



DM
SN 7000
Texas Eastern
Transmission Corporation
5400 Westheimer Ct. 77056-5310
P.O. Box 1642
Houston, TX 77251-1642

Ron Monheiser, Manager
Right of Way and Land Department

ok
DMM 1/25/01

January 16, 2001

Mr. Don Howard
Regional Supervisor
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394
(504) 736-2547



Attention: Mr. Alex Alvarado

Your Re: MS 5232
OCS-G-6551

Our Re: Abandonment of Texas Eastern Transmission Corporation 8-inch Line 41-J located in West Cameron Blocks 249, 250, 252, and 253 located in Federal Waters, Gulf of Mexico, Offshore Louisiana, Line 41-J

Gentlemen:

Please reference Texas Eastern Transmission Corporation's (TETCO) letter of August 28, 2000 wherein we advised you of our intent to 1) abandon the captioned pipeline and 2) relinquish the right of way. Also reference your letter received September 14, 2000 wherein you request written notification of the abandonment completion. Please be advised that TETCO completed the abandonment on September 29, 2000 of the captioned pipeline in accordance with the terms expressed in our letter of August 28, 2001.

Should you have any question, please contact me at 713-627-5554.

Sincerely,

Ron Monheiser

SN 7000

In Reply Refer To: MS 5232

SEP 14 2000

Mr. Theopolis Holeman
Texas Eastern Transmission Corporation
5400 Westheimer Court
Houston, Texas 77056

D. MOORE 9/14/2000

Dear Mr. Holeman:

Pursuant to 30 CFR 250.1000(b), the relinquishment of the right-of-way grant associated with the following pipeline is hereby accepted effective August 30, 2000:

<u>Pipeline Segment No.</u>	<u>Size (inches)</u>	<u>Length (feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
7000 (Right-of-Way OCS-G 6551)	8 5/8	24,987	Gas	"A" Platform Block 253 West Cameron Area Lease OCS-G 3500	A 30-inch SSTI Block 250 West Cameron Area Segment No. 3509 Right-of-Way OCS-G 1950

Your letter dated August 28, 2000, requests approval to permanently abandon in place approximately 24,987 feet (4.73 miles) of 8 5/8-inch pipeline designated as Segment No. 7000, and to relinquish in its entirety, Right-of-Way Grant OCS-G 6551, associated therewith.

Pursuant to 30 CFR 250.104(b), approval is hereby granted to abandon this pipeline, and in accordance with 30 CFR 250.1009(c), the requirement that the pipeline be removed is hereby waived. However, in the future, should it be determined that this abandoned pipeline constitutes a hazard to navigation or commercial fishing operations or unduly interferes with the other uses of the Outer Continental Shelf, Texas Eastern Transmission Corporation shall be required to remove it.

Texas Eastern Transmission Corporation shall cease transporting hydrocarbons through this pipeline immediately and complete the aforementioned abandonment operations within 60 days of the date of this letter. Additionally, Texas Eastern Transmission Corporation shall submit written notification to this office within 30 days of the completion of the pipeline abandonment. The notification shall include the date the abandonment was completed and an indication that the abandonment was completed as approved.

Sincerely,
(orig. sgd.) A. P. Alvarado

Donald C. Howard
Regional Supervisor
Field Operations

bcc: /1502-01 Segment No. 7000, ROW OCS-G 6551 (MS 5232)
1502-01 ROW OCS-G 6551 (Microfilm) (MS 5033)
MS 5232 Carto

DMoore:amm:9/14/00:Texas Eastern.000



Theopolis Holeman
Senior Vice President
Transmission and Engineering

DM

Texas Eastern
Transmission Corporation
Algonquin Gas
Transmission Company
East Tennessee
Natural Gas Company
5400 Westheimer Court
Houston, TX 77056-5310
(713) 627-5712

August 28, 2000

Mr. Don Howard
Regional Supervisor
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394
(504) 736-2547



SN 7000 (G 06551)

Attn: Mr. Alex Alvarado

RE: Abandonment of 8-inch Line 41-J located in West Cameron Blocks 249, 250, 252 and 253
Located in Federal Waters, Gulf of Mexico, Offshore Louisiana

Dear Mr. Alvarado:

In accordance with the Outer Continental Shelf Lands Act, Section 5 (e), 43 U.S.C.S. 1331, et seq. (1999), and 30 CFR 250.1006 (1999), Texas Eastern Transmission Corporation (TETCO) requests abandonment of the referenced 8-inch pipeline 41-J (the Line). The Line is 4.73 miles long and extends from Pennzoil "A" Platform in West Cameron (WC) Block 253 to TETCO's 30-inch Line 41 in WC 250. The Line is to be abandoned and left in place because there is no current operational need for the Line.

Pursuant to our phone conversation August 25, 2000, TETCO will relinquish all rights-of-way with abandonment of the Line.

TETCO respectfully requests approval to abandon the Line by pigging, flushing and filling with inhibited sea water, leaving the Line in place and isolating the Line with a closed block valve or blind flange at each end. After abandonment, TETCO shall relinquish all respective rights-of-way.

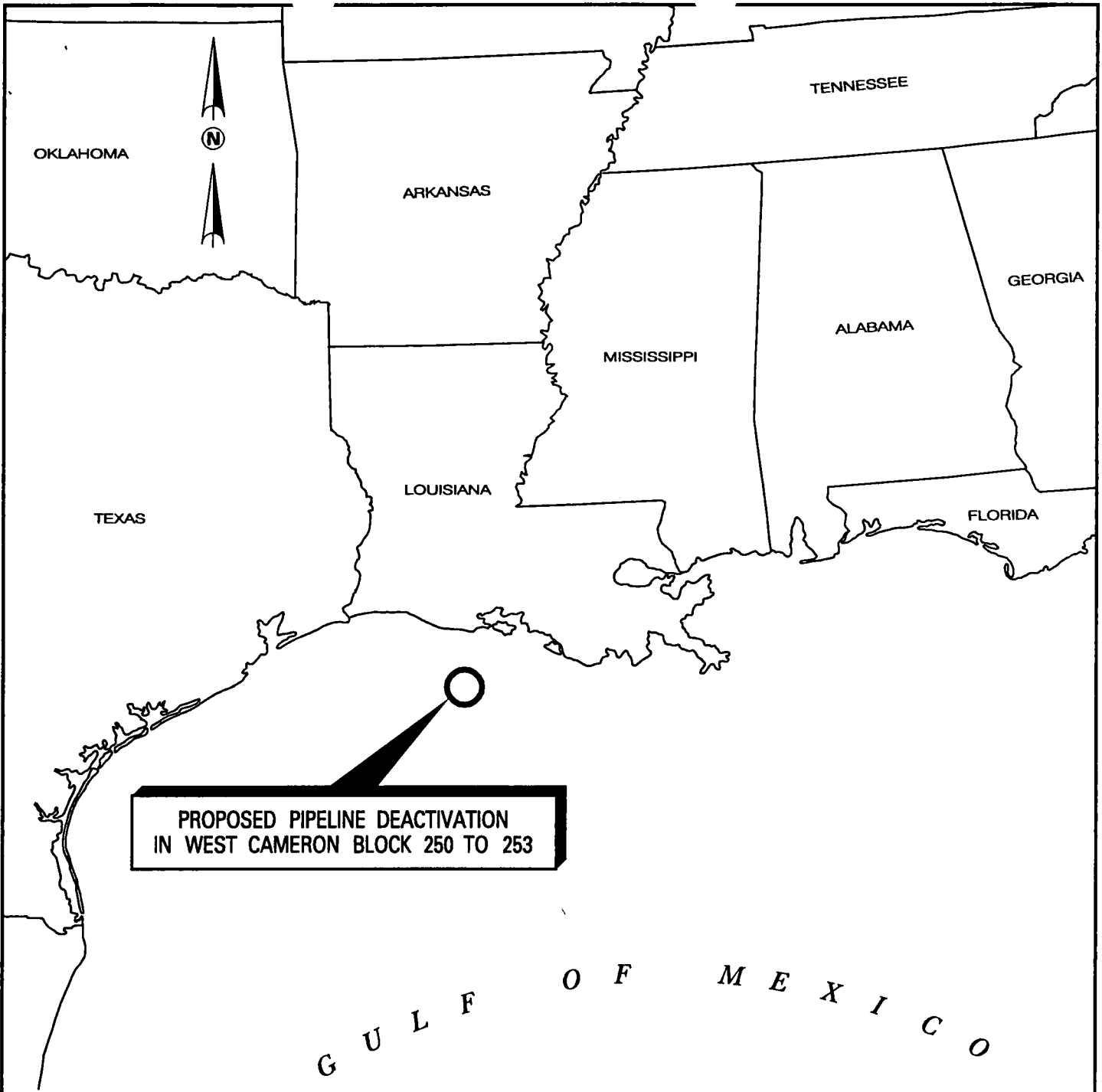
The location of the Line is indicated on the vicinity map and as-built drawings provided as Exhibit A. The general procedure for deactivating the 8-inch pipeline is provided as Exhibit B. Sub-sea tie-in details and platform details are provided as Exhibit C.

Questions or requests for additional information may be directed to Mark Reeder at (713) 627-5762.

Sincerely,

A handwritten signature in blue ink that reads 'Theopolis Holeman'.

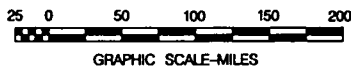
EXHIBIT A



**PROPOSED PIPELINE DEACTIVATION
IN WEST CAMERON BLOCK 250 TO 253**

G U L F O F M E X I C O

VICINITY MAP



AEREYS
21-AUG-2000 15:48

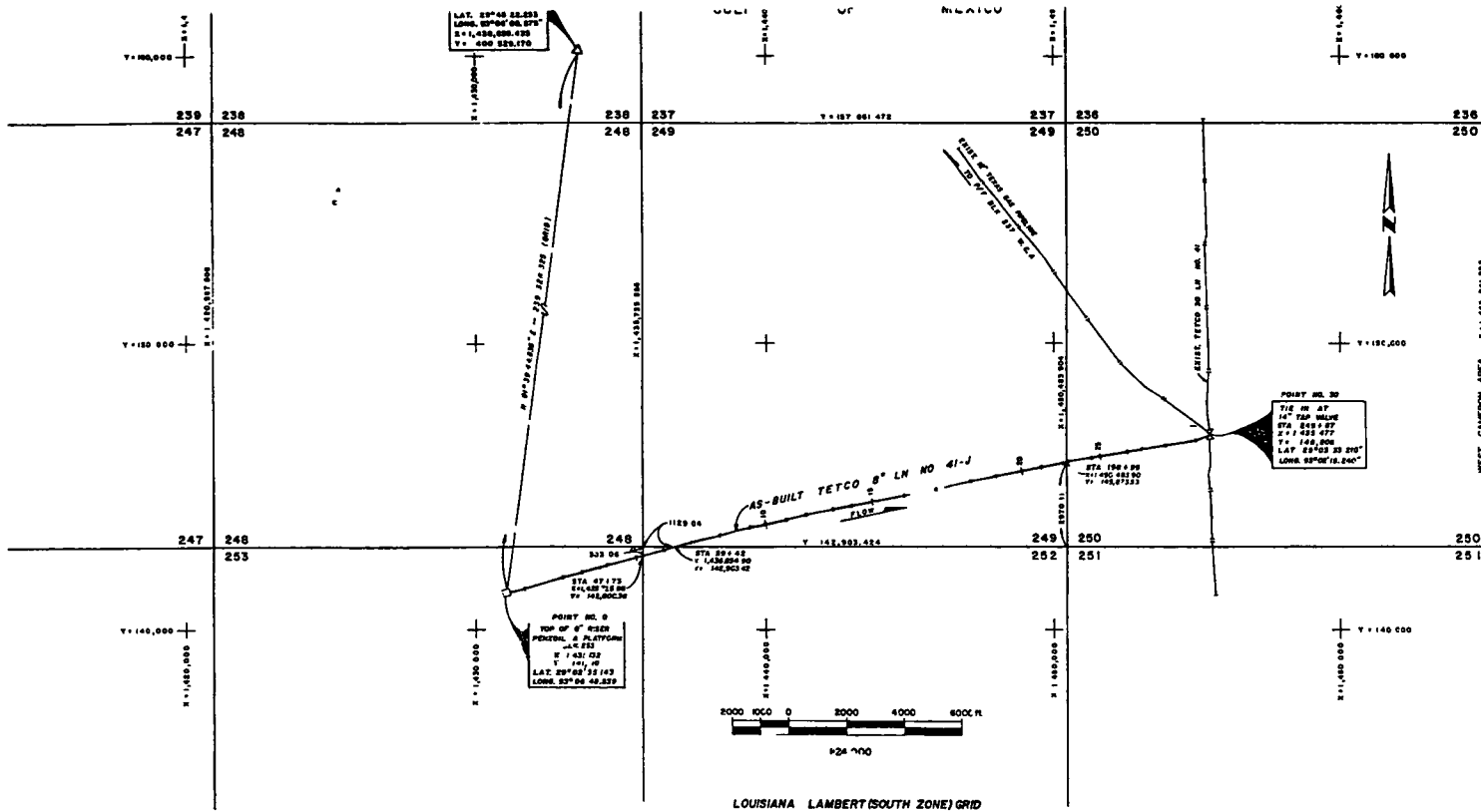
I.C. # MQZ3000.99

TITLE: PROPOSED PIPELINE DEACTIVATION
FOR 8" GAS PIPELINE FROM WEST CAMERON BLOCK 250 TO 253

LOC.: WEST CAMERON - GULF OF MEXICO REV.

CKD. BY ENG. DATE 6-14-99 W.O.

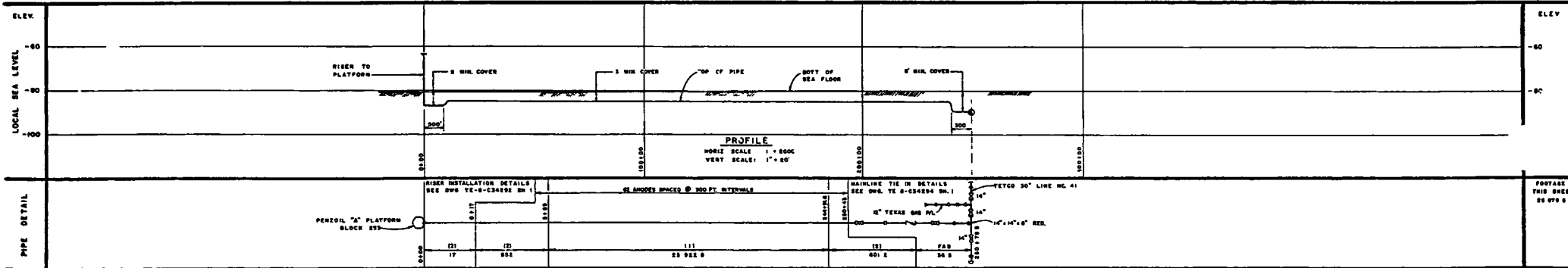
DRN. BY GAL SCALE AS SHOWN DWG. NO. MQ-Z-3000



STATION	ELEVATION	COORDINATES	DESCRIPTION
1	80.00	148,000.00	START OF TETCO 30\"/>



LOUISIANA LAMBERT (SOUTH ZONE) GRID



NOTE: CERTIFIED CORRECT AS TO THE HORIZONTAL POSITION OF PIPELINE

M. C. CARROLL
 J. THOMAS CARROLL
 REGISTERED LAND SURVEYOR NO. 4043
 STATE OF TEXAS
 OCEANONICS, INC.

REFERENCE DRAWINGS	PIPE DATA
TE-0-34866 PERMIT DRAWING AND AS-BUILT SURVEY BY OCEANONICS INC	1 8 625' O.D. x 0.375' W.T. API 5L 60 B SHLL
TE-0-32806 ALIGNMENT TETCO 30\"/>	

NOTES

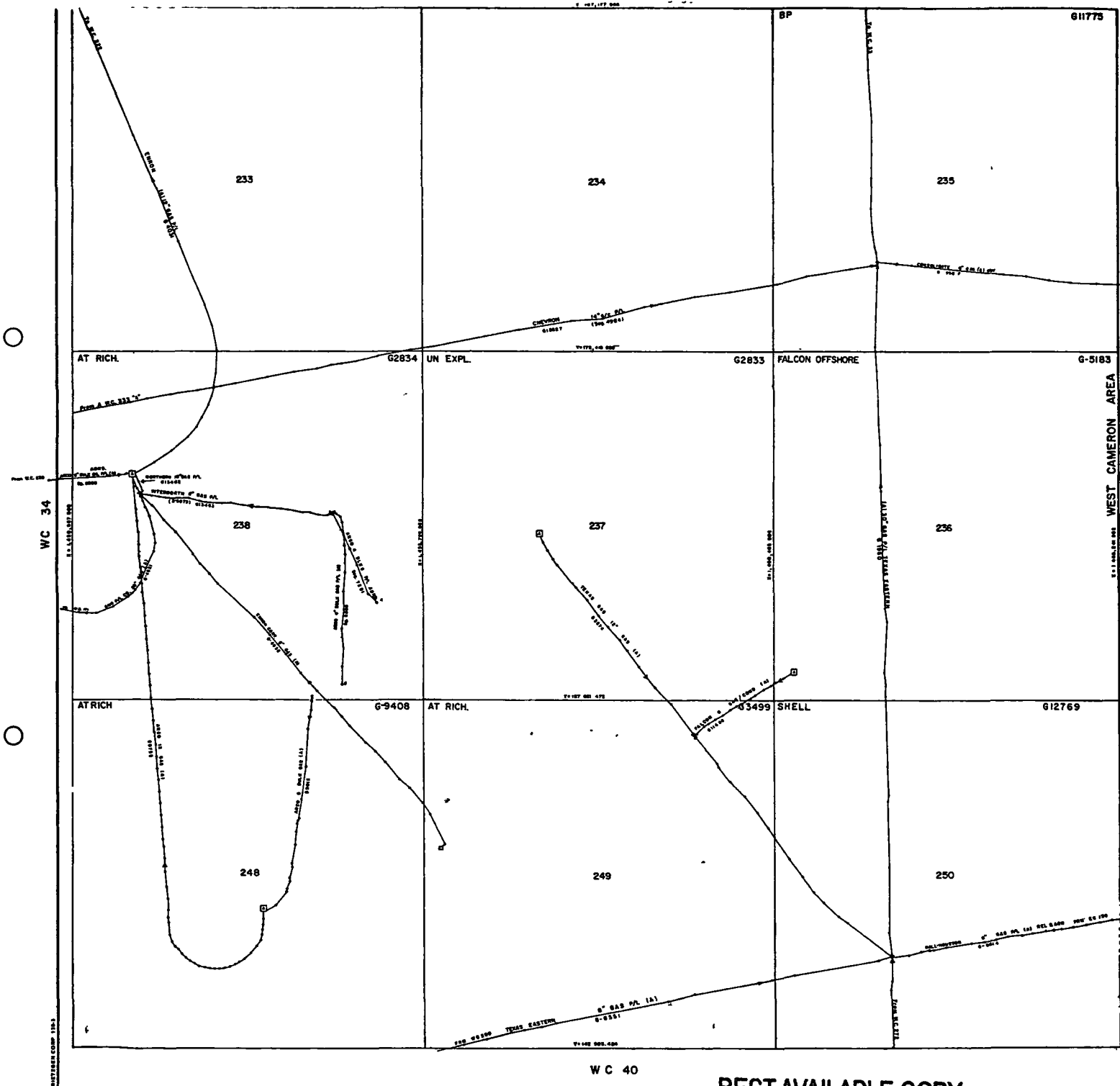
- E, Y COORDINATES IN FEET ARE BASED ON THE LAMBERT PLANE COORDINATE SYSTEM LOUISIANA SOUTH ZONE
- STATIONING IS BASED ON THE AS-BUILT PIPELINE ROUTE. FIX POINTS AND IS NOT REPRESENTATIVE OF THE LINEAR FOOTAGE OF PIPE INSTALLED. SEE PIPE DETAIL SHEET FOR ACTUAL PIPE FOOTAGE INSTALLED.
- PIPELINE WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF TRANSPORTATION'S MINIMUM FEDERAL SAFETY STANDARDS FOR GAS LINES PART 192, TITLE 49 CODE OF FEDERAL REGULATIONS.

TEXAS EASTERN GAS PIPELINE COMPANY
 A DIVISION OF TEXAS EASTERN TRANSMISSION CORPORATION

AS-BUILT TETCO 30\"/>
 FROM PENZON "A" PLATFORM BLOCK 253 TO THE-W AT TETCO 30\"/>
 WEST CAMERON AREA, OFFSHORE LOUISIANA, GULF OF MEXICO ALIGNMENT

APPROVED BY	DATE	APPROVED BY	DATE
DESIGNED BY: G. P. FARR	DATE: 2-15-85	APPROVED BY:	DATE:
CHECKED BY:	DATE:	APPROVED BY:	DATE:
APPROVED BY:	DATE:	APPROVED BY:	DATE:

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WEST CAMERON AREA
 EC 13 EAST CAMERON AREA

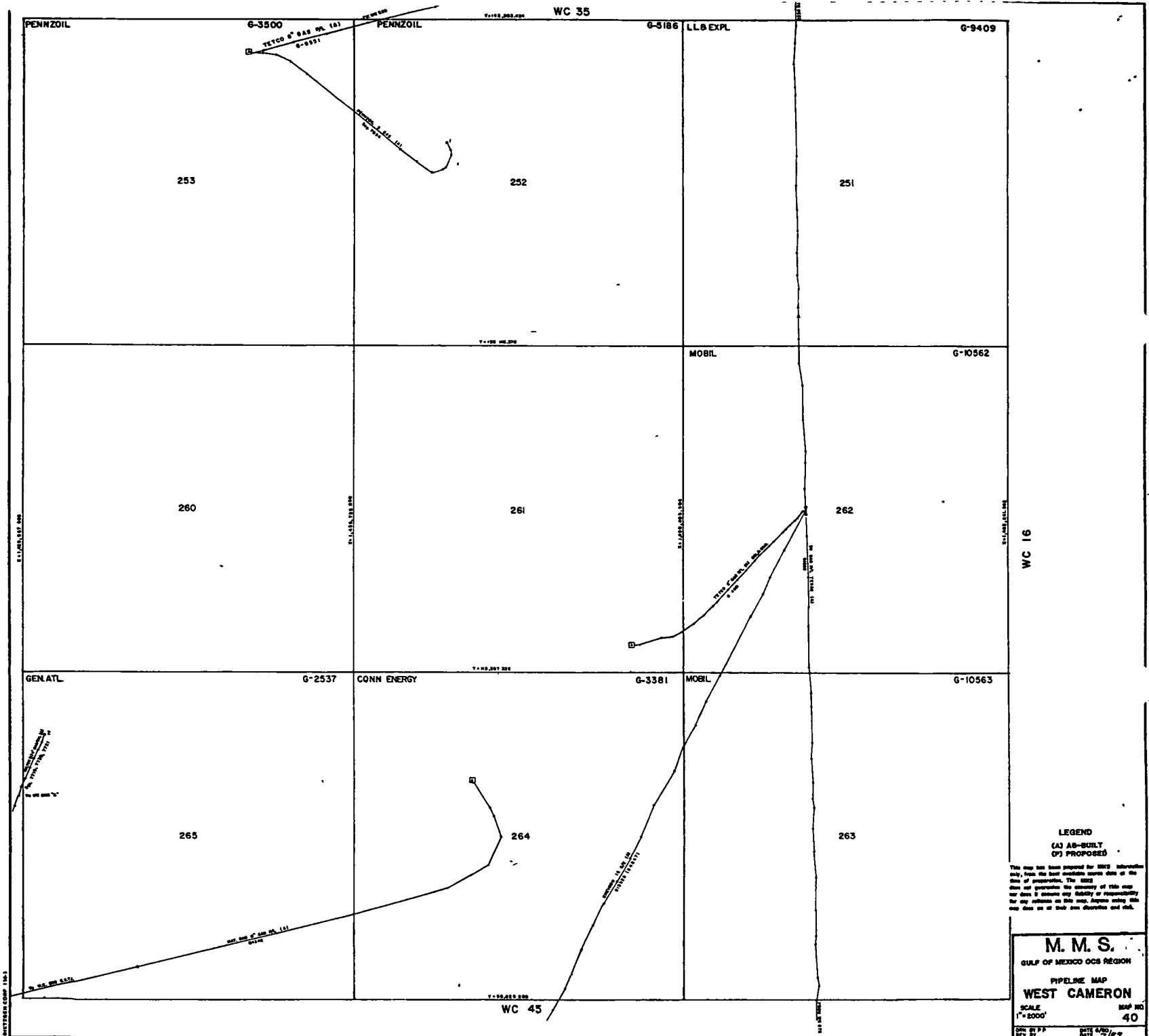
LEGEND
 (A) AS-SURVY
 (P) PROPOSED

This map has been prepared for 2000 information only from the best available source data at the time of preparation. The user assumes all responsibility for any reliance on this map.

M.M.S.
 GULF OF MEXICO OCS PROGRAM
 PIPELINE MAP
 WEST CAMERON
 SCALE 1"=2000'
 SHEET NO. 35
 DATE 1/15/00

WC 40

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EXHIBIT B

**TEXAS EASTERN TRANSMISSION CORPORATION
ABANDONMENT PROCEDURES FOR 8" LINE 41-J
WEST CAMERON BLOCK 250 TO BLOCK 253**

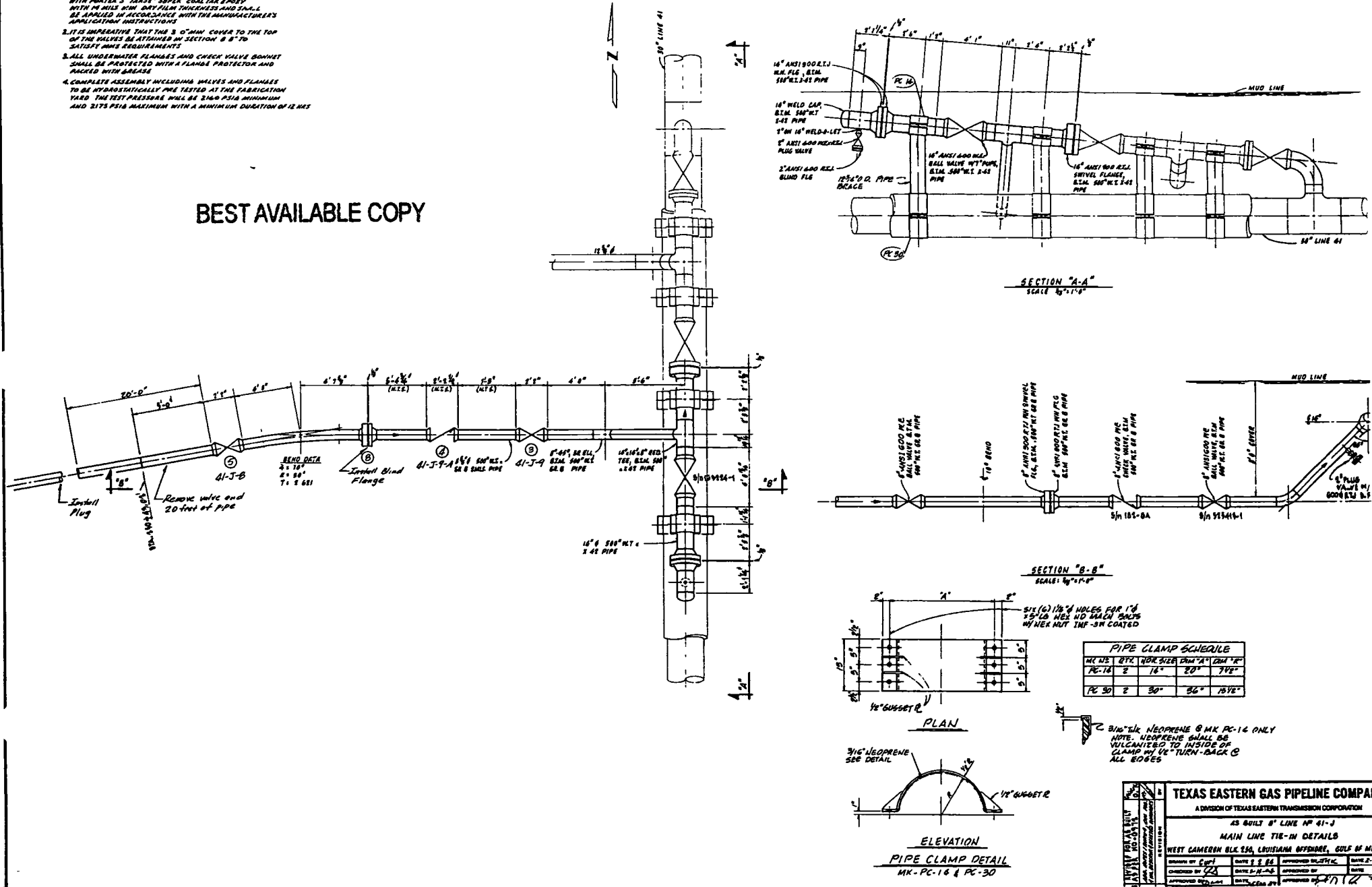
Scope of Work: Locate sub-sea tie-in at West Cameron Block 250. Run 2-8-inch spheres from West Cameron Block 253 to sub-sea tie-in at West Cameron Block 250. Remove 8-inch valve and 20 feet of 8-inch pipe from sub-sea tie-in and install 8-inch blind flange. Remove 8 feet of 8-inch pipe from riser, remove 8-inch check valve and remove tube turn at West Cameron Block 253.

1. Locate and uncover sub-sea tie-in at West Cameron Block 250. Coordinates X= 1,455,477, Y= 146,806. It is estimated that the line pressure on the 30-inch line 41 is between 950 psi and 1000 psi.
2. Operate valve #3 (8-inch 41-J-9) close then open 1/4, close then open 1/4 valve #5 (8-inch 41-J-8), pin 8-inch check valve #4 (41-J-9-A) open. Valves are located at West Cameron Block 250.
3. Pin 8-inch check valve #6 open at West Cameron Block 253 Pennzoil Platform.
4. Rig pump equipment on West Cameron Block 253 Pennzoil Platform.
5. Check close 10-inch valve #41-J-2 and 2-inch valve #41-J-1. Once valves are checked close, install 2-8-inch spheres into sphere trap at West Cameron Block 253 Pennzoil Platform.
6. Check close valve #7 (8-inch 41-J-5) at West Cameron Block 253 Pennzoil Platform.
7. Launch and run spheres with seawater, 25,000 feet of 8-inch line approximately 63,345 gallons. Not to exceed 10% or 69,680 gallons total. Pumps will have gallon counters installed. Run time is approximately 4.5 hours, 200 gallons of water per minute.
8. When spheres reach valve #5 (8-inch 41-J-8) pressure will spike. Stop pumping at Pennzoil Platform West Cameron Block 253. Divers will close valve #3 (8-inch 41-J-9) at sub-sea tie-in located at West Cameron Block 250.
9. Bleed pressure from 8-inch line 41-J at West Cameron Block 253 Pennzoil Platform, using 2-inch valve #41-J-3.
10. Once 8-inch line 41-J is blown down, divers will unbolt flange #8 and remove valve #5 (8-inch 41-J-8) and 20 feet of 8-inch pipe upstream. Install plug in open end of 8-inch pipe at West Cameron Block 250.
11. Install 8-inch blind flange, insure flange bolts are torqued to the required setting. Once blind flange has been installed and bolts tightened open valve #3 (8-inch 41-J-9) and check blind for any leaks. Repair if necessary, if no leaks close valve #3 (8-inch 41-J-9) and unpin check valve #4 (8-inch 41-J-9-A) at West Cameron Block 250.
12. Jet down end of 8-inch line 41-J to a minimum of 3 feet deep and install sand bags around the line and sub-sea tie-in at West Cameron Block 250.
13. Divers will remove 8 feet of 8-inch line 41-J from the riser above the water level, remove 8-inch check valve #6 and remove the tube turn and install plug in the open end of the pipe. Jet line to a minimum of 3 feet deep and install sand bags at West Cameron Block 253 Pennzoil Platform.

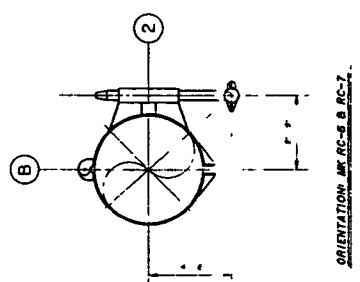
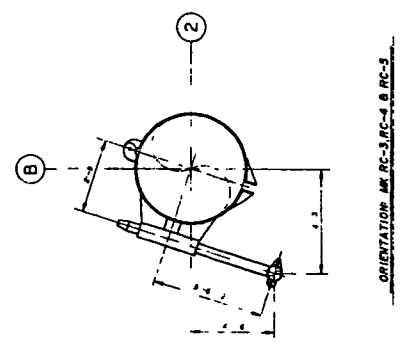
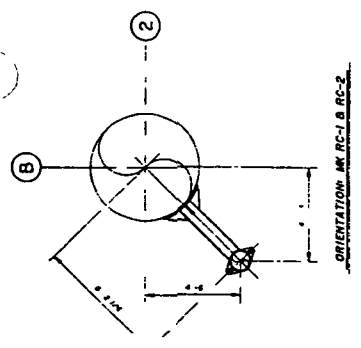
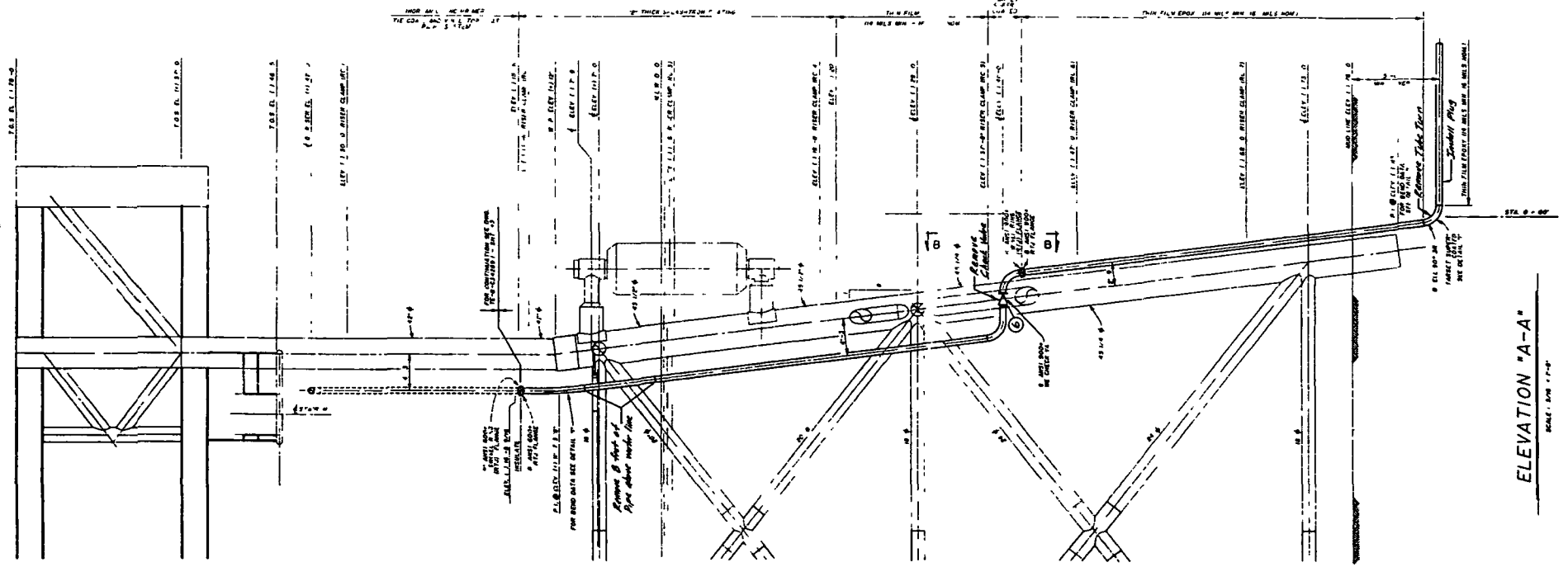
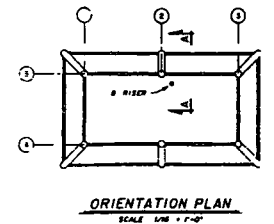
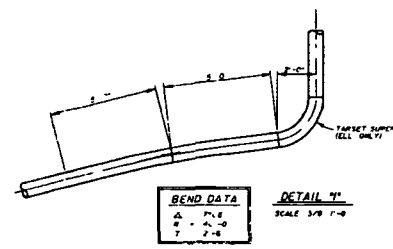
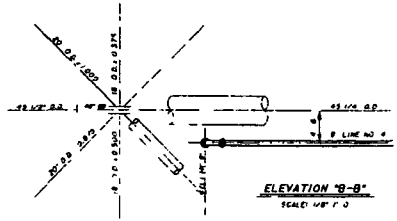
EXHIBIT C

1. ALL PROPOSED FABRICATION TO BE COATED WITH PRATER'S "TARSE" SUPER COAL TAR EPOXY WITH 14 MILS DRY FILM THICKNESS AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S APPLICATION INSTRUCTIONS
2. IT IS IMPERATIVE THAT THE 3/8" MIN COVER TO THE TOP OF THE VALVES BE ATTAINED IN SECTION B-B TO SATISFY MMS REQUIREMENTS
3. ALL UNDERWATER FLANGES AND CHECK VALVE BONNET SHALL BE PROTECTED WITH A FLANGE PROTECTOR AND PACKED WITH GREASE
4. COMPLETE ASSEMBLY INCLUDING VALVES AND FLANGES TO BE HYDROSTATICALLY PNE TESTED AT THE FABRICATION YARD THE TEST PRESSURE SHALL BE 3160 PSIA MINIMUM AND 2175 PSIA MAXIMUM WITH A MINIMUM DURATION OF 12 HRS

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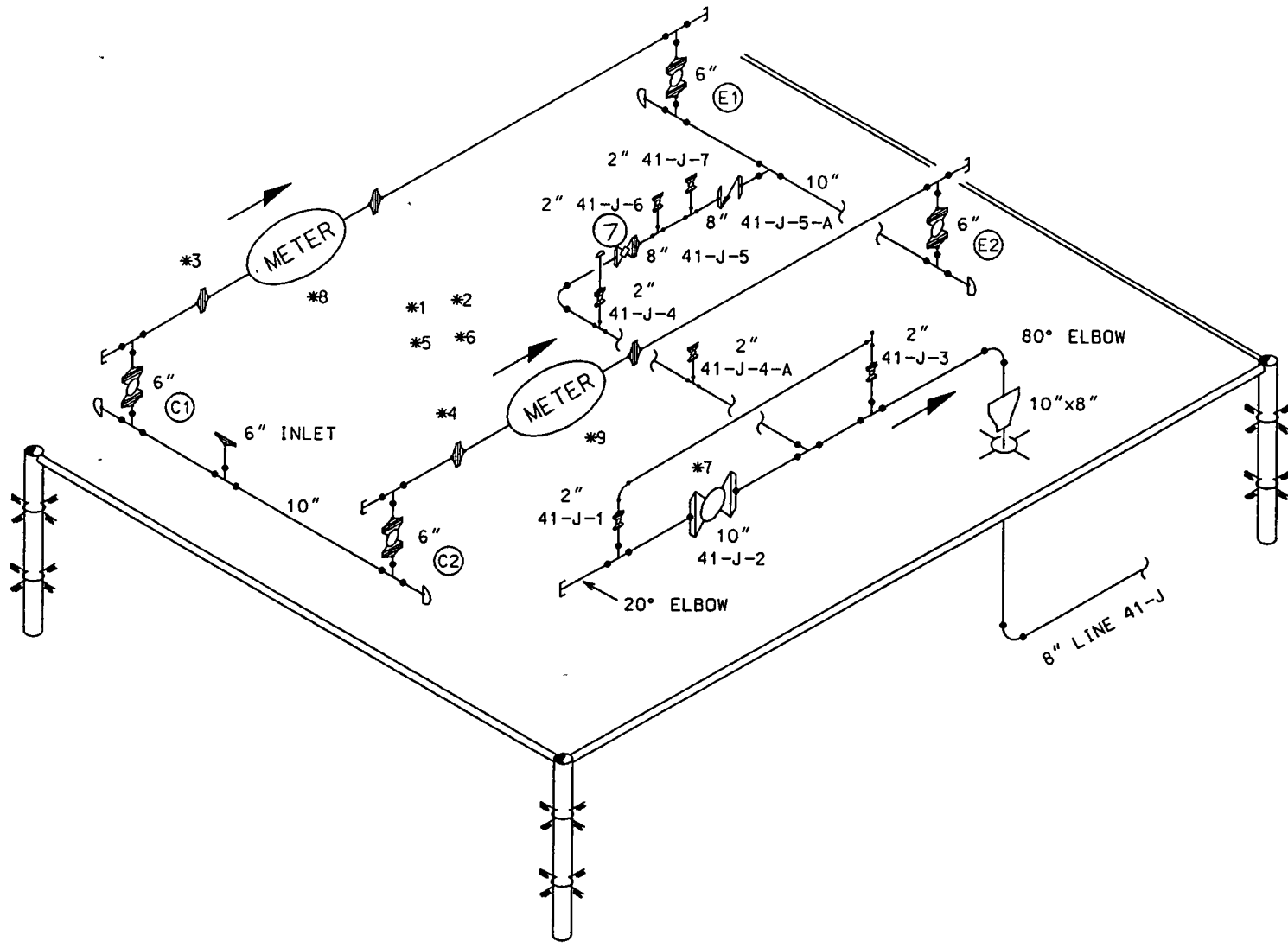


REFERENCE DRAWINGS
 7'-0-C44293 8" N. 253 PLATFORM RISER CLAMP DETAILS

DESIGNED BY DRAWN BY CHECKED BY DATE	TEXAS EASTERN GAS PIPELINE COMPANY A DIVISION OF TEXAS EASTERN TRANSMISSION CORPORATION 8" LINE N 41-4 PENZOIL PLATFORM - RISER INSTALLATION DETAILS W CAMERON BLK 253, L.A. OFFSHORE, GULF OF MEX. DRAWN BY CADSW-HAM DATE 7-30-63 APPROVED BY DATE
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PENNZOIL PLATFORM, BLOCK 253
MAIN DECK
M&R 2310
8" LINE 41-J

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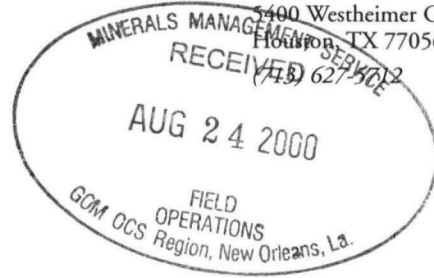




Theopolis Holeman
Senior Vice President
Transmission and Engineering

Texas Eastern
Transmission Corporation
Algonquin Gas
Transmission Company
East Tennessee
Natural Gas Company

5400 Westheimer Court
Houston, TX 77056-5310



DM

August 23, 2000

Mr. Don Howard
Regional Supervisor
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394
(504) 736-2547

Attn: Mr Alex Alvarado

SN 7000
(G 06551)

RE: Deactivation of 8-inch Line 41-J located in West Cameron Blocks 249, 250,252 and 253
Located in Federal Waters, Gulf of Mexico, Offshore Louisiana

Dear Mr. Alvarado:

In accordance with the Outer Continental Shelf Lands Act, Section 5 (e), 43 U.S.C.S. 1331, et seq. (1999), and 30 CFR 250.1006 (1999), Texas Eastern Transmission Corporation (TETCO) requests temporary deactivation of the referenced 8-inch pipeline 41-J (the Line). The Line is 4.73 miles long and extends from Pennzoil "A" Platform in West Cameron (WC) Block 253 to TETCO's 30-inch Line 41 in WC 250. The Line is to be deactivated and left in place because there is no current operational need for the Line.

TETCO respectfully requests approval to deactivate the Line by pigging, flushing and filling with inhibited sea water, leaving the Line in place and isolating the Line with a closed block valve or blind flange at each end. After deactivation, TETCO shall continue to maintain all respective rights-of-way.

The location of the Line is indicated on the vicinity map and as-built drawings provided as Exhibit A. The general procedure for deactivating the 8-inch pipeline is provided as Exhibit B. Sub-sea tie-in details and platform details are provided as Exhibit C.

Questions or requests for additional information may be directed to Mark Reeder at (713) 627-5762.

9/5/2000

Sincerely,

cancelled. Rec'd application dated 8/28/2000 to abandon PL & relinquish ROW

Damm

DEC 3 1984

In Reply Refer To: RP-2-2
OCS-G 6551

ACTION

Texas Eastern Transmission Corporation	:	Pipe Line Right-of-Way
	:	
	:	Date of Permit: 5/14/84
	:	
	:	Decision Requesting Proof of Construction Dated:
	:	
	:	Proof of Construction Received: 6/19/84

Proof of Construction Accepted

The above-captioned grantee has submitted the evidence required by the law and Regulations 30 CFR 256.95(a). The proof of construction is hereby accepted and approved. Deviation from the original plat has been noted and new plat made a part of the record. The total length of the "as-built" pipeline right-of-way is 4.73 miles.

(Orig. Sgd.) John L. Rankin

John L. Rankin
Regional Director

bcc: P/L OCS-G 6551 (LE)
P/L OCS-G 6551 (w/attachments) (RP-2-2)
ORD Reading File
OPS-4 (w/copy of location plat)

CWilliams:jj:11/28/84:Disk 8

An good

*on map
12/31/84
KZ*

BEST AVAILABLE COPY

Williams
11-29-84
Kelly 11/29/84
Stauffer 11/29/84
Jancy 12-3

In Reply Refer To: RP-2-2
OCS-G 6551

DEC 3 1984

ACTION

Texas Eastern Transmission Corporation	:	Pipe Line Right-of-Way
	:	
	:	Date of Permit: 5/14/84
	:	
	:	Decision Requesting Proof of Construction Dated:
	:	
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(Orig. Sgd.) John L. Rankin

John L. Rankin
Regional Director

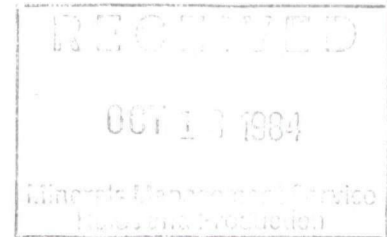
bcc: P/L OCS-G 6551 (LE)
P/L OCS-G 6551 (w/attachments) (RP-2-2)
ORD Reading File
OPS-4 (w/copy of location plat)

CWilliams:jj:11/28/84:Disk 8

TEXAS 
EASTERN
Transmission Corporation

JAMES G. MALVEN
MANAGER
RIGHTS OF WAY AND
LAND DEPARTMENT

October 4, 1984



Mr. John L. Rankin, Regional Manager
United States Department of the Interior
Minerals Management Service
P. O. Box 7944
Metairie, LA 70010

Re: Your File-RP-2-2
OCS-G-6551

Our File-286-4-41-J
AFE #6972, WC Block 253
to 250, Offshore Louisiana


Dear Mr. Rankin:

On May 14, 1984 your office issued Permit #OCS-G-6551 authorizing Texas Eastern Transmission Corporation to construct an 8" natural gas pipeline from Pennzoil Company's A Platform in Block 253, West Cameron Area to a subsea tie-in on our 30" line (OCS-G-1950) in Block 250, West Cameron Area, Offshore Louisiana.

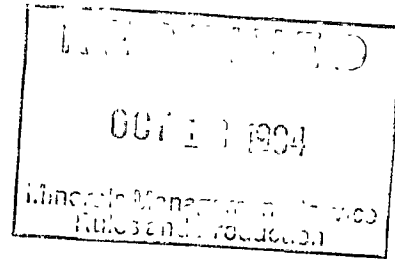
In accordance with the regulations contained in 30 CFR 256.95 and appropriate guidelines, we are enclosing in triplicate as-built drawing #TE-8-34866 along with three copies of the Hydrostatic Test Report.

If you need any additional information, please feel free to contact this office.

Very truly yours,


James G. Malven

KD:jt
Enc.



HYDROSTATIC TEST REPORT
LINE 41-J
WEST CAMERON 253 - WEST CAMERON 250
AFE 01-6972

TABLE OF CONTENTS

- I. INTRODUCTION
- II. HYDROSTATIC TEST LETTER
- III. TEST REPORTS
 - A. MAINLINE TESTS
 - 1) MAINLINE TEST
 - 2) IN-PLACE TEST-PLATFORM PIPING AND METER SKID
 - B. PRE-TESTS
 - 1) PRE-TEST #1- RISER PIPE
 - 2) PRE-TEST #2-2R - PLATFORM PIPE
 - 3) PRE-TEST #3- RISER-CHECK VALVE
 - 4) PRE-TEST #4, #4R & #4EXT- SUB-SEA TIE-IN
 - 5) PRE-TEST #5-5R - METER SKID

TEXAS 
EASTERN

INTEROFFICE CORRESPONDENCE

TO: J.L. Butler

CO/DIV: Engineering

FROM: D.R. Kuester

DATE: July 27, 1984

SUBJECT: Hydrostatic Test Report
Line 41-J -8"
West Cameron 253- West Cameron 250
AFE 01-6972

Please find transmitted herein the hydrostatic test report for 8" Line 41-J, from West Cameron 253 to West Cameron 250.

MAINLINE TEST

The mainline test consisted of approximately 25,080' of 8.625" O.D. x 0.375" W.T. Grade B pipe, plus fabrications from tie-in flange to riser flange (elevation +15'). The maximum test pressure was 2175 PSIG, (+0, -15). The mainline was accepted at the end of the test period which began at 2:58 a.m. on June 19, 1984 and ended at 6:00 p.m. on June 19, 1984. The test was conducted by Santa Fe Offshore Construction Co; their representative was G.B. Emert, Jr.. Texas Eastern's representative was Donald R. Kuester.

IN-PLACE TEST

An in-place test was conducted on the platform piping and meter skid. The maximum test pressure was 2185 PSIG, (+0, -25). This test section was accepted at the end of the test period which began at 9:35 p.m. on June 15, 1984 and ended at 10:00 a.m. on June 16, 1984. The test was conducted by Santa Fe; their representative was G.B. Emert, Jr.. Texas Eastern's representative was E.T. Jones.

PRE-TESTS

PRE-TEST #1

Pre-test #1 was test on the riser pipe consisting of 120' of 8.625" O.D. x 0.500" W.T. Grade B pipe. The maximum test pressure was 4000 PSIG, (+0, -50). The test section was accepted at the end of the test period which began at 8:10 p.m. on May 3, 1984 and ended at 8:20 a.m. on May 4, 1984. The test was conducted by Santa Fe; their representative was Clarence Abshire, Jr.. Texas Eastern's representative was Tommy Pluss.

PRE-TEST #2 and #2R

Pre-test #2 was a test on the platform piping fabrication in accordance with hydrostatic test letter dated April 6, 1984. The maximum test pressure was 2175 PSIG, (+0, -15). The test section was accepted at the end of the 12 hour test period which began at 4:35 p.m. on May 15, 1984 and ended at 4:40 a.m. on May 16, 1984. The test was conducted by Santa Fe; their representative was Clarence Abshire, Jr.. Texas Eastern's representative was Tommy Pluss.

Pre-test #2R was a repeat test of the platform piping in accordance with the hydrostatic test letter dated May 1, 1984. The maximum test pressure was 4000 PSIG, (+0, -50). The test section was accepted at the end of the 12 hour test period which began at 5:30 p.m. on May 18, 1984 and ended at 5:35 a.m. on May 19, 1984. The test was conducted by Santa Fe; their representative was Clarence Abshire, Jr.. Texas Eastern's representative was Malcolm Crane.

PRE-TEST #3

Pre-test #3 was a test of the riser pipe after Atwood-Morrell check valve was replaced by a Wheatley Check Valve. The maximum test pressure was 2185 PSIG, (+0, -25). The test was accepted at the end of the test period which began at 2:30 p.m. on May 26, 1984 and ended at 6:45 p.m. on May 26, 1984. The test was conducted by Santa Fe; their representative was C.J. Robin. Texas Eastern's representative was Cline Waguespack, Jr..

PRE-TEST #4, #4R, and #4EXT.

Pre-test #4 was a test of the 8" on 12" sub-sea tie-in fabrication which consisted of 12.750" O.D. x 0.500" W.T. X-42 and 8.625" O.D. x 0.500" W.T. Grade B pipe. The maximum test pressure was 2185 PSIG, (+0, -25). The test section was accepted at the end of the 12 hour test period which began at 10:00 p.m. on May 19, 1984 and ended at 11:05 a.m. on May 20, 1984. The test was conducted by Santa Fe; their representative was Clarence Abshire, Jr.. Texas Eastern's representative was Malcolm Crane.

Pre-test #4R was a test of the sub-sea tie-in after Atwood-Morrell check valve was replaced by a Wheatley check valve. The maximum test pressure was 2185 PSIG, (+0, -25). The test was accepted at the end of the test period which began at 1:30 a.m. on May 26, 1984 and ended at 1:35 p.m. on May 26, 1984. The test was conducted by Santa Fe; their representative was Paul D. Hebert. Texas Eastern's representative was Cline Waguespack, Jr..

Pre-test #4EXT. was a test of the sub-sea tie-in after an extension was added to the sub-sea tie-in fabrication. The maximum test pressure was 2185 PSIG, (+0, -25). The test was accepted at the end of the test period which began at 5:40 a.m. on June 22, 1984 and ended at 5:40 p.m. on June 22, 1984. The test was conducted by Santa Fe; their representative was James Phillips. Texas Eastern's representative was L.M. Calvert.

PRE-TEST #5 and #5R

Pre-test #5 was a test of the meter skid fabrication. The maximum test pressure was 2185 PSIG, (+0, -25). The test section was accepted at the end of the test period which began at 1:05 p.m. on May 25, 1984 and ended at 1:15 a.m. on May 27, 1984. The test was conducted by Santa Fe; their representative was Paul Blanchard. Texas Eastern's representative was Malcolm Crane.

Pre-test #5R was a test of the 8" Wheatley Check Valve that replaced the Atwood-Morrell check valve. The maximum test pressure was 2185 PSIG, (+0, -25). The test section was accepted at the end of a 12 hour test period which began at 12:55 p.m. on May 31, 1984 and ended

PRE-TEST #5R cont.

at 1:00 a.m. on June 1, 1984. The test was conducted by Santa Fe; their representative was Paul Blanchard. Texas Eastern's representative was Malcolm Crane.

The test reports contain copies of deadweight pressure logs, pressure charts, temperature charts, and deadweight and recorder certifications.

A handwritten signature in cursive script, appearing to read "D.R. Kuester", written over a horizontal line.

D.R. Kuester

kf

attachments

TEXAS 
EASTERN

INTEROFFICE CORRESPONDENCE

TO: J. L. Butler

CO/DIV: Gas Engineering

FROM: J. M. Keiser

DATE: May 1, 1984

SUBJECT: West Cameron 252/253
Hydrostatic Test Pressures & Procedures
AFE 6972
C/D File 20.2172

RECEIVED
MAY 1 1984
J. L. BUTLER

The hydrostatic testing of the subject job shall be performed as indicated below:

<u>Pre-Test</u>	<u>Test Pressure</u>	<u>Range</u>
1. Riser & Platform Pipe	4000 psig	+0, -50 psig

Pipe: 8.625" O.D. x .500" W.T., API-5L Gr. B

The above pipe is defined as pipe from the sea floor to the tie-in of the meter skid.

2. Meter Skid Piping:	2185 psig	+0, -25 psig
-----------------------	-----------	--------------

Mainline Tie-In Test (In Shop)

3. Tie-In Fabrication:	2185 psig	+0, -25 psig
------------------------	-----------	--------------

Mainline Test

4. Meter Skid, Platform Piping, Riser & Mainline:

	2175 psig	+0, -15 psig
--	-----------	--------------

Mainline Pipe: 8.625" O.D. x .500" W.T., API-5L Gr. B
8.625" O.D. x .375" W.T., API-5L Gr. B

Test numbers 1 and 2 shall be per Texas Eastern Specification 2401, Revision 3 dated 6-19-81 titled, "Hydrostatic Test Procedure", with the following exceptions:

1. No stroke-pressure plot is required.
2. No 3 hour hold is required.

Test number 3 shall be per Texas Eastern Specification 2401, Revision 3 dated 6-19-81 titled, "Hydrostatic Test Procedure", with the following exception:

1. No stroke-pressure plot is required.

J. L. Butler
May 1, 1984
Page 2

Test number 4 shall be in accordance with Texas Eastern Specification 2401, Revision 3 dated 6-19-81 titled, "Hydrostatic Test Procedure", with no exceptions.

If you have any questions, contact Mr. Doug Mims at extension 5817.

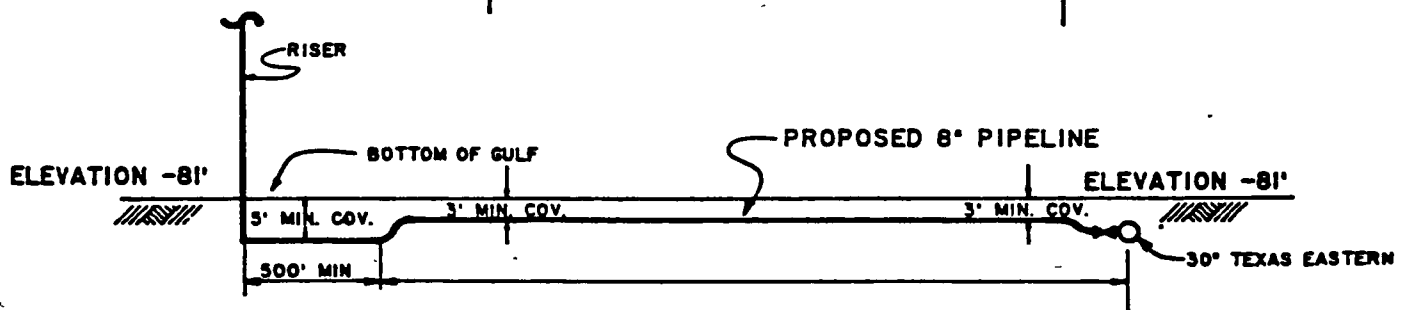
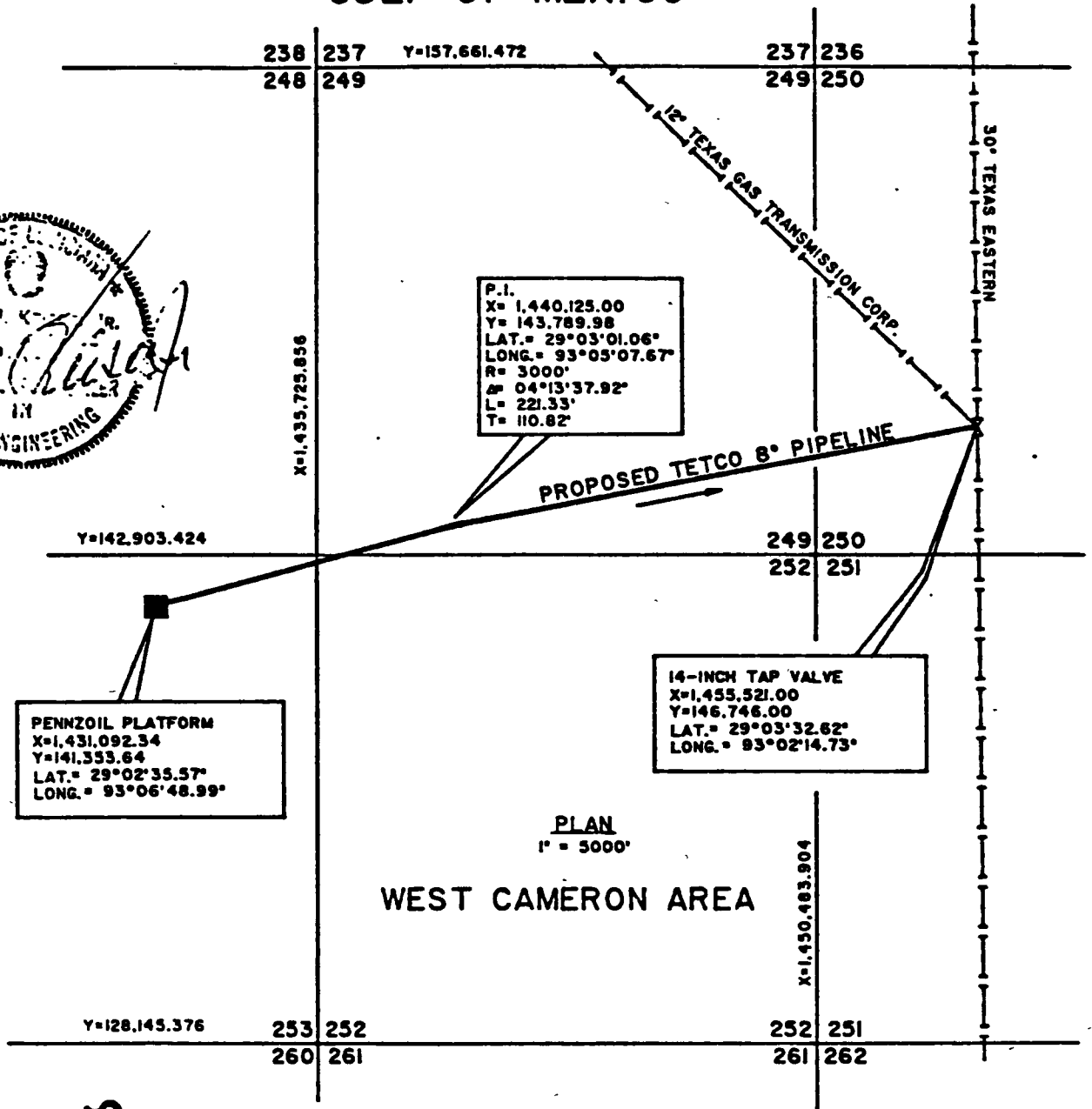
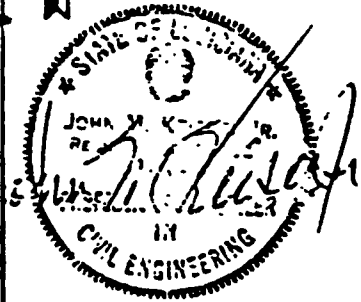

J. M. Keiser

 DCM/ems

xc: E. V. Holzer

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OFFSHORE LOUISIANA GULF OF MEXICO



CERTIFIED BY:
JOHN M. KEISER, JR.
 REGISTERED ENGINEER
 NO. 12162
 STATE OF LOUISIANA

SHEET 2 OF 2

TA-8-34420

DWG. BY: CADDS-MLW CHKD. BY: 5/2/82 1-23-90 APPR. BY: JK

TEXAS 
EASTERN
Transmission Corporation
Engineering Services Division

Specification Sheet

Job No.:
Date: 6-19-81

For: Hydrostatic Test Procedure Project:
By: SGB App: SWW App:  Spec. No.: 2401 Rev: 3

All hydrostatic pretesting and mainline testing, on new installations, where practical, shall be conducted in accordance with the following test procedures, and in conjunction with test information which will be furnished for each job. Variations or modifications to this procedure will be made only with approval of the Chief Engineer.

1. Maximum and minimum test pressures will be based on (1) the mill histogram plot, (2) a pressure determined by components in the test section such as valves and fittings, or (3) a pressure for special tests such as a pretest. All test pressures are based on calculations using the outside diameter of the pipe and at the high elevation point in the test section. Maximum elevation difference in any one test section shall be 200 feet.
2. Before pressuring is begun, the Test Engineer shall insure that the test section has been securely isolated from other components and that proper precautions have been taken to insure that the test will be conducted in a safe and workmanlike manner.
3. During initial pressuring to a pressure equal to mill test, determine and set a pump stroke rate which will pressure the test section at a constant stroke rate without pump speed drop, change of pump speed, or changing gears during the pressuring operation. The pressure rise rate shall be determined by the Test Engineer, and, where practical, be less than 10 psig per minute. The final pump stroke rate and resulting pressure rise rate shall be determined during pressuring in the region of 100 psig below mill test or at 90% SMYS, if mill test was in excess of 90% SMYS.
4. When the pressurization of the test section has reached the pressure determined by mill test, stop and hold the pressure for 15 minutes. Then slowly reduce the pressure to 100 psig below the pressure and hold a tight line leak test. During this leak test, the Test Engineer shall insure that no leaks exist in the test section so that the test section is in order for preparing a stroke-pressure plot. The tight line leak test shall continue until all leaks have been stopped and no loss of pressure occurs for fifteen (15) consecutive minutes. All pressure readings shall be done with a dead weight gauge.

TEXAS 
EASTERN
Transmission Corporation

Specification Sheet

Engineering Services Division

Job No.:
Date: 6-19-81

For: Hydrostatic Test Procedure	Project:			
By: SGB	App:	App:	Spec. No.: 2401	Rev: 3

5. The starting test pressure for preparing the stroke-pressure plot is at the discretion of the Test Engineer, however it shall be at least 100 psig below the pressure determined by the mill test. The test section is to be pressured with the pump operated continuously at the stroke rate previously determined. It is most important that full attention be given to maintain a constant pump rate. Observation of a tachometer or counting strokes versus time and small throttle adjustments may be needed to achieve a constant rate. The constant rate shall be maintained throughout preparation of the stroke-pressure plot.

6. A continuous plot shall be made of pump strokes versus pressure, beginning at the starting pressure and continuing to the ending pressure. The ending pressure shall be equal to the specified minimum test pressure or to the desired yield level whichever is greater. The desired yield level is defined as that point along the stroke pressure plot at which the number of strokes per pound of pressure rise is equal to twice the number of strokes per pound of pressure rise which was experienced prior to initial deviation, or to the specified maximum test pressure, whichever is smaller. Pump strokes versus pressure shall be indicated as a plot point at 10 psi intervals in whole multiples of 10. Stroke readings shall be indicated at each plot point. Time in hours, minutes, and seconds shall be indicated at the beginning and ending points as well as intermediate points at 50 psi intervals.

7. After the test pressure is reached, the time and pressure shall be recorded and these are the beginning time and pressure of the hold period. The minimum hold period shall be 12 hours. The pressure during the hold period shall be the maximum pressure of the test. For the first two hours of the hold period, the pressure shall be held between +0 and -2 psig of the maximum test pressure. For the remainder of the hold period, the pressure shall be held between +0 and -15 psig of the maximum test pressure. During the initial two hour period, the number of strokes to maintain maximum pressure after 10 minutes, 30 minutes, 60 minutes, and 120 minutes shall be recorded. Ambient temperatures shall be recorded hourly, beginning with initial pressuring and continuing for the duration of the hold period.

TEXAS 
EASTERN
Transmission Corporation

Engineering Services Division

Job No.:
Date: 6-19-81

For: Hydrostatic Test Procedure	Project:
By: SGB	App: App: Spec. No.: 2401 Rev: 3

8. All data shall be recorded with the utmost of care. Pressures, temperature, stroke counts, time and all other data on the test section shall be clearly recorded, legible, and understandable. Each time a repressure operation is necessary, the time and pressure before and after repressure shall be recorded along with the number of strokes required to repressure. Should it become necessary to reduce the pressure of a test section during the hold period, the time and pressure shall be recorded both before and after the reduction of pressure. The volume of water removed shall be either measured or calculated and recorded.

9. The requirements for an acceptable pressure test shall be as follows:

a. The section has been maintained at the desired test pressure (+0, -15 psig) for a period of 12 hours. Should conditions require that a test be interrupted, it is required by Federal Regulations that:

1. An 8 hour continuous test is required for piping installed for gas service.

2. A 4 hour continuous test is required for piping installed for liquid service which can be visually inspected.

An 8 hour continuous test is required for piping installed for liquid service which cannot be visually inspected.

b. No pressure loss during the last 3 hours of the test.

c. Pressure losses corrected after the 12 hour test period and no pressure loss for an additional 3 hours.

d. Pressure loss rate which declines steadily after 12 hour test period which can be verified as within the calculable affect of ambient conditions, and approval obtained from the office of the Chief Engineer.

10. Before a piping section is permanently installed, it may be necessary to pre-test the piping before installation. The necessary test information will be furnished with each job.

TEXAS 
EASTERN
Transmission Corporation

Engineering Services Division

Job No.:	
Date:	6-19-81

For:	Hydrostatic Test Procedure	Project:					
By:	SGB	App:		Spec. No.:	2401	Rev:	3

11. The Test Engineer shall note that the following special conditions may exist which may prevent a hydrostatic test to the desired yield level:
 - a. Concrete coated pipe shall be tested to a maximum pressure of 102% SMYS plus 15 psig. For offshore inplace test, the piping shall be tested to a maximum pressure of 102% SMYS plus 15 psig taken at the water line.
 - b. Hydrostatic tests for sections containing piping of two or more specifications shall be conducted to a maximum pressure as determined by piping of the lowest specification.
 - c. Valves, fittings, and end-closures are at times included in a test section and may limit the calculated maximum allowable test pressure for the section to a lesser pressure.
 - d. Station piping shall be tested to a minimum pressure of twice the design pressure for gas piping, and one and a half times the design pressure for liquid piping. The Test Engineer shall determine if valves and fittings have been special ordered so that they will not limit the test.
 - e. Electric Resistance Welded (ERW) Pipe shall be tested to a maximum pressure of 102% SMYS plus 15 psig, at the low elevation point.

12. In the event of a test failure/leak, the following procedure shall be followed:

The test engineer will report all leaks or failures to the Construction Supervisor at the site and the Project Superintendent in charge. The test engineer will also report by telephone, the leak or failure within one (1) working day to the Field Construction Operations (FCO) office in Houston. Technical data required for DOT Form F-7100.2 will be filled out by the test engineer and forwarded to the Project Superintendent.

TEST ENGINEER'S MAINLINE HYDROSTATIC TEST SECTION EVALUATION

General Information

Job No. 6972 Test Section No. MAINLINE Length 25,132' Miles 4.76
Pipe Specification 8.625 O.D." x 0.375" " x Grade B
Time and Date on Test 2:58am 6/19/84 Test Pressure 2175 PSIG.
Time and Date off Test 6:00pm 6/19/84 Final Pressure PSIG.
Initial Wather: Sky: Clear, Ambient Temp. 77 °F. - Rising - Falling
Final Weather : Sky: Clear, Ambient Temp. 81 °F. - Rising - Falling
Estimated Length of Exposed Pipe 15 Feet @ 1 Sections
Type of Soil: Clay - Loam - Rocky - Sandy - Shale - Other Sea Water
Surface Condition of Soil: Dry - Wet - Damp Sea Water
Recent Rain: Yes - No - Approx. Amount: Trace - Steady - Showers.
Specified Minimum Test Pressure at High Elevation Point 2175 PSIG.

Specific Information

Test Elevation Spread: High Point 15' Low Point Sea Level Pump 15'
Pump to High Point Correction: 0 Feet 0 PSIG
Maximum Pressures Reached to Give Desired Test:
At Pump 2175 PSIG - O.D. Stress 25,012 PSI
At Low Point PSIG - O.D. Stress PSI
At High Point 2175 PSIG - O.D. Stress 25,012 PSI
Fill Water Temp. Measured: Yes - No. If Yes, °F.
Ground Temp. Measured: Yes - No. If Yes, °F.
Pump Data: Gals./Strk. .0060 Strks./Min. 152.7 Est. Strks./Min.
Test Data: Strks./PSIG 16.8 Gals./PSIG 0.1008 Theoretical Gals/PSIG
Report of Observed Leaks: Valve-Flange-Nipple-Other NONE
Remarks on Observed Leakage:

Leak Stopped: Yes - No. Time If No., Estimate Rate Gals./Hr.*
Pressure Loss or Gain During Last 3 hours of Test: Loss Gain PSIG.

Calculations

Minimum Uniform Pressure Loss Rate Experienced: (Leak Rate Equivalent) PSIG/Hr.

Leak Rate Based on Test Data:
PSIG/Hr. x Gals./PSIG x 24 Hr. ÷ 42 Gals./BBL = BBL/D.

Leak Rate Based on Theoretical Valves:
Leak Coefficient "K":

Pipe Specification "K" Valve, BBL/PSIG - Mile
For 30" x .375", .469", .450", etc., Use 0.0243,
For 36" x .390", .469", .388", etc., Use 0.0376

LR = PSIG/HR. x Miles "K" x 24 = BBL/Day
Could this Rate be Detected by Walking the line? Yes - No.
Remarks on Indicated Leakage, etc.

Give Reason for Accepting of Extending Test

DR Keuster Test Engineer

* 10 drops per second for a dripping leak are about equal to 1-Gallon per Hour.

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Line 41J West Cameron 253

Section Tested: From: Riser Flange To: Sub-Sea Tie-in

Test Section No.: Mainline Length: 25132'

Size of Pipe: 8.625 O.D. x .375 W.T. x Grade B Manufacturer: Armco

Pressure Unit No.: _____ Gallons per Stroke: 0.006 Fill Unit No.: _____

Pressure Unit Location: Platform Water Source: Gulf Of Mexico

Time and Date Test Started: 2:58-^{AM}PM- 6/19/84 Test Pressure (Maximum): 2175 PSIG

Time and Date Test Ended: 6:00-^{AM}PM 6/19/84 Stroke-Pressure Plot: Yes No _____

Section Accepted Section Leaking NO Section Ruptured NO

DEADWEIGHT RECORDED READING (PSIG)

Date: _____

TIME AM	PRESSURE	STROKES	TEMP. F1/Amb	TIME AM	PRESSURE	STROKES	TEMP. F1/Amb
2345PM	Start Pumping			1230 PM	2165		102/78
2355	195 Bleed Off Air		85	1300	2165		102/78
0003	Start pumping to 1875			1330	2165		101/78
0125	1875		97/77	1400	2165		102/78
0150	1750		97/77	1430	2165		102/78
0225	1875			1500	2164		102/79
0258	2175	ON TEST	99/77	1600	2164		103/78
0330	2174		99/77	1630	2164		103/78
0400	2173		98/77	1700	2164		104/80
0430	2173		98/77	1730	2164		104/81
0500	2172		98/77	1800	2164	OFF TEST	104/81
0530	2170		98/76				
0600	2169		98/76				
0700	2168		98/76				
0730	2167		100/76				
0800	2167		103/76				
0830	2167		105/77				
0900	2166		107/77				
0930	2166		108/78				
1000	2166		109/78				
1030	2166		110/78				
1100	2166		110/78				
1130	2166		106/78				
1200	2165		104/78				

Comments: _____

TETCO Representative: *[Signature]* Contractor Representative: G. B. Emerth

Recorders Last Tested: _____ Deadweight Serial No.: 12793

Test Contractor: _____

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Line 41-J WEST CAMERON 253

Section Tested: From: Riser Flange To: Sub-Sea Tie-IN

Test Section No.: Mainline Length: 25,132'

Size of Pipe: 8.625" O.D. x .375" W.T. x Grade B Manufacturer: Armco

Pressure Unit No.: _____ Gallons per Stroke: 0.006 Fill Unit No.: _____

Pressure Unit Location: Platform Water Source: Gulf of Mexico

Time and Date Test Started: 2:58^{AM} 6/19/84 Test Pressure (Maximum): 2175 PSIG

Time and Date Test Ended: 6:00^{AM} 6/19/84 Stroke-Pressure Plot: Yes No _____

Section Accepted YES Section Leaking NO Section Ruptured NO

DEADWEIGHT RECORDED READING (PSIG)

Date: 6 | 19 | 84

STROKE PRESSURE - PLOT DATA

TIME	PRESSURE	STROKES	TEMP. STROKES	TIME	PRESSURE	STROKES	TEMP. STROKES
2:25 ^{AM} PM							
0:00	1875	0			2105	3642	148
	1885	178	178		2115	3955	165
	1895	333	155	26:23	*2125	4122	167
	1905	492	159		2135	4282	160
	1915	669	177		2145	4445	163
5:37	*1925	850	181		2155	4641	196
	1935	1010	160		2165	4800	159
	1945	1170	160	32:15	*2175	4973	173
	1955	1342	172				
	1965	1510	168				
11:00	*1975	1680	170				
	1985	1842	162				
	1995	1996	154				
	2005	2173	177				
	2015	2542	169				
15:58	*2025	2500	158				
	2035	2650	150				
	2045	2822	172				
	2055	2983	161				
	2065	3140	157				
21:07	*2075	3309	169				
	2085	3472	161				
	2095	3642	170				

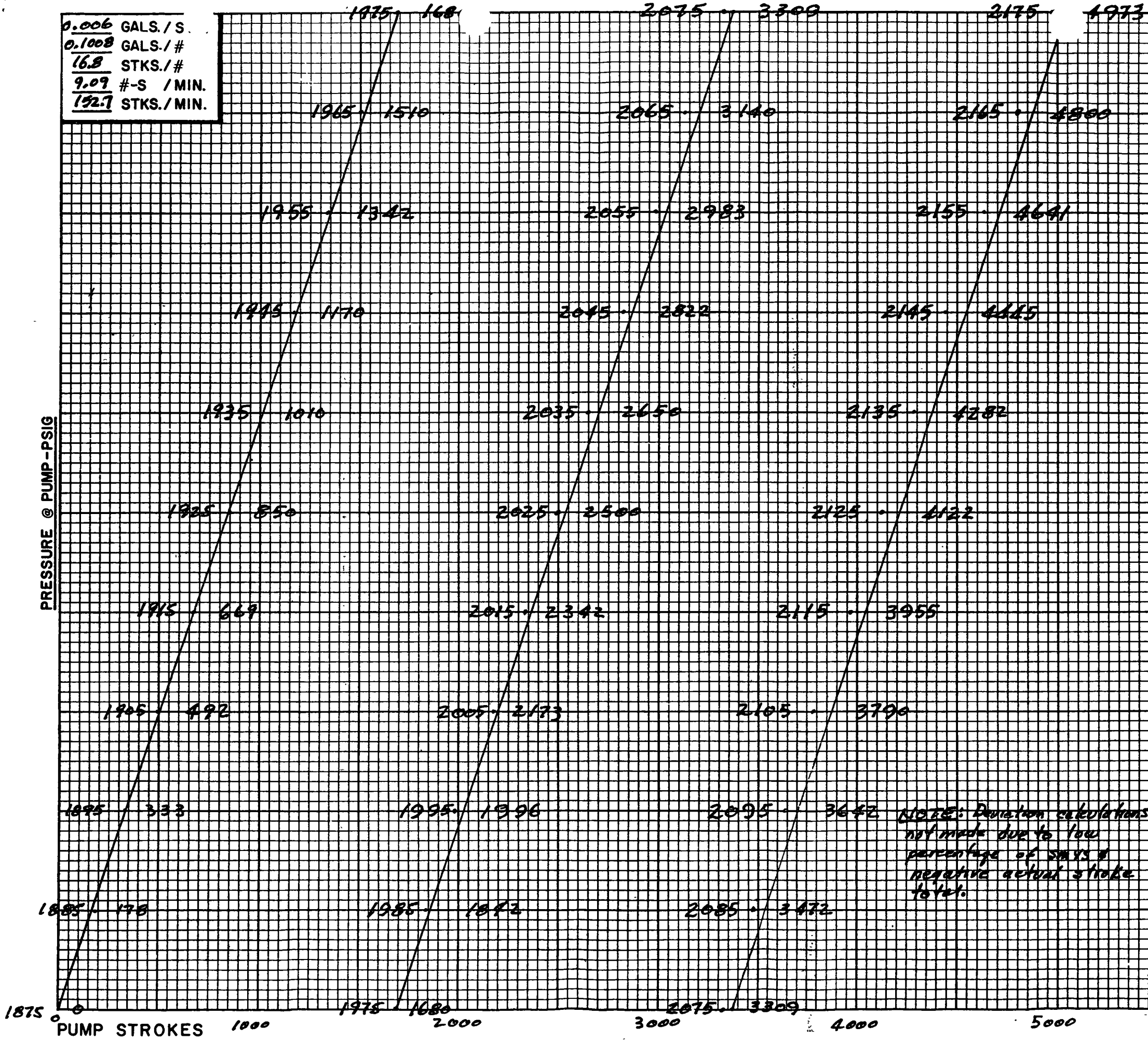
Comments: _____

TETCO Representative: *[Signature]* Contractor Representative: G.B. Emert, JR.

Recorders Last Tested: _____ Deadweight Serial No.: 12793

Test Contractor: Santa Fe Construction Company

0.006 GALS./S.
 0.1008 GALS./#
 16.8 STKS./#
 9.09 #-S / MIN.
 152.7 STKS./MIN.



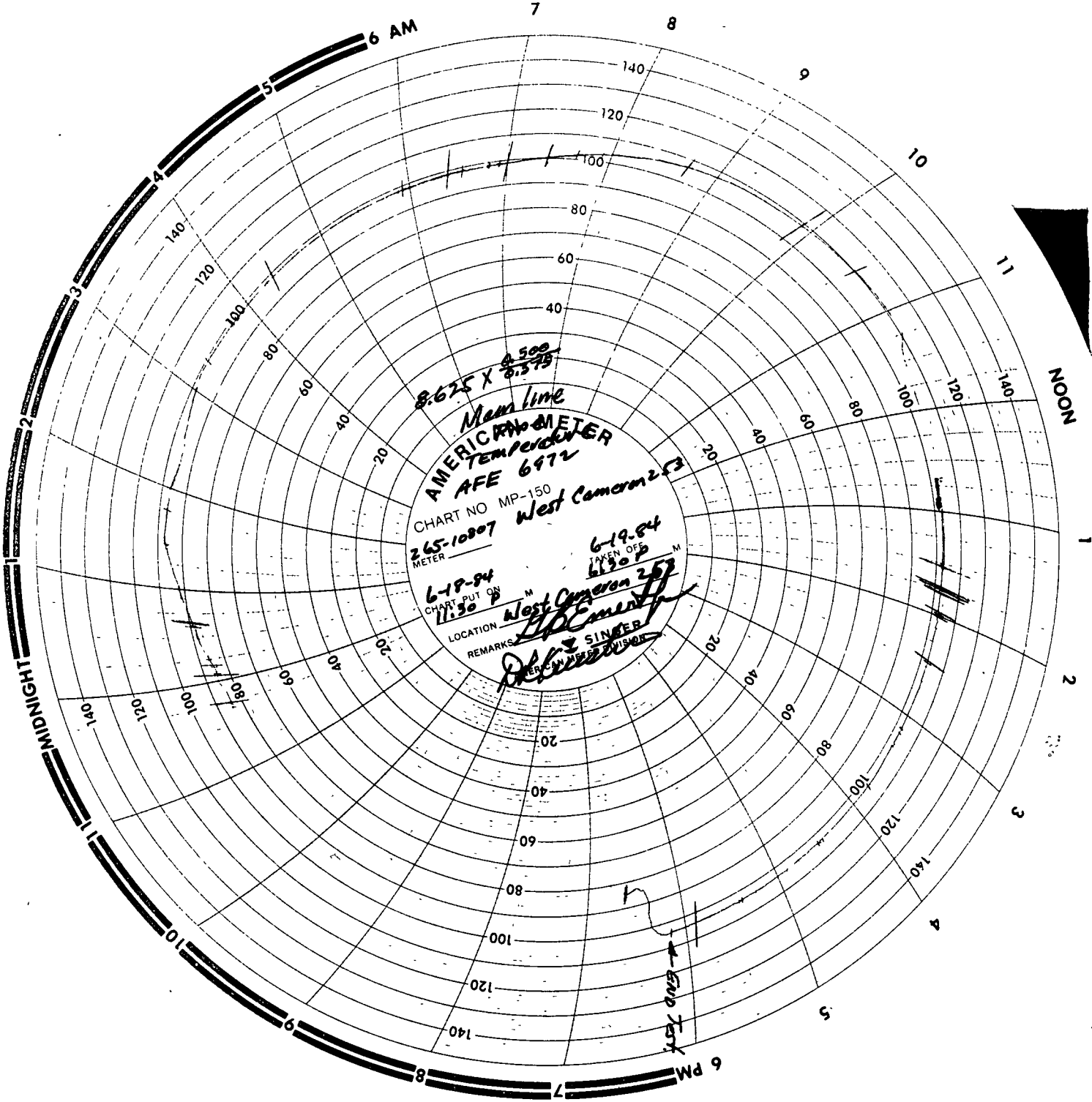
TIME ON TEST 2:58 PM TIME OFF TEST 6:00 PM
 TEMP. ON 77° TEMP. OFF 81°
 WEATHER Clear SOIL TYPE Sea Water
 LENGTH OF EXPOSED PIPE 15'
 WATER SOURCE Gulf of Mexico
 DWT. NO. 12793 PUMP NO. _____
 REC. NO. 242A-9012 L.H. NO. _____
 FILL UNIT NO. _____
 NO. OF STK. FIRST 2 HR. HOLD 0
 OPERATORS NAME John Mayeaux
 REMARKS:
Temperature Recorder 265-10807
Strokes - Less than Calculated.
Calculated - 5040
Actual - 4973
Less than Cal - 67
See Note

STROKE - PRESSURE GRAPH
8.625" O.D. x 0.375" WALL - X - B PIPE
Line 41J W. Cameron 253 LINE
AFE #6972 T. S. # _____
 PIPE MILES
 LENGTH OF TEST SECTION 4.76
 M.P. 0.00 TO M.P. 4.76
 PRESS. PUMP @ Platform M.P. _____
 DATE TEST ACCEPTED June 19, 1984
 TEST ENGINEER D.R. Kuester

	I.D. STRESS	O.D. STRESS
2175#@ PRESS. PUMP	<u>23381</u> PSI	<u>25012</u> PSI
2175#@ HIGH ELEV. PT.	<u>23381</u> PSI	<u>25012</u> PSI
2175#@ LOW ELEV. PT.	<u>23381</u> PSI	<u>25012</u> PSI

No Deviation Calculations - See Note
 GALLONS DEVIATION = 0 GALLONS
 GALLONS DEV. / MI. = 0 GALLONS / MILE
 GALLONS PER 40'JT. = 128.85 GALLONS
 NO. OF 40 FOOT JTS. 628.3 JOINTS
 % YIELD OF -1- JT. = $\sqrt{\frac{(128.85+0)^2}{128.85^2}} - 1 = 0\%$
 % YIELD OF -10- JTS. = $\sqrt{\frac{(128.85+0)^2}{128.85^2}} - 1 = 0\%$
 % YIELD OF -1%- JTS. = $\sqrt{\frac{(128.85+0)^2}{128.85^2}} - 1 = 0\%$
 % YIELD OF -2%- JTS. = $\sqrt{\frac{(128.70+0)^2}{2571.0^2}} - 1 = 0\%$

NOTE: Deviation calculations not made due to low percentage of stress & negative actual stroke to test.



8.625 x 8.500
8.575

Main line
AMERICAN METER
TEMPERATURE
AFE 6472

CHART NO MP-150
265-10807
METER

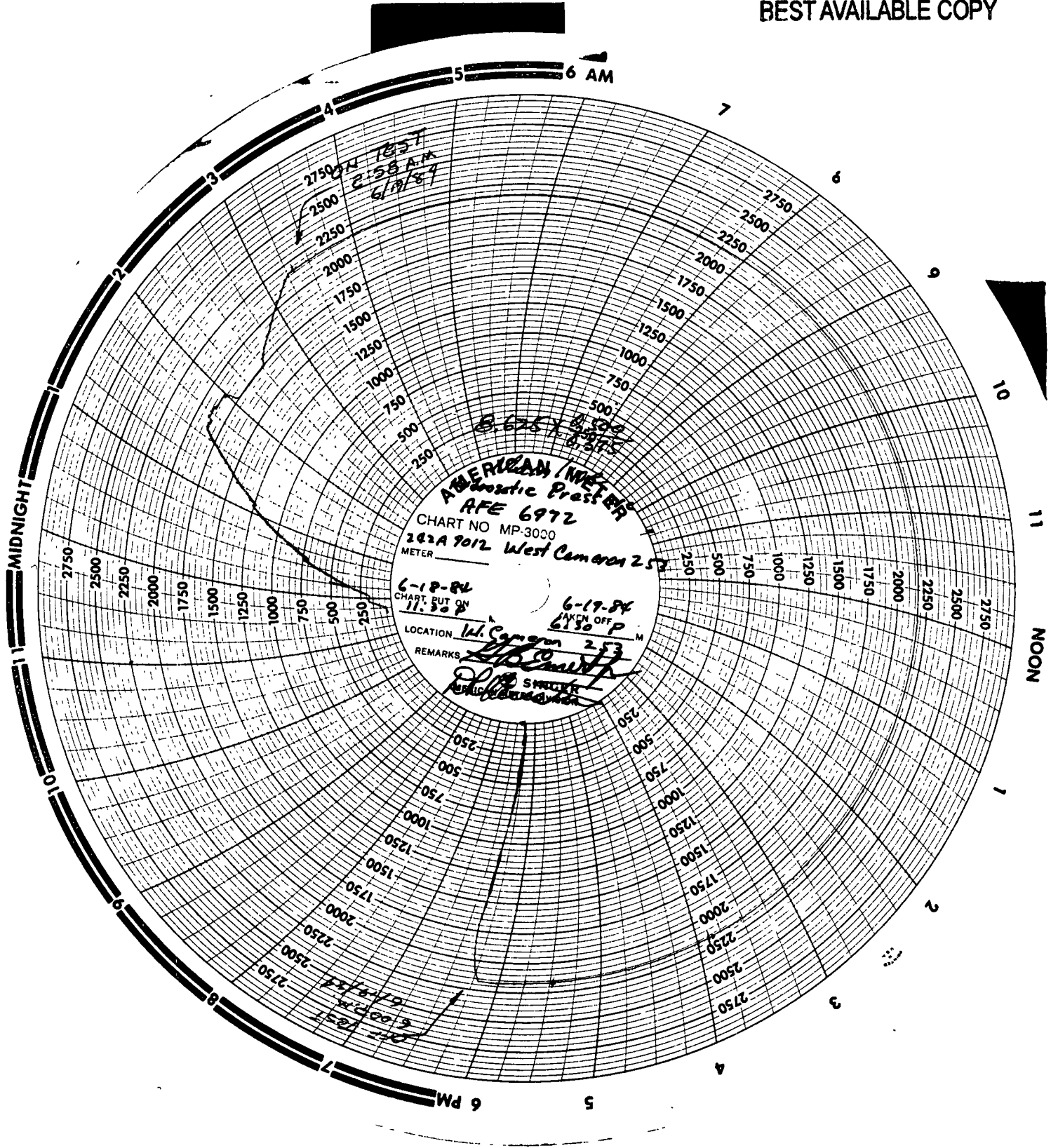
6-19-94
CHART PUT ON
11:30 P

LOCATION

West Cameron 253
LDC ment
SINGER
SERIAL NO 251008

6-19-94
TAKEN OFF
6:30 P

END 757



[REDACTED]

CALIBRATION CERTIFICATE

SF#1

MAKE Chandler SERIAL NUMBER 12793

PRESSURE RANGE 50-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATION


DATE OF CALIBRATION May 25, 1994 INSPECTOR John Antill, Jr.

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler

Engineering S/N 18187 traceable to the National Bureau of Standards, traceability reference

P-7223

[REDACTED]



ANTILL INSTRUMENT
&
VALVE SERVICE

RTE. 1, BOX 430 — HOUMA, LA 703
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1606

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10

CALIBRATION CERTIFICATE


MAKE Parton SERIAL NUMBER 242A-9012
 PRESSURE RANGE 0-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
 DATE OF CALIBRATION May 31, 1984 INSPECTOR Johnny Antill
 This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 10134 traceable to the National Bureau of Standards, traceability reference
P-7223



ANTILL INSTRUMENT
 &
 VALVE SERVICE

RTE. 1, BOX 430 — HOUMA LA 70360
 HWY. 90 WEST
 TELEPHONE: BUS. 504/876-1695

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CALIBRATION CERTIFICATE

REF#9

MAKE Barton

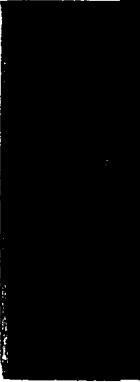
SERIAL NUMBER 265-10807

OPERATING RANGE 0-150F

CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION May 25, 1984

INSPECTOR John Antill, Jr.



ANTILL INSTRUMENT
&
VALVE SERVICE

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

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TEST ENGINEER'S MAINLINE HYDROSTATIC TEST SECTION EVALUATION

General Information

No. 01-6972 Test Section No. Mainline Length 25132' Miles 4.76
Pipe Specification 8.625 O.D." x 0.375" x Gr. B
Time and Date on Test 2:58 A 6-19-84 Test Pressure 2175 PSIG.
Time and Date off Test 6:00 P 6-19-84 Final Pressure PSIG.
Initial Weather: Sky: Clear, Ambient Temp. 77 F. - Rising - Falling
Final Weather: Sky: Clear, Ambient Temp. 81 F. - Rising - Falling
Estimated Length of Exposed Pipe 15 Feet @ 1 Sections
Type of Soil: Clay - Loam - Rocky - Sandy - Shale - Other Sea Water
Surface Condition of Soil: Dry - Wet - Damp - Sea Water
Recent Rain: Yes - NO - Approx. Amount: Trace - Steady - Showers.
Specified Minimum Test Pressure at High Elevation Point 2175 PSIG.

Specific Information

Test Elevation Spread: High Point 15' Low Point Sea level Pump 15'
Pump to High Point Correction: 0 Feet 0 PSIG
Maximum Pressures Reached to Give Desired Test:
At Pump 2175 PSIG - O.D. Stress 25012 PSI
At Low Point PSIG - O.D. Stress PSI
At High Point 2175 PSIG - O.D. Stress 25012 PSI
Fill Water Temp. Measured: Yes - NO If Yes, F.
Ground Temp. Measured: Yes - NO If Yes, F.
Pump Data: Gals./Strk. .0060 Strks./Min. 152.7 Est. Strks./Min.
Test Data: Strks./PSIG 16.8 Gals./PSIG 0.1008 Theoretical Gals./PSIG
Report of Observed Leaks: Valve-Flange-Nipple-Other None
Remarks on Observed Leakage:

Leak Stopped: Yes - No. Time If No., Estimate Rate Gals./Hr.*
Pressure Loss or Gain During Last 3 hours of Test: Loss 0 Gain 0 PSIG.

Calculations

Minimum Uniform Pressure Loss Rate Experienced: (Leak Rate Equivalent) PSIG/Hr.

Leak Rate Based on Test Data: PSIG/Hr. x Gals./PSIG x 24 Hr. ÷ 42 Gals./BBL = BBLs/D.

Leak Rate Based on Theoretical Valves:
Leak Coefficient "K":

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Pipe Specification "K" Valve, BBLs/PSIG - Mile
For 30" x .375", .469", .450", etc., Use 0.0243,
For 36" x .390", .469", .388", etc., Use 0.0376

LR = PSIG/HR. x Miles "K" x 24 = BBLs/Day
Could this Rate be Detected by Walking the line? Yes - No.
Remarks on Indicated Leakage, etc.

Give Reason for Accepting or Extending Test

Donald R. Keirste Test Engineer

* 10 drops per second for a dripping leak are about equal to 1-Gallon per Hour.

TEXAS 
EASTERN
Transmission Corporation

FIELD PRESSURE & TEST REPORT

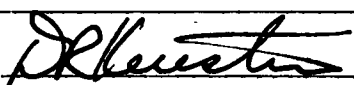
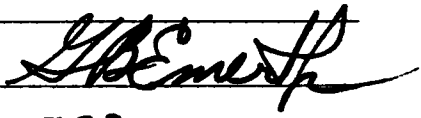
Line Description: Line 41 J W. Cameron 253
 Section Tested: From: Riser Flange To: Subsea Tie-in
 Test Section No.: Main line Length: 25132'
 Size of Pipe: 8.625 O.D. x .375 W.T. x Grade B Manufacturer: Armedo
 Pressure Unit No.: _____ Gallons per Stroke: 0.006 Fill Unit No.: _____
 Pressure Unit Location: Platform Water Source: Gulf of Mexico
 Time and Date Test Started: 2:58 ~~AM~~ ^{AM} Test Pressure (Maximum): 2125 PSIG
 Time and Date Test Ended: 6:00 ~~AM~~ ^{PM} Stroke-Pressure Plot: Yes No _____
 Section Accepted Section Leaking No Section Ruptured No

DEADWEIGHT RECORDED READING (PSIG)
Stroke-Pressure Plot Data BEST AVAILABLE COPY

Date: 6 | 19 | 84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
AM				AM			
2:58							
0:00	1875	0	—		2105	3642	Δ Strokes
	1885	178	178		2115	3790	148
	1895	333	155		2125	3955	165
	1905	492	159	26:23	2135	4122	167
	1915	669	177		2145	4282	160
5:37	* 1925	850	181		2155	4445	163
	1935	1080	160		2165	4641	196
	1945	1170	160	32:13	* 2175	4800	159
	1955	1342	172			4973	173
	1965	1510	168				
11:00	* 1975	1680	170				
	1985	1842	162				
	1995	1996	154				
	2005	2173	177				
	2015	2342	169				
15:58	* 2025	2500	158				
	2035	2650	150				
	2045	2822	172				
	2055	2983	161				
	2065	3140	157				
21:07	* 2075	3309	169				
	2085	3472	161				
	2095	3642	170				

Comments: _____

TETCO Representative:  Contractor Representative: 

Recorders Last Tested: _____ Deadweight Serial No.: 12793

" nstruct on .

Deadweight Test and Temperature Data

Project: West Cameron 253

Extent of Test: From _____ To _____

Pipe Specifications: _____ O.D. x _____ W.T.; Grade _____

Length of Line Tested _____

BEST AVAILABLE COPY

No.	Time	Pressure	Fluid	Temperature Ambient
1.	12:30	2165	102°	78°
2.	13:00	2165	102°	78°
3.	13:30	2165	101°	78°
4.	14:00	2165	102°	78°
5.	14:30	2165	102°	78°
6.	15:00	2164	102°	79°
7.	15:30	2164	103°	78°
8.	16:30	2164	103°	78°
9.	17:00	2164	104°	80°
10.	7:30	2164	104°	81
11.	18:00	2164	104°	81
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				

Test Started: Time 11:30 PM Date 6-18-84

Test Completed: Time 6:30 PM Date 6-19-84

Testing Equipment:

Deadweight Tester: Make CHANDLER Serial No. 12793

Pressure Recorder: Make BARTON Serial No. 242A-9012

Temperature Recorder: Make BARTON Serial No. 265-10807

Recorded By: [Signature]

Inspector: [Signature]

Witnesses: _____

Deadweight Test and Temperature Data

Project: H. Cameron 253

Extent of Test: From _____ To _____

Pipe Specifications: _____ O.D. x _____ W.T.; Grade _____

Length of Line Tested _____

BEST AVAILABLE COPY

No.	Time	Pressure	Fluid	Temperature	Ambient
1.	23:45	START PUMPING			
2.	23:53	195	BLOOD OFF AIR	95	
3.	00:03	START PUMPING	TO 1875		
4.	01:25	1875		97	77
5.	01:50	1750		97	77
6.	02:25	1875			
7.	02:58	2175		99	77
8.	03:30	2174		99	77
9.	04:00	2173		98	77
10.	04:30	2173		98	77
11.	05:00	2172		98	77
12.	05:30	2170		98	76
13.	06:00	2169		98	76
14.	06:30	2169		98	76
15.	07:00	2168		98	76
16.	07:30	2167		100	76
17.	08:00	2167		103	76
18.	08:30	2167		105	77
19.	09:00	2166		107	77
20.	09:30	2166		108	78
21.	10:00	2166		109	78
22.	10:30	2166		110	78
23.	11:00	2166		110	78
24.	11:30	2166		106	78
25.	12:00	2165		104	78

Test Started: Time 11:30 PM Date 6-18-84

Test Completed: Time 6:30 PM Date 6-19-84

Testing Equipment:

Deadweight Tester: Make CHANDLER Serial No. 12793

Pressure Recorder: Make BARTON Serial No. 242A-9012

Temperature Recorder: Make BARTON Serial No. 265-10807

Recorded By: L. Bennett

Inspector: R. Lester

Witnesses: _____

PRE-TEST REPORT

LINE NAME: 41-J In-Place Test- Platform Piping & Meter Skid

JOB NO: _____ WORK ORDER NO: AFE-6972

LOCATION OF TEST: Pennzoil Platform- West Cameron 253

LENGTH: _____ O.D.: _____ WALL THICKNESS: _____

PRE-TEST NO.: _____ SECTION PLOTTED: NO

TIME TEST STARTED: 21:35 DATE TEST STARTED: 6/15/84

TIME ACCEPTED: 10:00 a.m. DATE ACCEPTED: 6/16/84

MAXIMUM PRESSURE: 2185 MINIMUM PRESSURE: 2160

SPEC. MIN. YIELD: _____ MANUFACTURER: _____

MAXIMUM O.D. STRESS: 35,000 MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 14034 TEST ENGINEER: E.T. Jones DRB
E.T. Jones

REMARKS: _____

EASTERN

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Platform Piping and Meter Skid

Section Tested: From: Pennzoil Platform To: Riser Flange

Test Section No.: _____ Length: _____

Size of Pipe: 8" O.D. x .432 W.T. x Grade B Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: Pennzoil Platform Water Source: Pennzoil Platform

Time and Date Test Started: 21:35 ^{AM} ~~PM~~ 6/15/84 Test Pressure (Maximum): 2185 PSIG

Time and Date Test Ended: 10:00 ^{AM} ~~PM~~ 6/16/84 Stroke-Pressure Plot: Yes _____ No X

Section Accepted YES Section Leaking NO Section Ruptured NO

DEADWEIGHT RECORDED READING (PSIG)

Date: 6 | 16 | 84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
AM				AM			
PM				PM			
<u>21:35</u>	<u>2185</u>		<u>78</u>	<u>05:00</u>	<u>2167</u>		<u>76</u>
<u>22:00</u>	<u>2175</u>		<u>78</u>	<u>05:07</u>	<u>2167-2184</u>	<u>17</u>	<u>76</u>
<u>22:15</u>	<u>2175-2185</u>	<u>13</u>	<u>78</u>	<u>05:30</u>	<u>2182</u>		<u>76</u>
<u>22:30</u>	<u>2182</u>		<u>78</u>	<u>06:00</u>	<u>2178</u>		<u>76</u>
<u>23:00</u>	<u>2170</u>		<u>78</u>	<u>06:30</u>	<u>2175</u>		<u>76</u>
<u>23:10</u>	<u>2170-2184</u>	<u>14</u>	<u>78</u>	<u>06:38</u>	<u>2174</u>		<u>76</u>
<u>23:50</u>	<u>2174</u>		<u>78</u>	<u>07:00</u>	<u>2172</u>		<u>76</u>
<u>24:00</u>	<u>2172</u>		<u>78</u>	<u>07:22</u>	<u>2172</u>		<u>76</u>
<u>00:15</u>	<u>2168</u>		<u>78</u>	<u>07:30</u>	<u>2172</u>		<u>76</u>
<u>00:30</u>	<u>2166-2184</u>	<u>18</u>	<u>78</u>	<u>07:48</u>	<u>2173</u>		<u>76</u>
<u>01:00</u>	<u>2178</u>		<u>77</u>	<u>08:00</u>	<u>2174</u>		<u>78</u>
<u>01:15</u>	<u>2174</u>		<u>77</u>	<u>08:30</u>	<u>2176</u>		<u>78</u>
<u>01:30</u>	<u>2170</u>		<u>76</u>	<u>08:50</u>	<u>2179</u>		<u>78</u>
<u>01:40</u>	<u>2167-2184</u>	<u>17</u>	<u>76</u>	<u>09:00</u>	<u>2180</u>		<u>78</u>
<u>02:00</u>	<u>2181</u>		<u>76</u>	<u>09:10</u>	<u>BLED TO 2179</u>		<u>78</u>
<u>02:30</u>	<u>2177</u>		<u>76</u>	<u>09:30</u>	<u>2182</u>		<u>78</u>
<u>02:45</u>	<u>2173</u>		<u>76</u>	<u>09:35</u>	<u>BLED TO 2179</u>		<u>79</u>
<u>03:05</u>	<u>2169</u>		<u>76</u>	<u>09:55</u>	<u>2183</u>		<u>79</u>
<u>03:10</u>	<u>2167-2184</u>	<u>17</u>	<u>76</u>	<u>09:56</u>	<u>BLED TO 2181</u>		<u>79</u>
<u>03:30</u>	<u>2181</u>		<u>76</u>	<u>10:00</u>	<u>2182</u>		<u>79</u>
<u>03:37</u>	<u>2178</u>		<u>76</u>				
<u>04:00</u>	<u>2177</u>		<u>76</u>				
<u>04:30</u>	<u>2172</u>		<u>76</u>				

Comments: Test good.

TETCO Representative: E. T. Jones Contractor Representative: G.B. Emert, Jr.

Recorders Last Tested: _____ Deadweight Serial No.: 14034

Test Contractor: Santa Fe Offshore Construction Company

441



CALIBRATION CERTIFICATE

MAKE Chandler SERIAL NUMBER 14034


PRESSURE RANGE 50-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION May 31, 1984 INSPECTOR Johnny Antill

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler


Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference

P-7223



ANTILL INSTRUMENT
&
VALVE SERVICE

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695



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CALIBRATION CERTIFICATE

SF#1

MAKE Barton


SERIAL NUMBER 265-4731

TEMPERATURE RANGE 0-200F

CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION June 4, 1984

INSPECTOR Johnny Intill




ANTILL INSTRUMENT
&
VALVE SERVICE

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

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CALIBRATION CERTIFICATE


MAKE Barton SERIAL NO. 2117
PRESSURE RANGE 0-3,000psi CALIBRATED TO INDUSTRY STANDARD
DATE OF CALIBRATION May 25, 1964 INSPECTOR [Signature]

This is to certify that this instrument has been inspected and tested against Pressure Standards
Engineering S/N 18187 traceable to the National Bureau of Standards, traceability record
P-7223

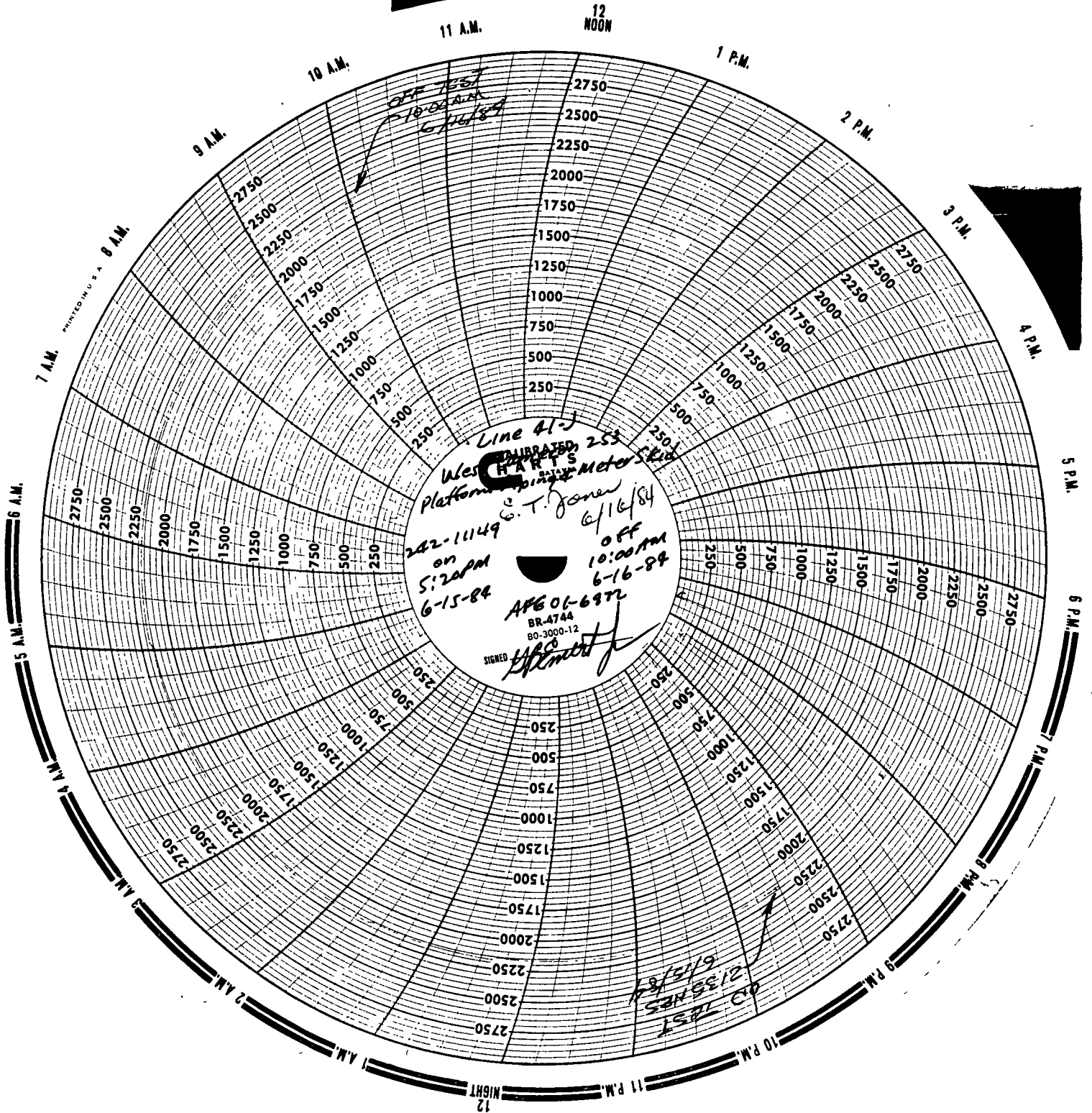


**ANTILL INSTRUMENT
&
VALVE SERVICE**

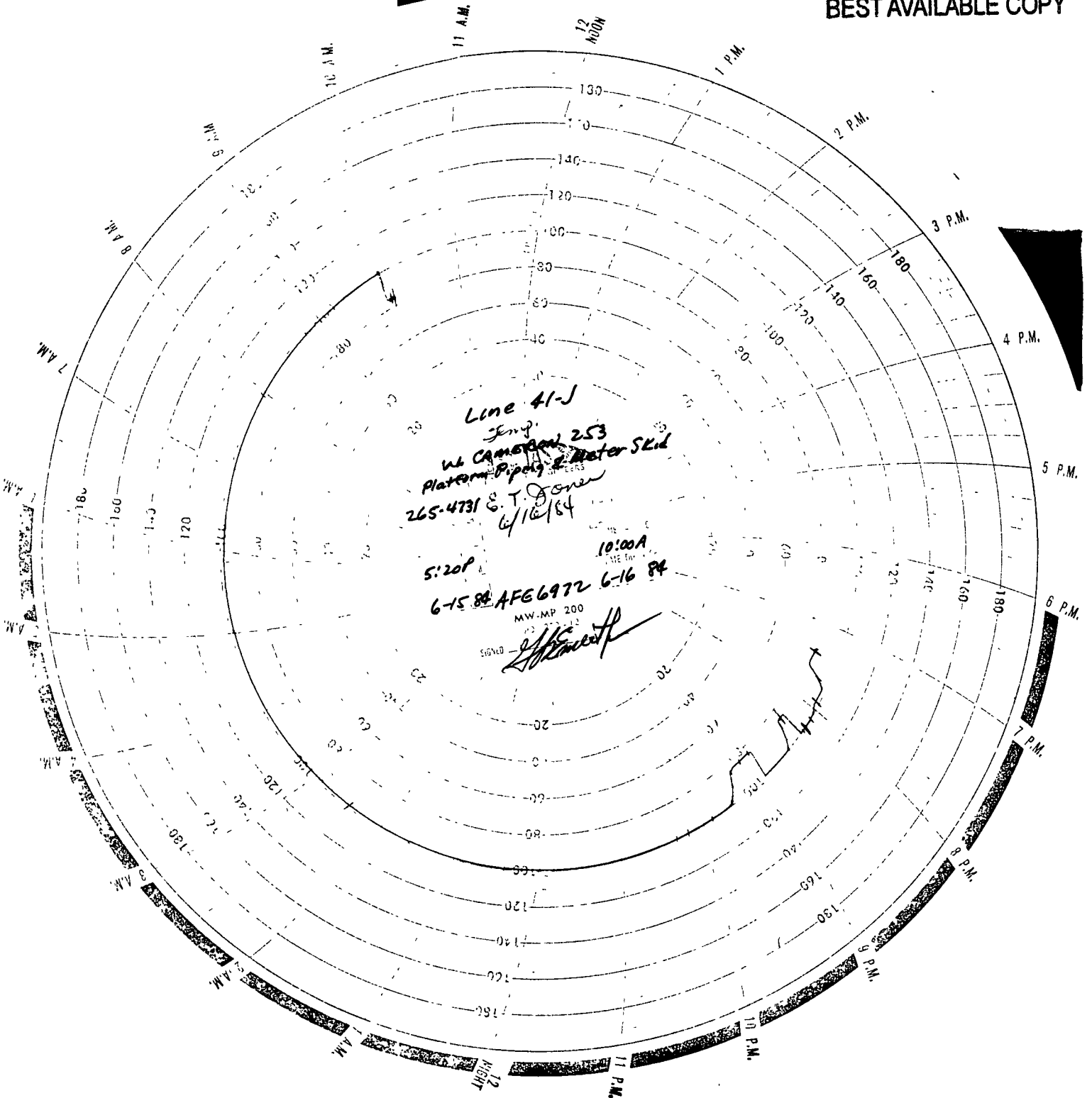
HIL 1, BOX 410 FERRIS, CA 94501
HWY. 99 W. 1/2
TELEPHONE BUS 50 7576 1000



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FIELD PRESSURE & TEST REPORT

Line Description: Platform Piping & Meter Skid

Section Tested: From: Pennycail Platform To: Riser Flange

Test Section No.: Length:

Size of Pipe: 8" O.D. x 432 W.T. x Grade B Manufacturer:

Pressure Unit No.: Gallons per Stroke: Fill Unit No.:

Pressure Unit Location: Pennycail Platform Water Source: Pennycail Platform

Time and Date Test Started: 2135 AM 6/15/84 Test Pressure (Maximum): 2185 PSIG

Time and Date Test Ended: 1000 AM 6/16/84 Stroke-Pressure Plot: Yes No

Section Accepted YES Section Leaking NO Section Ruptured NO

DEADWEIGHT RECORDED READING (PSIG)

Date: 6/16/84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
2135	2185		78°	0500	2167		76°
2200	2175		78°	0507	2167-2184	17	76°
2215	2125-2185	13	78°	0520	2182		76°
2230	2182		78°	0600	2178		76°
2300	2170		78°	0630	2175		76°
2310	2170-2184	14	78°	0638	2174		76°
2350	2174		78°	0700	2172		76°
2400	2172		78°	0722	2172		76°
0015	2168		78°	0730	2172		76°
0030	2166-2184	18	78°	0748	2173		76°
0100	2178		77°	0800	2174		78°
0115	2174		77°	0830	2176		78°
0130	2170		76°	0850	2179		78°
0140	2167-2184	17	76°	0900	2180		78°
0200	2181		76°	0910	2179		78°
0230	2177		76°	0930	2182		78°
0245	2173		76°	0935	2179		79°
0305	2169		76°	0955	2183		79°
0310	2167-2184	17	76°	0956	2181		79°
0330	2181		76°	1006	2182		79°
0337	2178		76°				
0400	2177		76°				
0430	2172		76°				

Hold for 3 hr test

Comments: Test good

TETCO Representative: E. T. Jones

Contractor Representative: [Signature]

Recorders Last Tested:

Deadweight Serial No.: 14034

Temperature Ambient SS# 265-4731

Pressure SS# 242-11149

E. T. Jones 6/16/84

PRE-TEST REPORT

LINE NAME: Line 41-J Riser Pipe

JOB NO: _____ WORK ORDER NO: AFE-6972

LOCATION OF TEST: Santa Fe Yard

LENGTH: 120' O.D.: 8.625" WALL THICKNESS: 0.500"

PRE-TEST NO.: 1 SECTION PLOTTED: NO

TIME TEST STARTED: 8:10 p.m. DATE TEST STARTED: 5/3/84

TIME ACCEPTED: 8:20 a.m. DATE ACCEPTED: 5/4/84

MAXIMUM PRESSURE: 4000 MINIMUM PRESSURE: 3950

SPEC. MIN. YIELD: 35,000 MANUFACTURER: Armco

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 12793 TEST ENGINEER: Tommy Pluss

REMARKS: _____

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: 8" Riser AFE-6972

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: 120'

Size of Pipe: 8.625" O.D. x .500" W.T. x Grade B Manufacturer: J&L STEEL

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: City of Houma

Time and Date Test Started: 8:10 ^{-AM} PM 5/3/84 Test Pressure (Maximum): 4000 PSIG

Time and Date Test Ended: 8:20 ^{AM} PM 5/4/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted YES Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 4 | 84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
8:10	4000		77	12:15	3975		75
8:15	3996		77	12:40	3967-4000	REPRESSURE	75
8:30	3988		77	1:15	3975		75
8:42	3965-3998	REPRESSURE	76	1:56	3965-4000	REPRESSURE	75
8:45	3998		76	2:15	3994		74
9:00	3980		76	3:15	3980		74
9:10	3965-3999	REPRESSURE	74	4:15	3970		74
9:15	3996		76	4:20	3970-4000	REPRESSURE	74
9:35	3966-3998	REPRESSURE	76	5:15	3983		74
10:00	3965-3997	REPRESSURE	76	5:55	3965-4000	REPRESSURE	74
10:15	3977		76	6:15	3980		73
10:27	3965-3999	REPRESSURE	76	7:15	3973		73
11:00	3966-3997	REPRESSURE	76	8:15	3990		76
11:15	3985		76	8:20	3990		76
11:40	3969-4000	REPRESSURE	75				

Comments: _____

TETCO Representative: Tommy Pussady Contractor Representative: Clarence Abshire, Jr.

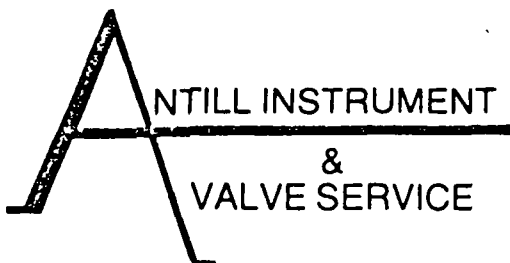
Recorders Last Tested: 2/14/84 Deadweight Serial No.: 12793

Test Contractor: Santa Fe Offshore Construction Company

CALIBRATION CERTIFICATE

SF# 1

MAKE Chandler SERIAL NUMBER 12793
 PRESSURE RANGE 50-5,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
 DATE OF CALIBRATION Feb. 14, 1984 INSPECTOR J. Antell
 This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference
P-7223



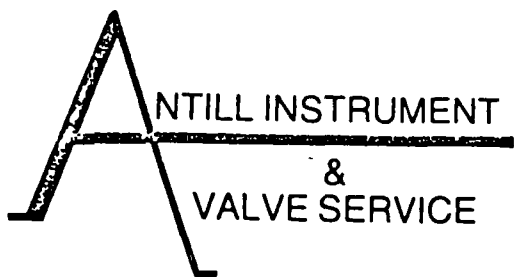
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RTE. 1, BOX 430 — HOUMA, LA 70360
 HWY. 90 WEST
 TELEPHONE: BUS. 504/876-1695

CALIBRATION CERTIFICATE

SF# 7

MAKE Barton SERIAL NUMBER 242-11148
 PRESSURE RANGE 0-5,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
 DATE OF CALIBRATION Feb. 14, 1984 INSPECTOR J. Antell
 This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference
P-7223

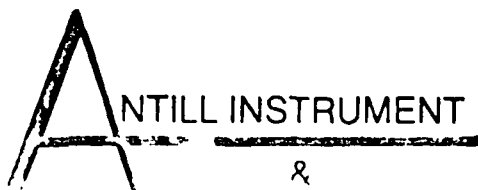


RTE. 1, BOX 430 — HOUMA, LA 70360
 HWY. 90 WEST
 TELEPHONE: BUS. 504/876-1695

CALIBRATION CERTIFICATE

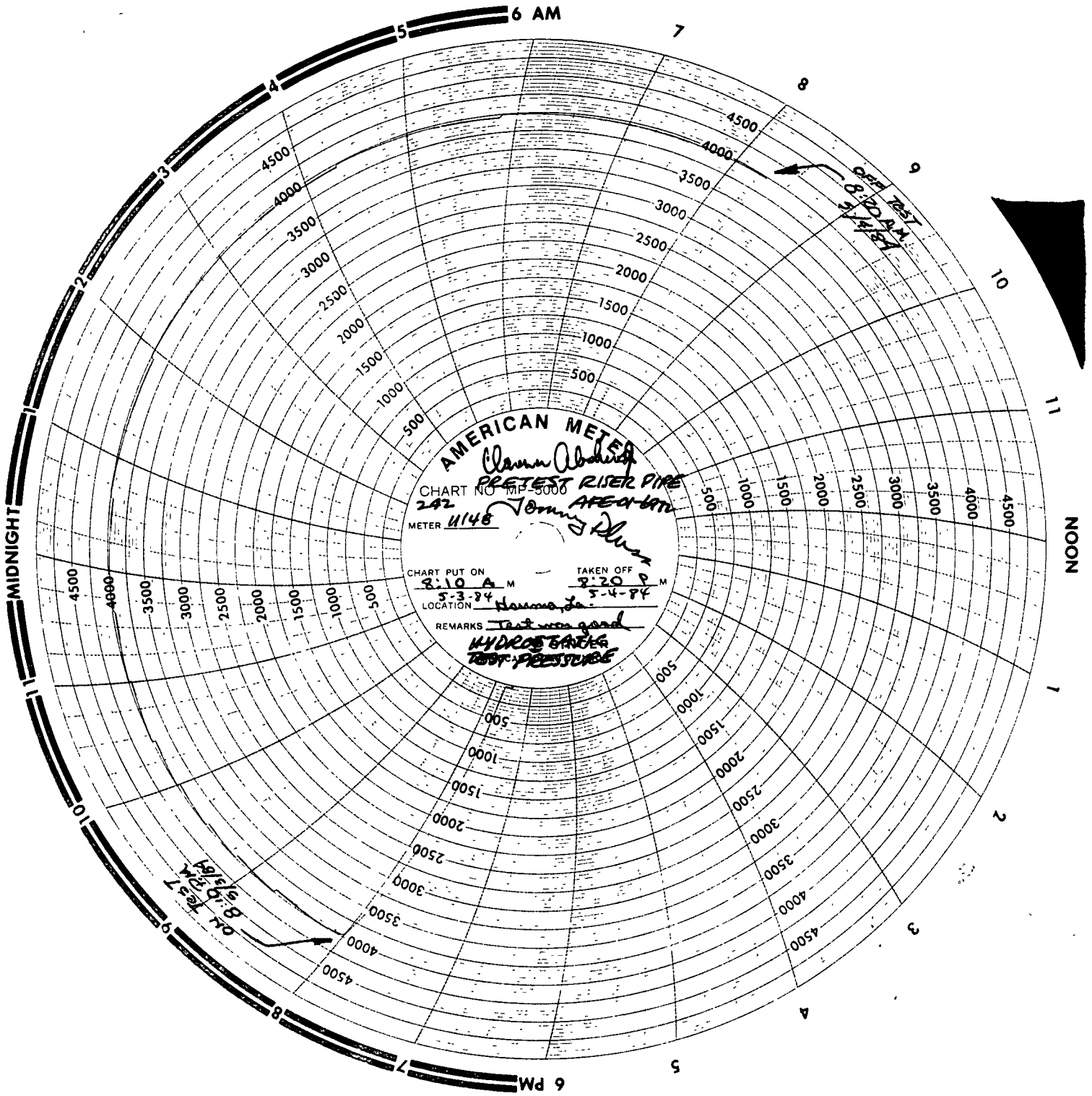
SF# 8

MAKE Barton SERIAL NUMBER 242A-30178
 TEMPERATURE RANGE 0-150F CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
 DATE OF CALIBRATION Feb. 14, 1984 INSPECTOR J. Antell

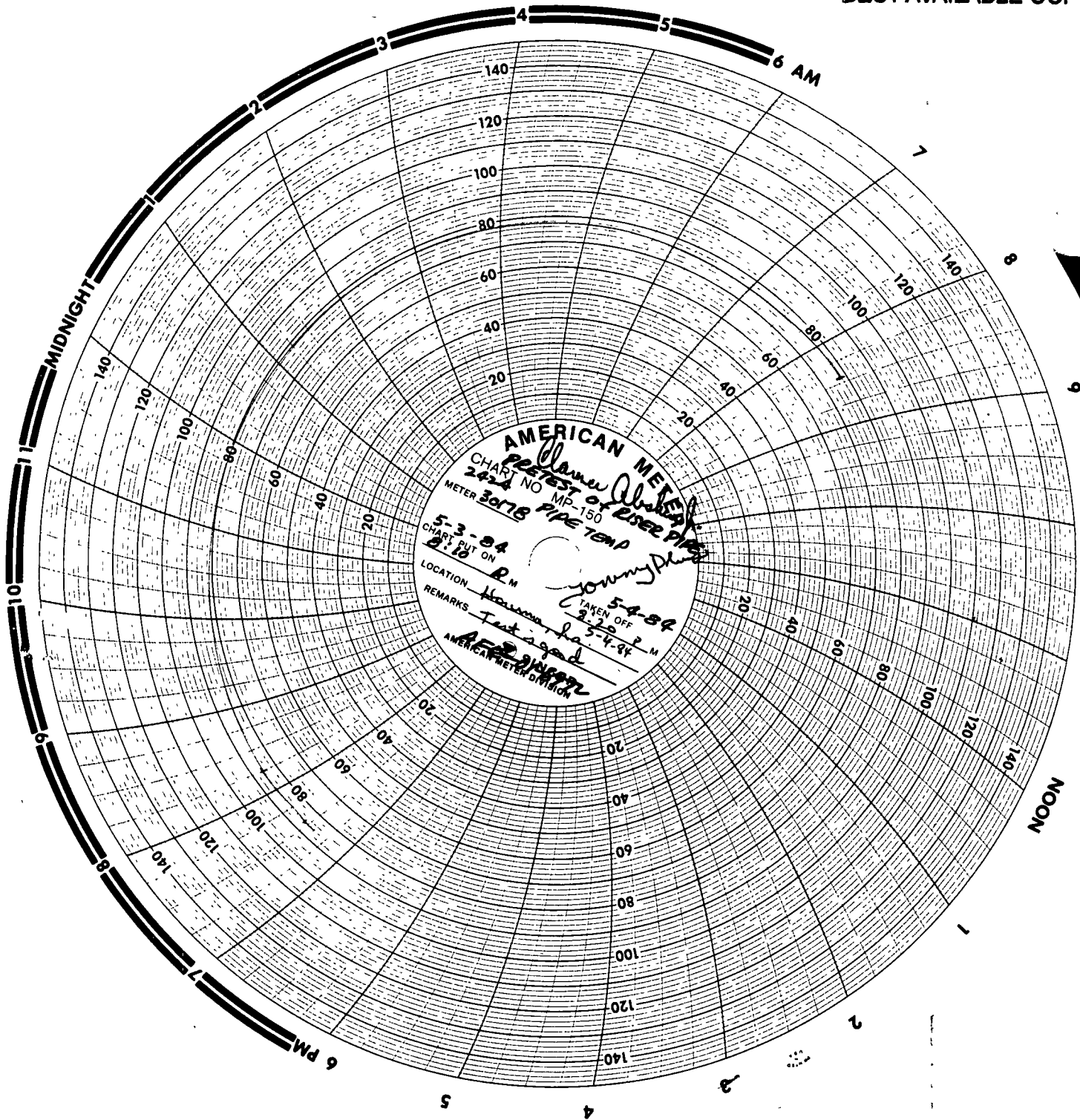


RTE. 1, BOX 430 — HOUMA, LA 70360
 HWY. 90 WEST
 TELEPHONE: BUS. 504/876-1695

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Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: 8" Riser AFE 6972
1-8" 3R-90°

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: 120'

Size of Pipe: 8.625 O.D. x .500 W.T. x Grade B Manufacturer: Armed
~~Fit Steel~~

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: City of Houma

Time and Date Test Started: 8:10 ^{AM}~~PM~~ 5-3-84 Test Pressure (Maximum): 4000 PSIG

Time and Date Test Ended: 8:20 ^{AM}~~PM~~ 5-4-84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted Yes Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 4 | 84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
^{AM} PM				^{AM}			
8:10	4000		77°	5:15 PM	3983		74°
8:15	3996		77°	5:55	3965-4000 (Re-Press)		74°
8:30	3988		77°	6:15	3980		73°
8:42	3965-3998		76°	7:15	3973		73°
8:45	3998		76°	8:15	3990		76°
9:00	3980		76°	8:20	3990		76°
9:10	3965-3999 (Re-Press)		76°				
9:15	3996		76°				
9:35	3966-3998 (Re-Press)		76°				
10:00	3965-3997 (Re-Press)		76°				
10:15	3977		76°				
10:27	3965-3999 (Re-Press)		76°				
11:00	3966-3997 (Re-Press)		76°				
11:15	3985		76°				
11:40	3969-4000 (Re-Press)		75°				
12:15 Am	3975		75°				
12:40	3967-4000 (Re-Press)		75°				
1:15	3975		75°				
1:56	3965-4000 (Re-Press)		75°				
2:15	3994		74°				
3:15	3980		74°				
4:15	3970		74°				
4:20	3970-4000 (Re-Press)		74°				

Comments: _____

TETCO Representative: Tommy Pluss Contractor Representative: Clarence Alshing

Recorders Last Tested: February 14, 1984 Deadweight Serial No.: #12793

Test Contractor: Santa Fe

PRE-TEST REPORT

LINE NAME: Line 41-J Platform Pipe- West Cameron 253

JOB NO: _____ WORK ORDER NO: AFE-6972

LOCATION OF TEST: Santa Fe Yard

LENGTH: 92'8" O.D.: 8.625 WALL THICKNESS: 0.500

PRE-TEST NO.: 2 SECTION PLOTTED: NO

TIME TEST STARTED: 4:35 PM DATE TEST STARTED: 5/15/84

TIME ACCEPTED: 4:40 AM DATE ACCEPTED: 5/16/84

MAXIMUM PRESSURE: 2175 MINIMUM PRESSURE: 2160

SPEC. MIN. YIELD: _____ MANUFACTURER: _____

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 13014 TEST ENGINEER: *Tommy Pluss*
TOMMY PLUSS

REMARKS: _____

TEXAS 
EASTERN
Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Pre-test Platform Piping- AFE-6969, 6967, 6972

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 6" O.D. x .432 W.T. x Grade GR. B. Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 4:35 ^{-AM-} PM 5/15/84 Test Pressure (Maximum): 2160 2175 PSIG

Time and Date Test Ended: 4:40 ^{AM} -PM 5/16/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted X Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 16 | 84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
AM				AM			
PM				PM			
3:30	Start Pressure			7:29	2162-2175	R.P.	80
4:35	2175			7:34	2162-2175	R.P.	80
4:45	2175		89	7:41	2162-2175	R.P.	81
5:00	2175		88	7:45	2164-2175	R.P.	81
5:15	2173		89	7:54	2163-2175	R.P.	81
5:19	2175-2169	BLEED	88	8:03	2163-2175	R.P.	80
5:25	2175-2169	BLEED	88	8:11	2164-2175	R.P.	80
5:30	2173		88	8:21	2164-2175	R.P.	80
5:37	2175-2170	BLEED	88	8:31	2161-2175	R.P.	80
5:45	2174		88	8:43	2161-2175	R.P.	80
				8:45	2170		80
6:09	2161-2172	R.P.	84	8:49	2162-2175	R.P.	80
6:14	2162-2171	R.P.	84	9:04	2163-2175	R.P.	78
6:19	2162-2175	R.P.	82	9:17	2161-2175	R.P.	78
6:26	2162-2175	R.P.	82	9:27	2164-2175	R.P.	78
6:35	2164-2175	R.P.	82	9:37	2163-2175	R.P.	78
6:41	2162-2173	R.P.	82	9:45	2165		78
6:47	2161-2174	R.P.	82	9:47	2163-2175	R.P.	78
6:54	2162-2174	R.P.	82	10:00	2161-2175	R.P.	78
6:58	2161-2175	R.P.	82	10:12	2162-2175	R.P.	78
7:05	2162-2175	R.P.	81	10:25	2161-2175	R.P.	77
7:13	2162-2175	R.P.	81	10:37	2163-2175	R.P.	77
7:21	2162-2175	R.P.	81	10:45	2167		77

Comments: R.P. means Repressure

TETCO Representative: Tommy Plus Contractor Representative: Clarence Abshire, Jr.

Recorders Last Tested: May 10, 1984 Deadweight Serial No.: 13014

Test Contractor: Santa Fe Construction Co.

TEXAS 
EASTERN
Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Pre-Test Platform Piping- AFE-6969, 6967, 6972 (cont.)

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 6" .432
8" O.D. x .500 W.T. x Grade Gr. B. Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 4:35 ^{-AM} ~~PM~~ 5/15/84 Test Pressure (Maximum): 2160 2175 PSIG

Time and Date Test Ended: 4:40 ^{AM} ~~PM~~ 5/16/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 16 | 84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
^{AM} PM				^{AM} PM			
10:51	2163-2175	R.P.	77°	4:40	2164		74°
11:03	2161-2175	R.P.	77°				
11:17	2162-2175	R.P.	77°				
11:30	2161-2175	R.P.	77°				
11:44	2162-2175	R.P.	76°				
11:45	2175		76°				
12:00am	2163-2175	R.P.	76°				
12:16	2161-2175	R.P.	76°				
12:33	2162-2175	R.P.	76°				
12:45	2165		76°				
12:52	2161-2175	R.P.	76°				
1:10	2161-2175	R.P.	76°				
1:28	2162-2175	R.P.	76°				
1:45	2162		76°				
1:51	2161-2175	R.P.	76°				
2:16	2162-2175	R.P.	76°				
2:38	2163-2175	R.P.	76°				
2:45	2167		76°				
2:58	2162-2175	R.P.	76°				
3:20	2162-2175	R.P.	76°				
3:45	2163		76°				
3:47	2162-2175	R.P.	76°				
4:24	2163-2175	R.P.	75°				

Comments: R.P. means repressure

TETCO Representative: Johnny Pluss Contractor Representative: Clarence Abshire, Jr.

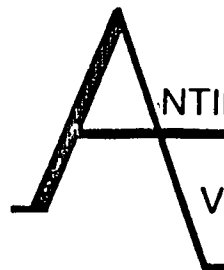
Recorders Last Tested: _____ Deadweight Serial No.: 13014

Test Contractor: Santa Fe Construction Co.

CALIBRATION CERTIFICATE

SF# 8

MAKE Barton SERIAL NUMBER 242A-30178
TEMPERATURE RANGE 0-150F CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION Feb. 14, 1984 INSPECTOR *Jim Antel*

 ANTILL INSTRUMENT
&
VALVE SERVICE

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

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SF#9

CALIBRATION CERTIFICATE

MAKE Taylor SERIAL NUMBER 14427
PRESSURE RANGE 0-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 10, 1984 INSPECTOR Johnny Antill
This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference
P-7223

ANTILL INSTRUMENT
&
VALVE SERVICE

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

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SF #2

CALIBRATION CERTIFICATE

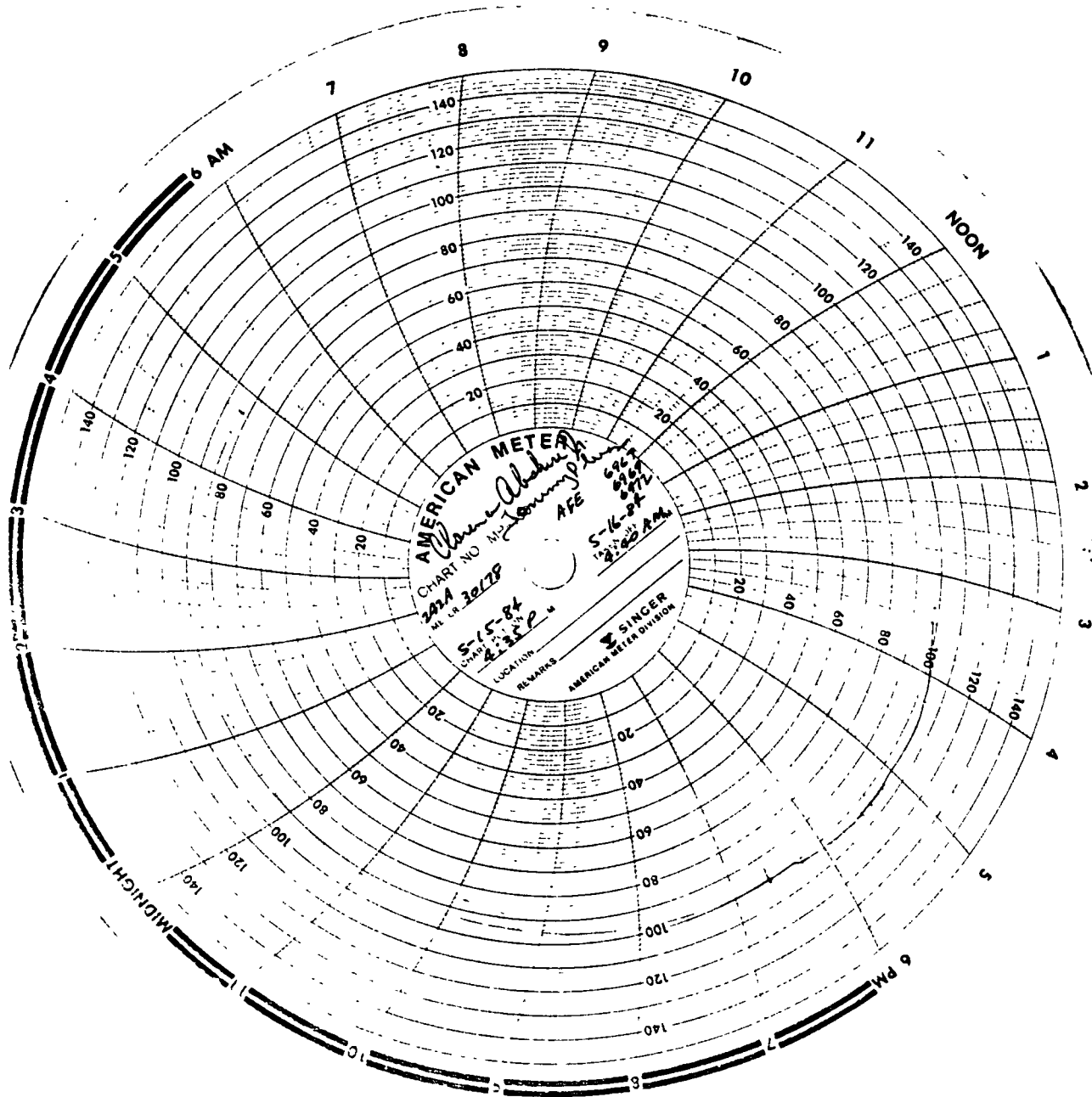
MAKE Chandler Engineering SERIAL NUMBER 13014
PRESSURE RANGE 50-3000 psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 11, 1984 INSPECTOR *John C. ...*
This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering s/n 18512 traceable to the National Bureau of Standards, traceability reference
P-7223

ANTILL INSTRUMENT
&
VALVE SERVICE

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

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EASTERN Transmission Corporation

FIELD PRESSURE & TEST REPORT

Pretest
AFE 6969
6967
6972

Line Description: Pretest Connecting Riser Piping

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 6" O.D. x .732 W.T. x Grade 40 B Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: City of Houston

Time and Date Test Started: 4:35 AM 5-15-84 Test Pressure (Maximum): 2175 PSIG

Time and Date Test Ended: 4:40 AM 5-16-84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

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Date: 5/16/84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
3:30	<i>Start Pressure</i>			7:29	2162-2175	R.P.	80°
4:35	2175			7:34	2162-2175	R.P.	80°
4:45	2175		89°	7:41	2162-2175	R.P.	81°
5:00	2175		88°	<u>7:45</u>	2164-2175	R.P.	81°
5:15	2173		89°	7:54	2163-2175	R.P.	81°
5:19	2175-2169	Bleed	88°	8:03	2163-2175	R.P.	80°
5:25	2175-2169	Bleed	88°	8:11	2164-2175	R.P.	80°
5:30	2173		88°	8:21	2164-2175	R.P.	80°
5:37	2175-2170	Bleed	88°	8:31	2161-2175	R.P.	80°
5:45	2174		88°	8:43	2161-2175	R.P.	80°
6:09	2161-2172	R.P.	84°	<u>8:45</u>	2170		80°
6:14	2162-2171	R.P.	84°	8:49	2162-2175	R.P.	80°
6:19	2162-2175	R.P.	82°	9:04	2163-2175	R.P.	78°
6:26	2162-2175	R.P.	82°	9:17	2161-2175	R.P.	78°
6:35	2164-2175	R.P.	82°	9:27	2164-2175	R.P.	78°
6:41	2162-2173	R.P.	82°	9:37	2163-2175	R.P.	78°
6:47	2161-2174	R.P.	82°	9:45	2165		78°
6:54	2162-2174	R.P.	82°	9:47	21663-2175	R.P.	78°
6:58	2161-2175	R.P.	82°	10:00	2161-2175	R.P.	78°
7:05	2162-2175	R.P.	81°	10:12	2162-2175	R.P.	78°
7:13	2162-2175	R.P.	81°	10:25	2161-2175	R.P.	77°
7:21	2162-2175	R.P.	81°	10:37	2163-2175	R.P.	77°
				10:45	2167		77°

Comments: R.P. means Repressured

TETCO Representative: Tommy Plus Contractor Representative: Clara Abshir

Recorders Last Tested: May 10-84 Deadweight Serial No.: 11074 13014

Test Contractor: Santa Fe

Transmission Corporation

FIELD PRESSURE & TEST REPORT

BEST AVAILABLE COPY

Line Description: _____

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 6" x .432 G-B
8" O.D. x .500 W.T. x Grade G-B Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 4:35 ^{AM} ~~PM~~ 5/15/84 Test Pressure (Maximum): 2160 min 2175 max PSIG

Time and Date Test Ended: 4:40 ^{AM} ~~PM~~ 5/16/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5/16/84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
^{AM} PM 10:57	2163-2175	RP	77°	^{AM} PM 4:40	2164		74°
11:03	2161-2175	RP	77°				
11:17	2162-2175	RP	77°				
11:30	2161-2175	RP	77°				
11:44	2162-2175	RP	76°				
11:45	2175		76°				
12:00 mid	2163-2175	RP	76°				
12:16	2161-2175	R.P.	76°				
12:33	2162-2175	R.P.	76°				
12:45	2165		76°				
12:52	2161-2175	R.P.	76°				
1:10	2161-2175	R.P.	76°				
1:28	2162-2175	R.P.	76°				
1:45	2162		76°				
1:51	2161-2175	RP	76°				
2:16	2162-2175	RP	76°				
2:38	2163-2175	RP	76°				
2:45	2167		76°				
2:58	2162-2175	RP	76°				
3:20	2162-2175	R.P.	76°				
3:45	2163		76°				
3:47	2162-2175	R.P.	76°				
4:24	2163-2175	R.P.	75°				

Comments: RP means Re-pressured

TETCO Representative: Tommy Pluss Contractor Representative: Clarence Abshing

Recorders Last Tested: _____ Deadweight Serial No.: _____

Test Contractor: _____

PRE-TEST REPORT

LINE NAME: Line 41-J Platform Pipe

JOB NO: _____ WORK ORDER NO: AFE-6972

LOCATION OF TEST: Santa Fe Yard

LENGTH: 92'8" O.D.: 8.625 WALL THICKNESS: 0.500

PRE-TEST NO.: 2R SECTION PLOTTED: _____

TIME TEST STARTED: 5:30 P.M. DATE TEST STARTED: 5/18/84

TIME ACCEPTED: 5:35 A.M. DATE ACCEPTED: 5/19/84

MAXIMUM PRESSURE: 4000 MINIMUM PRESSURE: 3950

SPEC. MIN. YIELD: 35,000 MANUFACTURER: _____

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 12792 TEST ENGINEER: MALCOLM CRANE

MALCOLM CRANE

REMARKS: _____

FIELD PRESSURE & TEST REPORT

Line Description: AFE-6967, Line #61, AFE-6969, Line #40-G-3, AFE-6972, Line #41-J

Section Tested: From: _____ To: _____

Test Section No.: Platform Piping Length: _____

Size of Pipe: _____ O.D. x _____ W.T. x Grade _____ Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: Santa Fe Yard Water Source: City of Houma, LA.

Time and Date Test Started: 5:30 ^{AM} PM 5/18/84 Test Pressure (Maximum): 4000 (+0, -50) PSIG

Time and Date Test Ended: 5:35 ^{AM} PM 5/19/84 Stroke-Pressure Plot: Yes _____ No X

Section Accepted YES Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 18 | 84

TIME	PRESSURE	STROKES-REMARKS	TEMP. AMB/PIPE	TIME	PRESSURE	STROKES-REMARKS	TEMP. AMB/PIPE
AM				AM			
PM				PM			
5:30	4000		83/99	12:18	3962-4000	REPRESSURE	76/
5:36	4000-3992	BLEED	82/	12:30	3996		76/77
5:45	3995		81/100	1:19	3961-3999	REPRESSURE	76/
6:00	3980		80/98	1:30	3995		76/76
6:15	3960-4000	REPRESSURE	80/97	2:18	3963-4000	REPRESSURE	76/
6:30	3979		80/96	2:30	3995		76/74
6:44	3962-3999	REPRESSURE	80/	3:24	3961-4000	REPRESSURE	76/
7:04	3959-4000	REPRESSURE	80/	3:30	4000		76/74
7:21	3960-4000	REPRESSURE	79/	4:30	3997		76/73
7:30	3980		79/90	5:11	3965-3985	REPRESSURE	76/
7:40	3958-4000	REPRESSURE	78/	5:30	3977		76/73
8:00	3960-4000	REPRESSURE	78/	5:35	3977		76/73
8:21	3960-4000	REPRESSURE	78/				
8:30	3985		78/86				
8:49	3963-3999	REPRESSURE	77/				
9:16	3957-4000	REPRESSURE	77/				
9:30	3980		77/83				
9:43	3961-3999	REPRESSURE	77/				
10:08	3963-4000	REPRESSURE	76				
10:30	3970		76/80				
11:00	3964-4000	REPRESSURE	76				
11:30	3969		76/78				
11:35	3965-4000	REPRESSURE	76				

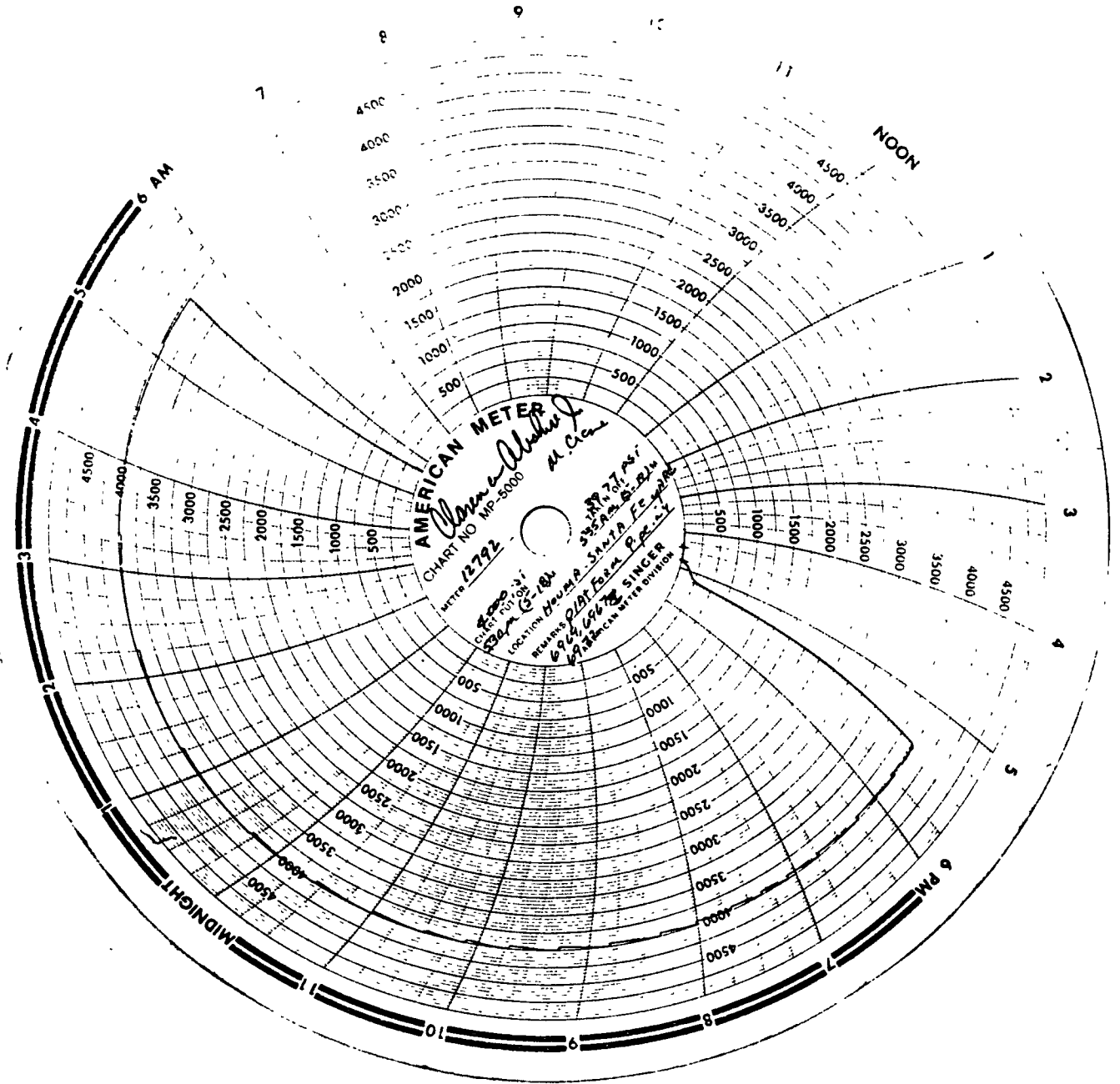
Comments: _____

TETCO Representative: Malcolm Carney Contractor Representative: Clarence Abshire

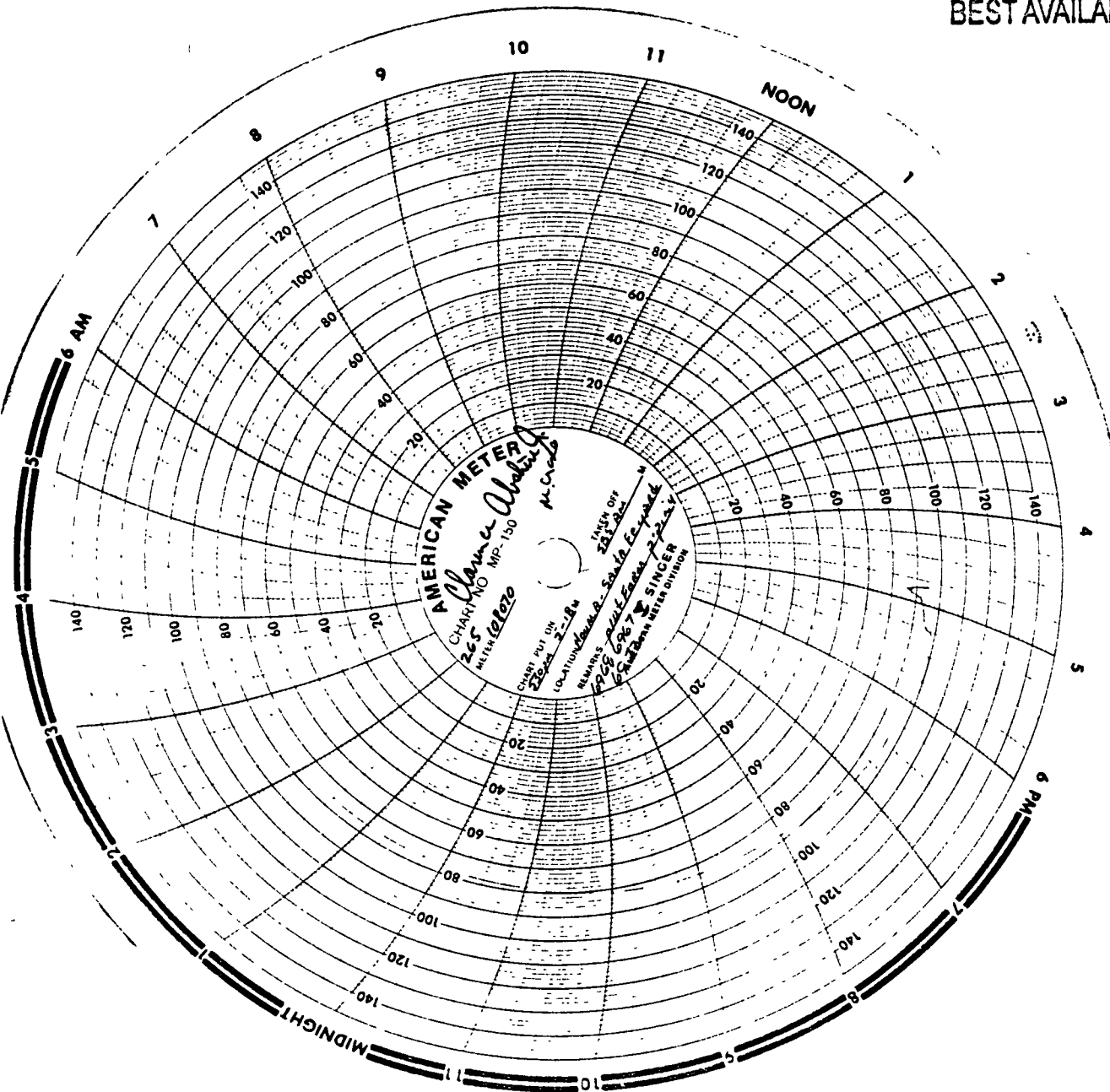
Recorders Last Tested: 1/16/84 1/13/84 Deadweight Serial No.: 12792

Test Contractor: Santa Fe Offshore Construction Co.

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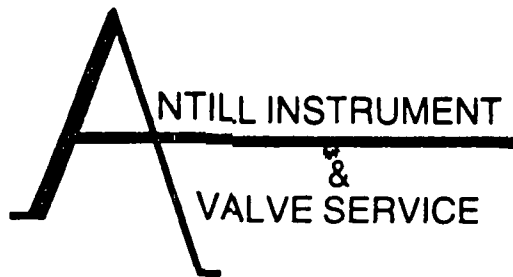
CALIBRATION CERTIFICATE

SF# 8

MAKE Chandler SERIAL NUMBER 12792
PRESSURE RANGE 50-5,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION Feb. 14, 1984 INSPECTOR *J. Antell*

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference
P-7223

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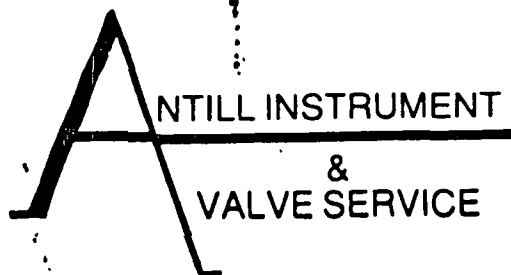


RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

CALIBRATION CERTIFICATE

SF# 9

MAKE Barton SERIAL NUMBER 265-108070
TEMPERATURE RANGE 0-150F CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION Jan. 16, 1984 INSPECTOR *Johnny Antell*



RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

6739

CALIBRATION CERTIFICATE

SF# 8

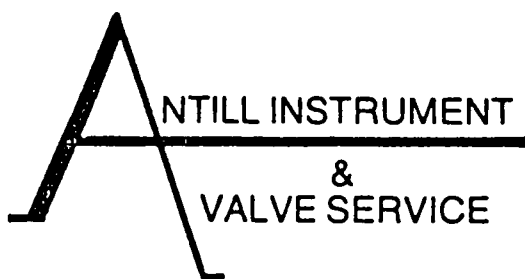
MAKE BARTON SERIAL NUMBER 242-11149

PRESSURE RANGE 0-5,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION January 13, 1984 INSPECTOR Jenny Antill

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 18512 traceable to the National Bureau of Standards, traceability reference
P-7223

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 ANTILL INSTRUMENT
&
VALVE SERVICE

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

DEADWEIGHT READINGS (PSIG)

Report No. _____

Date Test On 5/19/84 5:30 P.M.

Date Test Off 5/19/84 5:35 A.M. Sheet _____ Of _____

TIME AM. (PM.)	PRESSURE PSIG	TEMP. AMB.	TEMP. PIPE	REMARKS	TIME AM. (PM.)	PRESSURE PSIG	TEMP. AMB.	TEMP. PIPE	REMARKS
5:30	4000	83	99		12:18	3962-4000	76		R.P.
5:36	4000-3992	82		Bleed	12:30	3996	76	77	
5:45	3995	81	100		12:19	3961-3999	76°		R.P.
6:00	3980	80	98		1:30	3995	76°	76°	
6:15	3960-4000	80	97	R.P.	2:18	3963-4000	76°		R.P.
6:30	3979	80	96		2:30	3995	76°	74°	
6:44	3962-3999	80		R.P.	3:24	3961-4000	76°		R.P.
7:04	3959-4000	80		R.P.	3:30	4000	76°	74°	
7:21	3960-4000	79		R.P.	4:30	3977	76	73	
7:30	3980	79	90		5:11	3965-3985	76		
7:40	3958-4000	78		R.P.	5:30	3977	76	73	
8:00	3960-4000	78		R.P.	5:35	3972	76	73	
8:21	3960-4000	78		R.P.					
8:30	3985	78	86						
8:49	3963-3999	77		R.P.					
9:16	3957-4000	77		R.P.					BEST AVAILABLE COPY
9:30	3980	77	83						
9:43	3961-3999	77		R.P.					
10:08	3963-4000	76		R.P.					
10:30	3970	76	80						
11:00	3964-4000	76		R.P.					
11:30	3969	76	78						
11:35	3965-4000	76		R.P.					

REMARKS: (P.S.I.G. 3950-4000 R.P. means Re-pressured)

see test for plat form piping
 AFE 6969, 6967 & 6972
 over (used city water)

PRE-TEST REPORT

LINE NAME: Line 41-J Riser- Re-test for 8" Wheatley Check ValveJOB NO: _____ WORK ORDER NO: AFE-6972LOCATION OF TEST: Derrick Barge- "CHICKASAW"

LENGTH: _____ O.D.: _____ WALL THICKNESS: _____

PRE-TEST NO.: 3 SECTION PLOTTED: noTIME TEST STARTED: 2:30 p.m. DATE TEST STARTED: 5/26/84TIME ACCEPTED: 6:45 p.m. DATE ACCEPTED: 5/26/84MAXIMUM PRESSURE: 2185 MINIMUM PRESSURE: 2160

SPEC. MIN. YIELD: _____ MANUFACTURER: _____

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 12792 TEST ENGINEER: Clince Waguespack, Jr.REMARKS: _____

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: 8" Line 41-J West Cameron 253- Pre-Test

Section Tested: From: 8" Check Valve with 1 flange To: 59.11 Riser pipe 2-90'

Test Section No.: _____ Length: _____

Size of Pipe: 8" O.D. x .500 W.T. x Grade B Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 14:30 ^{-AM} PM 5/26/84 Test Pressure (Maximum): 2160
2185 PSIG

Time and Date Test Ended: 18:45 ^{-AM} PM 5/26/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted YES Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 26 | 84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
AM				AM			
PM				PM			
14:30	2180 Bled to	2170	98				
15:00	2177 Bled to	2170	94				
15:30	2185 Bled to	2170	96.9				
15:35	2183 Bled to	2170	98				
15:45	2183 Bled to	2170	99				
16:00	2184 Bled to	2170	101				
16:10	2184 Bled to	2170	103				
16:20	2184 Bled to	2170	107				
16:30	2184 Bled to	2170	108				
16:37	2184 Bled to	2170	107				
16:58	2184 Bled to	2177	106				
17:00	2184 Bled to	2177	103				
17:13	2184 Bled to	2175	102				
17:30	2182		99				
17:37	2184 Bled to	2175	98.5				
18:00	2172		96				
18:15	2163 Pumped to	2173	95				
18:30	2173 Pumped to	2240	93				
18:31	2240 Bled to	2175	93				
18:36	2165 Pumped to	2177	90				
18:42	2162 Pumped to	2185	90				
18:45	2177 OFF TEST		90				

Comments: _____

TETCO Representative: *[Signature]* Contractor Representative: *C.J. Robin*

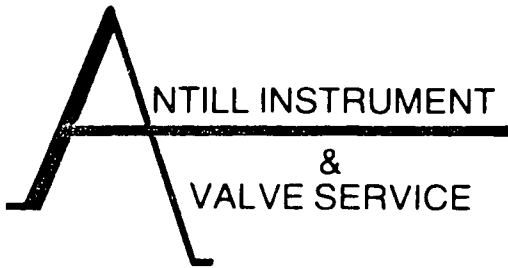
Recorders Last Tested: 5/25/84 Deadweight Serial No.: 12792

Test Contractor: Santa Fe Offshore Construction Company

CALIBRATION CERTIFICATE

SF#P

MAKE Chandler SERIAL NUMBER 12702
PRESSURE RANGE 50-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 25, 1984 INSPECTOR John Antill, Jr.
This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 18187 traceable to the National Bureau of Standards, traceability reference
P-7223



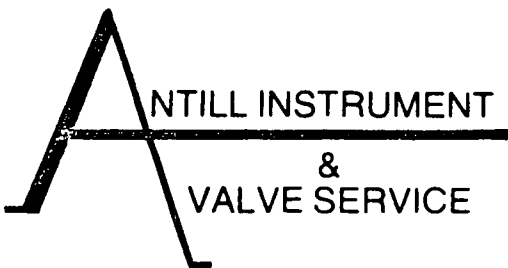
RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY

CALIBRATION CERTIFICATE

SF#F

MAKE Taylor SERIAL NUMBER 35
PRESSURE RANGE 0-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 25, 1984 INSPECTOR John Antill, Jr.
This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 18187 traceable to the National Bureau of Standards, traceability reference
P-7223



RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

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8

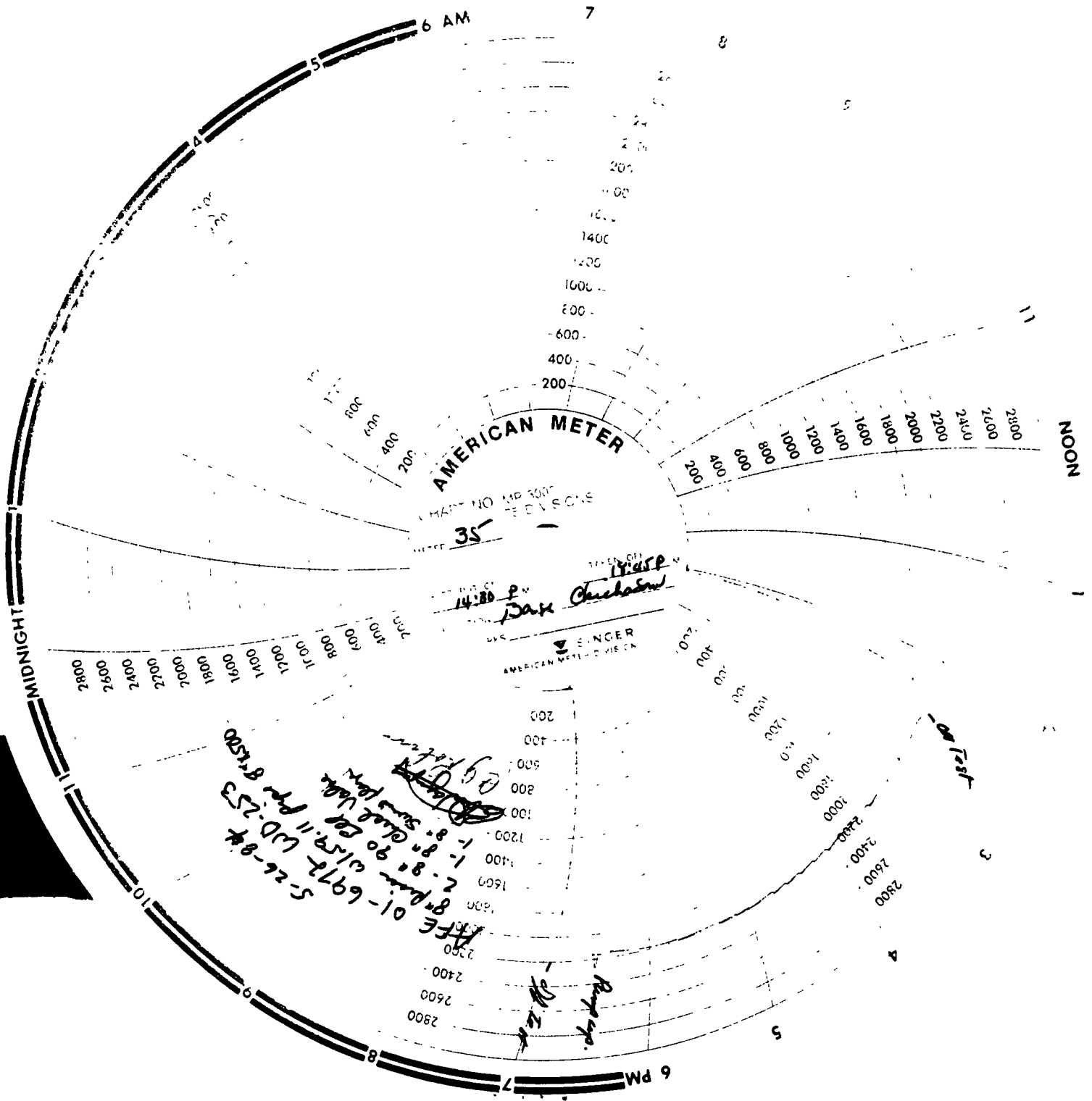
CALIBRATION CERTIFICATE

MAKE Farton SERIAL NUMBER 2421-3017^c
TEMPERATURE RANGE 0-150F CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 1st, 1984 INSPECTOR Johnny Antill

ANTILL INSTRUMENT
&
VALVE SERVICE

RTE 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY



AMERICAN METER
SERIAL NO. MP 3007
E-NGER DIVISION

35

14:57 P.M.
Dak Cheekman

E-NGER
AMERICAN METER DIVISION

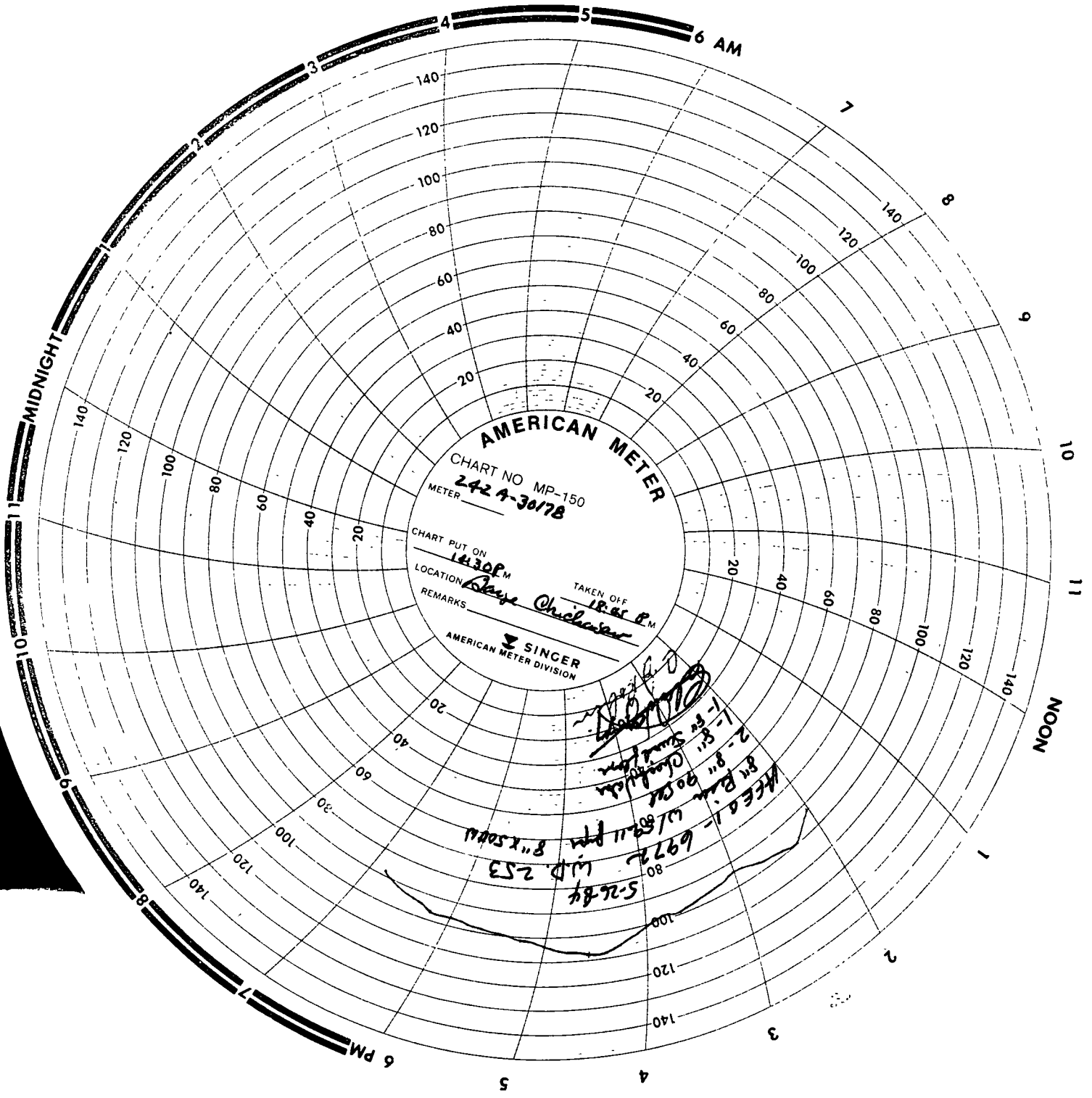
5-26-84
01-6972-
8-...
1-8-90
1-8-90
1-8-90

MIDNIGHT

NOON

6 PM

BEST AVAILABLE COPY



Transmission Corporation

FIELD PRESSURE & TEST REPORT

Pre Test

Line Description: 8" Line 41-5 W.C 253

Section Tested: From: 8" Check Valve w/ ant flange To: 59.11 Rise pipe - 2-90'

Test Section No.: _____ Length: _____

Size of Pipe: 8" O.D. x 500 W.T. x Grade B Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 14:30 AM 5-26-84 Test Pressure (Maximum): 2160 PSIG

Time and Date Test Ended: 18:45 PM 5-26-84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

BEST AVAILABLE COPY

Date: 5 | 26 | 84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
1430	2180 BLED TO	2170	98				
1500	2177 BLED TO	2170	94				
1530	2185 BLED TO	2170	96.9				
1535	2183 BLED TO	2170	95				
1545	2183 BLED TO	2170	99				
1600	2184 N-EN TO	2170	101				
1610	2184 BLED TO	2170	103				
1620	2184 BLED TO	2170	107				
1630	2184 BLED TO	2170	105				
1637	2184 BLED TO	2170	107				
1638	2184 BLED TO	2177	106				
1700	2184 BLED TO	2177	103				
1713	2184 BLED TO	2175	102				
1730	2182		99				
1737	2184 BLED TO	2175	98.5				
1800	2172		96				
1815	2163 Pumped up to	2173	95				
1830	2173 Pumped up to	2240	93				
1831	2240 BLED TO	2175	93				
1836	2165 Pumped up to	2177	90				
1842	2162 Pumped up to	2185	90				
1845	2177	OFF TEST	90				

Comments: _____

TETCO Representative: [Signature] Contractor Representative: [Signature]

Recorders Last Tested: May 25-84 Deadweight Serial No.: 12792

Test Contractor: Santa Fe

PRE-TEST REPORT

LINE NAME: Line 41-J Sub-sea Tie-In

JOB NO: _____ WORK ORDER NO: AFE-6972

LOCATION OF TEST: Santa Fe Yard

LENGTH: _____ O.D.: _____ WALL THICKNESS: _____

PRE-TEST NO.: 4 SECTION PLOTTED: NO

TIME TEST STARTED: 10:00 P.M. DATE TEST STARTED: 5/19/84

TIME ACCEPTED: 11:05 A.M. DATE ACCEPTED: 5/20/84

MAXIMUM PRESSURE: 2185 MINIMUM PRESSURE: 2160

SPEC. MIN. YIELD: _____ MANUFACTURER: _____

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 12792 TEST ENGINEER: MALCOLM CRANE

MALCOLM CRANE
M

REMARKS: _____

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: AFE-6969, Line 40-G-3, AFE-6967, Line 61, AFE-6972, Line 41-J

Section Tested: From: _____ To: _____

Test Section No.: Sub-Sea Tie-in Length: _____

Size of Pipe: _____ O.D. x _____ W.T. x Grade _____ Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: Santa Fe Yard Water Source: _____

Time and Date Test Started: 10:00 ^{-AM} ~~PM~~ 5/19/84 Test Pressure (Maximum): 2185 (+0, -25) PSIG

Time and Date Test Ended: 11:05 ^{AM} ~~PM~~ 5/20/84 Stroke-Pressure Plot: Yes _____ No X

Section Accepted YES Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 19 | 84

TIME -AM PM	PRESSURE	-STROKES REMARKS	TEMP. AMB/PIPE	TIME AM PM	PRESSURE	STROKES REMARKS	TEMP. AMB/PIPE
10:00	2185		76/82	5:44	2170-2185	REPRESSURE	71/
10:15	2170-2185	REPRESSURE	76/82	6:00	2170		70/74
10:30	2175		76/81	6:07	2168-2185	REPRESSURE	71
10:36	2170-2185	REPRESSURE	76	6:31	2167-2185	REPRESSURE	70
10:45	2181		76/81	7:00	2171		70/73
11:00	2172		76/81	7:15	2166-2185	REPRESSURE	71
11:03	2170/2185	REPRESSURE	76/	8:00	2174		72/73
11:38	2170-2185	REPRESSURE	75/	9:00	2183		73/73
12:00am	2178		75/81	9:22	2185-2183	BLEED	73/
12:25	2168-2185	REPRESSURE	75	9:34	2185-2181	BLEED	74/
1:00	2175		75/80	9:43	2185-2181	BLEED	74/
1:26	2170-2185	REPRESSURE	75	9:53	2185-2181	BLEED	74/
2:00	2178		75/80	10:00	2184		74/
2:40	2170/2185	REPRESSURE	75/	10:05	2185-2181	BLEED	75/
3:00	2181		75/80	10:17	2185-2182	BLEED	75/
4:00	2169		75/80	10:25	2185-2181	BLEED	74/
4:05	2168-2185	REPRESSURE	75/	11:00	2183		72/
4:24	2167-2185	REPRESSURE	73/	11:05	2183		72/
4:37	2167-2185	REPRESSURE	72			END OF TEST	
4:50	2170-2185	REPRESSURE	72				
5:00	2175		72/76				
5:08	2168-2185	REPRESSURE	72/				
5:26	2168-2185	REPRESSURE	72/				

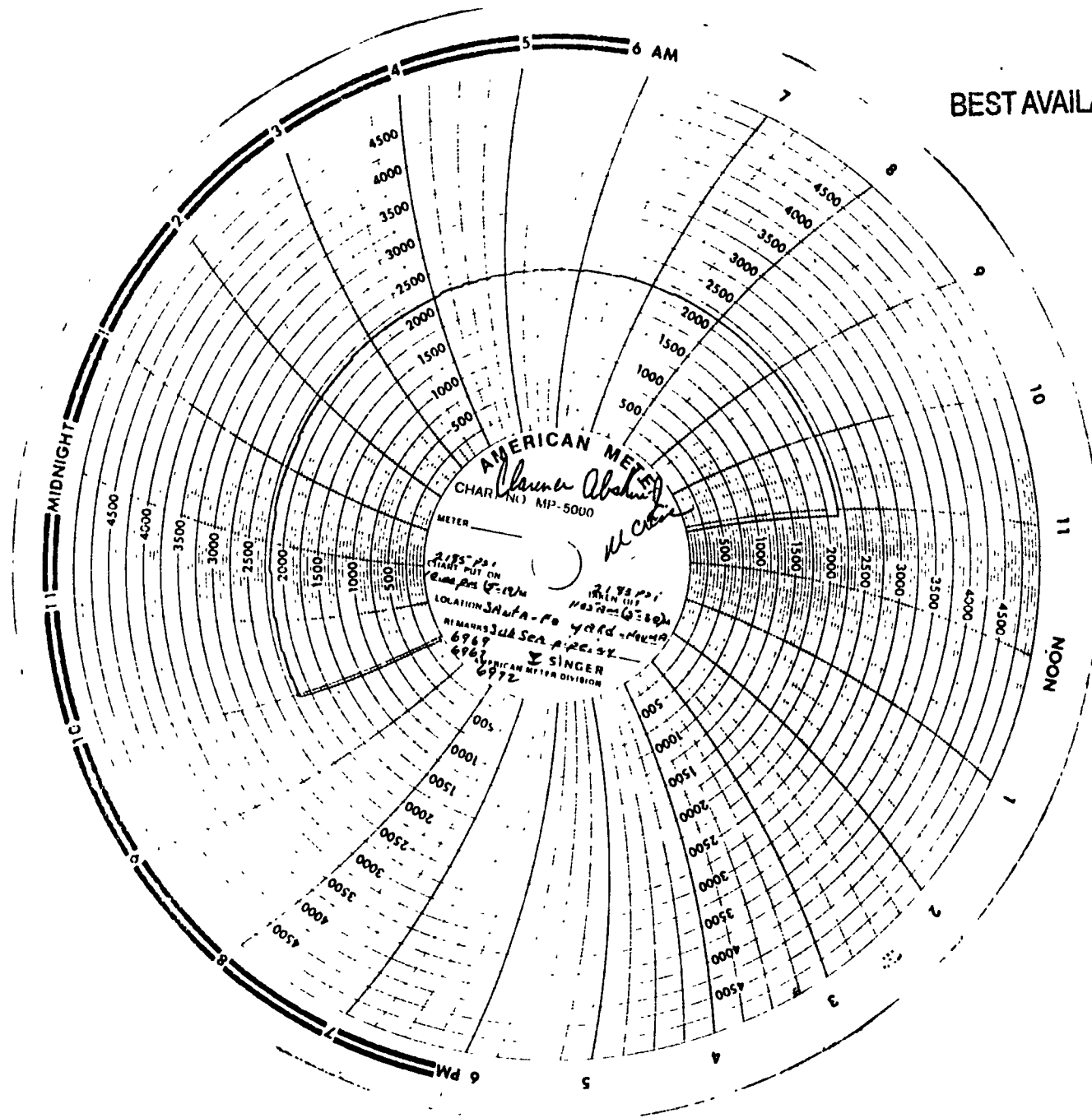
Comments: _____

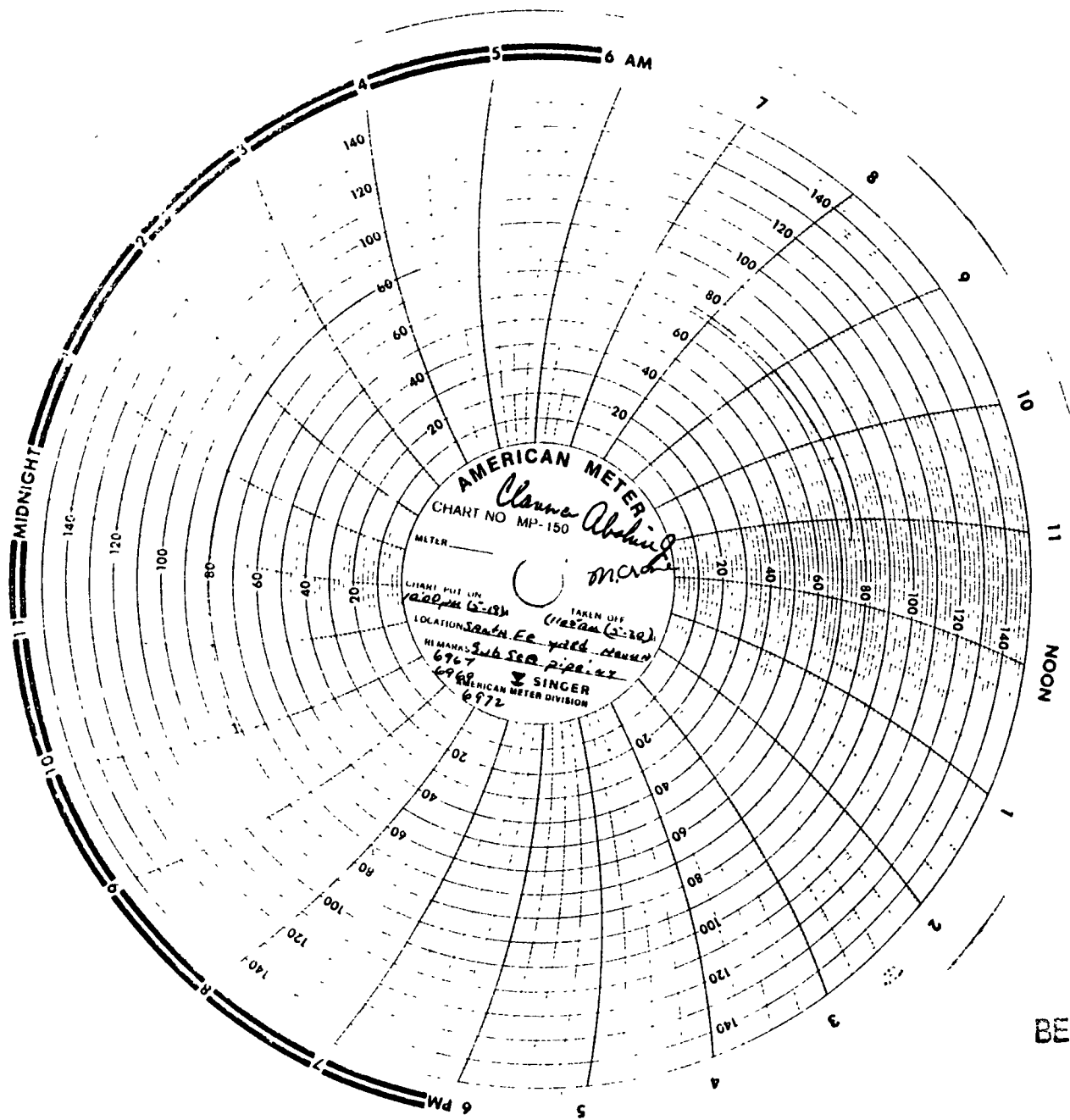
TETCO Representative: MALCOLM CRANE Contractor Representative: CLARENCE ABSHIRE

Recorders Last Tested: _____ Deadweight Serial No.: _____

Test Contractor: _____

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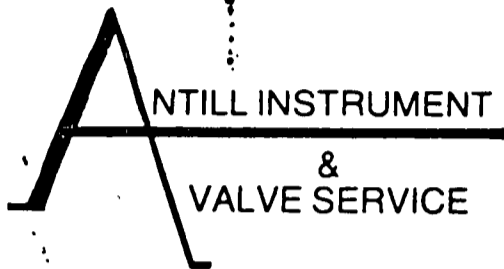


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CALIBRATION CERTIFICATE

SF# 9

MAKE Barton SERIAL NUMBER 265-108070
TEMPERATURE RANGE 0-150F CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION Jan. 16, 1984 INSPECTOR *Johnny Antill*



RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

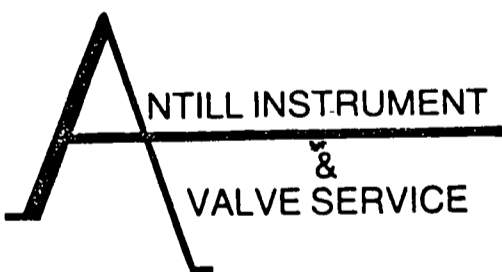
BEST AVAILABLE COPY

CALIBRATION CERTIFICATE

SF# 8

MAKE Chandler SERIAL NUMBER 12792
PRESSURE RANGE 50-5,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION Feb. 14, 1984 INSPECTOR *for Antill*

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference
P-7223



RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

CALIBRATION CERTIFICATE

SF# 8

MAKE BARTON SERIAL NUMBER 242-11149
PRESSURE RANGE 0-5,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION January 13, 1984 INSPECTOR *Johnny Antill*

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 18512 traceable to the National Bureau of Standards, traceability reference
P-7223



DEADWEIGHT READINGS (PSIG)

BEST AVAILABLE COPY

Report No. _____

Date Test On 5/19/84

Date Test Off 5/20/84

Sheet _____ Of _____

TIME AM. (PM.)	PRESSURE PSIG	TEMP. AMB.	TEMP. PIPE	REMARKS	TIME AM. (PM.)	PRESSURE PSIG	TEMP. AMB.	TEMP. PIPE	REMARKS
10:00	2195	76	82		5:44	2170-2185	71		R.P.
10:15	2170-2185	76	82	R.P.	6:00	2170	70	74	
10:30	2175	76	81		6:07	2168-2185	71		R.P.
10:36	2170-2185	76		R.P.	6:31	2167-2185	70		R.P.
10:45	2181	76	81		7:00	2171	70	73	
11:00	2172	76	81		7:15	2166-2185	71		R.P.
11:03	2170-2185	76		R.P.	8:00	2174	72	73	
11:38	2170-2185	75		R.P.	9:00	2183	73	73	
midnight A.M.	2178	75	81		9:22	2185-2183	73		Bleed
12:00 12:25	2168-2185	75		R.P.	9:34	2185-2181	74		Bleed
1:00	2175	75	80		9:43	2185-2181	74		Bleed
1:26	2170-2185	75		R.P.	9:53	2185-2181	74		Bleed
2:00	2178	75	80		10:00	2184	74		
2:40	2170-2185	75			10:05	2185-2181	75		Bleed
3:00	2181	75	80		10:17	2185-2182	75		Bleed
4:00	2169	75	80		10:25	2185-2181	74		Bleed
4:05	2168-2185	75		R.P.	11:00	2183	72		
4:24	2167-2185	73		R.P.	11:05	2183	72		End of Test
4:37	2167-2185	72		R.P.					
4:50	2170-2185	72		R.P.					
5:00	2175	72	76						
5:08	2168-2185	72		R.P.					
5:26	2168-2185	72		R.P.					

REMARKS: 4:15 Raining | 7:30 stop Raining | R.P. means Repressure

Sub SEA piping A.F.E 6969, 6967, 6972

PRE-TEST REPORT

LINE NAME: 41J - Subsea Tie-in - Retest for 8" Wheatley Check ValveJOB NO: _____ WORK ORDER NO: AFE-01-6972LOCATION OF TEST: Derrick Barge Chickasaw

LENGTH: _____ O.D.: _____ WALL THICKNESS: _____

PRE-TEST NO.: 4R SECTION PLOTTED: NoTIME TEST STARTED: 1:30 a.m. DATE TEST STARTED: 5-26-84TIME ACCEPTED: 1:35 p.m. DATE ACCEPTED: 5-26-84MAXIMUM PRESSURE: 2185 MINIMUM PRESSURE: 2160

SPEC. MIN. YIELD: _____ MANUFACTURER: _____

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 12793 TEST ENGINEER: Clince Waguespack, Jr.REMARKS: _____

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Pre-test

Line Description: 8" #41-J W.C. 250

Section Tested: From: 8" Check Valve W/28" pup and 8" flange To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 8 O.D. x 500 W.T. x Grade B Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 0130 AM 5-26-84 Test Pressure (Maximum): 2185 PSIG

Time and Date Test Ended: 1335 PM 5-26-84 Stroke-Pressure Plot: Yes _____ No _____


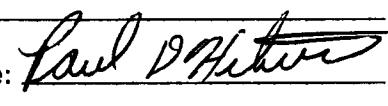
Section Accepted X Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 05 26 84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
0130	2178	On Test	80	1300	2154 Bled to 2175		86.5
0200	2178		82	1300			
0230	2178		82	1335	2178	Off Test	
0300	2177		82.5				
0330	2177		82.5				
0400	2177		82.5				
0430	2177		82				
0500	2177		82.5				
0530	2185 Bled to 2180		83.5				
0600	2180		83.5				
0630	2180		83.9				
0700	2185 Bled to 2175		84				
0730	2175		84				
0800	2180		84				
0830	2185 Bled to 2175		84				
0900	2185 Bled to 2175		85				
0930	2180		85				
1000	2185 Bled to 2175		85				
1030	2180 Start 3hr. hold		85.5				
1100	2185 Bled to 2175		86				
1130	2175		86				
1200	2180		86				
1230	2185 Bled to 2175		86.5				

Comments: _____

TETCO Representative:  Contractor Representative: 

Recorders Last Tested: 5-25-84 Deadweight Serial No.: 12793

Test Contractor: Santa Fe Construction

8

CALIBRATION CERTIFICATE

MAKE Parton

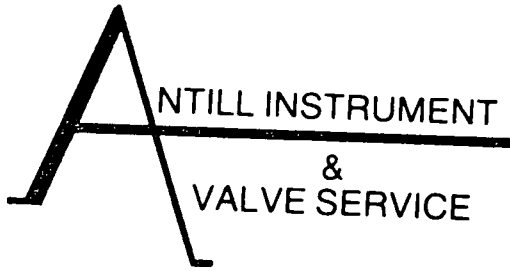
SERIAL NUMBER 242A-30179

TEMPERATURE RANGE 0-150F

CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION May 18, 1984

INSPECTOR Johnny Antell



RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY

CALIBRATION CERTIFICATE

SF#1

MAKE Chandler

SERIAL NUMBER 12793

PRESSURE RANGE 50-3,000psi

CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

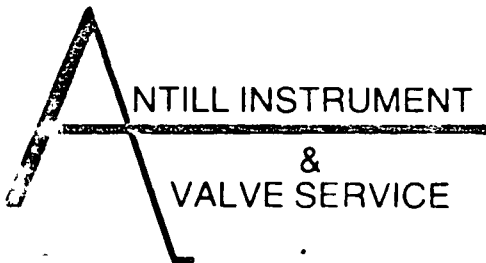
DATE OF CALIBRATION May 25, 1984

INSPECTOR Johnny Antell

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler

Traceability: S/N 18187 traceable to the National Bureau of Standards, traceability reference

P-7223



RTE 1 BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY

CALIBRATION CERTIFICATE

SF#8

MAKE Barton SERIAL NUMBER 242-11149

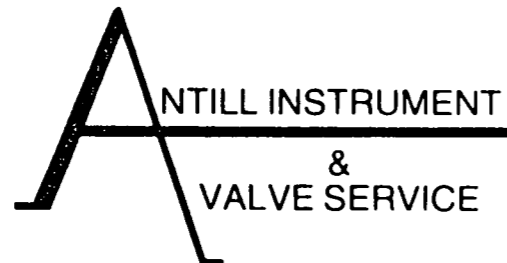
PRESSURE RANGE 0-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION May 25, 1984 INSPECTOR John Antill, Jr.

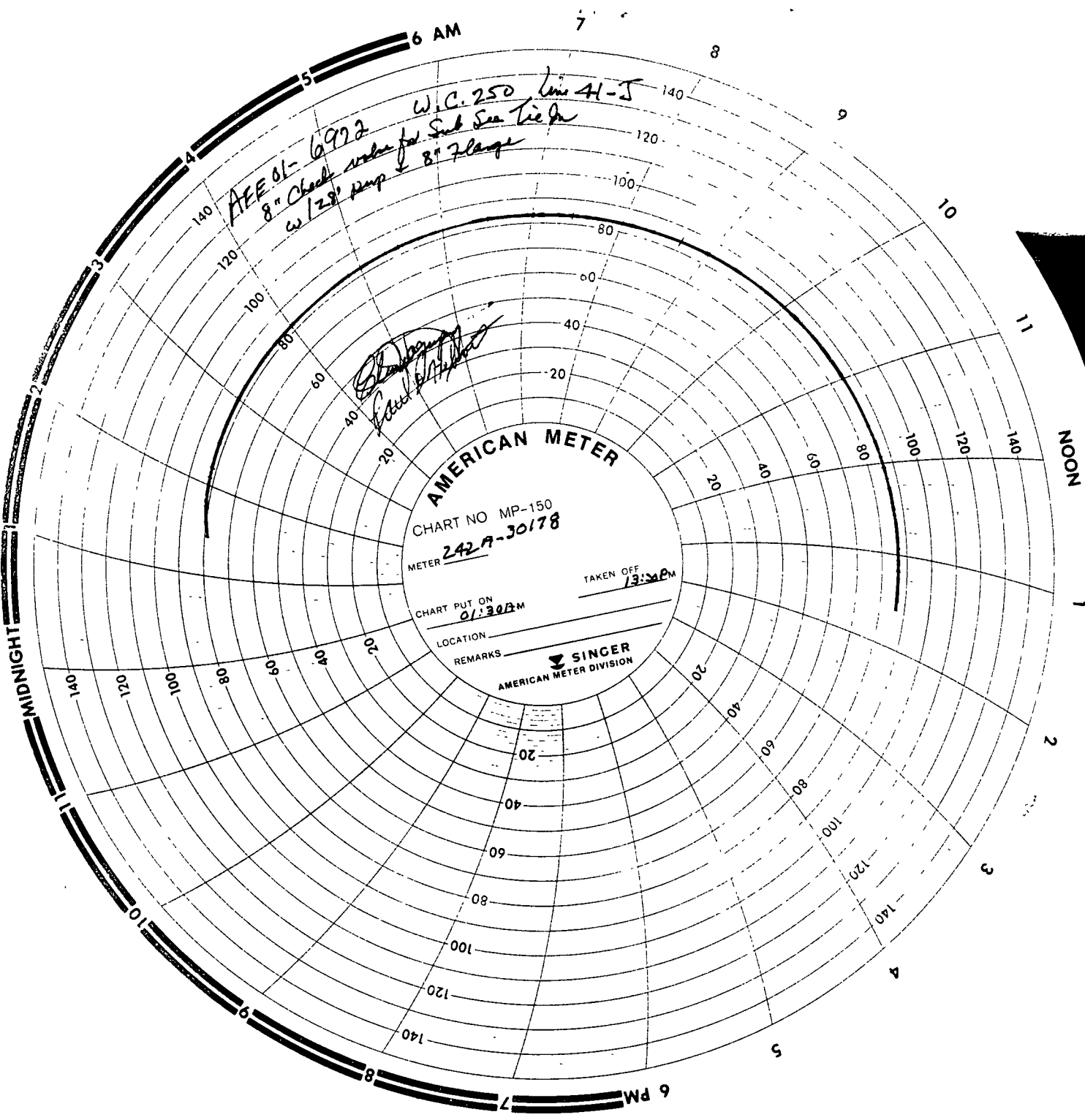
This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler

Engineering S/N 18187 traceable to the National Bureau of Standards, traceability reference

P-7223



RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695



W.C. 250 Line 41-J
 AEE 01-6992
 8" Check valve for Sub Sea Tie In
 w/ 28" pump & 8" Flange

[Handwritten signature]
[Handwritten signature]

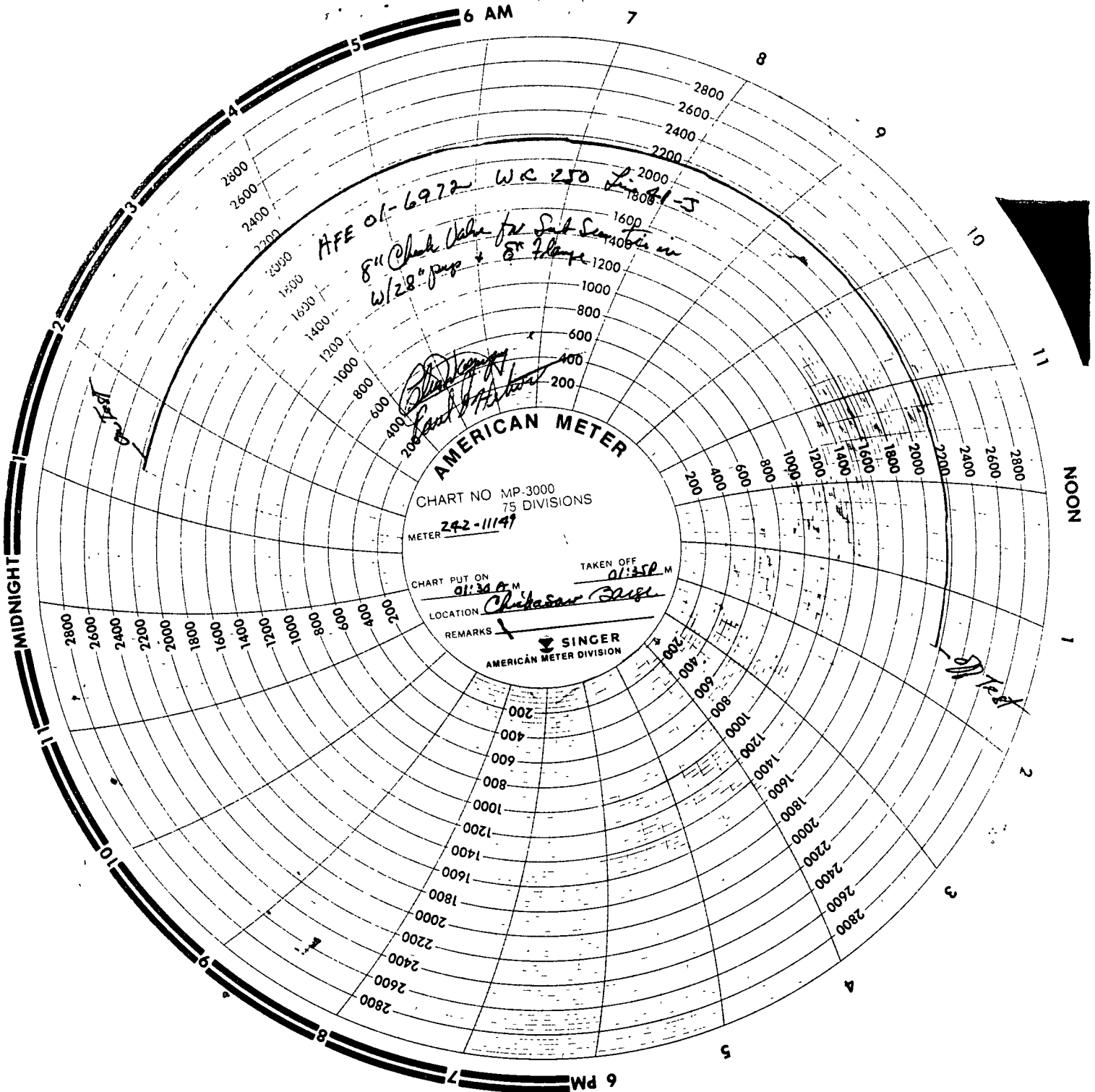
AMERICAN METER

CHART NO MP-150
 METER 242A-30178

CHART PUT ON 01:30 PM
 LOCATION
 REMARKS

TAKEN OFF 13:30 PM

SINGER
 AMERICAN METER DIVISION



Transmission Corporation

Pre Test

FIELD PRESSURE & TEST REPORT

Line Description: 8" #41-J W.C 250

Section Tested: From: 8" Check Valve w/ 28" pup & 8" Flange

Test Section No.: _____ Length: _____

Size of Pipe: 8 O.D. x 500 W.T. x Grade B Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 01:30 ^{AM} 5-26-84 Test Pressure (Maximum): 2185 ^{MIN 2160} PSIG

Time and Date Test Ended: 13:35 ^{AM} 5-26-84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5/26/84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
0130	2178	ON Test	80	1300	2170 2175		86.5
0200	2178		82	1300			
0230	2178		82	1335	2178	OFF Test	
0300	2177		82.5				
0330	2177		82.5				
0400	2177		82.5				
0430	2177		82				
050	2177		82.5				
0530	2175 2180		83.5				
0600	2180		83.5				
0630	2180		83.9				
0700	2180 2175		84				
0730	2175		84				
0800	2180		84				
0830	2178 2180		84				
0900	2180 2180		85				
0930	2180		85				
1000	2180 2150		85				
1030	2150	start	85.5				
1100	2150 2175	3H	86				
1130	2175		86				
1200	2180	Hold	86				
1230	2185 2175		86.5				

Comments: _____

TETCO Representative: [Signature] Contractor Representative: Paul B. Heber

Recorders Last Tested: May 25-84 Deadweight Serial No.: 12793

Test Contractor: Stata Fe

PRE-TEST REPORT

LINE NAME: 41J - Extension of Subsea Tie-in Fabrication

JOB NO: _____ WORK ORDER NO: AFE-01-6972

LOCATION OF TEST: Derrick Barge Tonkawa

LENGTH: _____ O.D.: _____ WALL THICKNESS: _____

PRE-TEST NO.: 4EXT SECTION PLOTTED: No

TIME TEST STARTED: 05:40 a.m. DATE TEST STARTED: 6-22-84

TIME ACCEPTED: 05:40 p.m. DATE ACCEPTED: 6-22-84

MAXIMUM PRESSURE: 2185 MINIMUM PRESSURE: 2160

SPEC. MIN. YIELD: _____ MANUFACTURER: _____

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 12793 TEST ENGINEER: L. M. Calvert

L.M. CALVERT
EDG

REMARKS: _____

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Sub-Sea Tie-in Fabrication WC 253 AFE 6972

Section Tested: From: Spool Piece add on To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 8" O.D. x .500 W.T. x Grade B Manufacturer: USS

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: D/B Tonkawa Water Source: Fresh

Time and Date Test Started: 0540 ^{AM} ~~PM~~ 6/22/84 Test Pressure (Maximum): 2185+0 -25 PSIG

Time and Date Test Ended: 1740 ^{AM} ~~PM~~ 6/22/84 Stroke-Pressure Plot: Yes _____ No X

Section Accepted Yes Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 06 | 22 | 84

TIME AM PM	PRESSURE	STROKES	TEMP. Out-In	TIME AM PM	PRESSURE	STROKES	TEMP.
<u>0540</u>	<u>2185</u>	<u>Pressure</u>	<u>80/99</u>	<u>1112</u>	<u>2162</u>	<u>Bled Down</u>	<u>100/119</u>
<u>0600</u>	<u>2176</u>	_____	<u>80/99</u>	<u>1117</u>	<u>2166</u>	<u>Bled Down</u>	<u>103/119</u>
<u>0625</u>	<u>2165</u>	_____	<u>80/99</u>	<u>1125</u>	<u>2165</u>	<u>Bled Down</u>	<u>104/120</u>
<u>0630</u>	<u>2181</u>	<u>Repressure</u>	<u>80/99</u>	<u>1130</u>	<u>2165</u>	<u>Bled Down</u>	<u>104/121</u>
<u>0700</u>	<u>2170</u>	_____	<u>80/100</u>	<u>1138</u>	<u>2166</u>	<u>Bled Down</u>	<u>101/121</u>
<u>0730</u>	<u>2166</u>	_____	<u>80/104</u>	<u>1142</u>	<u>2160</u>	<u>Bled Down</u>	<u>101/121</u>
<u>0800</u>	<u>2169</u>	_____	<u>80/108</u>	<u>1153</u>	<u>2163</u>	<u>Bled Down</u>	<u>103/121</u>
<u>0830</u>	<u>2175</u>	_____	<u>81/110</u>	<u>1200</u>	<u>2160</u>	<u>Bled Down</u>	<u>100/121</u>
<u>0900</u>	<u>2180</u>	_____	<u>81/113</u>	<u>1215</u>	<u>2161</u>	<u>Bled Down</u>	<u>100/121</u>
<u>0910</u>	<u>2177</u>	<u>Bled Down</u>	<u>82/114</u>	<u>1225</u>	<u>2161</u>	<u>Bled Down</u>	<u>100/121</u>
<u>0920</u>	<u>2174</u>	<u>Bled Down</u>	<u>90/114</u>	<u>1236</u>	<u>2165</u>	<u>Bled Down</u>	<u>100/121</u>
<u>0930</u>	<u>2180</u>	_____	<u>90/115</u>	<u>1246</u>	<u>2167</u>	<u>Bled Down</u>	<u>110/121</u>
<u>0935</u>	<u>2170</u>	<u>Bled Down</u>	<u>90/115</u>	<u>1253</u>	<u>2162</u>	<u>Bled Down</u>	<u>109/121</u>
<u>0940</u>	<u>2165</u>	<u>Bled Down</u>	<u>90/115</u>	<u>1301</u>	<u>2165</u>	<u>Bled Down</u>	<u>105/120</u>
<u>0955</u>	<u>2165</u>	<u>Bled Down</u>	<u>96/116</u>	<u>1313</u>	<u>2169</u>	<u>Bled Down</u>	<u>109/121</u>
<u>1005</u>	<u>2165</u>	<u>Bled Down</u>	<u>94/116</u>	<u>1322</u>	<u>2163</u>	<u>Bled Down</u>	<u>113/122</u>
<u>1015</u>	<u>2165</u>	<u>Bled Down</u>	<u>96/116</u>	<u>1328</u>	<u>2162</u>	<u>Bled Down</u>	<u>110/122</u>
<u>1025</u>	<u>2165</u>	<u>Bled Down</u>	<u>98/116</u>	<u>1340</u>	<u>2165</u>	<u>Bled Down</u>	<u>111/123</u>
<u>1030</u>	<u>2180</u>	_____	<u>98/116</u>	<u>1348</u>	<u>2164</u>	<u>Bled Down</u>	<u>109/124</u>
<u>1035</u>	<u>2165</u>	<u>Bled Down</u>	<u>98/116</u>	<u>1400</u>	<u>2167</u>	<u>Bled Down</u>	<u>110/122</u>
<u>1045</u>	<u>2160</u>	<u>Bled Down</u>	<u>98/116</u>	<u>1409</u>	<u>2163</u>	<u>Bled Down</u>	<u>110/122</u>
<u>1055</u>	<u>2165</u>	<u>Bled Down</u>	<u>100/117</u>	<u>1418</u>	<u>2163</u>	<u>Bled Down</u>	<u>116/124</u>
<u>1105</u>	<u>2164</u>	<u>Bled Down</u>	<u>100/118</u>	<u>1426</u>	<u>2163</u>	<u>Bled Down</u>	<u>116/124</u>

Comments: _____

TETCO Representative: L.M. CALVERT Contractor Representative: James Phillip

Recorders Last Tested: 5/25/84 & 5/31/84 Deadweight Serial No.: 12793

Test Contractor: Santa Fe Construction Co.

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Sub-Sea Tie-in Fabrication WC 253 AFE 6972

Section Tested: From: Spool Piece add on To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 8" O.D. x .500 W.T. x Grade B Manufacturer: USS

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: D/B Tonkawa Water Source: Fresh

Time and Date Test Started: 0540 ^{AM} ~~PM~~ 6/22/84 Test Pressure (Maximum): 2185+0 -25 PSIG

Time and Date Test Ended: 1740 ^{AM} ~~PM~~ 6/22/84 Stroke-Pressure Plot: Yes _____ No X

Section Accepted Yes Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 6 | 22 | 84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
1436	2164	Bled Down	115/124				
1445	2161	Bled Down	114/125				
1453	2162	Bled Down	113/125				
1503	2163	Bled Down	112/124				
1512	2164	Bled Down	109/125				
1522	2165	Bled Down	110/124				
1532	2161	Bled Down	110/124				
1544	2164	Bled Down	97/124				
1555	2161	Bled Down	92/124				
1607	2165	Bled Down	89/124				
1616	2166	Bled Down	89/124				
1629	2164	Bled Down	90/123				
1658	2167	Bled Down	91/122				
1715	2179	Bled Down	91/121				
1726	2180	Bled Down	90/122				
1730	2183		90/121				
1735	2184		90/121				
1740	Bleed off	test					

Comments: _____

TETCO Representative: L.M. CALVERT Contractor Representative: James Phillip

Recorders Last Tested: 5/25/84 & 5/31/84 Deadweight Serial No.: 12793

Test Contractor: Santa Fe Construction Co.

BEST AVAILABLE COPY

CALIBRATION CERTIFICATE

SF#1

MAKE Chandler SERIAL NUMBER 12793

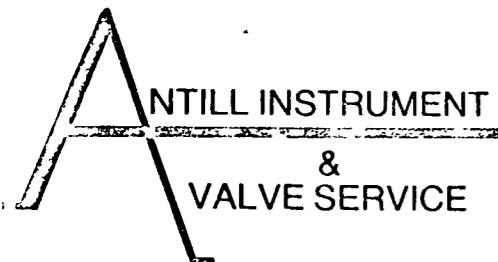
PRESSURE RANGE 50-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION May 25, 1984 INSPECTOR John Antill

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler

Engineering S/N 18187 traceable to the National Bureau of Standards, traceability reference

P-7223



RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY

CALIBRATION CERTIFICATE

SF#9

TAKE Parton SERIAL NUMBER 265-10807
TEMPERATURE RANGE 0-150F CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 25, 1984 INSPECTOR John Antill

ANTILL INSTRUMENT
&
VALVE SERVICE

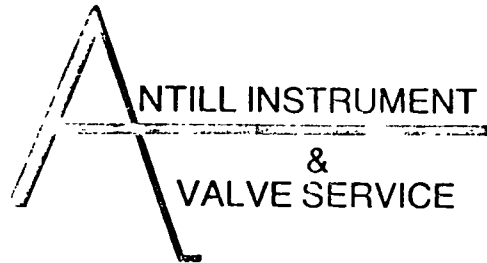
RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY

10

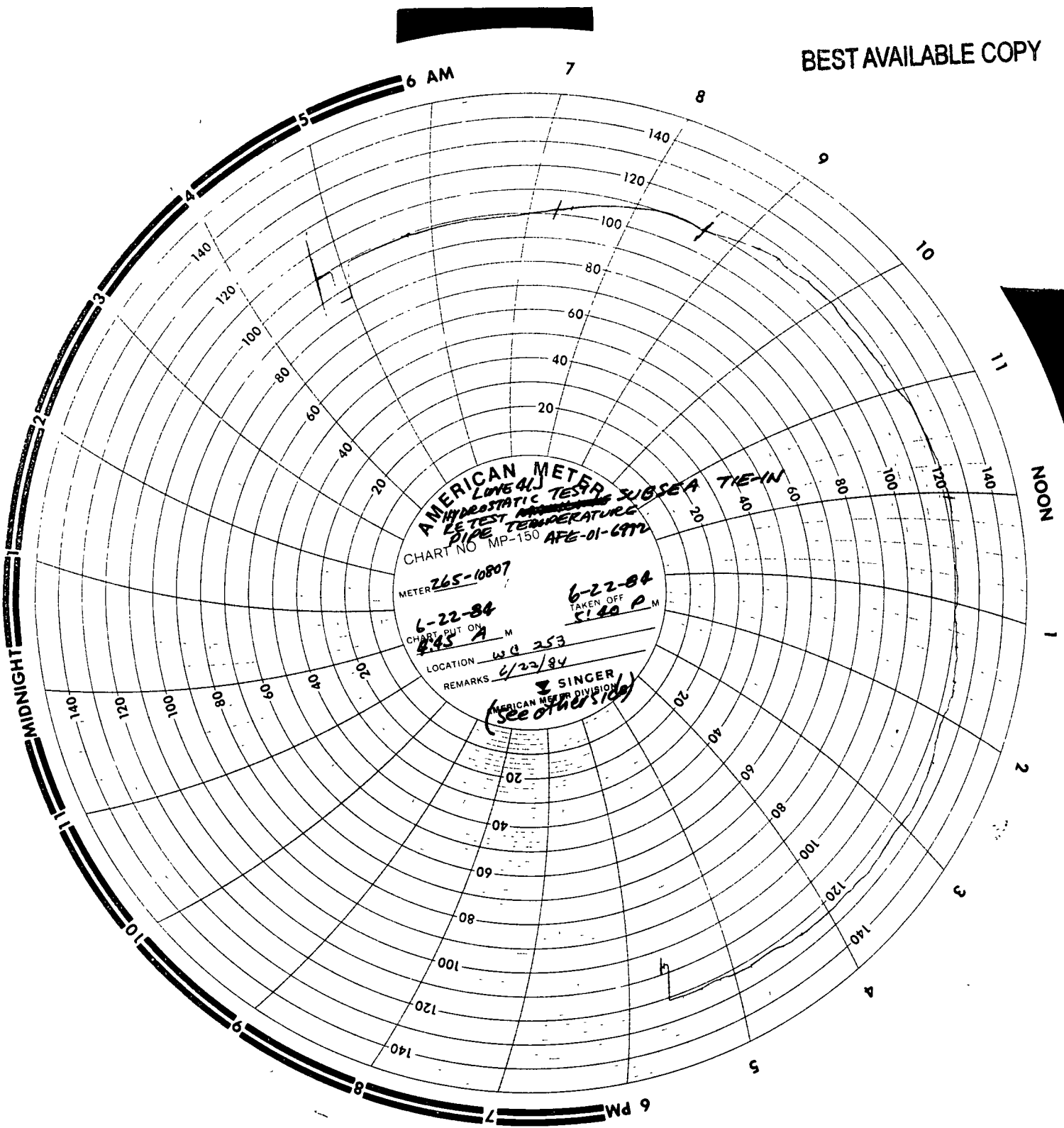
CALIBRATION CERTIFICATE

MAKE Parton SERIAL NUMBER 242A-9012
PRESSURE RANGE 0-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 31, 1984 INSPECTOR Johnny Antill
This is to certify that this instrument has been inspected and tested against Pressure Standard Charlier
Engineering S/N 10134 traceable to the National Bureau of Standards, traceability reference
P-7223

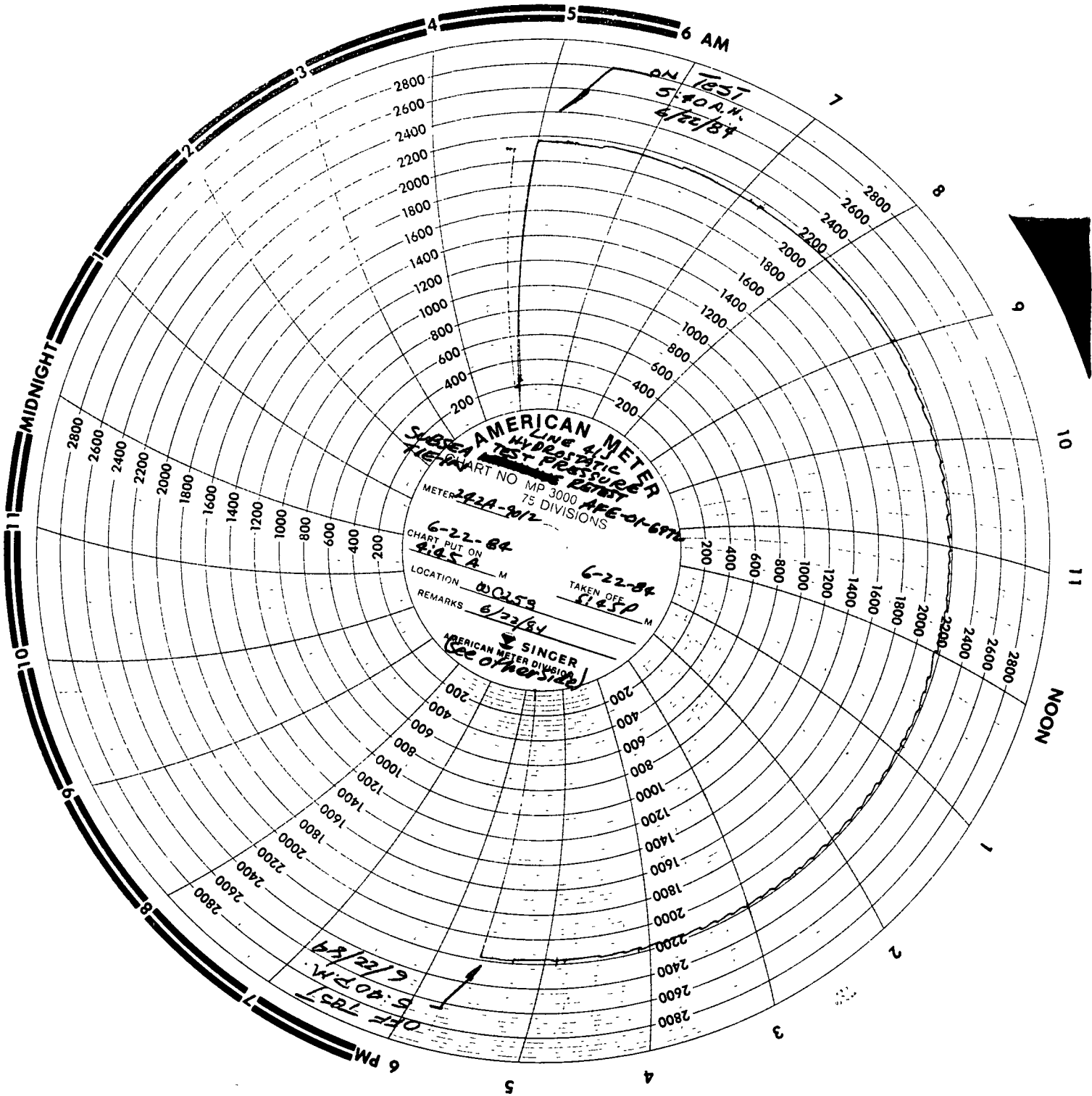


RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY



BEST AVAILABLE COPY



TEXAS 
EASTERN
Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Meter Piping 6972

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 2", 6", 8", 10" O.D. x .500 W.T. x Grade B Manufacturer: J&L Steel

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 1:05 ^{AM}_{PM} 5/26/84 Test Pressure (Maximum): 2182 PSIG

Time and Date Test Ended: 1:15 ^{AM}_{PM} 5/27/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 26 | 84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
<u>8:39</u> ^{AM} _{PM}	<u>2160-2177</u>	<u>Repressure</u>	<u>79</u>	_____	_____	_____	_____
<u>0850</u>	<u>2160-2177</u>	<u>Repressure</u>	<u>79</u>	_____	_____	_____	_____
<u>0900</u>	<u>2160-2179</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>0914</u>	<u>216--2179</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>0915</u>	<u>2178</u>	<u>Reading</u>	_____	_____	_____	_____	_____
<u>0930</u>	<u>2160-2177</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>0945</u>	<u>2160-2180</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1005</u>	<u>2160-2181</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1015</u>	<u>2170</u>	<u>Reading</u>	_____	_____	_____	_____	_____
<u>1023</u>	<u>2160-2181</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1043</u>	<u>2160-2181</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1105</u>	<u>2160-2181</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1115</u>	<u>2170</u>	<u>Reading</u>	_____	_____	_____	_____	_____
<u>1125</u>	<u>2160-2181</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1145</u>	<u>2160-2181</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1206</u>	<u>2160-2181</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1215</u>	<u>2173</u>	<u>Reading</u>	_____	_____	_____	_____	_____
<u>1230</u>	<u>2160-2180</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>1252</u>	<u>2160-2182</u>	<u>Repressure</u>	_____	_____	_____	_____	_____
<u>0115</u>	<u>2160</u>	<u>Reading</u>	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Comments: _____

TETCO Representative: Malcolm Crane Contractor Representative: Paul Blanchard

Recorders Last Tested: 5/18/84 Deadweight Serial No.: 11074

Test Contractor: Santa Fe Construction Co.

Transmission Corporation

BEST AVAILABLE COPY

FIELD PRESSURE & TEST REPORT

Line Description: SUB-SEA TIC-IN FABRICATION WC 253 AFE 6912

Section Tested: From: SPOOL PIECE ADD ON To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 8" O.D. x .500 W.T. x Grade B Manufacturer: USS

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: D/B TANKAWA Water Source: FRESH

Time and Date Test Started: 0540 ^{AM} ~~PM~~ 6/22/84 Test Pressure (Maximum): 2185 ± 0 PSIG
-25

Time and Date Test Ended: 1740 ^{AM} ~~PM~~ 6/22/84 Stroke-Pressure Plot: Yes _____ No X

Section Accepted YSS Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 6/22/84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
AM			Out - In	AM			
0540 ^{PM}	<u>2185</u>	<u>PRESSURE</u>	<u>80° 99°</u>	<u>1117</u> ^{PM}	<u>2166</u>	<u>BLEED DOWN</u>	<u>103° 119°</u>
<u>0600</u>	<u>2176</u>		<u>80° 99°</u>	<u>1125</u>	<u>2165</u>	" "	<u>104° 120°</u>
<u>0635</u>	<u>2165</u>		<u>80° 99°</u>	<u>1130</u>	<u>2165</u>	" "	<u>104° 121°</u>
<u>0630</u>	<u>2181</u>	<u>Re Pressure</u>	<u>80° 99°</u>	<u>1138</u>	<u>2166</u>	" "	<u>101° 121°</u>
<u>0700</u>	<u>2170</u>		<u>80° 100°</u>	<u>1142</u>	<u>2160</u>	" "	<u>101° 121°</u>
<u>0730</u>	<u>2166</u>		<u>80° 104°</u>	<u>1153</u>	<u>2163</u>	" "	<u>103° 121°</u>
<u>0800</u>	<u>2169</u>		<u>80° 108°</u>	<u>1200</u>	<u>2160</u>	" "	<u>100° 121°</u>
<u>0830</u>	<u>2175</u>		<u>81° 110°</u>	<u>1215</u>	<u>2161</u>	" "	<u>100° 121°</u>
<u>0900</u>	<u>2180</u>		<u>81° 113°</u>	<u>1225</u>	<u>2161</u>	" "	<u>100° 121°</u>
<u>0910</u>	<u>2177</u>	<u>BLEED DOWN</u>	<u>82° 114°</u>	<u>1236</u>	<u>2165</u>	" "	<u>100° 121°</u>
<u>0920</u>	<u>2174</u>	" "	<u>90° 114°</u>	<u>1246</u>	<u>2167</u>	" "	<u>110° 121°</u>
<u>0930</u>	<u>2180</u>		<u>90° 115°</u>	<u>1253</u>	<u>2162</u>	" "	<u>109° 121°</u>
<u>0935</u>	<u>2170</u>	<u>BLEED DOWN</u>	<u>90° 115°</u>	<u>1301</u>	<u>2165</u>	" "	<u>105° 120°</u>
<u>0940</u>	<u>2165</u>	" "	<u>90° 115°</u>	<u>1313</u>	<u>2169</u>	" "	<u>109° 121°</u>
<u>0955</u>	<u>2165</u>	" "	<u>96° 116°</u>	<u>1322</u>	<u>2163</u>	" "	<u>113° 122°</u>
<u>1005</u>	<u>2165</u>	" "	<u>94° 116°</u>	<u>1328</u>	<u>2162</u>	" "	<u>110° 122°</u>
<u>1015</u>	<u>2165</u>	" "	<u>96° 116°</u>	<u>1340</u>	<u>2165</u>	" "	<u>111° 123°</u>
<u>1025</u>	<u>2165</u>	" "	<u>98° 116°</u>	<u>1348</u>	<u>2164</u>	" "	<u>109° 124°</u>
<u>1030</u>	<u>2180</u>		<u>98° 116°</u>	<u>1400</u>	<u>2167</u>	" "	<u>110° 122°</u>
<u>1035</u>	<u>2165</u>	<u>BLEED DOWN</u>	<u>98° 116°</u>	<u>1409</u>	<u>2163</u>	" "	<u>110° 122°</u>
<u>1045</u>	<u>2160</u>	" "	<u>98° 116°</u>	<u>1418</u>	<u>2163</u>	" "	<u>116° 124°</u>
<u>1055</u>	<u>2165</u>	" "	<u>100° 118°</u>	<u>1426</u>	<u>2163</u>	" "	<u>116° 124°</u>
<u>1105</u>	<u>2164</u>	" "	<u>100° 118°</u>	<u>1436</u>	<u>2164</u>	" "	<u>115° 124°</u>
<u>1112</u>	<u>2162</u>	" "	<u>100° 119°</u>	<u>1445</u>	<u>2161</u>	" "	<u>114° 125°</u>

Comments: _____ PAGE 1 OF 2

TETCO Representative: _____ Contractor Representative: James Phillip

Recorders Last Tested: _____ Deadweight Serial No.: _____

Test Contractor: _____

FIELD PRESSURE & TEST REPORT

Line Description: SUB - SEA Tie-IN FABRICATION (CONTINUED) WC 253

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: _____ O.D. x _____ W.T. x Grade _____ Manufacturer: _____

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: _____ AM
PM _____ Test Pressure (Maximum): _____ PSIG

Time and Date Test Ended: _____ AM
PM _____ Stroke-Pressure Plot: Yes _____ No _____

Section Accepted _____ Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 6 | 22 | 84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
<u>1453</u>	<u>2162</u>	<u>Bled Down</u>	<u>113° 125°</u>				
<u>1503</u>	<u>2163</u>	<u>" "</u>	<u>112° 124°</u>				
<u>1512</u>	<u>2164</u>	<u>" "</u>	<u>109° 125°</u>				
<u>1522</u>	<u>2165</u>	<u>" "</u>	<u>110° 124°</u>				
<u>1532</u>	<u>2161</u>	<u>" "</u>	<u>110° 124°</u>				
<u>1544</u>	<u>2164</u>	<u>" "</u>	<u>97° 124°</u>				
<u>1555</u>	<u>2161</u>	<u>" "</u>	<u>92° 124°</u>				
<u>1607</u>	<u>2165</u>	<u>" "</u>	<u>89° 124°</u>				
<u>1616</u>	<u>2166</u>	<u>" "</u>	<u>89° 124°</u>				
<u>1629</u>	<u>2164</u>	<u>" "</u>	<u>90° 123°</u>				
<u>1658</u>	<u>2167</u>	<u>" "</u>	<u>91° 122°</u>				
<u>1715</u>	<u>2179</u>	<u>" "</u>	<u>91° 121°</u>				
<u>1726</u>	<u>2180</u>	<u>" "</u>	<u>91° 122°</u>				
<u>1730</u>	<u>2183</u>		<u>90° 121°</u>				
<u>1735</u>	<u>2184</u>		<u>90° 121°</u>				
<u>1740</u>	<u>BLEED OFF TEST</u>						

Comments: _____

PAGE 2 OF 2

TETCO Representative: Jim Colwell Contractor Representative: James Phillips

Recorders Last Tested: 5/25/84 & 5/31/84 Deadweight Serial No.: 12793

Test Contractor: _____

PRE-TEST REPORT

LINE NAME: 41J - W. Cameron 253-Meter Skid

JOB NO: _____ WORK ORDER NO: AFE-01-6972

LOCATION OF TEST: Santa Fe Yard

LENGTH: _____ O.D.: _____ WALL THICKNESS: _____

PRE-TEST NO.: 5 SECTION PLOTTED: No

TIME TEST STARTED: 1:05 p.m. DATE TEST STARTED: 5-26-84

TIME ACCEPTED: 1:15 a.m. DATE ACCEPTED: 5-27-84

MAXIMUM PRESSURE: 2185 MINIMUM PRESSURE: 2160

SPEC. MIN. YIELD: _____ MANUFACTURER: _____

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 11074 TEST ENGINEER: Malcolm Crane

REMARKS: _____

Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: Meter Piping 6972

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 2", 6", 8", O.D. x .500 W.T. x Grade B Manufacturer: J&L Steel
10"

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: City of Houma

Time and Date Test Started: 1:05 ^{AM} ~~PM~~ 5/26/84 Test Pressure (Maximum): 2182 PSIG

Time and Date Test Ended: 1:15 ^{AM} ~~PM~~ 5/27/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted X Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5/26/84

TIME AM	PRESSURE	STROKES	TEMP. Outside	TIME AM	PRESSURE	STROKES	TEMP.
105 PM	2162 Reading		89/90	0439	2160-2177	Repressure	85
0113	2180-2160	Bleed off	89	0448	2160-2177	Repressure	83
0115	2164 Reading		88/91	0558	2160-2177	Repressure	83
0122	2180-2160	Bleed off	88	0507	2160-2177	Repressure	83
0129	2180-2160	Bleed off	88	0515	2164	Reading	83/91
0130	2161 Reading		88/92	0519	2160-2177	Repressure	83
0137	2180-2160	Bleed off	88	0532	2160-2175	Repressure	83
0145	2178-2160	Bleed off	88/93	0542	2160-2179	Repressure	83
0152	2178-2160	Bleed off	88	0554	2160-2177	Repressure	83
0200	2178 Reading		88/94	0605	2160-2176	Repressure	83
0201	2178-2160	Bleed off	88/94	0615	2160-2175	Repressure	82/90
0209	2178-2160	Bleed off	88	0623	2160-2177	Repressure	82
0215	2170 Reading		88/94	0636	2161-2178	Repressure	82
0218	2178-2160	Bleed off	88	0648	2162-2179	Repressure	82
0225	2178-2160	Bleed off	88	0703	2160-2178	Repressure	82
0235	2178-2160	Bleed off	88	0714	2160-2178	Repressure	81
0244	2178-2160	Bleed off	88	0715	2176	Reading	81/88
0258	2178-2160	Bleed off	88	0726	2160-2179	Repressure	81
0312	2178-2160	Bleed off	88	0738	2160-2180	Repressure	81
0315	2161 Reading		88/95	0752	2160-2178	Repressure	80
0409	2160-2170	Repressure	86	0802	2160-2177	Repressure	80
0415	2164 Reading		85/95	0813	2160-2179	Repressure	80
0418	2160-2176	Repressure	85	0815	2176	Repressure	80/87
0429	2160-2177	Repressure	85	0826	2160-2179	Repressure	79

Comments: 3:23 Cloudy

TETCO Representative: Malcolm Crane Contractor Representative: Paul Blanchard

Recorders Last Tested: 5/18/84 Deadweight Serial No.: 11074

Test Contractor: Santa Fe Construction Co.

CALIBRATION CERTIFICATE

MAKE Chandler SERIAL NUMBER 11074

PRESSURE RANGE 50-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION May 18, 1984 INSPECTOR Johnny Sattell

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler

Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference

P-7223

ANTILL INSTRUMENT
&
VALVE SERVICE

BEST AVAILABLE COPY

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

SF # 10

CALIBRATION CERTIFICATE

MAKE Barton SERIAL NUMBER 242A-9012

PRESSURE RANGE 0-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION May 18, 1984 INSPECTOR Johnny Sattell

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler

Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference

P-7223

ANTILL INSTRUMENT
&

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST

SF # 5

CALIBRATION CERTIFICATE

MAKE Nolte SERIAL NUMBER 11272100

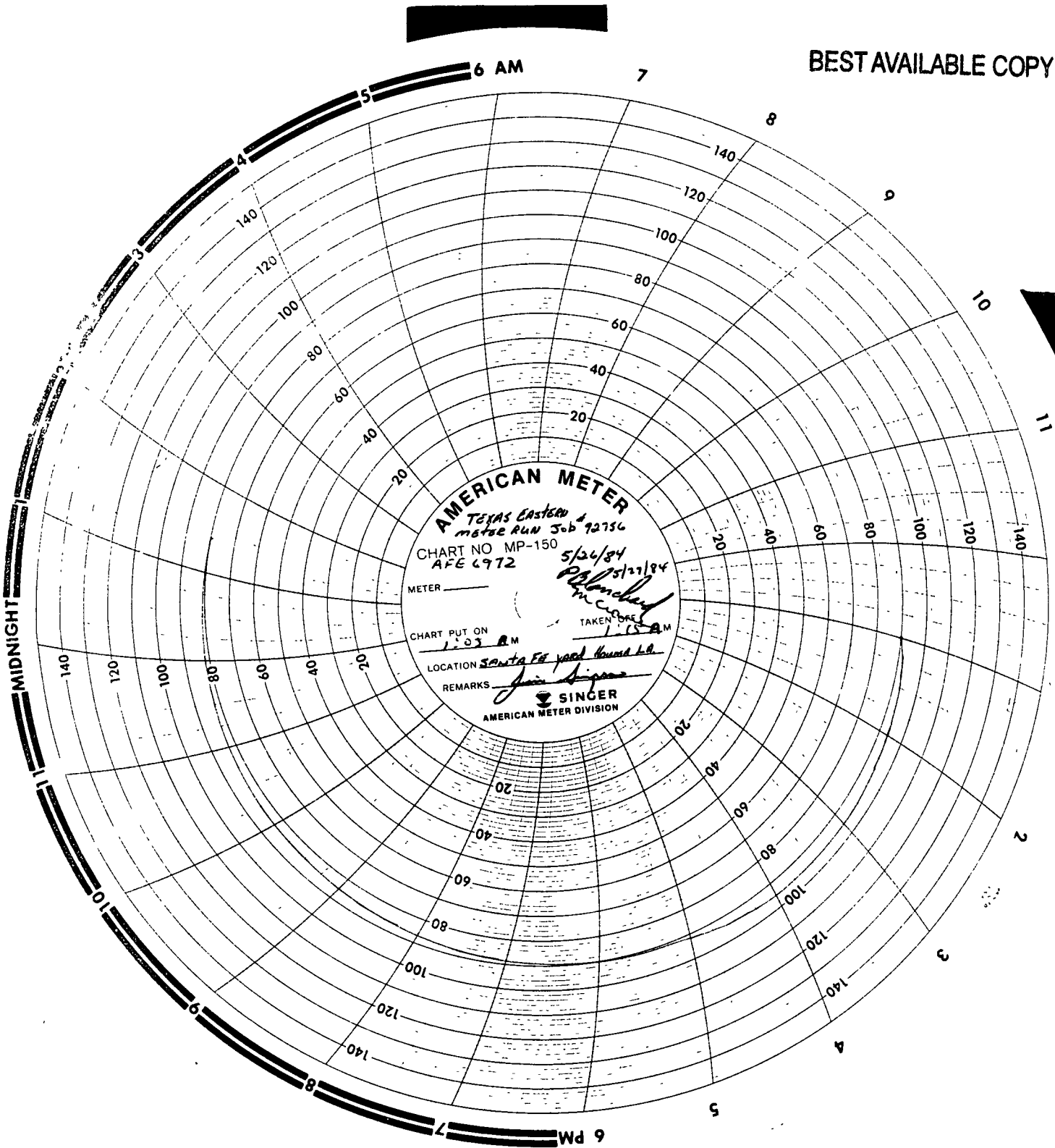
TEMPERATURE RANGE 0-150F CALIBRATED TO MANUFACTURER'S SPECIFICATION

DATE OF CALIBRATION May 18, 1984 INSPECTOR Johnny Sattell

ANTILL INSTRUMENT

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY



AMERICAN METER
TEXAS EASTERN
METER RUN 506 92756
CHART NO MP-150
AFE 6972
5/26/84
5/27/84
Blanchard
M. C. ...
METER _____
CHART PUT ON 1:03 A.M.
TAKEN ON 1:15 A.M.
LOCATION Santa Fe yard Round LA.
REMARKS Jim ...
SINGER
AMERICAN METER DIVISION

Transmission Corporation

FIELD PRESSURE & TEST REPORT

BEST AVAILABLE COPY

Line Description: Meter piping 6972

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 2", 6", 8", 10" O.D. x .500 W.T. x Grade B Manufacturer: J. L Steel

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: City of Houma

Time and Date Test Started: 1:05 ^{AM} ~~PM~~ 5/26/84 Test Pressure (Maximum): 2182 PSIG

Time and Date Test Ended: 1:15 ^{AM} ~~PM~~ 5/27/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted ✓ Section Leaking _____ Section Ruptured _____
By Billy Ed

DEADWEIGHT RECORDED READING (PSIG)

Date: 5 | 26 | 84

TIME AM PM	PRESSURE	STROKES outside Temp	TEMP.	TIME AM PM	PRESSURE	STROKES outside Temp	TEMP.
<u>1:05</u>	<u>2162</u>	<u>89°</u>	<u>90°</u>	<u>R.P. 4:29</u>	<u>2160-2172</u>	<u>85°</u>	
<u>o.o. 1:13</u>	<u>2180-2160</u>	<u>89°</u>		<u>R.P. 4:39</u>	<u>2160-2177</u>	<u>85°</u>	
<u>R. 1:15</u>	<u>2164</u>	<u>88°</u>	<u>91°</u>	<u>R.P. 4:49</u>	<u>2160-2177</u>	<u>83°</u>	
<u>B.O. 1:22</u>	<u>2180-2160</u>	<u>88°</u>		<u>R.P. 5:58</u>	<u>2160-2177</u>	<u>83°</u>	
<u>B.O. 1:29</u>	<u>2180-2160</u>	<u>88°</u>		<u>R.P. 5:07</u>	<u>2160-2177</u>	<u>83°</u>	
<u>R. 1:30</u>	<u>2161</u>	<u>88°</u>	<u>92°</u>	<u>R. 5:15</u>	<u>2164</u>	<u>83°</u>	<u>91°</u>
<u>R.B.O. 1:37</u>	<u>2180-2160</u>	<u>88°</u>		<u>R.P. 5:19</u>	<u>2160-2177</u>	<u>83°</u>	
<u>R.B.O. 1:45</u>	<u>2178-2160</u>	<u>88°</u>	<u>93°</u>	<u>R.P. 5:32</u>	<u>2160-2175</u>	<u>83°</u>	
<u>B.O. 1:52</u>	<u>2178-2160</u>	<u>88°</u>		<u>R.P. 5:42</u>	<u>2160-2179</u>	<u>83°</u>	
<u>R. 2:00</u>	<u>2178</u>	<u>88°</u>	<u>94°</u>	<u>R.P. 5:54</u>	<u>2160-2177</u>	<u>83°</u>	
<u>B.O. 2:01</u>	<u>2178-2160</u>	<u>88°</u>	<u>94°</u>	<u>R.P. 6:05</u>	<u>2160-2176</u>	<u>83°</u>	
<u>B.O. 2:09</u>	<u>2170-2160</u>	<u>88°</u>		<u>R.P. 6:15</u>	<u>2160-2175</u>	<u>82°</u>	<u>90°</u>
<u>R. 2:15</u>	<u>2170</u>	<u>88°</u>	<u>94°</u>	<u>R.P. 6:23</u>	<u>2160-2177</u>	<u>82°</u>	
<u>B.O. 2:18</u>	<u>2178-2160</u>	<u>88°</u>		<u>R.P. 6:36</u>	<u>2161-2178</u>	<u>82°</u>	
<u>B.O. 2:25</u>	<u>2178-2160</u>	<u>88°</u>		<u>R.P. 6:48</u>	<u>2162-2179</u>	<u>82°</u>	
<u>B.O. 2:35</u>	<u>2178-2160</u>	<u>88°</u>		<u>R.P. 7:03</u>	<u>2160-2178</u>	<u>82°</u>	
<u>B.O. 2:44</u>	<u>2178-2160</u>	<u>88°</u>		<u>R.P. 7:14</u>	<u>2160-2178</u>	<u>81°</u>	
<u>B.O. 2:58</u>	<u>2178-2160</u>	<u>88°</u>		<u>R. 7:15</u>	<u>2176</u>	<u>81°</u>	<u>88°</u>
<u>B.O. 3:12</u>	<u>2178-2160</u>	<u>88°</u>		<u>R.P. 7:26</u>	<u>2160-2179</u>	<u>81°</u>	
<u>R. 3:15</u>	<u>2161</u>	<u>88°</u>	<u>95°</u>	<u>R.P. 7:38</u>	<u>2160-2180</u>	<u>81°</u>	
<u>R.P. 4:09</u>	<u>2160-2170</u>	<u>86°</u>		<u>R.P. 7:52</u>	<u>2160-2178</u>	<u>80°</u>	
<u>R. 4:15</u>	<u>2164</u>	<u>85°</u>	<u>95°</u>	<u>R.P. 8:02</u>	<u>2160-2177</u>	<u>80°</u>	
<u>R.P. 4:18</u>	<u>2160-2176</u>	<u>85°</u>		<u>R.P. 8:13</u>	<u>2160-2179</u>	<u>80°</u>	

Comments: 3:23 Cloudy (R.-Reading) (B.O.-BLEED OFF) (R.P.-REPRESSURE)

TETCO Representative: Billy Ed Contractor Representative: Paul Blanchard

Recorders Last Tested: May 12, 1984 Deadweight Serial No.: #11074

Test Contractor: Souta Te

Transmission Corporation

FIELD PRESSURE & TEST REPORT

BEST AVAILABLE COPY

Line Description: meter piping 6972

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: 2", 6", 8", 10" O.D. x 500 W.T. x Grade B Manufacturer: J.L. Steel

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: _____ Water Source: _____

Time and Date Test Started: 1:05 ^{AM} ~~PM~~ 5/26/84 Test Pressure (Maximum): 2182 PSIG

Time and Date Test Ended: 1:15 ~~AM~~ ^{PM} 5/27/84 Stroke-Pressure Plot: Yes _____ No _____

Section Accepted By B. McGee Section Leaking _____ Section Ruptured _____

DEADWEIGHT RECORDED READING (PSIG)

Date: 5/26/84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
^{AM} PM		outside Temp		AM PM			
R. 8:15	2176	80°	87°				
R.P. 8:26	2160-2179	79°					
R.P. 8:39	2160-2177	79°					
R.P. 8:50	2160-2177	79°					
R.P. 9:00	2160-2179	79°					
R.P. 9:14	2160-2179	79°					
R. 9:15	2178	79°	85°				
R.P. 9:30	2160-2177	79°					
R.P. 9:45	2160-2180	79°					
R.P. 10:05	2160-2181	78°					
R. 10:15	2170	78°	84°				
R.P. 10:23	2160-2181	78°					
R.P. 10:43	2160-2181	78°					
R.P. 11:05	2160-2181	77°					
R. 11:15	2170	77°	83°				
R.P. 11:25	2160-2181	77°					
R.P. 11:45	2160-2181	76°					
^{midday} R.P. 12:00 AM	2160-2181	76°					
R. 12:15 AM	2173	76°	81°				
R.P. 12:30 AM	2160-2180	76°					
R.P. 12:52 AM	2160-2182	76°					
R. 1:15 AM	2160	75°	80°				

Comments: _____

TETCO Representative: By Billy McGee Contractor Representative: Paul Blanchard
 Recorders Last Tested: May 18, 1984 Deadweight Serial No.: # 11074
 Test Contractor: Santa Fe

PRE-TEST REPORT

LINE NAME: 41J-West Cameron 253-Meter Skid-Retest for 8" Wheatley Check Valve

JOB NO: _____ WORK ORDER NO: AFE - 01-6972

LOCATION OF TEST: Santa Fe Yard

LENGTH: _____ O.D.: _____ WALL THICKNESS: _____

PRE-TEST NO.: 5R SECTION PLOTTED: No

TIME TEST STARTED: 12:55 p.m. DATE TEST STARTED: 5-31-84

TIME ACCEPTED: 1:00 a.m. DATE ACCEPTED: 6-1-84

MAXIMUM PRESSURE: 2185 MINIMUM PRESSURE: 2160

SPEC. MIN. YIELD: _____ MANUFACTURER: _____

MAXIMUM O.D. STRESS: _____ MINIMUM O.D. STRESS: _____

DEAD WEIGHTS: 11073 TEST ENGINEER: Malcolm Crane

REMARKS: _____

Transmission Corporation

FIELD PRESSURE & TEST REPORT

AFE-6969 LINE 40-G-3
 AFE-6972 LINE 41-J
 AFE-6967 LINE 61

Line Description: 3-Check Valves- 1-6" Valve, 2-8" Valves

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: _____ O.D. x _____ W.T. x Grade _____ Manufacturer: Wheatley Check Val

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: Santa Fe, Houma, LA. Water Source: City Water

Time and Date Test Started: 12:55 ^{AM} PM 5/31/84 Test Pressure (Maximum): 2185 PSIG

Time and Date Test Ended: 1:00 ^{AM} ~~PM~~ 6/1/84 Stroke-Pressure Plot: Yes _____ No X

Section Accepted YES Section Leaking NO Section Ruptured NO

DEADWEIGHT RECORDED READING (PSIG)

Date: 6 | 1 | 84

TIME AM PM	PRESSURE	STROKES	TEMP.	TIME AM PM	PRESSURE	STROKES	TEMP.
12:55	2185		78°	8:27	2165-2185	RP	71°
1:00	2185		78°	8:30	2185		71°
1:15	2177		78°	9:00	2165		70°
1:30	2171		76°	9:03	2165-2185	RP	70°
1:45	2168		78°	9:30	2166		68°
1:53	2167-2185	RP	78°	9:32	2166-2185		68°
2:00	2185		80°	10:00	2167		67°
2:26	2185-2180	BLEED	80°	10:04	2167-2185	RP	67°
2:30	2181		80°	10:30	2166		66°
3:00	2184		80°	10:35	2165-2185	RP	66°
3:21	2185-2179	BLEED		11:00	2168		66°
3:30	2179		81°	11:04	2168-2185	RP	66°
4:00	2183		81°	11:30	2165		65°
4:22	2185-2178	BLEED	80°	11:37	2163-2185	RP	65°
4:30	2178		80°	12:00	2170		64°
5:00	2181		80°	12:12am	2166-2185	RP	64°
5:30	2182		80°	12:30	2173		64°
6:00	2182		79°	12:41	2167-2185	RP	63°
6:30	2180		78°	1:00	2173		63°
7:00	2176		78°				
7:30	2169		74°				
7:43	2165-2185	RP	74°				
8:00	2180		72°				

Comments: 2-8" check valves cap 8" x 8" x 8" pipe x 8" x cap
1-6" check valve cap 18" x 18" x weld cap

TETCO Representative: Malcolm Crane Contractor Representative: Paul Blanchard
DKK *DKK*

Recorders Last Tested: May 29, 1984 Deadweight Serial No.: 11073

Test Contractor: Santa Fe Offshore Construction Company

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SF # 1

CALIBRATION CERTIFICATE

MAKE American Meter SERIAL NUMBER PR52289

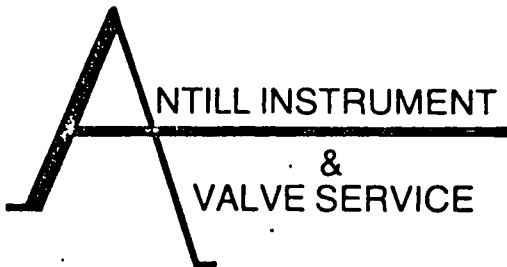
PRESSURE RANGE 0-3,000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS

DATE OF CALIBRATION May 18, 1984 INSPECTOR Johnny Antill

This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler

Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference

P-7223



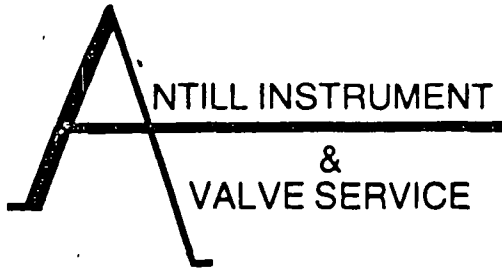
RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

CALIBRATION CERTIFICATE

MAKE Barton SERIAL NUMBER 265-4731
TEMPERATURE RANGE 0-200F CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 10, 1984 INSPECTOR Johnny Antill

BEST AVAILABLE COPY

RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

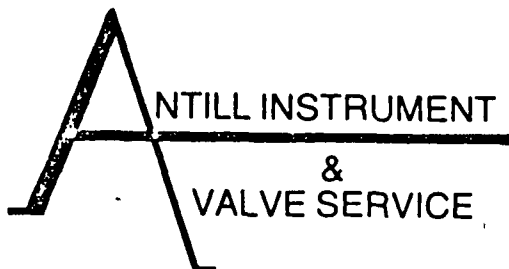


CALIBRATION CERTIFICATE

MAKE Chandler SERIAL NUMBER 11073
PRESSURE RANGE 50-3000psi CALIBRATED TO MANUFACTURER'S SPECIFICATIONS
DATE OF CALIBRATION May 20, 1984 INSPECTOR Johnny Antill

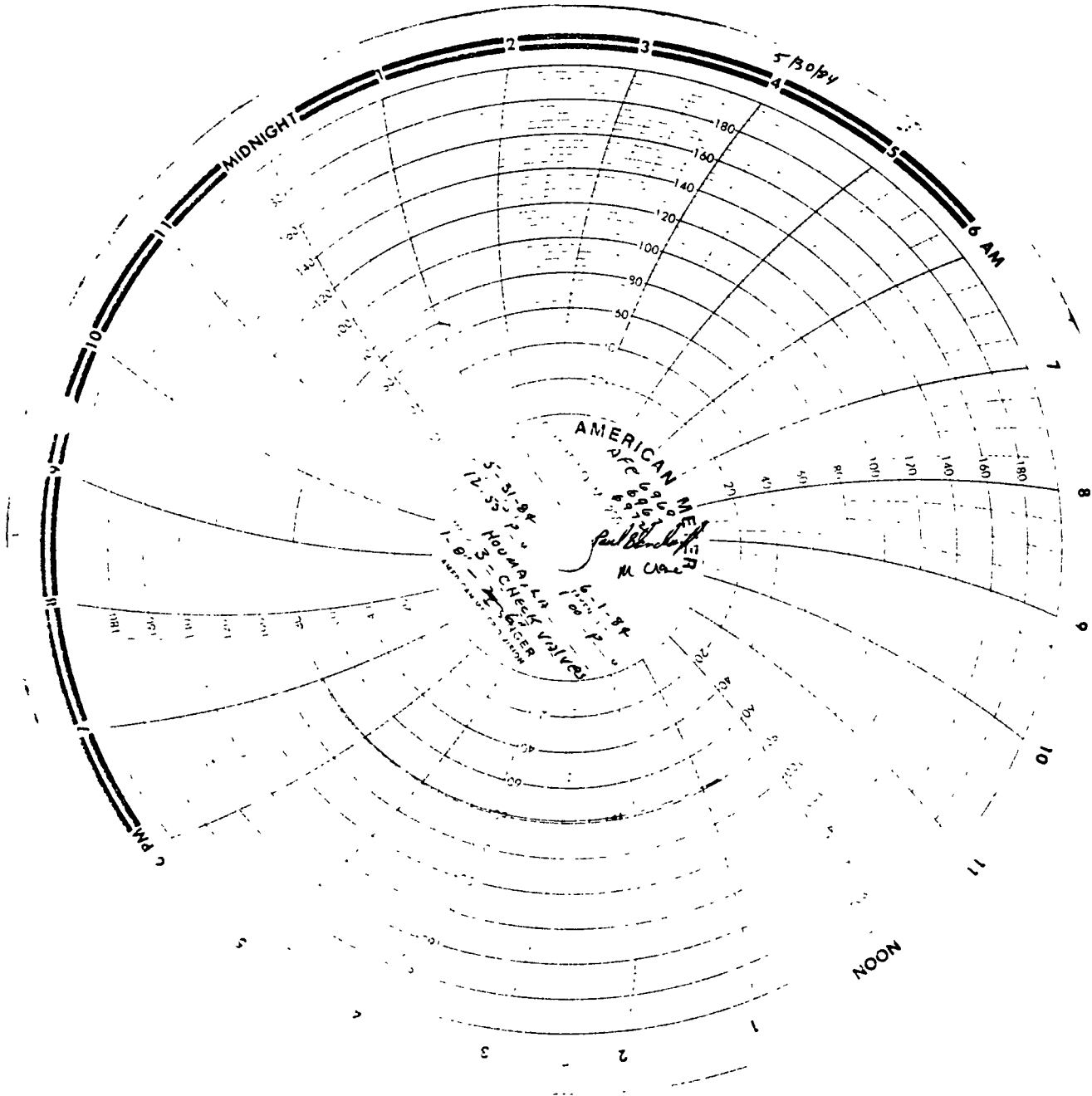
This is to certify that this instrument has been inspected and tested against Pressure Standard Chandler
Engineering S/N 19134 traceable to the National Bureau of Standards, traceability reference

P-7223

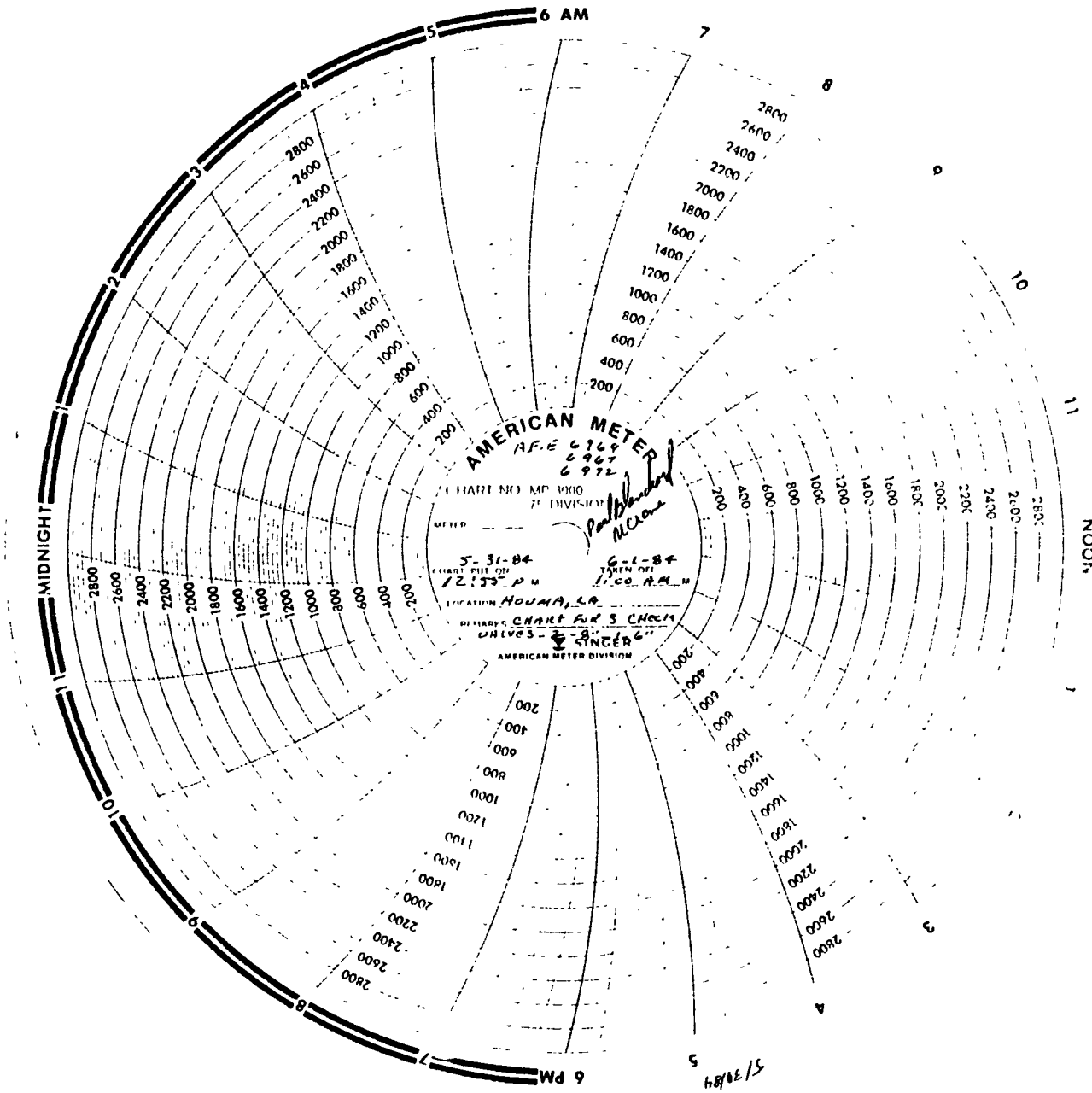


RTE. 1, BOX 430 — HOUMA, LA 70360
HWY. 90 WEST
TELEPHONE: BUS. 504/876-1695

BEST AVAILABLE COPY



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5/18/84

EASTERN Transmission Corporation

FIELD PRESSURE & TEST REPORT

Line Description: 3 - CHECK VALVES - 1-6" VALVE - 2-8" VALVES

Section Tested: From: _____ To: _____

Test Section No.: _____ Length: _____

Size of Pipe: _____ O.D. x _____ W.T. x Grade _____ Manufacturer: WHEATLY CHECK VALVES

Pressure Unit No.: _____ Gallons per Stroke: _____ Fill Unit No.: _____

Pressure Unit Location: SANTA FE HOUMA YARD Water Source: CITY WATER

Time and Date Test Started: 12:55^{AM} PM 5-31-84 Test Pressure (Maximum): 2185 PSIG

Time and Date Test Ended: 1:00^{AM} PM 6-1-84 Stroke-Pressure Plot: Yes _____ No

Section Accepted YES Section Leaking NO Section Ruptured NO

DEADWEIGHT RECORDED READING (PSIG)

Date: 6 | 1 | 84

TIME	PRESSURE	STROKES	TEMP.	TIME	PRESSURE	STROKES	TEMP.
AM				AM			
PM				PM			
12:55 P.M.	2185		78°	8:27	2165-2185	RP	71°
1:00	2185		78°	8:30	2185		71°
1:15 P.M.	2177		78°	9:00	2165		70°
1:30	2171		76°	9:03	2165-2185	RP	70°
1:45	2168		78°	9:30	2166		68°
1:53	2167-2185	R.P.	78°	9:32	2166-2185		68°
2:00	2185		80°	10:00	2167		67°
2:26	2185-2186	Bleed	80°	10:04	2167-2185	RP	67°
2:30	2181		80°	10:30	2166		66°
3:00	2184		80°	10:35	2165-2185	R.P.	66°
3:21	2185-2179	Bleed		11:00	2168		66°
3:30	2179		81°	11:04	2168-2185	R.P.	66°
4:00	2183		91°	11:30	2165		65°
4:22	2185-2178	Bleed	90°	11:37	2163-2185	RP	65°
4:30	2178		80°	12:00	2170		64°
5:00	2181		80°	12:12	2166-2185	RP	64°
5:30	2182		80°	12:30	2173		64°
6:00	2182		79°	12:41	2167-2185	R.P.	63°
6:30	2180		78°	1:00	2173		63°
7:00	2176		78°				
7:30	2169		74°				
7:43	2165-2185	RP	74°				
8:00	2180		72°				

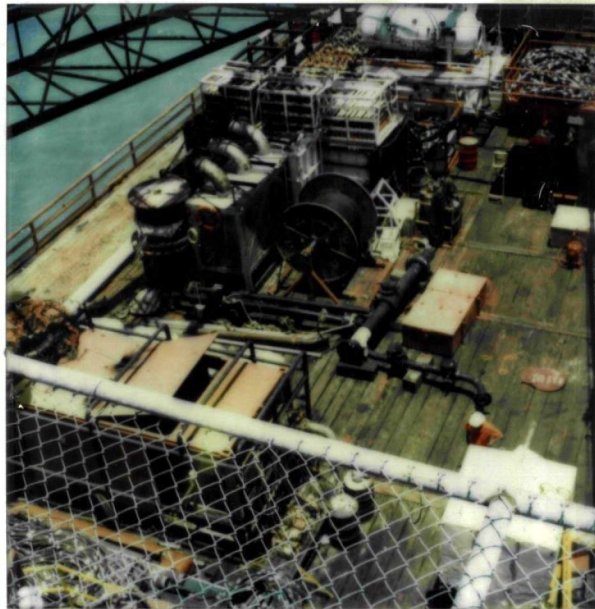
Comments: 2 - 8" CHECK VALVES CAP → 8" X 8" PIPE X 8" CAP
1 - 6" CHECK VALVE CAP → 1/2" X 1/2" WELD CAP

TETCO Representative: M. Crane Contractor Representative: Paul Blum

5/30/84 Recorders Last Tested: MAY - 29 - 84 Deadweight Serial No.: 11073

Test Contractor: SANTA FE.

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June 13, 1984

NOTIFICATION OF CONSTRUCTION

Date: 1-17-84

- 1. OCS number G 6551
- 2. Name of company Texas Eastern Transmission Corp.
- 3. Name of contractor Santa Fe Engineering
- 4. Name or number of barge Chickasaw
- 5. Size and length of pipeline 8 7/8" Gas 4.74 miles long
- 6. From where to where Pennair Co's Platform "A" in Block 253 to a subsea-tie-in with OCS-G1950 in Block 250, all located in West Cameron Area
(area, block number, and platform)
- 7. Where construction begins Pennair's Platform A in Block 253
(area and block number)
West Cameron Area
- 8. When barge will begin May 23, 1984
- 9. Length of time barge will be on job 2 weeks
- 10. Nearest available heliport on Barge
- 11. Does the pipeline cross or is it in close proximity to fairways or anchorage area?

Yes _____ No ✓

Where _____

Initial and terminal points: Initial: X = _____ Y = _____

Terminal: X = _____ Y = _____

Name of Company Contact Money Mc Crocker

Telephone Number (713) 759-5214

BENT's Notification to USGS Frank TORRES Date 1-17-84

U.S. Coast Guard _____ Date _____

Note: Notification may be made by calling Autry Britton at (504) 589-6541 between the hours of 7:45 a.m. and 4:15 p.m. Monday through Friday.

BENT Employee [Signature]

Coating: Splash Tarn Bumper Guard: _____

Water Depth: 80

Cover over Valves: _____

Remarks: _____

Pipeline Installation Inspection Report

Date of inspection: June 13, 1984
Lessee/Operator: Pennsgail oil Co.
MMS Inspector: Frank Torres
Seg No.: or BLM G-6551
From: WC 233 A

Person involved: Fred Kattner & E.T. Jones
Contractor: Sand-Town, VA
Barge ID _____
Barge or Platform: _____
Location _____
DOT/DOI: DOT
To: SSTI-1950

General Description of Pipeline: Pipe Specification:

Type: GR
Size: 8 1/2"
Grade: B
Seamless:
Coating: 212

Length: 4.74
SMYs: _____
Wall Thickness: Pipe 432 - Valve 562
Anodes: Zinc -
Type: Zinc Weight: 10.4 - 12.14
No.: _____ Spacing: 300

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HTP Test

<u>(Medium) Water or Product</u>	<u>Water</u>
<u>Duration Time</u>	<u>12</u>
<u>Pressure Psig</u>	<u>2160</u>

Rating of Valves, Flanges, Fittings and Location

Rating: 2160 Flanges: 2160
Location: _____ Fitting: 2160

Type of Downstream Component

High Low

Sensors: _____ Rating of Downstream Component: _____
Pipeline Crossing & Clearance: _____ Burial Depth: 3' Case over Valve at mud line

Riser Protection

Valves, Taps: _____

Coating: Splash Coat Bumper Guard: _____

Water Depth: 80 Cover over Valves: _____

Remarks: _____

WEST CAMERON AREA

GULF OF MEXICO

239

238

237

236

119

160,000

247

FIX NO.	STATION NO.	EASTING	NORTHING	DESCRIPTION	DISTANCE (FEET)	Bearing
-	0 + 00	1,431,132	141,310	RISER: PENZONIL MC 253	516	76° 04' 15"
1	3 + 16	1,431,631	141,440	AS-BUILT TETCO 8" PVL	1,371	72° 34' 21"
2	16 + 67	1,432,839	141,853		680	76° 11' 24"
3	25 + 67	1,433,596	142,027		816	76° 23' 15"
4	34 + 83	1,434,463	142,257		1,007	76° 06' 30"
5	44 + 30	1,435,451	142,532		990	76° 03' 30"
6	54 + 80	1,436,412	142,771		1,034	75° 13' 31"
7	65 + 14	1,437,402	143,067		1,012	76° 21' 21"
8	75 + 28	1,438,395	143,306		1,077	75° 00' 27"
9	85 + 03	1,439,425	143,584		534	75° 20' 42"
10	91 + 37	1,439,850	143,683		742	76° 07' 25"
11	96 + 79	1,440,678	143,826		735	76° 51' 21"
12	106 + 14	1,441,330	144,015		332	76° 34' 11"
13	115 + 46	1,442,503	144,200		683	79° 10' 08"
14	122 + 15	1,442,960	144,326		740	79° 11' 59"
15	129 + 55	1,443,607	144,465		1,100	78° 56' 53"
16	140 + 64	1,444,775	144,577		1,157	78° 42' 51"
17	152 + 21	1,445,310	144,804		1,203	76° 23' 00"
18	164 + 30	1,447,065	145,186		833	76° 54' 56"
19	173 + 23	1,447,861	145,356		932	78° 35' 13"
20	182 + 55	1,448,874	145,542		692	76° 24' 28"
21	183 + 17	1,449,552	145,682		794	79° 16' 02"
22	197 + 41	1,450,332	145,830		171	74° 01' 22"
23	199 + 32	1,450,436	145,877		843	81° 17' 18"
24	207 + 35	1,451,329	146,004		312	78° 28' 02"
25	210 + 67	1,451,635	146,067		525	81° 22' 11"
26	220 + 21	1,452,577	146,216		829	79° 33' 43"
27	225 + 46	1,453,098	146,295		1,076	80° 13' 47"
28	233 + 75	1,453,911	146,443		536	70° 24' 25"
29	244 + 51	1,454,971	146,625			
-	243 + 87	1,455,477	146,806	VRLVE: MC 250		

150,000

140,000

130,000

248

249

250

136

AS-BUILT TETCO 8" PIPELINE
TOTAL LENGTH = 24,987'

TOP OF 8" RISER
PENZONIL "A" PLATFORM
BLK 253
X = 1,431,132
Y = 141,310

14" SUBSEA VALVE
X = 1,455,477
Y = 146,806

RECEIVED
OCT 12 1984
Minerals Management Service
Ruler and Production

254

253

252

251

137

BEST AVAILABLE COPY

Segment 7000

TEXAS EASTERN GAS PIPELINE COMPANY
A DIVISION OF TEXAS EASTERN TRANSMISSION CORPORATION

8" LINE NO. 41-J

BY: OCEANONICS INC.

TITLE: AS-BUILT
TETCO 8" PIPELINE
WEST CAMERON BLOCKS 253 TO 250
FOR
TEXAS EASTERN TRANSMISSION CORP.

DRAWN: B.B. AE SPV.

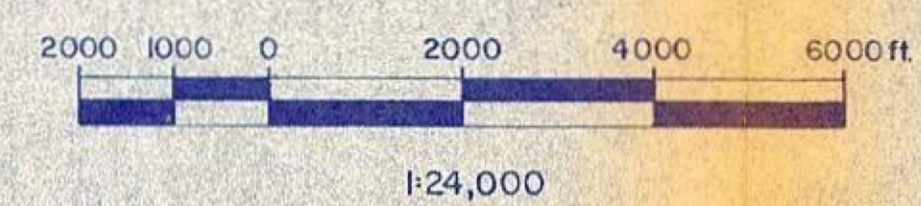
CHKD: J.T.C. NO: 84042.09-D

DATE 8 / 29 / 84 SHEET 1 OF 1



NOTE: CERTIFIED CORRECT AS TO THE HORIZONTAL POSITION OF PIPELINE.

J. Trevor Carnegie
REGISTERED LAND SURVEYOR NO. 4043
STATE OF TEXAS
OCEANONICS, INC.



LOUISIANA LAMBERT (SOUTH ZONE) GRID

BEST AVAILABLE COPY

SN 7000

Butler 5/8/84
Kelly 5/8/84
Stauffer 5/9/84
McLennan 5/9/84

MAY 14 1984

In Reply Refer To: RP-2-2
OCS-G 6551

West Cameron Area

Texas Eastern Transmission Corporation

Right-of-Way

ACTION: APPLICATION APPROVED

Your application for a right-of-way 200 feet in width for the construction, maintenance, and operation of an 8 5/8-inch natural gas pipeline, 4.74 miles in length, from Pennzoil Company's Platform A in Block 253, West Cameron Area, across Blocks 252 and 249, West Cameron Area, to a subsea tie-in with Texas Eastern Transmission Corporation's 30-inch natural gas pipeline (OCS-G 1950) in Block 250 West Cameron Area, dated February 6, 1984, with its attachments, is hereby approved subject to the following:

1. Prior to construction, buoy the following pipelines to prevent possible damage from lay barge anchors.

<u>Name</u>	<u>Diameter (inches)</u>	<u>Block</u>
Texas Gas Transmission Company	12	250
Texas Eastern Transmission Corporation	30	250

2. Prior to construction, buoy the following unidentified magnetic anomalies and avoid by 150 meters when placing lay barge anchors:

<u>Shot Point No.</u>	<u>Line No.</u>
26.1	97
5.3	99
14.8	103

(Orig. Sgd.) John L. Rankin

John L. Rankin
Regional Manager

cc: U.S. Fish and Wildlife Service
75 Spring Street, S.W.
Atlanta, Georgia 30303

Department of Transportation
2320 La Branch, Room 2116
Houston, Texas 77004 (w/enclosures)

bcc: P/L OCS-G 6551 (LE)
P/L OCS-G 6551 (RP-2-2)
RM Reading File

UNITED STATES GOVERNMENT
MEMORANDUM

Date: 4-5-84

To: Right-of-Way Pipeline File OCS-G 6551 (LE)
Through: Supervisor, Platform/Pipeline Unit, Plans, Platform and Pipeline
Section, Rules and Production, Gulf of Mexico Region (RP-2-2) PH
From: Petroleum Engineer, Platform/Pipeline Unit, Plans, Platform and
Pipeline Section, Rules and Production, Gulf of Mexico Region (RP-2-2)
Subject: Pipeline Right-of-Way Application, Technical Review, TEXAS
TRANSMISSION CORPORATION
EASTERN GAS PIPELINE COMPANY OCS-G 6551

<u>Size (inches)</u>	<u>Length (feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
<u>8 5/8</u>	<u>25,033</u>	<u>GAS</u>	<u>PLATFORM A</u>	<u>A 30" SUBSEA TIE-IN</u>
			<u>WEST CAMERON</u>	<u>WEST CAMERON</u>
			<u>BLOCK 253</u>	<u>BLOCK 250</u>

Recommendations:

- ✓ 1. The technical aspects of the proposed pipeline are acceptable in accordance with appropriate Regulations and Standards.
- ✓ 2. Advise applicant of Notice to Lessees and Operators No. 83-3.
- ✓ 3. Valve protection cover shall not protrude above the level of the mud line.
- ✓ 4. Subsea valves and taps associated with this pipeline shall be provided with a minimum of three feet of cover, either through burial or with sandbags.
- ✓ 5. MAOP = 1440 PSIG

C. A. Walker

C. A. Walker

cc: 1502-01 OCS-G 6551 (w/orig appln) (Seg. 7000) (RP-2-2)
OPS-6 (w/cy of plat) ✓

CWalker:lv:Disk 1

PWQ
CGW
12/4/84

UNITED STATES GOVERNMENT
MEMORANDUM

March 13, 1984

To: Chief, Plans, Platform, and Pipeline Section, Offshore Rules and Production, GOM Region (RP-2)

From: Chief, Environmental Operations Section, Leasing and Environment, GOM Region (LE-5)

Subject: National Environmental Policy Act (NEPA) Review for Pipeline Right-of-Way Application OCS-G 6551

Texas Eastern Gas Pipeline Company
Pipeline Right-of-Way
West Cameron Blocks 253, 252, 249, and 250

Right-of-Way two hundred feet (200 feet) in width for the construction of an 8-inch pipeline to transport natural gas from the Pennzoil platform in Block 253 to a valve tie-in with the Texas Eastern Transmission Corporations 30-inch pipe line in Block 250.

Our NEPA review of the subject action is complete. The following environmental protective measures intended to avoid or mitigate potential impacts associated with the action are provided for inclusion in the plan/application approval letter.

To prevent possible damage from lay barge anchors, the following pipelines shall be buoyed before construction:

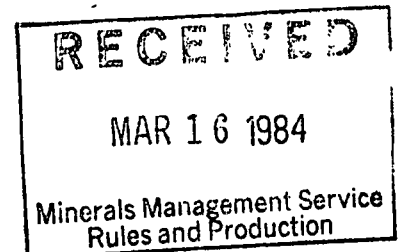
<u>Name</u>	<u>Diameter (inches)</u>	<u>Block(s)</u>
Texas Gas	12	250
TETCO	30	250

Buoy the following locations of unidentified magnetic anomalies before construction and avoid by 150 meters when installing lay barge anchors:

<u>Shot Point No.</u>	<u>Line No.</u>
26.1	97
5.3	99
14.8	103

Les Dauterive
Les Dauterive

ODeWald:mhc





UNITED STATES DEPARTMENT OF THE INTERIOR

MINERALS MANAGEMENT SERVICE

GULF OF MEXICO REGION

IMPERIAL OFFICE BLDG., 3301 N. CAUSEWAY BLVD.

P. O. BOX 7944

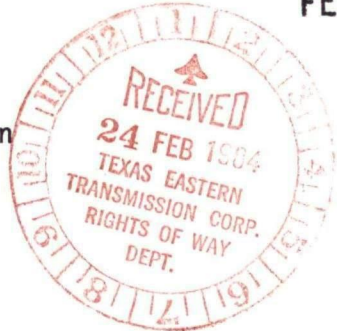
METAIRIE, LOUISIANA 70010

504-837-4720

FEB 22 1984

In Reply Refer To: RP-2-2

Texas Eastern Transmission Corporation
Attention: Mrs. Nancy McCracken
Post Office Box 2521
Houston, Texas 77001



Gentlemen:

We have received your application for a right-of-way for the construction, maintenance, and operation of the following pipeline, OCS-G 6551, located in West Cameron Area:

<u>Pipeline Segment No.</u>	<u>Size (inches)</u>	<u>Length (feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
7000	8 5/8	25,033	Gas	Platform A Block 253	A 30-inch Texas Eastern Transmission Corporation Subsea tie-in Block 250

The proposed installation of this pipeline is under review for approval; however, the enclosed duplicate original of this letter containing an appropriate paragraph for signature by an authorized officer, denoting your consent and acceptance of the stipulation when executed, must be received as a condition precedent to granting the right-of-way.

Sincerely yours,

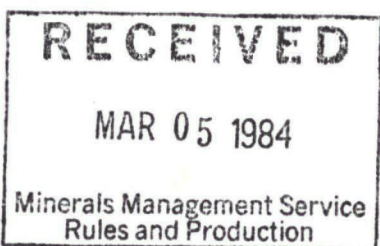
D.W. Solanas

D. W. Solanas
Regional Supervisor
Rules and Production

STIPULATION

Texas Eastern Transmission Corporation hereby agrees to keep open at all reasonable times for inspection by the Minerals Management Service, the area covered by this right-of-way and all improvements, structures, and fixtures thereon and all records relative to the design, construction, operation, maintenance, and repairs, or investigations on or with regard to such area.

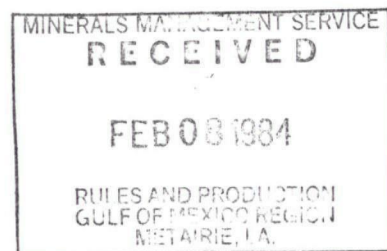
H.D. Church
Authorized Officer - H.D. Church
Vice President, Texas Eastern Gas Pipeline Company
a division of Texas Eastern Transmission Corporation
Date: _____



Enclosure

TEXAS 
EASTERN
Gas Pipeline Company

A DIVISION OF TEXAS EASTERN TRANSMISSION CORPORATION



H. D. CHURCH
VICE PRESIDENT

February 6, 1984

Mr. John L. Rankin, Acting Regional Manager
Minerals Management Service
P.O. Box 7944
Metairie, Louisiana 70010

Re: Our File 286-4-41-J
Application for Right-of-Way
for Proposed 8-Inch Pipeline
from Block 253 West Cameron
Area to Block 250 West Cameron
Area

Dear Mr. Rankin:

Pursuant to the authority granted in Section 5(e) of the Outer Continental Shelf Lands Act, (67 Stat. 462), (43 U.S.C. 1331), as amended (92 Stat. 629), and in compliance with the regulations contained in Title 30 CFR Part 256 Subpart N, Texas Eastern Transmission Corporation hereby applies, in triplicate, for a right-of-way two hundred feet (200 ft.) in width to construct, maintain and operate an 8-inch natural gas pipeline as shown on the following listed maps and drawings attached hereto and made a part hereof:

1. Index or Vicinity map
Drawing No. TA-8-34420
2. Hazard Survey
Drawing No. S-83042.11-D
3. Profile Map
Drawing No. TA-8-34420
4. Route Map
Drawing No. TA-8-34420
5. Schematic
Drawing No. TG-8-34205

This 8-inch pipeline will be used to gather and transport natural gas from Pennzoil platform in Block 253, West Cameron Area to Texas Eastern Transmission Corporation's 30-inch pipeline in Block 250 West Cameron Area.

Mr. John L. Rankin
February 2, 1984
Page 2

This application (and any amendments made hereto) is made with our full knowledge and concurrence with the OCS Lands Act (43 U.S.C. 1331, et seq.), as amended, (P.L. 95-372), including the following: Sec. 5(e) addressing pipeline rights-of-way, Requirements of the Federal Energy Regulatory Commission relating to notice of hearing, transportation and purchase of oil and gas without discrimination; Sec 5(f)(1) addressing operation of pipelines in accordance with competitive principles, including open and nondiscriminatory access to both owner and non-owner shippers; Sec. 5(f)(2) which may allow exemption of the requirements in Sec. 5(f)(1); Sec. 21(b), addressing the assuring of maximum environmental protection, including the safest practices for pipeline burial; and Sec. 5(f)(1)(b) which may require expansion of throughput capacity of any pipeline except for the Gulf of Mexico or the Santa Barbara Channel.

Additionally, we expressly agree that if any site, structure, or object of historical or archaeological significance should be discovered during the conduct of any operations within the permitted right-of-way, we shall report immediately such findings to the Manager, New Orleans OCS Office, and make every reasonable effort to preserve and protect the cultural resource from damage until said Manager has given directions as to its preservation.

In accordance with applicable regulations, the applicant has delivered a copy of the application and attachments thereto by certified mail, return receipt requested, to each lessee or right-of-way or easement holder whose lease, right-of-way or easement is so affected. A list of such lessees or right-of-way or easement holders is attached and copies of the return receipts showing date and signature as evidence of service upon such lessees or right-of-way or easement holders will be forwarded to your office when received. In the event applicant cannot obtain completed return receipt cards, a letter from the lessee, right-of-way or easement holder expressing no objection to the proposed project is acceptable. Should the proposed route of the right-of-way adjoin and subsequently cross any state submerged lands, the applicant agrees to submit to the authorized officer evidence that the state or states so affected have reviewed the application, and shall submit any comments received.

Applicant agrees to be bounded by the foregoing regulations, and further agrees to comply with the applicable stipulations as set forth in the OCS Pipeline Procedures guidebook dated June, 1981.

Additional design criteria is as follows:

1. Supervisor of Pipeline Design: Mr. S. W. Cook (713) 759-4060.
2. The line pipe will be:
 - 8.625" O.D. x 0.500" W.T. x 43.39#/ft. API 5L- Grade B, Seamless
 - a) 500 feet of pipeline approaching the platform.
 - b) 500 feet of pipeline approaching the mainline tie-in.
 - c) Pipeline riser and platform piping.

8.625" O.D. x 0.375" W.T. x 33.04#/ft. x APL 5L Gr. B, Seamless.
a) Mainline.

3. Sacrificial anodes are used to cathodically protect the pipeline. The design and description of the anodes are as follows:

a. Description:

Type: Galvalum III
Size: Manufacturers drawings not available at this time.
Weight: 39 lbs.
Spacing: 78 anode-bracelets will be installed at an approximate spacing of 320 feet each.

b. Design:

The anode weight of cathodic protection is based on the following calculations.

Where, W = weight of Galvalum III anodes in lbs.

e = Galvalum III anode capacity = .107 ampre years/lb. in mud =
.131 ampre years/lb. in sea water.

A = total surface area of the pipeline to be protected in square ft.

h = % of the pipe surface exposed by coating holidays or damage.

c = current density required for cathodic protection, in amperes per square ft. of exposed steel surface.

y = number of years of protection to be furnished by initial anode installation.

u = utilization factor of anodes; conservative design estimate of 0.7.

$$W = \frac{A h c y}{e u}$$

$$\frac{W}{A} = \frac{h c y}{0.107 \times 0.7}$$

$$= \frac{.02 \times .005 \times 40}{.107 \times 0.7}$$

= 0.0534 lbs. of Galvalum III per sq. ft. of total pipe surface

$$A = \frac{\pi}{12"} \times 8.625 \times 4.8 \text{ Mi.} \times 5,280'$$

= 57,227 sq. ft.

$$W = 0.0534 \text{ lbs./sq. ft.} \times 57,227 \text{ sq. ft.}$$

= 3,056 lbs. of Galvalum III anodes required

$$N = \frac{W}{39} = \frac{3,056}{39} = 78 \quad \text{Use 78 anode bracelets}$$

4. The water depth along the proposed route is approximately 82 feet maximum and 78 feet minimum.
5. External pipeline coating:
Line Pipe: Scotchkote 217, 14 mils minimum thickness.
Riser Pipe: a) Below splash zone
Scotchkote 217, 14 mils minimum thickness.
b) In splash zone
1/2" thickness of Splasatron rubberized coating.
c) Above splash zone
Inorganic zinc primer, tie-coat and vinyl topcoat paint system.
6. No pipeline internal coating will be applied. Corrosion inhibitor will be injected, as deemed necessary.
7. Specific gravity of the empty coated pipe is 1.30 based on sea water at 64.00 lbs/cu. ft.
8. The expected specific gravity of the gas transported is 0.61 based on air at 1.0.
9. The design capacity of the pipeline is 19 MMCFD based on the maximum expected working pressure of 1200 psig.
10. The 8-inch pipeline will be hydrostatically tested at 2175 psig (+0, -15 psig) for a minimum duration of 12 hours. The riser section will be pretested to 4000 psig (+0, -50 psig) for a minimum duration of 12 hours.

11. Maximum allowable operating pressure based on valves, flanges and fittings is 1440 psig.
12. Maximum allowable operating pressure based on line pipe is 2,191 psig.

$$P = \frac{2 St}{D} \times F \times E \times T$$

$$S = 35,000 \text{ psig}$$

$$t = 0.375 \text{ in.}$$

$$D = 8.625 \text{ in.}$$

$$F = 0.72 \text{ (Design factor for line pipe)}$$

$$E = 1.0 \text{ for seamless pipe}$$

$$T = 1.0 \text{ for } 250^\circ \text{ or less}$$

$$p = \frac{2 \times 35,000 \times 0.375}{8.625} \times 0.72 \times 1.0 \times 1.0$$

$$P = 2,191 \text{ psig}$$

13. Maximum allowable operating pressure based on riser pipe is 2,028 psig.

$$p = \frac{2 St}{D} \times F \times E \times T$$

$$S = 35,000 \text{ psig}$$

$$t = 0.500 \text{ in.}$$

$$D = 8.625 \text{ in.}$$

$$F = 0.50 \text{ (Design factor for riser)}$$

$$E = 1.0 \text{ for Seamless Pipe}$$

$$T = 1.0 \text{ for } 250^\circ\text{F or less}$$

$$p = \frac{2 \times 35,000 \times 0.500}{8.625} \times 0.5 \times 1.0 \times 1.0$$

$$P = 2,028 \text{ psig}$$

Mr. John L. Rankin
February 2, 1984
Page 6

14. Maximum allowable operating pressure as determined in accordance with DOT Title 49, Code of Federal Regulations, as applicable, is 1,440 psig.
15. No pumps or prime movers will be connected to the pipeline.
16. The proposed 8-inch Pipeline will be tied into an existing 14-inch tap valve on Texas Eastern's 30" Line 41 pipeline in Block 250 West Cameron area. The design pressure is 1440 psig. Other data of the existing line is as follows:
 - a. Line Pipe:
30" O.D. x 0.500" W.T. x 157.53#/ft. x API 5LX-60.
 - b. The most recent hydrostatic test pressure is 2,025 psig.
 - c. All valves and fittings are rated ANSI 600 or better.
 - d. The gas transmission pipeline construction was completed in September 1970.
17.
 - a. The approximate construction starting date is May 1, 1984.
 - b. Pipeline construction will be conventional lay or reel barge.
 - c. The pipeline burial will be jet dredge.
 - d. Time required to lay the pipeline is approximately twenty days.
 - e. This project should be completed by September 30, 1984.

Texas Eastern Transmission Corporation wishes to "hereby certify that the proposed activity described in this permit application complies with and will be conducted in a manner that is consistent with the Coastal Resources Program of the State of Louisiana."


Enclosed are the appropriate number of copies of the maps and drawings referred to above, prepared and certified in accordance with applicable guidelines. A certified copy of the Articles of Incorporation and a certified copy of the resolution, under seal, certifying that the corporate officer executing the application has the authority to do so, have already been submitted to your office. These documents have been placed on record in a file identified as Miscellaneous File No. 176. A filing fee of \$100.00, together with the first year's rental of \$75.00 computed on 4.74 miles of right of way, is enclosed. Also enclosed are three (3) originals of a Nondiscrimination in Employment statement as executed by Texas Eastern Transmission Corporation.

Mr. John L. Rankin
February 2, 1984
Page 7

If the above and attached information meets with your approval, we would appreciate your issuing the necessary permit for the right-of-way at your earliest convenience. Inquiries concerning this application may be directed to Nancy McCracken at 713/759-5214.

Sincerely,

TEXAS EASTERN TRANSMISSION CORPORATION



H. D. Church, Vice President
Texas Eastern Gas Pipeline Company
A division of
Texas Eastern Transmission Corporation

*cc
JSM*

NSM/wp
Enc.

cc: Lessees and Right of Way Holders
Listed on Attachments

Lessees and Right of Way Holders to be notified of Texas Eastern Transmission Corporation's proposed 8-inch line from Pennzoil's Platform in Block 253 West Cameron Area to Texas Eastern Transmission Corporation's 30-inch line in Block 250 West Cameron Area.

<u>Block</u>	<u>Decision</u>	<u>Lessee or Right of Way Holder</u>
253	OCS-G-3500 ✓	Pennzoil Producing Company
253	OCS-G-3500 ✓	Pogo Producing Company
253	OCS-G-3500 ✓	AMAX Petroleum Corporation
253	OCS-G-3500 ✓	Pennzoil Oil & Gas, Inc.
252	OCS-G-5186 ✓	Pennzoil Oil & Gas, Inc.
252	OCS-G-5186 ✓	Pennzoil Producing Company
252	OCS-G-5186 ✓	Pogo Producing Company
252	OCS-G-5186 ✓	AMAX Petroleum Corporation
249	OCS-G-3499 (✓)	Atlantic Richfield Company
249	OCS-G-3874	Texas Gas Transmission Corporation
249	OCS-G-4632	InterNorth, Inc.
250	OCS-G-1950	Texas Eastern Transmission Corporation
250	OCS-G-3874	Texas Gas Transmission Corporation
250	OCS-G-5185 (✓)	Atlantic Richfield Company

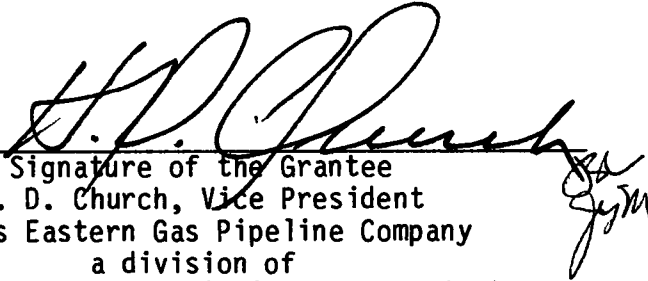
UNITED STATES
DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE

NONDISCRIMINATION IN EMPLOYMENT

As a condition precedent to the approval of the granting of the subject pipeline right-of-way, the grantee, Texas Eastern Transmission Corporation, hereby agrees and consents to the following stipulation which is to be incorporated into the application for said right-of-way.

During the performance of this contract the grantee agrees as follows:

During performance under this grant, the grantee shall fully comply with paragraphs (1) through (7) of section 202 of Executive Order 11246 as revised (reprinted in 41 CFR 60-1.4(a), which are for the purpose of preventing discrimination against persons on the basis of the race, color, religion, sex or national origin. Paragraphs (1) through (7) of section 202 of Executive Order 11246 as amended are incorporated in this grant by reference.



Signature of the Grantee
(H. D. Church, Vice President
Texas Eastern Gas Pipeline Company
a division of
Texas Eastern Transmission Corporation)

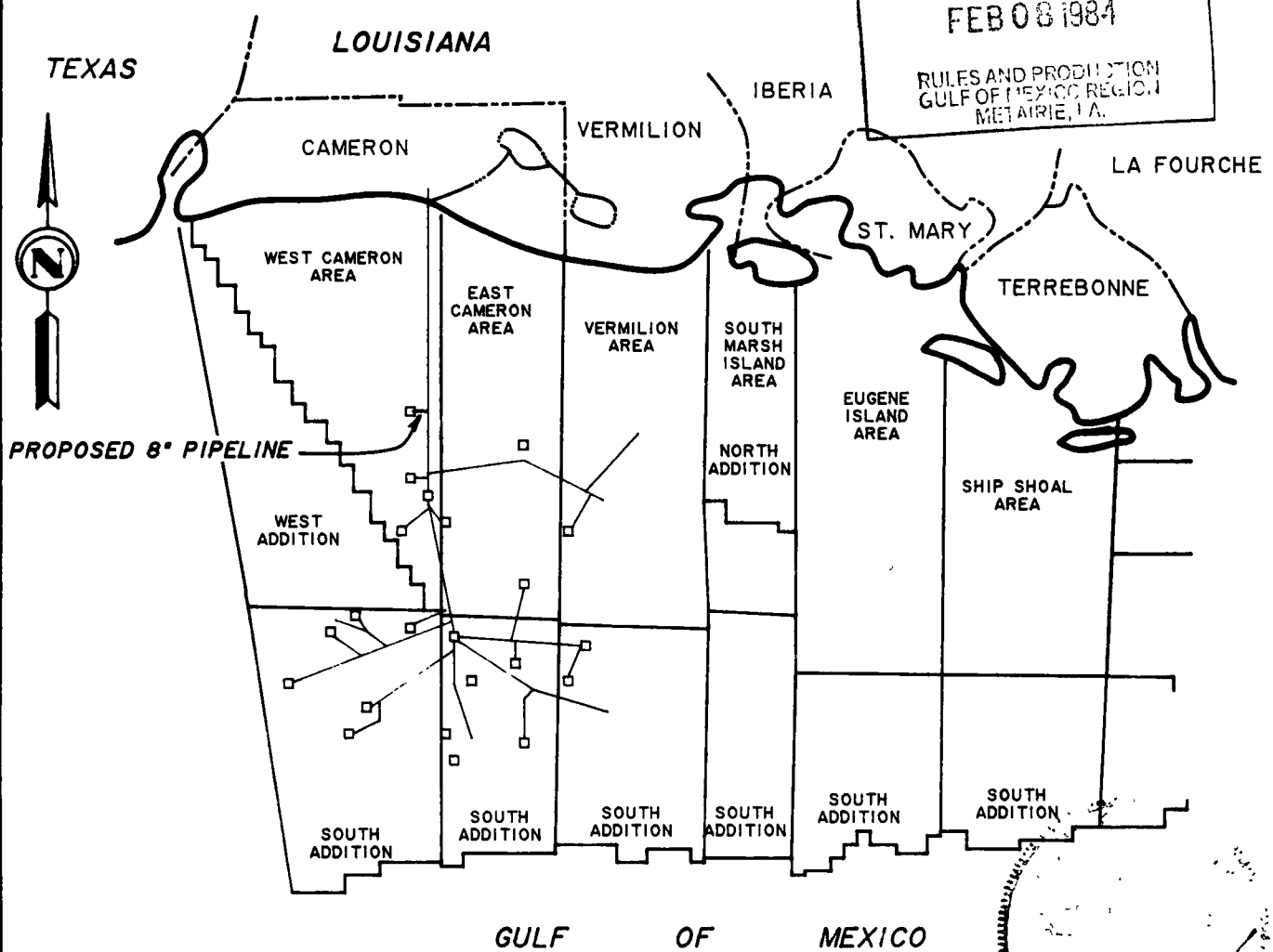
Date: February 6, 1984

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MINERALS MANAGEMENT SERVICE
RECEIVED

FEB 08 1984

RULES AND PRODUCTION
GULF OF MEXICO REGION
METAIRIE, LA.



NOTE:
 BEARINGS RELATE TO LA. STATE PLANE COORDINATE SYSTEM (SOUTH ZONE) UNLESS NOTED OTHERWISE.
 PURPOSE OF PIPELINE IS FOR TRANSMISSION OF NATURAL GAS
 RIGHT-OF-WAY TO BE 200' IN WIDTH.
 TOTAL PIPELINE LENGTH: 25,033 FT. (4.74 MI.)
 PIPELINE TO BE IN COMPLIANCE WITH DEPARTMENT OF TRANSPORTATION, TITLE 49, PART 192.

APPLICATION BY: TEXAS EASTERN TRANSMISSION CORPORATION
 HOUSTON, TEXAS
 H.D. CHURCH - VICE PRES. & CHIEF ENGR.
 TEXAS EASTERN GAS PIPELINE COMPANY, A DIVISION OF TEXAS EASTERN TRANSMISSION CORPORATION.

CERTIFIED BY:
 REGISTERED ENGINEER
 NO. 12162
 STATE OF LOUISIANA

TEXAS EASTERN TRANSMISSION CORPORATION

PROPOSED 8-INCH PIPELINE
 FROM BLOCK 253 WEST CAMERON AREA
 TO BLOCK 250 WEST CAMERON AREA

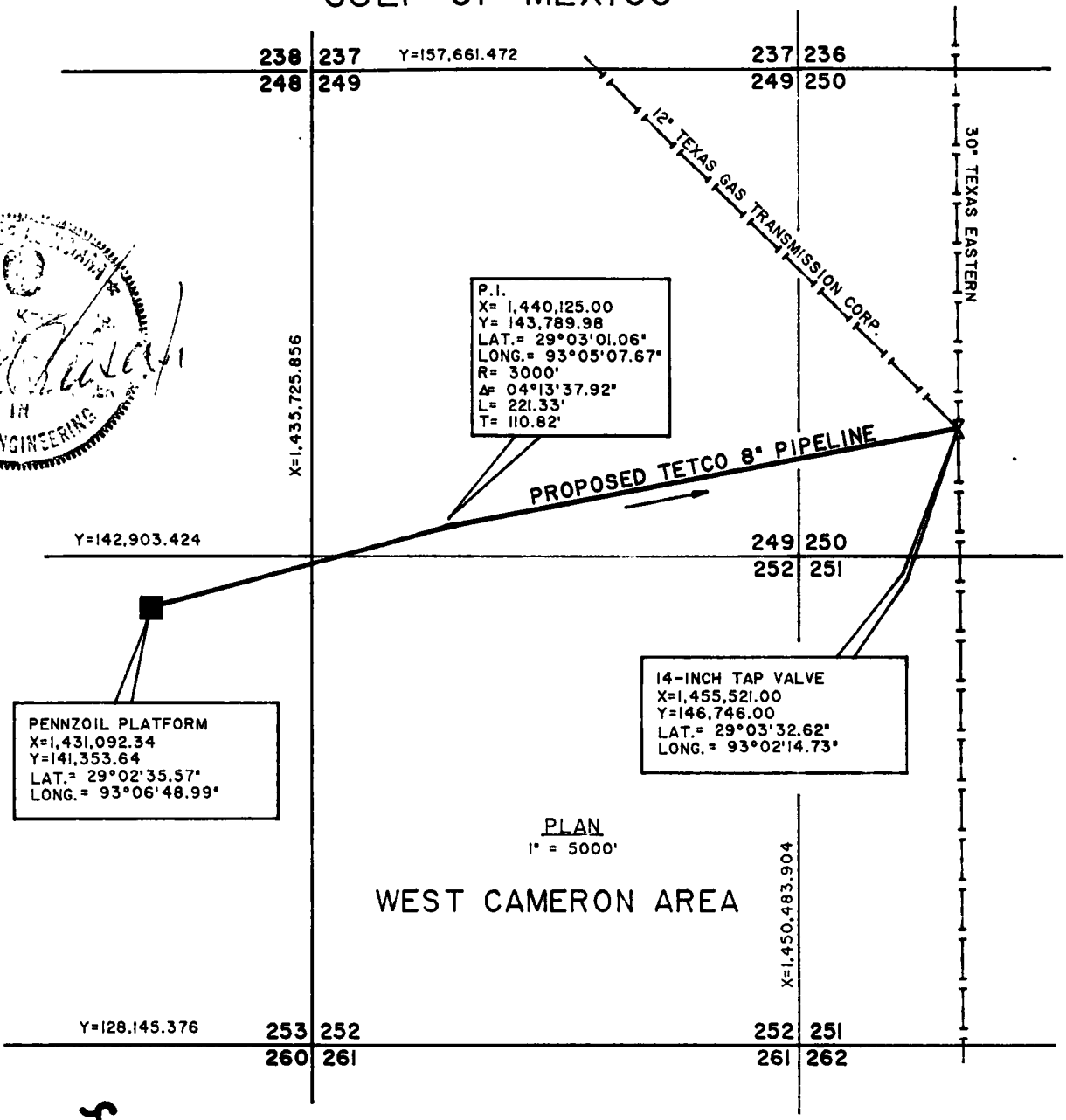
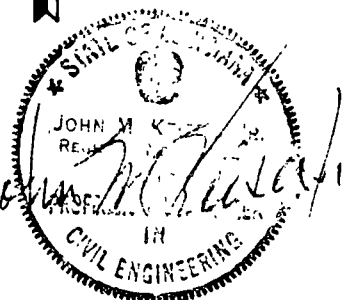
LOUISIANA OFFSHORE AREA GULF OF MEXICO

SHEET 1 OF 2 OCS-G655/TA-8-34420

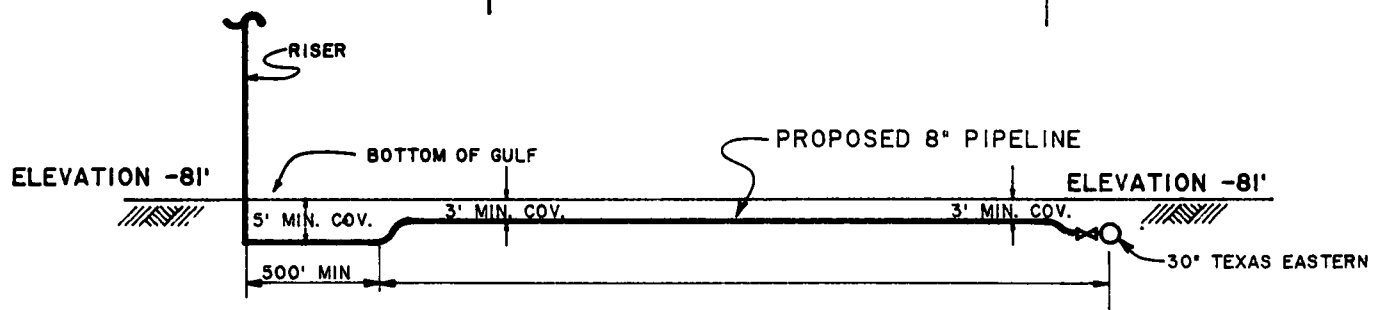
DWG. BY: CADD-MLW CHKD. BY: [Signature] APPR. BY: [Signature]

OFFSHORE LOUISIANA GULF OF MEXICO

BEST AVAILABLE COPY

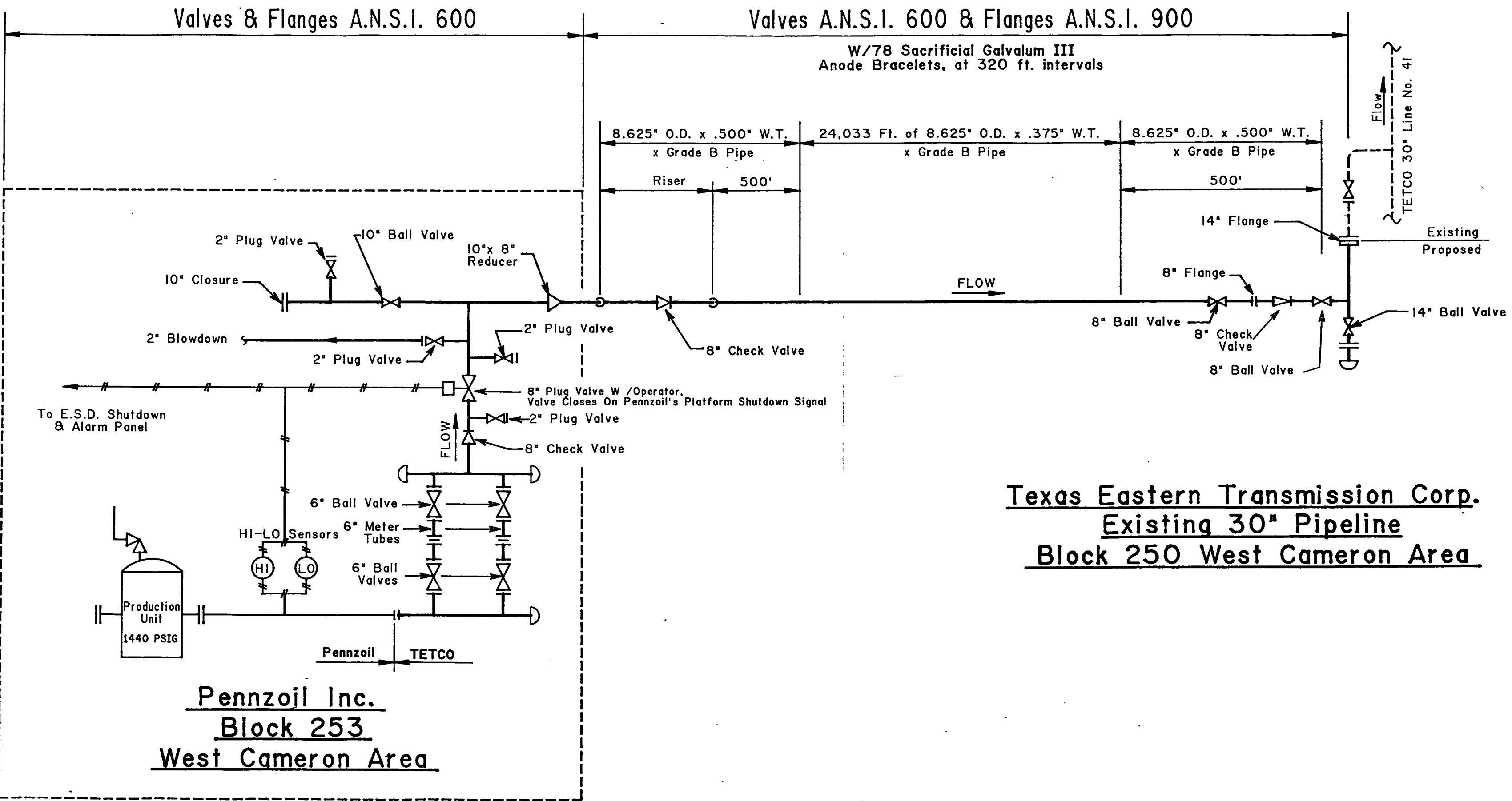


PLAN
1" = 5000'
WEST CAMERON AREA

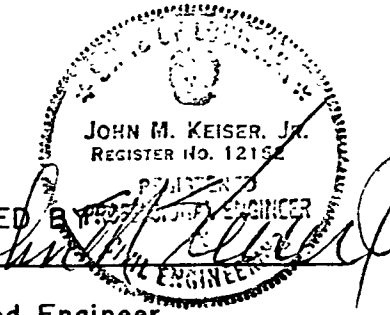


CERTIFIED BY:
JOHN M. KEISER, JR.
REGISTERED ENGINEER
NO. 12162
STATE OF LOUISIANA

PROFILE
NOT TO SCALE



Texas Eastern Transmission Corp.
Existing 30" Pipeline
Block 250 West Cameron Area


 CERTIFIED
 Registered Engineer
 No. 12162
 STATE OF LOUISIANA

BEST AVAILABLE COPY

- Note:
- 1.) Design Pressure 1440 P.S.I.G. (ANSI 600)
 - 2.) All Piping And Facilities Shall Be In Accordance With The Department Of Transportation Title 49, Part 192, Code Of Federal Regulations.
 - 3.) Emergency Shutdown Ssystems On Platform Are In Accordance With OCS Oder No.9, Section 1.A & 2.C.

REFERENCE DRAWING
 TA-8-34420 PERMIT

MINERALS MANAGEMENT SERVICE
RECEIVED
 FEB 08 1984
 RULES AND PRODUCTION
 GULF OF MEXICO REGION
 METAIRIE, LA.

Pennzoil Inc.
Block 253
West Cameron Area

TEXAS EASTERN GAS PIPELINE COMPANY			
A DIVISION OF TEXAS EASTERN TRANSMISSION CORPORATION			
SCHEMATIC PIPING PROPOSED 8" PIPELINE FROM BLOCK 253 PLATFORM TO BLOCK 250 WEST CAMERON AREA, LA. OFFSHORE - GULF OF MEXICO			
NO.	DATE	REVISION	
AFE-6972	SCALE NONE	TG-8-34205	
	SHEET 1 OF 1		

NOTIFICATION OF CONSTRUCTION

Date: 1-17-84

- 1. OCS number G 6551
- 2. Name of company Texas Eastern Transmission Corp.
- 3. Name of contractor Santa Fe Engineering
- 4. Name or number of barge Chickasaw
- 5. Size and length of pipeline 8 5/8" Gas 4.94 miles long
- 6. From where to where Pennzoil Co's Platform "A" in Block 253 to a subsea line with OCS-G 1950 in Block 250, all located in West Cameron Area.
(area, block number, and platform)
- 7. Where construction begins Pennzoil's Platform A in Block 253 West Cameron Area.
(area and block number)
- 8. When barge will begin May 23, 1984
- 9. Length of time barge will be on job 2 weeks
- 10. Nearest available heliport on Barge
- 11. Does the pipeline cross or is it in close proximity to fairways or anchorage area?

Yes _____ No ✓

Where _____

Initial and terminal points: Initial: X = _____ Y = _____

Terminal: X = _____ Y = _____

Name of Company Contact Nancy Mc Crocker

Telephone Number (713) 759-5214

BEM's Notification to USGS Frank Torres Date 1-17-84

U.S. Coast Guard _____ Date _____

Note: Notification may be made by calling Autry Britton at (504) 589-6541 between the hours of 7:45 a.m. and 4:15 p.m. Monday through Friday.

BEM Employee Autry Britton

PIPELINE APPLICATION CHECK LIST

BEST AVAILABLE COPY

INSTRUCTIONS: Check the blank on the left if the statement is affirmative or correct data submitted. Make N/A (not applicable) where appropriate. Place an X in the blank if the answer is no or if the data was not submitted. All blanks marked X must be rectified to a check (or qualified) before approval can be given for the pipeline. Enter data in the blanks furnished.

A. Verify the following general information:

I. SOP

N/A a. Do the leases involved on the pipeline application appear on the current Suspension of Production (SOP) Lease List?

II. POD

N/A a. Is the pipeline presently covered by an approved Plan of Development (POD)?

III. USGS Application

A. The pipelines are wholly contained within the boundaries of:

N/A 1. A single lease.

N/A 2. Unitized leases.

N/A 3. Contiguous (not cornering) leases of the same owner or operator

IV. BLM Application

a. Pipelines not covered by III above.

V. DOT Pipelines

a. The pipelines are shoreward of the outlet flange at the last process facility (if yes, include 49 CFR 192 for gas P/L or 49 CFR 195 for oil P/L in approval).

VI. DOI Pipelines

N/A a. Pipelines not covered by V above.

8. Verify that the information shown on the safety equipment schematic drawing contains the following:

- I. The pipeline leaving the platform receiving production from the platform is equipped with high- and low-pressure sensors to directly or indirectly shut-in the well or wells on the platform.
- N/A II. The pipeline delivering production to production facilities on the platform is equipped with automatic fail close valve tied into the automatic and remote shut-in system.
- N/A III. The pipeline crossing the production platform which does not deliver production to the platform, but which may or may not receive production from the platform, is equipped with high- and low-pressure sensors connected to an automatic fail close valve located in the upstream portion of the pipeline at the platform. In addition, the sensors are tied into either the platform's automatic and remote shut-in system or an independent remote shut-in system.
- N/A IV. The pipeline boarding the platform is equipped with a check valve.
- V. The pipeline leaving the platform is equipped with a check valve.
- N/A VI. The pipeline pump is shown as well as its associated high- and low-pressure shut-in device.
- VII. Check valves are located such that the low-pressure shut-in devices in I, II, III, and VI are not isolated.
- N/A VIII. If pipeline pilots are located on any pressure vessel or downstream of a departing check valve, all flow restriction(s), [backpressure valve(s), choke(s)], downstream of the process vessel, or wellhead, and upstream of check valve(s) must be indicated on the schematic.
- If flow restriction(s) exist downstream of any process vessel a low-pressure sensor must be installed between the flow restriction(s) and the departing check valve(s). High-pressure sensor(s) must be installed downstream of the wellhead choke.
- N/A IX. If safety equipment associated with the pipeline is located on a pig trap, so that it would be bypassed during pigging operations, add statement in approval letter referring to letter to lessees and operators, dated February 25, 1980, (Procedures for Temporary Removal of Pipeline-Related Safety Equipment)
- X. Pressure source is drawn into the schematic with the following:
- a. Source SEPERATOR.
- b. Maximum source pressure, psig 1440.
- XI. The rated working pressures of all separators, pumps, compressors, valves, flanges, and fittings upstream of and including the boarding automatic fail close valve are shown. ANSI 600

C. Verify that the location plat depicts the following:

- ✓ I. Location of pipeline
- ✓ II. Length of pipeline
- ✓ III. Size of pipeline
- ✓ IV. Type of service
- ✓ V. Direction of flow
- ✓ VI. X-Y coordinates of key points

D. Verify that the information given on the submitted data sheet is completed and calculate the $MAOP_{sc}$, $MAOP_{rc}$, $MAOP_{p/1}$.

I. General information for calculating $MAOP_{sc}$, $MAOP_{rc}$, etc.

- a. Size of pipeline, inches 8 5/8
- b. Weight of pipeline, lbs./ft. 0.375 33.04#/FT
- c. Grade of pipeline B
- d. Wall thickness, inches 0.375
- e. Size of riser, inches 8 5/8
- f. Weight of riser, lbs./ft. 43.39
- g. Grade of riser B
- h. Wall thickness of riser, inches 0.500
- i. Minimum WP rating of piping, fittings, valves, psig 1440
- j. Hydrostatic test pressure (HTP), psig LINE 2175 RISER 4000
- k. Hold time, hrs. 12 HRS
- l. Classification of pipeline (oil or gas) GAS

E. Verify that the information was given on the submitted data sheet is complete; and calculate the life expectancy of the pipelines corrosion protection ($LE_{p/l}$)

I. General Information for Calculating $LE_{p/l}$

- a. Type of corrosion protection (platform anodes, P/L anodes) or rectifier
- b. If pipeline anodes are used:
1. Type of anode GALVALUM III
 2. Spacing interval, ft. 320
 3. Weight of unit anode, lbs. 39

II. Calculate Life Expectancy of Corrosion Protection

- N/A a. If platform anodes are used, annual pipe-to-electrolyte potential measurements are required.
- b. If pipeline anodes are used:
- $LE_{p/l} = 3.82 \times 10^4 \times W^0 / DIR? = \underline{56.23}$
- W^0 = weight of one anode, pounds
- D = outside diameter of pipe, inches
- I = interval = length of pipe, feet + total number of anodes
- R = consumption rate, lbs./amp-yr.
- c. Is our calculated $LE_{p/l} \geq 20$ years.

If not, one of the following is necessary:

- N/A 1. The company agrees to increase their cathodic protection to meet the 20-year requirement.
- N/A 2. Annual pipe-to-electrolyte potential measurements will be required.

II. DOI Pipelines

- a. IP @ SMYS for submerged pipeline = $\frac{2st}{D}$ = _____
 - b. (.72 x IP @ SMYS) for submerged pipeline = _____ (MAOP_{sc})
 - c. IP @ SMYS for riser = $\frac{2st}{D}$ = _____
 - d. (.60 x IP @ SMYS) for riser = _____ (MAOP_{rc})
 - e. See DIi above (MAOP_{pfv}) = _____ (MAOP_{pfv})
 - f. Is $1.25 \text{ MSP} \leq \text{HTP} \leq .95$ (IP @ SMYS for smaller IP of a and c above)
 _____ \leq _____ \leq _____
 - g. $\text{HTP}/1.25$ = _____
 - h. Is HTP hold time ≥ 2 hours
 - i. MAOP of receiving pipeline from JV _____
 - j. MAOP_{p/l} = the smallest of b, d, e, g, and i above
 _____ (MAOP_{p/l})
 - k. Test pressure ANSI & API carbon steel RTJ & RF Flanges and Valves
 _____ (From Table 3.1, Page 31 API RP 14E)
 - l. Is $K > \text{HTP}$
- NOTE: If not, add statement in approval letter to insure valves and flanges are not subjected to test pressure.
- m. Is $j \geq \text{MSP}$
 _____ \geq _____
- If not, one of the following is necessary:
- 1. Redundant safety equipment is afforded.
 - 2. A departure from the requirement for redundant safety equip
- n. Type of redundant protection
 - 1. Additional SDV actuated by an independent PSH.
 - 2. PSV that vents into a flare scrubber or another approved location (must be approved by District).

III. DOT Pipelines

- a. IP @ SMYS for submerged pipeline = $\frac{2st}{D}$ = 3043
- b. (.72 x IP @ SMYS) for submerged pipeline = 2191 (MAOP_{sc})
- c. IP @ SMYS for riser = $\frac{2st}{D}$ = 4058
- d. For oil P/L (.60 x IP @ SMYS) for riser = N/A (MAOP_{rc})
 For gas P/L (.50 x IP @ SMYS) for riser = 2029
- e. See DIi above 1440 (MAOP_{pfv})
- f. Limit of Testing
1. For oil P/L
 Is 1.25 MSP \leq HTP \leq .95 (IP @ SMYS for smaller IP of a and c above)
N/A \leq N/A \leq N/A
 2. For gas P/L riser component:
 Is 1.50 MSP \leq HTP of riser \leq .95 (IP @ SMYS of c above)
2160 \leq 4000 \leq 3855
 3. For gas P/L submerged component:
 Is 1.25 MSP = HTP of submerged component = .95 (IP @ SMYS of a a)
1440 \leq 2175 \leq 2891
- g. MAOP_{p/l} based on HTP
1. For oil P/L HTP 1.25 = N/A
 2. For gas P/L riser component HTP/1.5 = 2667
 of riser
 3. For gas P/L submerged component HTP/1.25 = 1740
 or submerged
 component

- h. For oil P/L Is HTP hold time \geq 24 hours N/A
 For gas P/L Is HTP hold time \geq 8 hours 12 HRS
- i. MAQP of receiving pipeline from IV 1440
- j. $MAQP_{p/1}$ = the smallest of b, d, e, g, and i above
1440 ($MAQP_{p/1}$)
- k. Test pressure ANSI & API carbon steel RTJ & RF flanges and valves
217.5 (From table 3.1, page 31 API RP 14E)
- l. Is $k >$ HTP EQUAL
- NOTE: If not, add statement in approval letter to insure valves and flanges are not subjected to test pressure.
- m. Is $j \geq$ MSP
1440 \geq 1440

NOTE: If not, one of the following is necessary.

- N/A 1. Redundant safety equipment is afforded
- N/A 2. A departure from the requirement for redundant safety equipment.

IV. Pipeline Receiving Production (Installed Prior to July 31, 1977)

	<u>Submerged Component</u>	<u>Riser</u>
a. Size, inches	_____	_____
b. Grade	_____	_____
c. Wall thickness, inches	_____	_____
d. Minimum working pressure of valves and flanges	_____	(MAOP _{pfv})
e. Date of last hydrostatic test	_____	_____
f. HTP, psig	_____	_____
g. Hold time, hrs.	_____	_____
h. MAOP based on HTP HTP/1.25	_____	_____
i. IP@SMYS for submerged P/L 2ST/D	_____	_____
j. (.72 x IP@SMYS) for submerged P/L	_____	(MAOP _{sc})
k. IP@SMYS for riser 2ST/D	_____	_____
l. (.60 x IP@SMYS) for riser	_____	(MAOP _{rc})
m. If the receiving P/L is a DOT gas P/L and has not been tested since July 1, 1971, then what is the HAOP to which the segment was subjected during the 5 years prior to July 1, 1976?	_____	_____
n. MAOP of receiving P/L <u>MAOP of proposed P/L</u> MSP of proposed P/L	<u>1440</u>	<u>1440</u> <u>1440</u>

*HAOP - Highest actual operating pressure

F. Verify that the information given on the submitted data sheet is complete; and calculate the specific gravity on the pipeline $SG_{p/1}$

I. General information pertaining to $SG_{p/1}$

- a. Description of pipelines protective coating SCOTCHKOTE 217 14 MILS
- b. Description of risers protective coating B. SCOTCHKOTE 217 14 SZ 1/2" RUBBER
A - ZINC PRIMER, TIE COAT & VINYL PAINT
- c. Description of pre-concrete coating N/A
- d. Gravity or density of products:

For gas 0.61 (air = 1.0)

For oil/condensate N/A ° API N/A (water = 1.0)

II. Specific information pertaining $SG_{p/1}$

- a. Given $SG_{p/1}$ _____
- b. Weight of bare pipe (W) _____ lb/ft
- c. Weight of pre-concrete coating (P) _____
- d. K_3 (coefficients from table) _____
- e. Density of concrete (d_c) _____
- f. Thickness of concrete (T) _____
- g. K_1 (coefficient from table) _____
- h. K_2 (coefficient from table) _____

III. Specific gravity for weighted pipelines:

$$a. SG_{p/1} = \frac{d_c}{d} + \left[\frac{K_2}{(T - K_1)^2} \left(\frac{W+P}{K_3} - \frac{d_c}{d} \right) \right] = \underline{\hspace{2cm}}$$

IV. Specific gravity for epoxy-coated pipelines:

$$a. SG_{p/1} = 2.865 w/d^2 = \underline{1.27}$$

(w = weight of pipe, d = diameter, inches)

V. Is calculated S.G. \approx operator's given SG

1.27 \approx 1.30

NOTE: If not, resolve. If the SG is close to a value of 1, the pipeline is unacceptable and must be weighted with concrete or anchored securely to the bottom.

6. Pipeline crossing and subsea taps and valves

I. If pipeline crosses an existing pipeline, the following conditions must be met:

N/A 1. 18-inch minimum clearance between pipelines.

N/A 2. If pipeline is buried is there 3-feet of cover provided for the proposed pipeline?

3. Slope of sandbags

N/A a. Diameter of both pipelines is \leq 8 5/8-inch - 2:1 slope

N/A b. Diameter of either pipeline is $>$ 8 5/8-inch - 3:1 slope

N/A c. At pipe crossings if both pipelines are unburied (regardless of size) - 3:1 slope

II. If pipeline ties into an existing pipeline or is equipped with future subsea taps, the following conditions must be met:

✓ 1. Minimum 3-feet of cover is provided at subsea tie-in and future tie-in point(s).

N/A 2. If a birdcage is utilized it must be provided with a minimum of 3-feet of cover.

H. Verify the following general information:

I. Water depth, ft. 82 (Max) 78 (Min)

II. Burial depth, ft. 3

III. Anticipated Operating Pressure (MOP) 1200 PSIG

IV. Capacity 19 M³/D

I. Verification of Information Per Telephone Conversation. Give Name of Person, Date, and Information:

