Tennessee Gas Pipeline

Sugar Mill Point
1115 Regal Row
Houma, Louisiana 70360

SN 5484

TENNECO

~~ORD~~
FO

July 30, 1993

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

ATTN: J. Rogers Pearcy
Regional Director

R/W
RE: OCS-4043, Segment No. 5484,
Ship Shoal Block 320-A Line

Dear Mr. Pearcy:

Please be informed that the above referenced pipeline has been abandoned as proposed.

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

BJC/KJC:cjh

cc: W. M. Murray
J. M. Nunnally
D. N. Huebner
H. S. Mills
File

Gulf of Mexico OCS Region
MMS
AUG 3 1993
Office of the Regional Director

b4043
An 5484

TIMELESS energy 1943 1993

SN 5484

In Reply Refer To: MS 5421
OCS-G 4043

July 20, 1993

ACTION

Tennessee Gas Pipeline Company — Right-of-way

RELINQUISHMENT OF RIGHT-OF-WAY GRANT
ABANDONMENT OF PIPELINE

On May 22, 1979, Consolidated Gas Supply Corporation filed an application for a right-of-way two hundred feet (200') in width for the purpose of constructing and maintaining a 10 3/4-inch natural gas pipeline, 1.92 miles in length, from CNG Producing Company's Platform A in Block 320, Ship Shoal Area, South Addition, across Block 346, to a subsea tie-in with Tenneco Inc.'s 16-inch receiving pipeline (OCS-G 3348) in Block 367, Eugene Island Area, South Addition. By Action dated August 13, 1979, the application was approved and the right-of-way granted. By letter dated September 20, 1979, the size of the pipeline was changed to an 8 5/8" wall pipeline. Proof of construction was subsequently accepted on January 16, 1980.

On June 20, 1980, Consolidated Gas Supply Corporation assigned unto Tenneco Inc. all of Assignor's interest in subject right-of-way, effective February 1, 1980.

By Action dated November 30, 1989, Tenneco Inc. changed its name to Tennessee Gas Pipeline Company, effective December 8, 1987.

Approval was granted for the temporary cessation of operation of the above-described pipeline on June 29, 1990.

On January 25, 1993, Tennessee Gas Pipeline Company requested relinquishment of the above-described right-of-way in its entirety. Additionally, grantee requested permission to abandon in place the subject pipeline in accordance with 30 CFR 250, Subpart J.

Inasmuch as grantee has agreed to comply with 30 CFR 250, Subpart J, removal of the 1.91 miles of line pipe is hereby waived. However, in the future, should it be determined that this pipeline constitutes a hazard to navigation or commercial fishing operations or unduly interferes with other uses of the OCS, Tennessee Gas Pipeline Company shall be required to remove it.

gN map
7/20/93
KF

Therefore, relinquishment of the right-of-way grant associated with the above-described pipeline that is to be abandoned in place is hereby accepted, effective January 25, 1993.

Tennessee Gas Pipeline Company shall, within 30 days after completion of the abandonment, submit a report to this office informing the Minerals Management Service of the date the abandonment was completed and verify such abandonment was completed as approved.

(Orig. Sgd.) Chris Oynes

J. Rogers Pearcy
Regional Director

cc: Case File

MHHOLMES/

United States Department of the Interior

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

In Reply Refer To: MS 5421
OCS-G 4043

July 20, 1993

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ABANDONMENT OF PIPELINE

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Inasmuch as grantee has agreed to comply with 30 CFR 250, Subpart J, removal of the 1.91 miles of line pipe is hereby waived. However, in the future, should it be determined that this pipeline constitutes a hazard to navigation or commercial fishing operations or unduly interferes with other uses of the OCS, Tennessee Gas Pipeline Company shall be required to remove it.

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Chris Dignes for

J. Rogers Pearcy
Regional Director

cc: Case File

Tennessee Gas Pipeline
A Tenneco Company

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

TENNECO

January 20, 1993

MINERALS MANAGEMENT SERVICE
RECEIVED
JAN 25 1993
FIELD OPERATIONS
GOM OCS Region, New Orleans, La.

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

Re: Permanent abandonment and relinquishment of pipeline right of way, OCS-G 4043, Segment No. 5484, Ship Shoal Block 320-A 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 1.91 miles of eight (8") inch natural gas pipeline in the Ship Shoal and Eugene Island Areas, Offshore Louisiana.

The temporary abandonment of the above pipeline was approved on June 29, 1990. 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.

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

Sincerely,

B. J. Chaney

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

BJC/KJC:erd
Enclosures
cc: J. M. Nunnally
D. N. Huebner
P. K. Howard
O. O. Jones
File

ACCEPTED
Chris Oynes
Acting Regional Director
Effective Date JAN 25 1993

LTGPL 10108A 12/88

1-25-93

To: Adjudication Unit (MS 5421)

From: Pipeline Unit, Field Operations (MS 5232)

Subject: Right-of-Way Relinquishment/Abandonment

Company: Tennessee Gas Pipeline Company

Right-of-Way Number: OCS-G-4043

The subject abandonment has been reviewed and has been found to be in compliance with 30 CFR 250.157(c).

✓ Pipeline abandoned in place

_____ Pipeline abandoned by removal

_____ Pipeline never constructed

Mike Conner

Enclosure

This pipeline can not be permanently abandoned and relinquished until FERC has approved it.

Procedure for abandonment looks fine. I told Kurt Chermie to let me know when FERC has given their approval, then he can submit a relinquishment. So in the mean time — I issued a disconnection + cessation.

Carol 6-18-90

BEST AVAILABLE COPY

SN54541 Williams 6-27-90
Forward 6/29/90

In Reply Refer To: MS 5232 (OCS-G 4043) JUN 29 1990

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

Gentlemen:

Pursuant to the authority granted by 30 CFR 250.150(b), your request dated May 23, 1990, for modification of the above-captioned pipeline right-of-way grant to allow for the disconnection and temporary cessation of operation of the associated 8-inch pipeline is hereby approved, subject to the following conditions:

1. The annual rental required by 30 CFR 250.159(c)(2) shall continue to be due and payable in December of each calendar year.

2. If the associated pipeline has not been returned to service and is not being used for the purpose for which the pipeline right-of-way grant was made by May 23, 1995, the grant shall be deemed to have expired in accordance with 30 CFR 250.159(e).

3. If, at any time prior to May 23, 1995, it is determined that the use of the associated pipeline is to be permanently discontinued, an application to relinquish the pipeline right-of-way grant shall be submitted to this office for approval.

Sincerely,

(Orig. Sgd.) A. Donald Giroir

D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: 1502-01 (P/L OCS-G 4043), w/orig application (KFaust) (MS 5232)
1502-01 (P/L OCS-G 4043), w/cy of application (CWilliams) (MS 5033)
MS 5260
MS 5232 (Carto), w/cy of plat

CWilliams:ds:6/27/90

Orig map 7/10/90 KJ

PDB

Tennessee Gas Pipeline
A Tenneco Company

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

May 23, 1990

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

Attention: Carol Williams

Re: Temporary abandonment of 8" natural gas pipeline, Ship Shoal Block 320-A Line, OCS-G 4043

Dear Carol:

In accordance with Title 30 CFR Part 250, Subpart J, 250.156, Tennessee Gas Pipeline Company hereby requests approval to temporarily abandon the above referenced pipeline in the Ship Shoal Area, Gulf of Mexico, Offshore Louisiana.

This pipeline extends from CNG Producing Company's Ship Shoal Block 320-A platform to a sub-sea tie-in with Tennessee Gas Pipeline Company's existing 16" pipeline in Block 367. The end near the platform will be cut and plugged at the base of the riser, then buried with three feet of cover. The riser and platform piping will be removed with the platform. At the sub-sea tie-in, a 6" section of line will be removed and a blind flange will be installed on the sub-sea assembly. The end of the line will be plugged and buried with three feet of cover.

The line will be purged with sea water to remove any materials which may be harmful to the environment prior to abandonment.

Also, enclosed are three copies of Drawing Nos. TE-F2-523M-5400-1AA, 1A and 1B which have been red-marked to show the proposed work.

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

Sincerely,

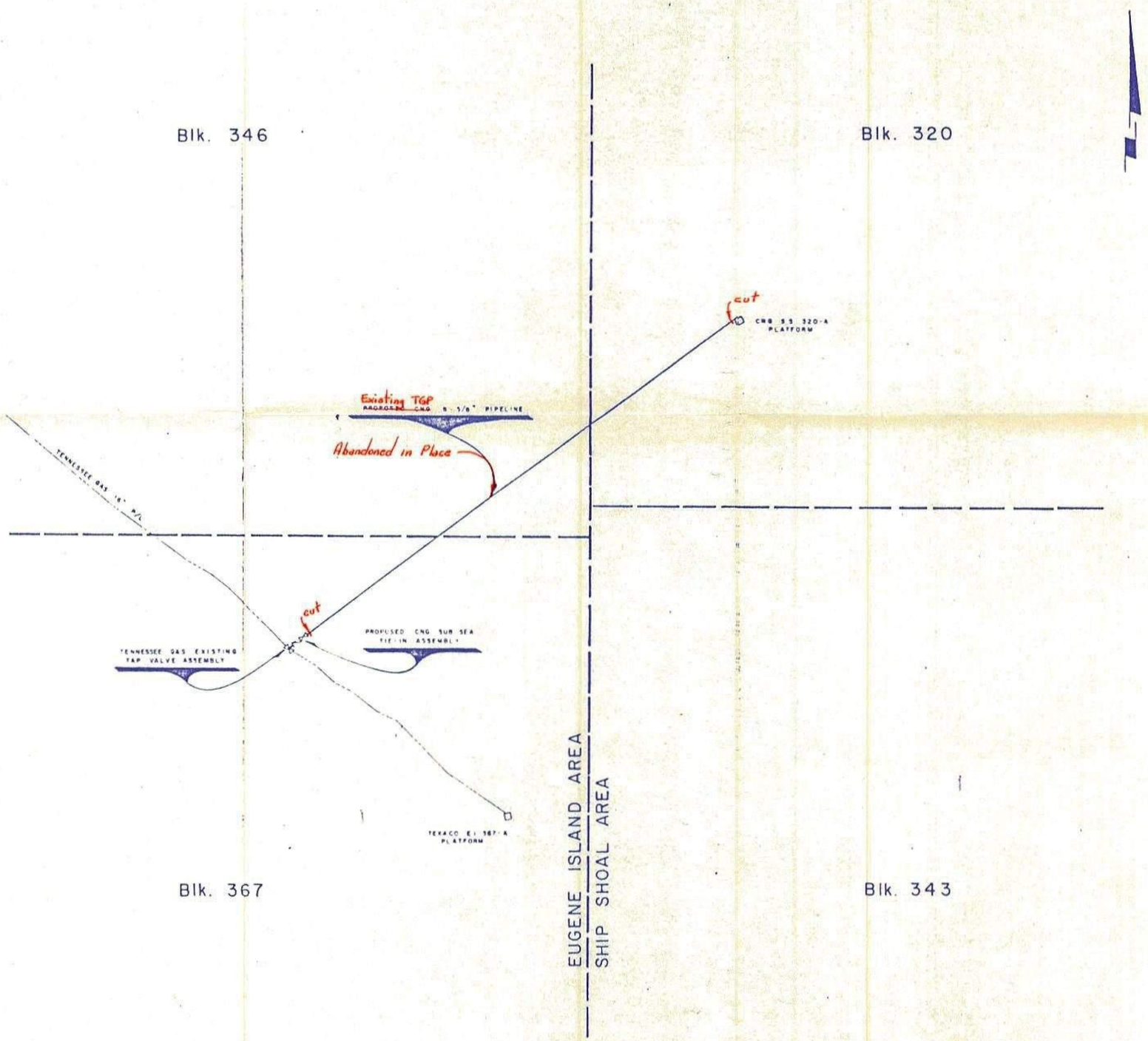
B. J. Chaney

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

BJC/KJC:vdm

Enclosures

cc: M. T. Bardwell
File



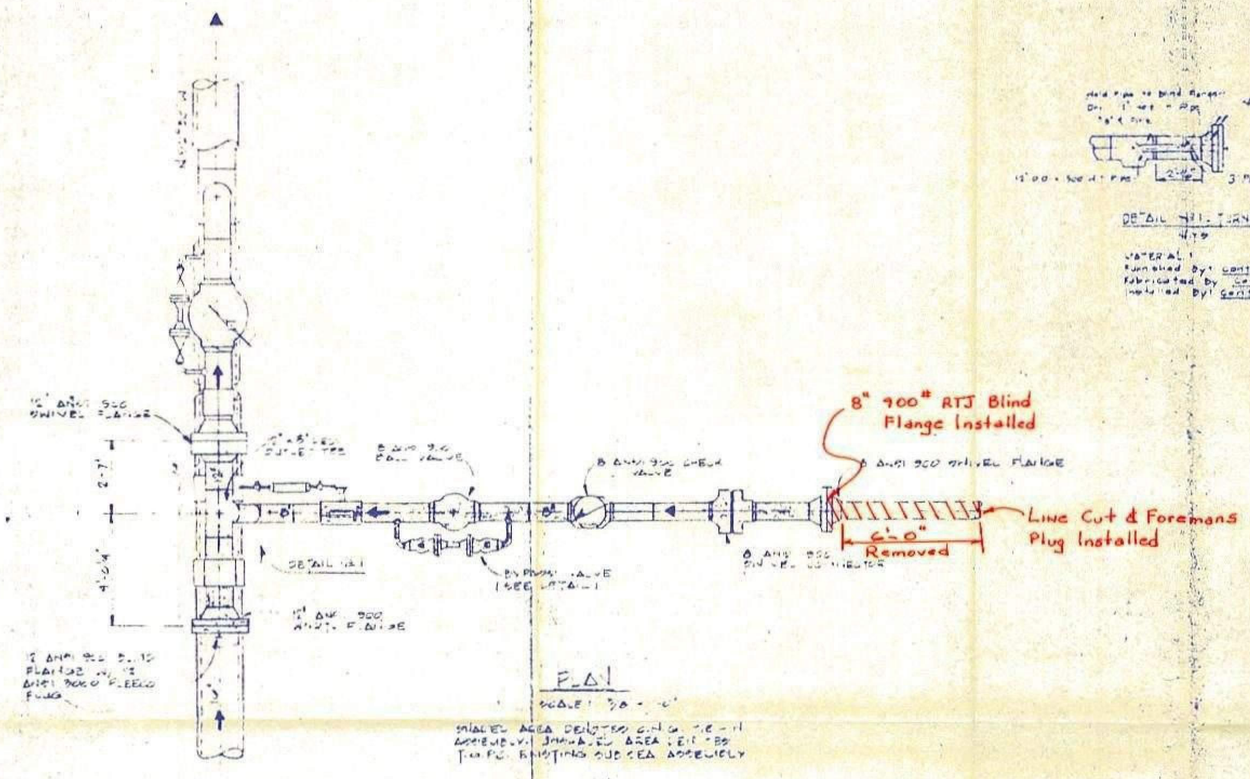
CNG PRODUCING COMPANY
THOMPSON RD HOUMA, LA

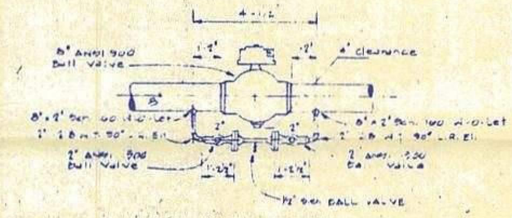
DATE
SCALE
DESIGNED BY
DRAWN BY
DWG. NO.

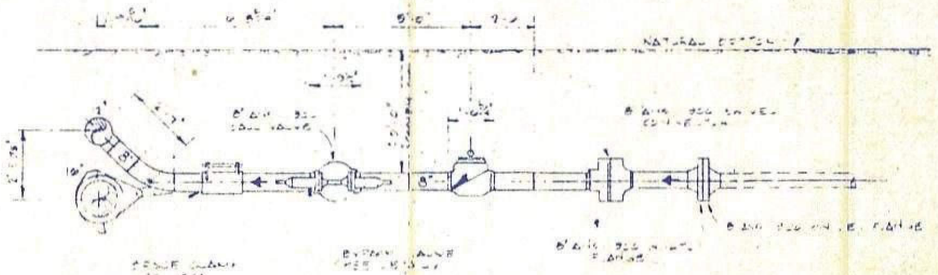
TE-FZ-523M-5400-1AA

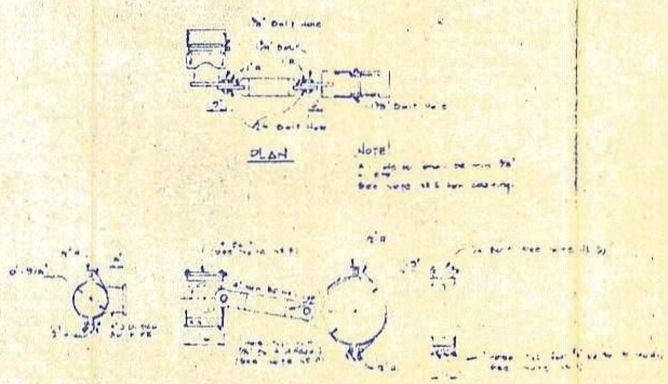
C.O. 47564.

OCS-G-4143









NOTES:

1. All material for clamp fabrication is to be furnished by contractor. This includes all bolts, etc.
2. Clamps to be sandblasted and painted per C.N.G. specifications (coal-tar epoxy), after fabrication and prior to assembly.
3. Contractor to clean, prime and coat unit with coal tar epoxy.
4. Entire side valve unit is to be fabricated by contractor and all welds to be satisfactorily x-rayed.
5. Accessible bolt specifications
   a. Stud bolts to be alloy steel (ASTM-A193-87) with 2 hvy. hex nuts, 2 washers. Bolt to be coated per [illegible] specs.
   b. [illegible] hex head bolt A.I.S.I. 316 stainless steel (ASTM-[illegible]-89) Class 2) with 2 hvy. hex nuts, 1 [illegible] washer, 2 flat washers.

ENGINEERING COMPLETIONS INVENTORIED

CNG PRODUCING COMPANY
THOMPSON RD — HOUMA, LA.

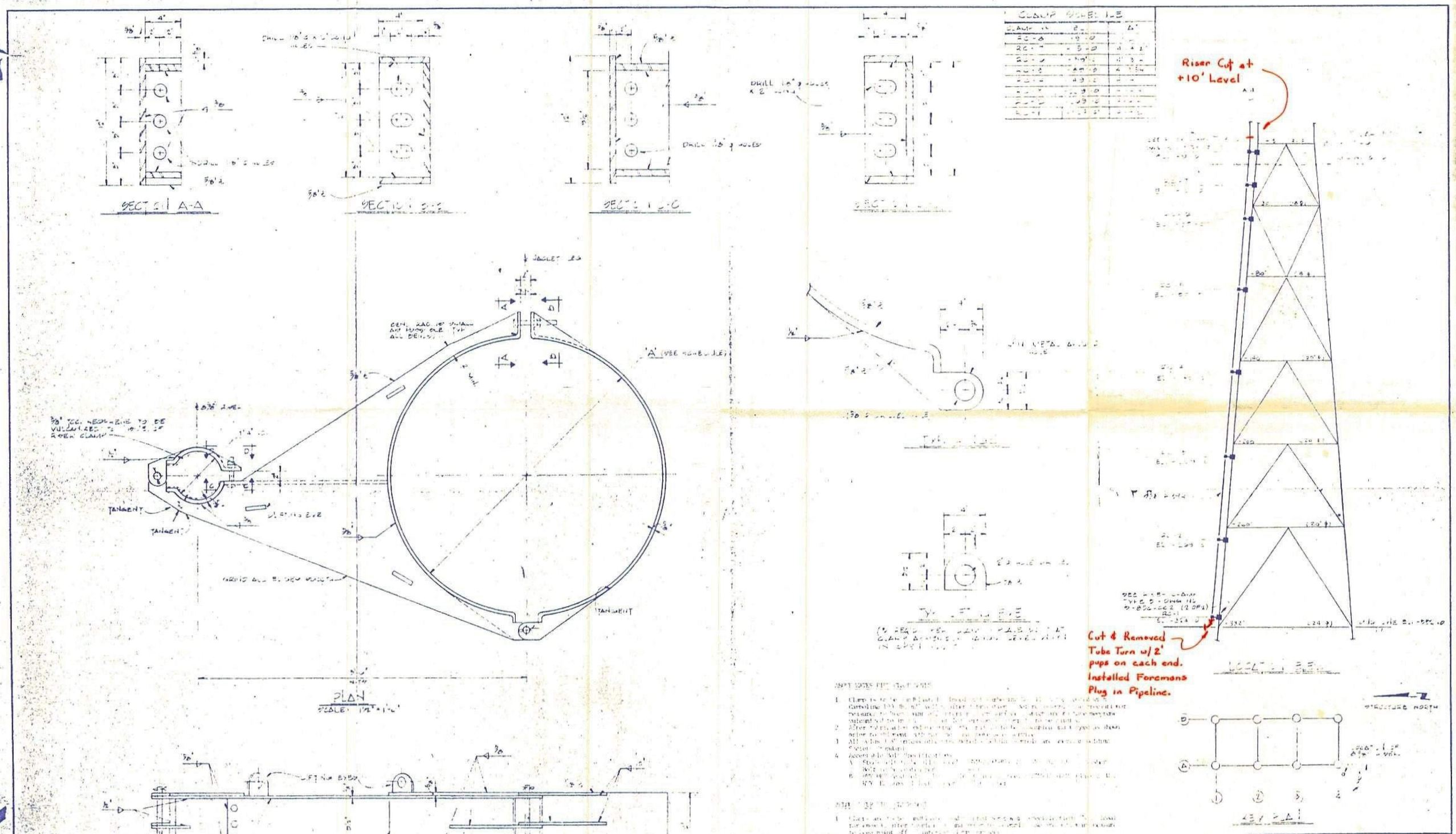
SIDE VIEW TE-1 DETAILS FOR CNG PRODUCING CO. PIPELINE AT [illegible] LA. 527

DATE	6-14-89	DWG. NO.
SCALE	0-6 mil	6-9-142
DESIGNED BY		
DRAWN BY	[illegible]	

C.O. 47564

TE-F2-523M-5400-1A

OCS-G-4043



CNG PRODUCING COMPANY
THOMPSON RD HOUMA, LA.

DATE	DWG. NO.
SCALE	
DESIGNED BY	
DRAWN BY	

TE-F2-523M-5400-1B

ENGINEERING COUNCIL OMS INVENTORIED

OCS-G 4043

C.O. 47564

5N5484

United States Department of the Interior

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

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

November 30, 1989

$4043

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

IN REPLY REFER TO
OCS-G 4043

JN 5484

BUREAU OF LAND MANAGEMENT

NEW ORLEANS OUTER CONTINENTAL SHELF OFFICE
HALE BOGGS FEDERAL BUILDING
500 CAMP STREET—SUITE 841
NEW ORLEANS, LA. 70130

Instrument:

Filed: June 17, 1980
Executed: June 2, 1980
Approved: June 20, 1980
Effective: February 1, 1980

Consolidated Gas Supply Corporation
Assignor

Tenneco Inc.
Assignee

ACTION: ASSIGNMENT APPROVED — Right-of-Way

The approval of this assignment is restricted to record title interest only, and by virtue of this approval, the Assignee is subject to, and shall fully comply with, all applicable regulations now or to be issued under the Outer Continental Shelf Lands Act, as amended.

Assignor assigned unto Assignee all of Assignor's right, title and interest.

Record title interest is now held as follows:

OCS-G 4043 Block 320, Ship Shoal Area, South Addition; Blocks 346 and 347, Eugene Island Area, South Addition

Tenneco Inc. 100%

John L. Rankin
Manager

cc:
Assignor
Assignee
Geological Survey (2)
Case File

CONSOLIDATED GAS SUPPLY CORPORATION
ONE CANAL PLACE - SUITE 3100

NEW ORLEANS, LA.
70130

504-523-5581
TWX: 810-951-6080
TELECOPIER: 504-523-2442

June 16, 1980

Mr. R. L. Rankin, Manager
Outer Continental Shelf Office
Bureau of Land Management
Suite 841 - Hale Boggs Federal Building
500 Camp Street
New Orleans, Louisiana 70130

Re: OCS-G-4043 RIGHT-OF-WAY
SHIP SHOAL AREA/EUGENE ISLAND AREA

Dear Mr. Rankin:

Reference is made to Right-of-Way OCS-G-4043 for an 8 5/8" natural gas pipeline from CNG Producing Company's Platform "A" in Block 320, Ship Shoal Area, South Addition, across Block 346, to a subsea tie-in with Tenneco Inc.'s 16" receiving pipeline (OCS-G-3348) in Block 367, Eugene Island Area, South Addition.

Consolidated Gas Supply Corporation desires to and does hereby transfer and assign the following unto Tennessee Gas Pipeline Company, a Division of Tenneco, Inc.:

> OCS-G-4043, being that certain pipeline right-of-way granted by the United States Department of the Interior, Bureau of Land Management, to Consolidated Gas Supply Corporation on August 16, 1979.

The transfer and assignment of said right-of-way shall be effective as of February 1, 1980.

Enclosed are six (6) executed originals of OCS-G-4043 Right-of-Way assignment along with $25.00 filing fee. Upon the approval of the Bureau of Land Management of assignment and transfer of OCS-G-4043 Right-of-Way, please return four (4) receipted, executed originals, along with Bureau of Land Management's approval to Consolidated Gas Supply Corporation.

Very truly yours,

R. J. Murdy,
Agent and Attorney-in-Fact

ya

Enclosures (Six Executed Assignments and
Check in the amount of $25.00)

cc: Mr. A. D. Simpson, III
Tennessee Gas Pipeline Company,
A Division of Tenneco, Inc.
Post Office Box 2511
Houston, Texas 77001

Mr. C. Reisgen
CNG Producing Company
One Canal Place - Suite 3100
New Orleans, Louisiana 70130

ASSIGNMENT

SHIP SHOAL BLOCK 320 PIPELINE PROJECT

STATE OF LOUISIANA

PARISH OF JEFFERSON

KNOW ALL MEN BY THESE PRESENTS, that

CONSOLIDATED GAS SUPPLY CORPORATION, a West Virginia corporation, of the post office address of Suite 1800, Bank of New Orleans Building, 1010 Common Street, New Orleans, Louisiana 70112, (hereinafter referred to as Grantor), for and in consideration of the sum of $10.00 and other good and valuable consideration, the receipt of which is hereby acknowledged, does hereby sell, transfer, and assign unto Tennessee Gas Pipeline Company, a Division of Tenneco Inc., a Delaware corporation, of the post office address of P. O. Box 2511, Houston, Texas 77001, (hereinafter referred to as Grantee), all of the Grantor's right, title and interest in and to the following:

1. OCS-G-4043, being that certain pipeline right-of-way granted by the United States Department of the Interior, Bureau of Land Management, to Consolidated Gas Supply Corporation on August 16, 1979.

2. United States Corps of Engineers Permit - Approval for installation of the subject pipeline was granted on June 1, 1979, under authority of LMNOD-SP (General Permit) NOD-12, dated October 30, 1978.

The Assignment is made without any warranty whatsoever, either express or implied, but with full sbustitution and subrogation in and to all rights which Grantor may have, if any, against all preceding owners or vendors whomsoever.

This Assignment shall be effective as of February 1, 1980.

Approved

Manager

Effective Date FEB 1 1980

IN WITNESS WHEREOF, this Assignment is executed as of the 1st day of February, 1980.

WITNESSES

Aline W. Scroggins

Nancy S. Williams

CONSOLIDATED GAS SUPPLY CORPORATION

By: [signature]
Agent and Attorney-in-Fact

Pat Byrd

Sammie Scarborough

TENNESSEE GAS PIPELINE COMPANY,
A Division of Tenneco Inc.

By: H. E. Long

FORM 5-27-80 APPROVED

STATE OF LOUISIANA)
)
PARISH OF JEFFERSON (

ON THIS 2nd day of June, 1980, before me appeared R. J. Mundy, to me personally known, who being by me duly sworn did say that he is the Agent & Attorney-in-Fact of Consolidated Gas Supply Corporation, and that said instrument was signed in behalf of said corporation by authority of its Board of Directors and said R. J. Mundy acknowledged said instrument to be the free act and deed of said corporation.

Cyril H. Reisgen II
Notary Public

CYRIL H. REISGEN, II
Notary Public in & for Jefferson Parish, Louisiana
My Commission expires at my death.

STATE OF TEXAS)
)
COUNTY OF Harris)

ON THIS 27th day of May, 1980, before me appeared H. E. Long, to me personally known, who being by me duly sworn, did say that he is the President of Tennessee Gas Pipeline Company, a Division of Tenneco Inc., and that said instrument was signed in behalf of said corporation by authority of its Board of Directors and said H. E. Long acknowledged said instrument to be the free act and deed of said corporation.

Wilma Johnson
Notary Public

WILMA JOHNSON
Notary Public in and for Harris County, Texas
My Commission Expires December 26, 1981

SN 5484

IN REPLY REFER TO
OCS-G 4043

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

NEW ORLEANS OUTER CONTINENTAL SHELF OFFICE
HALE BOGGS FEDERAL BUILDING
500 CAMP STREET—SUITE 841
NEW ORLEANS, LA 70130

Ship Shoal Area
Eugene Island Area

January 16, 1980

DECISION

Consolidated Gas Supply Corporation	:	Right of Way for Pipe Line
	:	Date of Permit: 8/16/79
	:	Decision Requesting Proof of Construction Dated:
	:	Proof of Construction Received: 1/11/80

Proof of Construction Accepted

The above-captioned permittee has submitted the evidence required by the law and regulations 43 CFR 3340.3(a). The proof of construction is hereby accepted and approved with minor deviations.

John L. Rankin
Manager

cc: U. S. Geological Survey
(w/dwg. and report)

NOTED—MC INTOSH

NOTED—SCHONEKAS

JAN 18 1980

CONSOLIDATED GAS SUPPLY CORPORATION
1800 BANK OF NEW ORLEANS BUILDING
1010 COMMON STREET
NEW ORLEANS, LA. 70112
504·523·5581

January 10, 1980

NEW ORLEANS OCS
FILE CODE
ROUTE INITIAL
MGR.
ASST. MGR.
JAN 11 1980
P. LEGAL
PAO
EAD
OPS
STUDIES
MGMT. SER.

Manager,
U. S. Dept. of the Interior
Bureau of Land Management
N. O. Outer Continental Shelf Office
Hale Boggs Federal Building
500 Camp Street - Suite 841
New Orleans, Louisiana 70130

BUR OF LAND MGMT.
OUTER CONTINENTAL
SHELF OFFICE
NEW ORLEANS, LA.
JAN 11 10 49 AM '80
RECEIVED

Re: Proof of Construction
Pipeline Right-of-Way
OCS-G-4043
Ship Shoal Area/Eugene Island Area

Dear Sir:

On August 13, 1979, application for a pipeline right-of-way was approved and permit issued for the construction, maintenance, and operation of an 8 5/8" natural gas pipeline from CNG Producing Company's Ship Shoal Block 320 "A" Platform, South Addition, across Block 346, to a subsea tie-in with Tenneco Inc.'s 16" receiving pipeline (OCS-G-3348) in Block 367, Eugene Island Area, South Addition, Gulf of Mexico.

In accordance with the regulations 43 CFR 2883.2-3 (a) and appropriate guidelines, we attach herewith in duplicate, the "AS BUILT" drawing showing the above pipeline as installed, along with duplicate copies of hydrostatic test data and temperature and pressure charts.

Installation of the above pipeline was completed on December 15, 1979, and production from this pipeline will commence on February 15, 1980.

If there are any questions or additional information needed pertaining to this matter, please contact Mr. Francis Green (523-5581, Ext. 240).

Very truly yours,

CONSOLIDATED GAS SUPPLY CORPORATION

Joseph W. Porter, Jr.,
Agent and Attorney-In-Fact

ya

Enclosures

cc: CNG Houma Office

HYDROSTATIC TEST REPORT

CONSOLIDATED NATURAL GAS CO.
10,300 FEET - 8 5/8" x .500 x GR. B
SHIP SHOAL 320A

C. S. I. HYDROSTATIC TESTERS, INC.
LAFAYETTE, LOUISIANA

PRIME CONTRACTOR
J. RAY MCDERMOTT & COMPANY, INC.

DATE OF TEST
NOVEMBER 26, 1979

REPORT CERTIFIED BY:

RONALD J. SAVOY, P. E.
VICE-PRESIDENT

STATE OF LOUISIANA
RONALD J. SAVOY
REG. NO. 5636
REGISTERED
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING

A Hargett Company

BEST AVAILABLE COPY

December 3, 1979

Mr. Mike Lam
J. RAY MCDERMOTT & COMPANY, INC.
P. O. Box 38
Harvey, Louisiana 70059

RE: CONSOLIDATED NATURAL GAS CO.
10,300 FEET - 8 5/8" x .500 x GR. B
SHIP SHOAL 320A

Dear Mr. Lam:

We have carefully reviewed and evaluated all data assembled from the hydrostatic test on CONSOLIDATED NATURAL GAS CO.'s subject line.

Upon completion of the fill of the line, a hydrostatic test was performed using approved engineering practices and procedures. Information detailed on the required test forms show conclusively that the pipeline is as safe as today's technology can produce.

From the test results it is concluded that CONSOLIDATED NATURAL GAS CO. has used the latest advanced scientific developments in the field of hydrostatic testing in compliance with all current state and federal safety regulations.

Yours very truly,

C. S. I. HYDROSTATIC TESTERS, INC.

Ronald J. Savoy, P. E.
Vice-President

STATE OF LOUISIANA
RONALD J SAVOY
REG NO 6636
REGISTERED
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING

RJS/fh

CSI Hydrostatic Testers, Inc.
P O Box 51282 Lafayette, Louisiana 70505 Phone 318/235-7567

C.S.I. HYDROSTATIC TESTERS

Hydrostatic Test Report

P. O. BOX 51232, O.C.S. LAFAYETTE, LA. 70505

Company CONSOLIDATED NATURAL GAS

BEST AVAILABLE COPY

Line _____ Location SHIP SHOAL 320 A Job No. _____ Length 10,300 ft.

Line Size 8 5/8 O.D. .500 W.T. Gr. B Sta/M.P. _____ to Sta/M.P. _____

Terrain GULF OF MEXICO Soil Condition WET

Fill began 11-26-79 at 10:30 ~~P.M.~~ A.M. Fill Completed 11-26-79 at 1[illegible] A.M

Meter Reading: Beginning _____ Gals., Final _____ Gal.

Displacement: Theoretical _____ Gal., Meas. _____ Gal.

Gallons Required to increase pressure from _____ P.S.I.G. to _____ P.S.I.G. _____ Gal.
PRESSURE PUMP MEASUREMENT

Exposed pipe APP. 20 ft. General Contractor J. RAY MCDERMOTT

Fill water Temperature APP. 72

TIME		Deadweight Pressure	TEMPERATURE OF			REMARKS
Date	Hour		Air	Pipe	Remote Earth	
11-26-79	10:30 AM	0				Start Filling
	11:45	100				Line full-Rigging to test
	12:20 PM	100				Start Pressuring
	12:41	2160	72			Surgeing
	12:48	2140				Repressuring
	12:52	2164	72			Complet Repressure
	1:00	2160-2180	72			Repressured
	1:04	2180	72			Fix leak in flange
	1:15	2171	71			On test head
	1:30	2162	71			
	1:35	2160-2180	72			Repressured
	1:40	2176	72			Complete Repressure
	1:45	2168	72			Leak fixed
	2:00	2161	72			
	2:03	2160-2180	72			Repressured
	2:05	2180	72			
	2:30	2174				
	3:00	2166	72			
	3:25	2160-2180				Repressured
	3:27	2180				Repressured completed
	3:30	2179	71			
	4:00	2174	71			

CSI Engineer MIKE WARD

Witness 1 R. S. DENNIS

2 BOBBY COLLINS

Field Approval for Pipeline Company

Insp. [illegible]

Chief Insp. _____

C.S.I. HYDROSTATIC TESTERS

Hydrostatic Test Report

P.O. BOX 51282, O.C.S. LAFAYETTE, LA. 70505

Line _____ Location SHIP SHOAL 320A Job No. _____ Length 10,300 ft.

Line Size 8 5/8 O.D. .500 W.T. Gr. B Sta/M.P. _____ to Sta/M.P. _____

TIME		Dead Weight Pressure	TEMPERATURE OF			REMARKS
DATE	HOUR		Air	Pipe	Remote Earth	
11-26-79	4:30 PM	2170	70			
	5:00	2168	70			
	5:30	2165	70			
	6:00	2162	70			
	6.16	2160-2180	69			Repressured
	6:22	2175	69			Completed Repressure
	6:30	2173	69			
	7:00	2170	68			
	7:30	2168	68			
	8:00	2165	68			
	8:30	2164	68			
	9:00	2163	68			
	9:30	2162	68			
	10:00	2162	68			
						CHARTS RETAINED
						BY INSPECTOR

CSI Engineer MIKE WARD

Witness 1 R. S. DENNIS

2 BOBBY COLLINS

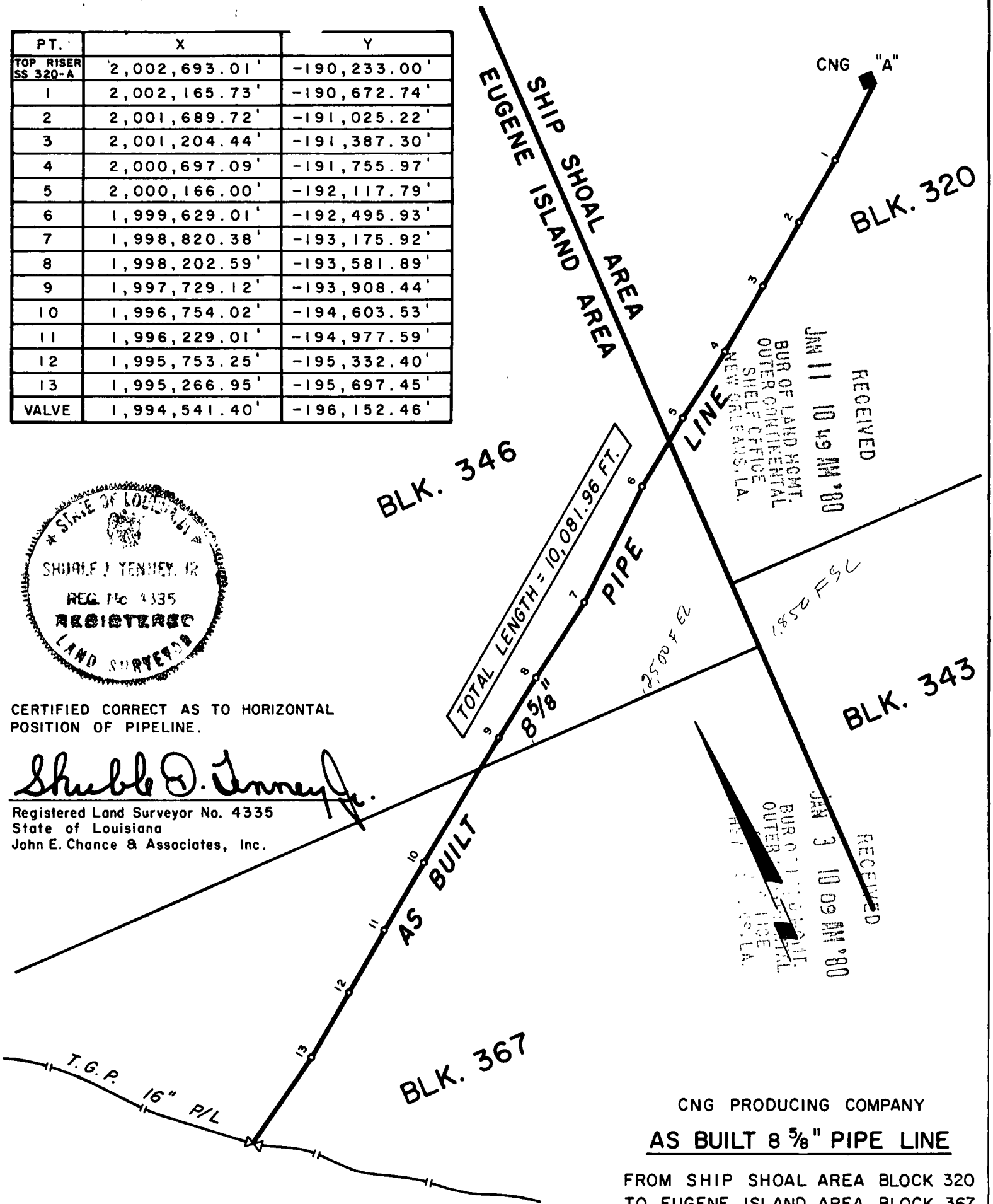
Field Approval for Pipeline Company

Insp. _____

Chief Insp. _____

BEST AVAILABLE COPY
SS320-A
UNIFORM
8 5/8" Gas
Hys. Test
Test off
11/26/79
10:00 Pm
Test on
11/26/79
12:52 Pm
MW-P150-12
Mule Head - DST
1A.M.
MIDNIGHT
11P.M.
10P.M.
9P.M.
8P.M.
7P.M.
6P.M.
5P.M.
4P.M.
3P.M.
2P.M.
PRINTED BY THE FOXBORO COMPANY, FOXBORO, MASS. U.S.A. MWBOOBOO9

PT.	X	Y
TOP RISER SS 320-A	2,002,693.01'	-190,233.00'
1	2,002,165.73'	-190,672.74'
2	2,001,689.72'	-191,025.22'
3	2,001,204.44'	-191,387.30'
4	2,000,697.09'	-191,755.97'
5	2,000,166.00'	-192,117.79'
6	1,999,629.01'	-192,495.93'
7	1,998,820.38'	-193,175.92'
8	1,998,202.59'	-193,581.89'
9	1,997,729.12'	-193,908.44'
10	1,996,754.02'	-194,603.53'
11	1,996,229.01'	-194,977.59'
12	1,995,753.25'	-195,332.40'
13	1,995,266.95'	-195,697.45'
VALVE	1,994,541.40'	-196,152.46'



CERTIFIED CORRECT AS TO HORIZONTAL POSITION OF PIPELINE.

Shuble D. Tenney Jr.

Registered Land Surveyor No. 4335
State of Louisiana
John E. Chance & Associates, Inc.

CNG PRODUCING COMPANY

AS BUILT 8 5/8" PIPE LINE

FROM SHIP SHOAL AREA BLOCK 320
TO EUGENE ISLAND AREA BLOCK 367
GULF OF MEXICO

SCALE: 1" = 1000'

12/10/79

OCS-G 4043

BEST AVAILABLE COPY

NOTIFICATION OF HYDROSTATIC TEST:

Company representative furnishing following information Yvonne Abadie

Telephone Number 523-5581 Date 12-11-79

1. OCS Number G 4043

2. Name of Company Consolidated Gas Supply Corp

3. Size of Pipeline 8 5/8" 1.93 miles long

4. From where to where CNG Producing Company's "A" Platform in S.S. 320 to subsea tie with Tenneco Inc's 16" Pipeline in Eugene Island Block 367

5. Platform where hydrostatic test instruments will be set up "A" Platform in SS 320

6. Date and time they plan to start Thursday Dec. 13, 1979 @ 8:00 AM

Notify: Frank Torres, U.S. Geological Survey, 837-4720, Ext. 237, or leave a message for him. N/A

BLM Employee: Ruby J. Button 12-11-79

BEST AVAILABLE COPY

NOTIFICATION OF CONSTRUCTION:

Company representative furnishing the following information Ms Yvonne Abadie

Telephone Number 523-5581 Date 11-15-79

1. OCS Number G 4043

2. Name of Company Consolidated Gas Supply Corp

3. Name of Contractor McDermott

4. Name of lay barge #23

5. Size of Pipeline 8 5/8 inch GAS 1.92 miles long

6. From where to where CNG Producing Company's "A" Platform Ship Shoal, Block 320 to subsea tie with Tennessee Gas Pipeline Co's 16" Pipeline in Eugene Island Block 367.

7. Where construction begins and ends (i.e., which platform) Start @ Ship Shoal 320 and end at subsea tie in EI 367

8. Method of laying Conventional

9. How long barge will be on job 7 days

10. Where heliports are available On Barge

11. Does the pipeline cross safety fairway(s)? (Go to map for information) NO.

Where

Initial and teminal points: Initial: X = Y =

Terminal: X = Y =

12. When the barge will begin (date) 11-15-79

Notify: Frank Torres, U. S. Geological Survey, 837-4720, Ext. 237 (Give him items 1 10 & 12)). Date Contacted N/A

Notify only if construction crosses or in close proximity of fairways Chief O'Neil, Petty Officer Lutali, or Chief Flannegan, U. S. Coast Guard, telephone #6236 (upstairs). Give items 1 - 9 & 11 - 12. Date Contacted N/A

Items 1, 2, 5, 6, and 11 can be determined from the file if the company representative doesn't know them. Item 11 should be determined on a map in this office (see Bill Overstreet).

BLM Employee [signature] 11-15-79

United States Department of the Interior

GEOLOGICAL SURVEY

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

P. O. BOX 7944

METAIRIE, LOUISIANA 70010

TEL: (504) 837-4720

In Reply Refer To: OS-5

Memorandum

To: Manager, Bureau of Land Management, 841 Hale Boggs Federal Building, 500 Camp Street, New Orleans, Louisiana 70130

From: Conservation Manager, Gulf of Mexico Region

Subject: Consolidated Gas Supply Corporation's Pipeline Right-of-Way Application, BLM OCS-G 4043

We have reviewed the modified design specifications for the subject Right-of-Way Application, dated September 20, 1979. It is for the installation of an 8 5/8-inch pipeline in lieu of the 10 3/4-inch pipeline originally proposed from CNG's Platform "A", Ship Shoal Block 320, lease OCS-G 2144, to a subsea tie-in with the receiving Tennessee Gas Pipeline Corporation's pipeline (BLM OCS-G 3348), in Eugene Island Block 367, lease OCS-G 2618.

From the limited information supplied, we must assume that all other technical aspects of this pipeline will remain as originally applied for (hydrostatic test procedure, cathodic protection, safety schematic, class of valves, flanges, and fittings, route, and nonburial). Based on the information supplied and the above assumption, which we understand you will confirm to be valid, we are changing our records to show this proposed pipeline to be 8 5/8 inches in diameter and we recommend that the maximum allowable operating pressure for this pipeline be 1,440 psig.

Conservation Manager

Why this "escape clause" wording from GS? Aren't we supplying needed info? KE

IN REPLY REFER TO

OCS-G 4043

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

NEW ORLEANS OUTER CONTINENTAL SHELF OFFICE

HALE BOGGS FEDERAL BUILDING

500 CAMP STREET—SUITE 841

NEW ORLEANS, LA 70130

OCT 4 1979

OCT 4 1979

September 28, 1979

Memorandum

To: Conservation Manager
Gulf of Mexico OCS Operations

From: Manager
New Orleans OCS Office

Subject: Consolidated Gas Supply Corporation's Pipeline Right-of-Way Application (OCS-G 4043)

Enclosed is additional information which you may use to further evaluate the subject application.

If you have any questions regarding this matter, please contact Mr. Autry J. Britton of this office.

Enclosure (1)
Copy of letter from Consolidated Gas Supply Corporation dated September 20, 1979

NOTED—MC INTOSH

NOTED – PATZ

BEST AVAILABLE COPY

CONSOLIDATED GAS SUPPLY CORPORATION
1800 BANK OF NEW ORLEANS BUILDING
1010 COMMON STREET
NEW ORLEANS, LA. 70112
504-523-5581

September 20, 1979

United States Department of the Interior
Bureau of Land Management
New Orleans Outer Continental Shelf Office
Hale Boggs Federal Building
500 Camp Street - Suite 841
New Orleans, Louisiana 70130

NEW ORLEANS OCS
FILE CODE
ROUTE INITIAL
MGR.
ASST. MGR.
SEP 21 1979
P. LEGAL
PAD
EAD
OPS
STUDIES
MGMT. SER.

Attention: Mr. H. P. Sieverding,
Acting Manager

Re: OCS-G-4043
Ship Shoal Area
Eugene Island Area

Gentlemen:

Consolidated Gas Supply Corporation made application on May 12, 1979, and received approval from the Bureau of Land Management on August 16, 1979, to install a 10 3/4" natural gas pipeline from CNG Producing Company's "A" Platform in Block 320, Ship Shoal Area, South Addition, across Block 346, to a subsea tie-in with Tenneco Inc.'s 16" receiving pipeline (OCS-G-3348) in Block 367, Eugene Island Area, South Addition.

Drilling operations failed to prove up the anticipated volume of gas production, and a 10 3/4" pipeline is not required. In order to minimize the cost of this pipeline and subsequent cost to our gas customers, a decision has been made to install 8 5/8" OD Grade B Seamless 1/2" Wall instead of the previously authorized 10 3/4".

Consolidated Gas Supply Corporation respectfully requests that you change your records to reflect that an 8 5/8" pipeline will be installed.

Very truly yours,

CONSOLIDATED GAS SUPPLY CORPORATION

Joseph W. Porter, Jr.,
Agent and Attorney In Fact

RECEIVED
SEP 21 12 36 PM '79
BUR OF LAND MGMT.
OUTER CONTINENTAL
NEW ORLEANS OFFICE
NEW ORLEANS, LA.

ECS/ya

SN 5484

OCS-G 4043

Ship Shoal Area
Eugene Island Area

August 13, 1979

Consolidated Gas Supply Corporation

AUG 20 1979

Right-of-way

ACTION - APPLICATION APPROVED

Your application for a 10 3/4-inch natural gas pipeline from CNG Producing Company's Platform "A" in Block 320, Ship Shoal Area, South Addition, across Block 346, to a subsea tie-in with Tenneco Inc.'s 16-inch receiving pipeline (OCS-G 3348) in Block 367, Eugene Island Area, South Addition, dated May 21, 1979, with attachments thereto is hereby approved with the following additions and corrections:

1. The guidelines for preparation of a pipeline application that are applicable and agreed to by the applicant are dated February 13, 1978.

2. The ANSI 600 valves should not be subjected to a test-pressure differential greater than 1440 psig.

3. The ANSI 600 valves, flanges, and fittings should not be subjected to a body test greater than 2175 psig.

4. Hydrostatic test data including test procedure, hold time, two copies of the pressure charts and results, along with two copies of the completion report consisting of a plat showing the location of the pipeline as installed, must be submitted to this office within ninety (90) days after completion.

The permittee agrees 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, he 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 the Manager, New Orleans OCS Office, has given directions as to its preservation.

Permittee agrees to comply with all regulations and conditions as may be prescribed by the Secretary of the Interior, or the Secretary of Transportation including, pursuant to section 21(b) of the OCS Lands Act, as amended, provisions to assure maximum environmental protection by utilization of the best available and safest technologies, including the safest practices for pipeline burial. This agreement includes but is not limited to complying with the following stipulations:

1. Permittee shall transport or purchase without discrimination oil or natural gas produced from submerged lands or outer Continental Shelf lands in the vicinity of its pipeline in such proportionate amounts as the Federal Energy Regulatory Commission, in consultation with the Secretary of Energy, may, after a full hearing with due notice thereof to the interested parties, determine to be reasonable, taking into account, among other things, conservation and the prevention of waste.

2. Permittee shall operate its pipeline in accordance with the competitive principles set out in section 5(f)(1) of the Outer Continental Shelf Lands Act, as amended, except insofar as the Federal Energy Regulatory Commission may, by order or regulation, exempt such pipeline from any or all of the requirements of section 5(f)(1) pursuant to section 5(f)(2) (which permits such exemption of any pipeline or class of pipelines which feeds into a facility where oil and gas are first collected or a facility where oil and gas are first separated, dehydrated, or otherwise processed).

3. Unless so exempted by Federal Energy Regulatory Commission order or regulation, permittee shall operate its pipeline so as to provide open and nondiscriminatory access to both owner and nonowner shippers, and permittee shall comply with any specific conditions which the Secretary of Energy and the Federal Energy Regulatory Commission may require, after consultation with and due consideration given to the views of the Attorney General, to ensure that its pipeline is operated in accordance with the competitive principles set forth in section 5(f)(1).

/s/ H. P. Sieverding
H. P. Sieverding, Acting Manager
Date: August 16, 1979

Consolidated Gas Supply Corporation hereby agrees to be bound by the foregoing.

/s/ Joseph W. Porter, Jr.
Joseph W. Porter, Jr., Agent and Attorney In Fact
Date August 15, 1979

cc: Geological Survey, USDI
Office of Pipeline Safety Operations, USDT

United States Department of the Interior

GEOLOGICAL SURVEY

434 IMPERIAL OFFICE BLDG. 3301 N. CAUSEWAY BLVD
P.O. BOX 7944
METAIRIE, LOUISIANA 70010

TEL (504) 837-4720

NEW ORLEANS OCS
FILE CODE
ROUTE INITIAL
MGR.
ASST. MGR.
JUN 13 1979
P. LEGAL
PAO
EAD
OPS
STUDIES
MGMT. SER.

JUN 12 1979

In Reply Refer To: OS-5

Memorandum

To: Manager, Bureau of Land Management, 841 Hale Boggs Federal Building, 500 Camp Street, New Orleans, Louisiana 70130

From: Conservation Manager, Gulf of Mexico Region

Subject: Consolidated Gas Supply Corporation's Pipeline Right-of-Way Application, BLM OCS-G 4043

We have reviewed the safety features and design specifications for the subject Right-of-Way Application, dated May 21, 1979, in accordance with the MOU dated August 1, 1974. It is for the construction, maintenance, and operation of a ~~10 3~~ 8/4-inch gas pipeline 10,139 feet in length from CNG's Platform "A", Ship Shoal Block 320, lease OCS-G 2144, to a subsea tie-in with the receiving 16-inch Tennessee Gas Pipeline Corporation's pipeline (BLM OCS-G 3348), Eugene Island Block 367, lease OCS-G 2618.

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

Pipeline Component	Maximum Allowable Operating Pressure/WP Ratings
Submerged component	2922 ~~2,344~~ psig
Riser component	2039 ~~1,628~~ psig
Valves, flanges, fittings	1,440 psig

The hydrostatic pressure test with water will be at 2,160 psig for 24 hours. The ANSI 600 valves should not be subjected to a test-pressure differential greater than 1,440 psig. The ANSI 600 valves, flanges, and fittings should not be subjected to a body test greater than 2,175 psig.

Based on these calculations, we recommend that the maximum allowable operating pressure for this pipeline be 1,440 psig (which is the hydrostatic test pressure divided by 1.50) and that this pressure may be exceeded only when hydrostatically pressure-testing the pipeline. We also recommend that valves and taps at the subsea tie-in be provided with a minimum of three feet of cover, either through burial or with sandbags.

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.

Acting Conservation Manager

UNITED STATES GOVERNM

Memorandum

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

IN REPLY REFER TO:
OCS-G 4043

JUN 04 1979

4043-1

TO : Conservation Manager
Gulf of Mexico OCS Operations

Date: June 1, 1979

FROM : Manager
New Orleans OCS Office

SUBJECT : Consolidated Gas Supply Corporation's Pipeline Right-of-way Application (OCS-G 4043)

In accordance with the memorandum of understanding between the Bureau of Land Management and U. S. Geological Survey signed August 1, 1974, the subject application is attached.

Please review the technical aspects of the proposed pipeline. If you have any questions regarding this matter, please contact Mr. Autry J. Britton of this office.

Attachments
1. Application dated May 21, 1979
2. Calculations, undated
3. Vicinity, Plan, and Profile Map dated May 15, 1979
4. Drawing No. LA-31, Schematic, dated May 18, 1979

NOTED—MC INTO&H

DSC-1541-2
Mar. 1974

CONSOLIDATED GAS SUPPLY CORPORATION
1800 BANK OF NEW ORLEANS BUILDING
1010 COMMON STREET
NEW ORLEANS, LA.
70112
504-523-5581

FILE CODE

ROUTE	INITIAL
MGR.	
ASST. MGR.	
P. LEGAL	
PAO	
EAD	
OPS	
STUDIES	
MGMT. SER.	

MAY 22 1979

May 21, 1979

Mr. John L. Rankin, Manager
Outer Continental Shelf Office
Bureau of Land Management
Suite 841 - Hale Boggs Federal Building
500 Camp Street
New Orleans, Louisiana 70130

RE: APPLICATION FOR RIGHT-OF-WAY FOR 10-3/4" OD NATURAL GAS PIPELINE FROM SHIP SHOAL BLOCK 320 "A" PLATFORM TO A SUBSEA TIE-IN ON TENNESSEE GAS PIPELINE CORPORATION'S 16" GAS PIPELINE LOCATED IN EUGENE ISLAND BLOCK 367 AREA, OFFSHORE, LOUISIANA, GULF OF MEXICO

Dear Mr. Rankin:

Pursuant to Section 5(c) of the Outer Continental Shelf Lands Act of August 7, 1953, Title 43, Chapter 11, Section 2883 of the Regulations of the Bureau of Land Management, Consolidated Gas Supply Corporation is filing this application for a right-of-way 200 feet in width for the purpose of constructing and maintaining a 10 3/4" OD natural gas pipeline to be installed from CNG Producing Company's Ship Shoal Block 320 "A" Platform to a subsea tie-in on Tennessee Gas Pipeline Corporation's 16" gas pipeline in Eugene Island 367 Area, Offshore, Louisiana, Gulf of Mexico. Consolidated will transport natural gas in this line.

Consolidated Gas Supply Corporation 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. Consolidated Gas Supply Corporation's Draft No. 048901 in the amount of $20.00, of which $10.00 covers the application fee and $10.00 covers the first year's rental on 1.92 miles of right-of-way.

3. Two executed originals of Nondiscrimination in Employment Stiuplations.

4. A list of companies to which copies of this application for a right-of-way and accompanying plats have been submitted by certified mail, return receipt requested. Copies of all receipts shall be forwarded to your office when returned by the postal service to this office.

5. Four (4) blueline prints of drawing showing the location, profile, pipeline right-of-way, and route of proposed pipeline.

6. Four (4) blueline prints of vicinity map.

7. Four (4) blackline schematic drawings showing hi-low sensors locations.

8. Calculation Sheet.

Consolicated Gas Supply Corporation has requested our surveyors, John Chance & Associates, to prepare a Hazards Survey on the proposed pipeline. Consolidated will forward the results of this study to the BLM as soon as it is made available to this office.

An Archaeological Survey for the proposed pipeline (covering Ship Shoal Block 320, Eugene Island Block 346 and Eugene Island Block 367 areas) will not be required, as these areas are below the probability area established by the Coastal Environment Inc. 1977 Base Line Study (this information was obtained from M. Street with BLM by Yvonne Abadie with CNG Producing Company in telephone conversation of 5/9/79).

Additional Information:

1. Contact for technical points of application should be directed to Francis L. Green (523-5581, Ext. 240).

2. ~~10.750~~ 8.625" x .500" Wall 54.74#/Ft. API 5L Grade B will be used in the line.
   ~~10.750~~ 8.625" x .500" Wall 54.74#/Ft. API 5L Grade B will be used in the riser.

3. Bracelet type sacrificial anodes will be used as corrosion protection with 33.96 year life expectancy, spaced at 500 feet intervals. Anodes will weigh 120 pounds each. See attached calculations.[1]

4. External Coating - Thin film thermoset epoxy pipe coating, 12-14 mils thick.

5. Internal Corrosion - None.

6. Specific Gravity - Bulk specific gravity of empty line = 135%, referred to sea water.

7. Product Density - Gravity of natural gas to be transported is expected to be 0.60, referred to air.

8. Normal operating pressure = 1000 to 1400 psi
   Maximum operating pressure = 1440 psi (with capacity of 54 MMCF per day)
   Maximum source pressure = 1440 psi

9. Maximum allowable pressure = 1440 psi. See attached calculations[2].

10. Test Pressure - Hydrostatic water test pressure of 2160 psig for a period of 24 hours after installation.

11. Pumps - None.

12. Tennessee Gas Pipeline's MAOP for 16" gas line located in Eugene Island Block 367, which proposed pipeline will tie into - 1440 psi.

13. Construction Information:

    a.) Starting date - August of 1979

    b.) Method of construction - Reel or conventional lay (contract not yet awarded).

    c.) Pipeline will not be buried except at subsea tie-in (minimum of 1' below ML)

    d.) Time required to lay pipe - approximately 2 weeks.

    e.) Time required to complete project - approximately 2 weeks.

Platforms and Structures:

1. Application for platform and structure was previously submitted to USGS prior to installation with the design feature attached.

2. The production facilities design features will be submitted for approval prior to placing this system in service.

Please refer to your New Orleans Miscellaneous 015 File for a copy of CGSC's Articles of Incorporation, which also authorizes the undersigned to sign for and on behalf of the company.

Consolidated Gas Supply Corporation will be pleased to furnish you with whatever additional information is needed or necessary to expedite the issuance of the Decision approving said right-of-way. Please direct any additional inquiries concerning this application to Mr. Francis L. Green (523-5581, Ext. 240).

Very truly yours,

CONSOLIDATED GAS SUPPLY CORPORATION

Joseph W. Porter, Jr.
Agent and Attorney in fact

ya

Enclosures

NOTE: This form must be executed as an original.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NONDISCRIMINATION IN EMPLOYMENT

As a condition precedent to the approval of the granting of the subject pipeline right-of-way, the grantee CONSOLIDATED GAS SUPPLY 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.

CONSOLIDATED GAS SUPPLY CORPORATION

Joseph W Porter Jr
Signature of Grantee

Date: May 18, 1979

COMPANIES TO WHICH APPROVAL HAS BEEN REQUESTED FOR APPLICATION FOR RIGHT-OF-WAY. APPLICATIONS SUBMITTED TO COMPANIES BY CERTIFIED MAIL - RETURN RECEIPT REQUESTED;

CNG Producing Company 1800 BNO Bldg., 1010 Common Street New Orleans, Louisiana 70112 --Attention: Mr. E. C. Smith, Vice President, Operations	OCS-G-2144 SS Blk. 320 Lease owner	
Wilshire Oil Company of Texas 921 Bergen Avenue Jersey City, New Jersey 07306 --Attention: Mr. John P. Dietzel	OCS-G-2144 SS Blk. 320 Lease Owner	
Texaco Inc. (Offshore LA., Miss., Ala., & Fla.) P. O. Box 60252 New Orleans, Louisiana 70160 --Attention: Mr. Alton McClung	OCS-G-2618 EI Blk. 367 Lease Owner	
Tenneco Exploration, Ltd. Tenneco Exploration II, Ltd. P. O. Box 51345 Lafayette, Louisiana 70505 --Attention: Mr. Steve Chesebro'	OCS-G-2618 EI Blk. 367 Lease Owner	
Tenneco Oil Company P. O. Box 51345 Lafayette, Louisiana 70505 --Attention: Mr. Steve Chesebro'	OCS-G-2618 EI Blk. 367 Lease Owner	
Tenneco Inc. P. O. Drawer 53388 - OCS Lafayette, Louisiana 70505 --Attention: Mr. R. G. Robertson	Pipeline OCS-G-3348 EI Blk. 367	Proposed PL does not cross Tenneco's PL in this area
Mesa Offshore Co. Mesa Petroleum Co. P. O. Box 2009 Amarillo, Texas 79189 --Attention: Mr. Michael J. Moore	OCS-G-3334 EI Blk. 346 Lease Owner	Proposed PL crosses SE corner of EI Blk. 346
American Natural Gas Production Company Suite 1100 Galleria Towers West 5075 Westheimer Houston, Texas 77056 --Attention: Mr. Arnold Dethrow	OCS-G-3334 EI Blk. 346 Lease Owner	"
Aminoil Development, Inc. Aminoil USA, Inc. P. O. Box 94193 Houston, Texas 77018 --Attention: Mr. Thomas R. Barr	OCS-G-3334 EI Blk. 346 Lease Owner	"
Oxy Petroleum, Inc. P. O. Box 2247 Houston, Texas 77001 --Attention: Mr. H. P. Dunn	OCS-G-3334 EI Blk. 346 Lease Owner	"

APPLICATION SUBMITTED TO FOLLOWING COMPANIES BY CERTIFIED MAIL - RETURN RECEIPT REQUESTED
(Continued)

Tenneco Inc. P. O. Drawer 53388, OCS Lafayette, Louisiana 70505 --Attention: Mr. R. G. Robertson	Pipeline OCS-G-3348 EI Blk. 346	Proposed PL does not cross Tenneco's PL in this area.

APPLICATION FOR RIGHT - OF - WAY FOR 10 3/4" NATURAL GAS PIPELINE FROM SHIP SHOAL BLOCK 320 "A" PLATFORM TO SUBSEA TIE-IN ON TENNESSEE GAS PIPELINE'S 16" O.D. GAS LINE LOCATED IN EUGENE ISLAND BLOCK 367, OFFSHORE, LOUISIANA, GULF OF MEXICO

CALCULATIONS

1. Cathodic Protection:

Assuming: 2% Holidays
Current Requirements: .005 Amps per Square Ft.
Zinc Requirements For Above 26# Zinc/Amp./Yr. Length of Line - 10,139'

$$10{,}139' \times 3.1416 \times \frac{\cancel{10.750}\ 8.625}{12} \times .02 \times .005 \times 26 = 74.19\# \text{ Zinc/Yr.}$$

Use 21 - 120# Zinc Anodes = 2520# Zinc (500' Spacing)

$$\frac{2520 \text{ Total \# Zinc}}{74.19\# \text{ Zinc/Yr.}} = 33.96 \text{ Years Life}$$

Since this line will be laid in the open water, Consolidated Gas Supply Corporation is proposing that the only test stations will be located at the platform end of the line at the insulating flanges because any stations along the line would be a hazard to navigation and would be subject to damages during any storm. Therefore, we are proposing that the first anode be placed 500' from the platform. The current would have to travel 500' to the test station where the remainder of the line the current would only have to travel 250'. Therefore, the tests on the platform should be aconservative estimate of the current at the mid point of the line.

2. Maximum Allowable Pressure:

(a) Line Pressure -

$$P = \frac{2st \times F}{D}$$

P = Maximum Internal Pressure in PSI
t = Nominal Thickness of the Pipe Wall in Inches
D = Nominal Outside Diameter of the Pipe Line in Inches
s = Maximum Allowable Hoop Stress in the Pipe Wall in PSI
F = Safety Factor

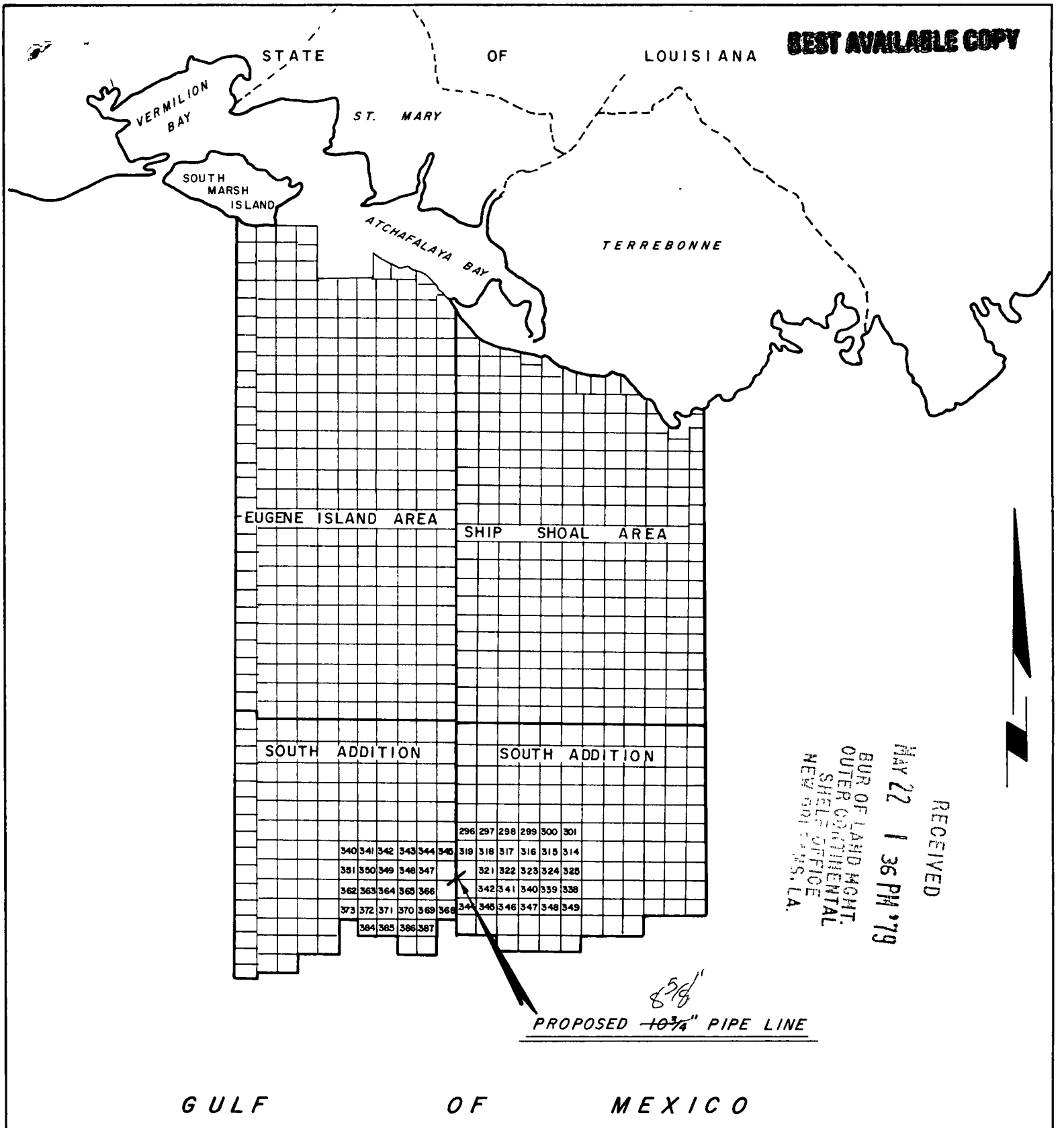
$$P = \frac{2 \times 35{,}000 \times .500 \times .72}{\cancel{10.75}\ 8.625} = \cancel{2344}\ 2922 \text{ PSI*}$$

(b) Riser -

$$P = \frac{2 \times 35{,}000 \times .500 \times \cancel{.60}\ .50}{\cancel{10.750}\ 8.625} = \cancel{1953}\ 2029 \text{ PSI*}$$

*~~1953~~ PSI is NOT the maximum allowable pressure because of the use of ANSI 600# flanges with a maximum allowable pressure of 1440 PSI.

Maximum Allowable Pressure is 1440 PSI.



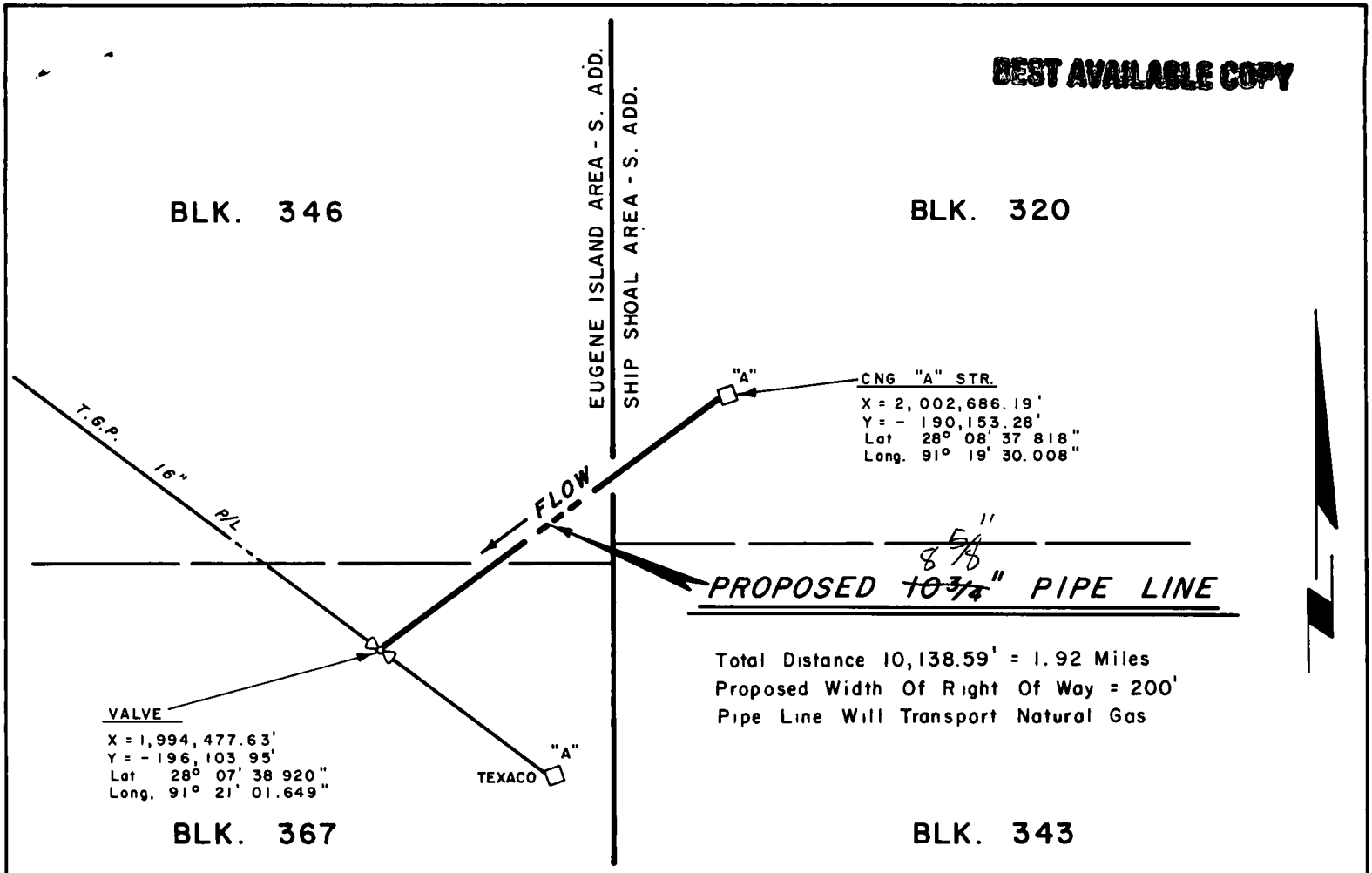
GULF OF MEXICO

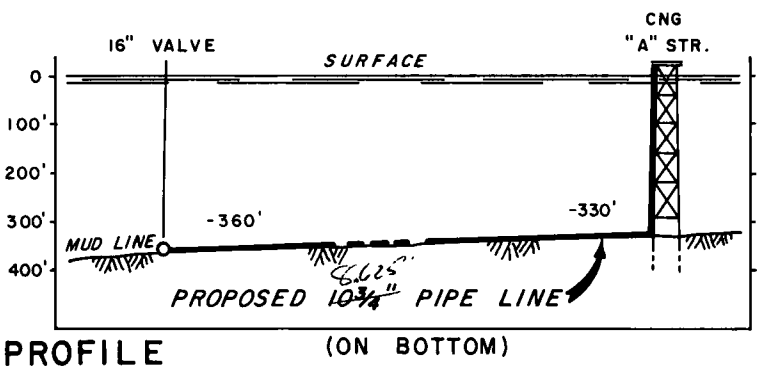
VICINITY MAP

0 15 30 MILES
SCALE

PROPOSED ~~10 3/4"~~ 8 5/8" PIPE LINE
BLK. 320 SHIP SHOAL AREA-S. ADD. TO
BLK. 367 EUGENE ISLAND AREA-S. ADD.
GULF OF MEXICO

APPLICATION BY CONSOLIDATED GAS SUPPLY CORP
MAY 15, 1979 NEW ORLEANS, LOUISIANA





NOTE:

THE DESIGN OF THIS PIPE LINE RIGHT-OF-WAY COMPLIES WITH D.O.T. REGULATIONS.

STATE OF LOUISIANA
JACK C. SCRANTON
REG. No. 320
REGISTERED
LAND SURVEYOR

RIGHT OF WAY AS SHOWN HEREON IS CERTIFIED CORRECT.

Jack C. Scranton

REGISTERED LAND SURVEYOR NO. 320

PROPOSED ~~10 3/4"~~ 8 5/8" PIPE LINE
BLK. 320 SHIP SHOAL AREA-S. ADD. TO
BLK. 367 EUGENE ISLAND AREA-S. ADD.
GULF OF MEXICO

APPLICATION BY CONSOLIDATED GAS SUPPLY CORP.
MAY 15, 1979 NEW ORLEANS, LOUISIANA

OCS-G 4042

UNDERWATER TIE-IN
SS BLK. 320 TO SUBSEA TIE-IN
ON TGT 16" PL IN EI BLK. 367

Tennessee Gas Pipeline Co

MAOP = 1440 PSIG

←12" 900# ANSI 900 Block Valve
←~~10~~ 8" 900# ANSI 900 Check Valve
←~~10~~ 8" 900# ANSI 900 Block Valve

NOTE: THE DESIGN CHARACTERISTICS OF THIS PIPELINE IS IN COMPLIANCE WITH DOT REGULATIONS

CERTIFIED BY:

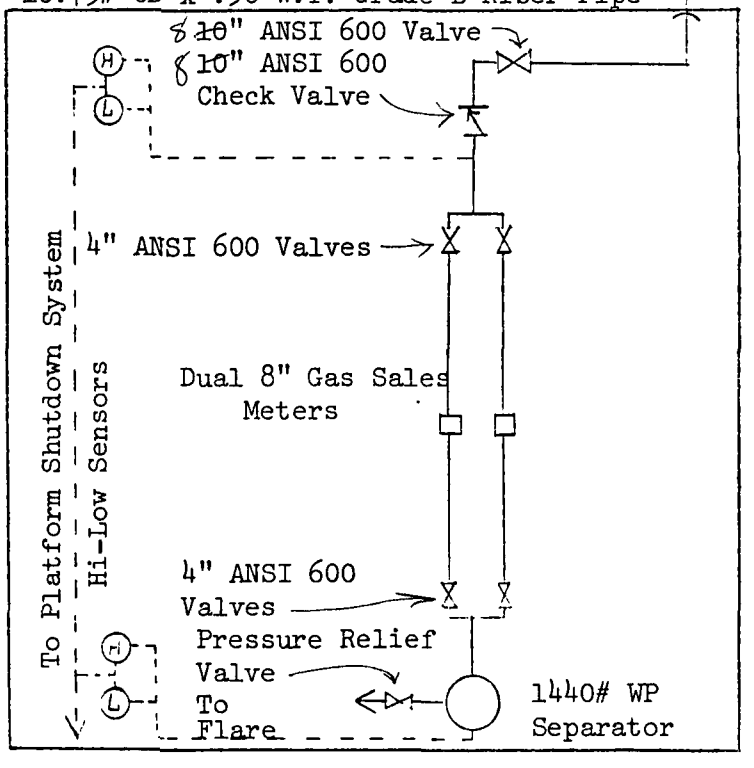
Eugene Kirch,
Vice President, Operations
May 18, 1979

Flow

~~10.75~~ 8.625" OD x .50 Wall Gr. B Line Pipe
21 Sacrificial Zinc Anodes
500 Ft. Separation 120# Each

~~10,139'~~

~~10.75~~ 8.625"# OD x .50 W.T. Grade B Riser Pipe



CNG PRODUCING COMPANY
SHIP SHOAL BLOCK 320
"A" PLATFORM

CONSOLIDATED GAS SUPPLY CORPORATION
SCHEMATIC DRAWING

Proposed ~~10.75~~ 8.625" Pipeline From CNG Producing Company's SS Blk. 320 "A" Platform to Subsea Tie-in in EI Blk. 367

Drawing #LA-31 5/18/79

Consolidated Gas ~~Pipe Line~~ Supply Corp'n. 4043 1

10 3/4" CH4's Plat "A", SS 320, G-2144

SSTI Tennessee Gas Pipeline Corpn 16" CI 367, G2618

10138.59 ←→ (1.92019MI)
10139' (1.92027MI)

PIPELINE APPLICATION CHECK LIST

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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:

I. SOP

_____ a. Do the leases involved on the P/L application appear on the current Suspension of Production (SOP) Lease List?

II. POD

_____ a. Is the pipeline presently covered by an approved Plan of Development (POD)? (Discuss ROU&E with Doug.) If yes, go to III. If No, go to 250.34. (Requires submittal to POD/P by operator to District.)

III. USGS Application

_____ a. The applicant is a Federal lease holder and the pipeline is to be used for such purposes as:

_____ 1. Moving production to a control point for gathering, treating, storing, or measuring.

_____ 2. Delivery of production to a point of sale.

_____ 3. Delivery of production to a pipeline operated by a transportation company.

_____ 4. Moving fluids in connection with lease operations, such as for injunction purposes.

_____ b. The pipeline is within the lease boundary owned by the operator (If yes, include 30 CFR 250.19(b) in approval.)

_____ c. Pipeline is within continguous lease boundaries. (If yes, include 30 CFR 250.19(b) in approval.)

_____ d. Pipeline is within non-continguous lease boundaries. (If yes, include 30 CFR 250.18(c) and 30 CFR 250.19(b) in approval.)

_____ e. Lessee's "intent to cross" letter are received. (Wait 30 days for letters of objection. Only objections concerning interference with lease operations will be considered.)

_____ f. Pursuant to Secretarial Order 2974 of April 30, 1975, check the following:

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_____ 1. FWS notified _____.

_____ 2. FWS comment received _____.

_____ 3. BLM notified _____.

_____ 4. BLM comment received _____.

_____ 5. Environmental Impact Evaluations completed _____.

_____ 6. If related to new POD/P, date of POD/P approval _____.

IV. BLM Application

✓ a. The pipeline must be able to be subjected to common carrier provisions (i.e., no downstream production facilities or downstream pipelines which could not be subjected to common carrier provisions).

V. DOT Pipelines

✓ a. The pipelines are shoreward of the outlet flange at the first 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.

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B. 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 located upstream of departing check valves 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 an automatic fail close valve tied into the automatic and remote shut-in system. SSTI

N/A III. 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 remote shut-in system.

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

✓ 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. If pipeline pilots are located on any process vessel, all flow restrictions (backpressure valves, chokes) downstream of pilots are indicated on the schematic.

✓ VIII. Pressure source is drawn into the schematic with the following:

✓ a. Source SEPARATOR.

✓ b. Maximum source pressure, psig 1440.

✓ IX. 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 1440 PSIG

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C. Verify that the location plat depicts the following:

✓ I. Location of P/L

✓ II. Length of P/L

✓ III. Size of P/L

✓ IV. Type of service

✓ V. Direction of flow

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

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

a. Size of P/L, inches 10.75

b. Weight of P/L, lbs./ft. 54.74

c. Grade of P/L B

d. Wall thickness, inches .500

e. Size of riser, inches 10.75

f. Weight of riser, lbs./ft. 54.74

g. Grade of riser B

h. Wall thickness of riser, inches 0.500

i. Minimum WP rating of piping, fittings, valves, psig

j. Hydrostatic test pressure (HTP), psig 2160

k. Hold time, hrs. 24

l. Classification of P/L (oil or gas) gas

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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 Ii above ($MAOP_{pfv}$) = _____ ($MAOP_{pfv}$)

_____f. Is 1.25 MSP $\leqq$ HTP $\leqq$ .95 (IP @ SMYS for smaller IP of a and c above)

_____ $\leqq$ _____ $\leqq$ _____

NOTE: If not, 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)

_____g. HTP/1.25 = _____

_____h. Is HTP hold time $\geqq$ 2 hours

_____i. MAOP of receiving pipeline from IV _____.

_____j. $MAOP_{p/1}$ = the smallest of b, d, e, g, and i above

_____ ($MAOP_{p/1}$)

_____k. Test pressure ANSI & API carbon steel RTJ & RF Flanges and Valves

_____ (From Table 3.1 Page 31 API RP 14E)

_____l. Is k > HTP

NOTE: If not, add statement in approval letter to insure valves and flanges are not subjected to test pressure.

_____m. Is j $\geq$ 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 equipment.

III. DOT Pipelines

a. IP @ SMYS for submerged pipeline = $\frac{2st}{D}$

b. (.72 x IP @ SMYS) for submerged pipeline = 2344 ($MAOP_{sc}$) ✓

c. IP @ SMYS for riser = $\frac{2st}{D}$ =

d. For oil P/L (.60 x IP @ SMYS) for riser = 1953 ($MAOP_{rc}$)

For gas P/L (.50 x IP @ SMYS) for riser = ~~1953~~ 1628 ✓

e. See Ii above 1440 ($MAOP_{pfv}$)

✓ f. Are b, d, and e $\geq$ MSP

1440 $\geq$ 1440

NOTE: If not, a departure is necessary requiring redundant safety equipment.

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

g. Limit of Testing

N/A 1. For oil P/L:

Is 1.25 MSP $\leq$ HTP $\leq$ .95 (IP @ SMYS for smaller IP of a and c above)

— $\leq$ 2160 $\leq$ —

✓ 2. For gas P/L riser component:

Is 1.50 MSP $\leq$ HTP of riser $\leq$ .95 (IP @ SMYS of c above)

~~1800~~ 2160 $\leq$ 2160 $\leq$ 3093

✓ 3. For gas P/L submerged component:

Is 1.25 MSP $\leq$ HTP of submerged component $\leq$ .95 (IP @ SMYS of a above)

1800 $\leq$ 2160 $\leq$ 3093

NOTE: If not, 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)

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h. $MAOP_{p/1}$ based on HTP

N/A 1. For oil P/L HTP/1.25 = _____

✓ 2. For gas P/L riser component 2160 HTP/1.5 = 1440
of riser

✓ 3. For gas P/L submerged component 2160 HTP/1.25 = 1728
of submerged component

N/A i. For oil P/L Is HTP hold time ≥ 24 hours

✓ For gas P/L Is HTP hold time ≥ 8 hours 24

✓ j. $MAOP_{p/1}$ = the smallest of b, d, e, and h above

1440 ($MAOP_{p/1}$)

✓ k. Test pressure ANSI & API carbon steel RTJ & RF flanges and valves

2175 (From table 3.1 page 31 API RP 14E)

✓ l. Is k > HTP 2160 > 2175

✓ NOTE: If not, add statement in approval letter to insure valves and flanges are not subjected to test pressure.

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

		Submerged Component	Riser
a.	Size,inches		
b.	Grade		
c.	Wall thickness, inches		
d.	Minimum working pressure of valves and flanges		(MAOPpfv)
e.	Date of last hydrostatic test		
f.	HTP, psig		
g.	Hold time, hours		
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		(MAOPsc)
k.	IP@SMYS for riser 2ST/D		
l.	(.60 X IP@SMYS) for riser		(MAOPrc)

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 _ MAOP of proposed P/L _
MAOP of proposed P/L

_____ _ _____ _ _____

G3348
16"
1440psig

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E. Verify that the information given on the submitted data sheet is complete; and calculate the life expectancy of the pipelines corrosion protection ($LE_{p/1}$)

I. General Information for Calculating $LE_{p/1}$

✓ a. Type of corrosion protection (platform anodes, P/L anodes, or rectifiers)

N/A b. If platform anodes are used:

1. Type of anode _____

2. Weight of unit anode, lbs. _____

✓ c. If pipeline anodes are used:

1. Type of anode ZINC

2. Spacing interval, ft. 500 ①

3. Weight of unit anode, lbs. 120

II. Calculated Life Expectancy of Corrosion Protection

N/A a. If platform anodes are used, are they considered adequate _____

✓ b. If pipeline anodes are used:

$LE_{p/1} = 3.82 \times 10^4 \times W^o/DIR? = \frac{3.82 \times 10^4 \times 120}{10.75 \times 500 \times 26}$ ① $= 32.8$

W^o = weight of one anode, pounds =

D = outside diameter of pipe, inches

I = interval = length of pipe, feet ÷ total number of anodes $\frac{10139}{21} = 482.81$

R = consumption rate, lbs./amp-yr.

✓ c. Is our calculated $LE_{p/1} \geq 20$ years

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

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

a. Description of pipelines protective coating 12-14 MILS EPOXY

b. Description of risers protective coating _____

c. Description of pre-concrete coating _____

d. Density of concrete, lbs./cu. ft. _____

e. Thickness of concrete, inches _____

f. Thickness of asphalt/somastic _____

g. Gravity or density of products _____

For gas .60 (air = 1.0)

For oil/condensate _____ ^{o} API, _____ (water = 1.0)

h. Given $SG_{p/1}$ 1.35

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II. $SG_{p/1}$

✓ a. Expoxy-coated pipelines:

$SG_{p/1} = 2.865\ W/D^2$

W = weight of bare pipe, lbs./ft.

D = diameter of pipe, inches

N/A b. For weighted pipelines:

$$SG_{p/1} = \frac{d_c}{d} + \frac{k_2}{(T-k_1)^2}\left(\frac{W+P}{k_3} - \frac{d_c}{d}\right)$$

d_c = density of concrete, lbs./ft.^{3}

d = density of fluid in which pipeline is submerged, lbs./ft.^{3}

k_1, k_2, k_3 = coefficients from tables

T = thickness of concrete coating, inches

W = weight of bare pipe, lbs./ft.

P = weight of double enamel coat and felt wrap, or weight of asphaltmastic coating, lbs./ft.

$SG_{p/1}$ = _____

✓ c. Is our calculated SG ≅ operator's given SG

1.357 ≅ 1.35

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.

G. Verify the following general information:

I. Water Depth, ft. 360 (Max) 330 (Min)

II. Burial depth, ft. 0

III. Maximum Operating Pressure (MOP) 1400 – 1000

IV. Capacity 54 MMCFD @ 1440