



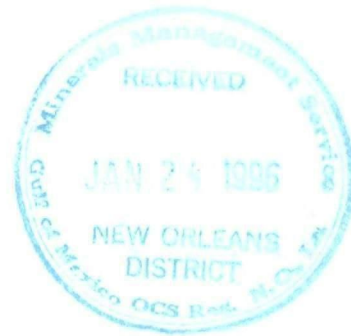
DALEN Resources
Oil & Gas Co.

SN 9322

~~G 10714~~
G 12719

January 19, 1996

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



Attn: Ms. Ann Becnel

Re: Pipeline Abandonment
South Marsh Island 273
Well No. 1R
OCS-G-10714 (LEASE #)
Segment No. 9322

Dear Ann:

By letter dated September 28, 1995 DALEN Resources Oil & Gas Co. requested relinquishment in its entirety of 12,023' of 4-1/2" ROW pipeline, and approval to abandon same in place.

On November 13, 1995 Mike Connor gave verbal approval to Suzy Younger in our office to relinquish and abandon the pipeline. This is to advise you that the work was completed on December 4, 1995. The pipeline was abandoned in place, flushed, filled with seawater, cut and plugged with the ends buried 3' below the mudline.

Please contact me at (214) 987-6329 if you have any questions or need additional information.

Sincerely,

Jim Johnson
Regulatory Specialist

c: C. Erwin
File

SN 9322

ok
2/12/96
B



SN 9322

10/6/95

mConner
Alvarado 10-13-95

OCT 16 1995

In Reply Refer To: MS 5232

Dalen Resources Oil & Gas Co.
Attention: Mr. Don W. Moore
6688 North Central Expressway, Suite 1000
Dallas, Texas 75206

Gentlemen:

Your letter dated September 28, 1995, requests approval to abandon in place 12,023 feet (2.28 miles) of 4 1/2-inch pipeline designated as Segment No. 9322, and to relinquish in its entirety, Right-of-Way Grant OCS-G 12719, associated therewith. The subject pipeline originates at Dalen Resources Oil & Gas Co.'s (Dalen) Platform A in Block 273, and terminates at a subsea tie-in with Tennessee Gas Pipeline Company's 10 3/4-inch pipeline (OCS-G 9341) in Block 275, all in the South Marsh Island Area, North Addition.

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, Dalen Resources Oil & Gas Co. 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 September 29, 1995.

Dalen shall cease transporting hydrocarbons through this pipeline immediately and complete the aforementioned abandonment operations by September 29, 1996. Additionally, Dalen shall within 30 days after completion of the abandonment, submit a report to this office which includes the date the abandonment was completed and verifies that the abandonment was completed as approved.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 (P/L OCS-G 12719)w/enclosures (MS 5232)
1502-01 (P/L OCS-G 12719) (microfilm) (MS 5033)
MS 5421
MS 5280
MS 5232 (Carto) w/plat

MConner:amm:10/5/95:Dalen.322

612719

gn m8
11/2/95
12

DALEN Resources
Oil & Gas Co.

G-12719
SN 9322
Kathy



VIA FEDERAL EXPRESS

September 28, 1995

Minerals Management Service
Gulf of Mexico, OCS Region
1201 Elmwood Park Blvd.
New Orleans, Louisiana 70123-2394

Attn: Mr. Mike Connor

Re: Pipeline Abandonment
South Marsh Island Block 273
Well No. 1R
Lease #OCS-G-10714

Dear Mr. Connor:

In accordance with Title 30 CFR 250.156 (a)(1), DALEN Resources Oil & Gas Co. respectively request relinquishment in its entirety of 12,023' of 4-1/2" ROW Pipeline OCS-G-12719, and approval to abandon in place Segment No. 9322. The pipeline will be abandoned in place, flushed, filled with seawater, cut and plugged with the ends buried at least three (3) feet deep.

If you have any questions concerning this matter, please contact our Engineer for this project Mickey Shaw at (214) 692-4371, or Jim Johnson, Regulatory Specialist at (214) 987-6329.

Very truly yours,

Don W. Moore
Vice President Operations

DWM/sw

cc: M. Shaw
C. Erwin
S. Younger



BEST AVAILABLE COPY

RECEIVED
OCT 2 1995

UNITED STATES GOVERNMENT
MEMORANDUM

MINERALS MANAGEMENT SERVICE
LEASING & ENVIRONMENT

10/2/95

To: Leasing Activities Section, Adjudication Unit (MS 5421)

From: Petroleum Engineer, Pipeline Unit, Plans and Pipeline Section,
Field Operations, GOM OCS Region (MS 5232)

Subject: Adjudication of Pipeline Right-of-Way Abandonment and Relinquishment

OCS-G 12719 Segment No. 9322

The subject request is attached for your adjudication. If you have any questions regarding this matter, please contact Mr. Mike Conner at extension 2544.

Mike Conner

Attachments

Application dated Sept 28, 1995 w/attach

Halmes, Jr Please initial and return if request meets all necessary criteria. 10-4-95



SN 9322

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
N.O. Misc. #582



ACTION

PG&E Resources Offshore Company

ACCEPTANCE OF MERGER

On March 31, 1992, there was filed in this office for approval evidence of merger of Corpus Christi Oil and Gas Company, a Delaware corporation (N.O. Misc. #538), with and into PG&E Resources Offshore Company, a Delaware corporation (N.O. Misc. #582), effective December 26, 1991. The name of the surviving corporation is PG&E Resources Offshore Company and the qualification number assigned thereto is New Orleans Miscellaneous File Number 582.

In connection with this merger, the following evidence was received:

1. Certificate of Ownership and Merger merging Corpus Christi Oil and Gas Company into PG&E Resources Offshore Company, duly certified by the Secretary of State of the State of Delaware on December 27, 1991, with additional certification by Randall B. Wilson, Assistant Secretary of PG&E Resources Offshore Company, on January 31, 1992;
2. Statement of PG&E Resources Offshore Company, duly sworn by Randall B. Wilson, Assistant Secretary, on January 31, 1992, reflecting the following:
 - A. PG&E Resources Offshore Company is incorporated in the State of Delaware;
 - B. PG&E Resources Offshore Company is authorized to hold oil and gas leases and pipeline rights-of-way on the Outer Continental Shelf;
3. Evidence of authority of persons empowered to execute for and on behalf of PG&E Resources Offshore Corporation, duly certified by Randall B. Wilson, Assistant Secretary, on March 31, 1992;


*On file
4/10/92
HJ*

4. Certificate executed by Randall B. Wilson, Assistant Secretary, on January 31, 1992, listing persons authorized to execute leases and other documents on behalf of PG&E Resources Offshore Company;
5. Certificate executed by Randall B. Wilson, Assistant Secretary, on January 31, 1992, listing the names and titles of all officers of PG&E Resources Offshore Company;
6. List of pipeline rights-of-way to be affected by the merger;
7. Outer Continental Shelf Mineral Lessee's and Operator's Bond Number U1870120 in the amount of \$300,000 executed on January 27, 1992, with PG&E Resources Offshore Company as principal and United Pacific Insurance Company as surety;
8. Outer Continental Shelf Right-of-Way Grant Bond Number U1870119 in the amount of \$300,000 executed on January 27, 1992, with PG&E Resources Offshore Company as principal and United Pacific Insurance Company as surety.

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 is hereby approved insofar as it affects 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:

PIPELINE RIGHTS-OF-WAY

<u>OCS-G NO.</u>	<u>OCS-G NO.</u>
8277	10105
8593	10528
8607	11191
8616	12310
9350	12719
9374	13414


J. Rogers Pearcy
Regional Director

cc: Qualification File #582

Corpus Christi Oil and Gas Company
the operating subsidiary of
PG&E Resources Offshore Company

5950 Berkshire Lane
Suite 600
Dallas, Texas 75225
Telephone 214/750-3800
FAX 214/750-3883

Suite 600 Building
J Box 2928
Corpus Christi, Texas 78403
Telephone 512/888-9301
FAX 512/883-5992

1200 Travis Street
Suite 1960
Houston, Texas 77002
Telephone 713/658-0601
FAX 713/658-0762

SN 9322



July 29, 1991

Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123

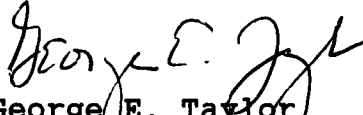
Attn: Mr. D. J. Bourgeois
Regional Supervisor
Field Operations

RE: OCS-G-12719
Pipeline Right-of-Way
Block 273
South Marsh Island Area

Dear Mr. Bourgeois:

Enclosed please find a copy of a letter from Chevron, USA, Inc. acknowledging receipt of the as-built plat for the subject pipeline. This should complete your files for this pipeline.

Yours very truly,


George E. Taylor
Manager, Operations
Dallas, Texas

GET/ck



BEST AVAILABLE COPY



Chevron U.S.A. Inc.

935 Gravier Street, New Orleans, LA 70112 • Phone (504) 592-6037

July 16, 1991

E B Mendel-John
Senior Attorney
Gulf of Mexico Land Division

As-Built Plat
Pipeline Right-of-Way
Blocks 273-275
South Marsh Island Area

Corpus Christi Oil and Gas Company
P. O. Box 2928
Corpus Christi, TX 78403

Attention Mr. George E. Taylor

Dear Mr. Taylor:

Please be advised that Chevron has received a copy of the as-built plat for the subject right-of-way.

Very truly yours,

A handwritten signature in cursive script, appearing to read "E B Mendel-John".

E. B. Mendel-John

EBM/dac

BEST AVAILABLE COPY

SN 9322

MARSH 6.21
Gandy 6-21

In Reply Refer To: MS 5232 (ROW OCS-G 12719)

JUN 25 1991

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Corpus Christi Oil and Gas Company
Attention: Mr. George Taylor
Post Office Box 2928
Corpus Christi, Texas 78403

Gentlemen:

In accordance with 30 CFR 250.158(b), your letter dated June 11, 1991, transmitted a pipeline construction report for the following right-of-way pipeline located in the South Marsh Island Area:

<u>Pipeline</u> <u>Right-of-way</u> <u>Number</u>	<u>Size</u> <u>(inches)</u>	<u>Length</u> <u>(feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
OCS-G 12719	4 1/2	12,023	Gas/ Condensate	Platform A Block 273 Lease OCS-G 10714	A 10-inch SSTI Block 275 Lease OCS-G 5477

The data which you provided indicates the following test information and establishes the assigned maximum allowable operating pressure (MAOP) for this pipeline:

<u>Pipeline</u> <u>Right-of-way</u> <u>Number</u>	<u>Test Pressure</u> <u>(psig)</u>	<u>Duration</u> <u>(hours)</u>	<u>MAOP</u> <u>(psig)</u>	<u>MAOP</u> <u>Determination</u>
OCS-G 12719	2,130	8	1,253	Tie-in Pipeline

Because grantee has deviated from the approved right-of-way in South Marsh Island Block 275, Lease OCS-G 5477, Corpus Christi Oil and Gas Company must notify Chevron U.S.A. Inc., operator of Lease OCS-G 5477, to that effect. A return-receipt card or letter from Chevron U.S.A. Inc. evidencing proof of notice must be submitted to this office within 60 days of receipt hereof.

on 7/1/91
ms

BEST AVAILABLE COPY

2

The total length of the "as-built" pipeline right-of-way is 2.28 miles.

In future correspondence, please refer to the above pipeline by its assigned right-of-way number.

Sincerely,

(Orig. Sgd.) A. Donald Giroir

D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: 1502-01 P/L OCS-G 12719 w/orig report (MS 5232) (K. Faust)
1502-01 P/L OCS-G 12719 w/copy of report (MS 5033) (D. Schaefer)
MS 5421
MS 5280
MS 5232 Carto w/cy of location plat

PLMarsh:km:6/19/91

Corpus Christi Oil and Gas Company
the operating subsidiary of
PG&E Resources Offshore Company

5950 Berkshire Lane
Suite 600
Dallas, Texas 75225
Telephone 214/750-3800
FAX 214/750-3883

The 600 Building
P.O. Box 2928
Corpus Christi, Texas 78403
Telephone 512/888-0001
FAX 512/883-5992

1200 Travis Street
Suite 1960
Houston, Texas 77002
Telephone 713/658-0601
FAX 713/658-0762

(214) 750-3800

June 11, 1991



Minerals Management Service
1201 Elmwood Park Blvd.
New Orleans, LA 70123

Attn: Mr. D. J. Bourgeois
Regional Supervisor
Field Operations



Re: OCS-G-12719
Pipeline Right-of-way
Block 273
South Marsh Island Area

Dear Mr. Bourgeois:

This is to advise you that the above named pipeline has been installed. Attached is a copy of the pressure test chart, the dead weight gauge reading and the "As-Built" plat of the line.

Yours very truly,

A handwritten signature in cursive script, appearing to read "George Taylor".
George Taylor
Manager, Operations

GT:ah

Enclosures



PHOENIX DIVING, INC.

HYDRO TESTING DIVISION

Phone (318) 234-4793
P. O. Box 53907, O.C.S. • Lafayette, La. 70505

BEST AVAILABLE COPY

DEADWEIGHT RECORD

A.F.E. NUMBER SMT-273 #1-R

JOB NUMBER _____

LINE OWNER C.C.O & G

GENERAL CONTRACTOR N.O.P.I.

TEST SECTION FROM STA. CCOG-
SMT-273 #1-R

TO STATION TENNESSEE GAS PIPELINE
SUB SEA TRP SMT-275

PIPE DESCRIPTION 4" SCH 40

MINIMUM PIPE ELEVATION -5'0"

MAXIMUM PIPE ELEVATION -5'0"

ELEV. DEADWEIGHT TESTER +10'

DATE & TIME TEST BEGAN 5-31-91 9:00 AM

DATE & TIME TEST COMPLETED 5-31-91 5:10 PM

MAXIMUM TEST PRESSURE 2205 PSIG

MINIMUM TEST PRESSURE 2180 PSIG

TIME	DEAD WEIGHT READING	TEMPERATURE AMBIENT	TEST MEDIUM
8:30 AM	2198 PSIG		
8:35	2178		
9:00	2205		PRESSURE #1
9:15	2202		
9:30	2198		
9:45	2195		
10:00	2193		
10:15	2191		
10:30	2189		
10:45	2188		
11:00	2188		
11:15	2187		
11:30	2186		
11:45	2185		
12:00 PM	2185		
12:15	2185		
12:30	2185		
12:45	2184		
1:00	2184		

TIME	DEAD WEIGHT READING	TEMPERATURE AMBIENT	TEST MEDIUM
1:15 PM	2184 PSIG		
1:30	2184		
1:45	2184		
2:00	2184		
2:15	2184		
2:30	2183		
2:45	2183		
3:00	2183		
3:15	2182		
3:30	2182		
3:45	2181		
4:00	2181		
4:15	2180		
4:30	2180		
4:45	2180		
5:00	2180		
5:10	2180		

RESULTS OF TEST: ☒ ACCEPTABLE

☐ UNACCEPTABLE

DURATION OF TEST 8 HRS.

CONTRACTOR'S REP. David L. Smith

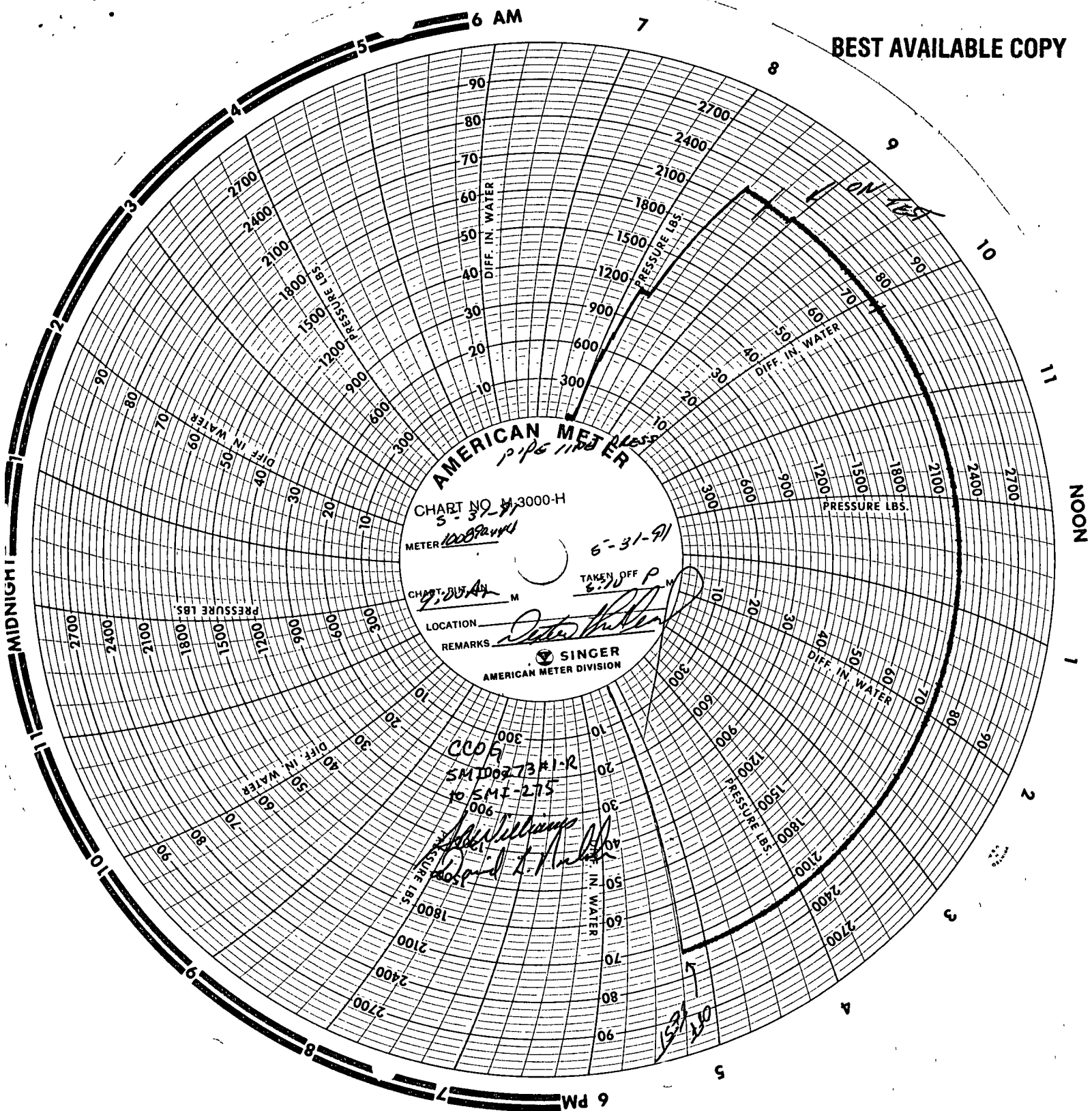
OWNER'S REP. John Williams

TESTER'S REP. Robert R. Rupp

DEADWEIGHT SERIAL NUMBER 15-497-2
PIPE LINE PRESS 100890-444

AMBIENT TEMPERATURE RECORDER S/N 100890-555
PIPE LINE TEMP 100890-666

BEST AVAILABLE COPY



BEST AVAILABLE COPY

BLK. 274

BLK. 273

OCS-G-10714

CORPUS CHRISTI
BLK. 273 #1
X=1,753,289.38'
Y= 158,101.94'
Lat. 29° 05' 56.893"
Long. 92° 06' 20.755"

MMS SEGMENT NO. 9322
TOTAL LENGTH = 12,022.71' = 2.28 MI.

AS-BUILT 4"
GAS PIPELINE

BLK. XING
X=1,750,688.51'
Y= 156,124.70'

BLK. XING
X=1,752,635.50'
Y= 157,601.69'

BLK. 276

TIE	Y	X
273#1	158,101'	1,753,289'
TAP	157,865'	1,752,990'
2	157,473'	1,752,482'
3	157,185'	1,752,082'
4	156,880'	1,751,705'
5	156,583'	1,751,302'
6	156,293'	1,750,894'
7	155,976'	1,750,508'
8	155,672'	1,750,111'
9	155,375'	1,749,705'
10	155,070'	1,749,311'
11	154,768'	1,748,913'
12	154,464'	1,748,515'
13	154,168'	1,748,114'
14	153,858'	1,747,721'
15	153,556'	1,747,323'
16	153,250'	1,746,927'
17	152,940'	1,746,533'
18	152,649'	1,746,127'
19	152,340'	1,745,734'
20	152,036'	1,745,338'
21	151,913'	1,745,117'
22	151,833'	1,744,904'
23	151,763'	1,744,723'
24	151,699'	1,744,524'
25	151,725'	1,744,344'
26	151,672'	1,744,105'
27	151,563'	1,743,925'
28	151,457'	1,743,747'
275-TAP	151,307'	1,743,496'

CORPUS CHRISTI
BLK. 275-TAP
X=1,743,496.63'
Y= 151,307.00'
Lat. 29° 04' 48.860"
Long. 92° 08' 10.592"

BLK. 275

CHEVRON
OCS-G-5477



ALL COORDINATES ARE BASED ON THE
LOUISIANA (LAMBERT) PLANE COORDINATE
SYSTEM, SOUTH ZONE (GRID UNITS IN FEET)
GEODETIC DATUM: NAD 1927, CLARKE 1866
SPHEROID.

CERTIFIED CORRECT AS TO HORIZONTAL
POSITION OF AS-BUILT PIPELINE.

Shuble J. Tenney, Jr.

REGISTERED LAND SURVEYOR NO. 4335
STATE OF LOUISIANA
JOHN E. CHANCE & ASSOCIATES, INC.

G12719 (SN 9322)

CORPUS CHRISTI OIL & GAS COMPANY

AS-BUILT 4"
GAS PIPELINE

SOUTH MARSH ISLAND AREA
GULF OF MEXICO

SCALE: 1"=2000'

6/08/91

2-20-91

Jim Herring called,
Cherron has asked CC to
stay 500' away from
their platform in Block 275.

Jim says it will affect
his pipeline by 100 to 200'.
(he will be within the survey area, and there
are no anomalies.)

I told him that was fine
and we would catch it on the
as-build.

Carol

BEST AVAILABLE COPY

SN9322

William
2-11-91
Alvarado 2-11-91

In Reply Refer To: MS 5232 (OCS-G 12719)

FEB 13 1991

Corpus Christi Oil and Gas Company
Attention: Mr. George E. Taylor
Post Office Box 2928
Corpus Christi, Texas 78403

Gentlemen:

Pursuant to the authority granted by 43 U.S.C. 1334(e) and 30 CFR 250.150(d), your application dated January 4, supplemented January 23, 1991, for a pipeline right-of-way two-hundred feet (200') in width for the installation, operation, and maintenance of a 4 1/2-inch pipeline, 2.29 miles in length, is hereby approved, as proposed.

The proposed pipeline will transport gas and condensate from Corpus Christi Oil and Gas Company's Platform A in Block 273, across Block 276, to Tennessee Gas Pipeline Company's 10-inch pipeline (OCS-G 9341) in Block 275, all in the South Marsh Island Area, North Addition.

This approval is subject to the following conditions:

1. Corpus Christi Oil and Gas Company shall construct, operate, and maintain the pipeline in accordance with the appropriate Department of Transportation regulations.

2. Our analyses indicate the following as potential hazards to the proposed activities. Therefore, precautions in accordance with Notice to Lessees and Operators No. 83-3, Section IV.B, shall be taken prior to conducting operations.

a. Pipelines

<u>Name</u>	<u>Diameter (inches)</u>	<u>Block</u>	<u>Area</u>
Chevron U.S.A. Inc.	4	275	South Marsh Island, North Addition
Chevron U.S.A. Inc.	2 and 4	275	South Marsh Island, North Addition

PIDB
2-26-91

on map
2/27/91
R

b. Magnetic Anomalies

<u>Block</u>	<u>Line No.</u>	<u>Shot Point</u>	<u>Remarks</u>
273	5	30.46	Unidentified Debris
276	5	26.18	Unidentified Debris
273	3	28.11	Unidentified Debris
276	3	42.05	Unidentified Debris
275	3	18.29	Unidentified Debris
273	1	27.68	Unidentified Debris
276	1	23.01	Unidentified Debris
275	1	12.69	Unidentified Debris
275	4	18.10	Unidentified Debris
275	4	14.69	Unidentified Debris

3. Corpus Christi Oil and Gas Company shall inspect pipeline No. OCS-G 9341 in the vicinity where the proposed work will be performed to ensure that proper cover has been maintained. If it is determined that environmental or other factors have detrimentally affected the burial depth of the pipeline or the protective cover of appurtenances, Corpus Christi Oil and Gas Company shall notify this office immediately.

4. Corpus Christi Oil and Gas Company's regional Oil Spill Contingency Plan approved on August 9, 1989, shall cover this pipeline operation.

Based on our analysis of your application, the maximum allowable operating pressure for this pipeline will be 1,253 psig.

Sincerely,

(Orig. Sgd.) William H. Martin

D. J. Bourgeois
Regional Supervisor
Field Operations

cc: Department of Transportation
2320 LaBranch, Room 2116
Houston, Texas 77004

W
bcc: 1502-01 (P/L OCS-G 12719) w/enclosures (K.Faust) (MS 5232)
1502-01 (P/L OCS-G 12719) (C.Williams) (MS 5033)
MS 5280
MS 5440
MS 5421, w/receipt
MS 5232 Carto, w/plat

CWilliams:ds:2/8/91:WP

CORPUS CHRISTI OIL AND GAS COMPANY

THE 600 BUILDING
P O BOX 2928
CORPUS CHRISTI, TEXAS 78403

January 4, 1991

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Blvd.
New Orleans, Louisiana 70123Attn: Mr. D. J. Bourgeois
Regional Supervisor
Field OperationsRe: Application for Pipeline Right-of-Way
Proposed 4.5" OD Natural Gas Pipeline
In and/or through Block 273, 275 and 276
South Marsh Island Area
Gulf of Mexico, Federal Waters

Pursuant to Section 5 (A)(7) of the OCS Lands Act 43 USC 1334 A 7 and Regulations 30 CFR 250 Subpart J, Corpus Christi Oil and Gas Company is filing this application in quadruplicate for a Right-of-Way two hundred feet (200') in width for the construction, maintenance and operations of an 4.5" OD Interstate Natural Gas Transmission Pipeline in the South Marsh Island Area, Gulf of Mexico. Corpus Christi Oil and Gas Company agrees that said Right-of-Way, if approved, will be subject to the terms and conditions of said regulations.

In support of our application and for your review and use, the following maps, drawings and documents have been enclosed herewith and made a part hereof:

1. Vicinity map, Drawing No. 001 (four copies)
2. Engineering and Hazard Survey Plat (See attached John Chance & Associates Booklet).
3. Route Map, Drawing No. 002 (four copies).
4. Profile Map, Drawing No. 003 (four copies).
5. Schematic, Drawing No. 004 (four copies).
6. Pipe Specifications and General Information, Drawing No. 005 (four copies).
7. Typical Pipeline Crossing and Burial Detail, Drawing No. 006 (four copies).
8. Typical Riser Guard Assembly, Drawing No. 007 (four copies).

Corpus Christi Oil and Gas Company
Pipeline Right-of-Way
South Marsh Island Area
Page 2

This 4.5" OD Line will be used to transport natural gas from Corpus Christi Oil and Gas Company's Platform "A" in the South Marsh Island Area, Block 273 to an existing Tennessee Gas Pipeline Company 10" Pipeline located in Block 275. The line will depart Corpus Christi Oil and Gas Company's Platform in Block 273 in a southwesterly direction to go 12,116.39' (2.29 miles) to the proposed underwater tap on Tenneco's 10" pipeline in Block 275, all being in the Gulf of Mexico, Federal Waters, Offshore, Louisiana. The proposed construction commencement date is March 1, 1991 with the time required to lay the pipeline being estimated at two weeks with an overall project time being estimated at 30 days.

In accordance with applicable regulations, we have delivered a letter requesting a statement of "No Objection" with a Plat showing the proposed pipeline route by certified mail, return receipt requested, to each Lessee or Right-of-Way or Easement Holder whose Lease, Right-of-Way or Easement is so affected. A list of such Lessees or Right-of-Way or Easement Holders is attached (See Attachment "A") and copies of the return receipts showing the date and signature as evidence of service upon such Lessees or Right-of-Way or Easement Holders are attached or will be forwarded. A letter from the Lessee, Right-of-Way or Easement Holder expressing "No Objection" to the proposed project is enclosed from those parties who have responded. Additional letters will be forwarded when received. The proposed route of the Right-of-Way does not adjoin or subsequently cross the state submerged lands.

Applicant agrees to be bound by the foregoing regulations, and further agrees to comply with the applicable stipulations as set forth in the OCS Pipeline Procedures Guidebook dated March, 1984 and revised September, 1984.

Additional Design Criteria Data is as follows:

1. Water depth along route of proposed pipeline and pipeline in relationship to natural bottom is set forth on attached Drawing No. 003.
2. The description of the pipe and coating is as follow:
 - A. Line Pipe: 4.5" x 0.237" OD WT, API 5L Grade B. Bare weight is 10.8#/ft. coated with TGF-3 coating or its equivalent. Specific gravity of the pipe in salt water is 1.5.
 - B. Riser Pipe: 4.5" OD x 0.237" OD WT, API 5L Grade B. Bare weight is 10.8#/ft. The area passing through the wave zone will be coated with Splashton or its equivalent. Specific gravity of the pipe in salt water is 1.5.
 - C. Internal Coating: The analysis of the transported products will be monitored and preventative measures such as pigging or inhibiting will be used as necessary.

3. Valves and Flanges:
 - A. Below water valves and flanges will be ANSI 600 Series with a rated working pressure of 1440 PSI.
 - B. Above water valves and flanges will be ANSI 600 Series with a rated working pressure of 1440 PSI.
4. The specific gravity of the product being transported is anticipated to be 0.60 (Air=1.0), T=60 degrees F.
5. Corrosion Protection:
 - A. Life expectancy of the proposed line is indefinite.
 - B. The sacrificial anodes are designed for a forty (40) year life and are to be replaced as necessary to extend the life of the Pipeline.
 - C. Anode Type: 24 lbs. Aluminum Alloy Semi-Cylindrical Bracelets.
 - D. Anode Spacing: Every 500 feet.
6. The design of the proposed pipeline is in accordance with the "Minimum Federal Safety Standards (Department of Transportation) Title 49 CFR Part 192."
7. Maximum Allowable Operating Pressure (MAOP) = 1440 PSI.
Maximum Capacity: Design Capacity: 40,000 MCF/D.
Maximum Operating Pressure: High Sensor Setting = 1200 PSI.
Maximum Operating Pressure: 500 PSI.
Calculations (*): See enclosed "Engineering Checklist"
8. Producer's Facilities are rated for 1440 PSIG working pressure.
9. The ten inch (10") Tennessee Gas Pipeline that the proposed line will tie into will have an assign MAOP of 1253 PSI.
10. Originally signed copy of Non-Discrimination in Employment Stipulation is attached to each copy of the application.
11. Company contact on technical points or other information:

George E. Taylor
Offshore-Operations
Corpus Christi Oil and Gas Company
P. O. Box 2928
Corpus Christi, Texas 78403
512/888-9301

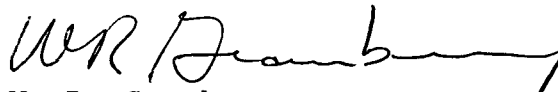
Corpus Christi Oil and Gas Company
Pipeline Right-of-Way
South Marsh Island Area
Page 4

12. Draft/Check No. 90121698 in the amount of \$1,445.00 of which \$1,400.00 covers the application fee and \$45.00 covers the first year's rental on 2.25 miles of Right-of-Way is also enclosed.
13. The line will be pressure tested to 2160 PSI PSIG for eight (8) hours.

Please refer to your New Orleans Miscellaneous File No. 538 for a copy of a resolution approved by the Board of Directors authorizing the undersigned to sign for and on behalf of Corpus Christi Oil and Gas Company.

If the above information meets with your approval, we would appreciate your issuing the necessary decision for the Right-of-Way at your earliest convenience. Inquiries concerning this application should be directed to the applicant at Post Office Box 2928, Corpus Christi, Texas 78403 to the attention of Mr. George E. Taylor.

Yours very truly,



W. R. Granberry
V.P. Production/Acquisition

WRG:ah

Enclosures

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 Corpus Christi Oil and Gas 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.


Signature of Grantee

Date: January 15, 1991

ATTACHMENT "A"

The following Lessees and Right-of-Way Holders on even date with this application were furnished a copy of this applicaiton by Certified Mail, Return Receipt Requested (Note: The status of Blocks listed below was current as of December 21, 1990 per Jim Herring, Corpus Christi Oil and Gas Company, in telephone conversation with Dionne Thigpen.

SOUTH MARSH ISLAND AREA

BLOCK 273

Northwestern Mutual Life
PG&E Resources, Offshore
PBSB 1988 Inv.
Open

CCO-Gas Operator
✓
50%
25%
25%

OCS-G-10714 Oil and Gas Lease

Pipeline Right-of-Way

BLOCK 275

Chevron USA, Inc.

✓
OCS-G-5477 Oil and Gas Lease

Tennessee Gas Pipeline Company

✓ OCS-G-9341 Pipeline Right-of-Way

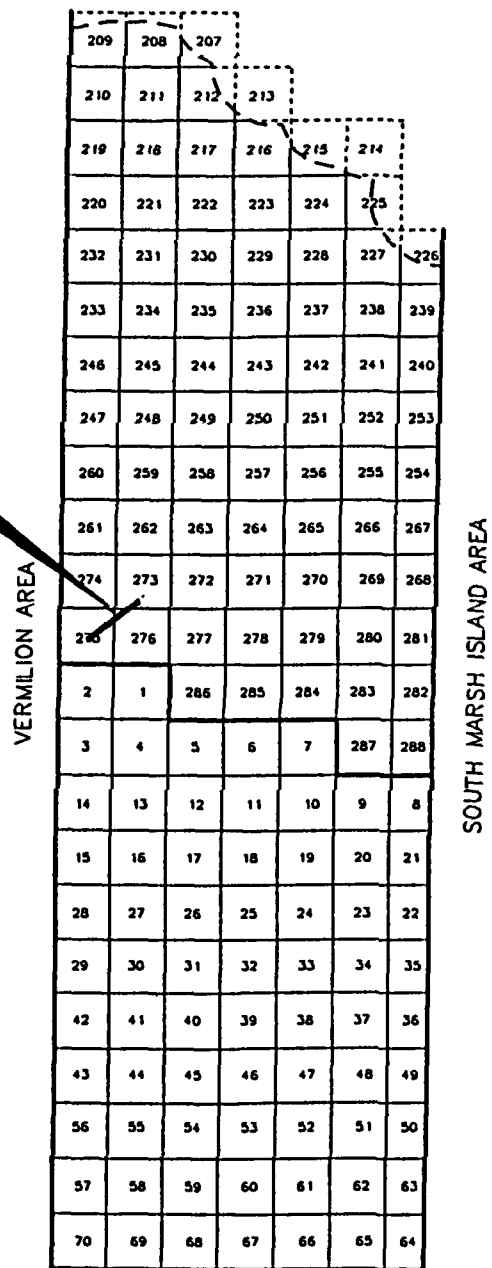
BLOCK 276

Open
Open

✓
Oil and Gas Lease
Pipeline Right-of-Way

BEST AVAILABLE COPY

CORPUS CHRISTI
PROPOSED PIPELINE ROUTE

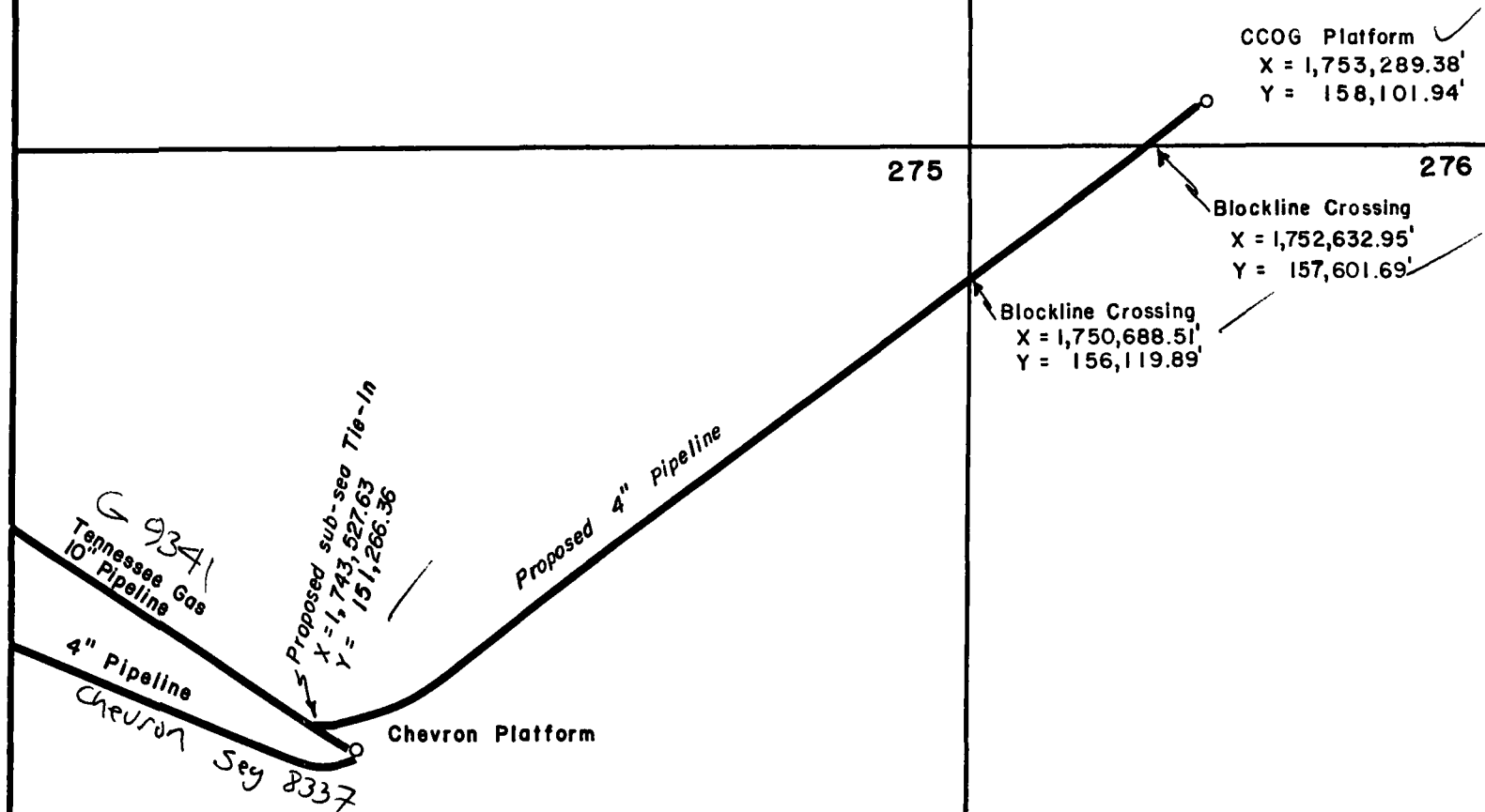


SOUTH MARSH ISLAND AREA

Drawing No. 001

JOHN E. CHANCE
& ASSOCIATES, INC.

BEST AVAILABLE COPY

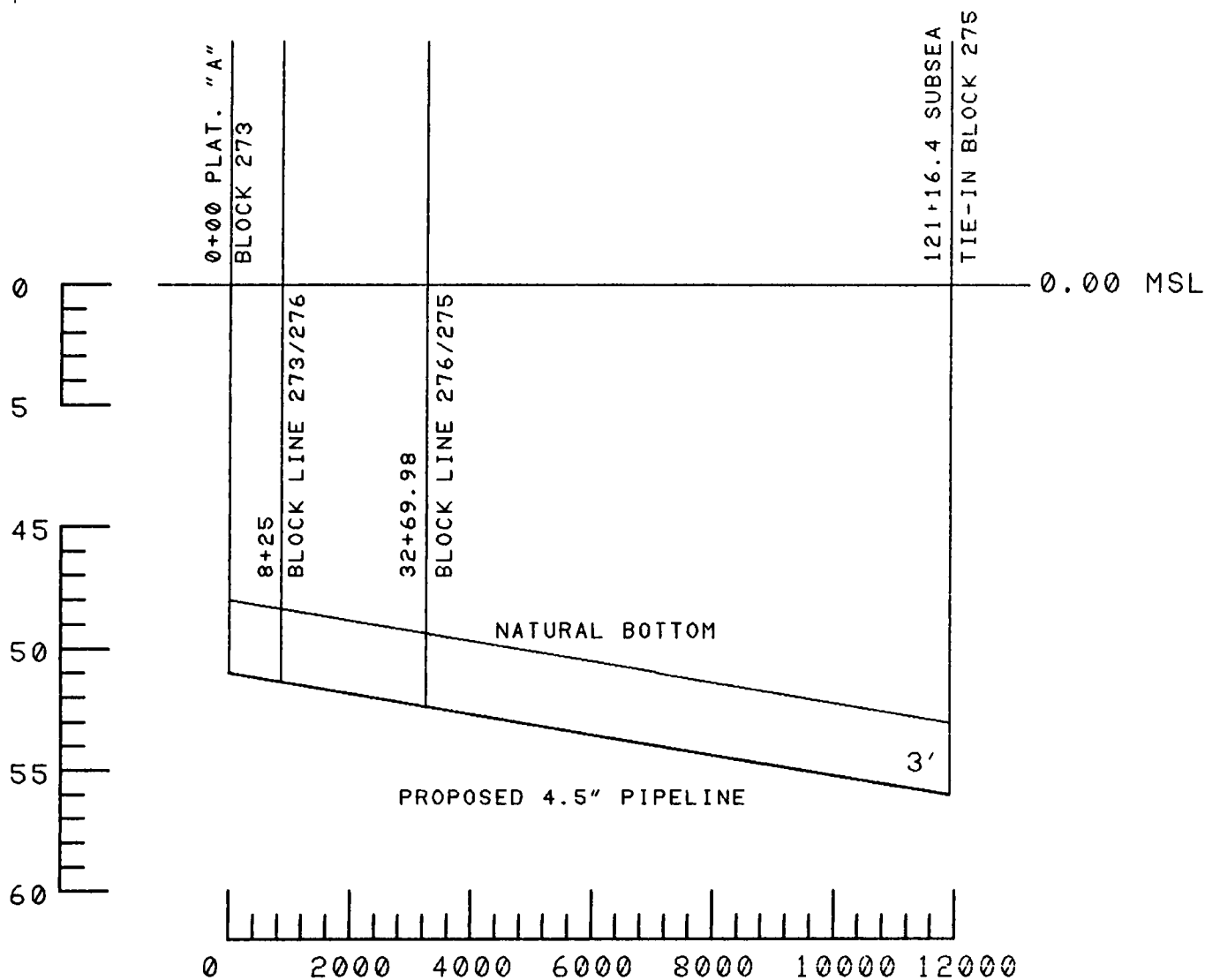


CORPUS CHRISTI OIL AND GAS COMPANY

PROPOSED 4" PIPELINE
BLOCK 273/275
SOUTH MARSH ISLAND AREA
North Addition

SCALE: 1" = 2000'

DWG 002



PROFILE

* Location of Right of Way
has been accurately
delineated upon this map
and design complies
with DOT regulation.

BEST AVAILABLE COPY

NOTES:

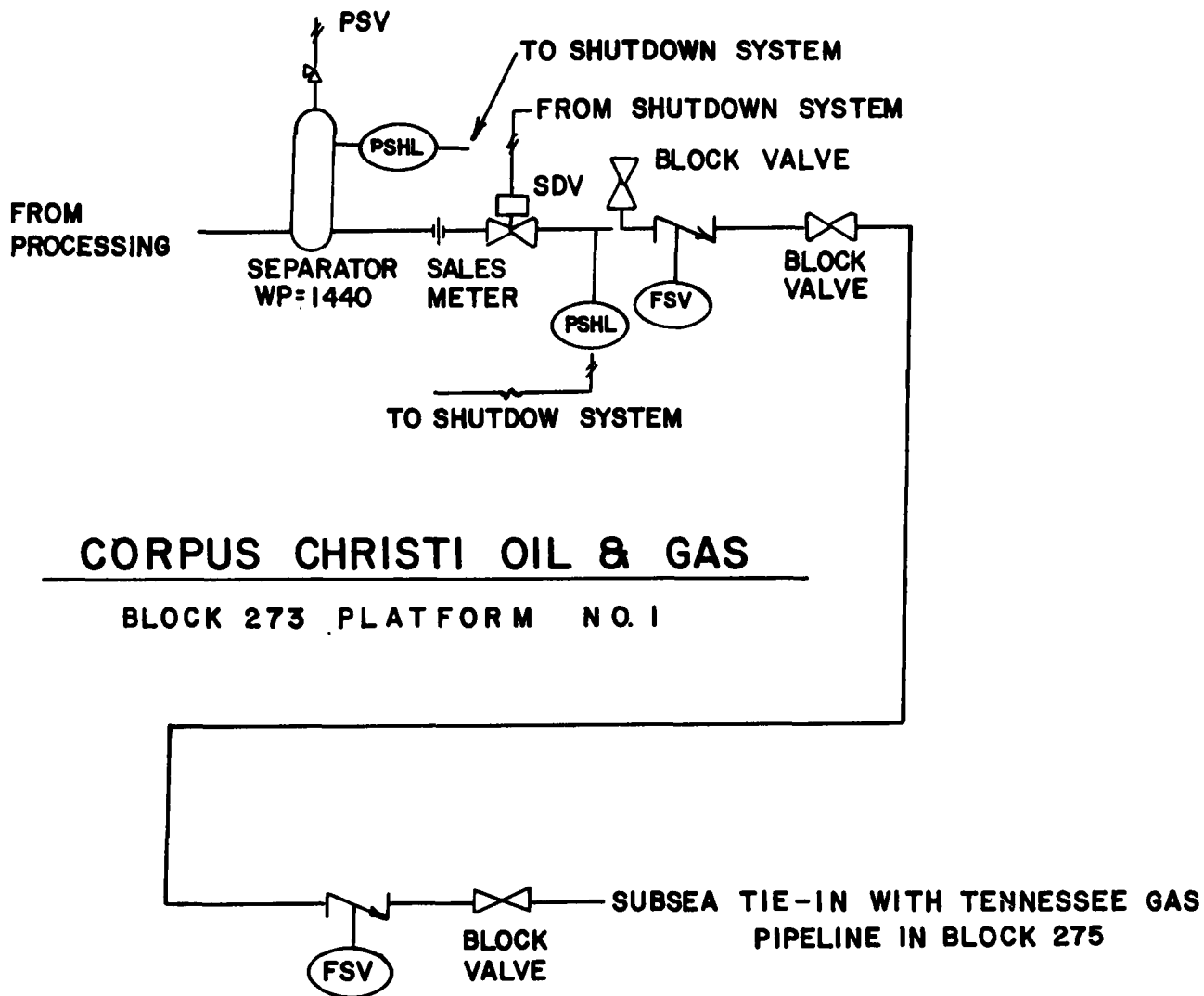
1. Pipe in the Gulf of Mexico will be buried by jetting where by there will be a minimum displacement of the bed and no spoil deposits remain.
2. Soundings and elevations are in feet and refer to mean sea level datum.
3. Coordinates are based on the Louisiana South Zone of the Lambert Grid system.
4. Product: Natural Gas
5. Total Length of 4" P/L = 11,879.7 FT.

CORPUS CHRISTI OIL & GAS CO.

PROPOSED 4" PIPELINE
BLOCK 273 TO BLOCK 275
So. MARSH ISLAND AREA

DWG. NO. 003

DEC. 1990



CORPUS CHRISTI OIL & GAS

BLOCK 273 PLATFORM NO. 1

SAFETY SCHEMATIC

*THE DESIGN CHARACTERISTICS OF THE PROPOSED PIPELINE EQUAL OR EXCEED THE REQUIREMENTS OF DOT TITLE 49, CFR PART 192 OR 195 AND DO! 30, CFR PART 256, SUBPART N.

NOTE: ALL VALVES FLANGES, AND FITTINGS ARE A.N.S.I. 600 SERIES.

4 1/2" PIPE
1440 PSI - WORKING PRESSURE
2160 PSI - TEST PRESSURE

CORPUS CHRISTI OIL AND GAS COMPANY

PROPOSED 4 1/2" P/L
BLOCK 273 TO 275
SO. MARSH ISLAND AREA

DRWN: A. G.

DATE: JAN. 1991

SCALE: NONE

CHKD.

DATE:

DWG. NO. 004

1. Line Pipe Specifications:

<u>O.D.</u>	<u>W.T.</u>	<u>GRADE</u>	<u>LENGTH</u>	<u>MAOP</u>	<u>TEST</u>
4.5"	0.237	B	12,116'	1440	2160 PSI FOR 8 HOURS

2. Riser Pipe Specification:

<u>O.D.</u>	<u>W.T.</u>	<u>GRADE</u>	<u>MAOP</u>
4.5"	0.237	B	1440

3. Line Pipe Coating:

T.G.F.-3, Pritec or Equivalent

4. Tennessee Gas Pipeline Company:

O.D.
10"

5. Name of Product:

Natural Gas and Condensate

6. Class Location:

Class I

7. Governing Code:

Part 192, Title 49 of the Code of Federal Regulations

8. All coordinates shown are based on the Louisiana (Lambert) Plane Coordinate System, South Zone.

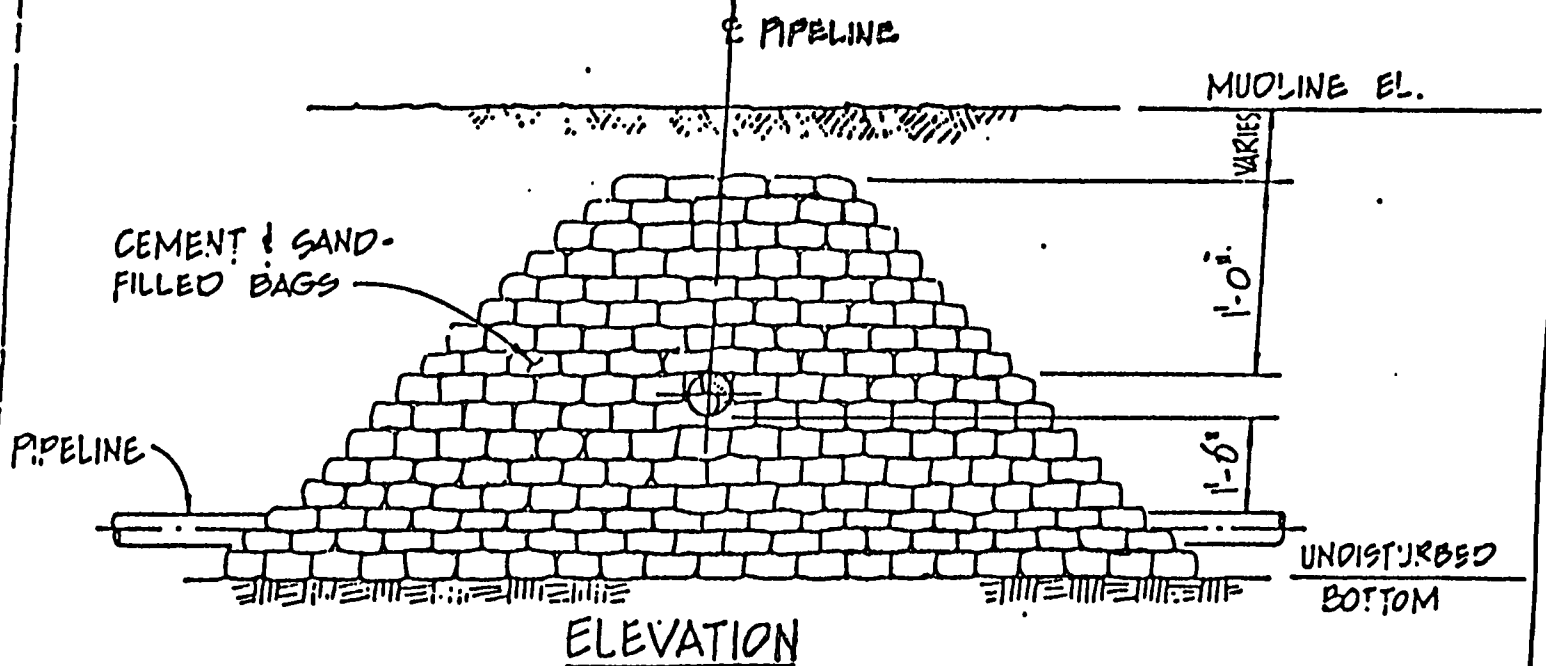
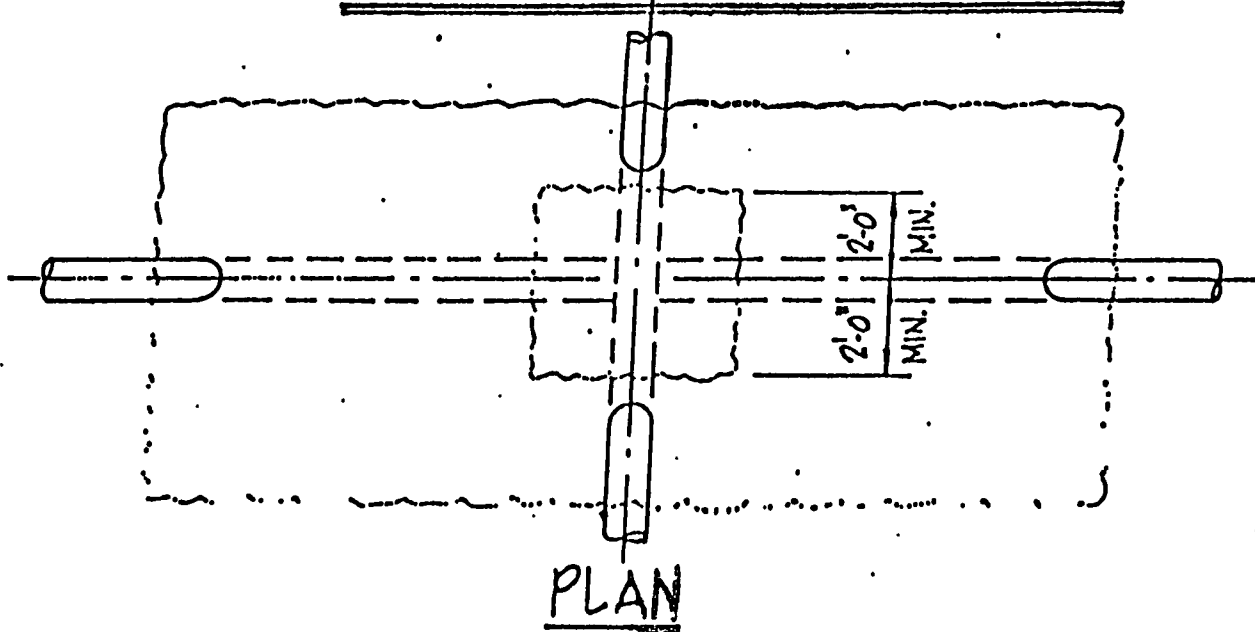
9. Sand bags may be used to obtain 3' minimum cover for tie-in if required.

Application by: Corpus Christi Oil and Gas Company

4.5" O.D. Natural Gas Pipeline
South Marsh Island Area
Gulf of Mexico

Drawing No. 005

TYPICAL PIPELINE CROSSING DETAIL



TYPICAL PIPELINE BURIAL DETAIL



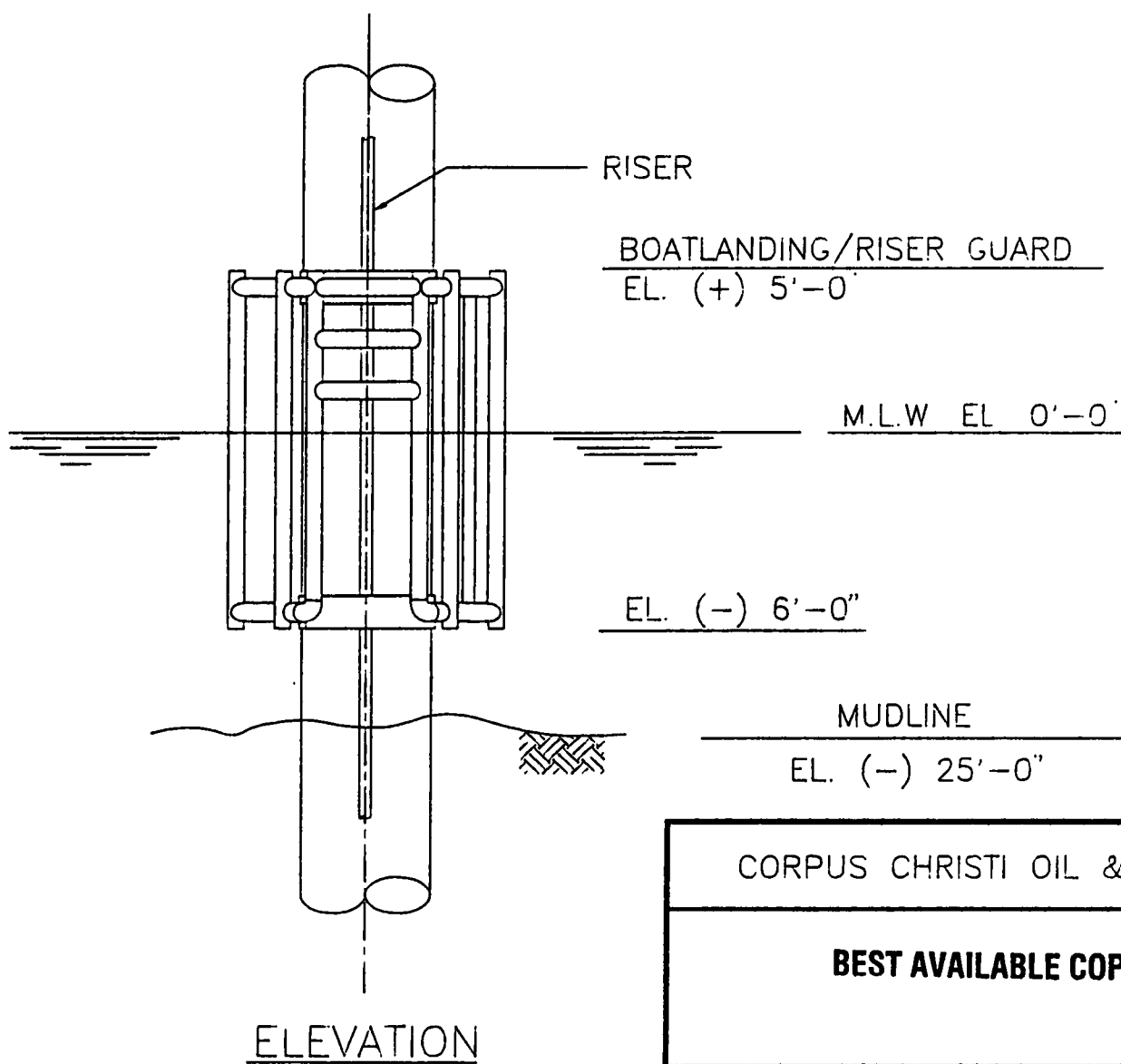
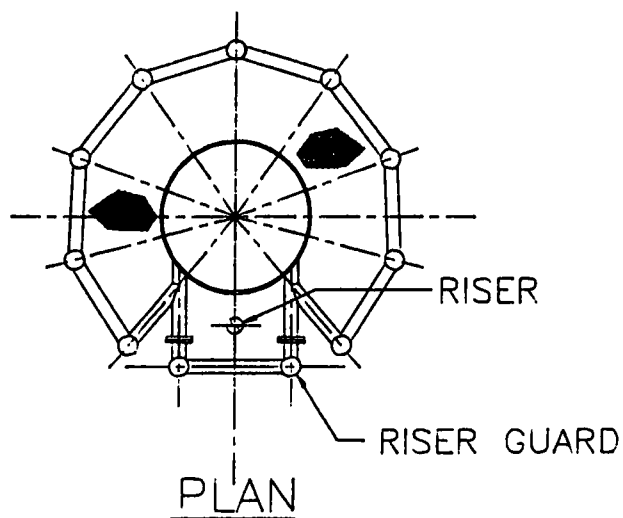
NOTE:

ALL PIPELINES SHALL BE BURIED TO A MINIMUM DEPTH OF 3 FEET BELOW BED OF GULF. LINE SHALL BE BURIED BY DISKING, PLOWING OR JETTING SO AS TO CAUSE A MINIMUM DISTURBANCE TO THE BOTTOM OF THE GULF.

CORPUS CHRISTI OIL & GAS

BEST AVAILABLE COPY

DRWN: SGG	DATE: 9-11-86	SCALE: NONE
CHKD:	DATE:	NO: 006



CORPUS CHRISTI OIL & GAS

BEST AVAILABLE COPY

DRWN: G D.	DATE 10-31-88	SCALE NONE
CHKD	DATE	DWC NO 007

PLM

January 8, 1991

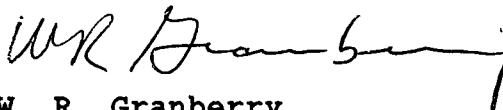
Mr. Joe Eskew
Corpus Christi Oil and Gas Company
P. O. Box 2928
Corpus Christi, Texas 78403

Re: OCS-G-10714

Dear Mr. Eskew:

This is to advise that P G & E Resources, Offshore, lessee of Block 273, South Marsh Island Area, has no objection to Corpus Christi Oil and Gas Company installing a 4.5" pipeline in Block 273 along the route shown on your Drawing No. 002.

Very truly yours,

A handwritten signature in dark ink, appearing to read "WR Granberry", written in a cursive style.

W. R. Granberry
V.P. Production/Acquisition

WRG:ah

CORPUS CHRISTI OIL AND GAS COMPANY

THE 600 BUILDING
P.O. BOX 2928
CORPUS CHRISTI, TEXAS 78403

BEST AVAILABLE COPY

January 8, 1991

PB-SB 1988 Investment Partnership
One New York Plaza
New York, NY 10002

Attn: K. Schmidt

Re: Pipeline Right-of-Way
Block 273-275
South Marsh Island Area

Dear Mr. Schmidt:

Attached is a plat of our proposed 4 1/2" pipeline which will cross a portion Block 273. If you have no objections to this route, please furnish us with a letter of "No Objection" for our submission to the Minerals Management Service.

Yours very truly,

George Taylor
George Taylor
Offshore-Operations

GT:ah

Attachment

P-579 148 631

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to PB-SB 1988 Inv. Pkts	Street and No One NY Plaza	P.O. State and ZIP Code NY, NY 10002	Postage \$	Certified Fee	Special Delivery Fee	Restricted Delivery Fee	Return Receipt showing to whom and Date Delivered	Return Receipt showing to whom Date and Address of Delivery	TOTAL Postage and Fees \$	Postmark or Date
--	--------------------------------------	--	---------------	---------------	----------------------	-------------------------	--	--	------------------------------	------------------

U.S.G.P.O. 153-506

PS Form 3800, June 1985

CORPUS CHRISTI OIL AND GAS COMPANY

THE 600 BUILDING
P.O. BOX 2928
CORPUS CHRISTI, TEXAS 78403

BEST AVAILABLE COPY

January 8, 1991

Northwestern Mutual Life
720 E. Wisconsin Ave.
Milwaukee, WI 53202


Attn: J. Baier

Re: Pipeline Right-of-Way
Block 273-275
South Marsh Island Area

Dear Mr. Baier:

Attached is a plat of our proposed 4 1/2" pipeline which will cross a portion Block 273. If you have no objections to this route, please furnish us with a letter of "No Objection" for our submission to the Minerals Management Service.

Yours very truly,


George Taylor
Offshore-Operations

GT:ah

Attachment

P-579 148 638

RECEIPT FOR CERTIFIED MAIL

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

Sender	720 E. Wisconsin Ave.
Address	Milwaukee, WI 53202
Postage	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt (if any)	
Date of Receipt	
Signature of Addressee	

U.S.G.P.O. 153506

PS Form 3800 June 1985

CORPUS CHRISTI OIL AND GAS COMPANY

THE 600 BUILDING
P.O. BOX 2928
CORPUS CHRISTI, TEXAS 78403

BEST AVAILABLE COPY

January 8, 1991

Tennessee Gas Pipeline Company
P. O. Box 2511
Houston, TX 77252

Re: Pipeline Right-of-Way
Block 273-275
South Marsh Island Area

Gentlemen:

Attached is a plat of our proposed 4 1/2" pipeline which will cross into your Block 275. If you have no objections to this route, please furnish us with a letter of "No Objection" for our submission to the Minerals Management Service.

Yours very truly,

George Taylor
George Taylor
Offshore-Operations

GT:ah

Attachment

<p>● SENDER: Complete Items 1 and 2 when additional services are desired, and complete Items 3 and 4.</p> <p>Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.</p> <p>1. <input checked="" type="checkbox"/> Show to whom delivered, date, and addressee's address. <input type="checkbox"/> Restricted Delivery ↑(Extra charge)↑</p>	
3. Article Addressed to: Tennessee Gas PL Company P. O. Box 2511 Houston, TX 77252	4. Article Number P-579-148-630 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>DAH 1/11/91</i>	
7. Date of Delivery	

CORPUS CHRISTI OIL AND GAS COMPANY

THE 600 BUILDING
P.O. BOX 2928
CORPUS CHRISTI, TEXAS 78403

BEST AVAILABLE COPY

January 8, 1991

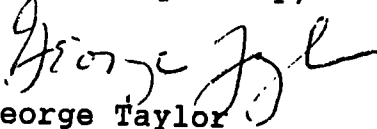
Chevron USA, Inc.
935 Gravier St.
New Orleans, LA 70112

Re: Pipeline Right-of-Way
Block 273-275
South Marsh Island Area

Gentlemen:


Attached is a plat of our proposed 4 1/2" pipeline which will cross into your Block 275. If you have no objections to this route, please furnish us with a letter of "No Objection" for our submission to the Minerals Management Service.

Yours very truly,


George Taylor
Offshore-Operations

GT:ah

Attachment

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested. 1. <input type="checkbox"/> Show to whom delivered, date, and addressee's address. <input type="checkbox"/> Restricted Delivery ↑(Extra charge)↑ ↑(Extra charge)↑	
3. Article Addressed to: Chevron, USA, Inc. 935 Gravier St. New Orleans, LA 70112	4. Article Number P-579-148-639 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X 	
7. Date of Delivery 1/11/91	

G 12719

Area Code 512
888-9301

CORPUS CHRISTI OIL AND GAS COMPANY

THE 600 BUILDING
P.O. BOX 2928
CORPUS CHRISTI, TEXAS 78403

January 23, 1991



U. S. Department of the Interior
Minerals Management Service
1201 Elmwood Park Blvd.
New Orleans, LA 70123

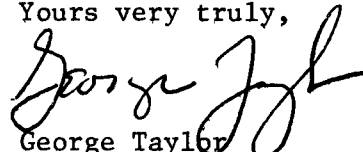
Attn: Carol Williams

Re: Application for Pipeline Right-of-Way
Proposed 4.5" OD Natural Gas Pipeline
In and/or through Block 273, 275 and 276
South Marsh Island Area
Gulf of Mexico, Federal Waters

Dear Ms, Williams:

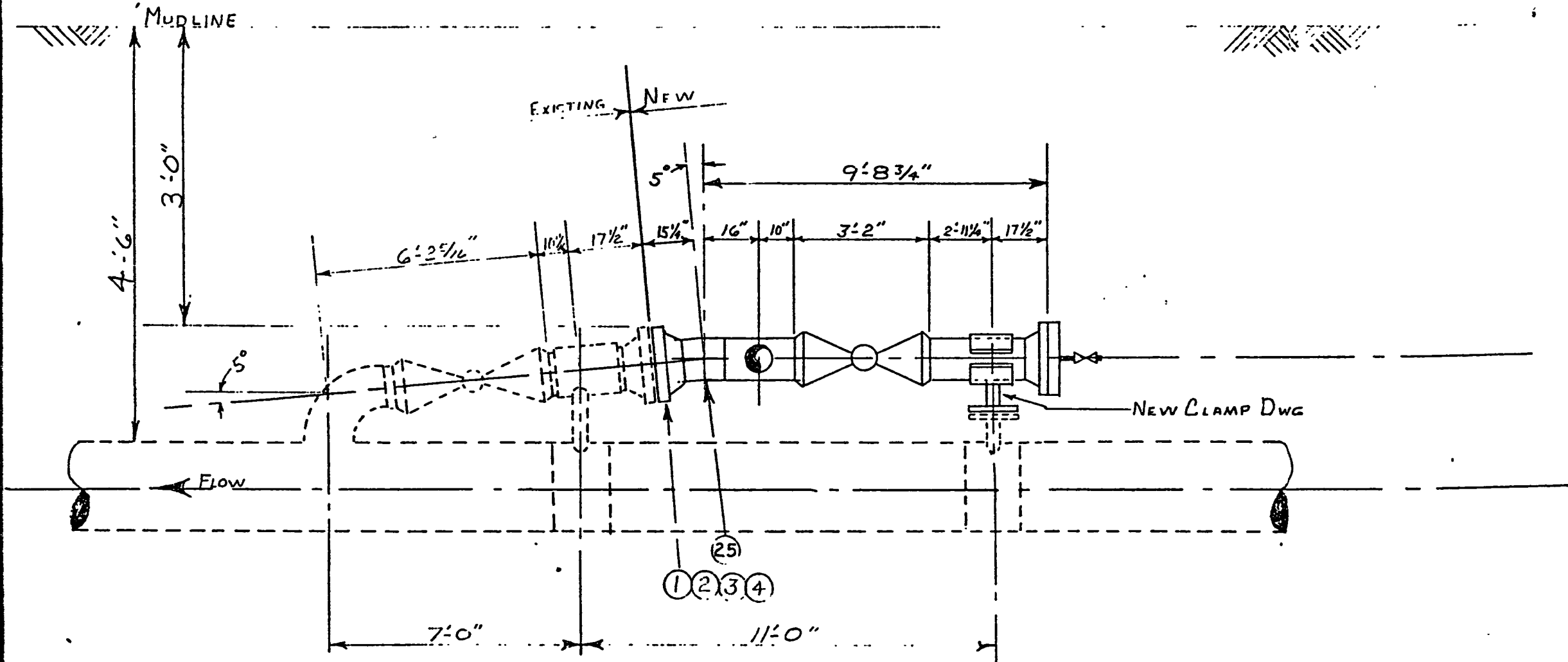
Enclosed are copies of the typical sub-sea tie-in drawings which you requested for the subject pipeline R-Q-W. If you need anything further, please contact me.

Yours very truly,


George Taylor
Offshore-Operations

GT:ah

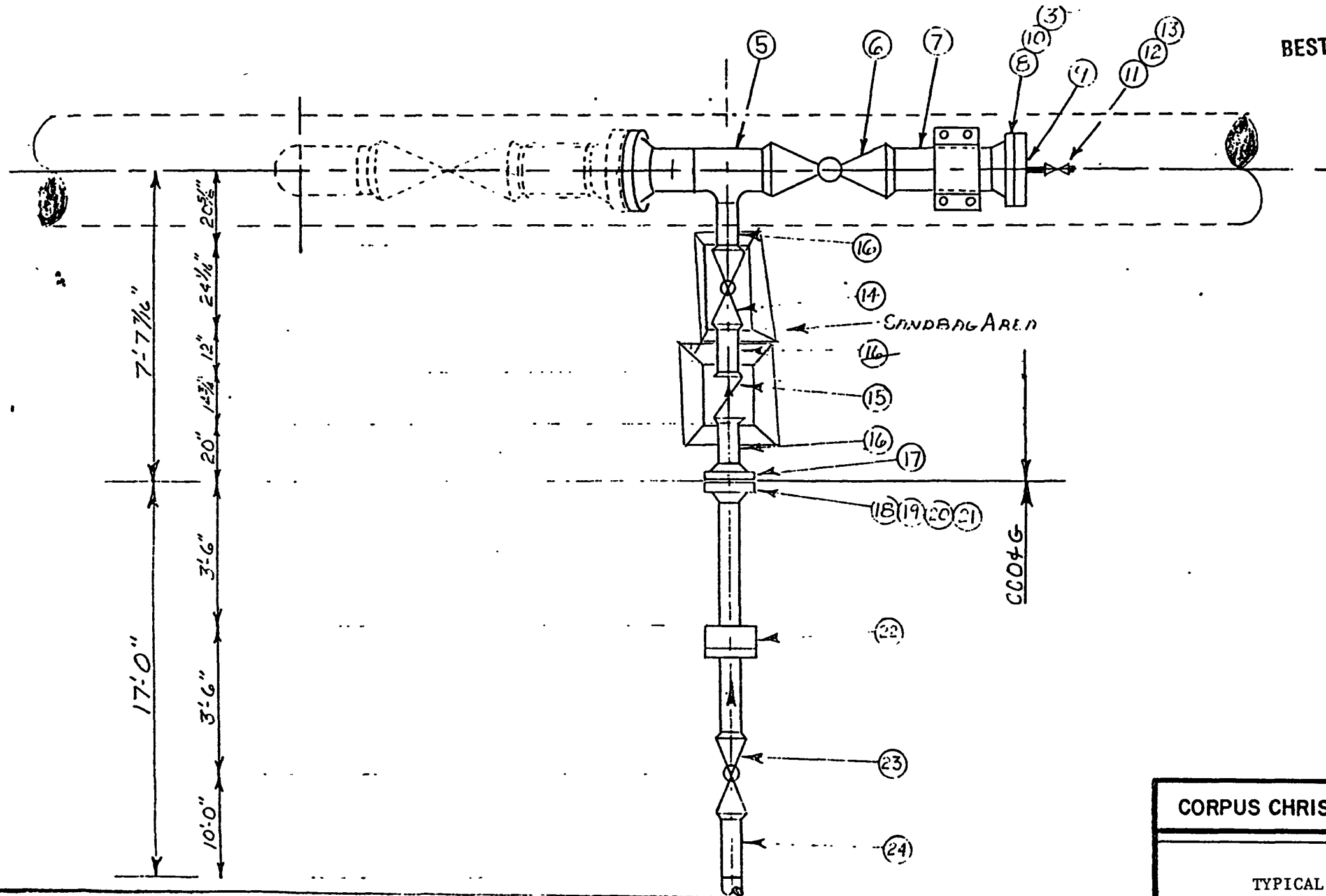
Enclosure



CORPUS CHRISTI OIL AND GAS COMPANY

TYPICAL SUB-SEA TIE-IN

BEST AVAILABLE COPY



CORPUS CHRISTI OIL AND GAS COMPANY
TYPICAL SUB-SEA TIE-IN

UNITED STATES GOVERNMENT
MEMORANDUM

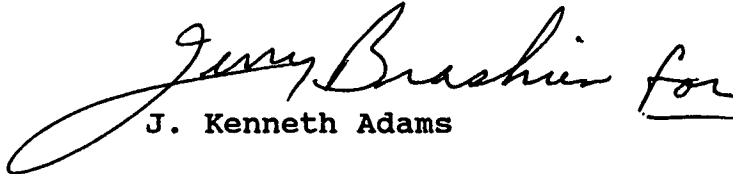
February 4, 1991

To: Regional Supervisor, Field Operations, GOM OCS Region
(MS 5200)

From: Regional Supervisor, Leasing and Environment, GOM OCS
Region (MS 5400)

Subject: National Environmental Policy Act Review for Pipeline
Right-of-Way Application OCS-G 12719

Our National Environmental Policy Act (NEPA) review of the
subject action is complete. Environmental protective measure(s),
if any, identified to avoid or mitigate potential impacts
associated with the action were included as part of the NEPA
analysis and are shown on the Categorical Exclusion Review (CER).


J. Kenneth Adams

Attachment

cc: Pipeline File OCS-G 12719 (MS 5440)



United States Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

NEPA CATEGORICAL EXCLUSION REVIEW

The Categorical Exclusion Review (CER) evaluated the proposed action(s) and determined that it meets the categorical exclusion criteria as defined by 516 DM 2.3A(1) which states "(a) The action or group of actions would have no significant effect on the quality of the human environment, and (b) The action or group of actions would not involve unresolved conflicts concerning alternative uses of available resources." The exclusion of this activity from future environmental analysis is conditioned on the imposition of the following mitigative measure(s). These measures are to ensure environmental protection, consistent environmental policy, and safety as required by the NEPA.

Environmental Protective Measures

The following measure was identified in the plan/application by the lessee/operator submitting the proposal: None.

The measures identified by MMS during the plan/application review or in the lease stipulation were:

Our analyses indicate the following as potential hazards to the proposed activities. Therefore, precautions in accordance with NTL No. 83-3, Section IV.B, will be taken prior to conducting operations.

Pipelines

<u>Name</u>	<u>Diameter (inches)</u>	<u>Block</u>	<u>Area</u>
Chevron	4" and 2"	275	South Marsh Island
Tenneco	10"	275	South Marsh Island
Tenneco	4"	275	South Marsh Island

Magnetic Anomalies and/or Side-Scan Sonar Contacts

<u>Blocks</u>	<u>Line No.</u>	<u>Shot Point</u>	<u>Remarks or Amplitude (gammas)</u>
273	5	30.46	Unidentified debris
276	5	26.18	"
273	3	28.11	"
276	3	42.05	"
275	3	18.29	"
273	1	27.68	"
276	1	23.01	"
275	1	12.69	"
275	4	18.10	"
275	4	14.69	"

Exclusion Determination

The proposed action was evaluated and reviewed against the CER exception criteria defined by 516 DM 2.3.A(3). With inclusion of the above mitigation, it does not represent an exception to the categorical exclusions. Therefore, preparation of an EA is not required.

2/4/91
Date

Susan B. Gaudy
Preparer

2/5/91
Date

Jerry Brasher
Chief, Environmental
Operations Section

I concur.

2/5/91
Date

Jerry Brasher for
Regional Supervisor,
Leasing and Environment

PIPELINE RIGHT-OF-WAY APPLICATION "ENGINEERING CHECKLIST"
 MINERALS MANAGEMENT SERVICE
 GOM REGIONAL OFFICE

Date: 1-23-91
 OCS-G 12719

- A. Description of pipeline and location of proposed route (i.e., size of pipe, product to be transported, from where to where, platform number, name, block number, area, and distance in feet and miles):** 4 1/2 - inch gas & condensate pipeline 12,116' or 2.29mi from Corpus Christi Oil & Gas Company's Platform A in Block 273, across Block 276, to Tennessee Gas Pipeline Company's 10-inch pipeline (OCS-G 9341) in Block 275, all in the South Marsh Island Area, North Addition.
- B. Safety Flow Schematic - Verify that the information shown on the safety flow schematic diagram contains the following:**
- ☒ 1. Pressure source is drawn into the schematic with the following:
 - a. source (i.e., name) Separator
 - b. design working pressure 1440
 - c. high-low pressure sensor settings _____
 - ☒ 2. "ANSI" ratings of all valves, flanges, and fittings between the source and the connecting pipeline are shown. ANSI 600
 - ☒ 3. Pressure relief valves, where applicable, are shown with the setting set no higher than the maximum working pressure (MWP) of the vessel.
 - ☒ 4. If the maximum input source pressure is greater than the maximum allowable operating pressure (MAOP) of the pipeline, redundant safety equipment is required. Seg # 8235 MAOP 1253
 - ☒ 5. MAOP of proposed pipeline does not exceed MAOP of connecting pipeline.
 - ☒ 6. The pipeline leaving the platform receiving production from the platform is equipped with high-low pressure sensors to directly or indirectly shut-in the well or wells on the platform.
 - ☒ 7. The pipeline delivering production to the production facilities on the platform is equipped with an automatic fail-close valve tied into the automatic and remote shut-in system. N/A
 - ☒ 8. 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-low pressure sensors connected to an automatic fail-close valve located in the upstream portion of the pipeline at the platform. In addition, the sensors are tied into either the platform's automatic and remote shut-in system or an independent remote shut-in system. N/A

BEST AVAILABLE COPY

- ____ 9. The pipeline boarding the platform/pipeline is equipped with a check valve.
- ____ 10. The pipeline leaving the platform is equipped with a check valve.
- ____ 11. The high-low pressure sensors on the departing pipeline is located upstream of the check valve.
- N/A 12. Where applicable, high-low sensors are located downstream of the back pressure regulator.
- N/A 13. If there is liquid injection into the line, are pumps associated with the injection? (Yes or No) _____
- ____ 14. Direction of flow indicated.
- ____ 15. Pipe specifications (i.e., size, grade, weight, and wall thickness).
- ____ 16. Total length of proposed pipeline (feet and miles).
- ____ 17. MAOP of connecting pipeline.
- ____ 18. Statement that design meets or exceeds DOT Regulations 192 or 195, as applicable, and/or applicable OCS orders, registered engineer's seal, registration number, date, and signature.
- ____ 19. Area and block number of proposed pipeline/platform.
- ____ 20. Cathodic protection specifications.

C. Design Information - Verify that the pipeline design information given in the application and/or on the data sheet is complete and correct:

____ 1. Product to be transported: gas + con

____ 2. Pipeline, riser, and subsea valve assembly specifications:

(1) Size 4.5 Wall Thickness .237 Grade B Weight 10.8 lbs/ft.

(2) Size _____ Wall Thickness _____ Grade _____ Weight _____ lbs/ft.

(3) Size _____ Wall Thickness _____ Grade _____ Weight _____ lbs/ft.

b. Riser:

(1) Size 4.5 Wall Thickness .237 Grade B Weight 10.8 lbs/ft.

(2) Size _____ Wall Thickness _____ Grade _____ Weight _____ lbs/ft.

(3) Size _____ Wall Thickness _____ Grade _____ Weight _____ lbs/ft.

c. Subsea valve assembly:

(1) Size _____ Wall Thickness _____ Grade _____ Weight _____ lbs/ft.

(2) Size _____ Wall Thickness _____ Grade _____ Weight _____ lbs/ft.

3. Water depth: Maximum 56 Minimum 51

4. Type of corrosion protection:

☐ a. Impressed current system

☒ b. Sacrificial anode system

(1) Type of anode aluminum

(2) Spacing interval 500 ft.

(3) Weight of unit anode given by applicant 24 lbs. ea.

☐ c. If platform anodes are used, are they considered adequate?

Yes ☐ No ☐

☒ d. If pipeline anodes are used:

Formula: $L_{p/1} = 3.82 \times 10^4 \times W^0 / D I R$

Where:

W^0 = Weight of Anode unit (lbs)

D = Dia. of pipe (inches)

I = Separation between anodes (ft.)

R = the following lbs/amp/year (Rate of Consumption)

Aluminum or Galvalum = 7.6

Zinc = 26

Magnesium = 17.5

53 years

Does the calculated life expectancy equal or exceed 20 years?

Yes ☒ No ☐

5. Description of protective coating:

☒ a. Pipeline

☐ b. Riser

☐ c. Subsea valve assembly

6. Description of weighted coating:

a. Preconcrete coating ☐

b. Density of concrete ☐ PCF

c. Thickness of concrete ☐

d. Thickness of asphalt ☐

7. Calculate the specific gravity (one of the following formulae may be used)

_____ a. For epoxy coating: $SG = 2.865W/D^2$

1.53

_____ b. Density comparison with fluid material: $SG = \frac{W+P}{\frac{A}{R}}$

_____ c. Lines with a specific thickness of concrete:

$$SG = \frac{RC + \frac{K_2}{R} \left(\frac{W+P}{T-K_1} - \frac{RC}{K_3} \right)}{K_3}$$

_____ d. Lines having two coatings of enamel and a felt wrap, or only asphaltmastic coating:

$$SG = \frac{W+P}{K_3}$$

Where:

SG = specific gravity

RC = density of concrete (lb/cu. ft.)

K_1, K_2, K_3 = coefficients

T = thickness of concrete coating (inches)

W = weight of bare pipe (lb/ft)

P = weight of coating

R = density of fluid material (lb/cu. ft.); i.e., sea water = 64 lbs/cu. ft.

D = diameter of pipe (inches)

A = cross-sectional area

_____ 8. Given specific gravity

a. 1.53 b. _____ c. _____

_____ 9. Gravity or density of product(s) .60

_____ 10. Design capacity of pipeline 40,000 MCF/D

_____ 11. Given Hydrostatic Test Pressure: Line Pipe 2160 Hold Time 8 hrs.

Preinstallation Test _____ Riser _____ Hold Time _____ hrs.

Recommended maximum hydrostatic body test for ANSI valves, flanges, and fittings are as follows:

ANSI 300 - 1,100 psig
ANSI 400 - 1,450 psig
ANSI 600 - 2,175 psig
ANSI 900 - 3,250 psig
ANSI 1,500 - 5,400 psig

Note: Minimum hold times:

Gas = Line Pipe = 8 hrs.
Riser = 4 hrs. (pretest)
or DOT 192.507(c)

Liquid = 4 hrs. @ 125% of MOP
Plus 4 hrs. @ 110% if leak inspection is not viable during test

12. Maximum Allowable Operating Pressure (MAOP) of line pipe:

$$MAOP = \frac{2 \pi \times F \times E \times T}{D}$$

Note: F = .72; E = 1; T = 1

a. MAOP =

b. MAOP =

c. MAOP =

$$\frac{2(35,000)(.237)}{4.5} = 3687 \times .72 = 2654$$

13. MAOP of riser pipe.

Note: F = .50 for risers on natural gas transmission lines.

Note: F = .60 for risers on liquid pipelines.

a. MAOP =

b. MAOP =

$$3687 \times .50 = 1,844$$

14. MAOP of flanges, fittings, and valves:

2.4 x ANSI rating =

$$1440$$

15. MAOP of proposed pipeline as determined in accordance with Title 49 CFR Part 195 or 192, as applicable, is 1253 psig. tie-in p/c

16. Items 12, 13, and 14 above are equal to or more than the maximum allowable working pressure (MAWP) of source.

17. Verify: 1:25 maximum source pressure (MSP) \leq hydrostatic test pressure (HTP) \leq .95 (smaller IP @ SMYS of Items 12 or 13 above)

$$\leq 2160 \leq 3503$$

Note: The recommended limit of test as a percentage of internal pressure @ specified minimum yield strength is equal to 95%:

$$IP @ SMYS = \frac{2 \times S \times 1}{D}$$

18. Verify MAOP does not exceed the lowest of the following:

a. Submerged components: HTP/1.25 =

b. Riser: HTP/1.5 =

$$\frac{2160}{1.5} = 1440$$

19. Valve gu. and: Yes _____ No _____

BEST AVAILABLE COPY

D. Installation Requirements:

1. All pipelines will be installed or laid to a minimum of three feet below the level of the mudline out to and including the 200 foot water depth, except at pipeline crossings. Any deviation must be justified at the time of application.
2. All valves and taps must be provided with a minimum of three feet of actual cover either with soil or sandbags or jettied to a minimum of three feet below the mudline. If A/S approved valve protection covers are used, the valves and taps are NOT required to have a minimum of three feet of actual cover or jettied three feet below the mudline. However, the top of the valve protection cover shall not protrude above the level of the mudline. Any deviation must be justified at the time of application.

E. Pipeline Crossings:

1. All pipeline crossings in water depths up to and including 200 feet shall be cement-bagged with a minimum of 18 inches between the lines with the uppermost line having a minimum of 3 feet of cover in the form of cement bags installed so as to provide a three foot horizontal to a one foot vertical (3:1) slope with a crown width that is one and one-half (1½) times the pipe diameter. Any deviation must be justified at the time of application.
2. All pipeline crossings in water depths greater than 200 feet shall be cement bagged with a minimum of 18 inches between the lines and installed so as to provide a three foot horizontal to a one foot vertical (3:1) slope. Any deviation must be justified at the time of application.

F. Construction Information:

1. Proposed construction commencement date
2. Method of construction
3. Method of burial
4. Time required to lay pipe
5. Time required to complete project

March 1, 1991

30 days

G. Applicant complies with current OCS pipeline guidelines:

Yes _____ No _____