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**CERTIFICADO DE CALIDAD / CERTIFICATE OF TEST  
 AND ANALYSIS**

|                                   |                  |
|-----------------------------------|------------------|
| No. Certificado / Certificate No: | 20065 - 10576749 |
| Fecha / Date:                     | 01/04/2014       |

**EXCELENCIA EN CALIDAD**

| DATOS DEL CLIENTE / SOLD TO |   | CLIENTE CONSIGNADO / SHIP TO |  | DATOS DEL EMBARQUE / SHIPPING INFORMATION |            |
|-----------------------------|---|------------------------------|--|---|------------|
| Cliente / Customer:         | PLESA ANAHUAC Y CIAS SA DE CV                       | Cliente / Customer:          | MONTERREY - MILENIU.                           | Núm. Viaje / Travel No:                   | 20065      |
| Dirección / Address:        | AV VALLE DE LAS ALAMEDAS 66 0 SAN FRANCISCO CHILPAN | Dirección / Address:         | BLVD MILENIUN #5100 PARQUE INDUSTRIAL MILENIUM | Núm. Factura / Invoice No:                | FQ14620    |
| Ciudad / City:              | TULTITLAN   | Ciudad / City:               | APODACA  | Estado / State:                           | N.L.       |
| Estado / State:             | EDO. DE MEXICO                                      | Estado / State:              | N.L.   | Pedido / Customer Order No:               | 10576749   |
| Teléfono / Phone:           | 10335570  |                              |  | Núm. Plan / Shipping Plan:                | 21491      |
|                             |   |                              |  | Fecha Embarque / Date:                    | 01/04/2014 |
| País / Country:             | MEXICO C.P./ZIP 54940                               |                              |  | Orden de Compra / Purchase Order:         | 17427      |
| Correo Electrónico / eMail: |   |                              |  |   |            |

| COMPOSICIÓN QUÍMICA / CHEMICAL COMPOSITION (% PESO / WEIGHT) |                      |              |  |      |      |      |       |       |      |      |      |       |       |       |       |        |       |      |
|--|----------------------|--------------|--|------|------|------|-------|-------|------|------|------|-------|-------|-------|-------|--------|-------|------|
| Colada / Heat  | Secuencia / Sequence | Clave / Code | Producto / Description of Goods                  | % C  | % Mn | % Si | % P   | % S   | % Cu | % Cr | % Ni | % Mo  | % Sn  | % Ti  | % V   | PPM Nb | PPM N | CE   |
|  |                      |              |  | AVG  | AVG  | AVG  | AVG   | AVG   | AVG  | AVG  | AVG  | AVG   | AVG   | AVG   | AVG   | AVG    | AVG   | AVG  |
| 2037   | 12229                | 60231        | SOLERA 2 1/2" x 1/4" A-36 6.10m 2.0T             | 0.21 | 0.72 | 0.15 | 0.004 | 0.022 | 0.16 | 0.06 | 0.07 | 0.013 | 0.011 | 0.000 | 0.007 | 14     | 0     | 0.35 |
| 3022   | 12278                | 60229        | SOLERA 2" x 1/4" A-36 6.10m 2.0T                 | 0.22 | 0.71 | 0.19 | 0.007 | 0.017 | 0.19 | 0.10 | 0.08 | 0.021 | 0.011 | 0.000 | 0.005 | 3      | 0     | 0.35 |
| 4408   | 12279                | 60229        | SOLERA 2" x 1/4" A-36 6.10m 2.0T                 | 0.22 | 0.75 | 0.14 | 0.007 | 0.015 | 0.18 | 0.10 | 0.07 | 0.014 | 0.012 | 0.000 | 0.005 | 15     | 0     | 0.36 |
| 4349   | 12198                | 60234        | SOLERA 3" x 1/2" A-36 6.10m 2.0T                 | 0.21 | 0.92 | 0.19 | 0.006 | 0.005 | 0.07 | 0.05 | 0.05 | 0.010 | 0.005 | 0.058 | 0.013 | 108    | 0     | 0.38 |
| 3331   | 11941                | 78055        | ANGULO L1 6" x 6" x 3/8" A36/A572-50 12.20m 4.0T | 0.21 | 0.92 | 0.20 | 0.008 | 0.009 | 0.08 | 0.07 | 0.03 | 0.013 | 0.006 | 0.008 | 0.012 | 106    | 0     | 0.37 |

| PROPIEDADES MECÁNICAS / MECHANICAL PROPERTIES |                      |              |  |                    |                    |        |         |         |      |         |                       |     |
|---|----------------------|--------------|--|--------------------|--------------------|--------|---------|---------|------|---------|-----------------------|-----|
| Colada / Heat                                 | Secuencia / Sequence | Clave / Code | Producto / Description of Goods                  | Calibre / Diameter | Cantidad / Bundles | RT     | TS      | % Elong | LF   | YS      | P. Doblez / Bend Test |     |
|   |                      |              |  |                    |                    | kg/mm² | PSI     | AVG     | AVG  | AVG     | AVG                   | AVG |
| 2037  | 12229                | 60231        | SOLERA 2 1/2" x 1/4" A-36 6.10m 2.0T             | 2 1/2" x 1/4"      | 4                  | 43.2   | 61573.0 | 34.5    | 35.9 | 51181.5 | Cumple / Successfully |     |
| 3022  | 12278                | 60229        | SOLERA 2" x 1/4" A-36 6.10m 2.0T                 | 2" x 1/4"          | 4                  | 45.6   | 64958.2 | 31.8    | 29.9 | 42527.9 | Cumple / Successfully |     |
| 4408  | 12279                | 60229        | SOLERA 2" x 1/4" A-36 6.10m 2.0T                 | 2" x 1/4"          | 3                  | 55.1   | 78413.6 | 32.2    | 35.6 | 50663.7 | Cumple / Successfully |     |
| 4349  | 12198                | 60234        | SOLERA 3" x 1/2" A-36 6.10m 2.0T                 | 3" x 1/2"          | 3                  | 55.4   | 78797.6 | 32.2    | 35.3 | 50251.2 | Cumple / Successfully |     |
| 3331  | 11941                | 78055        | ANGULO L1 6" x 6" x 3/8" A36/A572-50 12.20m 4.0T | 6" x 6" x 3/8"     | 1                  | 54.0   | 76920.1 | 35.3    | 38.4 | 54046.3 | Cumple / Successfully |     |



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Certificamos que este material ha sido producido, inspeccionado y probado de acuerdo a las normas de fabricación del acero aplicables a la ASTM A36-2008, A529-2005 (re aprobada el 2009), A572-2012 y A992-2011 y a las normas dimensionales NMX B252, ASTM A6/A6M-2012. La información de las propiedades químicas y mecánicas contenida en el presente certificado son valores promedio obtenidos de los registros internos de la compañía, cumpliendo con la norma antes mencionada. / We certify that this material has been produced, inspected and tested according to standards applicable steelmaking to ASTM A36-2008, A529-2005 (Reapproved 2009), A572-2012 y A992-2011, and the dimensional standards NMX B252, ASTM A6/A6M-2012. All information described in the certificate are average values that are based on internal company records in compliance with the above rule.

**FRANCISCO JAVIER VARGAS SOTO**  
 Gerente de Aseguramiento de Calidad / Quality Assurance Manager