

INFORME MENSUAL SOBRE LAS ESPECIFICACIONES DEL GAS NATURAL

(Valores promedio 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: (dd/mm/aa)	Metano (% vol)	Bióxido de Carbono (% vol)	Nitrógeno (% vol)	Total Inertes (% vol)	Etano (% vol)	Temperatura de Rocio (K)	Humedad (mg/m ³)	Poder Calorífico (MJ/m ³)	Índice Wobbe (MJ/m ³)	Acido Sulfhídrico (mg/m ³)
01/12/15	91.0108	0.3120	0.2016	0.5135	6.5323	272.2440	242.2951	40.8268	52.5040	0.0000
02/12/15	90.3921	0.2071	0.2040	0.4110	7.1952	271.5200	207.0385	41.0901	52.7213	0.0000
03/12/15	90.7199	0.2092	0.1811	0.3903	5.6923	273.5500	320.3691	41.5831	52.9940	6.4326
04/12/15	91.5614	0.2111	0.1814	0.3925	5.3870	271.2500	297.9432	41.1091	52.7335	4.5947
05/12/15	92.4353	0.1937	0.2025	0.3961	5.3919	272.8700	320.3691	40.4385	52.3700	8.0408
06/12/15	92.7637	0.1936	0.1844	0.3780	5.2148	273.2560	320.3691	40.2979	52.3008	9.4192
07/12/15	93.3278	0.1722	0.1679	0.3401	4.9525	272.6580	320.3691	40.0435	52.1829	14.4734
08/12/15	91.7162	0.2096	0.2176	0.4271	5.7568	273.2870	320.3691	40.7435	52.5203	8.7300
09/12/15	91.1971	0.2772	0.2243	0.5015	5.9334	274.2520	320.3691	40.9676	52.5934	9.6489
10/12/15	91.6217	0.2266	0.2107	0.4372	5.8182	274.3690	320.3691	40.7661	52.5242	0.0000
11/12/15	92.0614	0.2014	0.1957	0.3971	5.6298	277.4410	133.2735	40.5793	52.4457	1.3784
12/12/15	93.0965	0.1476	0.1257	0.2734	4.8695	274.4250	121.4199	40.3643	52.3952	9.6489
13/12/15	91.6954	0.2236	0.1783	0.4019	5.4416	275.1280	114.3718	41.0148	52.6756	15.3923
14/12/15	92.1733	0.2838	0.1465	0.4303	5.1804	273.5400	107.4838	40.8003	52.5302	4.8245
15/12/15	91.4454	0.1892	0.1489	0.3381	5.7826	276.8210	101.3327	41.1309	52.7769	7.8110
16/12/15	92.0875	0.1804	0.1572	0.3375	5.5883	276.6500	100.3716	40.7183	52.5538	6.2029
17/12/15	92.3913	0.1886	0.1777	0.3664	5.5273	277.1790	100.2755	40.4755	52.4054	14.2436
18/12/15	91.5576	0.2447	0.1760	0.4207	5.5293	275.2400	104.8888	41.0526	52.6826	5.7434
19/12/15	92.0125	0.3219	0.1729	0.4948	5.2907	270.5100	109.2619	40.7333	52.4556	3.9055
20/12/15	92.0052	0.2394	0.1791	0.4184	5.5212	275.2180	107.4518	40.7060	52.4958	7.3516
21/12/15	92.1568	0.1862	0.1770	0.3632	5.4561	271.2640	320.3691	40.6933	52.5266	9.1894
22/12/15	92.3874	0.2039	0.1721	0.3760	5.3970	276.1380	111.4884	40.5326	52.4282	5.7434
23/12/15	92.2638	0.2036	0.1849	0.3885	5.4951	2731.4250	110.2390	40.5542	52.4348	4.3650
24/12/15	92.6266	0.2025	0.1594	0.3619	5.3565	276.2160	112.4175	40.3866	52.3551	7.5813
25/12/15	92.5244	0.2550	0.1549	0.4098	5.3418	273.6560	111.7447	40.4629	52.3620	7.1218
26/12/15	91.7203	0.3088	0.1647	0.4735	5.5811	273.4380	112.1292	40.8823	52.5507	9.8786
27/12/15	91.6068	0.2293	0.1737	0.4030	5.8522	274.4660	115.0125	40.8641	52.5927	5.0542
28/12/15	93.3558	0.1612	0.1416	0.3027	5.1388	271.6610	114.3718	40.0318	52.1969	2.2974
29/12/15	92.6698	0.2185	0.1572	0.3757	5.3593	275.3400	119.1773	40.3333	52.3156	0.0000
30/12/15	92.7989	0.1821	0.1765	0.3586	5.3087	276.1310	320.3691	40.2750	52.3000	2.2974
31/12/15	93.0720	0.2393	0.1640	0.4033	5.0505	275.3710	105.7442	40.1647	52.2041	0.9189

Azufre total* (mg/m ³)	Oxígeno* (% vol)

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

Mínimo	90.3921	0.1476	0.1257	0.2734	4.8695	270.5100	100.2755	40.0318	52.1829	0.0000
Promedio	92.0792	0.2201	0.1761	0.3962	5.5346	353.4359	185.2598	40.6652	52.4880	6.2029
Máximo	93.3558	0.3219	0.2243	0.5135	7.1952	2731.4250	320.3691	41.5831	52.9940	15.3923
Desv. Est.	0.726099486	0.043547552	0.022459305	0.053424961	0.444631078	441.3400792	97.65713914	0.352485386	0.182048952	4.246492491

INFORME MENSUAL SOBRE LAS ESPECIFICACIONES DEL GAS NATURAL
(Valores promedio diarios)

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

FECHA: (dd/mm/aa)	Metano (% vol)	Bióxido de Carbono (% vol)	Nitrógeno (% vol)	Total Inertes (% vol)	Etano (% vol)	Temperatura de Rocio (K)	Humedad (mg/m ³)	Poder Calorífico (MJ/m ³)	Índice Wobbe (MJ/m ³)	Acido Sulfhídrico (mg/m ³)
01/12/15	92.7160	0.3610	0.1950	0.5560	5.2690		112.1300	39.9800	50.6200	1.4420
02/12/15										
03/12/15										
04/12/15										
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27/12/15										
28/12/15										
29/12/15										
30/12/15										
31/12/15										

Azufre total* (mg/m ³)	Oxígeno* (% vol)
1.3460	0.0550

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

Mínimo	92.7160	0.3610	0.1950	0.5560	5.2690	0.0000	112.1300	39.9800	50.6200	1.4420
Promedio	92.7160	0.3610	0.1950	0.5560	5.2690	0.0000	0.0000	39.9800	0.0000	0.0000
Máximo	92.7160	0.3610	0.1950	0.5560	5.2690	0.0000	112.1300	39.9800	50.6200	1.4420
Desv. Est.	92.7160	0.3610	0.1950	0.5560	5.2690	0.0000	112.1300	39.9800	50.6200	1.4420

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: (dd/mm/aa)	Metano (% vol)	Bióxido de Carbono (% vol)	Nitrógeno (% vol)	Total Inertes (% vol)	Etano (% vol)	Temperatura de Rocio (K)	Humedad (mg/m ³)	Poder Calorífico (MJ/m ³)	Índice Wobbe (MJ/m ³)	Acido Sulfhídrico (mg/m ³)
01/12/15	91.1270	0.3192	0.2048	0.5214	6.5979	272.2440	242.2951	40.9229	52.5636	0.0000
02/12/15	90.6050	0.2125	0.2154	0.4279	7.2920	271.5200	207.0385	41.1899	52.7670	0.0000
03/12/15	91.5322	0.2221	0.1920	0.4016	5.7935	273.5500	320.3691	42.1323	53.2979	6.4326
04/12/15	92.3070	0.2189	0.1886	0.4017	5.5397	271.2500	297.9432	42.0425	53.2390	4.5947
05/12/15	92.4864	0.1953	0.2068	0.4020	5.4062	272.8700	320.3691	40.4467	52.3755	8.0408
06/12/15	93.0076	0.2026	0.1870	0.3860	5.4953	273.2560	320.3691	40.4111	52.3578	9.4192
07/12/15	93.6706	0.1828	0.1813	0.3641	5.0951	272.6580	320.3691	40.1757	52.2424	14.4734
08/12/15	91.9823	0.2173	0.2275	0.4448	5.8438	273.2870	320.3691	40.8550	52.5716	8.7300
09/12/15	91.2680	0.2796	0.2261	0.5056	5.9544	274.2520	320.3691	41.0054	52.6117	9.6489
10/12/15	91.8445	0.2317	0.2149	0.4464	5.9139	274.3690	320.3691	40.8515	52.5658	0.0000
11/12/15	92.1241	0.2028	0.1997	0.4025	5.6571	277.4410	133.2735	40.5970	52.4527	1.3784
12/12/15	93.6439	0.1508	0.1283	0.2772	4.9164	274.4250	121.4199	40.5439	52.4932	9.6489
13/12/15	92.0778	0.2277	0.1814	0.4056	5.5576	275.1280	114.3718	41.2135	52.7819	15.3923
14/12/15	92.4916	0.2970	0.1516	0.4437	5.2400	273.5400	107.4838	41.0717	52.6829	4.8245
15/12/15	91.8595	0.1906	0.1533	0.3429	5.8645	276.8210	101.3327	41.4402	52.9455	7.8110
16/12/15	92.2313	0.1845	0.1609	0.3454	5.6691	276.6500	100.3716	40.7762	52.5811	6.2029
17/12/15	92.5583	0.1945	0.1938	0.3804	5.6767	277.1790	100.2755	40.5802	52.4573	14.2436
18/12/15	92.3505	0.3617	0.1899	0.5259	5.7766	275.2400	104.8888	41.2415	52.8202	5.7434
19/12/15	92.1391	0.3583	0.1862	0.5286	5.5857	270.5100	109.2619	40.9118	52.5292	3.9055
20/12/15	92.1004	0.2632	0.1823	0.4411	5.5497	275.2180	107.4518	40.7965	52.5432	7.3516
21/12/15	92.3398	0.1943	0.1826	0.3670	5.4807	271.2640	320.3691	40.8433	52.6075	9.1894
22/12/15	92.5162	0.2100	0.1811	0.3900	5.5066	276.1380	111.4884	40.6415	52.4889	5.7434
23/12/15	92.3992	0.2156	0.1882	0.4035	5.5583	2731.4250	110.2390	40.6137	52.4700	4.3650
24/12/15	92.6603	0.2107	0.1638	0.3714	5.3785	276.2160	112.4175	40.4214	52.3826	7.5813
25/12/15	92.5760	0.2573	0.1590	0.4145	5.3578	273.6560	111.7447	40.4934	52.3806	7.1218
26/12/15	92.0743	0.3326	0.1804	0.5130	5.6552	273.4380	112.1292	40.9959	52.5902	9.8786
27/12/15	91.7494	0.2318	0.1758	0.4076	5.9042	274.4660	115.0125	41.0164	52.6733	5.0542
28/12/15	93.5286	0.1642	0.1447	0.3077	5.2038	271.6610	114.3718	40.0629	52.2125	2.2974
29/12/15	93.1616	0.2776	0.1736	0.4337	5.5539	275.3400	119.1773	40.4865	52.3874	0.0000
30/12/15	92.8373	0.1838	0.1815	0.3629	5.3701	276.1310	320.3691	40.3011	52.3173	2.2974
31/12/15	93.2180	0.2455	0.1668	0.4116	5.1326	275.3710	105.7442	40.2532	52.2478	0.9189
Máximo	93.6706	0.3617	0.2275	0.5286	7.2920	2731.4250	320.3691	42.1323	53.2979	15.3923

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 II - Estacion Importacion Phenix
ZONA DE MEDICIÓN:	<u>RESTO DEL PAÍS</u>

FECHA: (dd/mm/aa)	Metano (% vol)	Bióxido de Carbono (% vol)	Nitrógeno (% vol)	Total Inertes (% vol)	Etano (% vol)	Temperatura de Rocio (K)	Humedad (mg/m ³)	Poder Calorífico (MJ/m ³)	Índice Wobbe (MJ/m ³)	Acido Sulfhídrico (mg/m ³)
01/12/15	92.7160	0.3610	0.1950	0.5560	5.2690		112.1300	39.9800	50.6200	1.4420
02/12/15										
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27/12/15										
28/12/15										
29/12/15										
30/12/15										
31/12/15										
Máximo	92.7160	0.3610	0.1950	0.5560	5.2690	0.0000	112.1300	39.9800	50.6200	1.4420

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: (dd/mm/aa)	Metano (% vol)	Bióxido de Carbono (% vol)	Nitrógeno (% vol)	Total Inertes (% vol)	Etano (% vol)	Temperatura de Rocio (K)	Humedad (mg/m ³)	Poder Calorífico (MJ/m ³)	Índice Wobbe (MJ/m ³)	Acido Sulfhídrico (mg/m ³)
01/12/15	90.8535	0.3000	0.1978	0.5048	6.4696	272.2440	242.2951	40.7584	52.4679	0.0000
02/12/15	90.1675	0.1991	0.1950	0.3941	7.1365	271.5200	207.0385	40.9818	52.6716	0.0000
03/12/15	89.9124	0.1967	0.1703	0.3788	5.5581	273.5500	320.3691	41.0524	52.6998	6.4326
04/12/15	90.2158	0.2045	0.1755	0.3857	5.2850	271.2500	297.9432	40.6138	52.4680	4.5947
05/12/15	92.4087	0.1926	0.1974	0.3900	5.3741	272.8700	320.3691	40.4189	52.3623	8.0408
06/12/15	92.4163	0.1852	0.1828	0.3696	5.0919	273.2560	320.3691	40.1852	52.2444	9.4192
07/12/15	93.0148	0.1637	0.1552	0.3188	4.7825	272.6580	320.3691	39.8982	52.1145	14.4734
08/12/15	91.4777	0.2027	0.2120	0.4147	5.6193	273.2870	320.3691	40.6289	52.4644	8.7300
09/12/15	91.1282	0.2734	0.2229	0.4963	5.9158	274.2520	320.3691	40.9255	52.5736	9.6489
10/12/15	91.4292	0.2204	0.2039	0.4243	5.7050	274.3690	320.3691	40.6713	52.4793	0.0000
11/12/15	92.0169	0.1997	0.1926	0.3922	5.6015	277.4410	133.2735	40.5514	52.4330	1.3784
12/12/15	92.8219	0.1431	0.1224	0.2655	4.7795	274.4250	121.4199	40.0144	52.2078	9.6489
13/12/15	91.3967	0.2210	0.1745	0.3958	5.3454	275.1280	114.3718	40.7503	52.5319	15.3923
14/12/15	91.7609	0.2751	0.1367	0.4135	5.1341	273.5400	107.4838	40.6011	52.4197	4.8245
15/12/15	91.0172	0.1867	0.1455	0.3357	5.6989	276.8210	101.3327	40.8394	52.6157	7.8110
16/12/15	91.9476	0.1780	0.1547	0.3327	5.5262	276.6500	100.3716	40.6412	52.5137	6.2029
17/12/15	92.1302	0.1824	0.1688	0.3512	5.4158	277.1790	100.2755	40.4012	52.3606	14.2436
18/12/15	91.1871	0.1774	0.1642	0.3493	5.0803	275.2400	104.8888	40.5714	52.3422	5.7434
19/12/15	91.7746	0.2488	0.1640	0.4350	5.1674	270.5100	109.2619	40.6259	52.4205	3.9055
20/12/15	91.8908	0.2196	0.1778	0.4019	5.4881	275.2180	107.4518	40.6171	52.4309	7.3516
21/12/15	91.9874	0.1829	0.1670	0.3608	5.4297	271.2640	320.3691	40.5556	52.4517	9.1894
22/12/15	92.2450	0.1927	0.1655	0.3582	5.3339	276.1380	111.4884	40.4443	52.3754	5.7434
23/12/15	92.1243	0.1965	0.1793	0.3806	5.4247	2731.4250	110.2390	40.4880	52.4005	4.3650
24/12/15	92.5986	0.1876	0.1557	0.3514	5.3399	276.2160	112.4175	40.3695	52.3425	7.5813
25/12/15	92.4768	0.2527	0.1513	0.4062	5.3269	273.6560	111.7447	40.4247	52.3387	7.1218
26/12/15	91.4640	0.2646	0.1475	0.4121	5.4769	273.4380	112.1292	40.7329	52.5071	9.8786
27/12/15	91.3731	0.2266	0.1718	0.4000	5.7916	274.4660	115.0125	40.7832	52.5499	5.0542
28/12/15	93.2606	0.1592	0.1366	0.2963	5.0501	271.6610	114.3718	39.9555	52.1579	2.2974
29/12/15	92.3591	0.1388	0.1427	0.2815	5.2494	275.3400	119.1773	40.1236	52.2531	0.0000
30/12/15	92.7646	0.1805	0.1692	0.3521	5.2678	276.1310	320.3691	40.2564	52.2886	2.2974
31/12/15	92.8812	0.2333	0.1589	0.3922	4.9906	275.3710	105.7442	40.1010	52.1755	0.9189

Mínimo	89.9124	0.1388	0.1224	0.2655	4.7795	270.5100	100.2755	39.8982	52.1145	0.0000
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(Registros mínimos diarios)**

PERMISIONARIO: Compañía Nacional de Gas SA de CV - Permiso G/11/DIS/1997
PUNTO DE MEDICIÓN: Cruce Internacional II - Estacion Importacion Phenix
ZONA DE MEDICIÓN: RESTO DEL PAÍS

FECHA: (dd/mm/aa)	Metano (% vol)	Bióxido de Carbono (% vol)	Nitrógeno (% vol)	Total Inertes (% vol)	Etano (% vol)	Temperatura de Rocio (K)	Humedad (mg/m ³)	Poder Calorífico (MJ/m ³)	Índice Wobbe (MJ/m ³)	Acido Sulfhídrico (mg/m ³)
01/12/15	92.7160	0.3610	0.1950	0.5560	5.2690		112.1300	39.9800	50.6200	1.4420
02/12/15										
03/12/15										
04/12/15										
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Mínimo	92.7160	0.3610	0.1950	0.5560	5.2690	0.0000	112.1300	39.9800	50.6200	1.4420
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Certificate of Analysis
 Number: 4030-15110368-002A

Pleasanton Laboratory
 627 2nd Street
 Pleasanton, TX 78064
 Phone 877-SPL-LABS

Olen Douglass
 Thurmond-McGothlin, Inc
 1428 N. Banks
 Pampa, TX 79065

Dec. 03, 2015

Station Name: Mexico #1
 Station Number: 781-006
 Cylinder No: TM11050
 Analyzed: 12/03/2015 10:17:30 by NDS

Sampled By: CARLOS NAVARRO
 Sample Of: Gas Spot
 Sample Date: 11/16/2015
 Sample Conditions: 152 psig, @ 58 °F
 Method: GPA-2261M

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	0.149	0.239		GPM TOTAL C2+	1.904
Carbon Dioxide	0.395	0.994		GPM TOTAL C3+	0.439
Methane	92.523	84.896		GPM TOTAL IC5+	0.089
Ethane	5.497	9.454	1.465		
Propane	0.815	2.056	0.224		
Iso-butane	0.160	0.532	0.052		
n-Butane	0.234	0.778	0.074		
Iso-pentane	0.078	0.322	0.028		
n-Pentane	0.054	0.223	0.020		
Hexanes Plus	0.095	0.506	0.041		
	100.000	100.000	1.904		

Physical Properties	Total	C6+
Relative Density Real Gas	0.6049	3.2176
Calculated Molecular Weight	17.484	93.189
Compressibility Factor	0.9976	
GPA 2172-09 Calculation:		
Calculated Gross BTU per ft ³ @ 14.65 psia & 60°F		
Real Gas Dry BTU	1074.5	5113.2
Water Sat. Gas Base BTU	1056.0	5023.7

Comments: H2O Mol% : 1.750 ; Wt% : 1.802

Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.



Certificate of Analysis
 Number: 4030-15110368-004A

Pleasanton Laboratory
 627 2nd Street
 Pleasanton, TX 78064
 Phone 877-SPL-LABS

Olen Douglass
 Thurmond-McGothlin, Inc
 1428 N. Banks
 Pampa, TX 79065

Dec. 03, 2015

Station Name: Custom Station
 Station Number: 761-009
 Cylinder No: TM11131
 Analyzed: 12/03/2015 10:17:43 by NDS

Sampled By: CARLOS NAVARRO
 Sample Of: Gas Composite
 Sample Date: 11/16/2015
 Sample Conditions: 460 psig, @ 75 °F
 Method: GPA-2261M

Analytical Data

Components	Mol. %	Wt. %	GPM at 14.65 psia		
Nitrogen	0.195	0.313		GPM TOTAL C2+	1.851
Carbon Dioxide	0.361	0.910		GPM TOTAL C3+	0.447
Methane	92.716	85.202		GPM TOTAL iC5+	0.093
Ethane	5.269	9.075	1.404		
Propane	0.822	2.076	0.226		
Iso-butane	0.157	0.523	0.051		
n-Butane	0.244	0.812	0.077		
Iso-pentane	0.082	0.339	0.030		
n-Pentane	0.060	0.248	0.022		
Hexanes Plus	0.094	0.502	0.041		
	100.000	100.000	1.851		

Physical Properties	Total	C6+
Relative Density Real Gas	0.6040	3.2176
Calculated Molecular Weight	17.457	93.189
Compressibility Factor	0.9976	

GPA 2172-09 Calculation:
 Calculated Gross BTU per ft³ @ 14.65 psia & 60°F
 Real Gas Dry BTU 1073.1 5113.2
 Water Sat. Gas Base BTU 1054.7 5023.7
 Comments:- H2O Mol% : 1.750 ; Wt% : 1.805

[Signature]
 Hydrocarbon Laboratory Manager

Quality Assurance: The above analyses are performed in accordance with ASTM, UOP, GPA guidelines for quality assurance, unless otherwise stated.

Laboratorio Contratado por Compañía Nacioanl de Gas SA de CV Cruce Internacional II

December 03, 2015

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 @ 457 psig & 74°F

Date Sampled: 11/16/2015

Job Number: 55049.001

CHROMATOGRAPH EXTENDED ANALYSIS - SUMMATION REPORT

COMPONENT	VOL %	L/M ³
Oxygen	0.055	
Hydrogen Sulfide*	< 0.001	
Nitrogen	1.893	
Carbon Dioxide	0.612	
Methane	89.101	
Ethane	5.776	
Propane	1.426	0.05221
Isobutane	0.287	0.01248
n-Butane	0.383	0.01605
2-2 Dimethylpropane	0.016	0.00081
Isopentane	0.140	0.00680
n-Pentane	0.111	0.00535
Hexanes	0.120	0.00657
Heptanes Plus	<u>0.080</u>	<u>0.00421</u>
Totals	100.000	0.10450

Computed Real Characteristics Of Heptanes Plus:

Specific Gravity ----- 3.249 (Air=1)
Molecular Weight ----- 93.87
Gross Heating Value ----- 4879 BTU/CF

Computed Real Characteristics Of Total Sample:

Specific Gravity ----- 0.631 (Air=1)
Compressibility (Z) ----- 0.9975
Molecular Weight ----- 18.24
Gross Heating Value
Dry Basis ----- 1079 BTU/CF 40.22 mJ/M³
Saturated Basis ----- 1061 BTU/CF 39.55 mJ/M³
Wobbe Index ----- 1359 BTU/CF 50.62 mJ/M³
Water Content Provided By: Compania Nacional de Gas S.A. de C.V.
7.0 Lbs/MMCF 112.13 mg/M³

*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/M³

H2S As Total Sulfur: 0.059 Gr/100 CF or 1.346 mg/M³

Base Conditions: 14.650 PSI & 60 Deg F

Sampled By: MSI
Analyst: RG
Processor: RG
Cylinder ID: T-4872

Certified: FESCO, Ltd. - Alice, Texas

David Dannhaus 361-661-7015

Laboratorio Contratado por Compañía Nacional de Gas SA de CV Cruce Internacional II

FESCO, Ltd.

Job Number: 55049.001

**CHROMATOGRAPH EXTENDED ANALYSIS
TOTAL REPORT**

COMPONENT	VOL %	L/M ³	WT %
Oxygen	0.055		0.096
Hydrogen Sulfide*	< 0.001		< 0.001
Nitrogen	1.893		2.908
Carbon Dioxide	0.612		1.477
Methane	89.101		78.377
Ethane	5.776		9.523
Propane	1.426	0.05221	3.448
Isobutane	0.287	0.01248	0.915
n-Butane	0.383	0.01605	1.221
2,2 Dimethylpropane	0.016	0.00081	0.063
Isopentane	0.140	0.00680	0.554
n-Pentane	0.111	0.00535	0.439
2,2 Dimethylbutane	0.007	0.00039	0.033
Cyclopentane	0.000	0.00000	0.000
2,3 Dimethylbutane	0.012	0.00065	0.057
2 Methylpentane	0.039	0.00215	0.184
3 Methylpentane	0.021	0.00114	0.099
n-Hexane	0.041	0.00224	0.194
Methylcyclopentane	0.011	0.00050	0.051
Benzene	0.009	0.00033	0.039
Cyclohexane	0.009	0.00041	0.042
2-Methylhexane	0.007	0.00043	0.038
3-Methylhexane	0.006	0.00036	0.033
2,2,4 Trimethylpentane	0.000	0.00000	0.000
Other C7's	0.010	0.00058	0.054
n-Heptane	0.009	0.00055	0.049
Methylcyclohexane	0.007	0.00037	0.038
Toluene	0.005	0.00022	0.025
Other C8's	0.005	0.00031	0.030
n-Octane	0.002	0.00014	0.013
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	0.10450	100.000

Computed Real Characteristics Of Total Sample:

Specific Gravity -----	0.631	(Air=1)
Compressibility (Z) -----	0.9975	
Molecular Weight -----	18.24	
Gross Heating Value		
Dry Basis -----	1079 BTU/CF	40.22 mJ/M ³
Saturated Basis -----	1061 BTU/CF	39.55 mJ/M ³
Wobbe Index -----	1359 BTU/CF	50.62 mJ/M ³