Filed 3760

TENNESSEE GAS PIPELINE
an El Paso Energy company

November 15, 1999

U. S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394
Attention: Alex Alvarado

BEST AVAILABLE COPY

Re: OCS-G 1854-H, Segment No. 3760,
West Cameron Block 177 Line,
507K-1600

DearAlex:

Please be informed that the abandonment/relinquishment of the above referenced pipeline was completed as proposed on November 11, 1999.

If you should have any questions regarding this matter, please call this office.

Sincerely,

K. J. Cheramie
Principal Property Rights Specialist

cc: M. Handley
P. Craft
File

MINERALS MANAGEMENT SERVICE
RECEIVED
NOV 17 1999
FIELD
OPERATIONS
GOM OCS Region, New Orleans, La.

Tennessee Gas Pipeline Company Sugar Mill Point 158 Regal Row Houma, Louisiana 70360 Phone (504) 868-6785 Fax (504) 868-1423

ENERGY RESOURCE TECHNOLOGY, INC.

OFFSHORE DIVISION

AUG 18 1999

Thurston		LeJeune	
Anglada		McCarter	
Belisle		Pagels	
Buiche		Pennington	
Cheremie		Romano	
✓ Craft		Shah	
Donaldson		Sykes	
Fulton		Weeks	
Harwood		Wilson	
Ledet			

August 16, 1999

Paul Kraft
c/o Tennessee Gas Pipeline
158 Regal Row
Houma, LA 70360

RE: Notification of intent to abandon West Cameron Block 177, Platform #3, OCS-G 1471.

Mr. Kraft:

With this letter, Energy Resource Technology, Inc. (ERT) formally notifies Tennessee Gas of ERT's intent to abandon the West Cameron Block 177 #3 Platform. The platform with its only completion (well #3) carries no further utility and has shown no production since March 1999.

As part of the abandonment process, ERT has submitted to the Minerals Management Service (MMS) procedures for well abandonment, platform abandonment and site clearance. We now request Tennessee Gas to submit procedures to the Minerals Management Service and any other required agency for permanent abandonment of the only pipeline servicing the platform. ERT's documents show this Tennessee pipeline as segment #3760; a 4" line that runs from the #3 Platform some 8092' to a 26" SSTI also on Block 177.

ERT's tentative schedule is to P&A the well in September 1999 and the platform in late October 1999.

Please keep ERT informed of your progress in this matter and in any procedures that may involve use of the #3 platform. If I can be of any assistance, please contact myself at 281-618-0484.

Sincerely,

Energy Resource Technology, Inc.

Steve Champagne
Operations Engineer

MINERALS MANAGEMENT SERVICE
RECEIVED
SEP 08 1999
FIELD OPERATIONS
GOM OCS Region, New Orleans, La.

400 N. Sam Houston Parkway E. • Suite 400 • Houston, Texas 77060 • (281) 618-0590 • Fax: (281) 618-0591

Patton 8-28-99
10-14-99
jm

SEP 30 1999

In Reply Refer To: MS 5232

Mr. Gerald W. Thurston
Tennessee Gas Pipeline Company
Sugar Mill Point, 158 Regal Row
Houma, Louisiana 70360

Dear Mr. Thurston:

Pursuant to 30 CFR 250.1000(b), the relinquishment of the right-of-way grant associated with the following pipeline is hereby accepted effective September 8, 1999:

Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
3760 (Right-of-Way OCS-G 1854H)	4 1/2	8,092	Gas	Platform CAGC Block 177 West Cameron Area Lease OCS-G 1471	A 26-inch SSTI Block 177 West Cameron Area Lease OCS-G 1471 Segment No. 3513

Your letter dated September 7, 1999, requests approval to permanently abandon in place approximately 8,092 feet (1.53 miles) of 4 1/2-inch pipeline designated as Segment No. 3760, and to relinquish in its entirety, Right-of-Way Grant OCS-G 1854H, 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, Tennessee Gas Pipeline Company shall be required to remove it.

Tennessee Gas Pipeline Company shall cease transporting hydrocarbons through this pipeline immediately and complete the aforementioned abandonment operations within 60 days of the date of this letter. Additionally, Tennessee Gas Pipeline Company 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,

(Org.Sgd.) J. R. Hennessey

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 Segment No. 3760, ROW OCS-G 1854H (MS 5232)
1502-01 ROW OCS-G 1854H (Microfilm) (MS 5033)
MS 5232 Carto

FPatton:amm:9/28/99:Tennesse.760

5232 Patton
SA 3760

TENNESSEE GAS PIPELINE
an El Paso Energy company

September 7, 1999

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394
Attention: Alex Alvarado

Re: Permanent Abandonment and Relinquishment of Pipeline Right of Way, OCS-G 1854-H, Segment No. 3760, West Cameron Block 177 Line, Line No. 507K-1600

Dear Alex:

In accordance with Title 30 CFR Part 250, Subpart J, 250.156 and 250.164, Tennessee Gas Pipeline Company hereby requests approval to permanently abandon and relinquish approximately 1.53 miles of four inch (4") pipeline in the West Cameron Area, Gulf of Mexico, Offshore Louisiana. Tennessee Gas Pipeline Company hereby requests approval to relinquish the pipeline right of way associated with this abandonment in its entirety. TGP is requesting this permanent abandonment and relinquishment based on the fact that there is no future use for this pipeline.

This pipeline extends from Energy Resource Technology, Inc.'s West Cameron Block 177#3 platform to sub-sea tie-in with TGP's twenty-six inch (26") pipeline in West Cameron Block 177.

The line will be purged with seawater to remove any materials which might be harmful to the environment prior to abandonment. The procedures to be used to abandon this facility is attached hereto. Also, enclosed are three copies of drawings which have been red-marked to show the proposed work, along with a letter from Energy Resource Technology requesting removal of TGP's line.

MINERALS MANAGEMENT SERVICE
RECEIVED
SEP 08 1999
FIELD OPERATIONS
GOM OCS Region, New Orleans, La.

Tennessee Gas Pipeline Company Sugar Mill Point 158 Regal Row Houma, Louisiana 70360 Phone (504) 868-6785 Fax (504) 868-1423

If you should require any additional information regarding this matter, please call this office.

Sincerely,

Gerald W. Thurston

Gerald W. Thurston
Agent and Attorney-in-Fact

cc: A. McDermott
P. Craft
C. Roney
File

8/99 pjc

WEST CAMERON177 #3 PIPELINE ABANDONMENT PROCEDURE
TGP's 4" Line No. 507K-1600

1.) Mobilize to TGP's subsea side valve assembly 507K-1601 in West Cameron Block 177. Close existing 4" subsea mainline valve507K-1601A, re-open to 1/4 position. (X = 1,462,141; Y = 252,752)

2.) Mobilize to Energy Resources Technologies. Inc.'s West Cameron Block 177 #3 platform. Prepare TGP's 507K-1600 pipeline to accept pig. (X = 1,459,649; Y = 260,451)

3.) Install poly pig in 4" pipeline at MLV 507K-1602. Launch and run pig with high-pressure water. (1.63 miles of 4" = approximately 5,200 gallons)

4.) When pig has arrived at subsea assembly water pressure will spike, isolate pipeline by closing 4" MLV 1601-A and 12" SV 1601 at subsea assembly in West Cameron Block 177.

5.) Bleed down water pressure from pipeline.

6.) Unbolt and disconnect 4" pipeline from subsea assembly, install 4" blind flange on subsea assembly side at pipeline station No. 0+25.

7.) Remove section of 4" pipeline and install plug, ensure pipeline has 3 feet of cover and sand bag over existing side valve assembly as necessary.

8.) Unbolt pipeline flanges at the base of the ERT's platform pipeline station 84+28, install foreman plug in pipeline end and ensure that the end of the pipeline is buried 3 feet.

9.) Diver to walk out pipeline 2,000' from platform to determine if any areas are exposed.

10.) Cut out and remove all pipeline sections found to be exposed, install plug and bury any remaining end to 3 feet cover.

11.) Cut riser at the working level approx. (+) 12 elevation. Riser to remain abandon in-place on platform.

WEST

175

CAMERON

AREA

178

176

47

EAST

EXIST. T.G.P. 12" LINE Nº 507K-300

64

EXIST. T.G.P. 10" LINE Nº 507K-400

CAMERON

AREA

65

EXISTING T.G.P. 26" LINE Nº 507K-100

℄ PROPOSED RIGHT OF WAY FOR T.G.P. 4" NATURAL GAS PIPELINE

EXIST. T.G.P. 20" LINE Nº 507K-200

OCS-G-1471

B

A

C.A.G.C. W. CAMERON BLK. 177 PLATF.
X = 1,459,649.00
Y = 260,451.00

N 17° 56' 08" W - 8,092.26

X = 1,460,000.00
Y = 250,000.00

EXISTING S.V. Nº 507K-901, BLK. 177
WEST CAMERON AREA
X = 1,462,141.00
Y = 252,752.00

177

IN

STATE OF LOUISIANA
KENNETH E. BRITAIN
REG. NO. 4901
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

PLAN

5,000 0 5,000 10,000

SCALE OF FEET

LOCATION OF RIGHT-OF-WAY HAS BEEN ACCURATELY DELINEATED UPON THIS MAP.

Kenneth E. Britain

KENNETH E. BRITAIN

LOUISIANA REGISTERED PROFESSIONAL CIVIL ENGINEER NO. 4901

NOTE:

THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM LOUISIANA TO THE MARKET.

ALL BEARINGS SHOWN ARE LAMBERT.

PROPOSED WIDTH OF RIGHT-OF-WAY 200'.

LENGTH OF LINE 8,092.26 FT. = 1.533 MI.

NO.	DATE	REVISION	REV.	CKD	APR
2	6-17-75	CHANGE SCALE	SJC		
1	5-13-75	CHANGE ROUTE OF LINE	H.A.P.	C.J.B.	

REFERENCE DRAWINGS

DRAWING NO.	TITLE
TA-L2-F507K-1600-1A	PROFILE
TB-L2-F507K-1600-1B	SCHEMATIC

DRAWN BY S J C DATE 3-20-75
CHECKED BY C J B DATE 3-31-75
CORRECT BY R S M DATE 4-75
APPROVED BY EJJ DATE 4/75
SCALE 1" = 2,000'

TENNECO

Tennessee Gas Pipeline Company
Division of Tenneco Inc
Engineering Department Houston, Texas

APPROVED BY
R. G. Robertson
FOR CHIEF ENGINEER

APPLICATION PLAT FOR PROPOSED NATURAL GAS PIPELINE RIGHT-OF-WAY

Tennessee Gas Pipeline Co.

TA-L2-F507K-1600-1

WEST CAMERON BLK. 177 LINE

VGLT

OCS-G 1854-H

3760

LTGP 119A

TENNESSEE GAS PIPELINE
an El Paso Energy company

Repair procedures hereby accepted.
Date _____
Donald C. Howard
Regional Supervisor
Field Operations

March 6, 1998

U.S. Department of the Interior
Attention: Mr. Frank Torres
Minerals Management Service
Gulf of Mexico, OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

MINERALS MANAGEMENT SERVICE
RECEIVED
MAR 11 1998
FIELD OPERATIONS
Gulf of Mexico OCS Region New Orleans, La.

Re: Procedures and Plans for the Repair of
Tennessee Gas Pipeline Company's Line No.
507K-1600, OCS-G-1854H Seg. No. 3760.

Dear Mr. Torres:

The attached information is about proposed repairs of a 4" riser located on Conoco's West Cameron Block 177-3 platform which has corrosion damage. Tennessee's plan is to initiate repairs after pre-fabrication and testing has been completed and as weather conditions allow. If you have any questions or require additional information please contact me at (504) 868-6785 ext. 2220.

Sincerely,

Paul J. Craft
Principal Pipeline Engineer

pjc/cc: G. W. Thurston
P. K. Alexis
C. Childs

CONSTRUCTION INFORMATION

1. **COMPANY CONTACT**

Mr. Paul J. Craft, Principal Pipeline Engineer
Tennessee Gas Pipeline Company
Sugar Mill Point, 1115 Regal Row
Houma, Louisiana 70360
Area Code (504) 868-6785 ext. 2220

2. **DATA ON PIPELINE:**

Riser Pipe:

4.500" O.D. x .337" Wt. Gr. B; coated with 14 mils of heat cured epoxy.

3. **CORROSION PROTECTION:**

Segment of line will be protected by existing anodes previously installed.

4. **WATER DEPTH:**

Maximum water depth at bottom of riser replacement location is approximately 13 feet.

5. **INTERNAL COATING:**

The analysis of the transported products will be monitored and preventative measures such as pigging and/or inhibiting will be employed as necessary.

6. **SPECIFIC GRAVITY:**

The specific gravity of the product being transported is anticipated to be .60 (Air = 1.0), T=60 degrees F.

7. **BURIAL DEPTH:**

N/A, replacement section is on riser from (+) 27 to (-) 13.

8. **MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) CALCULATIONS:**

Maximum Allowable Operating Pressure (MAOP) = 1440 psig.
Maximum Capacity = 25 MMCF/D.

Maximum Operating Pressure (MOP) is less than or equal to 1440 psig.

Minimum Operating Pressure = 500 psig.

A. Calculations:

Formulas: $P = \frac{2st}{d}$

$$M.A.O.P. = \frac{2st\,(F)(E)(T)}{d}$$

Whereas P = 100% SMYS
s = Specified Minimum Yield Strength
t = Nominal Wall Thickness in Inches
d = Nominal Outside Diameter in Inches
(F)= 0.50 for Riser Pipe
= 0.72 for Line Pipe
As per Title 49, CFR, Part 192.619
(E)= 1 for seamless and DSA welded pipe
(T)= 1 for temperature less than 250°F

a. Pipe:

4.500" O.D. x .337" WT. Gr. B.

$$P = \frac{2 \times 35{,}000 \times .337}{(4.500)} = 5{,}242 \text{ PSIG}$$

(1) MAOP (Design)

$$MAOP \quad \frac{2 \times 35{,}000 \times .337 \times .50 \times 1 \times 1}{(4.500)} = 2{,}621 \text{ PSIG}$$

(2) MAOP (Hydrostatic Test Pressure)

HTP = P x 95%

= 5,242 x .95 = **4,978 PSIG**

HTP will be 2,160 psig for 4 hours.

$$MAOP = \frac{2{,}160}{1.25} = \textbf{1,728 PSIG}$$

MAOP = 2,621 PSIG (Design) or 1,728 PSIG (HTP)

Since there are ANSI 600 series valves in the system the MAOP is restricted to 1,440 PSIG.

The producer's equipment is designed for 1,440 PSIG.

9. **VALVES AND FLANGES:**

Flanges and connectors will be ANSI 600 series (minimum) with a rated working pressure of 1,440 PSI.

10. **TIME PERIOD FOR CONSTRUCTION**

Anticipated start up date is weather dependant, Spring 1998.

Time required to complete the project is approximately 4 days.

RISER CHANGE OUT WEST CAMERON 177-3

SCOPE OF WORK

I. GENERAL SCOPE

During the 1997 offshore paint program , the four inch riser on WC 177-3 platform was found to have extensive rust built up under the neoprene coating on the pipe. It was determined to be a safety issue to remove the scale. The riser runs down through a larger diameter pipe. As a result of the rust TGP will replace a 40 foot section of the riser.

The affected riser is at West Cameron 177-3. The platform is a one leg platform located in approximately 50 feet of water. The repair will require the installation of 40 feet of riser piping flanged on each end. The bottom is located subsea in 13 feet of water. The top flange is located at the + 27 level.

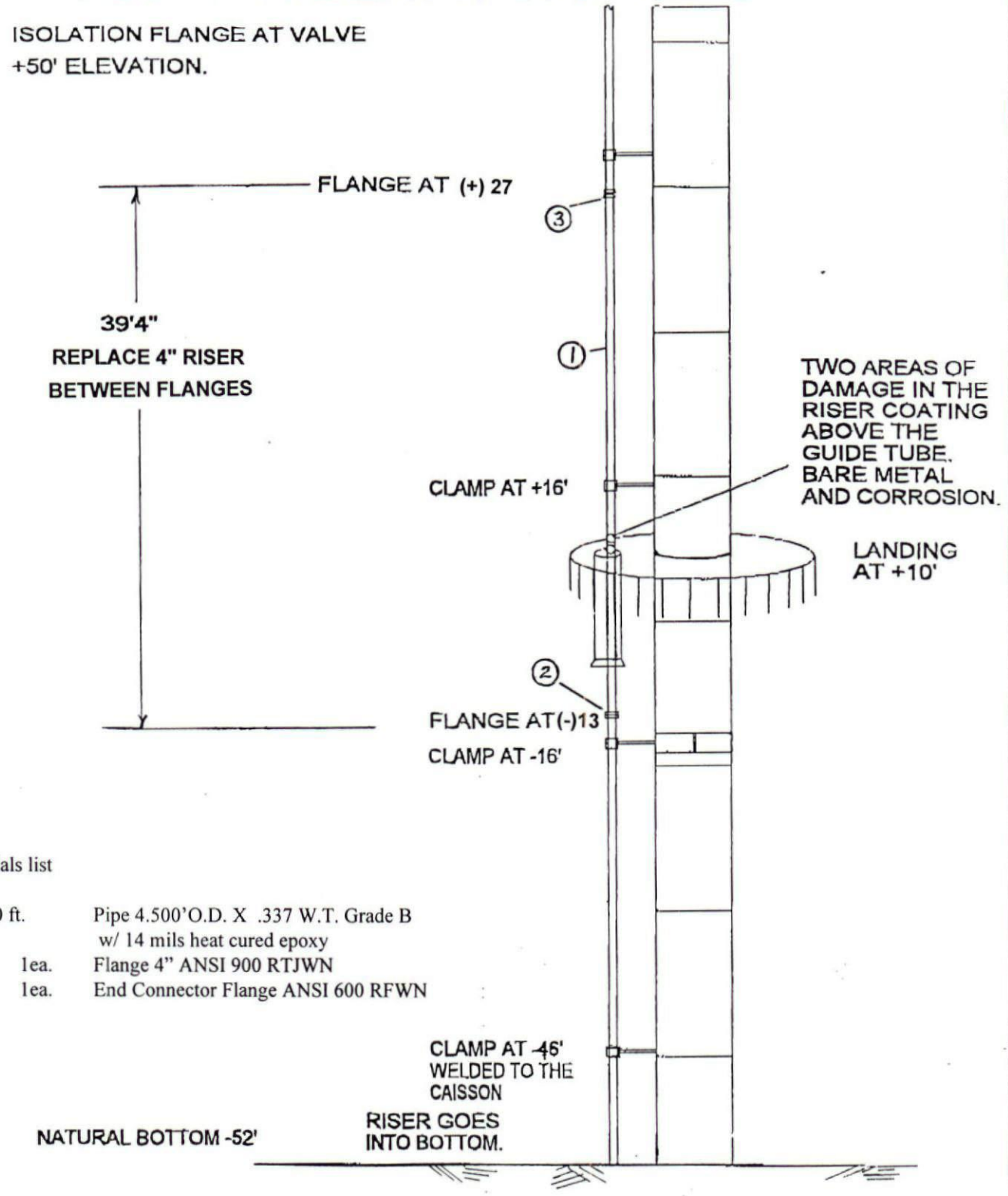
II. WORK PROCEDURE

1. **TGP to provide to diving contractor a prefabricated and pretested forty foot replacement riser section with one attached flange and one weld-less flange end connector.**
2. **Diving contractor to transport riser section from fabrication yard to W.C. 177-3.**
3. **Contractor to locate, uncover and close TGP's 4" side valve No. 507K-1601-A X=1,462,141 Y= 252,752.**
4. **TGP personnel will blow down line to atmosphere with assistance from the contractor at W.C. 177-3 platform..**
5. **Contractor to remove 4" Valve No. 507K-1602 located on W.C. 177-3 platform main deck and install four inch poly pig into existing pipeline.**
6. **Contractor to install a 4" blind flange (drilled and tapped 2") on pipeline flange where valve 507K-1602 was removed to facilitate pig launch and run.**
7. **Launch and run pig with high pressure water until pressure reaches 20 psig above mainline pressure (approximately 750 psig).**
8. **Partially open 4" subsea side valve No. 507K-1601-A and continue to run pig with high pressure water until pressure spike is indicated - line is filled with water, 1.63 miles of 4" = 5,200 Gallons.**
9. **Close 4" subsea valve No. 507K-1601-A . Bleed water pressure from pipeline at W.C.177-3 platform and equalize to atmosphere..**
10. **Remove bolts on flanges at the (-) 13 elevation and the (+) 27 elevation and remove corroded 40' long four inch O.D. riser section. Note old riser may be cut to facilitate removal.**
11. **Install new riser, cut piping as necessary and install weld-less end connector to fit field determined length.**
12. **Weld-less end connector flange to be installed at the (+) 27 elevation.**
13. **Install second 4" poly pig in pipeline where Valve No 507K-1602 was removed.**

14. **Re-install 4" valve No. 507K-1602.**
15. **TGP personnel to pressure up pipeline. Check for leaks.**
16. **Open 4" subsea valve No. 507K-1601-A, initiate gas flow.**
17. **Spot paint and patch coatings on riser as needed.**
18. **Demobilize**
19. **Return old riser to TGP's District 823 plant yard, Kinder, Louisiana**

All work should be bid on for completion by April 30th

TGP 4" RISER AT WC-177-3



Materials list

1.)	40 ft.	Pipe 4.500'O.D. X .337 W.T. Grade B w/ 14 mils heat cured epoxy
2.)	1ea.	Flange 4" ANSI 900 RTJWN
3.)	1ea.	End Connector Flange ANSI 600 RFWN

TGP RISER AT WC-177-3		DATE: 3/5/96	SCALE: NA	REPORT NO:	P.J. Cooper
		DRAWN:	CHECKED:	APPROVED:	DWG. NO. 1

5/22/95
mConner

In Reply Refer To: MS 5232

JUN 01 1995

Tennessee Gas Pipeline Company
Attention: Mr. K. J. Cheramie
1115 Regal Row
Houma, Louisiana 70360

Gentlemen:

In accordance with 30 CFR 250.158(b), your letter dated May 9, 1995, transmitted a construction report for the installation of a subsea tie-in assembly as an appurtenance to Tennessee Gas Pipeline Company's existing 26-inch pipeline (OCS-G 1854) in Block 2, East Cameron Area, at coordinates X = 1,478,561 and Y = 361,944.

This proof of construction is hereby accepted.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 (P/L OCS-G 1854) w/orig report (KFaust) (MS 5232)
1502-01 (P/L OCS-G 1854) w/copy of report (microfilm) (5033)

MConner:amm:5/22/95:Tennesse.854

G1854

ok
6/6/95
JS

Tennessee Gas Pipeline
A Tenneco Company

Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360
(504) 868-6785

May 9, 1995

1/alty
G-1854
SN 3513

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Mike Conner

Re: Proof of Construction, 6" Hot-tap,
East Cameron Block 2, Kicat(2) 130,
OCS-G 1854, Segment No. 3513

Dear Mike:

On November 28, 1994, amended application was approved for the construction of a six inch (6") sub-sea hot-tap assembly as an appurtenance to TGP's existing twenty-six inch (26") pipeline in East Cameron Block 2, Gulf of Mexico.

In accordance with 30 CFR 250.158 (b) and appropriate guidelines, we attach herewith in triplicate, the "As-Built" Drawing, along with three (3) copies of the hydrostatic test data.

If you should require any additional information regarding this matter, please call this office.

Sincerely,

K. J. Cheramie

K. J. Cheramie
Right of Way Agent

KJC:kjc

Enclosures

cc: M. Taylor
O. O. Jones
G. Benoit
C. R. Miller
File

TORCH INC.

1808 Engineers Road • Belle Chasse, LA. 70037 • (504) 392-3222

HYDROSTATIC TEST

COMPANY: Tenn Gas Pipeline

PROJECT: East Cameron Block 2 TESTED BY: Mike Silver

TEST SECTION: Sub Sea Tie In TEST STATION Belle Chase LENGTH 29'

PIPE: 6 5/8 O.D. X .432 W.T., GRADE B MANUFACTURER: _____

PRESSURE RECORDER: MFG: Barton SERIAL NO.: 10744

DATE CALIBRATED: 11-29-94

DEAD WEIGHT GAUGE: MFG: Chandler SERIAL NO.: 21801

DATE CALIBRATED: 11-29-94

FILL PUMP: MFG/TYPE: City Water LOCATION: Belle Chase

PRESSURED PUMP: MFG/TYPE: Strandco 5-3000 LOCATION: Belle Chase

FILL STARTED: TIME/DATE: 4:00PM 11-29-94 COMPLETED: TIME/DATE: 4:45PM 11-29-94

PRESSURIZATION STARTED: TIME/DATE: 7:45AM 11-30-94 COMPLETED: TIME/DATE: 4:00PM 11-30-94

TEST STARTED: TIME/DATE: 8:00AM 11-30-94 PRESSURE: 2349

AMBIENT TEMP.: 56 °F PIPE TEMP.: 59 °F

TEST COMPLETED: TIME/DATE: 4:00PM 11-30-94 PRESSURE: 2400

AMBIENT TEMP.: 62 °F PIPE TEMP.: 62 °F

REMARKS: _____

WITNESSES: COMPANY _____ DATE: _____

CONTRACTOR Torch Michael Silver DATE: 11-30-94

ATTACH DEADWEIGHT PRESSURE LOG AND RECORDER CHARTS

Jackson D. Bullock

(A Pipeline Contractor)

TORCH INC.

1808 Engineers Road • Belle Chasse, LA. 70037 • (504) 392-3222

DEADWEIGHT PRESSURE LOG

COMPANY: Tenn. Gas Pipeline

PROJECT: East Cameron Block 2 TESTED BY: Mike Silver

TEST SECTION: Sub-Sea Tie-in Assembly

DEADWEIGHT GAUGE: MFG Chandler SERIAL NO.: 21801

DATE CALIBRATED: 11-29-94 DATE: 11-30-94

TIME/ RECORDED BY	PRESSURE (PSIG)	PIPE TEMP (°F)	AMBIENT TEMP (°F)	REMARKS
8:00AM	2349	59°	56°	START Test
8:15	2349	59°	56°	
8:30	2349	59°	56°	
8:45	2349	59°	56°	
9:00	2349	59°	56°	
9:15	2349	59°	57°	
9:30	2349	59°	57°	
9:45	2349	59°	57°	
10:00	2349	59°	57°	
10:30	2349	59°	58°	
11:00	2349	60°	60°	
11:30	2352	60°	60°	
1200N	2355	60°	61°	
1:00 PM	2369	62°	62°	
2:00	2385	62°	64°	
3:00	2397	62°	63°	
4:00	2400	62°	62°	Michael Silver

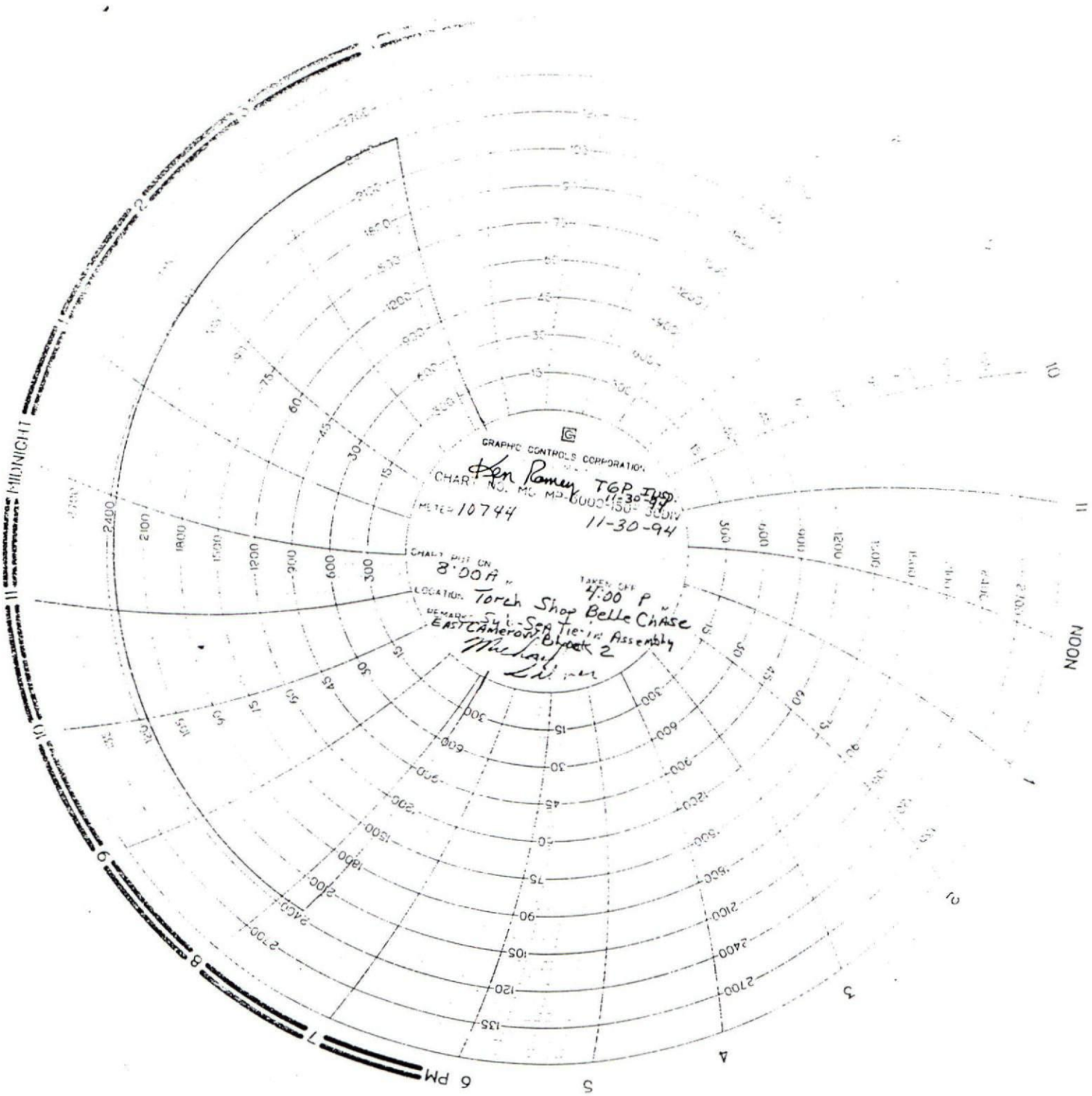
REMARKS: Recorders Pressure Barton SN 10744 11-29-94

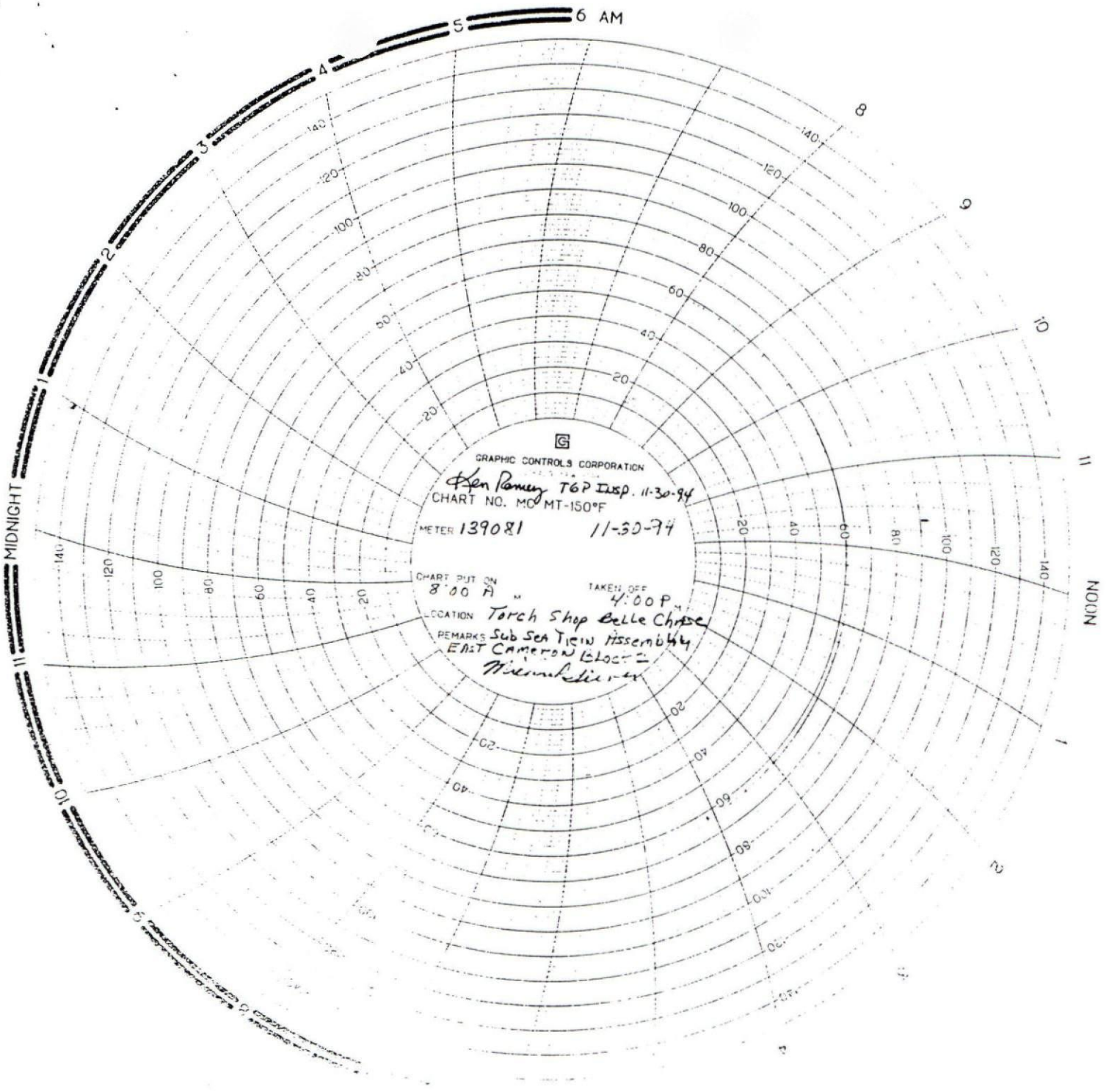
Temp. Barton SN 124081 11-29-94

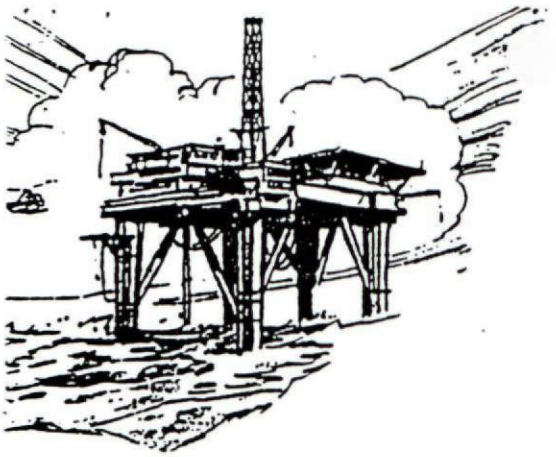
Attach completed record to the hydrotest report.

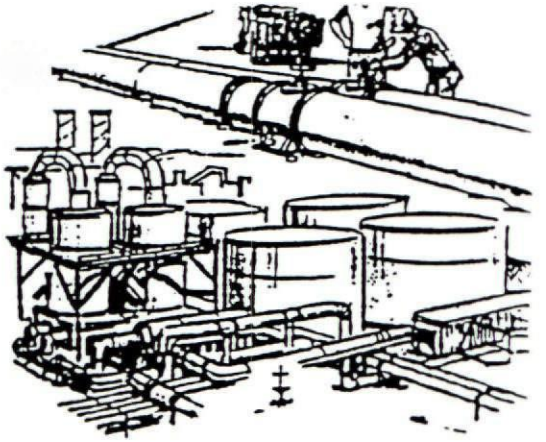
Ken Ramey
T&P Insp. 11-30-94

(A Pipeline Contractor)


GRAPHIC CONTROLS CORPORATION
CHART NO. MC MP-6000-150-30DIV
METER 10744
11-30-94
CHART PUT ON 8:00 A
TAKEN OFF 4:00 P
LOCATION Torch Shop Belle Chase
REMARKS Sub-Sea Tie-in Assembly
EAST CAMERON Block 2
MIDNIGHT
NOON
6 PM


6 AM
MIDNIGHT
NOON
GRAPHIC CONTROLS CORPORATION
Ken Ramey TGP Insp. 11-30-94
CHART NO. MC MT-150°F
METER 139081
11-30-94
CHART PUT ON
8:00 A M
TAKEN OFF
4:00 P M
LOCATION Torch Shop Belle Chasse
REMARKS Sub Sea Tie in Assembly
East Cameron Block





STRANCO RENTAL AND REPAIR
RENTALS - SALES - REPAIRS

5125-C TARAVELLA ROAD - MARRERO, LA 70072 - (504) 348-1446

CERTIFICATION OF CALIBRATION

This is to certify that the device listed below has been calibrated against secondary standards in our shop and the maximum error detected does not exceed the manufacture's specifications.
N.B.S. 35270-005

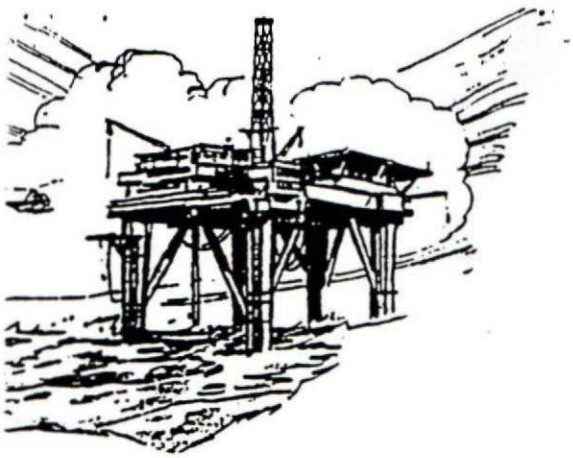
MANUFACTURER Chandler

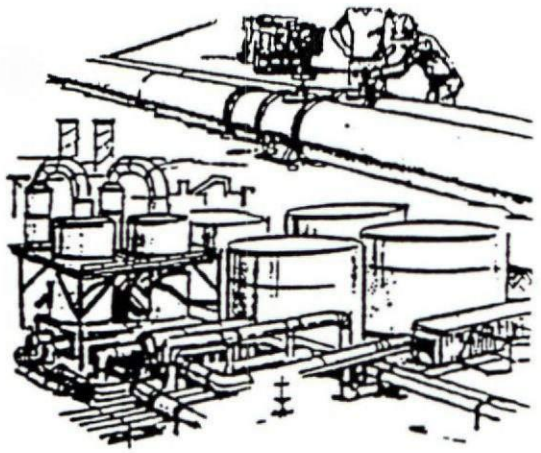
MODEL 2-1

SERIAL NUMBER 21801

CUSTOMER Torch Inc.

CALIBRATED BY E. F. Stander **DATE** 11-29-94





STRANCO RENTAL AND REPAIR
RENTALS - SALES - REPAIRS

5125-C TARAVELLA ROAD - MARRERO, LA 70072 - (504) 348-1446

CERTIFICATION OF CALIBRATION

This is to certify that the device listed below has been calibrated against secondary standards in our shop and the maximum error detected does not exceed the manufacture's specifications.
N.B.S. 35270-005

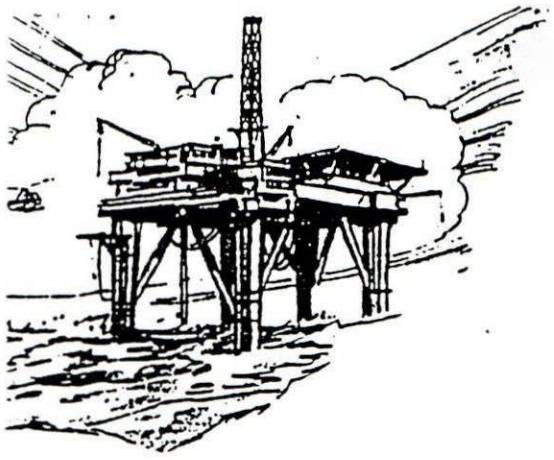
MANUFACTURER Barton

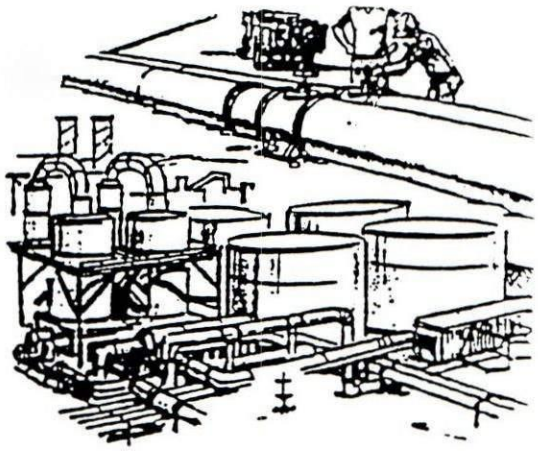
MODEL 242-A

SERIAL NUMBER 10744

CUSTOMER Torch Inc.

CALIBRATED BY E.L. Strand **DATE** 11-29-94





STRANCO RENTAL AND REPAIR
RENTALS - SALES - REPAIRS

5125-C TARAVELLA ROAD - MARRERO, LA 70072 - (504) 348-1446

CERTIFICATION OF CALIBRATION

This is to certify that the device listed below has been calibrated against secondary standards in our shop and the maximum error detected does not exceed the manufacture's specifications.
N.B.S. 35270-005

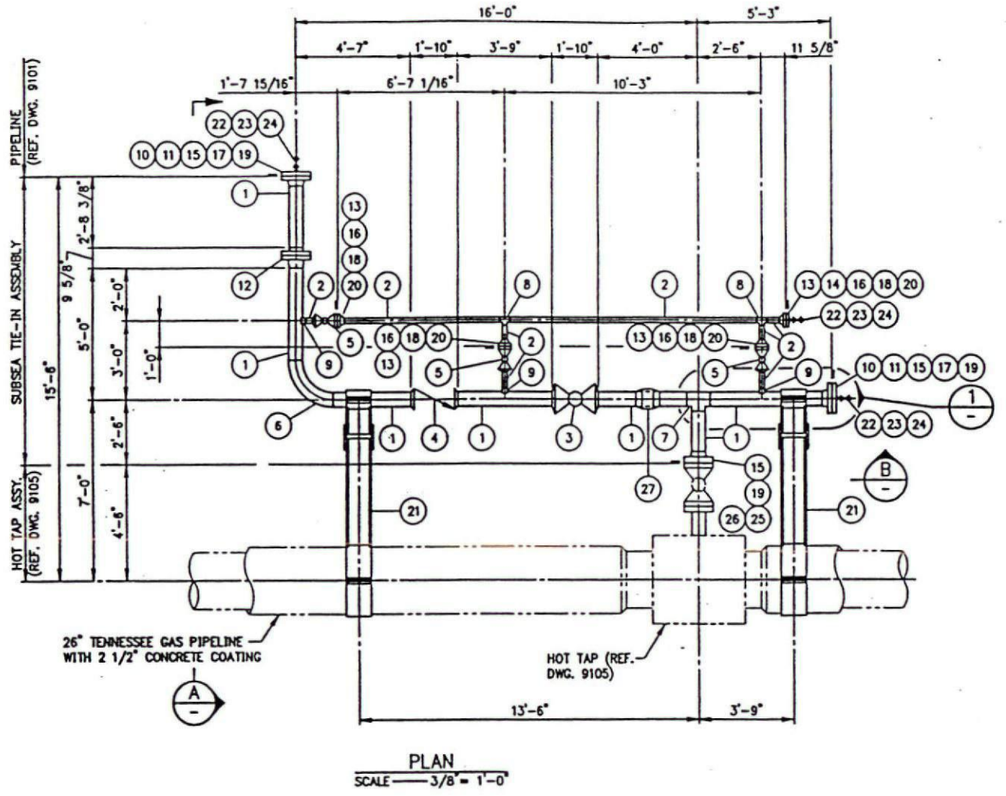
MANUFACTURER Barton

MODEL 242-A

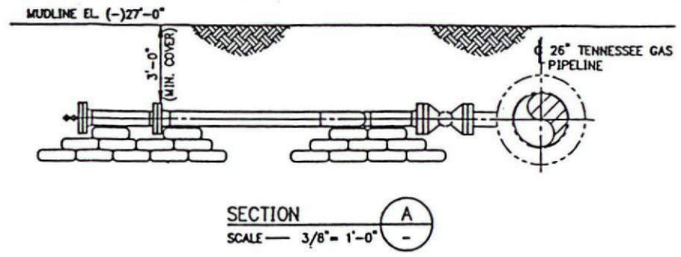
SERIAL NUMBER 139081

CUSTOMER Torch Inc.

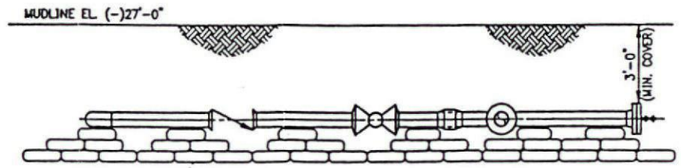
CALIBRATED BY E. L. Strand **DATE** 11-29-94



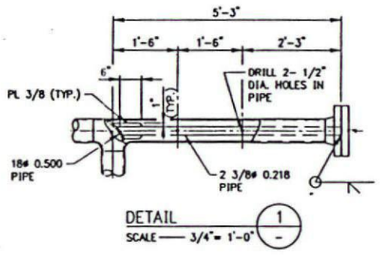
PLAN
SCALE —— 3/8"= 1'-0"



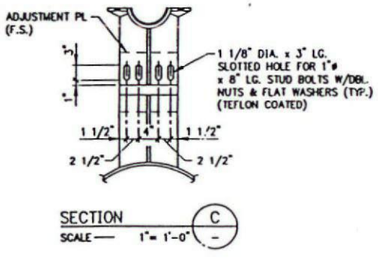
SECTION A
SCALE —— 3/8"= 1'-0"



SECTION B
SCALE —— 3/8"= 1'-0"

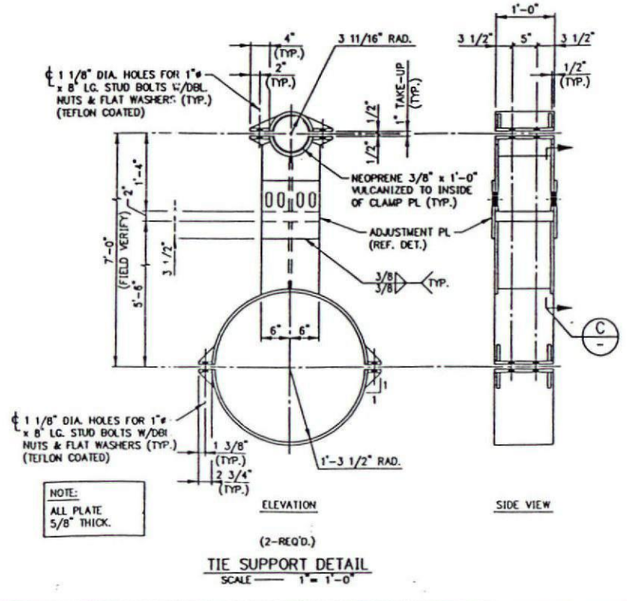


DETAIL 1
SCALE —— 3/4"= 1'-0"

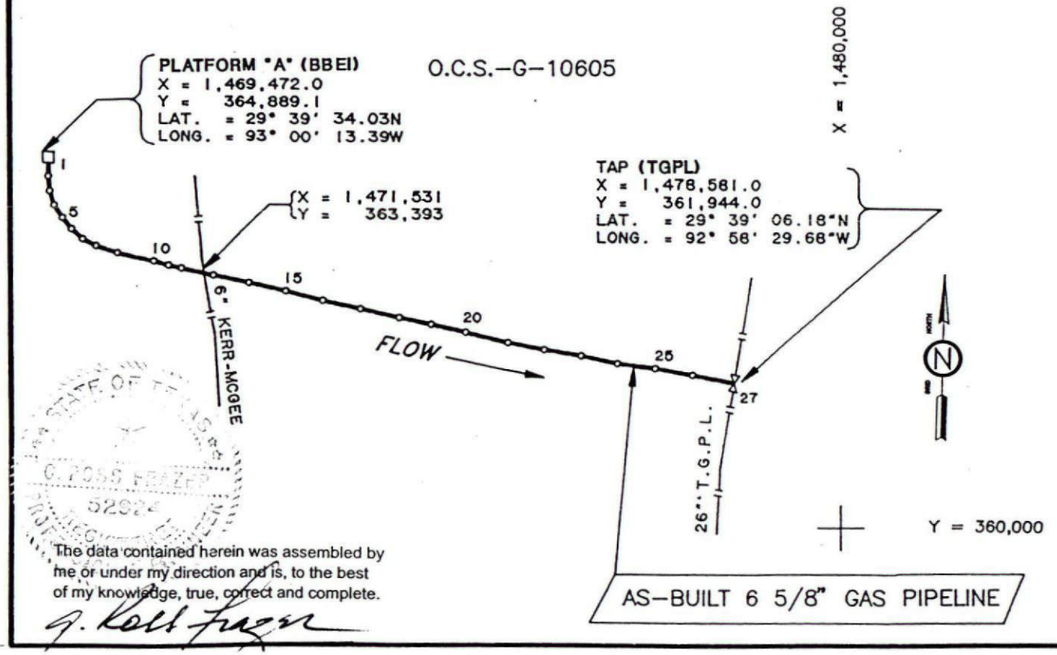


SECTION C
SCALE —— 1"= 1'-0"

MATERIAL SUMMARY		
ITEM	QTY.	DESCRIPTION
1	23 L.F.	PIPE, 6 5/8"O.D.x0.432" W.T., API 5L GR. B, SMLS
2	20 L.F.	PIPE, 2 3/8"O.D.x0.218" W.T., API 5L GR. B, SMLS
3	1	VALVE, BALL, 6", CL 600, API 6D, W.E., FULL OPENING,
		C/W GEAR OPERATOR PREPARED FOR SUBSEA SERVICE
4	1	VALVE, SWING CHECK, 6", CL 600, API 6D, W.E., BTM 0.432" W.T.
		C/W LEVER OPERATOR FOR SUBSEA SERVICE
5	3	VALVE, BALL, 2", CL 600, API 6D, RTJ F.E. x W.E., C/W LEVER
		OPERATOR, PREPARED FOR SUBSEA SERVICE
6	1	ELL, WELD, 6" 90° 3R, 0.432" W.T., ASTM A234 WPB
7	1	TEE, WELD, STRAIGHT 6" 0.432" W.T., ASTM A234 WPB
8	2	TEE, WELD, STRAIGHT, 2" SCH. 80, ASTM A234 WPB
9	3	SADDLE, WELD, 6" x 2", SMLS., 3/8" THK. ASTM A234 WPB
10	2	FLANGE, 6", CL 600 RTJ WN, BTM 0.432" W.T., ASTM A105
11	2	FLANGE, BLIND, 6", CL 600 RTJ, ASTM A105
		CENTER DRILL & TAP 1/2" NPT
12	1	MISALIGNMENT FLANGE ASSEMBLY, 6", CL 600 W.E. x RTJ F.E.,
		BTM 0.432" W.T., ASTM A105, (HYDROTECH), STUDS AND NUTS
		INCLUDED
13	4	FLANGE, 2", CL 600 RTJ WN, BTM 0.218" W.T., ASTM A105
14	1	FLANGE, BLIND, 2", CL 600 RTJ, ASTM A105
		CENTER DRILL & TAP 1/2" NPT
15	3	GASKET, RING JOINT, 6" ANSI CL 600 NO. R-45, OVAL, S.S.
16	4	GASKET, RING JOINT, 2" ANSI CL 600 NO. R-23, OVAL, S.S.
17	24	STUD BOLTS, 1"ø x 7" LG. A193 GR. B7 W/2 HEAVY
		HEX NUTS ASTM A194 GR. 2H & 2 WASHERS EA. (CADMIUM
		PLATED) (6", CL 600 RTJ WN OR BLIND)
18	32	STUD BOLTS, 5/8"ø x 4 1/2" LG. A193 GR. B7 W/2 HEAVY
		HEX NUTS ASTM A194 GR. 2H & 2 WASHERS EA. (CADMIUM
		PLATED) (2", CL 600 RTJ WN FLANGE OR BLIND)
19	3	FLANGE PROTECTOR (6", CL 600) 316 S.S.
20	4	FLANGE PROTECTOR (2", CL 600) 316 S.S.
21	2	TIE-IN SUPPORT, CLAMP-ON ASSEMBLY (REF. DET.)
22	3	PIPE NIPPLE, 1/2" XH x 3" LG., TBE, SS, ASTM A312T316L
23	3	VALVE, BALL, 1/2" NPT, 4500 PSI, "JAMESBURY" NO. HP36GT
		TYPE 316 S.S., W/HANDLE
24	3	PLUG, HEX, 1/2" 6000 PSI, S.S. SCR'D., ASTM A182X316
25	1	FLANGE, SWIVEL RING, 6" CL 600 RTJ, BTM 0.432" W.T.,
		ASTM A105 (BIG INCH)
26	12	STUD BOLTS, 1"x 8 1/4"LG. A193 GR. B7 W/2
		HEAVY HEX NUTS ASTM A194 GR. 2H & 2 WASHERS EA.
		(CADMIUM PLATED, 6"-600# SWIVEL RING)
27	1	ANODE, 32# GALVALUM III SEGMENTED TAPERED
		BRACELET



TIE SUPPORT DETAIL
SCALE —— 1"= 1'-0"



The data contained herein was assembled by me or under my direction and is, to the best of my knowledge, true, correct and complete.

G. Ross Frazer

BRITISH - BORNEO

EAST CAMERON AREA BLOCK 2

OCS-G 10605

PLATFORM "A" TO TGPL 26"LINE AS BUILT

Author. GRF	Date. APRIL
Drawn. JV	Fig No.

Tennessee Gas Pipeline
A Tenneco Company

Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360
(504) 868-6785

May 8, 1995

U. S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Kent Stauffer

Re: OCS-G 1854, Segment No. 1227,
East Cameron Block 64 Line

Dear Mr. Stauffer:

In response to Mr. Bourgeois' letter dated May 3, 1995, please be informed that the above referenced pipeline was abandoned as approved since October 1992.

Sincerely,

K. J. Cheramie

KJC:kjc

cc: M. Taylor
File

G1854

4/19/95
MConner

MAY 0 3 1995

In Reply Refer To: MS 5232

Tennessee Gas Pipeline Company
Attention: Mr. B. J. Chaney
1115 Regal Row
Houma, Louisiana 70360

Gentlemen:

Your letter dated April 17, 1995, requests approval to abandon in place 4,200 feet (0.79 miles) of 10 5/8-inch pipeline, designated as Segment No. 1227, and to relinquish in its entirety, Right-of-Way Grant OCS-G 1854, associated therewith. The subject pipeline originates at MOBIL OIL EXPLORATION & PRODUCING SOUTHEAST INC.'s Platform 02 in Block 64, East Cameron Area, and terminates at a subsea tie-in with Tennessee Gas Pipeline Company's 26-inch pipeline (OCS-G 1854) in Block 176 West Cameron Area.

Pursuant to 30 CFR 250.4(b), approval is hereby granted to abandon the above-described pipeline, and in accordance with 30 CFR 250.159(c)(9), 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 other uses of the Outer Continental Shelf, Tennessee Gas Pipeline Company shall be required to remove it.

Pursuant to 30 CFR 250.150(b), the relinquishment of the right-of-way grant associated with the pipeline that is to be abandoned in place is hereby accepted effective April 8, 1995. Tennessee Gas Pipeline Company shall, by December 31, 1995, submit a report to this office which includes the date the abandonment was completed and verifies that the abandonment was completed as approved.

The remaining portion of Right-of-Way OCS-G 1854 will be 176,300 feet (33.39 miles).

Sincerely,

[Orig. Sgd.] Kent E. Stauffer

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 (P/L OCS-G 1854) w/encl (K.Faust) (MS 5232)
1502-01 (P/L OCS-G 1854) w/cy of encl (microfilm) (MS 5033)
MS 5421
MS 5270
MS 5280
MS 5232 Carto

MConner:jvl:04/19/95:Tennesse.854

5/1/95

Tennessee Gas Pipeline
A Tenneco Company

Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360
(504) 868-6785

April 17, 1995

OCS-G-1854
SN 1227
Kathy

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394
Attention: Mike Conner

Re: Permanent Abandonment and Partial Relinquishment of Pipeline Right of Way, OCS-G 1854, Seg. No. 1227, East Cameron Block 64 Line

Dear Mike:

In accordance with Title 30 CFR Part 250, Subpart J, 250.156 and 250.164, Tennessee Gas Pipeline Company hereby requests approval to permanently abandon and relinquish approximately 0.80 miles of ten inch (10") pipeline in the East and West Cameron Areas, Offshore Louisiana.

The temporary abandonment of the above pipeline was approved on October 14, 1992. Tennessee Gas Pipeline Company hereby requests approval to relinquish the pipeline right of way associated with this abandonment. TGP is requesting this permanent abandonment and relinquishment based on the fact that there is no future use for this pipeline. This line has been abandoned as proposed since October 1992.

If you should require any additional information regarding this matter, please call this office.

Sincerely,

B. J. Chaney, Supervisor Rights of Way as Agent and Attorney-in-Fact

KJC:kjc

cc: M. Taylor
G. Benoit
O. O. Jones
L. Rosales
File

MINERALS MANAGEMENT SERVICE
RECEIVED
APR 18 1995
FIELD OPERATIONS
Gulf of Mexico OCS Region, New Orleans, La.

11/16/94
McConner
Butler 11/21/94

NOV 28 1994

In Reply Refer To: MS 5232

Tennessee Gas Pipeline Company
Attention: Mr. B. J. Chaney
1115 Regal Row
Houma, Louisiana 70360

Gentlemen:

Your application dated November 14, 1994, to install, operate, and maintain a 6 5/8-inch subsea tie-in as an appurtenance to existing pipeline Right-of-Way OCS-G 1854, Segment No. 3513 at coordinates X = 1,478,593 and Y = 361,959 in Block 2, East Cameron Area is hereby approved, as proposed. Additionally, pursuant to 30 CFR 250.150(b), your request to modify the above-captioned pipeline right-of-way to allow for the aforementioned action is hereby granted.

This approval is subject to the following:

Tennessee Gas Pipeline Company shall submit a hydrostatic pressure test report of the subject modification to this office within 30 days upon completion.

Based on our analysis of the application, the maximum allowable operating pressure for this subsea valve assembly will be 1,200 psig.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 P/L OCS-G 1854 w/orig appln (KFaust) (MS 5232)
1502-01 P/L OCS-G 1854 w/cy of appln (microfilm) (MS 5033)
MS 5280

MConner:amm:11/15/94:Tennesse.854

$1854

ole
11/28/94

Tennessee Gas Pipeline
A Tenneco Company

Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360
(504) 868-6785

OCS-G-1854
SN 3513
Kathy

November 14, 1994

U. S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Attention: Mike Conner

Re: Amended Application for Natural Gas Pipeline in the East Cameron Area, Gulf of Mexico, KICAT (2)-130, OCS-G 1854, Segment No.3513

Dear Mike:

Pursuant to the authority granted in 43 U.S.C. 1334 (3) and 30 CFR 250.157 (b), and in compliance with the regulations contained in Title 30 CFR, Part 250, Subpart J, Rights of Way for Pipelines on the Outer Continental Shelf, Tennessee Gas Pipeline Company is filing this amended application in quadruplicate for the hot-tap and installation of a six inch (6") sub-sea valve on the above referenced pipeline. This activity will be located in the East Cameron Area, Gulf of Mexico, Offshore Louisiana, in East Cameron Block 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 non-discriminatory access to both owner and non-owner shippers; Sec. 5 (f)(1); Sec. 5 (e), addressing the assuring of maximum environmental protection, including the safest practices for pipeline installation; and Sec. 5 (f)(1)(B) which may require expansion of a thruput 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 Regional Manager, Gulf of Mexico OCS Regional Office, and

MINERALS MANAGEMENT SERVICE
RECEIVED
NOV 14 1994
FIELD OPERATIONS
GULF OF MEXICO OCS REGION, NEW ORLEANS, LA

make every reasonable effort to preserve and protect the cultural resource from damage until said Regional Supervisor has given directions as to its preservation.

Tennessee Gas Pipeline Company's shore base for operations will be Intracoastal City, Louisiana.

In support of this application we attach the following:

1. Originally signed copy of Non-Discrimination in Employment Stipulations in quadruplicate.

2. A letter of No Objection from British-Borneo, operator of Lease No. OCS-G 10605 in E.C. Block 2.

3. Four (4) copies of Drawing Nos. OCS-105, 106 AND 107, showing the location of the proposed hot-tap.

4. Construction information as required by Minerals Management Service's "Pipeline Guidelines & Procedures" dated March, 1984.

Please refer to Tennessee Gas Pipeline Company's Miscellaneous No. 014 file for previously filed and accepted pipeline right of way qualifications as well as other appropriate documents authorizing the below signee.

Tennessee Gas Pipeline Company wishes to "hereby certify that the proposed activity described in the permit application complies with and will be conducted in a manner that is consistent with the Coastal Resources Program of the State of Louisiana".

STIPULATION

Tennessee Gas Pipeline Company 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.

Applicant agrees to be bound by the foregoing regulations, and further agrees to comply with the applicable stipulations as set forth in the Minerals Management Service Pipeline Procedures guidebook dated March, 1984. Additionally, the design of the proposed pipeline is in accordance with the "Minimum Federal Safety Standards" (Department of Transportation) Title 49 CFR Parts 192 and 195."

If the above and attached information meets with your approval, we would appreciate your issuing the necessary permit for the right of way as soon as possible.

Sincerely,

TENESSEE GAS PIPELINE COMPANY

B. J. Chaney, Supervisor
Rights of Way as Agent and
Attorney-in-Fact

BJC/KJC:hbg

Enclosures

cc: O. O. Jones
M. Taylor
G. P. Benoit
L. Onwuka
J. Auriemma
File

C:\WPFILES\BJC94\APPLECAM

NOTE: This form must be executed as an original.

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 Tennessee Gas Pipeline Company 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 grant the grantee agrees as follows:

> During the performance under this grant, the grantee shall fully comply with paragraphs (1) through (7) of section 202 of Executive Order 11246, as amended, (reprinted in 41 CFR 60-1.4 (a)), which are for the purpose of preventing discrimination against persons on the basis of 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.

B. J. Adams
Signature of Grantee

Date: November 14, 1994

YM 3341-1
(July 1982)

BRITISH-BORNEO
EXPLORATION, INC.

1021 MAIN STREET SUITE 1700 HOUSTON TEXAS 77002-6602
TEL. 713-650-8292 FAX 713-650-1053

November 10, 1994

Tennessee Gas Pipeline Co.
Sugar Mill Point
1115 Regal Row
Houma, LA 70360

ATTN: **Mr. Kurt Cheramie**

RE: **Letter of No Objection - Proposed Hot Tap Operation in East Cameron Block 2, OCS-G 10605**

Dear Mr. Cheramie:

This letter is to serve as British-Borneo Exploration, Inc.'s ("BBEI") notification it has no objection to the referenced operation. BBEI is the designated operator of the subject lease.

Thank you for your attention to this matter. Please do not hesitate to call if you have any questions.

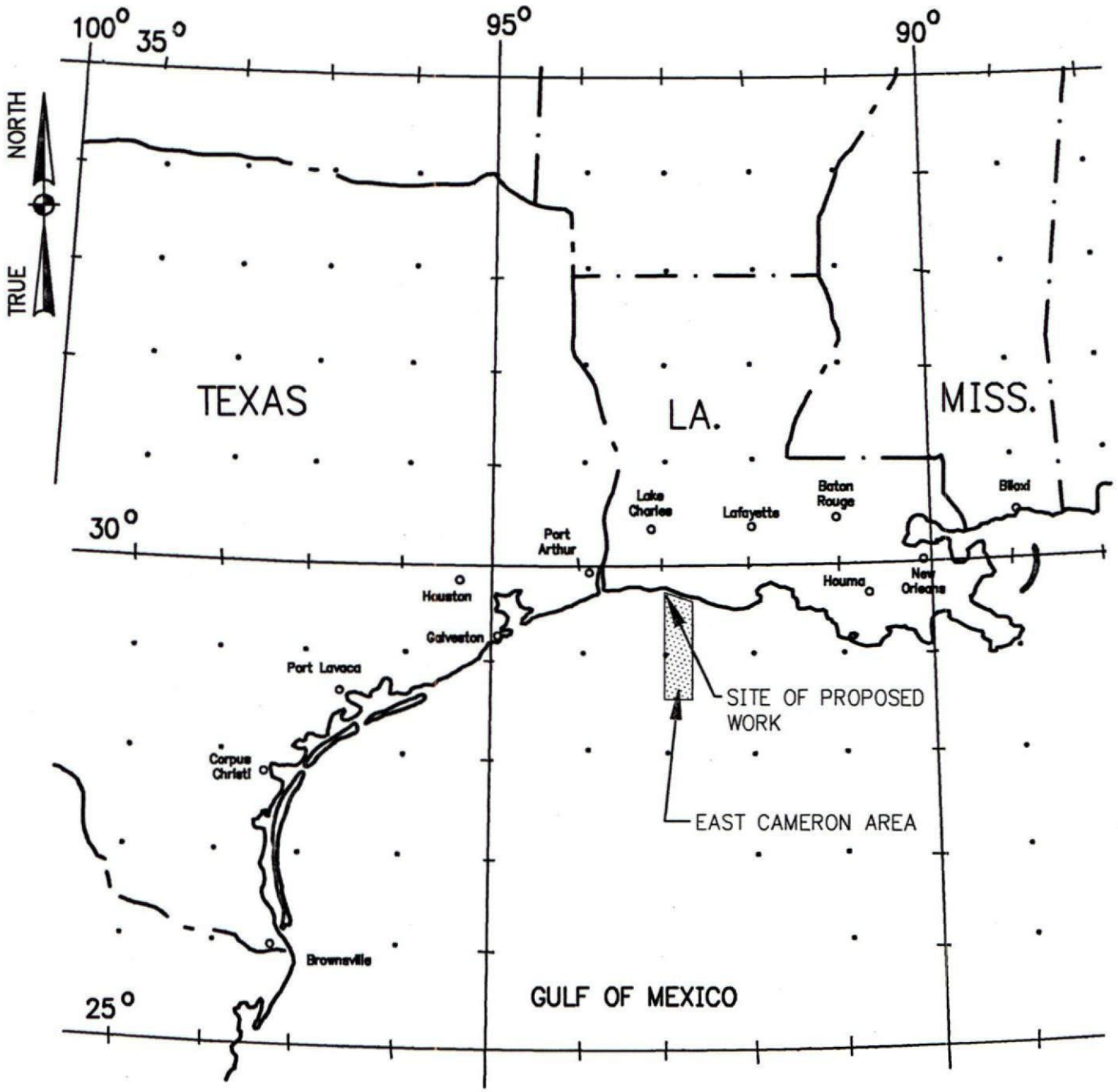
Sincerely,

G. Ross Frazer

G. Ross Frazer, P.E.
Operations Mgr

cc: Project File (GRF)
JCCI (CT)

G:\DATA\WPWORK\ROSS_F\EC2\1110TGPL.LTR



VICINITY MAP

0 25 50 75 100 200
SCALE IN MILES

PERMANENT RIGHT OF WAY – 200'

STATE OF TEXAS
DENNIS W. GARDNER
41207
REGISTERED PROFESSIONAL ENGINEER
11/9/94

Prepared By:
MUSTANG ENGINEERING, INC.

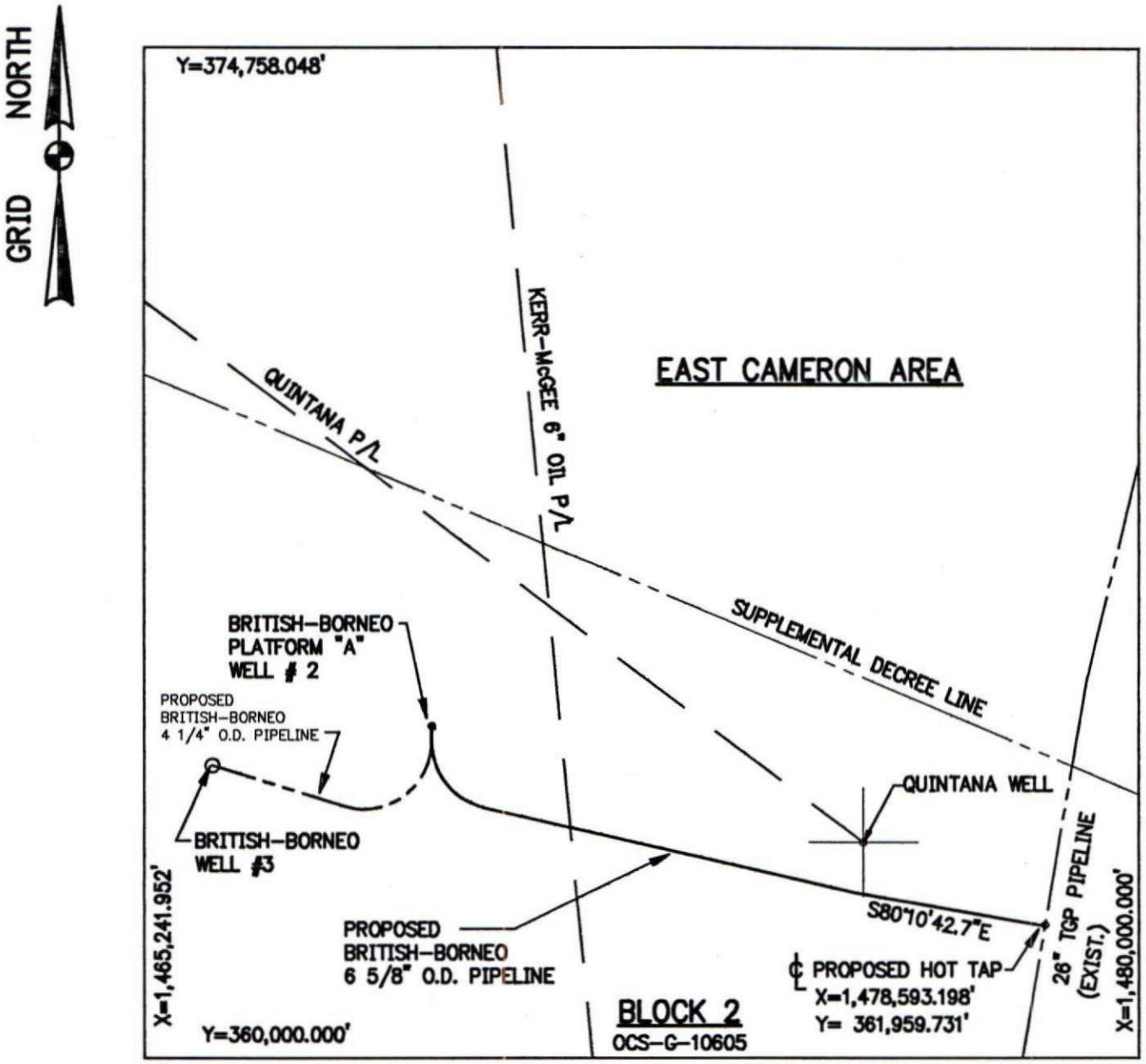
M.E.I. JOB NO. 4260

TENNESSEE GAS PIPELINE

PROPOSED 6.625" HOT TAP
EAST CAMERON BLOCK 2 SEGMENT 3913 OCS-G-1854

VICINITY MAP | OCS-105

426050CS.DWG 09NOV94 1258 4260 SF1 IMP KLIPIN



STATE OF TEXAS
DENNIS W. GARDNER
41207
REGISTERED PROFESSIONAL ENGINEER
11/9/94

Prepared By:
MUSTANG ENGINEERING, INC.

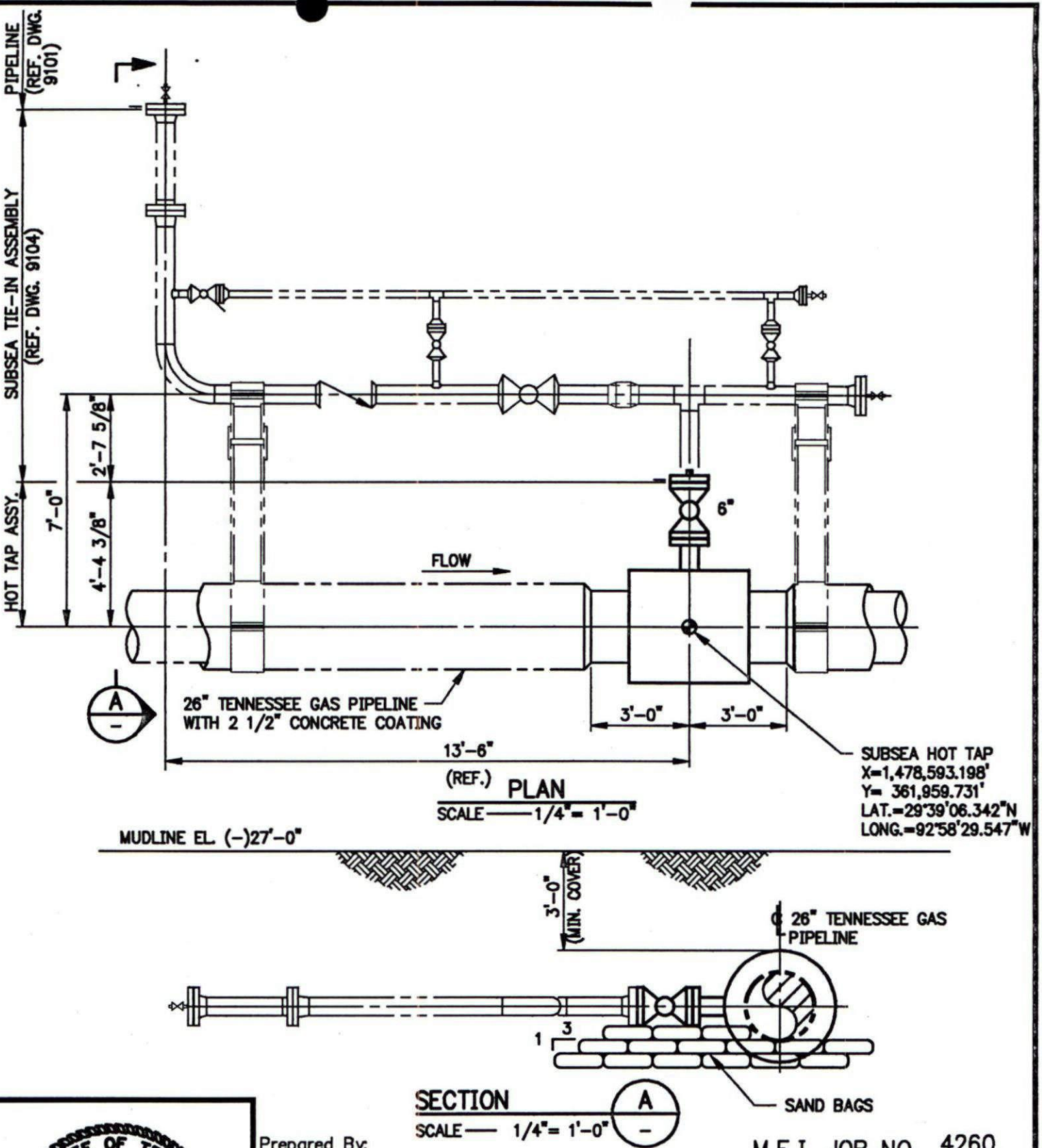
M.E.I. JOB NO. 4260

TENNESSEE GAS PIPELINE

PROPOSED 6.625" HOT TAP
EAST CAMERON BLOCK 2 SEGMENT 3913 OCS-G-1854

LOCATION PLAN | OCS-106

42606OCS.DWG 09NOV94 1316 4260 SF48 IMP KLIPIN



STATE OF TEXAS
DENNIS W. GARDNER
41207
REGISTERED PROFESSIONAL ENGINEER
11/9/94

Prepared By:
MUSTANG ENGINEERING, INC.

M.E.I. JOB NO. 4260

TENNESSEE GAS PIPELINE

PROPOSED 6.625" HOT TAP
EAST CAMERON BLOCK 2 SEGMENT 3913 OCS-G-1854

HOT TAP ASSEMBLY | OCS-107

42607OCS.DWG 09NOV94 1424 4260 SF48 IMP KLIPIN

CONSTRUCTION INFORMATION

1. COMPANY CONTACT

Mr. O. O. Jones, Manager Marine Construction
Tennessee Gas Pipeline Company
Sugar Mill Point, 1115 Regal Row
Houma, Louisiana 70360
(504)868-6785

2. DATA ON HOT TAP

VALVES
Hot tap valve and assembly valves will be ANSI 600 series with a rated working pressure of 1,480 psig.

TAP
The tap will be made using a mechanical hot tap clamp (Hydrotech Hydroclamp). The clamp is a ANSI 600 series with a rated working pressure of 1,480 psig.

ASSEMBLY PIPE

Outside Diameter (in.)	6.625
Pipe Wall Thickness (in.)	0.432
Welding Fittings Wall Thickness, Grade B (in.)	0.432
Material	API 5L
Grade	Grade B
Weight in Air w/o Coating (lb/ft)	28.57
Submerged Weight w/o Coating (empty) (lb/ft)	13.25
Coating (Fusion Bonded Epoxy)	14 mils

3. WATER DEPTH

Water depth at the tie-in is approximately 28 fsw.

4. BURIAL DEPTH

The hot tap valve shall be buried three (3) feet below the mudline.

5. MAXIMUM ALLOWABLE OPERATING PRESSURE

A. Design Pressure of Line Pipe:

$P = (2St/D) \times F \times E \times T$

$F = 0.60$

$E = 1.00$

$T = 1.00$ (max. Temp 100°

S = Specified Minimum Yield Stress of Pipe

$P = 2 \times 35000 \times 0.432 \times 0.60 \times 1.00 \times 1.00 \div 6.625 = 3286$

B. Minimum Hydrostatic Test Pressure:
Subsea Assembly
2220 psig min., 2500 psig max.
Hold time: 8 hours. Test medium: water

C. Design pressures of Flanges, Fittings and Valves in Pipeline and Riser:

ANSI Rating: Class 600 (Subsea Fittings)
At maximum Temperature of 100°F, ANSI B16.5 Rating (Table 2-900): P = 1480 psig

D. Maximum Allowable Operating pressure (MAOP) of Pipeline/Tie-in System is the lesser of the following Design Parameters:

A. Tie-In Assembly & Pipeline Design pressure = 3286 psig
B. Hydrostatic Test Pressure / 1.25 = 2220/1.25 = 1776 psig
C. Fitting Rating (ANSI 600) = 1480 psig
D. MAOP of Mainline (TGP 26") = 1200 psig

During Operations, the design of the Pipeline exceeds or equals the requirements of DOT Title CFR 49, 192.

6. TIME PERIOD FOR CONSTRUCTION

The anticipated installation of the tie-in assembly is December 3, 1994. The time required to complete the project is approximately 3 days.

Tennessee Gas Pipeline

Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360

November 17, 1993

MINERALS MANAGEMENT SERVICE
RECEIVED
NOV 22 1993
FIELD OPERATIONS
GOM OCS Region, New Orleans, La.

U.S. Department of the interior
Attention: Mr. Frank Patton
Minerals Management Service
Gulf of Mexico, OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Re: Report of Gas Leak and Repair of Tennessee Gas Pipeline Company's Line No.507K-1600, (OCS-G1854-H ROW)

Dear Mr. Patton:

The following is information on a leak reported by Conoco on Tennessee's line No. 507K-1600.

1. BLM Right-of-Way OCS-G1854-H segment No. 3760.
2. The pipeline product is natural gas.
3. The initial report was made to the NRC representative Chief Jones at 11:30 a.m. on October 17, 1993 and to the MMS representative Mr. Jim Wozney at 7:40 a.m. on October 18, 1993 by Mr. Louis Keller of Conoco. The incident was reported to Tennessee Gas pipeline Company at 2:25 p.m. on October 18, 1993.
5. The location of the leak was on Conoco's West Cameron Block 177-3 platform on TGP's 4" pipeline.
6. The leak was caused by the rupture of a 1-inch valve at 9:45 a.m. on October 17, 1993.
7. There were no injuries or fatalities.
8. Pipeline pressure was 480 psig.
9. The cause of the valve rupture has not yet been determined but is being investigated by Tennessee's Technical Services Lab.
10. The leak was minimal and no more than 26MCF of natural gas was released. A small amount of condensate was released which produced a temporary sheen on the water and was estimated by Conoco to be approximately 1.45 gallons
11. The valve replacement was completed at 10:05 a.m. on October 17,1993 by Conoco.
12. All repairs were in compliance with D.O.I. Regulations.

Sincerely,

O. O. Jones
Manager Marine Construction

pjc/cc: W. M. Murray, J. M. Nunnally, L. R. Cates,
C. E. Whitney, Files

TIMELESS energy 1943-1993

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
GULF OF MEXICO OCS REGION
1201 ELMWOOD PARK BOULEVARD
NEW ORLEANS, LOUISIANA 70123-2394

TAKE PRIDE IN AMERICA

G1854-H

In Reply Refer To: LE-3-1
N. O. Misc. No. 014

November 30, 1989

ACTION

Tennessee Gas Pipeline Company — Right-of-Way

MERGER AND CHANGE OF NAME RECOGNIZED

On October 17, 1989, there was filed in this office for approval evidence of merger of Tenneco Merger Company, an unqualified corporation, with and into Tenneco Inc., a Delaware corporation (N. O. Misc. No. 014), and, as of the date of the merger, Tenneco Inc. changed its name to Tennessee Gas Pipeline Company. The effective date of the merger and simultaneous change of name is December 8, 1987. The name of the surviving corporation is Tennessee Gas Pipeline Company and the qualification number assigned thereto is New Orleans Miscellaneous File Number 014.

In connection with the merger and change of name, the following evidence was received:

1. Agreement and Plan of Merger of Tenneco Merger Company with and into Tenneco Inc. under the name of Tennessee Gas Pipeline Company, duly certified by the Secretary of State of the State of Delaware on December 8, 1987, with additional certification by James Gaughan, Assistant Secretary of Tennessee Gas Pipeline Company, on June 7, 1989;

2. Certificate reflecting that Tennessee Gas Pipeline Company is duly incorporated under the laws of the State of Delaware and is in good standing, executed by the Secretary of State of the State of Delaware, on November 3, 1988;

3. Certificate reflecting that Tennesseee Gas Pipeline Company is incorporated under the laws of the State of Delaware and that it is authorized to hold pipeline rights of way and mineral leases on the Outer Continental Shelf, duly executed by Vincent F. Ewell, Jr., Assistant Secretary of Tennessee Gas Pipeline Company, on June 7, 1989;

4. Certificate listing the elected or appointed and now acting officers of Tennessee Gas Pipeline Company, duly executed by James Gaughan, Assistant Secretary of Tennessee Gas Pipeline Company, on June 7, 1989;

5. Copy of resolutions adopted at a meeting of the Board of Directors of Tennessee Gas Pipeline Company held on May 9, 1989, duly certified by James Gaughan, Assistant Secretary of Tennessee Gas Pipeline Company, on June 1, 1989;

6. Bond Rider to be attached to Outer Continental Shelf Right of Way Bond Number 61 S 33110-15-79 BCA changing the name of the principal to Tennessee Gas Pipeline Company, effective December 8, 1987;

7. Listing of the pipeline rights-of-way to be affected by the merger and change of name.

Since the transfer and vesting of property rights in the surviving corporation have been effected by State statutes by operation of law and not by individual conveyances, the merger and change of name are hereby approved insofar as they affect pipeline rights-of-way under 30 CFR 250. The change in ownership as to the pipeline rights-of-way listed below is recognized and the records so noted:

OCS-G NO.	OCS-G NO.	OCS-G NO.	OCS-G NO.	OCS-G NO.
0643	1345	1692	1854	2121-E
0643-A	1376	1702	1854-A	2123
0643-B	1382	1702-B	1854-B	2214
0643-C	1382-A	1702-C	1854-C	2214-A
0643-D	1383	1702-D	1854-E	2975
0649	1434	1702-E	1854-F	2975-A
0875	1434-A	1702-F	1854-G	3221
0877	1434-G	1702-H	1854-H	3221-A
0885	1434-H	1702-I	1854-I	3348
0886	1434-J	1702-K	1907-W	3349
0887	1434-K	1702-L	1950-J	3350
0887-A	1461	1702-M	1950-L	3355
0889	1464	1702-O	1992	3357
0891	1464-A	1702-P	2121	3358
0891-A	1683	1702-Q	2121-A	3360
0892	1684	1702-R	2121-B	3437
0895	1687-S	1702-S	2121-C	3449
1320	1687-T	1702-T	2121-D	3451

OCS-G NO.	OCS-G NO.	OCS-G NO.	OCS-G NO.	OCS-G NO.
3455	4028	4290	4855	7109
3613	4030	4291	4977	7535
3614	4040	4306	5135	7536
3626	4043	4308	5136	7552
3633	4061	4309	5137	7554
3638	4150	4340	5141	7575
3644	4154	4341	5152	7576
3648	4158	4373	5157	7587
3652	4160	4374	5232	8046
3828	4161	4526	5253	8047
3837	4169	4603	5259	8050
3845	4171	4605	5933	8056
3848	4173	4608	5937	8057
3851	4276	4609	6381	8527
3852	4282	4613	6546	8617
3855	4283	4641	7096	10396
3861	4284	4644	7104	11165
3862	4287	4686	7107	11174

J. Rogers Pearcy
Regional Director

cc: Associates
Case Files
Qualification File (N. O. Misc. No. 014)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
NEW ORLEANS OFFICE
SUITE 3200 THE PLAZA TOWER
1001 HOWARD AVENUE
NEW ORLEANS, LA. 70013

IN REPLY REFER TO
2883 (400)

OCS-G 1854-H
West Cameron Area

April 15, 1976

DECISION

Tenneco Inc.	:	Right of Way for Pipe Line
	:	
	:	Date of Permit: 7/28/75
	:	
	:	Decision Requesting Proof of Construction Dated:
	:	
	:	Proof of Construction Received: 4/9/76

Proof of Construction Accepted

The above-captioned permittee has submitted the evidence required by the law and regulations 43 CFR 2883.2-3(a). The proof of construction is hereby accepted and approved. Minor deviation noted.

Harold P. Sieverding

Harold P. Sieverding
Acting Manager

Copy to cc: U. S. Geological Survey w/ dwg.

Form GOCS#2

Tennessee Gas Pipeline
Division of Tenneco Inc

P.O. Drawer 53388
Lafayette, Louisiana 70501
(318) 233-7802

TENNECO

RECEIVED
[illegible] '76
[illegible] MGMT.
[illegible] CONTINENTAL
[illegible] OFFICE
[illegible] LA.

April 8, 1976

Mr. John L. Rankin, Manager
United States Department of The Interior
Bureau of Land Management
Suite 3200 The Plaza Tower
1001 Howard Avenue
New Orleans, Louisiana 70113

Re: Proof of Construction
Pipeline Right of Way
OCS-G 1854-H
West Cameron Area
West Cameron Block 177 Line

Dear Mr. Rankin:

On July 28, 1975, application for pipeline right of way was approved and permit issued for the construction of a four and one-half inch ($4\frac{1}{2}$") natural gas pipeline in the West Cameron Area, Gulf of Mexico, Louisiana.

In accordance with regulations 43 CFR 2883.2-3(a), we attach herewith in duplicate, the As-Constructed Drawing TO-F2-507K-1600-1, showing the deviation from the right of way as originally planned and submitted.

If there is any additional information needed pertaining to this matter, please advise.

Yours very truly,

R. S. Perot
Right of Way Agent

RSP/jsb

cc: R. L. Sanderson
J. B. Inglis
H. E. Fisher
R. G. Robertson
J. D. DeBlieux
F. J. Millette, Jr.
File

K&E 10 5155 5-73 MC559•

TAX DISTRICT DATA

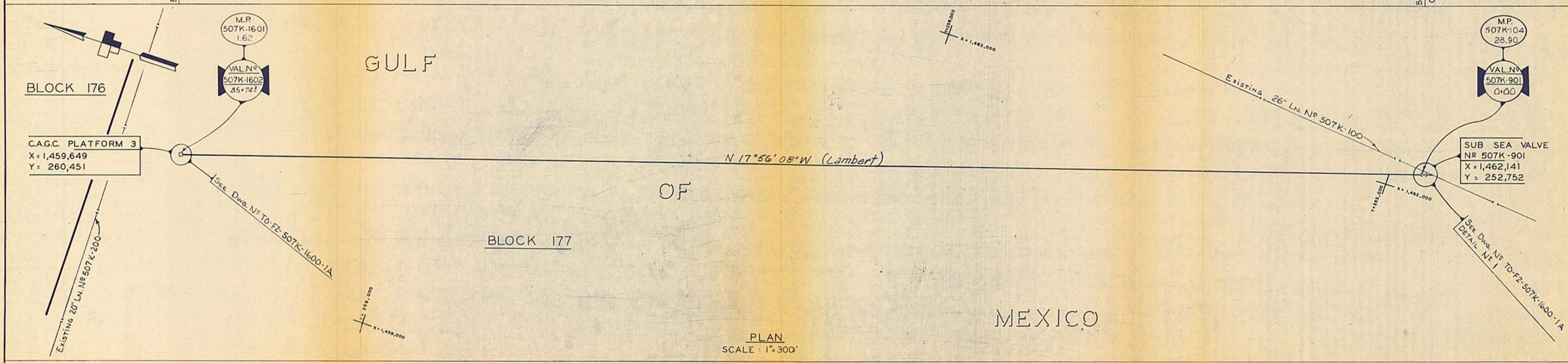
OWNERSHIP & LINE LIST NO.

END LINE

UNITED STATES OF AMERICA
(GULF OF MEXICO)

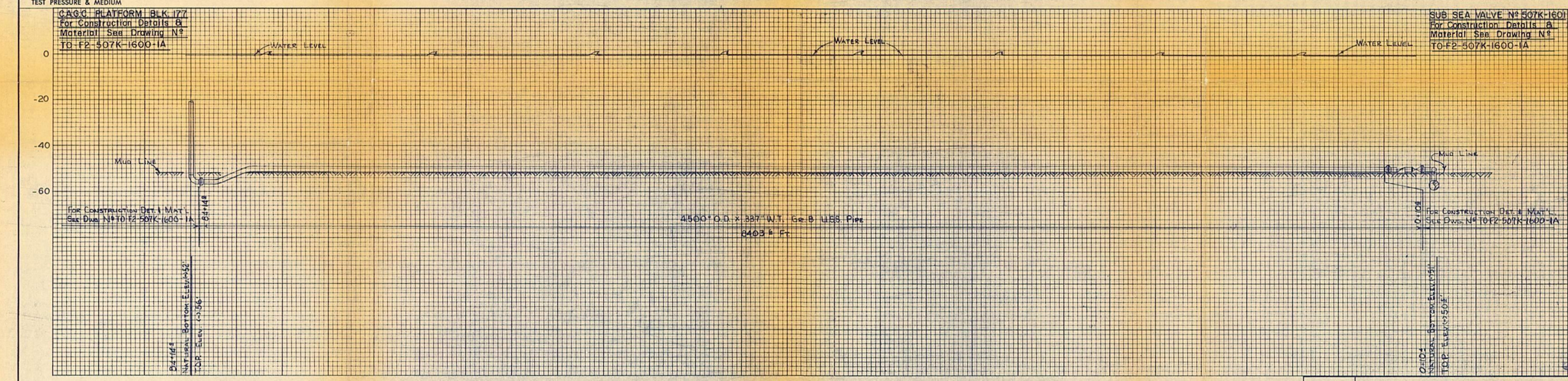
BEGIN LINE 0+00

RECEIVED
APR 9 8 37 AM '76
BUR. OF LAND MGMT.
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA.



PLAN
SCALE : 1" = 300'

TEST PRESSURE & MEDIUM



PROFILE
SCALE = HORIZ. : 1" = 300'
VERT. : 1" = 20'

PERMIT DRAWINGS
TA-N2-F507K-1600-1, 1A, & 1B

BEST AVAILABLE COPY

BEST AVAILABLE COPY

LOCATION OF RIGHT-OF-WAY HAS BEEN ACCURATELY DELINEATED ON THIS MAP
Richard E. Sons
RICHARD E. SONS
LOUISIANA REGISTERED PROFESSIONAL CIVIL ENGINEER NO. 11308

WELDING PROCEDURE

MATERIAL SUMMARY

QUANTITY	ITEM NO.	DESCRIPTION
		MATERIAL FURNISHED BY C.A.G.C.
8403± Ft.	1	Pipe, 4.500" O.D. x .337" W.T. 14.984 #/Ft. Gr. "B" U.S.S. Pipe

Sec # 3760
OCS-G 1854-N "As-Built"

C.O. NUMBER & DESCRIPTION: C.O. 43321
FIELD BOOKS: PRELIM. / CONST. / FINAL

REFERENCE DRAWINGS

DRAWING NO.	TITLE
T0-F2-507K-1600-1A	RISER DETAIL
T0-MP-507K-1600-1	METER STATION
T0-F2-507K-100-14	KINDER-C.A.G.C. LN. Nº 2 DETAILS

TENNECO
Tennessee Gas Pipeline Company
Division of Tenneco Inc.
Engineering Department — Houston, Texas

DRAWN BY	Hank	DATE 1-9-76
CHECKED BY		DATE
CORRECTED BY		DATE
APPROVED BY		DATE
C.O. 43321		SCALE Shown
ISSUE DATES	ORIGINAL	
	LAST	

WEST CAMERON BLK. 177 LINE
LN. Nº 507K-1600
WEST CAMERON AREA — GULF OF MEXICO
VALVE SECTION ENTIRE LINE ON THIS SHEET

APPROVED BY
CHIEF ENGINEER
TENNESSEE GAS PIPELINE CO.

TO-F2-507K-1600-1

Tennessee Gas Pipeline
Division of Tenneco Inc

P.O. Drawer 53388
Lafayette, Louisiana 70501
(318) 233-7802

RECEIVED
AUG 11 8 38 AM '75
BUR OF LAND MGMT.
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA.

August 8, 1975

The Bureau of Land Management
U. S. Dept. of The Interior
Outer Continental Shelf Office
Suite 3200 The Plaza Tower
1001 Howard Avenue
New Orleans, Louisiana 70113

Attn: Mr. Bob Brock
Chief, Division of Operations

Your Re: OCS-G-1854-H
Our Re: West Cameron Blk. 177 Line

Dear Mr. Brock:

This will confirm our telephone conversation of even date whereas we advised you of our contractor's intention to start the Hydrostatic Testing on the above captioned at approximately 2:30 P.M., August 9, 1975.

Yours very truly,

R. S. Perot
Right of Way Agent

RSP/jsb

cc: R. L. Sanderson
H. E. Fisher
R. G. Robertson
J. D. DeBlieux
F. J. Millette, Jr.
File

Form 1541–3
(July 1965)
(formerly 4–1599 a)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIRMATION/REPORT OF TELEPHONE CONVERSATION

TO		FROM	
Name	Louis Mc Bee	Name	EMILE H. SIMONEAUX, JR.
Office	G. S.	Office	BLM
Location	Metairie	Location	N. O., LA
Telephone Number	837-4720	Telephone Number	589-6541

Purpose of Call:

I called Mr. Louis Mc Bee today ~~and~~ to inform him that Tennessee Gas Pipeline OCS G-1854-H in West Cameron Block 177 will Hydrostatically Tested at approximately 2:30 P.M. August 9, 1975.

Mr. Mc Bee ~~was~~ was not in the office. Therefore, ~~the~~ his secretary took the message. I told ~~the~~ his secretary if he had any questions regarding this matter he could call me.

Explanatory Remarks:

August 8, 1975
(Date)

Emile H. Simoneaux, Jr.
(Signature)

CONFIRMATION COPY

GPO ☆ 780-070

Tennessee Gas Pipeline
Division of Tenneco Inc

P.O. Drawer 53388
Lafayette, Louisiana 70501
(318) 233-7802

TENNECO

RECEIVED
AUG 1 8 08 AM '75
BUR OF LAND MGMT.
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA.

July 31, 1975

The Bureau of Land Management
U. S. Dept. of The Interior
Outer Continental Shelf Office
Suite 3200 The Plaza Tower
1001 Howard Avenue
New Orleans, Louisiana 70113

Attn: Chief, Division of Operations

Your Re: OCS-G 1854-H

Our Re: West Cameron Blk. 177 Line

Dear Sir:

Please be advised that Tennessee Gas Pipeline Company's contractor plans to start construction on the above captioned line on or before August 3, 1975.

Yours very truly,

R. S. Perot
Right of Way Agent

RSP/jsb

called Bob Krueger 8-1-75 + gave GS info above,
Bob

cc: R. L. Sanderson
H. E. Fisher
R. G. Robertson
J. D. DeBlieux
F. J. Millette, Jr.
File

2883 (400)

OCS-G 1854-H

West Cameron Area

July 28, 1975

DECISION

Tenneco Inc. Right-of-Way

Application Approved

The above application was filed for approval on June 12, 1975, pursuant to Sec. 5(c) of the Outer Continental Shelf Lands Act of August 7, 1953 (67 Stat. 462) and the regulations promulgated thereunder (43 CFR 2883).

This application is for a right-of-way 200 feet in width for the proposed construction, maintenance, and operation of a 4.5-inch natural gas pipeline from C.A.G.C.'s Production Platform in Block 177, West Cameron Area, to a subsea tie-in with Tenneco Inc.'s 26-inch gas pipeline in the Southeast quadrant of Block 177, West Cameron Area, a distance of 1.53 miles as shown on Drawings No. TA-L2-F507K-1600-1 and TA-L2-F507K-1600-1A filed with the application.

The pipeline is to be laid on the bed of the waterway. Burial is waived due to the estimated life of the field, however, the side tap valve must be jetted down.

Proof of the notification of lessees affected by the subject right-of-way has been furnished.

The applicant has further consented to the stipulations regarding non-discrimination in employment, which are hereby made a part of this permit.

The application has been found to be in proper form and in accordance with 43 CFR 2883.2-1. The qualifications of the company and the authority of the signing officer are of record at this office.

The annual rental for the pipeline is $10.00. Operator submitted a draft in the amount of $20.00 to cover the rental for 1975 and the required application fee of $10.00,

Accordingly, the application is hereby approved and the right-of-way granted.

Proof of construction of the pipeline authorized hereunder should be submitted in accordance with 43 CFR 2883.2-3(a).

Tenneco Inc. OCS-G 1854-H

Design characteristics of this pipeline are:

Pipeline Nomenclature	Maximum Allowable Pressure/WP Ratings
Submerged component	3,774 psig
Riser component	3,145 psig
Piping, fittings, valves	1,440 psig

Statis hydro-pressure test will be 2,160 psig for 8 hours.

The maximum allowable pressure for this pipeline is 1,440 psig, and shall not be exceeded except when static hydro-pressure testing the pipeline.

Applicants are required to notify the Manager or Chief, Division of Operations, at least forty-eight (48) hours prior to the commencing of initial installation of this pipeline from the lay barge and to conducting the static hydro-pressure testing.

A copy of the completion report consisting of a plat showing the location of the pipeline as installed and a static hydro-pressure test report giving test procedure, test pressure, hold time, copy of pressure chart, and results are required.

John L. Rankin
Manager

cc: U. S. Geological Survey ✓

Phone log No. BLM-OCS-G 1854-H
LUC 177

P/L APPLICATION CHECK LIST

INSTRUCTIONS: Check the blank on the left if the statement is affirmative or correct data submitted. Mark 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 on the right.

A. Verify the following general information:

____ 1. The applicant is a Federal lease holder. (If the applicant is not a lessee and the line is to be a common carrier, return the application with instructions for the applicant to apply to the BLM).

____ 2. The pipeline is within the lease boundary owned by the operator.

____ a. If another operator has an existing pipeline traversing the proposed route, do we have a copy of the lessee's "intent to cross" letter?

____ 3. The pipeline is within contiguous lease boundaries. (Include 30 CFR 250.18c in approval)

____ 4. The lessee's proposed pipeline will traverse non-contiguous lease boundaries. (Include 30 CFR 250.18c in approval)

BLM

____ a. We have transmitted a copy of the application to BLM pursuant to MOU, paragraph 2, and have received a written review approval from them.

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

✓ 1. The pipeline leaving the platform receiving production from the platform is equipped with high and low pressure sensors, properly tied into the automatic fail close valve, to directly or indirectly shut-in the well or wells on the platform.

NA 2. The pipeline delivering production to production facilities on the platform is equipped with an automatic fail close valve tied into the automatic and remote shut-in system and operated by production vessels shut-in sensors.

✓ 3. The pipeline boarding the platform is equipped with a check valve.

NA 4. The pipeline crossing the 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 automatic and remote shut-in system.

NA 5. The pipeline pump is shown as well as its associated high and low pressure shut-in device.

✓ 6. Pressure source is drawn into the schematic. (If the well pressure is the source, show the wells in the drawing. If a separator pressure is the source, show the separator in the drawing.) If a pump is the pressure source, show the pump in the drawing.

✓ 7. The maximum pressure of the source is shown on the drawing. (The anticipated or known SITP if a well, the rated WP if a separator, etc.)

✓ 8. 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.

NA 9. The location of the choke is shown or a statement as to its location is given.

C. Verify that the location plat depicts the following:

✓ 1. Location of P/L.

✓ 2. Water depth.

✓ 3. Route of P/L.

✓ 4. Length of P/L.

X 5. Burial depth. — NOT BURIED SEE LETTER DATED MAY 21, 1975

✓ 6. Size of P/L.

✓ 7. Type of service.

✓ 8. Direction of flow.

D. Verify that the information given on the submitted data sheet is complete and correct.

✓ 1. Product to be transported. GAS

✓ 2. Size, weight, grade and wall thickness of P/L. 4.5" 14.98 #/FT GR. B 0.337" (5240)
Size, weight, grade and wall thickness of P/L. _____ _____ _____ _____

✓ 3. Length of line. 8,092' (1.533 MILES)

✓ 4. Maximum water depth. 50

✓ 5. Type of corrosion protection (platform anodes, P/L anodes, or rectifier).
P/L ANODES

If platform anodes are used:

NA a. Type of anode _____
NA b. Weight of unit anode _____

If P/L anodes are used:

✓ a. Type of anode. ZINC

✓ b. Spacing interval. 500

✓ c. Weight of unit anode given by operator. 56 #

✓ 6. Description of protective coating. HOMEGARD

If P/L is weighted with concrete:

NA a. Density of concrete. _____

NA b. Thickness of concrete. _____

NA c. Thickness of asphaltmastic. _____

✓ 7. Given specific gravity. 2.12

✓ 8. Gravity or density of product. 0.60 (AIR = 1.0)

✓ 9. MWP. 1440 What is the source? SEPARATOR

✓ 10. MOP and capacity. 1440 2.96 MMCFPD

✓ 11. Hydrostatic pressure and hold time. 2160 8 HRS

E. Calculations and deductions:

1. IPOMYS for submerged pipeline = $\frac{2\ s\ t}{D} = \frac{2 \times 35{,}000 \times .337}{4.5} = 5{,}242$

MAPsc 2. .72 (IPOMYS) (for submerged pipeline) = 3,774

3. IPOMYS for riser = $\frac{2\ s\ t}{D}$ = 5,242

MAPrc 4. .60(IPOMYS) (for riser) = 3,145

MAP pfv 5. Minimum WP rating of piping, fitting, and valves = 1,440

✓ 6. Are 2, 4, and 5 $\geq$ MWP? 1440 $\geq$ 1440 ?

NOTE: If no, a departure is necessary requiring redundant safety equipment.

_____ a. A written request for a departure has been received and the redundant safety equipment is satisfactory.

✓ 7. Is: 1.25 MWP $\leq$ HTP $\leq$ .9 (IP@SMYS for smaller IP of 1 and 3 above)?

NOTE: 1800 $\leq$ 2160 $\leq$ 1718

If the answer is no, inquire of the operator as to what he considers a limit of testing as a percentage of IP@SMYS.

Operator's answer: _____ % of IP@SMYS (for smaller IP).

8. HTP/1.25 = 1728

$MAP_{p/l}$ 9. $MAP_{p/l}$ = the smallest of 2, 4, 5, and 8 above.

$MAP_{p/l}$ = 1,440

✓ 10. SG (for epoxy coated P/L) = 2.865 W/D^2. = $\frac{2.865 \times 14.98}{(4.5)^2}$ = 2.12

NOTE: If weighted P/L, refer to supplement.

✓ a. Is our calculated SG $\tilde{=}$ operator's given SG?

2.12 $\tilde{=}$ 2.12

NOTE: These values should be approximately the same. 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.

✓ 11. Corrosion Protection

a. If Platform Anodes are used, are they considered adequate? N/A

b. If Pipeline Anodes are used:

$LE_{p/l}$ = 3.82 X 10^4 X W^o/DIR^2 = 36.6 yrs.

Is our calculated Life Expectancy $\geq$ 20 years? YES

$LE = \frac{3.82 \times 10^4 \times 56}{4.5 \times 500 \times 26} = 36.6$

United States Department of the Interior

GEOLOGICAL SURVEY

434 IMPERIAL OFFICE BLDG., 3301 N. CAUSEWAY BLVD.

P. O. BOX 7944

METAIRIE, LOUISIANA 70011

TEL: (504) 837-4720

RECEIVED

JUL 24 8 40 AM '75

BUR OF LAND MGMT.
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA.

July 14, 1975

Memorandum

To: Manager, Gulf of Mexico OCS - BLM

From: Conservation Manager, Gulf of Mexico OCS Operations

Subject: Tennessee Gas Pipeline Company's Pipeline Application (OCS-G 1854-H), Reference 2883 (400)

We have reviewed the safety features and design specifications for Tennessee Gas Pipeline Company's Right of Way Application dated May 21, 1975, in accordance with the MOU dated August 1, 1974. It is for the construction, maintenance, and operation of a 4.5-inch gas pipeline 8,092 feet in length from C.A.G.C.'s Production Platform, West Cameron Block 177, OCS-G 1471 to a subsea tie-in with Tennessee Gas Pipeline Company's 26-inch gas pipeline (BLM OCS-G 1854) in the Southeast quadrant of West Cameron Block 177, OCS-G 1471.

Based upon information submitted in the application, the design characteristics of this pipeline are calculated to be as follows:

Pipeline Nomenclature	Maximum Allowable Pressure/WP Ratings
Submerged component	3,774 psig
Riser component	3,145 psig
Piping, fittings, valves	1,440 psig

Static hydro-pressure test will be 2,160 psig for 8 hours.

Based on these calculations, we recommend that the maximum allowable pressure for this pipeline be 1,440 psig, and should not be exceeded except when static hydro-pressure testing the pipeline.

The technical aspects of the proposed pipeline are acceptable in accordance with appropriate regulations and standards.

We would appreciate receiving a copy of the plat showing the location of the pipeline as installed.

Lowell S. Hammons
for A. Dewey Acuff

IN REPLY REFER TO:

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

2883 (400)

DATE: June 19, 1975

TO : Conservation Manager
Gulf of Mexico OCS Operations

FROM : Manager
Gulf of Mexico OCS - BLM

SUBJECT: Tenneco Inc. Pipeline R/W Application (OCS-G 1854-H)

Please find enclosed Map No. TA-L2-F507K-1600-1 for subject application.

Attachment

NOTED
JUN 25 1975
A. D. ACUFF

P-1541-1
Oct. 1968

IN REPLY REFER TO:

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

2883 (400)

DATE: June 17, 1975

TO : Conservation Manager
Gulf of Mexico OCS Operations

FROM : Manager
Gulf of Mexico OCS - BLM

SUBJECT: Tenneco Inc. Pipeline R/W Application (OCS-G 1854-H)

In accordance with the memorandum of understanding between the BLM and USGS signed August 1, 1974, the subject application is attached.

Please review the technical aspects of the proposed pipeline. If you have any questions, please contact Mr. Emile Simoneaux of this office.

Attachment

P-1541-1
Oct. 1968

Tennessee Gas Pipeline
Division of Tenneco Inc

P.O. Drawer 53388
Lafayette, Louisiana 70501
(318) 233-7802

RECEIVED
JUN 12 8 41 AM '75
BUR OF LAND MGMT.
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA.

May 21, 1975

Mr. John L. Rankin, Manager
Outer Continental Shelf Office
Bureau of Land Management
Suite 3200 The Plaza Tower
1001 Howard Avenue
New Orleans, Louisiana 70113

Re: Application - Right of Way
for 4" Natural Gas Pipeline in
West Cameron Area, Gulf of Mexico,
West Cameron Block 177 Line

Dear Mr. Rankin:

Pursuant to Section 5 (c) of the Outer Continental Shelf Lands Act of August 7, 1953, Title 43, Chapter II, Section 2883 of the Regulations of the Bureau of Land Management, Tennessee Gas Pipeline Company, A Division of Tenneco Inc., is filing this application for a right of way 200 feet in width for the purpose of constructing and maintaining a four inch (4") natural gas pipeline in the West Cameron Area of the Gulf of Mexico.

The location and route of the proposed pipeline is shown on Drawings No. TA-L2-F507K-1600-1 and TA-L2-F507K-1600-1A. Also attached is Drawing No. TB-L2-F507K-1600-1B showing the safety features along with Hi-Lo Censor locations. We are enclosing the producers diagram showing their platform piping and safety equipment also. Tennessee Gas Pipeline Company agrees that said right of way, if approved, will be subject to the terms and conditions of said regulations.

As required, we are enclosing the following to support this application:

1. Letter of Application, in duplicate.

2. Certified and Return Receipts with copies of letter of notification to the following lease and right of way holders:

   a. Continental Oil Company - OCS-G 1471
   b. Cities Service Oil Company - OCS-G 1471
   c. Getty Oil Company - OCS-G 1471
   d. Atlantic Richfield Company - OCS-G 1471

3. Four (4) blue line prints of Drawing No. TA-L2-F507K-1600-1, TA-L2-F507K-1600-1A and TB-L2-F507K-1600-1B showing the location, profile and route of the proposed pipeline, and Hi-Lo Censor locations.

4. Two (2) blue line prints of Drawing No. TA-L2-F507K-1600-2 showing the leases and pipeline right of way holders.

5. Tennessee Gas Pipeline Company will transport natural gas in the line.

6. 4.50" O.D. x .337" W.T. Gr-B pipe will be used.

7. Bracelet type sacrificial anodes will be used as corrosion protection with 40 year life expectancy spaced at 500 feet intervals. Anodes weight 56 lbs. each.

8. Homegard coating will be used as protective coating.

9. Bulk specific gravity of the line will be 212% referred to salt water.

10. Gravity of natural gas to be transported is expected to be .60 referred to air.

11. Design working pressure will be 1440 psi with a capacity of 2.96 MMCF per day.

12. Maximum working pressure will be 1440 psi with a capacity of 2.96 MMCF per day.

13. The line is to be tested for 8 hours at a pressure of 2160 psi upon completion.

14. Executed original of Nondiscrimination in Employment Stipulations.

15. An archaeological report is attached for your review.

16. Tennessee Gas Pipeline Company's Draft No. 20400 in the amount of $20.00, of which $10.00 covers the application fee and $10.00 covers the first year's rental on 1.53 miles of right of way.

TENNESSEE GAS PIPELINE COMPANY

Please refer to your miscellaneous 014 file for a copy of a resolution approved by the Board of Directors authorizing the undersigned as Director-Rights of Way of Tennessee Gas Pipeline Company, a Division of Tenneco Inc., to sign for and on behalf of the Company.

Burial of this pipeline was waivered by yourself per telephone conversation with our Mr. R. S. Perot on April 1, 1975.

We will be pleased to furnish you with whatever additional information needed or necessary to expedite the issuance of the Decision approving said right of way.

Yours very truly,

TENNESSEE GAS PIPELINE COMPANY
A Division of Tenneco Inc.

FORM CLC
APPROVED

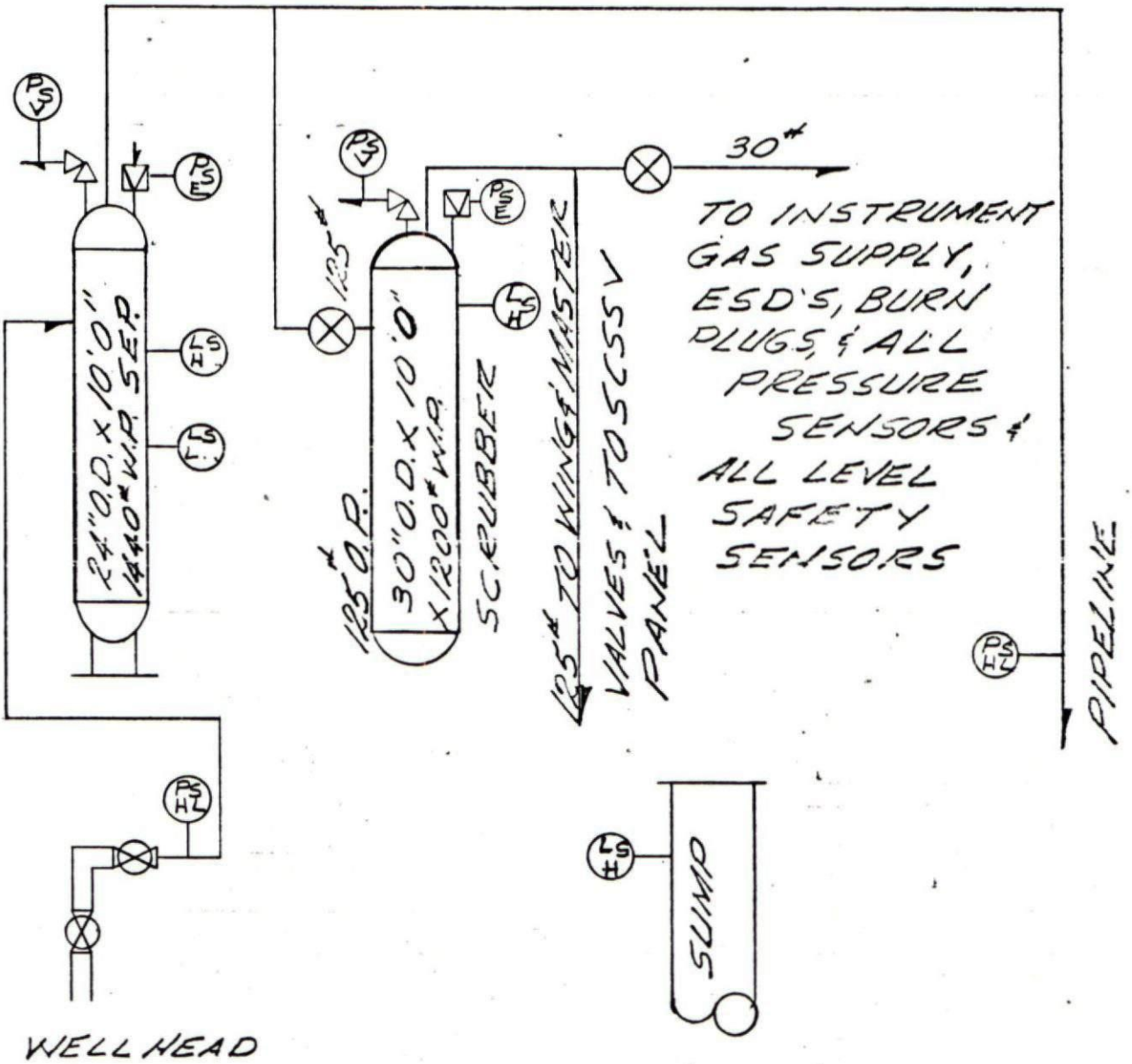
Roy A. Smith
Director-Rights of Way
as Agent and Attorney-in-Fact

RAS:RSP/jsb

Enclosures

cc: File

Certified Mail - Return Receipt No. 411519



⊗ BIG JOE REGULATOR

FURNISHED BY C.A.G.C.
LAKE CHARLES, LA.

4-289 S

ISSUE: APPR: DATE: 3-20-75	WEST CAMERON 179 #3 SAFETY SYSTEM	DWR. WRL/WLS NO.

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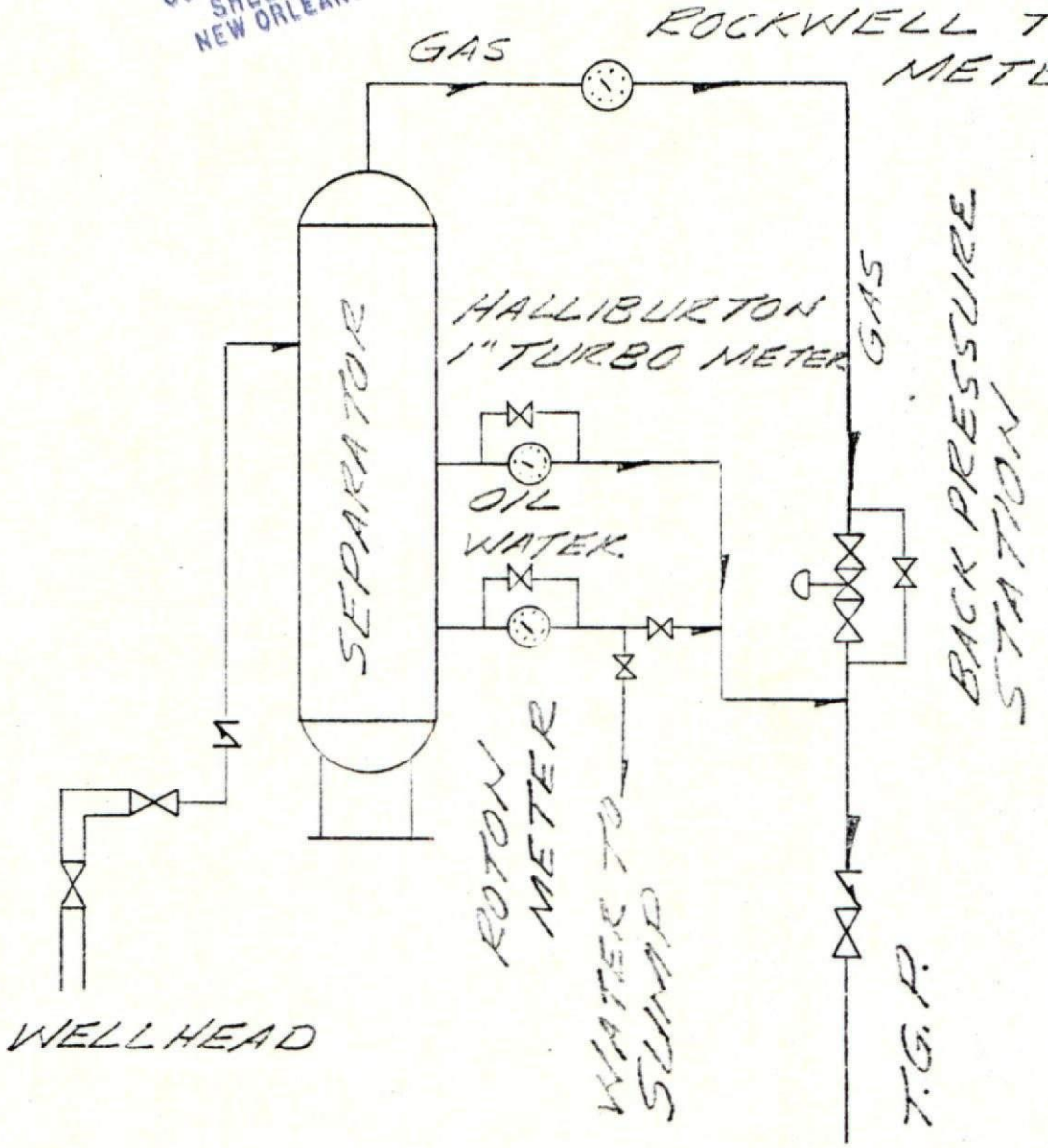
NEW ORLEANS, LA.



NOTE: ALL PIPING & SEPARATION EQUIPMENT FROM WELLHEAD TO T.G.P. CHECK VALVE IS 1440# W.P. DESIGN.

FURNISHED BY C.A.G.C.
LAKE CHARLES, LA.

4-289 S

ISSUE: APPR: DATE: 5-20-75	WEST CAMERON 177 #3 FLOW SCHEMATIC	DWR. WRL/WLS NO.

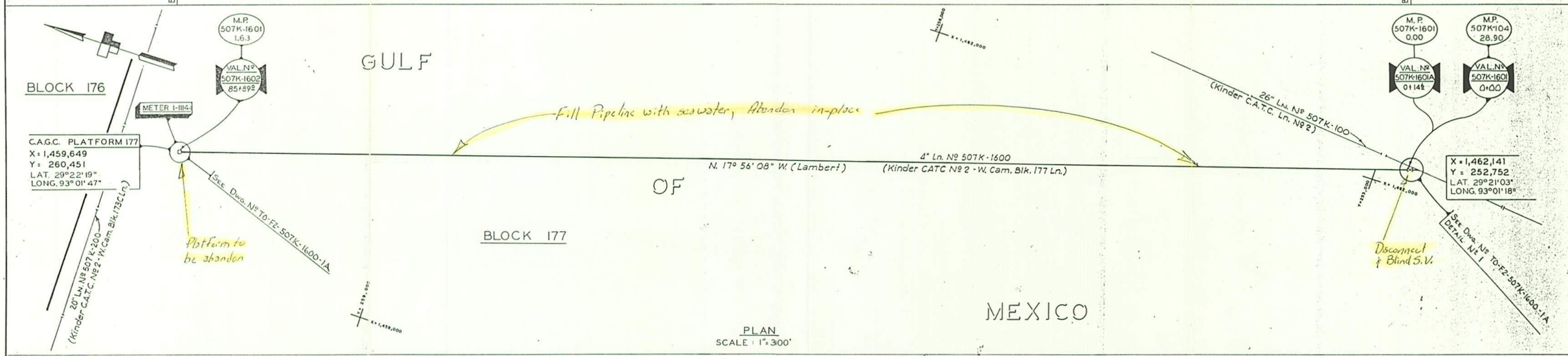
TAX DISTRICT DATA — ZONE — #2 ~ 8462 Ft.

OWNERSHIP & LINE LIST NO. W. CAM. BLK. 177

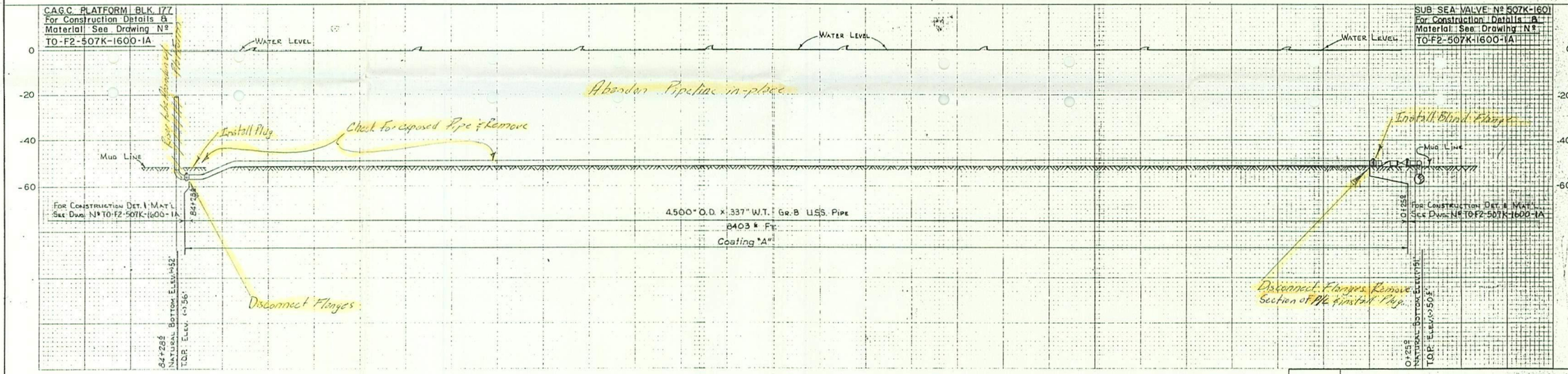
END LINE

UNITED STATES OF AMERICA
(GULF OF MEXICO)

BEGIN LINE



PLAN
SCALE : 1" = 300'



PROFILE
SCALE = HORIZ. : 1" = 300'
VERT. : 1" = 20'

PERMIT DRAWINGS
TA-N2-F507K-1600-1, 1A, & 1B

WELDING PROCEDURE	MATERIAL SUMMARY		
	QUANTITY	ITEM NO.	DESCRIPTION
	8403± Ft.	1	Pipe, 4.500" O.D. x .337" W.T. Gr. "B" U.S.S. Pipe
	8,403± Ft.	~	Coating "A" ~ Skotchkote #212 &/or Plexco X-Tru-Coat.

APPROVED 12-9-93

C.O. NUMBER & DESCRIPTION							
	C.O. 43321 ORIG. CONST.	C.O. 43111 VAL. GUARD C.O. 5402 W.O. 28576	C.O. 51655 R.O. 04818 REPLACE M.L.V. 507K-1602				
PRELIM.							
CONST.							
FINAL							
	13277	C.O. File	C.O. & R.O. File				

FIELD BOOKS

REFERENCE DRAWINGS

DRAWING NO.	TITLE
TO-F2-507K-1600-1A	Riser & Val. Nº 507K-1601 Details
TO-F2-507K-100-1A	KINDER - C.A.T.C. LN. Nº 2
TO-MP507K-1602-1	Meter Station Details

TENNECO

Tennessee Gas Pipeline Company
Division of Tenneco Inc.
Engineering Department — Houston, Texas

DRAWN BY	Hank	DATE 1-9-76
CHECKED BY	G.L.F.	DATE 10-4-76
CORRECT BY	R.S.M.	DATE 10-4-76
APPROVED BY	R.E.L.	DATE 10-4-76
		SCALE Shown
ISSUE DATES	ORIGINAL	10-12-76
	LAST	12-93

KINDER-C.A.T.C. LN. Nº 2-W. CAMERON BLK. 177 LN.

L.N. Nº 507K-1600

WEST CAMERON AREA — GULF OF MEXICO

VALVE SECTION ENTIRE LINE ON THIS SHEET

APPROVED BY — Abandonment — 10-4-76
ASST. CHIEF ENGINEER

TENNESSEE GAS PIPELINE CO.

TO-F2-507K-1600-1

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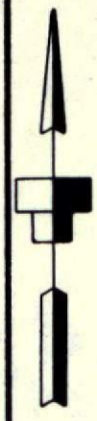
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA.



WEST
175
CAMERON

176

47

EAST

EXIST. T.G.P. 12" LINE Nº 507K-300

64

EXIST. T.G.P. 10" LINE Nº 507K-400

CAMEROON

EXISTING T.G.P. 26" LINE Nº 507K-100

℄ PROPOSED RIGHT OF WAY FOR T.G.P. 4" NATURAL GAS PIPELINE

EXIST. T.G.P. 20" LINE Nº 507K-200

OCS-G-1471

B

C.A.G.C. W. CAMERON BLK. 177 PLATF.
X=1,459,649.00
Y= 260,451.00

N 17° 56' 08" W-8,092.26

EXISTING S.V. Nº 507K-901, BLK. 177
WEST CAMERON AREA
X=1,462,141.00
Y= 252,752.00

AREA
178

177

65

AREA

A

X=1,460,000.00
Y= 250,000.00

STATE OF LOUISIANA
KENNETH E. BRITAIN
REG. NO. 4901
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

PLAN

5,000 0 5,000 10,000
SCALE OF FEET

LOCATION OF RIGHT-OF-WAY HAS BEEN ACCURATELY DELINEATED UPON THIS MAP.
Kenneth E. Britain
KENNETH E. BRITAIN
LOUISIANA REGISTERED PROFESSIONAL CIVIL ENGINEER NO. 4901

NOTE:
THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM LOUISIANA TO THE MARKET.
ALL BEARINGS SHOWN ARE LAMBERT.
PROPOSED WIDTH OF RIGHT-OF-WAY 200'.
LENGTH OF LINE 8,092.26 FT. = 1.533 MI.

NO.	DATE	REVISION	REV.	CKD	APR
1	5-13-75	CHANGE ROUTE OF LINE	H.A.P.	C.J.B.	

DRAWING NO.	TITLE
TA-L2-F507K-1600-1A TB-L2-F507K-1600-1B	PROFILE SCHEMATIC
REFERENCE DRAWINGS	

DRAWN BY S J C	DATE 3-20-75
CHECKED BY C J B	DATE 3-31-75
CORRECT BY R S M	DATE 4-75
APPROVED BY [illegible]	DATE 4/75
SCALE SHOWN	

TENNECO
Tennessee Gas Pipeline Company
Division of Tenneco Inc.
Engineering Department Houston, Texas

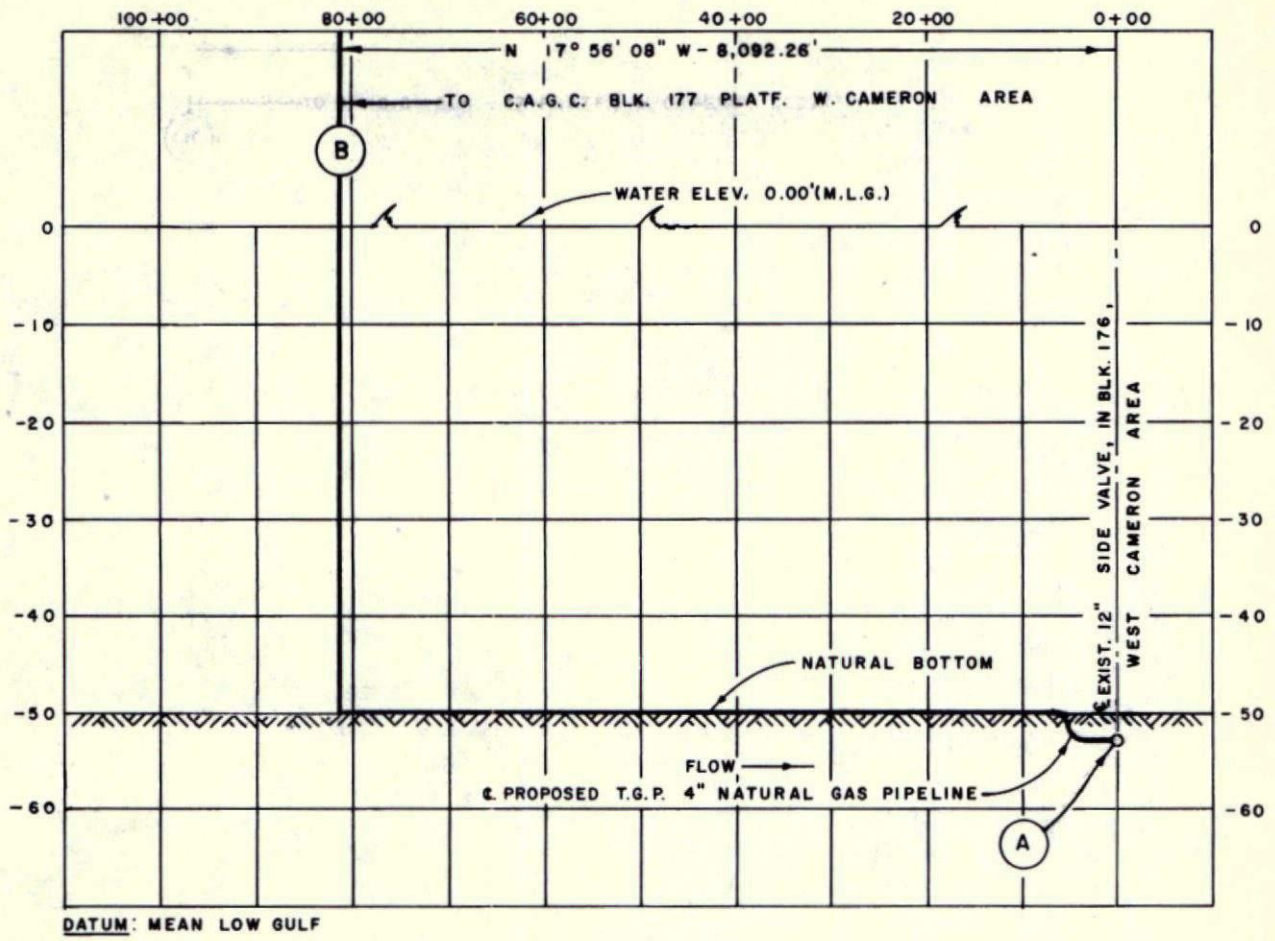
APPROVED BY
R. G. Robertson
FOR CHIEF ENGINEER

APPLICATION PLAT FOR PROPOSED NATURAL GAS PIPELINE RIGHT-OF-WAY

Tennessee Gas Pipeline Co.

TA-L2-F507K-1600-1

WEST CAMERON BLK. 177 LINE



PROFILE

2000 0 2000
HORIZONTAL SCALE OF FEET

20 15 10 5 0 20
VERTICAL SCALE OF FEET

NO.	DATE	REVISION	REV.	CKD	APR
1	5-13-75	CHANGE ROUTE OF LINE	H.A.P	C.J.B	

DRAWING NO.	TITLE
TB-L2-F507K-1600-1B TA-L2-F507K-1600-1	SCHEMATIC PLAN

REFERENCE DRAWINGS

DRAWN BY S J C	DATE 3-24-75
CHECKED BY C J B	DATE 4-1-75
CORRECT BY	DATE
APPROVED BY	DATE
SCALE SHOWN	C. O. 43321

Tennessee Gas Pipeline Company
Division of Tenneco Inc
Engineering Department Houston, Texas

APPROVED BY R. G. Robertson FOR CHIEF ENGINEER

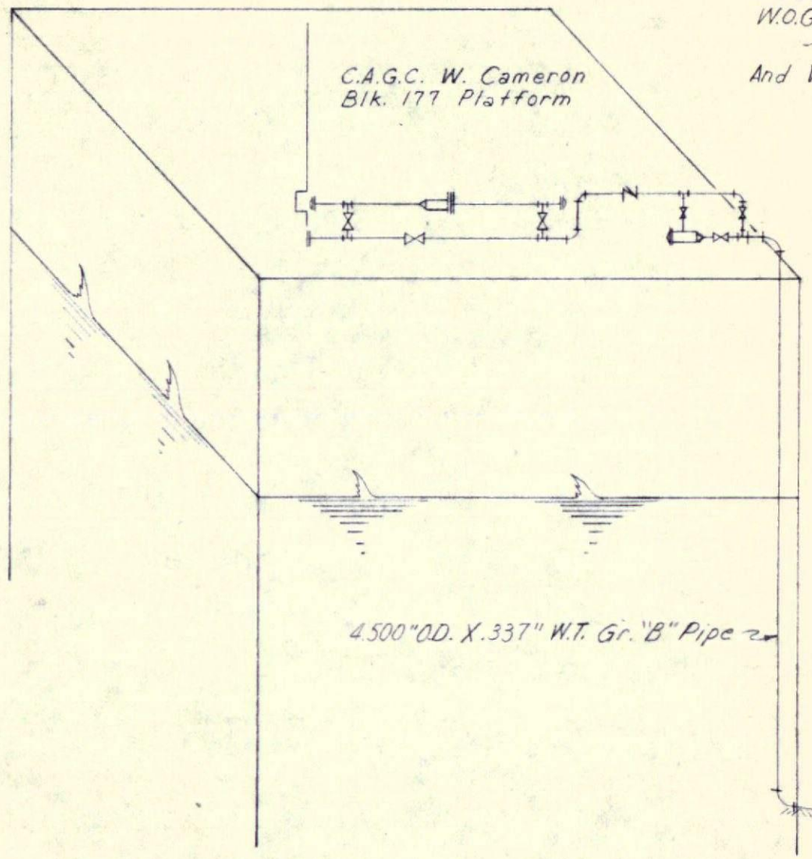
PROFILE

Tennessee Gas Pipeline Co.

TA-L2-F507K-1600-1A

WEST CAMERON BLK. 177 LINE

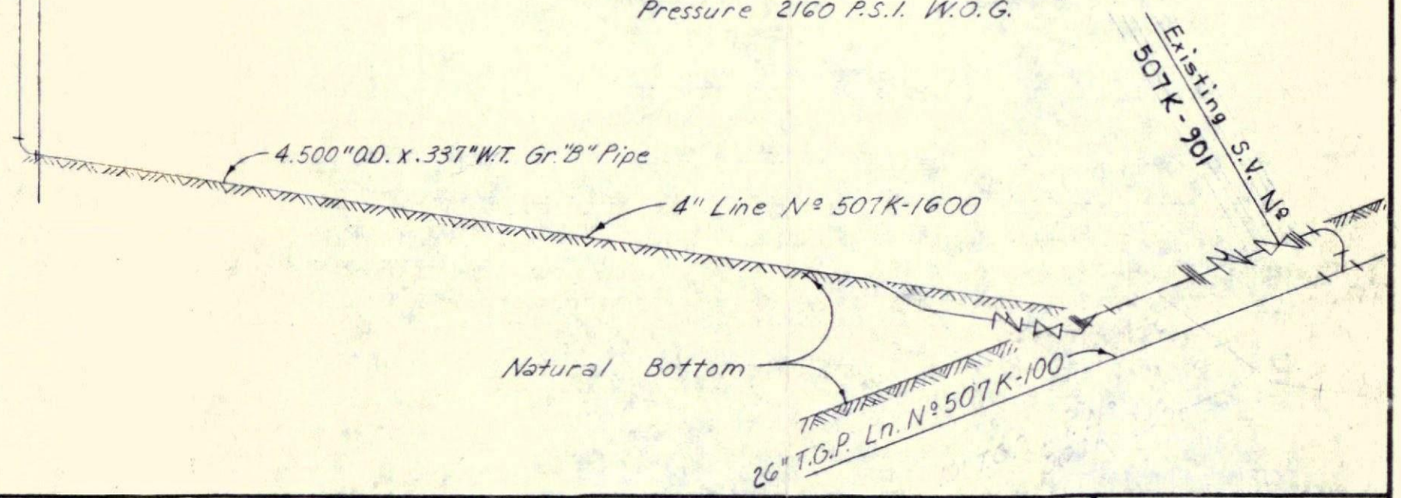
Begin Material By C.A.G.C. | End Material By T.G.P.



NOTE:
All Valves Above Water Are 600 P.S.I. ANSI Rated. Operating Pressure 1440 P.S.I. W.O.G.
- All Platform Piping Including Riser And Valves Is 72% Or Less Design Factor.

CORROSION PROTECTION
Zinc Sacrificial Anode, Bracelet Type
Number ~ 18
Weight ~ 56 lb. ea.
Spacing ~ 500 ft. ctr. to ctr.

NOTE:
All Valves Below Water Are 300 P.S.I. ANSI Rated. Operating Pressure 2160 P.S.I. W.O.G.



NO.	DATE	REVISION	REV. BY	CKD BY	APR. BY
1	5-13-75	General	H.P.	C.B.	

REFERENCE DRAWINGS

DRAWING NO.	TITLE
TA-L2-F507K-1600-1	Plan
TA-L2-F507K-1600-1A	Profile

TENNECO

Tennessee Gas Pipeline Company
Division of Tenneco Inc.
Engineering Department **Houston, Texas**

DRAWN BY STC	DATE 4/1/75
CHECKED BY CJB	DATE 4/1/75
CORRECT BY	DATE
APPROVED BY	DATE
SCALE NONE	C. O. 48321

SCHEMATIC
PROPOSED 4" T. G. P. WEST
CAMERON BLK. 177 LINE
WEST CAMERON AREA - GULF OF MEXICO

APPROVED BY K. J. Robertson FOR CHIEF ENGINEER
Tennessee Gas Pipeline Co.
TB-L2-F507K-1600-1B

RECEIVED
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OUTER CONTINENTAL
SHELF OFFICE
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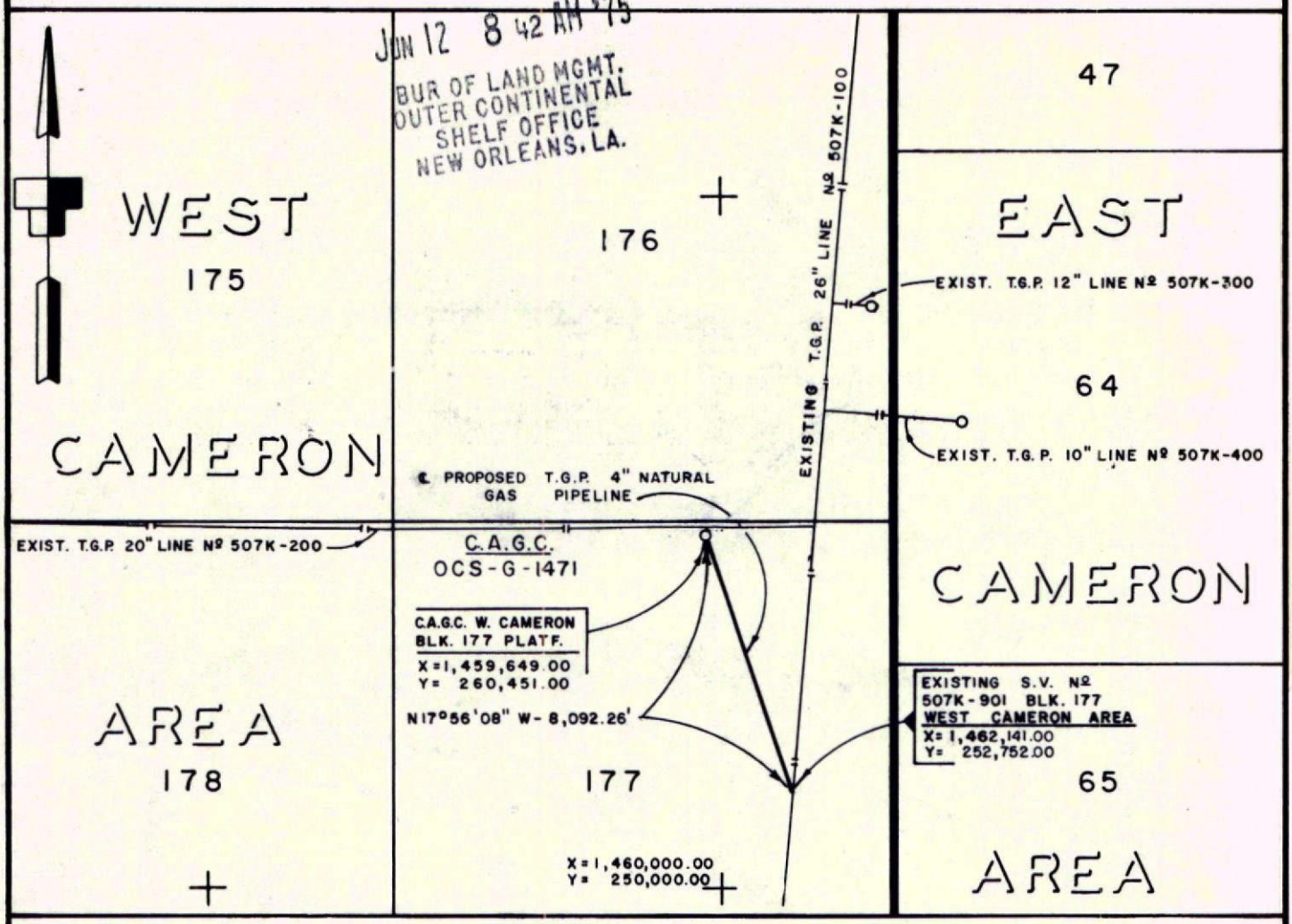

PLAN

5,000 0 5,000 10,000

SCALE OF FEET

NOTE:

ALL BEARINGS SHOWN ARE LAMBERT.

NO.	DATE	REVISION	REV.	CKD	APR
1	5-13-75	CHANGE ROUTE OF LINE	H.P.	C.J.B.	

DRAWING NO.	TITLE
	REFERENCE DRAWINGS

DRAWN BY S J C	DATE 3-20-75
CHECKED BY CJB	DATE 4-1-75
CORRECT BY	DATE
APPROVED BY	DATE
SCALE SHOWN	C. O. 43321

Tennessee Gas Pipeline Company
Division of Tenneco
Engineering Department Houston, Texas

APPROVED BY R. D. Robertson FOR CHIEF ENGINEER

PROPOSED T.G.P. 4" NATURAL GAS PIPELINE
CROSSING THRU BLOCK 177
WEST CAMERON AREA

Tennessee Gas Pipeline Co.

TA-L2-F507K-1600-2

WEST CAMERON BLK. 177 LINE