



VILLACERO

34612-1

MILL TEST REPORT

PRODUCT: 2" C80 ASTM A-53-A / NMX B-177
FINISHING: TUBERIA BARNIZADA EXTREMO LISO

CUSTOMER: BODEGA PYLSA

SHIPPING DATE: 17/09/14

SPORT PLATAFORM:

INVOICE: 6911T
ORDER: N/A

TRANSPORT/ TRANSPORTE: CHAVEZ MARTINEZ NAPOLEON

MANUFACTURER/ PLANTA: LAMINA Y PLACA COMERCIAL S.A DE C.V.
DIEGO DIAZ DE BERLANGA, NO. 1002 SUR
SAN NICOLAS DE LOS GARZA, NUEVO LEON, MEXICO

I HEREBY CERTIFY THAT THE PRODUCT ACCOMPLISHED WITH THE SPECIFICATION TO THE INVOICE AND/ OR REMISSION (DATABASE OF SYSTEM).
ESTE PRODUCTO FUE FABRICADO BAJO LA NORMA QUE SE DESCRIBE HACIENDO CUMPLIR LOS REQUERIMIENTOS DE LA ESPECIFICACION (BASE DE DATOS DEL SISTEMA).

PROCESS: HFW

| MANUFACTURING INFORMATION/ INFORMACION DE MANUFACTURA | | | | | | | DIMENSIONS (DIMENSIONES) | | |
|---|-------|------|------------|-------|------------------|----------------|--------------------------|----------------|--------------|
| DATE | SHIFT | OPER | ORDER OP # | GRADE | MANUFACT PROCESS | HEAT TREATMENT | OUTSIDE DIAMETER (In) | Thickness (In) | LENGTH (Mts) |
| 11/09/14 | 1 | COM | 264 | A | E | NO | 2.375" | 0.218 | 6.40 |

| ONLINE TESTS (PRUEBAS DE CAMPO) | | | | | | | | | |
|---------------------------------|------------------------|--------------------|-------------|----------------------------|--------------------|--------------|-----------------|-------------------|--|
| HEAT NUMBER (COLADA) | HYDROSTATIC TEST (PSI) | DELIVERY CONDITION | TIME (Sec.) | NON-DESTRUCTIVE TEST (PND) | METALLOGRAPHY TEST | BENDING TEST | FLATTENING TEST | VISUAL INSPECTION | |
| 434423 | 2514 | AS ROLLED | 5 | OK | N/A | N/A | OK | OK | |

| CHEMICAL ANALYSIS (ANALISIS QUIMICOS)/ MECHANICAL PROPERTIES (PROPIEDADES MECANICAS) | | | | | | | | | |
|--|--------|--------|--------|----------------|--------|----------|---------|----------------|---------------------|
| HEAT NUMBER (COLADA) | %C | %Mn | %P | %S | %Si | %Cr | %Mo | %Ni | %Cu |
| 434423 | 0.0880 | 0.3340 | 0.0230 | 0.0060 | 0.0060 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| %Nb | %Sn | %Ti | %V | YIELD ST (PSI) | | UT (PSI) | % ELONG | HARDNESS (HRb) | CARBON EQUIVALENT % |
| 0.0000 | 0.0000 | 0.0004 | 0.0040 | 50200 | | 61300 | 26.90 | 78 | N/A |

| CHARPY TEST (PRUEBA CHARPY) | | | | | |
|-----------------------------|-------------------------|-----|-----|---------|---------------------|
| HEAT IDENT NUM | ABSORBED ENERGY (FT-LB) | | | AVERAGE | TEMPERATURE TEST °C |
| | 1 | 2 | 3 | | |
| 434423 | N/A | N/A | N/A | N/A | N/A |

NOTE: THE SUM OF THE NIOBIUM, VANADIUM AND TITANIUM CONCENTRATIONS SHALL BE $\leq 0.15\%$
NOTA: LA SUMA DE LA CONCENTRACION DE NIOBIO, VANADIO Y TITANIO NO DEBE SER $\leq 0.15\%$

I HAVE PERSONAL KNOWLEDGE AS TO ACCURACY OF THE ABOVE INFORMATION, AND HAVE AUTHORITY TO SIGN ON BEHALF OF THE COMPANY.

TENGO EL CONOCIMIENTO Y AUTORIZACION EN NOMBRE DE LA COMPAÑIA PARA AVALAR ESTA INFORMACIÓN.

SINCERELY

ING. DAVID ANGEL MOLINA PEREZ

QUALITY ASSURANCE MANAGER