA	0
346	TP-1	Liquid Densities of Ethane, Propane, and Ethane-Propane Mixtures	1971	GPA	21
347	STD 2265	Determination of Hydrogen Sulfide and Mercaptan Sulfur in Natural Gas (Cadmium Sulfate-Iodometric Titration Method) - Reprinted 1974-1980	1968	GPA	6
348	RB-101	Compression and Charcoal Tests for Determining the Natural Gasoline Content of Natural Gas	1943	GPA	11
349	RR-59	Vapor-Liquid Equilibrium Measurements on the Systems: N <sub>2</sub> -Toluene, N <sub>2</sub> -m-Xylene, and N <sub>2</sub> -Mesitylene	0	GPA	0
350	RR-64A	GPA Data Bank of Selected Enthalpy and Equilibria Values	0	GPA	0
351	RR-64B	GPA Data Bank of Selected Enthalpy and Equilibria Values	0	GPA	0

352	RR-69	Evaluate GPA*SIM Computer Program with GPA Data Bank of Selected Enthalpy Values	0	GPA	0
353	RR-79	Liquid-Liquid-Vapor Equilibria in Cryogenic LNG Mixtures - Phase IV Nitrogen Rich Systems	0	GPA	0
354	RR-86	Properties of CO2-Rich Mixtures Literature Search and Pure CO2 Data Phase I	0	GPA	0

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