

**INFORME MENSUAL SOBRE LAS ESPECIFICACIONES DEL GAS NATURAL**



(Valores promedio diarios)

|                           |   |
|---------------------------|---|
| <b>PERMISIONARIO:</b>     | Compañía Nacional de Gas SA de CV - Permiso G/11/DIS/1997 |
| <b>PUNTO DE MEDICIÓN:</b> | Cruce Internacional I - Estacion Importacion Rio Bravo    |
| <b>ZONA DE MEDICIÓN:</b>  | <u>RESTO DEL PAÍS</u>                                     |

| FECHA:<br>(dd/mm/aa) | Metano<br>(% vol) | Bióxido de<br>Carbono<br>(% vol) | Nitrógeno<br>(% vol) | Total Inertes<br>(% vol) | Etano<br>(% vol) | Temperatura de<br>Rocio<br>(K) | Humedad<br>(mg/m <sup>3</sup> ) | Poder<br>Calorífico<br>(MJ/m <sup>3</sup> ) | Índice Wobbe<br>(MJ/m <sup>3</sup> ) | Acido<br>Sulfhídrico<br>(mg/m <sup>3</sup> ) | Azufre total*<br>(mg/m <sup>3</sup> ) | Oxígeno*<br>(% vol) |
|----------------------|-------------------|----------------------------------|----------------------|--------------------------|------------------|--------------------------------|---------------------------------|---|--------------------------------------|--|---------------------------------------|---------------------|
| 01/02/2017           | 94.2860           | 0.0999                           | 0.1144               | 0.2142                   | 4.9506           | 270.1250                       | 1.4900                          | 39.5328                                     | 51.9778                              | 0.0000                                       | 1.3470                                | 0.0000              |
| 02/02/2017           | 94.2377           | 0.0962                           | 0.1159               | 0.2120                   | 5.0513           | 269.7210                       | 1.4914                          | 39.5245                                     | 51.9754                              | 0.1300                                       |                                       |                     |
| 03/02/2017           | 94.0898           | 0.1031                           | 0.1148               | 0.2179                   | 5.1798           | 270.5240                       | 1.2533                          | 39.5677                                     | 51.9951                              | 0.2294                                       |                                       |                     |
| 04/02/2017           | 93.7818           | 0.0937                           | 0.1142               | 0.2079                   | 5.4930           | 272.1240                       | 1.4803                          | 39.6648                                     | 52.0564                              | 0.1300                                       |                                       |                     |
| 05/02/2017           | 93.3551           | 0.1212                           | 0.1149               | 0.2360                   | 5.8038           | 271.1700                       | 1.7908                          | 39.8100                                     | 52.1172                              | 0.1071                                       |                                       |                     |
| 06/02/2017           | 93.1188           | 0.1220                           | 0.1210               | 0.2430                   | 5.9292           | 272.1250                       | 2.2935                          | 39.9209                                     | 52.1751                              | 0.0229                                       |                                       |                     |
| 07/02/2017           | 93.1822           | 0.1370                           | 0.1275               | 0.2645                   | 5.8607           | 273.4258                       | 1.4914                          | 39.8823                                     | 52.1400                              | 0.0918                                       |                                       |                     |
| 08/02/2017           | 93.3100           | 0.0971                           | 0.1187               | 0.2158                   | 5.8650           | 272.6410                       | 1.5680                          | 39.8357                                     | 52.1469                              | 0.4282                                       |                                       |                     |
| 09/02/2017           | 93.5009           | 0.0918                           | 0.1133               | 0.2050                   | 5.7601           | 273.8217                       | 1.4621                          | 39.7533                                     | 52.1077                              | 0.1071                                       |                                       |                     |
| 10/02/2017           | 93.6683           | 0.0851                           | 0.1107               | 0.1958                   | 5.6050           | 273.1740                       | 1.4621                          | 39.7110                                     | 52.0899                              | 0.1606                                       |                                       |                     |
| 11/02/2017           | 94.0557           | 0.0909                           | 0.1115               | 0.2024                   | 5.2253           | 272.2280                       | 1.4301                          | 39.5910                                     | 52.0183                              | 0.0841                                       |                                       |                     |
| 12/02/2017           | 93.8850           | 0.0964                           | 0.1134               | 0.2098                   | 5.2536           | 273.1540                       | 1.8534                          | 39.6975                                     | 52.0723                              | 0.1376                                       |                                       |                     |
| 13/02/2017           | 94.0299           | 0.1173                           | 0.1243               | 0.2416                   | 5.0212           | 272.1210                       | 1.4440                          | 39.6581                                     | 52.0299                              | 0.0459                                       |                                       |                     |
| 14/02/2017           | 94.2942           | 0.0957                           | 0.1191               | 0.2148                   | 4.9390           | 273.2170                       | 1.4399                          | 39.5278                                     | 51.9758                              | 0.1682                                       |                                       |                     |
| 15/02/2017           | 94.4575           | 0.0900                           | 0.1140               | 0.2040                   | 4.8372           | 271.2510                       | 2.0345                          | 39.4670                                     | 51.9485                              | 0.0229                                       |                                       |                     |
| 16/02/2017           | 94.0976           | 0.1054                           | 0.1138               | 0.2193                   | 5.1412           | 272.1500                       | 1.9175                          | 39.5794                                     | 52.0002                              | 0.0688                                       |                                       |                     |
| 17/02/2017           | 93.5456           | 0.1352                           | 0.1174               | 0.2526                   | 5.4694           | 272.1811                       | 2.1097                          | 39.7952                                     | 52.0971                              | 0.0841                                       |                                       |                     |
| 18/02/2017           | 93.5263           | 0.1085                           | 0.1144               | 0.2229                   | 5.5136           | 272.3120                       | 2.3924                          | 39.8303                                     | 52.1369                              | 0.0000                                       |                                       |                     |
| 19/02/2017           | 93.5737           | 0.1038                           | 0.1157               | 0.2195                   | 5.5108           | 273.4410                       | 2.7015                          | 39.8066                                     | 52.1266                              | 0.0765                                       |                                       |                     |
| 20/02/2017           | 93.7942           | 0.1205                           | 0.1214               | 0.2419                   | 5.2676           | 273.1110                       | 2.0526                          | 39.7302                                     | 52.0693                              | 0.3441                                       |                                       |                     |
| 21/02/2017           | 93.9248           | 0.1224                           | 0.1214               | 0.2438                   | 5.2220           | 273.2740                       | 2.0011                          | 39.6478                                     | 52.0225                              | 0.0841                                       |                                       |                     |
| 22/02/2017           | 93.8920           | 0.1111                           | 0.1159               | 0.2270                   | 5.3042           | 273.1210                       | 1.9927                          | 39.6488                                     | 52.0339                              | 0.0459                                       |                                       |                     |
| 23/02/2017           | 93.4907           | 0.1271                           | 0.1201               | 0.2472                   | 5.5574           | 273.1278                       | 2.2155                          | 39.8079                                     | 52.1088                              | 0.1376                                       |                                       |                     |
| 24/02/2017           | 93.5034           | 0.1216                           | 0.1160               | 0.2376                   | 5.6532           | 273.1260                       | 2.1041                          | 39.7646                                     | 52.0911                              | 0.0000                                       |                                       |                     |
| 25/02/2017           | 93.5417           | 0.1081                           | 0.1149               | 0.2229                   | 5.6599           | 272.3316                       | 2.2559                          | 39.7507                                     | 52.0937                              | 0.0994                                       |                                       |                     |
| 26/02/2017           | 93.3353           | 0.2380                           | 0.1221               | 0.3601                   | 5.5393           | 273.5800                       | 3.2320                          | 39.8093                                     | 52.0299                              | 0.0918                                       |                                       |                     |
| 27/02/2017           | 93.4555           | 0.1461                           | 0.1234               | 0.2696                   | 5.5583           | 273.1600                       | 2.5219                          | 39.8080                                     | 52.0938                              | 0.2447                                       |                                       |                     |
| 28/02/2017           | 93.6611           | 0.1827                           | 0.1211               | 0.3037                   | 5.4094           | 223.4131                       | 2.5233                          | 39.6902                                     | 52.0036                              | 0.2447                                       |                                       |                     |
|                      |                   |                                  |                      |                          |                  |                                |                                 |   |                                      |  |                                       |                     |
|                      |                   |                                  |                      |                          |                  |                                |                                 |   |                                      |  |                                       |                     |
|                      |                   |                                  |                      |                          |                  |                                |                                 |   |                                      |  |                                       |                     |

\*/ Los valores trimestrales se deberán reportar en los meses de enero, abril, julio y octubre de cada año, respecto del trimestre inmediato anterior.

|                   |             |            |             |             |             |             |             |             |             |             |  |  |
|-------------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|
| <b>Mínimo</b>     | 93.1188     | 0.0851     | 0.1107      | 0.1958      | 4.8372      | 223.4131    | 1.2533      | 39.4670     | 51.9485     | 0.0000      |  |  |
| <b>Promedio</b>   | 93.7355     | 0.1167     | 0.1173      | 0.2340      | 5.4136      | 270.6840    | 1.9287      | 39.7076     | 52.0619     | 0.1210      |  |  |
| <b>Máximo</b>     | 94.4575     | 0.2380     | 0.1275      | 0.3601      | 5.9292      | 273.8217    | 3.2320      | 39.9209     | 52.1751     | 0.4282      |  |  |
| <b>Desv. Est.</b> | 0.359844732 | 0.03164304 | 0.004180514 | 0.034320245 | 0.304290332 | 9.323837372 | 0.478536617 | 0.120077069 | 0.061222113 | 0.101258547 |  |  |

Observaciones:

**INFORME MENSUAL SOBRE LAS ESPECIFICACIONES DEL GAS NATURAL**

**(Registros máximos diarios)**



**PERMISIONARIO:**

**Compañía Nacional de Gas SA de CV - Permiso G/11/DIS/1997**

**PUNTO DE MEDICIÓN:**

**Cruce Internacional I - Estacion Importacion Rio Bravo**

**ZONA DE MEDICIÓN:**

**RESTO DEL PAÍS**

| FECHA:<br>(dd/mm/aa) | Metano<br>(% vol) | Bióxido de Carbono<br>(% vol) | Nitrógeno<br>(% vol) | Total Inertes<br>(% vol) | Etano<br>(% vol) | Temperatura de<br>Rocio<br>(K) | Humedad<br>(mg/m <sup>3</sup> ) | Poder Calorífico<br>(MJ/m <sup>3</sup> ) | Índice Wobbe<br>(MJ/m <sup>3</sup> ) | Acido Sulhídrico<br>(mg/m <sup>3</sup> ) |
|----------------------|-------------------|-------------------------------|----------------------|--------------------------|------------------|--------------------------------|---------------------------------|--|--------------------------------------|--|
| 01/02/2017           | 94.5629           | 0.1244                        | 0.1185               | 0.2378                   | 5.1693           | 270.1250                       | 1.4900                          | 39.8487                                  | 52.1569                              | 0.0000                                   |
| 02/02/2017           | 94.3884           | 0.1060                        | 0.1182               | 0.2222                   | 5.1486           | 269.7210                       | 1.4914                          | 39.5891                                  | 52.0094                              | 0.1300                                   |
| 03/02/2017           | 94.3914           | 0.1241                        | 0.1176               | 0.2366                   | 5.4008           | 270.5240                       | 1.2533                          | 39.6165                                  | 52.0303                              | 0.2294                                   |
| 04/02/2017           | 94.0047           | 0.1024                        | 0.1179               | 0.2203                   | 5.7211           | 272.1240                       | 1.4803                          | 39.7564                                  | 52.1079                              | 0.1300                                   |
| 05/02/2017           | 93.5087           | 0.3012                        | 0.1181               | 0.4168                   | 5.9821           | 271.1700                       | 1.7908                          | 39.8867                                  | 52.1736                              | 0.1071                                   |
| 06/02/2017           | 93.3197           | 0.1501                        | 0.1267               | 0.2674                   | 6.0698           | 272.1250                       | 2.2935                          | 39.9755                                  | 52.2082                              | 0.0229                                   |
| 07/02/2017           | 93.3654           | 0.2533                        | 0.1337               | 0.3830                   | 5.9905           | 273.4258                       | 1.4914                          | 40.0249                                  | 52.2229                              | 0.0918                                   |
| 08/02/2017           | 93.5899           | 0.1230                        | 0.1272               | 0.2490                   | 5.9599           | 272.6410                       | 1.5680                          | 39.9147                                  | 52.1755                              | 0.4282                                   |
| 09/02/2017           | 93.7432           | 0.1140                        | 0.1185               | 0.2289                   | 5.9776           | 273.8217                       | 1.4621                          | 39.7924                                  | 52.1401                              | 0.1071                                   |
| 10/02/2017           | 93.8074           | 0.1020                        | 0.1226               | 0.2193                   | 5.7722           | 273.1740                       | 1.4621                          | 39.7593                                  | 52.1237                              | 0.1606                                   |
| 11/02/2017           | 94.3206           | 0.1253                        | 0.1181               | 0.2325                   | 5.5841           | 272.2280                       | 1.4301                          | 39.7352                                  | 52.0958                              | 0.0841                                   |
| 12/02/2017           | 94.1653           | 0.1118                        | 0.1197               | 0.2271                   | 5.4750           | 273.1540                       | 1.8534                          | 39.8185                                  | 52.1397                              | 0.1376                                   |
| 13/02/2017           | 94.3314           | 0.1900                        | 0.1313               | 0.3204                   | 5.1570           | 272.1210                       | 1.4440                          | 39.7976                                  | 52.1160                              | 0.0459                                   |
| 14/02/2017           | 94.5030           | 0.1366                        | 0.1322               | 0.2526                   | 5.1494           | 273.2170                       | 1.4399                          | 39.6018                                  | 52.0163                              | 0.1682                                   |
| 15/02/2017           | 94.6629           | 0.1249                        | 0.1157               | 0.2393                   | 4.9958           | 271.2510                       | 2.0345                          | 39.6048                                  | 52.0255                              | 0.0229                                   |
| 16/02/2017           | 94.3244           | 0.1766                        | 0.1167               | 0.2910                   | 5.4519           | 272.1500                       | 1.9175                          | 39.8494                                  | 52.1430                              | 0.0688                                   |
| 17/02/2017           | 94.0268           | 0.1867                        | 0.1320               | 0.3014                   | 5.8824           | 272.1811                       | 2.1097                          | 40.1189                                  | 52.2416                              | 0.0841                                   |
| 18/02/2017           | 93.8843           | 0.1413                        | 0.1198               | 0.2549                   | 5.7823           | 272.3120                       | 2.3924                          | 40.1363                                  | 52.3154                              | 0.0000                                   |
| 19/02/2017           | 93.7492           | 0.1211                        | 0.1211               | 0.2417                   | 5.7062           | 273.4410                       | 2.7015                          | 39.9273                                  | 52.1858                              | 0.0765                                   |
| 20/02/2017           | 94.0047           | 0.1549                        | 0.1309               | 0.2720                   | 5.3820           | 273.1110                       | 2.0526                          | 39.8163                                  | 52.1196                              | 0.3441                                   |
| 21/02/2017           | 94.1658           | 0.1512                        | 0.1325               | 0.2816                   | 5.4081           | 273.2740                       | 2.0011                          | 39.7765                                  | 52.0695                              | 0.0841                                   |
| 22/02/2017           | 94.0195           | 0.1543                        | 0.1207               | 0.2705                   | 5.4741           | 273.1210                       | 1.9927                          | 39.7076                                  | 52.0700                              | 0.0459                                   |
| 23/02/2017           | 93.9284           | 0.1546                        | 0.1413               | 0.2922                   | 5.8277           | 273.1278                       | 2.2155                          | 40.1294                                  | 52.2587                              | 0.1376                                   |
| 24/02/2017           | 93.7723           | 0.3540                        | 0.1208               | 0.4679                   | 6.2990           | 273.1260                       | 2.1041                          | 39.9267                                  | 52.1927                              | 0.0000                                   |
| 25/02/2017           | 94.1790           | 0.2384                        | 0.1330               | 0.3594                   | 6.0161           | 272.3316                       | 2.2559                          | 39.9826                                  | 52.1937                              | 0.0994                                   |
| 26/02/2017           | 94.0453           | 0.7181                        | 0.1283               | 0.8402                   | 6.8938           | 273.5800                       | 3.2320                          | 40.1821                                  | 52.1654                              | 0.0918                                   |
| 27/02/2017           | 93.8119           | 0.1741                        | 0.1320               | 0.3061                   | 5.7171           | 273.1600                       | 2.5219                          | 39.9774                                  | 52.1730                              | 0.2447                                   |
| 28/02/2017           | 93.9548           | 0.4026                        | 0.1348               | 0.5333                   | 5.6073           | 223.4131                       | 2.5233                          | 39.7691                                  | 52.0954                              | 0.2447                                   |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
| <b>Máximo</b>        | 94.6629           | 0.7181                        | 0.1413               | 0.8402                   | 6.8938           | 273.8217                       | 3.2320                          | 40.1821                                  | 52.3154                              | 0.4282                                   |

**Observaciones:**

**INFORME MENSUAL SOBRE LAS ESPECIFICACIONES DEL GAS NATURAL**

**(Registros mínimos diarios)**



**PERMISIONARIO:**

**Compañía Nacional de Gas SA de CV - Permiso G/11/DIS/1997**

**PUNTO DE MEDICIÓN:**

**Cruce Internacional I - Estacion Importacion Rio Bravo**

**ZONA DE MEDICIÓN:**

**RESTO DEL PAÍS**

| FECHA:<br>(dd/mm/aa) | Metano<br>(% vol) | Bióxido de Carbono<br>(% vol) | Nitrógeno<br>(% vol) | Total Inertes<br>(% vol) | Etano<br>(% vol) | Temperatura de<br>Rocio<br>(K) | Humedad<br>(mg/m <sup>3</sup> ) | Poder Calorífico<br>(MJ/m <sup>3</sup> ) | Índice Wobbe<br>(MJ/m <sup>3</sup> ) | Acido Sulhídrico<br>(mg/m <sup>3</sup> ) |
|----------------------|-------------------|-------------------------------|----------------------|--------------------------|------------------|--------------------------------|---------------------------------|--|--------------------------------------|--|
| 01/02/2017           | 93.8348           | 0.0832                        | 0.1123               | 0.1955                   | 4.7393           | 270.1250                       | 1.4900                          | 39.4068                                  | 51.8925                              | 0.0000                                   |
| 02/02/2017           | 94.0713           | 0.0841                        | 0.1133               | 0.1977                   | 4.9233           | 269.7210                       | 1.4914                          | 39.4572                                  | 51.9409                              | 0.1300                                   |
| 03/02/2017           | 93.8966           | 0.0851                        | 0.1123               | 0.1974                   | 4.8683           | 270.5240                       | 1.2533                          | 39.4965                                  | 51.9591                              | 0.2294                                   |
| 04/02/2017           | 93.5187           | 0.0845                        | 0.1117               | 0.1970                   | 5.2984           | 272.1240                       | 1.4803                          | 39.5794                                  | 52.0060                              | 0.1300                                   |
| 05/02/2017           | 93.1818           | 0.0962                        | 0.1125               | 0.2094                   | 5.6157           | 271.1700                       | 1.7908                          | 39.6726                                  | 51.9128                              | 0.1071                                   |
| 06/02/2017           | 92.9882           | 0.1028                        | 0.1147               | 0.2175                   | 5.7747           | 272.1250                       | 2.2935                          | 39.8244                                  | 52.1088                              | 0.0229                                   |
| 07/02/2017           | 92.9663           | 0.1079                        | 0.1204               | 0.2319                   | 5.7262           | 273.4258                       | 1.4914                          | 39.8029                                  | 52.0591                              | 0.0918                                   |
| 08/02/2017           | 93.1076           | 0.0791                        | 0.1134               | 0.1938                   | 5.7217           | 272.6410                       | 1.5680                          | 39.7261                                  | 52.1009                              | 0.4282                                   |
| 09/02/2017           | 93.3324           | 0.0732                        | 0.1094               | 0.1850                   | 5.5393           | 273.8217                       | 1.4621                          | 39.6492                                  | 52.0403                              | 0.1071                                   |
| 10/02/2017           | 93.4983           | 0.0750                        | 0.0948               | 0.1809                   | 5.4577           | 273.1740                       | 1.4621                          | 39.6588                                  | 52.0514                              | 0.1606                                   |
| 11/02/2017           | 93.6256           | 0.0719                        | 0.1066               | 0.1823                   | 4.9485           | 272.2280                       | 1.4301                          | 39.4993                                  | 51.9501                              | 0.0841                                   |
| 12/02/2017           | 93.6576           | 0.0885                        | 0.1093               | 0.2005                   | 5.0527           | 273.1540                       | 1.8534                          | 39.5811                                  | 51.9961                              | 0.1376                                   |
| 13/02/2017           | 93.7909           | 0.0978                        | 0.1139               | 0.2200                   | 4.7706           | 272.1210                       | 1.4440                          | 39.5272                                  | 51.9961                              | 0.0459                                   |
| 14/02/2017           | 94.0880           | 0.0799                        | 0.1120               | 0.1919                   | 4.6894           | 273.2170                       | 1.4399                          | 39.4265                                  | 51.8915                              | 0.1682                                   |
| 15/02/2017           | 94.2089           | 0.0725                        | 0.1109               | 0.1852                   | 4.6453           | 271.2510                       | 2.0345                          | 39.3680                                  | 51.8739                              | 0.0229                                   |
| 16/02/2017           | 93.7126           | 0.0893                        | 0.1112               | 0.2018                   | 4.8854           | 272.1500                       | 1.9175                          | 39.5053                                  | 51.9493                              | 0.0688                                   |
| 17/02/2017           | 92.8972           | 0.0991                        | 0.1108               | 0.2108                   | 5.0852           | 272.1811                       | 2.1097                          | 39.5726                                  | 51.9650                              | 0.0841                                   |
| 18/02/2017           | 93.0815           | 0.0943                        | 0.1114               | 0.2065                   | 5.2991           | 272.3120                       | 2.3924                          | 39.6570                                  | 52.0179                              | 0.0000                                   |
| 19/02/2017           | 93.2979           | 0.0864                        | 0.1102               | 0.1966                   | 5.3196           | 273.4410                       | 2.7015                          | 39.7031                                  | 52.0706                              | 0.0765                                   |
| 20/02/2017           | 93.6162           | 0.1013                        | 0.1155               | 0.2179                   | 5.0775           | 273.1110                       | 2.0526                          | 39.6427                                  | 52.0120                              | 0.3441                                   |
| 21/02/2017           | 93.6061           | 0.0938                        | 0.1127               | 0.2088                   | 5.0301           | 273.2740                       | 2.0011                          | 39.5524                                  | 51.9643                              | 0.0841                                   |
| 22/02/2017           | 93.7140           | 0.0913                        | 0.1129               | 0.2046                   | 5.1632           | 273.1210                       | 1.9927                          | 39.6161                                  | 51.9929                              | 0.0459                                   |
| 23/02/2017           | 92.8478           | 0.1065                        | 0.1113               | 0.2232                   | 5.2100           | 273.1278                       | 2.2155                          | 39.6266                                  | 52.0237                              | 0.1376                                   |
| 24/02/2017           | 92.7269           | 0.0921                        | 0.1132               | 0.2059                   | 5.3688           | 273.1260                       | 2.1041                          | 39.6986                                  | 51.9703                              | 0.0000                                   |
| 25/02/2017           | 93.0072           | 0.0391                        | 0.0995               | 0.1386                   | 5.4185           | 272.3316                       | 2.2559                          | 39.4628                                  | 51.9912                              | 0.0994                                   |
| 26/02/2017           | 91.5224           | 0.1249                        | 0.1161               | 0.2477                   | 4.5466           | 273.5800                       | 3.2320                          | 39.3717                                  | 51.4616                              | 0.0918                                   |
| 27/02/2017           | 93.1011           | 0.0951                        | 0.1158               | 0.2109                   | 5.2493           | 273.1600                       | 2.5219                          | 39.6645                                  | 51.9954                              | 0.2447                                   |
| 28/02/2017           | 93.0533           | 0.1128                        | 0.1134               | 0.2267                   | 4.8548           | 223.4131                       | 2.5233                          | 39.4663                                  | 51.6610                              | 0.2447                                   |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
| <b>Mínimo</b>        | 91.5224           | 0.0391                        | 0.0948               | 0.1386                   | 4.5466           | 223.4131                       | 1.2533                          | 39.3680                                  | 51.4616                              | 0.0000                                   |

**Observaciones:**

**INFORME MENSUAL SOBRE LAS ESPECIFICACIONES DEL GAS NATURAL**



(Valores promedio diarios)

|                           |   |
|---------------------------|---|
| <b>PERMISIONARIO:</b>     | Compañía Nacional de Gas SA de CV - Permiso G/11/DIS/1997 |
| <b>PUNTO DE MEDICIÓN:</b> | Cruce Internacional 2 - Estacion Importacion Phenix       |
| <b>ZONA DE MEDICIÓN:</b>  | <u>RESTO DEL PAÍS</u>                                     |

| FECHA:<br>(dd/mm/aa) | Metano<br>(% vol) | Bióxido de<br>Carbono<br>(% vol) | Nitrógeno<br>(% vol) | Total Inertes<br>(% vol) | Etano<br>(% vol) | Temperatura de<br>Rocio<br>(K) | Humedad<br>(mg/m <sup>3</sup> ) | Poder<br>Calorífico<br>(MJ/m <sup>3</sup> ) | Índice Wobbe<br>(MJ/m <sup>3</sup> ) | Acido<br>Sulfhídrico<br>(mg/m <sup>3</sup> ) | Azufre total*<br>(mg/m <sup>3</sup> ) | Oxígeno*<br>(% vol) |
|----------------------|-------------------|----------------------------------|----------------------|--------------------------|------------------|--------------------------------|---------------------------------|---|--------------------------------------|--|---------------------------------------|---------------------|
| 01/02/2017           | 94.2860           | 0.0999                           | 0.1144               | 0.2142                   | 4.9506           | 270.1250                       | 1.4900                          | 39.5328                                     | 51.9778                              | 0.0000                                       | 1.3470                                | 0.0000              |
| 02/02/2017           | 94.2377           | 0.0962                           | 0.1159               | 0.2120                   | 5.0513           | 269.7210                       | 1.4914                          | 39.5245                                     | 51.9754                              | 0.1300                                       |                                       |                     |
| 03/02/2017           | 94.0898           | 0.1031                           | 0.1148               | 0.2179                   | 5.1798           | 270.5240                       | 1.2533                          | 39.5677                                     | 51.9951                              | 0.2294                                       |                                       |                     |
| 04/02/2017           | 93.7818           | 0.0937                           | 0.1142               | 0.2079                   | 5.4930           | 272.1240                       | 1.4803                          | 39.6648                                     | 52.0564                              | 0.1300                                       |                                       |                     |
| 05/02/2017           | 93.3551           | 0.1212                           | 0.1149               | 0.2360                   | 5.8038           | 271.1700                       | 1.7908                          | 39.8100                                     | 52.1172                              | 0.1071                                       |                                       |                     |
| 06/02/2017           | 93.1188           | 0.1220                           | 0.1210               | 0.2430                   | 5.9292           | 272.1250                       | 2.2935                          | 39.9209                                     | 52.1751                              | 0.0229                                       |                                       |                     |
| 07/02/2017           | 93.1822           | 0.1370                           | 0.1275               | 0.2645                   | 5.8607           | 273.4258                       | 1.4914                          | 39.8823                                     | 52.1400                              | 0.0918                                       |                                       |                     |
| 08/02/2017           | 93.3100           | 0.0971                           | 0.1187               | 0.2158                   | 5.8650           | 272.6410                       | 1.5680                          | 39.8357                                     | 52.1469                              | 0.4282                                       |                                       |                     |
| 09/02/2017           | 93.5009           | 0.0918                           | 0.1133               | 0.2050                   | 5.7601           | 273.8217                       | 1.4621                          | 39.7533                                     | 52.1077                              | 0.1071                                       |                                       |                     |
| 10/02/2017           | 93.6683           | 0.0851                           | 0.1107               | 0.1958                   | 5.6050           | 273.1740                       | 1.4621                          | 39.7110                                     | 52.0899                              | 0.1606                                       |                                       |                     |
| 11/02/2017           | 94.0557           | 0.0909                           | 0.1115               | 0.2024                   | 5.2253           | 272.2280                       | 1.4301                          | 39.5910                                     | 52.0183                              | 0.0841                                       |                                       |                     |
| 12/02/2017           | 93.8850           | 0.0964                           | 0.1134               | 0.2098                   | 5.2536           | 273.1540                       | 1.8534                          | 39.6975                                     | 52.0723                              | 0.1376                                       |                                       |                     |
| 13/02/2017           | 94.0299           | 0.1173                           | 0.1243               | 0.2416                   | 5.0212           | 272.1210                       | 1.4440                          | 39.6581                                     | 52.0299                              | 0.0459                                       |                                       |                     |
| 14/02/2017           | 94.2942           | 0.0957                           | 0.1191               | 0.2148                   | 4.9390           | 273.2170                       | 1.4399                          | 39.5278                                     | 51.9758                              | 0.1682                                       |                                       |                     |
| 15/02/2017           | 94.4575           | 0.0900                           | 0.1140               | 0.2040                   | 4.8372           | 271.2510                       | 2.0345                          | 39.4670                                     | 51.9485                              | 0.0229                                       |                                       |                     |
| 16/02/2017           | 94.0976           | 0.1054                           | 0.1138               | 0.2193                   | 5.1412           | 272.1500                       | 1.9175                          | 39.5794                                     | 52.0002                              | 0.0688                                       |                                       |                     |
| 17/02/2017           | 93.5456           | 0.1352                           | 0.1174               | 0.2526                   | 5.4694           | 272.1811                       | 2.1097                          | 39.7952                                     | 52.0971                              | 0.0841                                       |                                       |                     |
| 18/02/2017           | 93.5263           | 0.1085                           | 0.1144               | 0.2229                   | 5.5136           | 272.3120                       | 2.3924                          | 39.8303                                     | 52.1369                              | 0.0000                                       |                                       |                     |
| 19/02/2017           | 93.5737           | 0.1038                           | 0.1157               | 0.2195                   | 5.5108           | 273.4410                       | 2.7015                          | 39.8066                                     | 52.1266                              | 0.0765                                       |                                       |                     |
| 20/02/2017           | 93.7942           | 0.1205                           | 0.1214               | 0.2419                   | 5.2676           | 273.1110                       | 2.0526                          | 39.7302                                     | 52.0693                              | 0.3441                                       |                                       |                     |
| 21/02/2017           | 93.9248           | 0.1224                           | 0.1214               | 0.2438                   | 5.2220           | 273.2740                       | 2.0011                          | 39.6478                                     | 52.0225                              | 0.0841                                       |                                       |                     |
| 22/02/2017           | 93.8920           | 0.1111                           | 0.1159               | 0.2270                   | 5.3042           | 273.1210                       | 1.9927                          | 39.6488                                     | 52.0339                              | 0.0459                                       |                                       |                     |
| 23/02/2017           | 93.4907           | 0.1271                           | 0.1201               | 0.2472                   | 5.5574           | 273.1278                       | 2.2155                          | 39.8079                                     | 52.1088                              | 0.1376                                       |                                       |                     |
| 24/02/2017           | 93.5034           | 0.1216                           | 0.1160               | 0.2376                   | 5.6532           | 273.1260                       | 2.1041                          | 39.7646                                     | 52.0911                              | 0.0000                                       |                                       |                     |
| 25/02/2017           | 93.5417           | 0.1081                           | 0.1149               | 0.2229                   | 5.6599           | 272.3316                       | 2.2559                          | 39.7507                                     | 52.0937                              | 0.0994                                       |                                       |                     |
| 26/02/2017           | 93.3353           | 0.2380                           | 0.1221               | 0.3601                   | 5.5393           | 273.5800                       | 3.2320                          | 39.8093                                     | 52.0299                              | 0.0918                                       |                                       |                     |
| 27/02/2017           | 93.4555           | 0.1461                           | 0.1234               | 0.2696                   | 5.5583           | 273.1600                       | 2.5219                          | 39.8080                                     | 52.0938                              | 0.2447                                       |                                       |                     |
| 28/02/2017           | 93.6611           | 0.1827                           | 0.1211               | 0.3037                   | 5.4094           | 223.4131                       | 2.5233                          | 39.6902                                     | 52.0036                              | 0.2447                                       |                                       |                     |
|                      |                   |                                  |                      |                          |                  |                                |                                 |   |                                      |  |                                       |                     |
|                      |                   |                                  |                      |                          |                  |                                |                                 |   |                                      |  |                                       |                     |
|                      |                   |                                  |                      |                          |                  |                                |                                 |   |                                      |  |                                       |                     |

\*/ Los valores trimestrales se deberán reportar en los meses de enero, abril, julio y octubre de cada año, respecto del trimestre inmediato anterior.

|                   |             |            |             |             |             |          |          |             |             |          |  |  |
|-------------------|-------------|------------|-------------|-------------|-------------|----------|----------|-------------|-------------|----------|--|--|
| <b>Mínimo</b>     | 93.1188     | 0.0851     | 0.1107      | 0.1958      | 4.8372      | 0.0000   | 0.0000   | 39.4670     | 51.9485     | 0.0000   |  |  |
| <b>Promedio</b>   | 93.7355     | 0.1167     | 0.1173      | 0.2340      | 5.4136      | #¡DIV/0! | #¡DIV/0! | 39.7076     | 52.0619     | #¡DIV/0! |  |  |
| <b>Máximo</b>     | 94.4575     | 0.2380     | 0.1275      | 0.3601      | 5.9292      | 0.0000   | 0.0000   | 39.9209     | 52.1751     | 0.0000   |  |  |
| <b>Desv. Est.</b> | 0.359844732 | 0.03164304 | 0.004180514 | 0.034320245 | 0.304290332 | #¡DIV/0! | #¡DIV/0! | 0.120077069 | 0.061222113 | #¡DIV/0! |  |  |

Observaciones:

**INFORME MENSUAL SOBRE LAS ESPECIFICACIONES DEL GAS NATURAL**

**(Registros máximos diarios)**



**PERMISIONARIO:**

**Compañía Nacional de Gas SA de CV - Permiso G/11/DIS/1997**

**PUNTO DE MEDICIÓN:**

**Cruce Internacional 2 - Estacion Importacion Phenix**

**ZONA DE MEDICIÓN:**

**RESTO DEL PAÍS**

| FECHA:<br>(dd/mm/aa) | Metano<br>(% vol) | Bióxido de Carbono<br>(% vol) | Nitrógeno<br>(% vol) | Total Inertes<br>(% vol) | Etano<br>(% vol) | Temperatura de<br>Rocio<br>(K) | Humedad<br>(mg/m <sup>3</sup> ) | Poder Calorífico<br>(MJ/m <sup>3</sup> ) | Índice Wobbe<br>(MJ/m <sup>3</sup> ) | Acido Sulhídrico<br>(mg/m <sup>3</sup> ) |
|----------------------|-------------------|-------------------------------|----------------------|--------------------------|------------------|--------------------------------|---------------------------------|--|--------------------------------------|--|
| 01/02/2017           | 94.5629           | 0.1244                        | 0.1185               | 0.2378                   | 5.1693           | 270.1250                       | 1.4900                          | 39.8487                                  | 52.1569                              | 0.0000                                   |
| 02/02/2017           | 94.3884           | 0.1060                        | 0.1182               | 0.2222                   | 5.1486           | 269.7210                       | 1.4914                          | 39.5891                                  | 52.0094                              | 0.1300                                   |
| 03/02/2017           | 94.3914           | 0.1241                        | 0.1176               | 0.2366                   | 5.4008           | 270.5240                       | 1.2533                          | 39.6165                                  | 52.0303                              | 0.2294                                   |
| 04/02/2017           | 94.0047           | 0.1024                        | 0.1179               | 0.2203                   | 5.7211           | 272.1240                       | 1.4803                          | 39.7564                                  | 52.1079                              | 0.1300                                   |
| 05/02/2017           | 93.5087           | 0.3012                        | 0.1181               | 0.4168                   | 5.9821           | 271.1700                       | 1.7908                          | 39.8867                                  | 52.1736                              | 0.1071                                   |
| 06/02/2017           | 93.3197           | 0.1501                        | 0.1267               | 0.2674                   | 6.0698           | 272.1250                       | 2.2935                          | 39.9755                                  | 52.2082                              | 0.0229                                   |
| 07/02/2017           | 93.3654           | 0.2533                        | 0.1337               | 0.3830                   | 5.9905           | 273.4258                       | 1.4914                          | 40.0249                                  | 52.2229                              | 0.0918                                   |
| 08/02/2017           | 93.5899           | 0.1230                        | 0.1272               | 0.2490                   | 5.9599           | 272.6410                       | 1.5680                          | 39.9147                                  | 52.1755                              | 0.4282                                   |
| 09/02/2017           | 93.7432           | 0.1140                        | 0.1185               | 0.2289                   | 5.9776           | 273.8217                       | 1.4621                          | 39.7924                                  | 52.1401                              | 0.1071                                   |
| 10/02/2017           | 93.8074           | 0.1020                        | 0.1226               | 0.2193                   | 5.7722           | 273.1740                       | 1.4621                          | 39.7593                                  | 52.1237                              | 0.1606                                   |
| 11/02/2017           | 94.3206           | 0.1253                        | 0.1181               | 0.2325                   | 5.5841           | 272.2280                       | 1.4301                          | 39.7352                                  | 52.0958                              | 0.0841                                   |
| 12/02/2017           | 94.1653           | 0.1118                        | 0.1197               | 0.2271                   | 5.4750           | 273.1540                       | 1.8534                          | 39.8185                                  | 52.1397                              | 0.1376                                   |
| 13/02/2017           | 94.3314           | 0.1900                        | 0.1313               | 0.3204                   | 5.1570           | 272.1210                       | 1.4440                          | 39.7976                                  | 52.1160                              | 0.0459                                   |
| 14/02/2017           | 94.5030           | 0.1366                        | 0.1322               | 0.2526                   | 5.1494           | 273.2170                       | 1.4399                          | 39.6018                                  | 52.0163                              | 0.1682                                   |
| 15/02/2017           | 94.6629           | 0.1249                        | 0.1157               | 0.2393                   | 4.9958           | 271.2510                       | 2.0345                          | 39.6048                                  | 52.0255                              | 0.0229                                   |
| 16/02/2017           | 94.3244           | 0.1766                        | 0.1167               | 0.2910                   | 5.4519           | 272.1500                       | 1.9175                          | 39.8494                                  | 52.1430                              | 0.0688                                   |
| 17/02/2017           | 94.0268           | 0.1867                        | 0.1320               | 0.3014                   | 5.8824           | 272.1811                       | 2.1097                          | 40.1189                                  | 52.2416                              | 0.0841                                   |
| 18/02/2017           | 93.8843           | 0.1413                        | 0.1198               | 0.2549                   | 5.7823           | 272.3120                       | 2.3924                          | 40.1363                                  | 52.3154                              | 0.0000                                   |
| 19/02/2017           | 93.7492           | 0.1211                        | 0.1211               | 0.2417                   | 5.7062           | 273.4410                       | 2.7015                          | 39.9273                                  | 52.1858                              | 0.0765                                   |
| 20/02/2017           | 94.0047           | 0.1549                        | 0.1309               | 0.2720                   | 5.3820           | 273.1110                       | 2.0526                          | 39.8163                                  | 52.1196                              | 0.3441                                   |
| 21/02/2017           | 94.1658           | 0.1512                        | 0.1325               | 0.2816                   | 5.4081           | 273.2740                       | 2.0011                          | 39.7765                                  | 52.0695                              | 0.0841                                   |
| 22/02/2017           | 94.0195           | 0.1543                        | 0.1207               | 0.2705                   | 5.4741           | 273.1210                       | 1.9927                          | 39.7076                                  | 52.0700                              | 0.0459                                   |
| 23/02/2017           | 93.9284           | 0.1546                        | 0.1413               | 0.2922                   | 5.8277           | 273.1278                       | 2.2155                          | 40.1294                                  | 52.2587                              | 0.1376                                   |
| 24/02/2017           | 93.7723           | 0.3540                        | 0.1208               | 0.4679                   | 6.2990           | 273.1260                       | 2.1041                          | 39.9267                                  | 52.1927                              | 0.0000                                   |
| 25/02/2017           | 94.1790           | 0.2384                        | 0.1330               | 0.3594                   | 6.0161           | 272.3316                       | 2.2559                          | 39.9826                                  | 52.1937                              | 0.0994                                   |
| 26/02/2017           | 94.0453           | 0.7181                        | 0.1283               | 0.8402                   | 6.8938           | 273.5800                       | 3.2320                          | 40.1821                                  | 52.1654                              | 0.0918                                   |
| 27/02/2017           | 93.8119           | 0.1741                        | 0.1320               | 0.3061                   | 5.7171           | 273.1600                       | 2.5219                          | 39.9774                                  | 52.1730                              | 0.2447                                   |
| 28/02/2017           | 93.9548           | 0.4026                        | 0.1348               | 0.5333                   | 5.6073           | 223.4131                       | 2.5233                          | 39.7691                                  | 52.0954                              | 0.2447                                   |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
| <b>Máximo</b>        | 94.6629           | 0.7181                        | 0.1413               | 0.8402                   | 6.8938           | 273.8217                       | 3.2320                          | 40.1821                                  | 52.3154                              | 0.4282                                   |

**Observaciones:**

**INFORME MENSUAL SOBRE LAS ESPECIFICACIONES DEL GAS NATURAL**

**(Registros mínimos diarios)**



**PERMISIONARIO:**

**Compañía Nacional de Gas SA de CV - Permiso G/11/DIS/1997**

**PUNTO DE MEDICIÓN:**

**Cruce Internacional 2 - Estacion Importacion Phenix**

**ZONA DE MEDICIÓN:**

**RESTO DEL PAÍS**

| FECHA:<br>(dd/mm/aa) | Metano<br>(% vol) | Bióxido de Carbono<br>(% vol) | Nitrógeno<br>(% vol) | Total Inertes<br>(% vol) | Etano<br>(% vol) | Temperatura de<br>Rocio<br>(K) | Humedad<br>(mg/m <sup>3</sup> ) | Poder Calorífico<br>(MJ/m <sup>3</sup> ) | Índice Wobbe<br>(MJ/m <sup>3</sup> ) | Acido Sulhídrico<br>(mg/m <sup>3</sup> ) |
|----------------------|-------------------|-------------------------------|----------------------|--------------------------|------------------|--------------------------------|---------------------------------|--|--------------------------------------|--|
| 01/02/2017           | 93.8348           | 0.0832                        | 0.1123               | 0.1955                   | 4.7393           | 270.1250                       | 1.4900                          | 39.4068                                  | 51.8925                              | 0.0000                                   |
| 02/02/2017           | 94.0713           | 0.0841                        | 0.1133               | 0.1977                   | 4.9233           | 269.7210                       | 1.4914                          | 39.4572                                  | 51.9409                              | 0.1300                                   |
| 03/02/2017           | 93.8966           | 0.0851                        | 0.1123               | 0.1974                   | 4.8683           | 270.5240                       | 1.2533                          | 39.4965                                  | 51.9591                              | 0.2294                                   |
| 04/02/2017           | 93.5187           | 0.0845                        | 0.1117               | 0.1970                   | 5.2984           | 272.1240                       | 1.4803                          | 39.5794                                  | 52.0060                              | 0.1300                                   |
| 05/02/2017           | 93.1818           | 0.0962                        | 0.1125               | 0.2094                   | 5.6157           | 271.1700                       | 1.7908                          | 39.6726                                  | 51.9128                              | 0.1071                                   |
| 06/02/2017           | 92.9882           | 0.1028                        | 0.1147               | 0.2175                   | 5.7747           | 272.1250                       | 2.2935                          | 39.8244                                  | 52.1088                              | 0.0229                                   |
| 07/02/2017           | 92.9663           | 0.1079                        | 0.1204               | 0.2319                   | 5.7262           | 273.4258                       | 1.4914                          | 39.8029                                  | 52.0591                              | 0.0918                                   |
| 08/02/2017           | 93.1076           | 0.0791                        | 0.1134               | 0.1938                   | 5.7217           | 272.6410                       | 1.5680                          | 39.7261                                  | 52.1009                              | 0.4282                                   |
| 09/02/2017           | 93.3324           | 0.0732                        | 0.1094               | 0.1850                   | 5.5393           | 273.8217                       | 1.4621                          | 39.6492                                  | 52.0403                              | 0.1071                                   |
| 10/02/2017           | 93.4983           | 0.0750                        | 0.0948               | 0.1809                   | 5.4577           | 273.1740                       | 1.4621                          | 39.6588                                  | 52.0514                              | 0.1606                                   |
| 11/02/2017           | 93.6256           | 0.0719                        | 0.1066               | 0.1823                   | 4.9485           | 272.2280                       | 1.4301                          | 39.4993                                  | 51.9501                              | 0.0841                                   |
| 12/02/2017           | 93.6576           | 0.0885                        | 0.1093               | 0.2005                   | 5.0527           | 273.1540                       | 1.8534                          | 39.5811                                  | 51.9961                              | 0.1376                                   |
| 13/02/2017           | 93.7909           | 0.0978                        | 0.1139               | 0.2200                   | 4.7706           | 272.1210                       | 1.4440                          | 39.5272                                  | 51.9961                              | 0.0459                                   |
| 14/02/2017           | 94.0880           | 0.0799                        | 0.1120               | 0.1919                   | 4.6894           | 273.2170                       | 1.4399                          | 39.4265                                  | 51.8915                              | 0.1682                                   |
| 15/02/2017           | 94.2089           | 0.0725                        | 0.1109               | 0.1852                   | 4.6453           | 271.2510                       | 2.0345                          | 39.3680                                  | 51.8739                              | 0.0229                                   |
| 16/02/2017           | 93.7126           | 0.0893                        | 0.1112               | 0.2018                   | 4.8854           | 272.1500                       | 1.9175                          | 39.5053                                  | 51.9493                              | 0.0688                                   |
| 17/02/2017           | 92.8972           | 0.0991                        | 0.1108               | 0.2108                   | 5.0852           | 272.1811                       | 2.1097                          | 39.5726                                  | 51.9650                              | 0.0841                                   |
| 18/02/2017           | 93.0815           | 0.0943                        | 0.1114               | 0.2065                   | 5.2991           | 272.3120                       | 2.3924                          | 39.6570                                  | 52.0179                              | 0.0000                                   |
| 19/02/2017           | 93.2979           | 0.0864                        | 0.1102               | 0.1966                   | 5.3196           | 273.4410                       | 2.7015                          | 39.7031                                  | 52.0706                              | 0.0765                                   |
| 20/02/2017           | 93.6162           | 0.1013                        | 0.1155               | 0.2179                   | 5.0775           | 273.1110                       | 2.0526                          | 39.6427                                  | 52.0120                              | 0.3441                                   |
| 21/02/2017           | 93.6061           | 0.0938                        | 0.1127               | 0.2088                   | 5.0301           | 273.2740                       | 2.0011                          | 39.5524                                  | 51.9643                              | 0.0841                                   |
| 22/02/2017           | 93.7140           | 0.0913                        | 0.1129               | 0.2046                   | 5.1632           | 273.1210                       | 1.9927                          | 39.6161                                  | 51.9929                              | 0.0459                                   |
| 23/02/2017           | 92.8478           | 0.1065                        | 0.1113               | 0.2232                   | 5.2100           | 273.1278                       | 2.2155                          | 39.6266                                  | 52.0237                              | 0.1376                                   |
| 24/02/2017           | 92.7269           | 0.0921                        | 0.1132               | 0.2059                   | 5.3688           | 273.1260                       | 2.1041                          | 39.6986                                  | 51.9703                              | 0.0000                                   |
| 25/02/2017           | 93.0072           | 0.0391                        | 0.0995               | 0.1386                   | 5.4185           | 272.3316                       | 2.2559                          | 39.4628                                  | 51.9912                              | 0.0994                                   |
| 26/02/2017           | 91.5224           | 0.1249                        | 0.1161               | 0.2477                   | 4.5466           | 273.5800                       | 3.2320                          | 39.3717                                  | 51.4616                              | 0.0918                                   |
| 27/02/2017           | 93.1011           | 0.0951                        | 0.1158               | 0.2109                   | 5.2493           | 273.1600                       | 2.5219                          | 39.6645                                  | 51.9954                              | 0.2447                                   |
| 28/02/2017           | 93.0533           | 0.1128                        | 0.1134               | 0.2267                   | 4.8548           | 223.4131                       | 2.5233                          | 39.4663                                  | 51.6610                              | 0.2447                                   |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
|                      |                   |                               |                      |                          |                  |                                |                                 |  |                                      |  |
| <b>Mínimo</b>        | 91.5224           | 0.0391                        | 0.0948               | 0.1386                   | 4.5466           | 223.4131                       | 1.2533                          | 39.3680                                  | 51.4616                              | 0.0000                                   |

**Observaciones:**

March 22, 2017

FESCO, Ltd.  
1100 Fesco Ave. - Alice, Texas 78332

For: Compania Nacional de Gas S.A. de C.V.  
P.O. Box 690  
Eagle Pass, Texas 78853

Sample: West Texas Gas - Customs Sales  
Station No. 781-009  
Composite Gas Sample @ 384 psig & 64 °F

Date Sampled: 02/10/2017

Job Number: 71641.001

CHROMATOGRAPH EXTENDED ANALYSIS - SUMMATION REPORT

| COMPONENT           | VOL %        | L/M <sup>3</sup> |
|---------------------|--------------|------------------|
| Oxygen              | 0.023        |                  |
| Hydrogen Sulfide*   | < 0.001      |                  |
| Nitrogen            | 0.766        |                  |
| Carbon Dioxide      | 0.094        |                  |
| Methane             | 92.909       |                  |
| Ethane              | 5.634        |                  |
| Propane             | 0.320        | 0.01172          |
| Isobutane           | 0.053        | 0.00231          |
| n-Butane            | 0.082        | 0.00344          |
| 2-2 Dimethylpropane | 0.001        | 0.00005          |
| Isopentane          | 0.031        | 0.00151          |
| n-Pentane           | 0.028        | 0.00135          |
| Hexanes             | 0.035        | 0.00192          |
| Heptanes Plus       | <u>0.024</u> | <u>0.00121</u>   |
| Totals              | 100.000      | 0.02349          |

Computed Real Characteristics Of Heptanes Plus:

Specific Gravity ----- 3.146 (Air=1)  
Molecular Weight ----- 90.91  
Gross Heating Value ----- 4698 BTU/CF

Computed Real Characteristics Of Total Sample:

Specific Gravity ----- 0.594 (Air=1)  
Compressibility (Z) ----- 0.9977  
Molecular Weight ----- 17.18  
Gross Heating Value  
Dry Basis ----- 1055 BTU/CF 39.30 mJ/M<sup>3</sup>  
Saturated Basis ----- 1037 BTU/CF 38.65 mJ/M<sup>3</sup>  
Wobbe Index ----- 1368 BTU/CF 50.98 mJ/M<sup>3</sup>

Water Content Provided By: Compania Nacional de Gas S.A. de C.V.  
3.0 Lbs/MMCF 48.06 mg/M<sup>3</sup>

\*Hydrogen Sulfide tested on location by: Compania Nacional de Gas S.A. de C.V.

Results: 0.063 Gr/100 CF, 1.0 PPMV, 0.000 Mol % or 1.442 mg/M<sup>3</sup>

H2S As Total Sulfur: 0.059 Gr/100 CF or 1.347 mg/M<sup>3</sup>

Base Conditions: 14.650 PSI & 60 Deg F

Sampled By: MSI  
Analyst: MR  
Processor: dm  
Cylinder ID: T-3526

Certified: FESCO, Ltd. - Alice, Texas

David Dannhaus 361-661-7015

**CHROMATOGRAPH EXTENDED ANALYSIS  
TOTAL REPORT**

| COMPONENT              | VOL %        | L/M <sup>3</sup> | WT %         |
|------------------------|--------------|------------------|--------------|
| Oxygen                 | 0.023        |                  | 0.043        |
| Hydrogen Sulfide*      | < 0.001      |                  | < 0.001      |
| Nitrogen               | 0.766        |                  | 1.249        |
| Carbon Dioxide         | 0.094        |                  | 0.241        |
| Methane                | 92.909       |                  | 86.772       |
| Ethane                 | 5.634        |                  | 9.862        |
| Propane                | 0.320        | 0.01172          | 0.821        |
| Isobutane              | 0.053        | 0.00231          | 0.179        |
| n-Butane               | 0.082        | 0.00344          | 0.277        |
| 2,2 Dimethylpropane    | 0.001        | 0.00005          | 0.004        |
| Isopentane             | 0.031        | 0.00151          | 0.130        |
| n-Pentane              | 0.028        | 0.00135          | 0.118        |
| 2,2 Dimethylbutane     | 0.002        | 0.00011          | 0.010        |
| Cyclopentane           | 0.000        | 0.00000          | 0.000        |
| 2,3 Dimethylbutane     | 0.004        | 0.00022          | 0.020        |
| 2 Methylpentane        | 0.011        | 0.00061          | 0.055        |
| 3 Methylpentane        | 0.006        | 0.00033          | 0.030        |
| n-Hexane               | 0.012        | 0.00066          | 0.060        |
| Methylcyclopentane     | 0.004        | 0.00018          | 0.020        |
| Benzene                | 0.004        | 0.00015          | 0.018        |
| Cyclohexane            | 0.003        | 0.00014          | 0.015        |
| 2-Methylhexane         | 0.002        | 0.00012          | 0.012        |
| 3-Methylhexane         | 0.002        | 0.00012          | 0.012        |
| 2,2,4 Trimethylpentane | 0.000        | 0.00000          | 0.000        |
| Other C7's             | 0.002        | 0.00012          | 0.012        |
| n-Heptane              | 0.003        | 0.00018          | 0.018        |
| Methylcyclohexane      | 0.002        | 0.00011          | 0.011        |
| Toluene                | 0.002        | 0.00009          | 0.011        |
| Other C8's             | 0.000        | 0.00000          | 0.000        |
| n-Octane               | 0.000        | 0.00000          | 0.000        |
| Ethylbenzene           | 0.000        | 0.00000          | 0.000        |
| M & P Xylenes          | 0.000        | 0.00000          | 0.000        |
| O-Xylene               | 0.000        | 0.00000          | 0.000        |
| Other C9's             | 0.000        | 0.00000          | 0.000        |
| n-Nonane               | 0.000        | 0.00000          | 0.000        |
| Other C10's            | 0.000        | 0.00000          | 0.000        |
| n-Decane               | 0.000        | 0.00000          | 0.000        |
| Undecanes (11)         | <u>0.000</u> | <u>0.00000</u>   | <u>0.000</u> |
| Totals                 | 100.000      | 0.02349          | 100.000      |

**Computed Real Characteristics Of Total Sample:**

|                           |        |                                   |
|---------------------------|--------|-----------------------------------|
| Specific Gravity -----    | 0.594  | (Air=1)                           |
| Compressibility (Z) ----- | 0.9977 |                                   |
| Molecular Weight -----    | 17.18  |                                   |
| Gross Heating Value       |        |                                   |
| Dry Basis -----           | 1055   | BTU/CF    39.30 MJ/M <sup>3</sup> |
| Saturated Basis -----     | 1037   | BTU/CF    38.65 MJ/M <sup>3</sup> |
| Wobbe Index -----         | 1368   | BTU/CF    50.98 MJ/M <sup>3</sup> |