


BAYOU STEEL CORPORATION

 RIVER ROAD P.O. BOX 5000
 LA PLACE, LOUISIANA 70069-1156
 Telephone (504) 652-4900

MATERIAL CERTIFICATION REPORT

 FEDERAL PIPE & STEEL CORP.
 41580 JOY ROAD
 PLYMOUTH, MI 48170

 FEDERAL PIPE & STEEL
 1641 NEW MARKET AVE.
 S PLAINFIELD, NJ 07080

NOV 12 2001

 TESTED IN ASTM A6
 ACCORDANCE
 WITH

 INVOICE NO.
 PRODUCT FLATS
 HEAT NO. 93131 14 Pcs
 Length 20'0"

 DATE 06/08/01
 Cust F-1000 -0020 PO:11710
 GRADE A3644W -
 SIZE F 8 X 5/8 X 17.02

CHEMICAL ANALYSIS	
C	.13
Mn	.94
P	.018
S	.04
Si	.19
Cu	.37
Ni	.11
Cr	.15
Mo	.034
Cb	.000
V	.015
B	
Al	

MECHANICAL PROPERTIES			
	TEST 1	TEST 2	TEST 3
YIELD STRENGTH - PSI	51,527	49,228	
TENSILE STRENGTH - PSI	71,897	70,701	
ELONGATION %	36.0	38.0	
GUAGE LENGTH	8	8	
DIAMETER			
BEND TEST RESULTS			
SPECIMEN AREA - SQ. IN.			
REDUCTION OF AREA %			
IMPACT STRENGTH FT/LBS.			
SEVERITY FREQUENCY RATING			
INTERNAL CLEANLINESS			

HARDENABILITY JOMINY TEST RESULTS	
GRAIN SIZE	
ROCKWELL C HARDNESS	
DISTANCE FROM	
QUENCHED END IN	
1/16th INCH INCREMENTS	
1	13
2	14
3	15
4	16
5	18
6	20
7	22
8	24
9	26
10	28
11	30
12	32

I HEREBY CERTIFY THAT THE MATERIAL TEST RESULTS PRESENTED HERE ARE FROM THE REPORTED HEAT AND ARE CORRECT. ALL TESTS WERE PERFORMED IN ACCORDANCE TO THE SPECIFICATIONS REPORTED ABOVE. ALL STEEL IS ELECTRIC FURNACE MELTED, MANUFACTURED, PROCESSED, AND TESTED IN THE U.S.A WITH SATISFACTORY RESULTS, AND IS FREE OF MERCURY CONTAMINATION IN THE PROCESS.

SIGNED

 TIMOTHY R. WHITE, QUALITY ASSURANCE MANAGER

NOTARIZED UPON REQUEST:

 SWORN TO AND SUBSCRIBED BEFORE ME IN AND FOR ST. JOHN
 PARISH ON THIS _____ DAY OF _____, 20____

(NOTARY PUBLIC)

 DIRECT ANY QUESTIONS OR NECESSARY CLARIFICATIONS CONCERNING
 THIS REPORT TO THE SALES DEPARTMENT.

1-800-535-7692 (USA)