



JSW STEEL (USA) INC.
5200 E. McKinney Rd
Baytown, TX 77520
Phone: (281) 383-3300
Fax: (281) 303-0473

Metallurgical and Pipe Test Report

MTR No.:

Sample No.: T11119458

PO Number: 116119-00

PO Date: 10/27/11 JSW #: SAW1425

Date: 11/16/11

Diameter (in): 30

Wall (in): 0.500

Grade: B PSL1/X42M PSL2

Heat No: S14172

Comments: EN 10204 3.1 Meets "NACE MR0175" and "NACE MR0103" (Hardness Only)"

Pipe Manufactured in USA

SAWL MATERIAL
THERMO MECHANICAL
ROLLED

INSPECTION CERTIFICATE: 3.1 B PER ISO 10474: 1991.
100% Weld seam inspection by ultrasonic testing method;
Calibration standard: N5 notches inside and outside (Longitudinal and Transverse)

API 5L October 2008 44th Ed

END X-RAY: 8" (ASTM - B PENETRAMETER)

Customer

TEXAS PIPE
2330 HOLMES ROAD
HOUSTON, TEXAS 77051

Ship To

TEXAS PIPE
2330 HOLMES ROAD
HOUSTON, TEXAS 77051

Type	Chemical Analysis											V	B	Nb	Ca	Zr	V +Nb +Ti	CE (0.43)	Pcm	
	C	Mn	P	S	SI	Cu	NI	Cr	Mo	Ti	Al									N
Ladle	0.10	0.95	0.013	0.011	0.29	0.100	0.040	0.030	0.004	0.004	0.040	0.006	0.004	0.0010	0.004	0.0010	0.000	0.01	0.28	0.17
Prod1	0.12	0.96	0.011	0.011	0.28	0.050	0.020	0.030	0.003	0.005	0.038	0.002	0.002	0.0003	0.001	0.0010	0.000	0.01	0.29	0.18
Prod2	0.11	0.97	0.012	0.011	0.30	0.050	0.020	0.030	0.003	0.005	0.040	0.004	0.002	0.0003	0.001	0.0008	0.000	0.01	0.28	0.17

Mechanical Testing

Orientation	Cwidth (Inch)	Yield (PSI)	Tensile (PSI)	Elong (%)	Y/T Ratio
1T180	1.44	61500	73900	36	0.83
1W	1.43	0	74600	0	

Weld Tensile Fracture Location:
BASE METAL

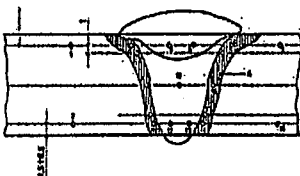
Guided Bend
Orientation Root Face
2W OK OK

Hydrostatic Test

TEST PRESS. HOLDING
PSI TIME
1370 (sec)
20

Hardness Tests

Orientation: 1W



1:160 7:169 13:186 19:163
2:172 8:160 14:162
3:163 9:160 15:160
4:183 10:160 16:160
5:183 11:160 17:160
6:172 12:184 18:187

MACRO OK

Form # ML-014
Rev: 2
Date: 07/05/11



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Charpy Impact Analysis

Orientation	Spec Size	Temp	Ft lb1	Ft lb2	Ft lb3	Ft lb avg	Shear1 (%)	Shear2 (%)	Shear3 (%)	Shear Avg (%)
3T90	10x10 mm	32 F	49	53	50	51	90	90	90	90
3W	10x10 mm	32 F	77	69	70	72	0	0	0	0
3HAZ	10x10 mm	32 F	88	71	80	80	0	0	0	0

Pipes Certified For This HEAT

T11119458 T11119491 T11119504 T11119512 T11119521 T11119539 T11119547

The material has been manufactured, sampled, tested, and inspected in accordance with this spec(API5L) and has been found to meet the requirements. We certify the above to be correct as contained in the records of the company.

Jade R. Senelle

QA ENGINEER

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