

Transmission Corp., CNG Producing Co.,
The East Ohio Gas Co., CNG Energy
Services Corp., Main Pass Gas Gathering
Co., ANR Pipeline Co., ANR Production
Co., ANR Storage Co., Great Lakes
Transmission Co., High Island Offshore
System, U-T Offshore System, Blue Lake
Gas Storage Co., Michigan Consolidated
Gas Co., Michcon Pipeline Co.,
Consumers Energy, Consumers Power,
Michigan Gas Storage Co., CMS Enterprises
Co., CMS Gas Transmission & Storage
Co., CMS Gas Co., CMS Gas Marketing,
CMS NOMEKO Oil & Gas Co.,
Public Service Co. of New

4. Defendants Sample Gas at Lower than Wellhead Pressure or Flow Line Pressure. Which Lowers the BTU Content of the Sample
 5. Defendants Improperly Use Inaccurate "Portable" Chromatographs
 6. The Joule-Thomson Effect Again Lowers BTU Content When the Gas Sample Is Transferred to the Chromatograph for Analysis
 7. Defendants Filter Out Heavier Hydrocarbon Molecules with Highest BTU Content
 8. Defendants Measure the Natural Gas at Room Temperature as Opposed to Higher Wellhead Temperature to Lower BTU Content
 9. Defendants Use False Assumptions Regarding the Percentage Composition of Heavier Hydrocarbons in Performing BTU Content Analysis
 10. Defendants Arbitrarily Impose BTU Content Limits
 11. Defendants Misuse of "Wet Gas" Analysis
 12. Defendants Not Only Cause or Permit Gas To Separate into Two Phases (Gaseous and Liquid and Under-measure the BTU in the Gaseous Phase. But Completely Ignore Measuring the Liquid Phase
- D. Measurement Techniques Distorting Volume, Heating Content or Both
1. Defendants Use Inferior Mechanical Gas Meters, Rather Than More Accurate Digital Gas Meters
 2. Defendants Fail To Calibrate Mechanical Gas Meters and Chromatographs
 3. Defendants Fail To Account for Super-Compressibility of Inert Gas
 4. Defendants Use Improper Gas Meter Orifice Diameter
 5. Defendants Improperly Use Volumetric Formulas
 6. Defendants Permit the Obstruction of Gas Flow
 7. Defendants Use Bypass Lines Around the Gas Meter
 8. Defendants Use Oversize or Defective Orifice
 9. Defendants Even Subtract 2% From The Volume They Measure
 10. Defendants Manipulate Gas Pressure To Reduce Heating Content and Volume

V. FRAUDULENT CONCEALMENT

VI. CLASS ACTION ALLEGATIONS

- A. Class Definition
- B. Class Certification Standards

VII. LEGAL THEORIES/CAUSES OF ACTION

VIII. PRAYER FOR RELIEF

X. DEMAND FOR JURY TRIAL

XI. ATTORNEY'S LIEN CLAIMED

Plaintiffs, Quinque Operating Company, on behalf of itself and all similarly situated Gas Producers who have been underpaid by Gas Pipelines due to the mismeasurement of gas volume and/or heating content on non-federal and non-Indian lands; Tom Boles, on behalf of himself and all other similarly situated royalty owners to whom Gas Producers owe statutory and/or contractual duties; Robert Ditto, on behalf of himself and all other similarly situated overriding royalty owners to whom Gas Producers owe statutory and/or contractual duties; working interest owners to whom Gas Producers owe statutory and/or contractual duties, represented by Quinque Operating Company and Robert Ditto; and severance production/conservation and other state taxing authorities to whom Gas Producers owe statutory duties, individually and on behalf of the class of persons defined below (hereinafter individually and collectively referred to as "Plaintiffs"), sue Defendants (individually and collectively, "Defendants", "Gas Pipelines", or "Gas Measurers") for the undermeasurement of gas volume and BTU, and would show the Court as follows:

I. NATURE OF THE GAS MISMEASUREMENT CASE

1. This case concerns the systematic, purposeful, and unlawful undervaluation by Defendants of natural gas they obtain from Plaintiffs. Defendants, natural gas pipeline owners and operators, are in the business of purchasing and transporting natural gas Plaintiffs are entities that produce gas from wells ("Gas Producers") and royalty owners, overriding royalty owners, working interest owners, and state taxing authorities to whom Gas Producers owe statutory or contractual duties. Defendants extract natural gas from wells owned or operated by Gas Producers, then transport the gas along pipelines for delivery to end users such as industries, power plants and local distribution companies ("LDCs")

2. Under standard industry contracts between Defendants and Gas Producers, Defendants are obligated to measure accurately the heating content and the volume of gas they extract from wells operated by Gas Producers. Because the value of natural gas is calculated by multiplying heating content by volume, these measurements determine the payments Defendants owe Gas Producers. Any undermeasurement in these variables will result in an undervaluation of the gas extracted and, accordingly, underpayment to Gas Producers. In recognition of the importance of accurate measurements, the natural gas industry has developed standards for measuring the value of natural gas. Indeed, Defendants themselves helped develop these industry standards.

3. For over twenty-five years, Defendants have affirmed that their measurements of the value of gas extracted from Gas Producers' wells were accurate and in compliance with state industry and international standards. As Defendants intended, Plaintiffs reasonably relied on these express and implied representations. Accordingly, Defendants' royalty payments to Gas Producers have been based for decades on Defendants' measurements.

4. In concerted breach of their contractual, statutory, and common law obligations and contrary to industry standards, however, Defendants have systematically deployed a variety of inaccurate techniques to undermeasure the value of gas extracted from Plaintiffs' wells, with the purpose and effect of understating the royalties due Plaintiffs. Specifically, Defendants (1) used inaccurate instruments to measure the volume and heating content of extracted gas; (2) excluded from the measurements heavier gas molecules that increase heating content; (3) measured volume and heating content at improper temperatures and pressures, thereby reducing the measurements; and (4) placed measurement probes in positions designed to undercount the value of natural gas. At least some of the Defendants, moreover, placed bypasses around their gas meters, reducing the reported volume of extracted gas.

5. Defendants resort to these unreliable measurement techniques only when extracting gas from Plaintiffs' wells -- only, that is, when they are buying gas and stand to benefit from undermeasurement. When they are selling gas to end users, Defendants employ the accurate measurement techniques demanded by law and industry standards. Remarkably, some Defendants acknowledge, in reports filed with federal and state agencies, that they sell more gas than they buy a physical impossibility. This unjustified and unjustifiable double measuring practice has been in place for decades, unjustly enriching Defendants at Plaintiffs' expense. By this lawsuit, Plaintiffs seek to end this practice and to recover the billions of dollars in revenues that Defendants have unlawfully diverted from Plaintiffs to themselves.

II. JURISDICTION AND VENUE

6. This is a class action brought by plaintiffs Quinque Operating Company, Tom Boles, and Robert Ditto, individually and as a class action pursuant to K.S.A. 60-223, on behalf of all Gas Producers and all persons and entities who owed statutory and contractual duties to royalty owners, overriding royalty owners, working interest owners, and state taxing authorities including subclasses of royalty and overriding royalty owners, working interest owners and state taxing bodies which are owed severance, production, conservation and other taxes.

7. This class action is brought pursuant to K.S.A. 60-223 on behalf of the nation's Gas Producers and those to whom Gas Producers owe financial obligations under statute or contract for natural gas produced based upon mineral interests in lands (other than federal and Native American lands) located throughout the United States, from and after January 1, 1974, to the present (the "Class Period") with respect to the production of natural gas for underpaid contract payments, i.e., the working interest owners for underpaid working interest payments, the royalty owners and overriding royalty owners for underpaid royalties. This Court has jurisdiction over such claims pursuant to K.S.A. 60-266 and/or 308.

8. Venue is proper in this Court under K.S.A. 60-603, 604, 605, 606, and/or 608.

9. Proper jurisdiction and venue as to one civil coconspirator is proper jurisdiction and venue as to all civil conspirators.

10. Before bringing this suit, Plaintiffs spent substantial time and resources investigating the wrongful gas volume measurement and gas heating content analysis practices particularized below, which have caused extensive underreporting of the volume and heating content of natural gas produced by the Gas Pipelines.

11. The class of gas producers shall be represented by Quinque Operating Company, a gas producer which has produced gas from numerous wells, including from Stevens County, Kansas, during the Class Period, Mike Moore is the President of Quinque Operating Company and has substantial and longstanding experience in the gas field. The gas royalty interests shall be represented by Tom Boles, an owner of gas royalty interests for decades, including royalty interests produced from gas wells in Stevens County, Kansas. The over-riding royalty owners shall be represented by Robert Ditto, who has held royalty interests and over-riding royalty interests for years in gas wells. Gas producer/working interest owners shall be represented by Quinque Operating Company, Mike Moore, President, and by Robert Ditto.

III. THE PARTIES

A. Plaintiffs

12. Quinque Operating Company, on behalf of itself, and all similarly situated Gas Producers who have been underpaid by Gas Pipelines due to the mismeasurement of gas volume and/or heating content on non-federal and non-Indian lands, including royalty owners, represented by Tom Boles, overriding royalty owners, represented by Robert Dino, working interest owners,

represented by Quinque Operating Company and Robert Ditto, and state severance, production, conservation, and other taxing authorities.

B. Defendants

13. Defendants are each natural gas pipelines, gas pipeline gatherers, gas marketers and/or gas processors and include the following entities, their predecessors in interest, subsidiaries, affiliates, divisions, and parent companies:

(a) Pacific Gas & Electric Co., a California corporation, 77 Beale Street, San Francisco CA 94177

(b) Pacific Gas Transmission Co., a California corporation, through its successor, PG&E Gas Transmission Northwest Corporation, 2100 SW River Parkway, Portland, Oregon 97201

(c) Pacific Interstate Offshore Company, a California corporation, 633 West Fifth Street, Box 30900, Los Angeles, CA 90071-2006

(d) Pacific Offshore Pipeline Company, a California Corporation, 633 West Fifth Street, Box 30900, Los Angeles, CA 90071-2006

(e) Southern California Gas Co., a California corporation, 555 West Fifth Street, Box 30900, Los Angeles, CA 90051-1249

(f) Aquila Energy Corporation, 2533 North 117th Avenue, Suite 200, Omaha, NE 68152

(g) Aquila Gas Pipeline Corporation, 100 N.E. Loop 410, Suite 1000, San Antonio, TX 78216

(h) Black Marlin Pipeline Co., 1400 Smith Street, Houston, TX 77002

(i) Coastal Chem, The.7 8305 Otto Road, Cheyenne, WY 82003

(j) Coastal Field Services Company, Nine Greenway Plaza, Houston, TX 77046

(k) Coastal Gas Marketing Company, Nine Greenway Plaza, Houston, TX 77046

(l) Coastal Gas Services Company, Nine Greenway Plaza, Houston, TX 77046

(m) Coastal Oil & Gas Corporation, Nine Greenway Plaza, Houston, TX 77046

(q) East Tennessee Natural Gas Company, 1010 Milam, Houston, TX 77002

(r) El Paso Energy Marketing Company, 1000 Louisiana, Houston, TX 77002

(s) El Paso Field Services Company, 614 Reilly Avenue, Farmington, NM 87401

(t) El Paso Gas Marketing Company, 1000 Louisiana, Houston, TX 77002

(u) El Paso Natural Gas Company d/b/a El Paso Energy Corporation, 1000 Louisiana, Houston, TX 77002

(v) El Paso Tennessee Pipeline Co., 1010 Milam, Houston, TX 77002

(w) Enron Corp. 7 1400 Smith Street, Houston, TX 77002

(x) Enron Gas Marketing, Inc., 1400 Smith Street, Houston, TX 77002

(y) Enron Oil & Gas Marketing, Inc., 1400 Smith Street, Houston, TX 77002

(z) Florida Gas Transmission Company, 1400 Smith Street, Houston, TX 77002

(aa) Great Divide Gas Services, L+L.C., 600-17th Street, Suite 800-S, Denver, CO 80202

(ab) Greeley Gas Company, a division of Atmos Energy Corporation, 1301 Pennsylvania, Denver, CO 80203

(ac) Houston Pipe Line Company, 1400 Smith Street, Houston, TX 77002

(ad) KN Energy, Inc., 370 Van Gordon Street, Lakewood7 CO 80228

(ac) KN Interstate Gas Transmission Co., 370 Van Gordon Street, Lakewood, CO 80228

(af) KN Natural Gas, Inc., 370 Van Gordon Street, Lakewood, CO 80228

(ag) Koch Exploration Company, 4111 East 37th Street Noah, Wichita, KS 67220

(ah) Koch Gateway Pipeline Company, 600 Travis Street, Houston, TX 77251

(ai) Koch Hydrocarbon Company, 4111 East 37th Street North, Wichita, KS 67220

(aj) Koch Industries, Inc., 4111 East 3701 Street North, Wichita, KS 67220

(ak) Koch Oil Co., 4111 East 37th Street North, Wichita, KS 67220

(al) Koch Pipeline Company, L.P., 4111 East 37th Street North, Wichita, KS 67220

(am) Louisiana Resources Company, 1400 Smith Street, Houston, TX 77002

(an) MGTC, Inc., 12200 Pecos Street, Denver, CO 80234

(ao) MIOC, Inc., 12200 Pecos Street, Denver, CO 80234

(ap) Mobile flay Pipeline Company, 4111 East 37th Street North, Wichita, KS 67220

(aq) Northern Border Pipeline Company, 1111 South 103rd Street, Omaha, NE 68124

(ar) Northern Gas Company, 370 Van Gordon Street, Lakewood, CO 80228

(as) Northern Natural Gas Company, 1111 South 103rd Street, Omaha, NE 68124

(at) Northern Natural Gas Production Company, 1111 South 103rd Street, Omaha, NE 68124

(au) Peoples Natural Gas Company, 1315 Capitol Avenue, Omaha, NE 68102

(av) Premier Gas Company, Samson Place, 2 West Second Street, Tulsa, OK 74103

(aw) Public Service Company of Colorado, 1225 Seventeenth Street, Denver, CO 80202

(ax) Questar Gas Company, 180 East 100 South, Salt Lake City, UT 84145

(ay) Questar Corporation, 180 East 100 South, Salt Lake City, UT 84145

(az) Questar Gas Management Company, 180 East 100 South, Salt Lake City, UT 84145

(ba) Questar Pipeline Company, 180 East 100 South, Salt Lake City, UT 84139

(bb) Rocky Mountain Natural Gas Company, through its successor, KN Energy, Inc., 370 Van Gordon Street, Lakewood, CO 80228

(bc) TCP Gathering Co., 370 Van Gordon Street, Lakewood, CO 80228

(bd) Tennessee Gas Pipeline Company, 1010 Milam, Houston, TX 77002

(be) Beaver Paw Energy, Inc., 370 17th Street, Suite 2750, Denver, CO 80202

(bf) The Coastal Corporation, Nine Greenway Plaza, Houston, TX 77046

(bf) TransColorado Gas Transmission Company d/b/a TransColorado Pipeline Company, 370 Van Gordon, Lakewood, CO 80228

(bh) Transcontinental Gas Pipeline Corporation, 2800 Post Oak Boulevard, Houston, TX 77056

(bi) Transwestern Pipeline Company, 1400 Smith Street, Houston, TX 77002

(bj) Tristar Gas Investments Corp., 8150 North Central Expressway, 15th Floor, Dallas, TX 75206

(bk) United Gas Pipeline Company, 600 Travis Street, Houston, TX 77251

(bl) Universal Resources Corporation d/b/a Questar Energy Trading Company, 180 East 100 South, Salt Lake City, UT 84145

(bm) Utah Gas Service Company, 5000 South Quebec Street, Suite 650, Denver, CO 80237

(bn) Utilicorp Energy Solutions, Inc., 7505 NW Tiffany Springs Parkway, Suite 400, Kansas City, MO 64153

(bo) Utilicorp Pipeline Systems, Inc., 10700 East State Route 350, Raytown, MO 64138

(bp) Valero Energy Corporation, 530 McCullough Avenue, San Antonio, TX 78215

(bq) Valero Field Services Company, 530 McCullough Avenue, San Antonio, TX 78215

(br) Valero Hydrocarbons Company, 530 McCullough Avenue, San Antonio, TX 78215

(bs) Valero Natural Gas Company, 530 McCullough Avenue, San Antonio, TX 78215

(bt) Valero Natural Gas Partners, E.P., 530 McCullough Avenue, San Antonio, TX 78215

(bu) Columbia Gas Transmission Company, 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(bv) Westar Transmission Company, 370 Van Gordon Street, Lakewood, CO 80228

(bw) Western Gas Resources, Inc., 12200 Pecos Street, Denver, CO 80234

(bx) Western Slope Refining Company, 370 17th Street, No.5300, Denver, CO 80202

(by) Wexpro Company, 180 East 100 South, Salt Lake City, UT 84145

(bz) Wildhorse Energy Partners, L.L.C., 370 Van Gordon Street, Lakewood, CO 80228

(ca) Wyoming Industrial Gas Co., 5000 South Quebec Street, Suite 6507 Denver, CO 80237

(cb) Wyoming Interstate Company, Ltd., 2 North Nevada Avenue, Colorado Springs, CO 80903

(cc) Acadian Gas Corporation, through its successor, Acadian Gas, LLC, 1301 McKinney Street, Suite 700, Houston, TX 77010

(cd) Bear Creek Storage Company, 1900 Fifth Avenue, North, Birmingham, AL 35202

(ce) Cirrus Corp., 1400 Smith Street, Houston, TX 77002

(cf) Citrus Interstate Pipeline Company, 1400 Smith Street, Houston, TX 77002

(cg) CNG Energy Services Corporation, One Park Ridge Center, 5th Floor, Pittsburgh, PA 15244

(ch) CNG Producing Company, CNG Tower, 625 Liberty Avenue, Pittsburgh, PA 15222

(ci) CNG Transmission Corporation, 445 West Main Street, Clarksburg, WV 26301

(cj) Columbia Energy Services Corporation, 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(ck) Columbia Gas Development Corporation, through its successor, Aviara Energy Corporation, 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cl) Columbia Gas of Kentucky, Inc., 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cm) Columbia Gas of Maryland, Inc., 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cn) Columbia Gas of Ohio, Inc., 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(co) Columbia Gas of Pennsylvania, Inc., 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cp) Columbia Gas System Service Corporation, 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cq) Columbia Gas Transmission Corporation, 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cr) Columbia Gulf Transmission Company, 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cs) Columbia LNG Corporation, 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(ct) Columbia Natural Resources, Inc., 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cu) Commonwealth Gas Services, Inc., 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(cv) Consolidated Natural Gas Company, CNG Tower, 625 Liberty Avenue, Pittsburgh, PA 15222

(cw) Coral Energy, L.P., 2 Houston Center, 909 Fannin, Seventh Floor, Houston, TX 77010

(cx) Cove Point LNG Limited Partnership, 12355 Sunrise Valley Drive, Suite

300, Reston, VA 20191

(cy) Dynegey, Inc., 1000 Louisiana, Suite 5800, Houston, TX 77002

(cz) Equitable Resources, Inc., 420 Boulevard of the Allies, Pittsburgh, PA 15219

(da) Equitable Storage Company, 11408 Louisiana Highway 89, Erath, LA 70533

(db) Equitrans, L.P., 3500 Park Lane, Pittsburgh, PA 15275

(dc) Evangeline Gas Corp., 5581 Vidrine Road, Villplatte, LA 70586

(dd) Evangeline Gas Pipeline Company, L.P.E, 601 Poydras Street, New Orleans, LA 70130

(de) Southwestern Energy Company, 2200 Mid-Continent Tower, 401 South Boston, Tulsa, OK. 74103

(df) Gulf Coast Natural Gas, Inc., through its successor, Gulf Coast Natural Gas Company, 1301 McKinney Street, Suite 700, Houston, TX 77010

(dg) Gulf Energy Pipeline Company, through its successor, Gulf Energy Pipeline, LLC, 1301 McKinney Street, Suite 700, Houston, TX 77010

(dh) Louisiana Industrial Gas Supply Systems, now known as Ponchartrain Natural Gas Systems, 1600 Smith Street, Houston, TX 77002

(di) Louisiana Intrastate Gas Company L.L.C., 8090 Highway 3128, Pineville, LA 70501

(dj) Main Pass Gas Gathering Company, 1400 Woodloch Forest Drive, Suite 520, The Woodlands, TX 77380

(dk) Sea Robin Pipeline Company, 1900 Fifth Avenue, North, Birmingham, AL 35202

(dl) Sonat Energy Services (Company, 1900 Fifth Avenue, North, Birmingham, AL 35202

(dm) Sonat Exploration Company, Four Greenway Plaza, Houston, TX 77251

(dn) Sonar Inc., 1900 Fifth Avenue, Noah, Birmingham, AL 35202

(do) Sonat Marketing Company, L.P., 1900 Fifth Avenue, North, Birmingham, At 35202

(dp) Southern Natural Gas Company, 1900 Fifth Avenue, North, Birmingham, AL 35202

(dq) Tejas Gas Corporation, through its successor, Tejas Gas, LLC, 1301 McKinney Street, Suite 700, Houston, TX 77010-1301

(dr) Tejas Gas Corp., through its successor, Tejas Gas Operating, LLC, 1301 McKinney Street, Suite 700, Houston, TX 77010

(ds) Tejas-Magnolia Energy, L.L.C., 1301 McKinney Street, Suite 700, Houston, TX 77010

(dt) Tejas Natural Gas Company, through its successor, Tejas Natural Gas, LLC, 1301 McKinney Street, Suite 700, Houston, TX 77010

(du) The Columbia Gas System, Inc., 12355 Sunrise Valley Drive, Suite 300, Reston, VA 20191

(dv) The East Ohio Gas Company, 1717 East Ninth Street, Cleveland, OH 44114

(dw) Transok, Inc., through its successor, Transok, LLC, 110 West Seventh Street, Tulsa, OK 74101

(dx) Venice Energy Services Company, LLC, 1000 Louisiana, Suite 5800, Houston, TX 77002

(dy) ANR Pipeline Company, 500 Renaissance Circle, Detroit, MI 48083

(dz) ANR Production Company, 500 Renaissance Circle, Detroit, MI 48083

(ea) ANR Storage Company, 1 Woodward Avenue, Suite 1600, Detroit, MI 48226

(eb) Blue Lake Gas Storage Company, 500 Griswold Street, Detroit, MI 48226

(ec) CMS Enterprises Company, Fairlane Plaza South, 330 Town Center Drive, Suite 1100, Dearborn, MI 48126

(ed) CMS Gas Co., Fairlane Plaza South, 330 Town Center Drive, Suite 1100, Dearborn, MI 48126

(ee) CMS Gas Marketing, Fairlane Plaza South, 330 Town Center Drive, Suite 1100, Dearborn, MI 48126

(ef) CMS Gas Transmission and Storage Company, Fairlane Plaza South, 330 Town Center Drive, Suite 1100, Dearborn, MI 48126

(eg) CMS NOMEKO Oil & Gas Co., One Jackson Square, Jackson, MI 49204

(eh) Consumers Energy, Fairlane Plaza South, 330 Town Center Drive, Suite 1100, Dearborn, MI 48126

(ei) Consumers Power, Fairlane Plaza South, 330 Town Center Drive, Suite 1100, Dearborn, MI 48126

(ej) Great Lakes Transmission Co., 1 Woodward Avenue, Suite 1600, Detroit, MI 48226

(ek) High Island Offshore System, 500 Renaissance Circle, Detroit, MI 48083

(el) Michcon Pipeline: Company, 500 Griswold Street, Detroit, MI 48226

(em) Michigan Consolidated Gas Co., 500 Griswold Street, Detroit, MI 48226

(en) Michigan Gas Storage Co., Fairlane Plaza South, 330 Town Center Drive, Suite 1100, Dearborn, MI 48126

(eo) Terra Energy Ltd., 212 West Michigan Avenue, Jackson, MI 49204

(ep) U-T Offshore System, 500 Renaissance Circle, Detroit, MI 48083

(eq) Gas Company of New Mexico, a division of Public Service Co, of New Mexico, Alvarado Square, Albuquerque, NM 87158

(er) PNM Gas Services of New Mexico, a division of Public Service Co. of New Mexico Alvarado Square, Albuquerque, NM 87158

(es) Public Service Co. of New Mexico, Alvarado Square, Albuquerque, NM 87158

(et) Sunterra Gas Gathering Company, Alvarado Square, Albuquerque, NM 87158

(eu) Sunterra Gas Processing Company, Alvarado Square, Albuquerque, NM 87158

(ev) Southwestern Energy Pipeline Company, 2200 Mid-Continent Tower, 401 South Boston, Tulsa, OK 74103

(ew) Anson Gas Corporation, 4005 Northwest Expressway, Oklahoma City, OK 73116

(ex) Arkansas Louisiana Gas Company, 525 Milam Street, Shreveport, LA 71101

(ey) Arkla Energy Resources Company through its successor, Reliant Energy Gas Transmission Company, 525 Milam Street, Shreveport, LA 71101

(ez) Caddo Gas Gathering Company, 12721 Oakdale View Drive, Edmund, OK 73013

(fa) Continental Gas Processing, L.L.C., 1412 5 Boston, Suite 500, Oklahoma City, OK 74119-3628

(fb) Continental Natural Gas Gathering, LLC, 1412 S, Boston, Suite 500, Oklahoma City, OK 741 19E3628

(fc) Continental Natural Gas Inc., 1412 S. Boston, Suite 500, Oklahoma City, OK 74119-3628

(fd) Delhi Gas Pipeline Corporation, 1700 Pacific Avenue, Dallas, TX 75201

(fe) Enogex Inc., 515 Central Park Drive #600, Central Park Two, Oklahoma City, OK 73105

(ff) Enogex Services Corporation, 600 Central Park 2, Central Park Drive, Oklahoma City, OK 73105

(fg) Entex, Inc., 1600 Smith Street, Houston, TX 77002

(fh) LG&E Natural Gathering and Processing Co., 921 W, Sanger, Hobbs, NM 88240

(fi) LG&E Natural Marketing Inc., 735 First National Building, Oklahoma City, OK 73102

(fj) LG&E Natural Pipeline Co., 2777 Stemmons Freeway, Suite 700, Dallas, TX 75207

(fk) Louisiana Intrastate Gas Corporation, 1600 Smith Street, Houston, TX 77002

(fl) Minnegasco, 801 LaSalle Avenue, Floor 11, Minneapolis, Minnesota 55459

(fm) Mississippi River Transmission Corporation, 9900 Clayton Road, St. Louis, MO 63178

(fn) NorAm (USA) Inc., 525 Milam Street, Shreveport, LA 71101

(fo) NorAm Energy Corp., 1600 Smith Street, Houston, TX 77002

(fp) NorAm Energy Services Inc., 1600 Smith Street, Houston, TX 77002

(fq) NorAm Field Services Corp., 525 Milam Street, Shreveport, LA 71101

(fr) NorAm Gas Transmission Company, 1600 Smith Street, Houston, TX 77002

(fs) Oklahoma Gas & Electric Co., 321 North Harvey, Oklahoma City, OK 73102

(ft) Public Service Co. of Oklahoma, 212 E. 6th Street, Tulsa, OK 74119

(fu) Southwestern Energy Production Company, 2200 Mid-Continent Tower, 401 South Boston, Tulsa, OK 74103

(fv) Woodward Pipeline, Inc., 11251 Northwest Freeway, Suite 400, Houston, TX 770924513

(lw) Alaska Pipeline Company, 3000 Spenard Road, Anchorage, AK 99503

(fx) Blue Dolphin Pipeline Company, 11 Greenway Plaza, Suite 1606, Houston, TX 77046

(fy) Enstar Natural Gas Company, 3000 Spenard Road, Anchorage, AK 99503

(fz) GPM Gas Corporation, 1300 Post Oak Boulevard, Houston, TX 77056

(ga) Leviathan Gas Pipeline Partners, L.P., 7200 Texas Commerce Tower,

600 Travis, Houston, TX 77040

(gb) Manta Ray Gathering Company, L.L.C., 7200 Texas Commerce Tower, 600 Travis, Houston, TX 77040

(gc) Phillips Pipeline Company, 370 Adams Building, Bartlesville, OK 74004

(gd) Viosca Knoll Gathering Company, 7200 Texas Commerce Tower, 600 Travis, Houston, TX 77040

(ge) Burlington Resources Oil & Gas Company, 5051 Westheimer, Suite 1400, Houston, TX 77056

(gf) Burlington Resources Trading Inc., 5051 Westheimer, Suite 1400, Houston, TX 77056

(gg) Burlington Resources, Inc., 5051 Westheimer, Suite 1400, Houston, TX 77056

(gh) Cascade Gas Company, 1 First Avenue South, Great Falls, MT 59403

(gi) Cody Gas Company, 2320 Mountain View Drive, Cody, WY 82414

(gj) Diamond Shamrock Offshore Partners United Partnership, 717 North Harwood Street, Dallas, TX 75201

(gk) Energy West Resources, Inc., 1 First Avenue South, Great Falls, MT 59403

(gl) Energy West, Incorporated, 1 First Avenue South, Great Falls, MT 59403

(gm) FMC Corporation, 200 B. Randolph Drive, Chicago, IL 60601

(gn) FMC Wyoming Corp., P.O. Box 872, Green River, WY 82935

(go) GED Energy Services, Inc., through its successor, Howard Energy Marketing, Inc., 13561 West Bay Shore Dr., Suite 2100, Traverse City, MI 49684

(gp) Gerrity Oil & Gas Corporation, through its successor, Patina Oil and Gas Corporation, 1625 Broadway, Suite 2000, Denver, CO 80202

(gq) Inexco Gas Transmission Company, 909 Poydras Street, Suite 3600, New Orleans, LA 70160

(gr) KCS Energy Marketmg, Inc., 379 ThornalE Street, Edison, NJ 08837

(gs) KCS Energy, Inc., 379 Thornall Street, Edison, NJ 08837

(gt) KCS Mountain Resources, Inc., 500 Fifteen Mile Road, Worland, TX 82401

(gu) KCS Pipeline Systems, Inc., 5555 San Felipe, Suite 1200, Houston, TX 77056

(gv) Louisiana Gas Systems, Inc., Route 1, Lake Charles, LA 70601

(gw) Medallion Gas Services, Inc., 7130 South Lewis Avenue, Suite 700, Tulsa, OK 74136

(gx) Montana-Dakota Utilities Co., 400 North Fourth Street, Bismarck, ND 58501A092

(gy) Montana Power Company, 40 East Broadway, Butte, MT 59701

(gz) Natural Gas Processing Co., 101 Division, Worland, WY 82401

(ha) North American Resources Company, Inc. (NARCO), 16 E. Granite, Butte, MT 59701

(hb) Overland Trail Transmission Company, 2515 Foothill Boulevard, Rock Springs, WY 82901

(hc) Patina Oil & Gas Corporation, 1625 Broadway, Suite 2000, Denver, CO 80202

(hd) The Louisiana Land and Exploration Company, 909 Poydras Street, Suite 3600, New Orleans, LA 70160

(he) Williston Basin Interstate Pipeline Company, 200 North Third Street, Bismarck, ND 58501-3831

(hf) Wyoming Gas Company, 101 Division, Worland, WY 82401

(hg) Dow Chemical Company, 2030 Dow Center, Midland, Michigan 48674

(hh) Dow Chemical USA, 3595 Moline, Aurora, Colorado 80010

(hi) Natural Gas Pipeline Co. of America and Stingray Pipeline Company, 701 East 22nd Street, Lombard, Illinois 60148

(hj) Midcon Corp., 370 Van Gordon Street, Lakewood, CO 80228

(hk) Midcon Gas Services Corp., 370 Van Gordon Street, Lakewood, CO 80228

(hl) Midcon Texas Pipeline Operator, Inc., 3200 Southwest Freeway, Houston, Texas 77210

(hm) Midcon Marketing Corp, 701 East 22nd Street, Lombard, Illinois 60148

(hn) Transmontaigne Oil Company, and Bear Paw Energy, Inc., 370 17th Street, Suite 2750, Denver, Colorado 80202

(ho) Sempra Energy, 101 Ash Street, San Diego, California 92101

(hp) TXU, 1601 Bryan Street, Dallas, Texas 75201

(hq) Excel Resources, Inc., 1111 Bagby, Suite 2400, Houston, Texas 77002

(hr) Transok, L.L.C., 110W. 7th Street, P.O. Box 3008 (74101-3008) Tulsa, Oklahoma 74119-3008

(hs) Amarillo Natural Gas, Inc., 6601140 West, Bldg., 2, Amarillo, Texas
79106-2628

(ht) Kentucky West Virginia Gas Co., P.O. Box 431, Prestonberg,
Kentucky 41653

(hu) Mustang Fuel Corp., 2000 N. Classen Blvd., Suite SOOE, Oklahoma
City, Oklahoma 73106-6036

(hv) Atmos Energy Corporation, 1800 Three Lincoln Center, 5430 LBJ
Freeway, Dallas, Texas 75240

(hw) Southwestern Energy Services Company, 2200 Mid-Continent Tower,
401 South Boston, Tulsa, OK 74103

(hx) Ensearch Corp., 300 South St. Paul Street, Ensearch Center, Dallas, TX
75201

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IV. DEFENDANTS' GAS MISMEASUREMENT TECHNIQUES

A. Background and Natural Gas Measurement In General

14. Under contracts common in the natural gas industry, which are in all material respects alike, natural gas transmission companies and other purchasers, gatherers, transporters, processors, marketers and natural gas pipelines, including Defendants (collectively referred to as a "Gas Measurers"), measure the volume and heating content of the natural gas they gather, purchase, market, transport, and/or process. Under standard industry contracts, these measurements determine the payments Gas Measurers owe Gas Producers.

15. Employing some of the same or similar mismeasurement techniques, Defendants have manipulated and distorted their calculations of the volume and heating content of the natural gas they gather, purchase, market, transport, and/or process, with the purpose and effect of underreporting the value of the natural gas gathered, purchased, marketed, processed and transported. This practice has been ongoing since at least the beginning of the Class Period in 1974, and has been done knowingly, intentionally and in concert, and has injured Plaintiffs as described herein.

16. Defendants knowingly submitted or caused to be submitted inaccurately low and false volume and heating content measurements, thereby depriving Plaintiffs and other members of the Class of billions of dollars in revenues to which they are entitled.

17. The value of natural gas is measured on the basis of two factors: (1) heating content, and (2) volume. Heating content is analyzed and expressed in "British Thermal Units," or "BTUs," per cubic foot. 30 C.F.R. § 202.152(a)(1). A "British Thermal Unit" is the amount of heat required to raise the temperature of one pound of water one degree Fahrenheit. See H. Williams and C. Meyers, Manual of Oil and Gas Terms (7th ed. 1987). Volume is measured in units of one thousand cubic feet, or "MCFs", at standard conditions of 60°F and at atmospheric pressure of 14.7 p.s.i., which standard conditions apply to the BTU analysis as well. See 30 C.F.R. § 202.152(a)(1). The value of a given amount of natural gas is derived by multiplying the heating content in BTUs per cubic foot by the volume in cubic feet, creating a product measured in millions of BTUs or "MMBTUs." For decades, natural gas has been valued and sold throughout the natural gas industry on the basis of a price per MMBTU. Beginning as early as 1965, but more aggressively in 1974, the Federal Power Commission ((FPC) the predecessor of FERC),

which was charged with setting maximum lawful prices, set prices per MCF with an adjustment for BTU content. Throughout the industry, natural gas has been and is purchased, sold, marketed, processed and transported on a MMBTU basis.

18. Working, royalty, and overriding royalty interests are calculated based upon the value of the natural gas produced. Thus, accurate techniques for measuring the MMBTU of natural gas produced are, and have been, required by law and contract in order to calculate those payments correctly

19. Defendants purport to follow industry measurement standards formulated by organizations they control or influence, including the American Gas Association ("AGA"), the Gas Processors Association ("GPAE") and relevant subcommittees of the American Society of Testing Materials ("ASTM"). These industry standards, and others, are intended to ensure accurate volume measurement and heating content analysis of natural gas - See, AGA Report No.3 at 4.1 (the primary consideration in the design of a metering station is sustained accuracy). The Mismeasurement Techniques set forth below are all inconsistent with that intent and violate industry standards.

20 In the natural gas industry, unproduced and/or unaccounted for oil and gas is owned by the mineral owners - Such mineral owners often enter into leases with oil and gas mineral lessees who are willing to bear the risk and expense of exploring for, drilling for, developing, and producing natural gas. Where natural gas is found in commercially producible quantities, the lessees enter into contracts to transport or sell that natural gas to Gas Measurers who purchase, gather, market, process and/or transport the gas so produced. Such contracts ("Gas Purchase or Transportation Contracts") provide that Gas Measurers will periodically analyze the heating content and continuously measure the volume of the natural gas being purchased and/or transported. Such contracts provide that the meters used to measure volume "shall be installed and operated" by the Gas Measurers, and that the Gas Measurers shall also determine the "gross heating value" of the natural gas produced. As an express or implied condition of all Gas Purchase or Transportation Contracts, Gas Measurers must measure the value of natural gas produced accurately and in good faith.

21. Based upon such contractual provisions - which appear in contracts throughout the natural gas industry, including in those of Defendants - the MMBTU value of natural gas produced has been measured and determined by Gas Measurers such as Defendants. These MMBTU measurements have been used to determine the value of natural gas, and hence the amount of payment for natural gas produced. Since at least the beginning of the Class Period, Gas Measurers such as Defendants have been responsible for accurately determining the volume and heating content of natural gas produced. By undermeasuring the volume and misanalyzing the heating content of natural gas, as described below, Defendants have underpaid or caused underpayments to Plaintiffs.

22 Defendants or their agents have measured the volume and heating content of natural gas produced and delivered into their pipeline systems throughout the United States in which one or more members of the Plaintiffs' Class has an interest. With respect to gas wells from which Defendants purchase, gather, market, process and/or transport natural gas, Defendants have employed various volume mismeasurement and wrongful heating content analysis practices, such as those particularized below, from at least the beginning of the Class Period to the present.

23. The result has been a significant underreporting of the MMBTU value of natural gas produced in reports sent to Gas Producers, and a corresponding underpayment of working interest, royalties, and production taxes due Plaintiffs. Defendants have also mismeasured the MMBTU value of natural gas produced from all or a vast majority of the gas properties in the United States from which Defendants have purchased, gathered, processed, marketed and/or transported gas from at least the beginning of the Class Period to the present

24. Defendants know how much natural gas they buy, gather, market, process and/or transport on a daily, monthly or yearly basis. Likewise, Defendants know how much natural gas they burn in the course of gathering, processing and transporting such gas. And Defendants know how much gas they have sold or delivered downstream from where the volume and heating content of gas is initially measured for payment purposes. This data permits Defendants to compute accurately the value of gas throughout the pipeline, and, therefore, an accurate accounting of payments due Gas Producers. But Plaintiffs are not privy to such information, which is within Defendants' exclusive knowledge and control. Thus, while Plaintiffs have concluded that Defendants used the Mismeasurement Techniques described below to undermeasure, underreport, and underpay Plaintiffs for gas, the precise degree of mismeasurement caused by Defendants and the precise degree of resulting underpayments to Plaintiffs can only be determined in the course of examining Defendants' records. Estimated conservatively, however, the underpayments reach into the tens of billions of dollars.

25. Defendants routinely employ the same basic techniques for measuring gas volume and for analyzing heating content at every well from which they purchase, gather, market, process and/or transport natural gas. All of the Defendants engage in some or all of the same or similar Mismeasurement Techniques listed below, all of which have the purpose and effect of understating the MMBTU value of natural gas produced. Defendants undertake this mismeasurement knowingly and in concert, having discussed the improper techniques they use at industry-wide meetings, seminars, and conventions.

26. The effects of the volume mismeasurements and incorrect heating content analyses described below are complementary and cumulative in nature, *i.e.* one Mismeasurement Technique does not serve to counterbalance or offset another. Thus, the greater number of Mismeasurement Techniques used by Defendants, the greater the inaccuracy of Defendants' MMBTU valuation.

B. Defendants Intentionally Measure and Analyze Natural Gas Differently at the Point of Intake and at the Point of Later Delivery

27. The physical composition of natural gas does not ordinarily change from one point in a gas line to another; therefore, the heating content of a flow of natural gas should remain the same at any point along its path. However, by using different techniques, procedures and/or assumptions in the measurement and analysis processes, one can significantly distort the measured MMBTU value of a natural gas flow.

28. Not only do Defendants control the MMBTU volume measurement and heating content analysis process at the point of purchase or input into gas gathering lines and/or gas pipelines (where working interest and royalty measurements are taken), but Defendants (directly or through subsidiaries or affiliates) also control the procedures for analyzing the heating content and measuring the volume of natural gas at any later point - often at a distant location from the point of intake - where Defendants (or their affiliates) resell or otherwise convey that gas.

29. Defendants have wrongfully profited from understating the MMBTU value of natural gas at the point of purchase or input, where payment determinations to Plaintiffs are made. With respect to interstate pipelines regulated by the FERC, prior to the implementation date set forth in FERC Order No. 636, in FERC Stats. & Regs. Preambles 30,909 (April 8, 1992), Defendants and/or their affiliates could, and did, (a) purchase a given quantity of natural gas and assign it a certain MMBTU value at the point of purchase, (b) resell that same or equivalent quantity of gas at a higher-assigned MMBTU value at a point further down the gas line, and (c) thereby profit significantly from a purported increase in the MMBTU value of the gas even though the actual composition of the gas remained the same from the points of purchase through resale. Ever since the implementation date of Order 636, *i.e.* once Defendants became solely gatherers and/or carriers of gas with no direct proprietary or mercantile interest in its sales price, Defendants have

continued their mismeasurement practices to avoid the cost associated with proper measurement and to avoid the tacit admission of prior wrongdoing.

30. A spot check analysis of the filings with the FERC indicates that since 1989 the following Defendants have reported selling more gas than they purchased: ANR Pipeline, Arkla Energy Resources, Great Lakes Natural Gas Pipeline, Northern Natural Gas, Northwest Pipeline, Panhandle Eastern Pipeline, Questar Pipeline Co., Tennessee Gas Pipeline Co., Texas Eastern Transmission, Texas Gas Transmission, Transcontinental Gas Pipeline, Transwestern, Trunkline, United Gas Pipeline and Williams Natural Gas. These companies all reported that their pipelines actually gained gas on the way from the well to the final destination - a physical impossibility. Indeed, as a practical matter gas is inevitably lost between the well and the destination by leakage and incidental use. Upon information and belief, an examination of additional filings will show that other Defendants filed similar reports. Such reports are necessarily false, and illustrate that the volume of natural gas is undercounted at the wellhead.

31. The process of analyzing the heating content and measuring the volume of natural gas is highly technical. It requires special equipment, trained personnel, and proper laboratory conditions to obtain accurate results. Without knowledge, and in reasonable reliance on the Gas Measurers, Plaintiffs were defrauded by Gas Measurers, including Defendants, who unjustly enriched themselves or their affiliates by knowingly underreporting, at the point of purchase or input into a gathering line and/or pipeline, the heating content and/or the volume of natural gas produced.

C. Measurement Techniques Distorting BTU Heating Content

1. Defendants Strategically Placed Flow Disturbing Devices in the Gas Stream to Obtain Unrepresentatively Low BTU Gas Samples

32. The heating content of natural gas is determined from a sample, which, according to industry standards such as ASTM 5503-94 5, must be "representative" of the gas stream as a whole. Natural gas produced normally ranges from the lightest hydrocarbon such as methane (CH₄), to heavier weight hydrocarbons such as butane (C₄H₁₀), hexane (C₆H₁₄), octane (C₈H₁₈), decane (C₁₀H₂₂), and heavier hydrocarbons. The heavier the weight of the hydrocarbon, the greater its BTU value. For instance, a FERC table shows that an ideal cubic foot of methane (CH₄) would have a 1009.7 BTU value under standard temperature and pressure conditions of 60F and 14.73 p.s.i., whereas an ideal cubic foot of decane (C₁₀H₂₂) would have a 7742.1 BTU value under similar conditions.

33. Defendants knowingly understate the value of the natural gas they purchase by determining its BTU content on the basis of an unrepresentatively light (lower BTU content) sample. Defendants generally achieve this result by extracting gas for heating content analysis at a location (the "BTU Extraction Point") too close "downstream" from the orifice used to measure gas volume. Because this orifice always has a smaller diameter than the field-gathering line feeding to it, the orifice disturbs the normal flow of gas, resulting in a BTU sample that is not representative of the gas stream, to the detriment of Plaintiffs.

34. *Upstream" of flow disturbing elements such as the orifice, the gas is homogeneous: the heavier weight gas components - which always have a greater heating content - are representatively mixed with the lighter weight, lower heating content, gas components. Industry standards provide that appropriate gas samples for heating content analyses are obtained only under these conditions, where the mixture of hydrocarbons is representative of the mixture that is produced from the gas wells themselves. However, as the natural gas proceeds through the orifice, two physical effects occur. First, the gas experiences drops in pressure and temperature, which result in a separation of the heavier weight (higher BTU) gas components from the lighter weight (lower BTU) components. Second, when the gas exits the orifice, it experiences "flattering turbulence," which causes the heavier weight components to travel along the inside wall of the

pipe. Then, even if Defendants correctly insert a sample probe, used to extract a gas sample for heating content analysis, in the center 1/3 of the pipeline, the flow disturbing devices, such as the orifice, prevent a sample, which is representative of the natural gas stream as a whole from being taken. Instead, the probe extracts mostly lighter weight (lower BTU) hydrocarbons, because the higher BTU hydrocarbons flow near the inside wall of the pipe at the BTU Extraction Point. This procedure yields a "skinny" gas sample with an unrepresentatively low heating content.

35. In recognition of this distorting effect, industry associations have promulgated standards to govern the proper placement of BTU Extraction Points relative to flow disturbing devices. See, e.g., ASTM 5287-92 6; ASTM 5503-94 5. For example, AGA Report No. 3 at Figures 4-9 instructs that in order to yield an accurate measurement, a probe must be placed somewhere between 6 and 45 pipe diameters "downstream" of a flow-disturbing device, depending on the configuration of the gathering line and/or pipeline. The AGA Report sets forth factors to guide Defendants in the proper placement of each BTU Extraction Point. Under rare field conditions, industry standards might permit the BTU Extraction Point to be located a minimum of five pipe diameters downstream from any flow-disturbing elements. API Chapter 14.1.5.4.1. The API Standard, like the AGA Report, establishes required factors that govern the proper placement of the BTU Extraction Point beyond this minimum required distance.

36. Without considering any of these factors, however, Defendants routinely place the BTU Extraction Points about five pipe diameters or less downstream - a placement that under most, if not all, field conditions violates the industry standards. The purpose and effect of this practice is to reduce the measured heating content of the sample gas and thereby reduce the payments due Gas Producers.

37. This mismeasurement practice is unheard of elsewhere in the world. International standards require placement of the BTU Extraction Point at least twenty pipe diameters downstream from any flow-disturbing element. Indeed, in (at least) Canada, France and Great Britain the heating content of natural gas is analyzed from natural gas samples taken "upstream" of the orifice, or from a separate parallel "sampling run" carried in a length of straight pipe that eliminates the distorting effects of upstream flow disturbances.

38. Indeed, Defendants recognize the value of these more accurate measuring conventions when an accurate measure of the value of gas is in Defendants' economic interest. Defendants or their affiliates sell or convey natural gas at locations remote from where it is measured for purposes of paying working interest, royalties and production taxes. At those remote locations, when selling or conveying the natural gas, Defendants regularly analyze the heating content upstream of the gas volume meter. In other words, Defendants or their affiliates analyze the heating content of natural gas differently at the point of purchase or input into a gas gathering line and/or pipeline than at the point of sale or conveyance.

39. Some Defendants even installed additional flow disturbing devices after the orifice but before the BTU Extraction Point, such as rectangularly shaped "plug" valves that create more flow disturbance than a functionally equivalent, spherically shaped "ball" valve. Industry standards permit the use of plug valves in appropriate circumstances, but typically the valves must be totally open to minimize flow disturbance. Thus, Defendants fail to use the least disturbing valves and/or ensure that the valves are fully open.

40. Defendants also frequently exacerbate the flow disturbances occurring at the BTU Extraction Point by inserting a thermometer probe and/or a test probe into the pipe immediately upstream of the BTU Extraction Point.

41. Industry standards permit Defendants to sample natural gas somewhat closer to flow-disturbing elements (the specific distances are determinable from industry standards) by installing commercially available equipment, known as "straightening vanes," inside the gathering line. Straightening vanes are a grouping of short, small-diameter tubes similar to a bundle of large

diameter straws. See AGA Report No. 3, Figure 9. The straightening vanes act to reduce turbulence and render more representative natural gas samples for heating content analyses. But Defendants have failed to install straightening vanes at the points where volume mismeasurement and heating content analyses are made.

42. Defendants know they mismeasure the BTU content. First, although Defendants are well aware that flow disturbance can negatively affect the BTU content of a natural gas sample, most Defendants do not take and use an undisturbed, truly representative BTU sample - except at the point of sale, when it is to their benefit. Second, Defendants know that the BTU content of natural gas produced from a given gas well should remain relatively constant over time, like fingerprints or DNA. Nevertheless, the BTU content reported by Defendants for natural gas from any given gas well varies considerably, indicating to Defendants the inaccuracy of the BTU determination.

2. Defendants Fail to Prevent or Account for Changes in the Flow Rate.

43. As the natural gas flow rate changes, the BTU sample pulled from that stream changes as well. Consequently, industry standards require that to obtain a natural gas sample representative of the natural gas stream as a whole, a sampling interval should be carefully chosen so that the collected sample reflects any changes in the pipeline's flow rate. API Chapter 14.1.8.1. Defendants fail to take into account the flow-rate changes. Defendants could, and should, eliminate this potential factor for mismeasurement. A well-known device called the Welker vanishing chamber continuous sampler GSS-4, for example, samples natural gas over an entire month to average the flow of the gas in order to obtain the most accurate representation of the gas produced. Although this form of sampler has been on the market for approximately twenty-five years, Defendants have not utilized it (nor an equivalent device) to assess accurately the sampling for BTU content from each gas well connected to the Defendant's system.

3. Defendants Allow Natural Gas to Cool and Liquefy Before Sampling, Which Artificially Lowers the BTU Content of the Sample.

44. Defendants locate the natural gas BTU Extraction Points 100 - 300 feet or more downstream from the separator and/or dehydrator unit. This placement causes the natural gas to cool to temperatures far below those that exist in the producing formation or in the well. In a natural gas reservoir - at 10,000 feet, for example, gas has an approximate temperature of 170°F, is homogeneous, and is in one phase (that is, gaseous). The applicable regulations and industry standards recognize that it is imperative to obtain natural gas samples at a temperature representative of the true well temperature. See API 14.1.5.4.2; ASTM 5503-94-5. However, once the natural gas cools - which occurs when the gas travels the 100 to over 300 feet described above - the gas separates into two phase flows (that is, liquid and gaseous). The heavier natural gas elements, which have a higher heating content, liquefy and separate as they cool, yielding an unrepresentative gas sample that understates the percentage of hydrocarbons with a higher BTU content. To counter this effect, Defendants must either heat the natural gas before it is extracted (to ensure that it returns to one phase flow) or separately measure the hydrocarbons that have liquefied. Id.; see also API 14.1.6.3; ASTM 5503-94 1,5. Defendants do neither.

4. Defendants Sample Gas at Lower than Wellhead Pressure or Flow Line Pressure, Which Lowers the BTU Content of the Sample

45. Any natural gas sampling device "must extract a representative sample from a flowing pipeline." ASTM 5503-94 5.1; see also GPA 2166-86, 3.1. While industry standards permit natural gas sampling to be conducted in a variety of ways, Defendants fail to extract a "representative sample."

46. Defendants extract natural gas samples by means of a steel sample container ("sample bomb") or similar device. The pressure in the sampling container that Defendants utilize is either at a vacuum or at atmospheric conditions. This pressure is far lower than the pressure of the

natural gas either in its true subsurface state or after the gas is produced and flows in the gas gathering line and/or pipeline. Only when Defendants sample the natural gas is it subjected to this low a pressure. The type of sampling device Defendants use allows the gas to undergo a rapid and extreme drop in pressure (which occurs immediately before the sample enters the device used to determine the heating content of the gas). The natural gas is thus subjected to what is known in physics as the Joule-Thomson effect. Simply stated, the drop in pressure causes a drop in temperature, which, in turn, causes heavier gases (with a higher heating content) to liquefy, separate, and stay behind in the pipeline; whereas the lighter gases (with a lower heating content) remain in a gaseous phase and enter the gas sampling container. (As a physical matter, molecules of natural gas that have a higher heating content turn to liquid at lower pressures and temperatures than natural gas molecules with a lower heating content.) Accordingly, Defendants exclude a disproportionate amount of the heavier BTU hydrocarbons from the natural gas sampling process and subsequent heating content analysis.

47. Defendants could, and should, prevent this lowering of the BTU content of the natural gas sample. A natural gas sampling device known as a "Floating Piston Cylinder," wherein natural gas is retrieved into a pressurized container that can be adjusted to the pressure in the gathering line and/or pipeline, has been available in the industry for over twenty years. The industry specifically permits the use of the Floating Piston Cylinder, which, when operated correctly, is least subject to the Joule-Thomson effect among all available sampling techniques. The Floating Piston Cylinder allows Defendants to extract a truly representative and reliable natural gas sample, thus complying with the sampling pressure requirements of the applicable standards, without having to make adjustments required with other sampling techniques. While the applicable standards do not require Defendants to use Floating Piston Cylinders under all circumstances, they do require Defendants to use appropriate measuring devices to avoid the Joule-Thomson effect in extracting natural gas for heating content analysis. See, e.g., API Chapter 14.110 and 14.1.14; GPA 2166-86, § 3.1 and 5-7, and the citations in ASTM 5503 - 94 § 5.1. Defendants often use Floating Piston Cylinders to analyze the heating content of gas sold to local distribution companies, but use the outmoded low pressure cylinders to sample natural gas when buying or measuring natural gas from producers. Indeed, the reported heating content of natural gas is increased when the Floating Piston Cylinder is used.

5. Defendants Improperly Use Inaccurate "Portable" Chromatographs.

48. Certain Defendants use a portable chromatograph to perform a natural gas sample heating content analysis directly in the field. However, analyses from portable chromatographs are accurate only up to C₈H₁₈ (octane) level, and then only if the analyzer is correctly connected to the sample probe, which Defendants fail to do. The portable chromatograph, lines, filters, regulators, inlet systems and accessories must be heated in order for a representative mixture of the natural gas to be delivered to the chromatograph. If this does not occur, as required by the applicable regulations and standards, see, e.g., API Chapter 14.1.16.3; GPA 2166-86 § 8, the portable chromatograph will understate the heating content and reduce payments to Plaintiffs.

49. Additionally, by forcing natural gas samples from a high-pressure gathering line (100 psi or higher) into a chromatograph with very low internal pressure (less than 20 psi), the natural gas sample is subjected to another Joule-Thomson effect. This causes liquefaction of the heavier weight (higher BTU) hydrocarbons, which causes them to go undetected in the heating content analysis process, in contravention of the applicable regulations and standards. See, e.g., API Chapters 14.1.6.3, 14.1.9, and 14.1.16; ASTM 5503-94 § 5.5.5.1 and Order No.5, § III.C.23.

50. Portable chromatographs also use a submicron filter which, due to the drop in pressure or series of drops in pressure caused by such filters, causes the heavier weight (higher BTU) hydrocarbons to be lost, without ever being analyzed by the chromatographs. The effect on the natural gas from the use of this filter is similar to the effect described below regarding chromatographs with filters situated in laboratories

51. The portable chromatograph does not properly analyze the heavier, (higher hydrocarbons as required by API Chapter 14.1.16.4, GPA 2261-95 §§ 3-7, and Order § III.C.231 and does not correct for nitrogen and oxygen which is found in certain gas streams.

6. The Joule-Thomson Effect Again Lowers BTU Content When the Gas Sample Is Transferred to the Chromatograph for Analysis.

52. The unrepresentatively light BTU gas sample described above is still further restricted as Defendants transport the gas sample from the BTU Extraction Point to a laboratory and transfer it to a "chromatograph" where its heating content is analyzed. When such a natural gas sample container is connected to the chromatograph, and the natural gas flows from the container into the chromatograph, the pressure drops in the gas sample container (which has no way of maintaining pressure at an appropriate level, creating another Joule-Thomson effect). As this pressure drop occurs, the heavier and lighter hydrocarbons separate from each other and only the lighter hydrocarbons (with a lower BTU content) tend to flow into the chromatograph. By this pressure drop, the heavier BTU hydrocarbons (with a higher BTU content) remain in the sample chamber without ever being analyzed.

7. Defendants Filter Out Heavier Hydrocarbon Molecules with Highest BTU Content.

53. Defendants place a filter at the exit point of the natural gas sample container (chamber), the result of which is to further restrict gas flow and disturb the gas stream. This placement again causes an inordinate exclusion of the heavier (higher BTU) hydrocarbons, creating yet another Joule-Thomson effect. The purpose of the filter is to eliminate possible impurities from the natural gas sample entering the chromatograph; the filter is not intended to be a means by which Defendants may eliminate heavier, (higher BTU) hydrocarbons from the natural gas sample being analyzed.

8. Defendants Measure the Natural Gas at Room Temperature, as Opposed to Higher Wellhead Temperature, to Lower BTU Content.

54. Even if Defendants analyzed the heating content of natural gas at the appropriate pressure, interviews and research have shown that the Defendants authorize or allow their laboratories to analyze the gas sample at an inappropriate low temperature. Defendants analyze the retrieved natural gas sample for heating content in the laboratory at approximately 70°F, or room

(lower BTU) hydrocarbons. Inspections of the records of several of the Defendants, including but not limited to defendants Questar and Williams, reveal that they instruct the laboratories who analyze the heating content of the natural gas they purchase and/or transport to analyze only hydrocarbons CH₄ (methane) through C₆H₁₄ (hexane) or C₇H₁₆ (heptane) for heating content, instead of analyzing the heating content of all the hydrocarbons (including the heavier, high BTU molecules). Rather than conduct the actual analysis, Defendants make conservative assumptions as to the percentage composition of the heavier weight hydrocarbons beyond C₆H₁₄ (hexane). By so doing, Defendants violate the applicable regulations and industry standards. See, e.g., GPA 2261-95 6-7; API 14.1.16.4; and Order No. 5 § III.C.23.

10. Defendants Arbitrarily Impose BTU Content Limits.

57. Defendants routinely pay for natural gas only up to an arbitrarily and unilaterally determined BTU content, such as 1100 BTU, irrespective of what the true BTU content of the natural gas is, and even where the true BTU value of the natural gas exceeds 1100. This arbitrary imposition of a BTU limit is inconsistent with the regulations and standards requiring analysis of all of the hydrocarbons in a given sample. See, e.g., GPA 2166-86 §§ 3-7; GPA 2261-95 §§ 6-7; ASTM 5503-94 §§ 1,5; API Chapter 14.1.16.4; and Order No.5 § III.C.23.

11. Defendants' Misuse of "Wet Gas" Analysis.

58. Depending on its state, natural gas is often referred to as "dry" or "wet." A chromatograph (described above) analyzes the heating content of natural gas only on a "dry" basis. The vast majority of gas contracts, however, call for natural gas to be delivered and paid for on a "wet" basis. Thus, a GPA formula exists for converting analyzed "dry" gas to the so-called "wet gas" basis. Defendants, through the use of wrong pressure data, use this formula incorrectly, to their advantage and to the detriment of Plaintiffs. A variable Defendants use for converting BTU values from the analyzed "dry" basis to the "wet" basis is the flowing pressure in the field gas gathering line. Defendants arbitrarily substitute an assumed atmospheric pressure (such as 14.7 p.s.i., the atmospheric pressure at sea level, or a standard pressure) for the flowing pressure in the natural gas gathering line, on the false assumption that the natural gas in the gathering line (from which the natural gas sample is taken) is subject merely to atmospheric pressure, which it is not (or it would not move or "flow" in the pipeline) Instead, the natural gas is subject to far greater pressures in both the gas producing fields and while moving through the natural gas gathering lines, where pressures are at least 100 p.s.i., and usually more. Defendants should use in the formula the flowing pressure in the gathering line of at least 100 p.s.i. At this much higher true flowing pressure, the formula demonstrates that the difference between the analyzed BTU of the natural gas on a "dry" basis with the calculated "wet" basis is virtually non-existent. But by erroneously using atmospheric pressure of 14.7 p.s.i. in the formula, Defendants erroneously calculate that "wet" gas has only 98% of the BTU content of "dry" gas and, therefore, Defendants pay for only 98% of what Plaintiffs are really owed. While industry standards and many contracts between Gas Producers and Gas Measurers permit using an atmospheric pressure of 14.7 p.s.i. and a temperature of 60°F, they all require further calculations to ensure that the actual flow pressure and temperature are properly accounted for. Defendants erroneously make this calculated to their advantage and Plaintiffs' detriment.

12. Defendants Not Only Cause or Permit Gas To Separate into Two Phases (Gaseous and Liquid) and Under-Measure the BTU in the Gaseous Phase, But Completely Ignore Measuring the Liquid Phase.

59. Defendants have recovered the liquefied ("condensate") natural gas, without paying Plaintiffs. Defendants do this by purging their gas gathering and gas pipeline Systems using a "pig," and in the process recover large quantities of gas liquids. These gas liquids should have been accounted for to the Plaintiffs, but were not.

D. Measurement Techniques Distorting Volume, Heating Content or Both

1. Defendants Use Inferior Mechanical Gas Meters, Rather Than More Accurate Digital Gas Meters.

60. Defendants use mechanically operated gas meters which chronically underreport the volume of natural gas at the point of purchase. These meters record natural gas production accurately only within a limited range. Defendants measure the volume of gas outside of that permitted range, and thus fail to measure volume accurately.

61. During periods of peak production, mechanically operated natural gas meters typically "overrange" and go "off the chart," in which case a portion of natural gas production goes unreported, resulting in Defendants obtaining "free" natural gas. Conversely, during periods of low production, the meter is prone to "underranging" and thus fails to record either some or all of the natural gas being produced. For instance, the mechanically recorded chart under-measures the volume of natural gas as much as 50% in natural gas wells using plunger lifts (a device to remove water produced with natural gas), where the spikes and variations are most evident. This measurement is inconsistent with the applicable regulations and standards, which require use of natural gas meters within their range of accuracy and the reporting of gas volumes between 30% and 70% of the chart readings. Defendants' use of the mechanical gas meters thus further violates industry standards requiring accurate natural gas measurements. See e.g., 30 C.F.R. 250.181(c)(3); Order No.5 III.C4-5; Defendants make no corrections for this systematic underreporting of natural gas volume at the point of purchase or intake.

62. Moreover, for approximately the past fifteen years, Defendants have had available to them digital gas meters that eliminate the mechanical chart recording problems described above. Defendants have not installed digital gas meters in every gas well to eliminate volume mismeasurement by mechanical chart meters. Recently, certain Defendants have installed digital gas meters on "master meter" locations, but only on a limited basis, on individual gas wells.

2. Defendants Fail To Calibrate Mechanical Gas Meters and Chromatographs.

63. Defendants do not calibrate the equipment used in the analysis of heating content and the measurement of volume as often as is required by the applicable regulations and industry standards. See e.g., 30 C.F.R. 250.181(c)(3); Order No. 5 III.C.13-19. Defendants fail to calibrate properly the mechanical meters (and digital meters on the few individual wells where they are installed), and even the chromatographs.

3. Defendants Fail To Account for Super-Compressibility of Inert Gas.

64. In order to measure properly the volume of natural gas, one must correct for the inert content of the natural gas, such as carbon dioxide, hydrogen sulphide, nitrogen and helium, and determine the "super-compressibility" of the gas. This need to determine super-compressibility is a direct function of the law of physics known as Boyle's Law. Accordingly, super-compressibility is a factor used in the formula for calculating gas volume, referred to in the formula as 'Fpv'. The former standards for performing these corrections were called "NX19" instructions. These instructions were changed and replaced in 1985 by AGA Report No 8, entitled, "Compressibility and Super-compressibility for Natural Gas and Other Hydrocarbon Gases," and again in 1992 by a new AGA Report No.8, entitled, "Compressibility Factors of Natural Gas and Other Related Hydrocarbon Gases." Nevertheless, Defendants, until recently, did not adopt the revised procedures inappropriately using the outdated information and parameters contained in the NX19 instructions. The inert gases found in the volume of gas compress and take up less volume so that there is really more natural gas than NX19 instructions indicated. This failure to timely respond and use AGAS and revised AGAS undermeasured the volume to Plaintiffs' detriment.

4. Defendants Use Improper Gas Meter Orifice Diameter.

65. Volume is measured by means of an orifice, that is, a constriction inserted in the natural gas gathering and/or pipeline as described herein. In industry parlance, the (Beta) ratio is the orifice diameter divided by the inside pipe diameter of the gathering line pipe delivering natural gas to the orifice. Defendants have used incorrect ratios, thus causing an understatement in the measured volume of natural gas produced. The industry standards set forth in AGA Report No.3, 4.2.7, and Order No. 5 III.C.1-C.2, prescribed that the ratio should be between 0.15 and 0.70 for gas meters using flange taps and between .02 and .067 for gas meters using pipe taps.

Defendants then multiply the volume and heating content to obtain an MMBTU amount without first converting the volume, measurements and heating content analysis to a uniform temperature and pressure base such as 60°F and 14.73 p.s.i., as required by AGA and API standards. This procedure results in an undue reduction in the reported MMBTU value of natural gas produced, short changing the Plaintiffs.

72. Certain Defendants purchase or transport natural gas at a base pressure of 15.025 psi and a temperature of 60°F. However, when these Defendants sell or deliver the natural gas they do so at a higher pressure base 14.73 psi or 14.69 psi and a temperature of 60°F gaining for themselves an additional 2% volume of natural gas.

V. FRAUDULENT CONCEALMENT

73. Despite having exercised reasonable diligence, Plaintiffs could not discover and were prevented from discovering Defendants' mismeasurement schemes described herein. Without specific knowledge of the sampling techniques, laboratory methodology, scientific principles, and complex algebraic formulas, Plaintiffs could not discern Defendants' mismeasurement conduct. Defendants actively and/or passively concealed material facts relating to their deceptive, and unlawful conduct alleged herein. When Plaintiffs raised concerns about the BTU content of natural gas produced from a given well, Defendants actively concealed the truth with half-truths, false and misleading statements and omissions or seemingly innocuous explanations for the shortfall, or claimed the mismeasurement was inadvertent. Without the "whole mismeasurement picture," Plaintiffs were unable to discern the individual techniques or, even when they could, Plaintiffs were unable to evaluate and challenge them effectively.

74. Defendants knew during the Class Period that undervaluing the heating content and volume of natural gas produced would adversely impact royalties, overriding royalties, working interests and production taxing authorities, which are directly dependent upon the reported value of natural gas produced.

75. Defendants actively concealed the above material facts from Gas Producers to whom they owed contractual and fiduciary duties to provide accurate and honest accounting of the value of natural gas produced. Plaintiffs subgroups are third-party beneficiaries of said contracts and, thus, owed similar contractual, statutory, and tort duties.

76. The running of the statute of limitations has been suspended with respect to claims that Plaintiffs allege herein, as Defendants, through various devices of secrecy, concealed the existence of their unlawful mismeasurement schemes and course of conduct from Plaintiffs. Until shortly before the commencement of this action, Plaintiffs had no knowledge of Defendants' scheme and unlawful conduct. Plaintiffs, with the exercise of reasonable and due diligence, did not discover Defendants' wrongdoing until shortly before the filing of this Petition.

VI. CLASS ACTION ALLEGATIONS

A. Class Definition.

77. This is a class action brought pursuant to K.S.A. 60-223 by plaintiffs Quinque Operating Company, on behalf of itself, and all similarly situated Gas Producers who have been underpaid by Gas Pipelines due to the mismeasurement of gas volume and/or heating content on non-federal and non-Indian lands located throughout the continental United States, from and after January 1, 1974, to the present, including subgroups of royalty owners represented by Tom Boles, overriding royalty owners represented by Robert Ditto, working interest owners represented by Quinque Operating Company and Robert Ditto, and state taxing authorities who are owed severance, production, conservation, and other production related taxes for natural gas produced within their jurisdiction. Excluded from the Class are affiliates of Defendants mentioned.

B. Class Certification Standards.

78. Plaintiffs bring this action individually and as representatives of the above-mentioned Class (and subclasses).

79. Numerosity, K.S.A 60-223(a)(1): Plaintiffs do not have access to the information necessary to establish the names or total number of Class (and sub-class) members. Such information is in the hands of Defendants. However, Plaintiffs believe that the size of the Class (and subclass) is so numerous that joinder of individual members is impractical.

80. Commonality, K.S.A. 60-223(a)(2): Plaintiffs' claims have common questions of law or fact.

81. Typicality, K.S.A. 60-223.(a)(3): The class representative's claims are typical of the claims of the class.

82. Adequacy of Representation K.S.A. 60-223(a)(4): The class representatives can and will fairly and adequately protect the interest of all class members.

83. Plaintiffs' counsel have been and are currently involved in class action litigation, have extensively researched the factual and legal issues involved herein, and can competently represent the entire class,

84. A Class Action Is Superior, K.S.A. 60-223(b)(3): A class action is superior to any other available method for the fair and efficient adjudication of the controversy. A single adjudication of this dispute in a class action will prevent prejudice to each Plaintiff that might be unable to justify bringing a relatively small individual suit, and might result in incompatible court determinations that would prejudice Plaintiffs. One single decision in this class action would be dispositive of the interest of the members of the class and would thereby protect the interest of the members of the class better than separate actions.

85. Common Issues Predominate, K.S.A 60-223(b)(3): Questions of law and fact common to all members of the Plaintiff class predominate over other questions, if any, affecting only individual members.

86. A Class Action Will Aid In Case Management, K.S.A 60-223(b)(3): Deciding this issue as a class action would save time and expense for the parties and the Court, over hundreds of individual lawsuits.

VII. LEGAL THEORIES/CAUSES OF ACTION.

The Defendants are liable to each and all of Plaintiffs for one or more of the following reasons:

87. Breach of Contract: The Gas Pipelines have express and implied contractual obligations to the Gas Producers and to each of the other class of Plaintiffs as third party beneficiaries of the contract by statute, contract, or common law. By mismeasuring the gas, Gas Pipelines have breached the contract and the implied terms, the duty to market diligently and the duty of good faith and fair dealing. As a direct and proximate result, plaintiffs are entitled collectively but not necessarily individually to recover damages far in excess of Seventy-Five Thousand Dollars (\$75,000), plus attorney's fees, pre- and post-judgment interest, and costs.

88. Negligent or Intentional Misrepresentation: Gas Pipelines negligently or intentionally misrepresented the gas measurements to Plaintiffs during each and every payment, and negligently or intentionally concealed the mismeasurement from Plaintiffs, entitling Plaintiffs to a tolling of the statute of limitations, recovery of actual damages approximately caused by Defendants' mismeasurement collectively far in excess of Seventy-Five Thousand Dollars (\$75,000), attorneys fees, pre- and post-judgment interest, and costs.

89. Civil Conspiracy: Each of the Gas Pipelines conspired to misrepresent and mislead Plaintiffs and are therefore jointly and severally liable to Plaintiffs for the illegalities.

90. Common Carrier Liability: Gas Pipelines, as common carriers, have enhanced statutory and common law duties. Gas Pipelines are specifically identified as common carriers under K.S.A. 66-105, subjecting them to a private cause of action for actual damages and attorneys fees under K.S.A. 66-176 and, for treble damages and attorneys fees before July 15, 1995, under K.S.A. 66-176 As a result of their mismeasurement, Gas Pipelines are liable to Plaintiffs for treble damages before July 15, 1995, and actual damages thereafter, including attorneys fees for the trial court and all subsequent appeals, pre- and post-judgment interest, and costs.

91. Conversion: By mismeasuring the gas, Gas Pipelines converted the use and benefit of Plaintiffs' gas to their use, proximately causing actual damages to Plaintiffs. As a result, Plaintiffs are entitled to recover actual damages, attorney's fees, pre and post-judgment interest, and costs, and specifically reserves their right to recover punitive damages against Gas Pipelines.

92. Kansas Consumer Protection Act: Each of Plaintiffs are consumers and the Gas Pipelines are suppliers, and the mismeasurement of gas was a deceptive and an unconscionable act entitling Plaintiffs to recover actual damages, an injunction, attorneys fees, pre- and post-judgment interest, and costs under K.S.A. 50-623 et seq.

93. Uniform Commercial Code: Gas Pipelines violated K.S.A 84-1-201(9), 1-203, 2-305, 2-104, and 2-103(b), entitling Plaintiffs to actual damages, attorneys fees, pre- and post-judgment interest, and costs.

94. Liability Under K.S.A. 55-614, et seq.: Plaintiffs are owed by defendants full payment, pre- and post-judgment interest, and attorneys fees and costs under K.S.A, 55-614 et seq.

95. Res Ipsa Loquitur and Negligence: Defendants at all relevant times had exclusive control of the devices and means of measuring volume and analyzing heating content of Plaintiffs' gas, which devices caused billions of dollars of injury to Plaintiffs which would not ordinarily occur if Defendants had used proper care, such that negligence can be inferred as a matter of law. In addition, Plaintiffs were simply negligent, or worse, which can be shown by direct evidence, such that Plaintiffs are entitled to recover actual damages, pre- and post-judgment interest, and costs.

96. Breach of Fiduciary Duty: Defendants had a fiduciary relationship by business or association with each Plaintiff, including each subgroup, which reasonably and actually placed special trust and confidence in Defendants to properly measure the volume and analyze the BTU content of Plaintiffs' gas. Plaintiffs placed this special confidence in Defendants, which in equity and good conscience, bound Defendants to act in good faith and with due regard to the interest of the Plaintiffs, but as outlined above Defendants breached that fiduciary duty, entitling Plaintiffs to actual damages, attorneys fees, pre and post-judgment interest, and costs. Plaintiffs specifically reserve their right to recover punitive damages against Gas Pipelines.

97. Equity (Injunction, Accounting, Quantum Meruit, and Unjust Enrichment): Plaintiffs are entitled to an injunction to prevent Gas Pipelines from mismeasuring in the future, an accounting to determine the amount of damages from Gas Pipelines past mismeasurement, and to recover all money unjustly enriching Gas Pipelines at the expense of Plaintiffs. As a result, Plaintiffs are entitled to a complete accounting, an injunction, actual damages, attorney's fees, pre and post-judgment interest, costs, and specifically reserve their right to receive punitive damages.

VII. PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray that the Court enter an Order certifying the case as a class action against Defendants, enjoining Defendants from their illegal mismeasurement, granting an

accounting, and granting judgment against Defendants for actual damages far in excess of Seventy-Five Thousand Dollars (\$75,000), treble damages up through July 15, 1995, attorney's fees, pre-judgment interest, post-judgment interest, costs, and all other just relief, including reserving the right to plead for punitive damages.

X. DEMAND FOR JURY TRIAL

Plaintiffs demand a trial by jury pursuant to K.S.A. 60-238 on all issues so triable.

XI. ATTORNEY'S LIEN CLAIMED.

DATED: September 23, 1999

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