

~~Box 36~~ -7086 m meug 7/9/01
Nelson 6/1/04
G11731

In Reply Refer To: MS 5421
GOM Company Number 2237

APR 20 2004

ACTION

Noble Energy, Inc.

Oil & Gas

ACCEPTANCE OF MERGER

On December 19, 2003, there was filed in this office for approval evidence of a merger of Samedan Oil Corporation (GOM Company Number 0185), with and into Noble Energy, Inc. (GOM Company Number 2237), effective December 31, 2002.

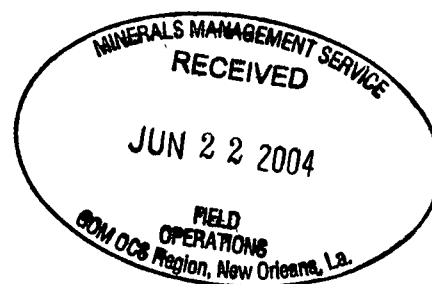
The name of the surviving corporation is Noble Energy, Inc. and the identification number assigned thereto is GOM Company Number 2237.

Since the transfer and vesting of property rights in the surviving corporation have been affected by State statutes by operation of law and not by individual conveyances, the merger is hereby accepted insofar as it affects pipeline right-of-way grants under 30 CFR 250, Subpart J, and oil and gas leases, including operating rights, under 30 CFR 256. The change in ownership as to the pipeline right-of-way grants and oil and gas leases, including operating rights, as set forth on Exhibit A attached hereto is recognized and the records so noted.

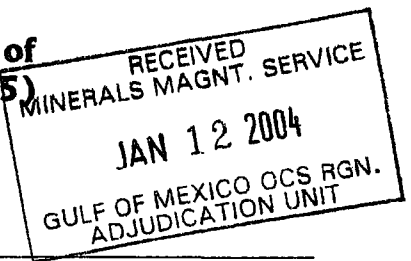
Steven K. Waddell, CPL
Supervisor, Adjudication Unit
Leasing and Environment

bc: 1101-02f, GOM Company Number 2237 (MS 5421)
1502-01, Right-of-Way files (MS 5232)
TIMS (MS 5421)

SWaddell:mm:04/06/04:c:\my documents\Noble merger.doc



**Federal OCS Leases affected by the merger of
Samedan Oil Corporation (GOM Co. #0185)
with and into
Noble Energy, Inc. (GOM Co. #2237)**



RECORD TITLE

00038	G 02322	G 03593
00040	G 02359	G 03757
00042	G 02360	G 03793
00063	G 02361	G 03811
00064	G 02567	G 03949
00065	G 02595	G 04081
00066	G 02596	G 04098
00067	G 02598	G 04215
00068	G 02601	G 04270
00069	G 02690	G 04473
00072	G 02705	G 04508
00073	G 02712	G 04579
00074	G 02716	G 04794
G 00996	G 02724	G 04800
G 01023	G 02750	G 04818
G 01028	G 02754	G 04832
G 01029	G 02872	G 05006
G 01127	G 02895	G 05050
G 01253	G 02939	G 05052
G 01256	G 03079	G 05370
G 01269	G 03108	G 05438
G 01526	G 03128	G 05479
G 01676	G 03177	G 05611
G 01677	G 03328	G 05668
G 02023	G 03377	G 05693
G 02024	G 03388	G 05841
G 02176	G 03414	G 06044
G 02263	G 03481	G 06069
G 02300	G 03520	G 06085

**Federal OCS Leases affected by the merger of
Samedan Oil Corporation (GOM Co. #0185)
with and into
Noble Energy, Inc. (GOM Co. #2237)**

RECORD TITLE

G 06086	G 15104	G 19761
G 06113	G 15141	G 19796
G 06136	G 15161	G 19960
G 06805	G 15212	G 19980
G 06946	G 15261	G 19982
G 07227	G 16239	G 20030
G 07760	G 16317	G 20048
G 07802	G 16361	G 20800
G 07836	G 16473	G 21051
G 08549	G 16535	G 21059
G 08658	G 16541	G 21091
G 08690	G 16583	G 21097
G 08765	G 16624	G 21098
G 09478	G 16650	G 21108
G 09514	G 16676	G 21145
G 09524	G 16727	G 21155
G 09631	G 17255	G 21177
G 10636	G 17259	G 21180
G 10687	G 17261	G 21188
G 10720	G 17267	G 21202
G 10815	G 17964	G 21233
G 10878	G 17991	G 21235
G 11881	G 18168	G 21310
G 12807	G 18273	G 21353
G 13032	G 19006	G 21355
G 13342	G 19016	G 21368
G 13576	G 19167	G 21371
G 13606	G 19180	G 21554
G 14348	G 19760	G 21555

**Federal OCS Leases affected by the merger of
Samedan Oil Corporation (GOM Co. #0185)
with and into
Noble Energy, Inc. (GOM Co. #2237)**

RECORD TITLE

G 21556	G 22642	G 23827
G 21558	G 22645	G 23828
G 21559	G 22697	G 23923
G 21560	G 22762	G 23939
G 21584	G 22793	G 23946
G 21602	G 22794	G 24054
G 21615	G 22795	G 24106
G 21657	G 22826	G 24113
G 21712	G 22854	G 24119
G 21721	G 22859	G 24123
G 21732	G 22860	G 24150
G 21739	G 22862	G 24156
G 21751	G 22863	G 24157
G 21813	G 22891	G 24158
G 21814	G 22907	
G 21817	G 22908	
G 21822	G 22911	
G 22165	G 22912	
G 22166	G 22913	
G 22251	G 22921	
G 22253	G 22922	
G 22266	G 22970	
G 22540	G 23006	
G 22551	G 23007	
G 22552	G 23009	
G 22598	G 23010	
G 22599	G 23011	
G 22627	G 23258	
G 22637	G 23826	

**Federal OCS Oil and Gas Leases affected by the merger of
Samedan Oil Corporation (GOM Co. #0185)
with and into
Noble Energy, Inc. (GOM Co. #2237)**

OPERATING RIGHTS

00146	G 04215	G 12465
G 00993	G 04558	G 13035
G 01027	G 04818	G 13980
G 01030	G 05370	G 13981
G 01127	G 05438	G 13982
G 01143	G 05611	G 13983
G 01144	G 05668	G 13984
G 01526	G 05685	G 15212
G 02037	G 05693	G 15441
G 02113	G 06069	G 15444
G 02322	G 06946	G 15445
G 02388	G 08187	G 16315
G 02412	G 08658	G 16317
G 02416	G 08690	G 16473
G 02601	G 08765	G 17789
G 02712	G 09478	G 17815
G 02719	G 09514	G 17964
G 02872	G 09522	G 17991
G 02895	G 10741	G 18168
G 03068	G 10926	G 19760
G 03087	G 10929	G 19761
G 03141	G 10930	G 20114
G 03256	G 10931	G 22540
G 03394	G 10932	G 22627
G 03798	G 10933	G 22793
G 03811	G 10934	
G 03949	G 11881	
G 04081	G 12019	
G 04082	G 12020	

**Federal OCS Leases affected by the merger of
Samedan Oil Corporation (GOM Co. #0185)
with and into
Noble Energy, Inc. (GOM Co. #2237)**

PIPELINE RIGHTS-OF-WAY

G 03720	G 12377	G 15686
G 04355	G 13234	G 15695
G 04374	G 13235	G 15696
G 04643	G 13236	G 15982
G 05120	G 13426	G 16005
G 05132	G 13454	G 16031
G 07545	G 13701	G 16061
G 07568	G 14081	G 17040
G 08049	G 14099	G 18823
G 08518	G 14257	G 20498
G 08935	G 14684	G 20515
G 10078	G 14685	G 20584
G 10080	G 14686	G 21038
G 10081	G 14699	G 21892
G 10095	G 14965	G 22378
G 10096	G 14966	G 22418
G 10532	G 14989	G 22458
G 11731	G 15038	G 23434
G 12305	G 15046	G 25353
G 12306	G 15047	G 25354
G 12338	G 15672	
G 12371	G 15673	

Patton 7.9.99

10-16-99

SN 7086

In Reply Refer To: MS 5232

OCT 04 1999

Mr. Dan O. Dinges
Energy Development Corporation
3500 Glenborough, Suite 240
Houston, Texas 77067-3299

Dear Mr. Dinges:

Pursuant to 30 CFR 250.1000(b), the relinquishment of the right-of-way grant associated with the following pipeline is hereby accepted effective June 24, 1999:

<u>Pipeline Segment No.</u>	<u>Size (inches)</u>	<u>Length (feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
7086 (Right-of-Way OCS-G 11731)	4 1/2	2,361	Gas	The Federal/State Boundary Block 42 Breton Sound Area Lease OCS-G 8751	A 24-inch Block 42 Breton Sound Area Lease OCS-G 8751 Segment No. 3427 Right-of-Way OCS-G 1689

Your letter dated June 14, 1999, requests approval to permanently abandon in place approximately 2,361 feet (0.45 miles) of 4 1/2-inch pipeline designated as Segment No. 7086, and to relinquish in its entirety, Right-of-Way Grant OCS-G 11731, associated therewith.

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

Your letter states this pipeline was abandoned on June 29, 1994, prior to Samedan Oil Corporation's purchase of Energy Development Corporation.

Sincerely,

(orig. sgd.) A. P. Alvarado

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 Segment No. 7086, ROW OCS-G 11731 (MS 5232)
1502-01 ROW OCS-G 11731 (Microfilm) (MS 5033)
MS 5232 Carto

FPatton:amm:7/9/99:Energy.086

5232

ENERGY DEVELOPMENT CORPORATION
350 GLENBOROUGH, SUITE 240
HOUSTON, TEXAS 77067
(281) 876-6250
(281) 876-6206 (Fax)

June 14, 1999

United States Department of the Interior
Minerals Management Service
1201 Elmwood Park Blvd. (MS5330)
New Orleans, Louisiana 70123-2394



Attn: Mr. Alex Alvarado
Pipeline Unit
Unit Supervisor

Re: Pipeline Abandonment and Relinquishment
Breton Sound Block 39 to Breton Sound Block 42, 24" SSTI
4-1/2" Gas Pipeline, Right-of-Way No. OCS-G-11731
Segment No. 7086
Offshore, Louisiana

Gentlemen:

In accordance with Title 30 CFR Part 250, Subpart J, Energy Development Corporation hereby requests approval to relinquish all rights to the subject 4-1/2" gas pipeline. This 4-1/2" gas pipeline extends approximately 0.45 miles from the Breton Sound Block 39 Federal/State line to a 24" subsea tie-in at Texas Eastern Transmission Corporation's pipeline in the Breton Sound Block 42 (OCS-G-1689) Area. The pipeline was abandoned-in-place on June 29, 1994, as follows:

The pipeline was disconnected from Texas Eastern's 24" SSTI in Breton Sound Block 42. A pig and 8,000 gallons of inhibited bay water were pumped back to the platform to flush the 4-1/2" pipeline of all hydrocarbons. Then the riser was disconnected 30' from the platform, ANSI 600 blind flanges were installed on both ends of the pipeline, and the flanged ends were jetted down to a minimum of three feet (3') of cover.

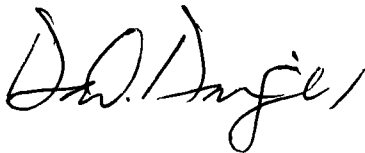
Please note, Samedan Oil Corporation purchased Energy Development Corporation in 1996 and assumed ownership of its records as well. However, todate, Samedan has been unable to locate the permit for this pipeline abandonment.

Pipeline Abandonment and Relinquishment
Breton Sound Block 39 to Breton Sound Block 42, 24" SSTI
4-1/2" Gas Pipeline, Right-of-Way No. OCS-G-11731
Segment No. 7086
June 14, 1999
Page 2

If further information is required, please contact Pam Tullos at (281) 876-6274.

Sincerely,

ENERGY DEVELOPMENT CORPORATION



Dan O. Dinges
Senior Vice President
Division General Manager

DOD/PT/sb



SN 7086

Williams
6-18-90
Howard 6/18/90
Stauffer 6/18/90

~~XXXXXXXXXX~~
In Reply Refer To: MS 5232 (OCS-G 11731)

JUN 19 1990

Energy Development Corporation
Attention: Mr. H. M. Macmillan, Jr.
1000 Louisiana, Suite 2900
Houston, Texas 77002

Gentlemen:

Pursuant to the authority granted by 43 U.S.C. 1334(e) and 30 CFR 250.150(d), your application dated February 15, 1990, for a pipeline right-of-way two-hundred feet (200') in width for the operation and maintenance of a 4 1/2-inch pipeline, 0.45 miles in length, is hereby approved, as proposed.

The existing pipeline will transport gas from the Federal/State line to a subsea tie-in with Texas Eastern Transmission Corporation's 24-inch pipeline (OCS-G 1689) all in Block 42, Breton Sound Area.

The pipeline was originally approved on August 2, 1984, and assigned Segment No. 7086.

Based on our analysis, the maximum allowable operating pressure for this pipeline will be 1,440 psig.

Sincerely,

(Orig. Sgd.) A. Donald Giroir

D. J. Bourgeois
Regional Supervisor
Field Operations

cc: Department of Transportation
2320 La Branch, Room 2116
Houston, Texas (w/appln)

bcc: 1502-01 (P/L OCS-G 11731), w/encl (MS 5232)
MS 5033 (P/L OCS-G 11731) (CWilliams)
MS 5250
MS 5421, w/receipt
MS 5232 (Carto), w/plat

CCWilliams:lr:gtj:Lexidisk/Carol

OK map
6/25/90
HR

SN 7086

PJB



OCS-G
11731

FO2-2

February 15, 1990



Mr. Daniel J. Bourgeois
Regional Director
Office of Field Operations
U. S. Department of the Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Attention: Ms. Carol Williams
FO-2-2

RE: Application for a 4.500" Natural Gas Right-of-Way Pipeline Installed In and/or Through Blocks 39 and 42, Breton Sound Area, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

Pursuant to the authority granted in Section 5 (e) of the Outer Continental Shelf Lands Act (67 Stat. 462) (43 U.S.C. 1331), as amended (92 Sta. 629), and in compliance with the regulations contained in Title 30 CFR, Part 250, Subpart J, Energy Development Corporation (Energy Development) is filing this application in quadruplicate (original and three copies) for a right-of-way two hundred feet (200') in width for the maintenance and operation of an existing 4.500" natural gas pipeline in the Breton Sound Area, Gulf of Mexico. Energy Development agrees that said right-of-way, if approved, will be subject to the terms and conditions of said regulations.

This 4.500" pipeline will be used to transport natural gas production from Energy Development's State Lease 13044, Well No. 4 located in State Waters in Breton Sound Block 39 to a subsea tie-in point with Texas Eastern Transmission Corporation's (TETCO) existing 24" pipeline located in Federal Waters in Breton Sound Block 42. Energy Development will construct and install a 1845' extension to the State portion of the pipeline. The proposed extension will originate at Energy Development's State Lease 13044, Well No. 4 and connect with the existing pipeline in Breton Sound Block 39, proceeding in a southerly direction, approximately 11,602.21 feet (2.20 miles) across the State/Federal Boundary in Breton Block 42, continuing on in a southerly direction approximately 2361.01 feet (.45 miles) to a subsea tie-in point with TETCO's existing 24" pipeline in Breton Sound Block 42, all being in the Gulf of Mexico, Offshore, Louisiana. The proposed construction commencement date is March 15, 1990, with the time required to complete the pipeline extension and testing being estimated at 15 days with an overall completion of project time being estimated at 20 days. Energy Development will utilize an existing onshore support base located in Venice, Louisiana.

Energy Development Corporation

A subsidiary of Public Service Enterprise Group Incorporated

1000 Louisiana, Suite 2900, Houston, Texas 77002 (713) 750-7300

Energy Development Corporation
Minerals Management Service
4.500" R-O-W Application
February 15, 1990

Page Two

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

In accordance with applicable regulations, we have forwarded information regarding the proposed project by certified mail, return receipt requested, to each designated operator, right-of-way or easement holder whose lease, right-of-way or easement is so affected. A list of such operators, right-of-way or easement holders is included as Attachment "A" and copies of the return receipts showing date and signature as evidence of service upon such operators, right-of-way or easement holders will be forwarded to your office when received. In order to expedite the permit process, we have requested a letter from the operator, right-of-way or easement holder expressing no objection to the proposed project. When obtained, these letters will be forwarded to your office. The proposed right-of-way does not adjoin or subsequently cross 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, revised September, 1984.

Energy Development Corporation
Minerals Management Service
4.500" R-O-W Application
February 15, 1990

Page Three

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. Operators and Right-of-Way Holders (Attachment "A")
2. General Pipeline Information & Calculations (Attachment "B")
3. Vicinity Map & Pipeline Route, (Drawing 039-800.B)
4. Pipeline Profile (Drawing 039-804)
5. Pipeline Schematic (Drawing 039-801)
6. Originally signed copy of Nondiscrimination in Employment Stipulation is attached to each copy of the application.
7. Check in the amount of \$ 1415.00 of which, \$ 1400.00 covers the application fee and \$ 15.00 covers the first years rental on .45 miles of right-of-way in federal waters.

Contact on technical points or other information:

Connie J. Goers
J. Connor Consulting
P. O. Box 218753
Houston, Texas 77218
Telephone: 713/558-0607

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

Energy Development Corporation
Minerals Management Service
4.500" R-O-W Application
February 15, 1990

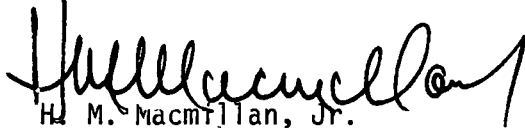
Page Four

Please refer to your New Orleans Miscellaneous File No. 415 for a copy of a resolution approved by the Board of Directors authorizing the undersigned to sign for and on behalf of Energy Development Corporation.

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 our regulatory agent at J. Connor Consulting, P. O. Box 218753, Houston, Texas, 77218, Attention: Ms. Connie J. Goers (713) 558-0607.

Sincerely,

ENERGY DEVELOPMENT CORPORATION

A handwritten signature in dark ink, appearing to read "H. M. Macmillan, Jr.", written over the typed name.

H. M. Macmillan, Jr.
Vice President Exploration

JFS:CJG
Attachments and Enclosures

Energy Development Corporation
Minerals Management Service
4.500" R-O-W Application
February 15, 1990

Page Five

cc: Shell Offshore, Inc.
P. O. Box 61933
New Orleans, Louisiana 70161
(Certified Mail No. P 835 367 473)

Chandeleur Pipeline Company
935 Gravier Street
New Orleans, Louisiana 70112
(Certified Mail No. P 835 367 474)

ATTACHMENT "A"

The following Operators and Right-of-Way Holders have been furnished information regarding the proposed pipeline installation by Certified Mail, Return Receipt Requested. (Note: The status of blocks listed below is current as of February 8, 1990, per research of MMS records).

BRETON SOUND AREA

BLOCK 42

Shell Offshore, Inc.	OCS-G 8751	Oil & Gas Lease
Chandeleur Pipeline Company	OCS-G 1350	Pipeline R-O-W
Chandeleur Pipeline Company	OCS-G 1350-A	Pipeline R-O-W

ATTACHMENT "B"

GENERAL INFORMATION & CALCULATIONS

4.500" NATURAL GAS PIPELINE

BRETON SOUND AREA BLOCKS 39 & 42

1. The maximum water depth (17' MSL) along the existing pipeline route and in relationship to the natural bottom.
2. The description of the pipe and coating is as follows:
 - a. Line Pipe: 4-1/2" O.D. x 0.237" W.T. Schedule 40; bare weight = 10.79#/ft. Specific gravity in seawater (empty) w/coating = 1.527. Pipe is coated with Scotchkote 212 fusion bonded epoxy (14 mils). **Pipe joints are protected with heat shrinkable wraparound pipe sleeves.**
 - b. Subsea side tap valve assembly: Block and Check Valves in Breton Sound Block 42.
 - c. Internal Coating: The analysis of transported products will be monitored and preventative measures will be employed as necessary.
3. The existing pipeline length in federal waters is approximately 2361 feet in horizontal length. The pipeline will transport natural gas production. The facility design working pressure is 1200 PSIG.
4. Valves and Flanges: Pipeline subsea ball valves are ANSI Class 600 with a rated working pressure of 1440 PSIG and flanges are ANSI Class 900 with a rated working pressure of 2160 PSIG.
5. The design of the existing pipeline is in accordance with Department of Transportation Title 49 Part 192.

Attachment "B"
Page Two

6. The cathodic protection system for the pipeline uses Galvalum tapered semi-cylinder bracelet anodes. Calculations are as follows:

$$\text{Amps Required} = \frac{\text{PiD (Linear Ft.)}}{12} \left(\frac{\text{Amps}}{\text{Ft}^2} \right) (\% \text{ Bare Pipe})$$

$$\frac{3.14(4.5)}{12} (15,763.1) (0.006) (0.04)$$

$$= 4.457$$

$$\text{Amp Year} = (\text{Amps Required}) (\text{Design Life})$$

$$= (4.457) (20)$$

$$= 89.14$$

$$\text{Lb. Galvalum Required} = (\text{Amp Year}) \left(\frac{\text{Lb. Galvalum}}{\text{Amp Year}} \right)$$

$$= (89.14) (7.6)$$

$$= 677.464$$

$$\frac{\text{Lb. Galvalum}}{\text{Lb. Anode}} = \text{No. Anodes Required}$$

$$= \frac{677.464}{25} = 27.099 \quad \text{Use 28}$$

$$\frac{\text{P/L Length}}{\# \text{ Anodes Req'd}} = \text{Spacing}$$

$$\frac{15,763.1}{28} = 563'$$

Attachment "B"
Page Three

7. The design pressure for the line pipe:

$$\begin{aligned} t &= PD/2S & P &= \text{Internal design pressure} = 1440 \text{ PSIG} \\ &= 1440(4.5)/2(35,000)(0.72)(1.0)(1.0) \\ &= 0.129" + 0.05" \text{ C.A.} & t &= \text{Nominal wall thickness inches} \\ &= 0.179" & S &= \text{SMYS } (35,000) \times .72 \\ & & & 25,200[\text{per ANSI B31.8}] \\ & & D &= \text{Nominal outside diameter} \\ & & & = 4.5" \end{aligned}$$

Use 4.5" O.D. x 0.237" W.T. API 5L Grade B or ASTM A106 Grade B Seamless.

Hydrostatic test pressure:

In accordance with DOT 49 CFR Part 192 and API RP 1111

$$\begin{aligned} \text{HTP} &= 1.25 \times \text{MAOP} \\ &= 1.25 \times 1440 \\ &= 1800 \text{ PSIG} \end{aligned}$$

Test to 2160 psig, same as riser

8. The hydrostatic test will be conducted in accordance with applicable regulations. Test duration will be a minimum of eight (8) hours per 49 CFR Ch. 1 Part 192.6.5.b. The test medium will be inhibited seawater. The test pressure is not greater than 90% of the hoop stress pressure using 100% of the steel's SMYS.

$$\begin{aligned} P &= 2tS/D & P &= \text{Max. hoop pressure} \\ &= 2(0.237)(35,000)/4.5 & t &= \text{Nominal wall thickness} \\ &= 3686.7 \text{ PSIG} & S &= \text{SMYS } (35,000) \\ 90\% \text{ of } P &= 3318 \text{ PSIG} & D &= \text{Nominal outside diameter} \end{aligned}$$

Attachment "B"
Page Four

9. The specific gravity of the line pipe was calculated as follows:

$$\text{S.G.} = 2.865 \frac{W}{D^2}$$

W = Weight of Pipe/Ft., #/L.F.

D = Diameter of Pipe, Inches

$$\text{S.G.} = 2.865(10.79)^2 / 4.5^2$$

$$= 1.527$$

The weight of coatings and anodes were not included in these calculations.

10. The design capacity of the pipeline is approximately 5,000 MCFD.
11. The proposed extension (state waters) and existing pipeline segment will depart from Energy Development's State Lease 13044, Well No. 4 in Breton Sound Block 39 and terminate at a subsea valve on TETCO's existing 24" pipeline located in Breton Sound Block 42.

PIPELINE SUMMARY

1. Line Pipe Specifications:

<u>O.D.</u>	<u>W.T.</u>	<u>Material Spec.</u>	<u>Length</u>	<u>MAOP</u>
4-1/2"	0.237"	SCHEDULE 40	2361'	1440 PSI

2. Riser Pipe Specifications:

Not Applicable - Located In State Waters

3. Transportation Company Line Specifications:

<u>O.D.</u>	<u>MAOP</u>	<u>Pipeline Company</u>
24"	1440	TETCO

4. Line Pipe Coating:

Scotchkote 212 fusion bonded epoxy (14 mils)

5. Name of Product:

Natural Gas

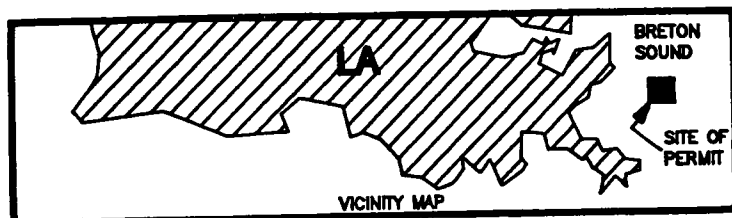
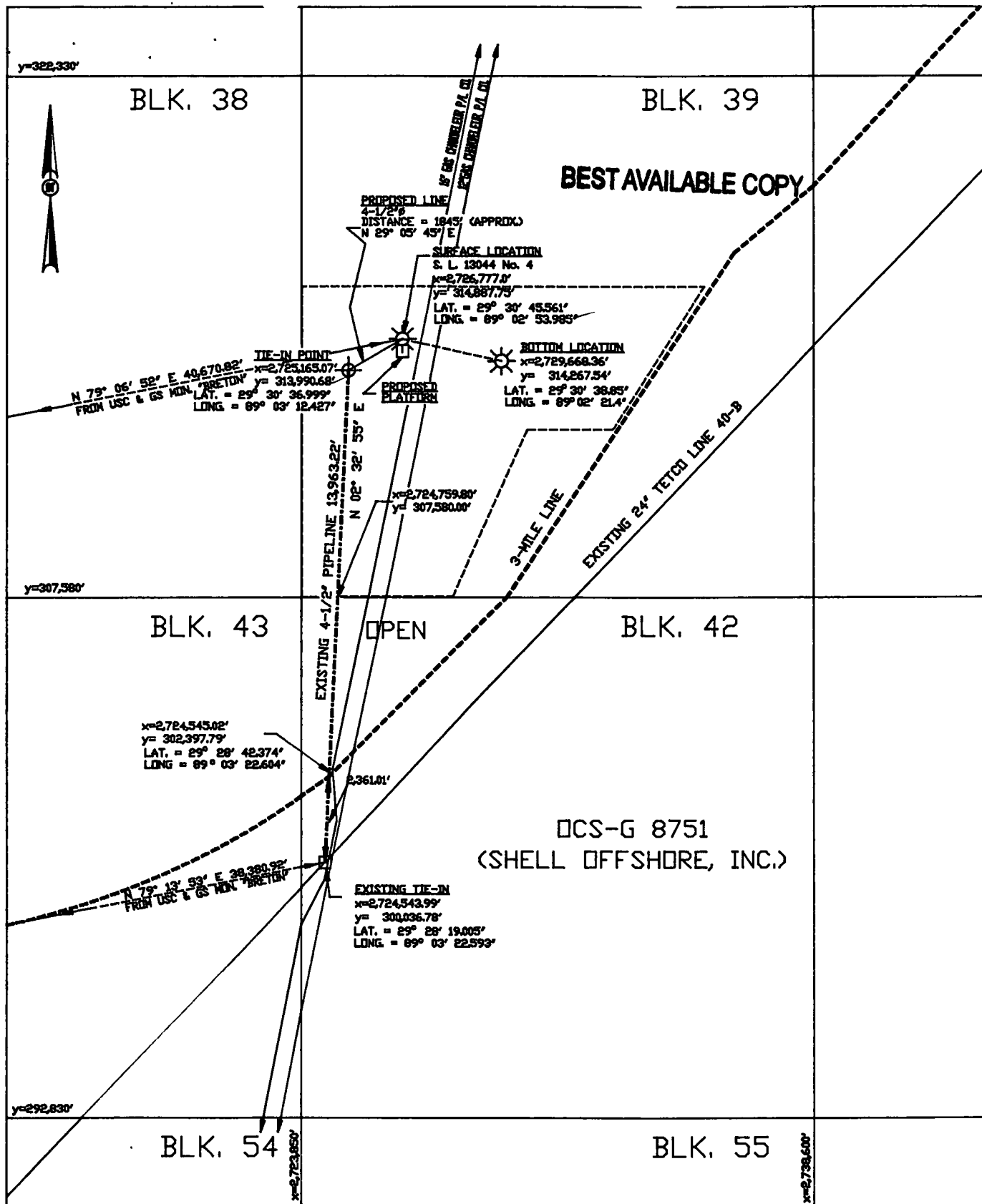
a. Specific gravity of the natural gas will be 0.62.


6. Class Location:

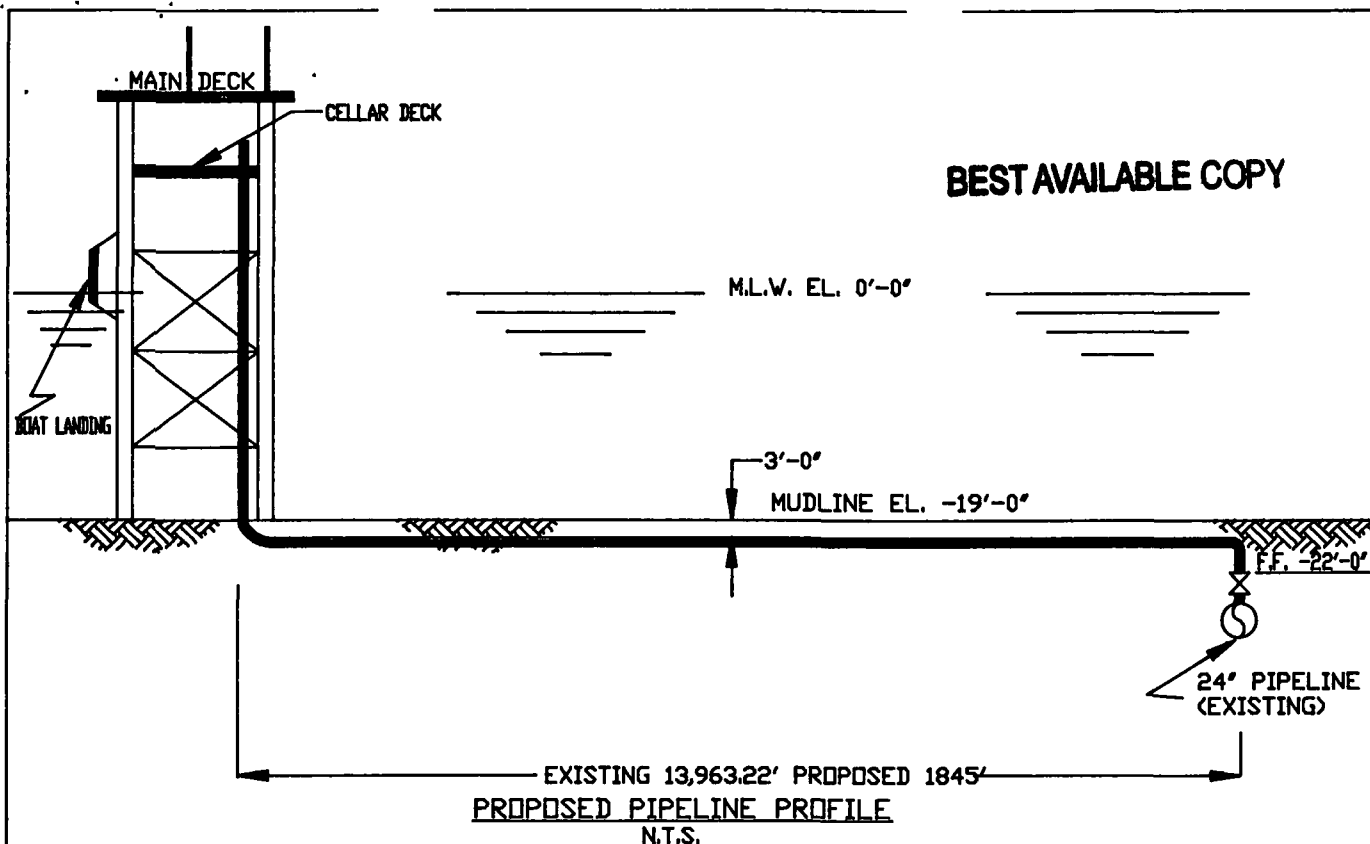
Class I

7. Governing Code:

DOT Title 49 Part 192

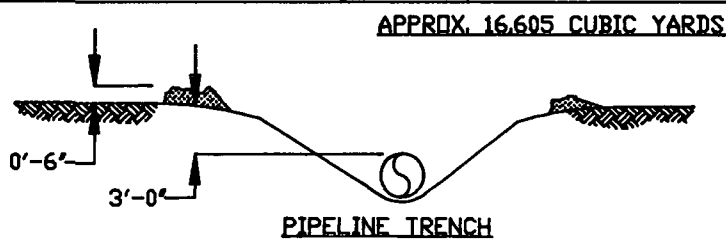


 ENGICON			
ENERGY DEVELOPMENT CORPORATION BRETON SOUND BLOCK 39			
TITLE PROPOSED PIPELINE SYSTEM			
SCALE 1"=4000' DRAWN CND	DATE 1-25-90	DRAWING NUMBER 039-800.B	REV 0



1. <u>DRY NATURAL GAS</u>	TRANSPORTED PRODUCT
2. <u>4' 10.79 #/FT. SCH. 40, 237" W.T.</u>	SIZE, WEIGHT, GRADE OF PIPE
3. <u>13,963.22 EXISTING PLUS 1845' PROPOSED</u>	LENGTH OF LINE
4. <u>19'</u>	MAXIMUM WATER DEPTH
5. <u>CATHODIC PROTECTION</u>	CORROSION PROTECTION
6. <u>SCOTCH COAT 212</u>	PROTECTIVE COATING
7. <u>48.6 #/FT.³</u>	ANTICIPATED DENSITY
8. <u>1.527</u>	BULK SPECIFIC GRAVITY
9. <u>1200 # 5.0 mmscfd</u>	DESIGN WORKING PRESSURE & CAPACITY
10. <u>1440 # 7.0 mmscfd</u>	MAXIMUM WORKING PRESSURE & CAPACITY

GENERAL PIPELINE INFORMATION



ENGICON

ENERGY DEVELOPMENT CORPORATION
BRETON SOUND BLOCK 39

TITLE

PROPOSED 4" PIPELINE

SCALE

NONE

DATE

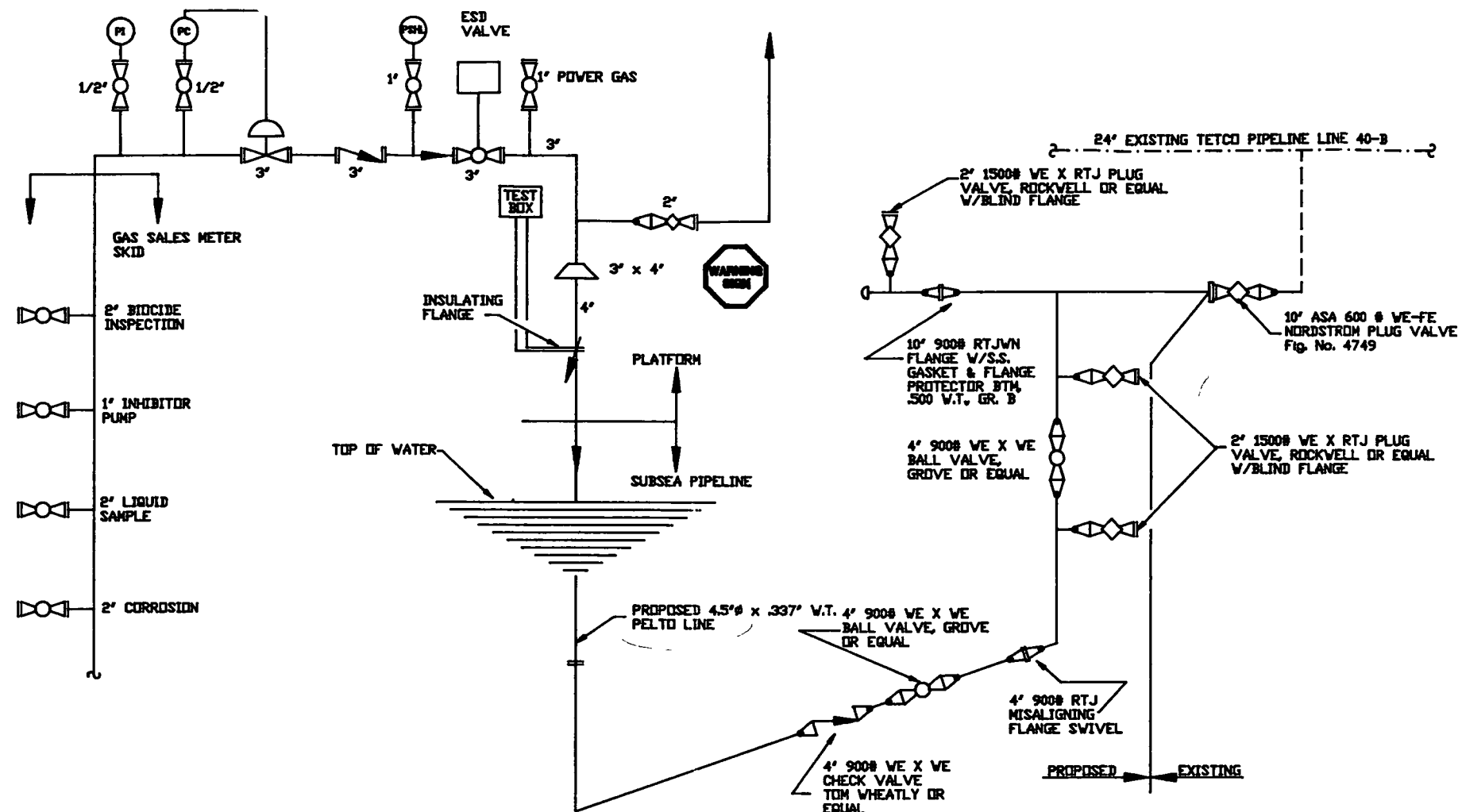
1-26-90

DRAWING NUMBER

039-804

REV

0




BEST AVAILABLE COPY

GENERAL NOTES AND SPECIFICATIONS

- CODE: DEPARTMENT OF TRANSPORTATION, MINIMUM FEDERAL SAFETY STANDARDS FOR GAS LINES. PART 192, TITLE 49 CODE OF FEDERAL REGULATIONS AND ANSI 31.8.
- PIPE: THE 4' MAINLINE PIPE AND RISER PIPE WILL CONSIST OF: 4.500" x .337" W.T. API-5L GR. B SMLS. BURIAL DEPTH = 3'-0" (MIN) FIELD JOINT = CANUSA "TUBE" TYPE SHRINK SLEEVES.
- PIPE DESIGN FACTOR: A DESIGN FACTOR OF 0.72 OR LESS WILL BE APPLIED TO THE PIPELINE. A DESIGN FACTOR OF 0.50 OR LESS WILL BE APPLIED TO TIE-IN PIPE, FABRICATION PIPE, PLATFORM PIPING WITHIN 500 FT. OF PLATFORM AND THE MAINLINE PIPE FOR APPROXIMATELY 120 FT. ON EACH SIDE OF THE MAINLINE VALVE AND SIDETAP FABRICATIONS. MATERIAL WILL CONFORM WITH THE REQUIREMENTS OF D.O.T. PART 192 AND ANSI 31.8.
- MAJOR VALVES: ALL ABOVE WATER VALVES WILL BE RATED ANSI 600# RTJ. SUBSEA VALVES SHALL BE ANSI 900# RTJ OR BETTER. ALL VALVES FOR UNDERWATER SERVICE SHALL BE COATED WITH CEILKOTE'S FLAKETAR COAL EPOXY. VALVES SHALL BE BORED TO MATCH ABUTTING PIPING.
- MAJOR FITTINGS: ALL ABOVE WATER FLANGES SHALL BE RATED ANSI 600 AND FURNISHED WITH WELD NECK RING TYPE JOINT FACING. SUBSEA FLANGES SHALL BE RATED ANSI 900 OR BETTER AND FURNISHED WITH RING TYPE JOINT FACING. FITTINGS SHALL HAVE A WALL THICKNESS AND YIELD STRENGTH TO MATCH ADJOINING PIPE.
- MISC. FITTINGS: ALL NIPPLES, THREADED, WELDED, AND OTHER MINOR FITTINGS SHALL BE RATED 6000#.
- COATING: PIPELINE - 14 - 16 MILS. FUSION BONDED EPOXY
RISER - SUBSEA: 1/2" THK. SODASTIC TYPE III
SPLASH ZONE: 1/2" THK. SPLASHTRON RUBBERIZED COATING (±20' TO -20' ELEVATION)
ABOVE WATER: INORGANIC ZINC PRIMER TIE-COAT, AND POLYURETHANE TOP COAT PAINT SYSTEM (DINETCOTE OR EQUAL)
- ANODES: FOR 4.500' LINE (29 REQ'D)
TYPE - GALVALLUM III 24.5 LBS.
SPACING - 500 FEET MAX.
DESIGN LIFE - 20 YRS. 2X HOLIDAY
CURRENT - 0.005 AMP/SQ. FT.

LIST OF DRAWINGS

REV	DATE	DRAWN	CHK'D	APPR'D	COMMENT
2	02-08-99	CHG			REMOVED OVERALL FIELD LAYOUT
1	02-08-99	CHG			REVISED UPON CLIENT REQUEST
0	02-07-99	CHG			PRELIMINARY ISSUE
<div>  ENGICON ENERGY DEVELOPMENT CORPORATION BRETON SOUND BLOCK 39 TITLE PIPELINE SYSTEM SCHEMATIC DIAGRAM </div>					
CHECKED	SCALE	DATE	DRAWING NUMBER	REV	
APPROVED	NT.S. CHG	12-07-99	039-801	2	



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 15, 1990

Shell Offshore, Inc.
P. O. Box 61933
New Orleans, Louisiana 70161

RE: Application for a 4.500" Natural Gas Right-of-Way Pipeline Installed In
and/or Through Blocks 39 and 42, Breton Sound Area, Gulf of Mexico,
Offshore, Louisiana

Gentlemen:

Energy Development Corporation (Energy Development) is in the process of submitting an application to the MMS for a Pipeline Right-of-Way for reinstating an existing 4.500" O.D. natural gas pipeline installed in and/or through Breton Sound Block 39 and 42, Gulf of Mexico, Offshore, Louisiana, which crosses a portion of your lease(s) and/or pipeline.

In order to expedite processing of the proposed right-of-way application, Energy Development is hereby requesting you submit a letter of no objection to, Ms. Connie J. Goers, J. Connor Consulting, P. O. Box 218753, Houston, Texas 77218. (Sample attached).

Your cooperation in this matter would be greatly appreciated.

Sincerely,

ENERGY DEVELOPMENT CORPORATION

H. M. Macmillan, Jr.
Vice President Exploration

JFS:CJG
Enclosures

Energy Development Corporation

10000 Highway 100, Suite 100, Houston, Texas 77060

Phone: (713) 865-1000 Telex: 160000 EDCO Houston, Texas 77060

Energy Development Corporation
c/o J. Connor Consulting
P. O. Box 218753
Houston, Texas 77079

Attention: Ms. Connie J. Goers

RE: Minerals Management Service Application by Energy Development Corporation's 4.500" O. D. Natural Gas Pipeline In and/or Through Breton Sound Area Blocks 39 and 42, Gulf of Mexico, Offshore, LA

Dear Ms. Goers:

Energy Development Corporation proposes to extend and re-instate an existing 4.500" O. D. natural gas pipeline from its State Lease 13055, Well No. 4 in Breton Sound Block 39 to a subsea tie-in point with an existing Texas Eastern Transmission Corporation's existing 24" pipeline in Breton Sound Block 42, located in Federal Waters. The route of the above referenced pipeline right-of-way crosses a portion of Breton Sound Block 42, all being in Federal Waters, Offshore, Louisiana.

Please be advised our company has no objection to the operations proposed.

Signature

Company

Address

City State Zip

Date



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 15, 1990

Chandeleur Pipeline Company
935 Gravier Street
New Orleans, Louisiana 70112

RE: Application for a 4.500" Natural Gas Right-of-Way Pipeline Installed In
and/or Through Blocks 39 and 42, Breton Sound Area, Gulf of Mexico,
Offshore, Louisiana

Gentlemen:

Energy Development Corporation (Energy Development) is in the process of submitting an application to the MMS for a Pipeline Right-of-Way for reinstating an existing 4.500" O.D. natural gas pipeline installed in and/or through Breton Sound Block 39 and 42, Gulf of Mexico, Offshore, Louisiana, which crosses a portion of your lease(s) and/or pipeline.

In order to expedite processing of the proposed right-of-way application, Energy Development is hereby requesting you submit a letter of no objection to, Ms. Connie J. Goers, J. Connor Consulting, P. O. Box 218753, Houston, Texas 77218. (Sample attached).

Your cooperation in this matter would be greatly appreciated.

Sincerely,

ENERGY DEVELOPMENT CORPORATION

H. M. Macmillan, Jr.
Vice President Exploration

JFS:CJG
Enclosures

Energy Development Corporation

A subsidiary of Energy Development Corporation, a Delaware corporation

Energy Development Corporation, 1000 Poydras Street, Suite 1500, New Orleans, Louisiana 70112

Energy Development Corporation
c/o J. Connor Consulting
P. O. Box 218753
Houston, Texas 77079

Attention: Ms. Connie J. Goers

RE: Minerals Management Service Application by Energy Development Corporation's 4.500" O. D. Natural Gas Pipeline In and/or Through Breton Sound Area Blocks 39 and 42, Gulf of Mexico, Offshore, LA

Dear Ms. Goers:

Energy Development Corporation proposes to extend and re-instate an existing 4.500" O. D. natural gas pipeline from its State Lease 13055, Well No. 4 in Breton Sound Block 39 to a subsea tie-in point with an existing Texas Eastern Transmission Corporation's existing 24" pipeline in Breton Sound Block 42, located in Federal Waters. The route of the above referenced pipeline right-of-way crosses a portion of Breton Sound Block 42, all being in Federal Waters, Offshore, Louisiana.

Please be advised our company has no objection to the operations proposed.

Signature

Company

Address

City State Zip

Date

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, Energy Development 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 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
H. M. MACMILLAN, JR.
VICE PRESIDENT

Energy Development Corporation

February 21, 1990
Date

NATURAL BOTTOM - 18

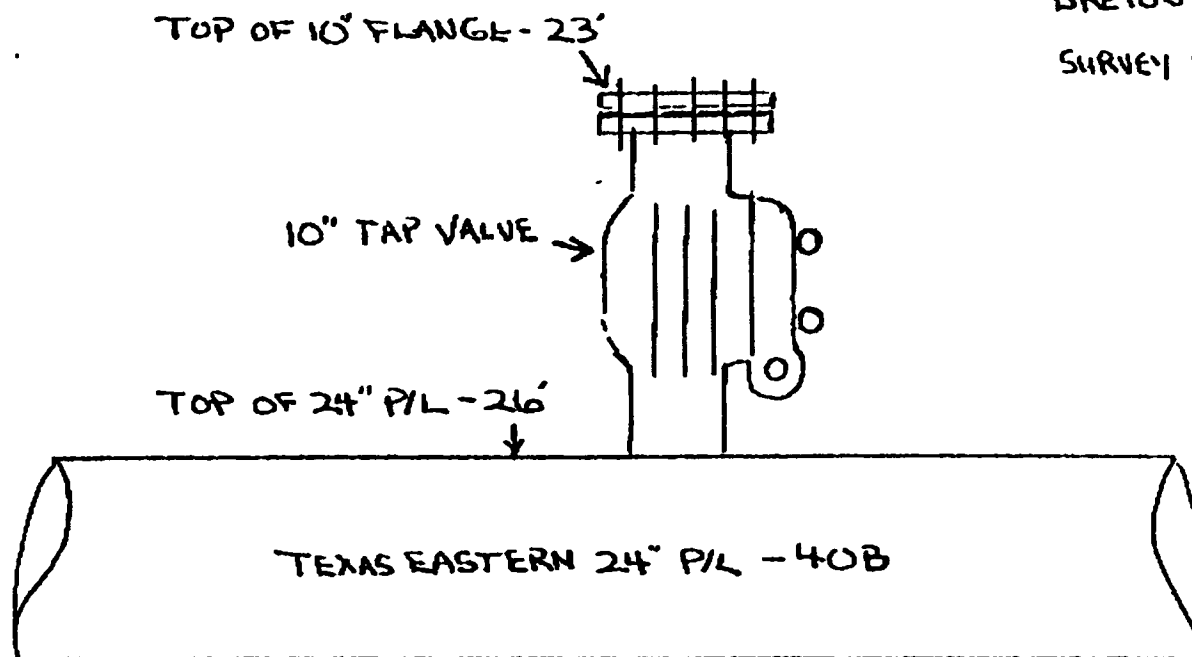
BOTTOM MATERIAL SUGAR SAND

BEST AVAILABLE COPY

VALVE LOCATION

BRETON SOUND 42

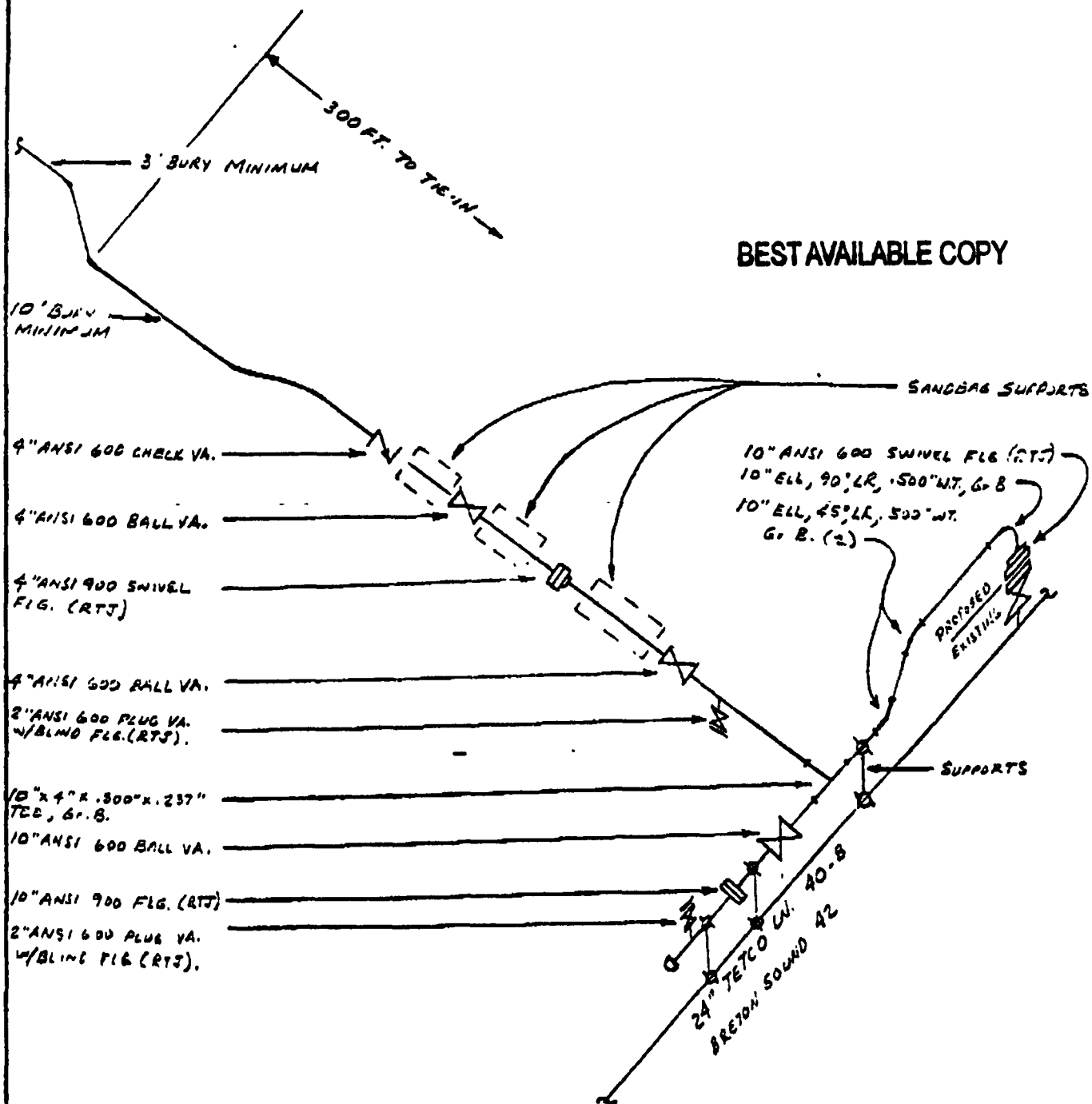
SURVEY STATION 1490+47



NOTE

VALVE IN GOOD SHAPE &
EASILY OPERABLE - NO
CORROSION APPARENT
ANYWHERE ON VALVE

report for:		S & H DIVING CORPORATION	
TEXAS EASTERN		P. O. Box 2276	
diver:	date:	Morgan City, Louisiana 70381	
KIP HARZMAN	5-24-84	job number:	
drawn by:	sheet 1 of 1	111493	
KIP HARZMAN	scale:	location:	
	NONE	BRETON S	



- NOTES. ① ALL FABRICATION PIPING TO BE THRESEY COATED.
- ② FABRICATIONS TO BE IN ACCORDANCE WITH TETCO SPECIFICATIONS.
- ③ BURY SHALL BE SUFFICIENT TO MAINTAIN 3 FT. OF COVER OVER TOP OF VALVES.

TEXAS EASTERN GAS PIPELINE COMPANY
ENGINEERING DIVISION-PIPELINE DESIGN

BRETON SOUND 39

TIE-IN FABRICATION FACILITIES.

NO SCALE

PREPARED BY:

[Signature]

DATE: 4/1/34

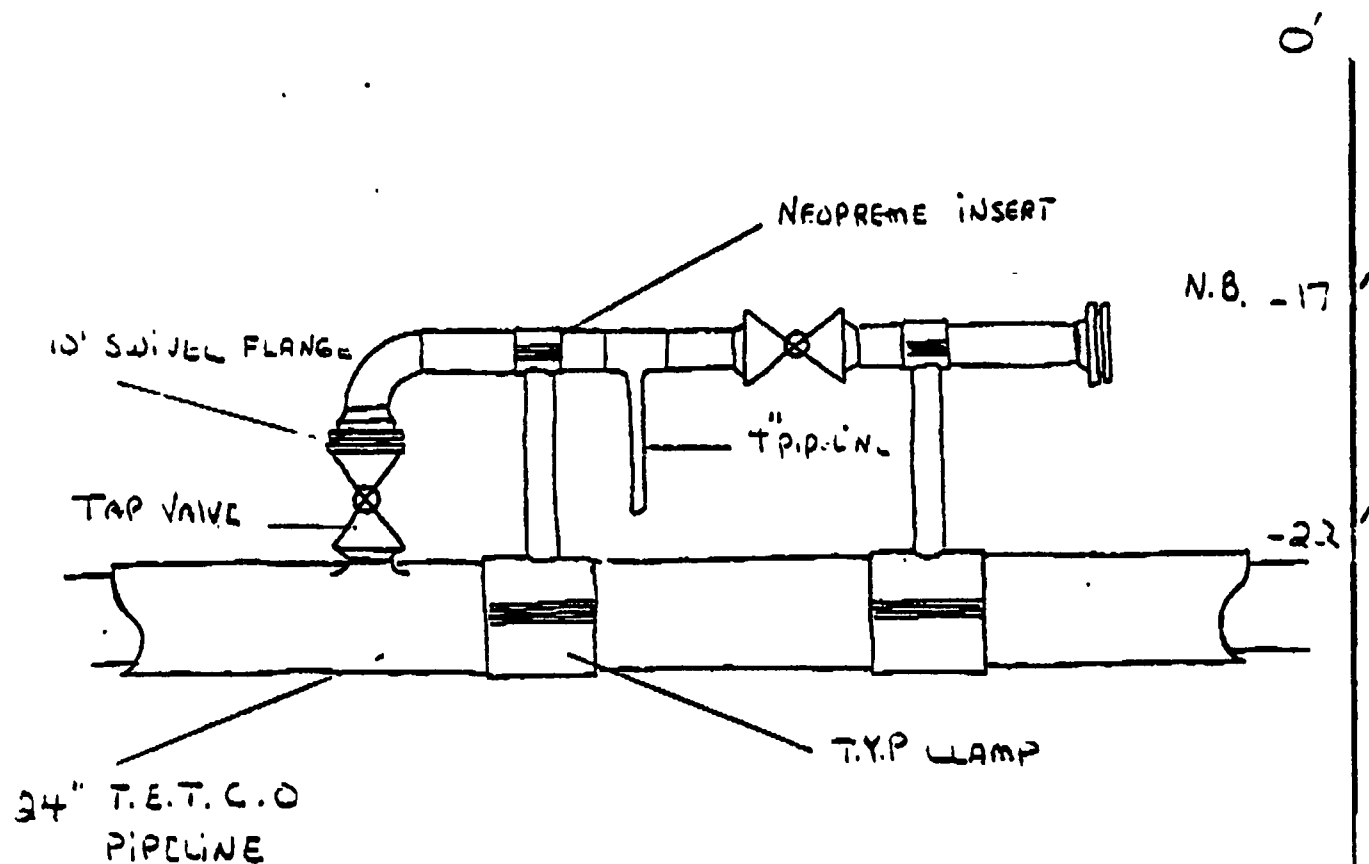
UNION TEXAS PETROLEUM

SUB-SEA ASSEMBLY

BEST AVAILABLE COPY

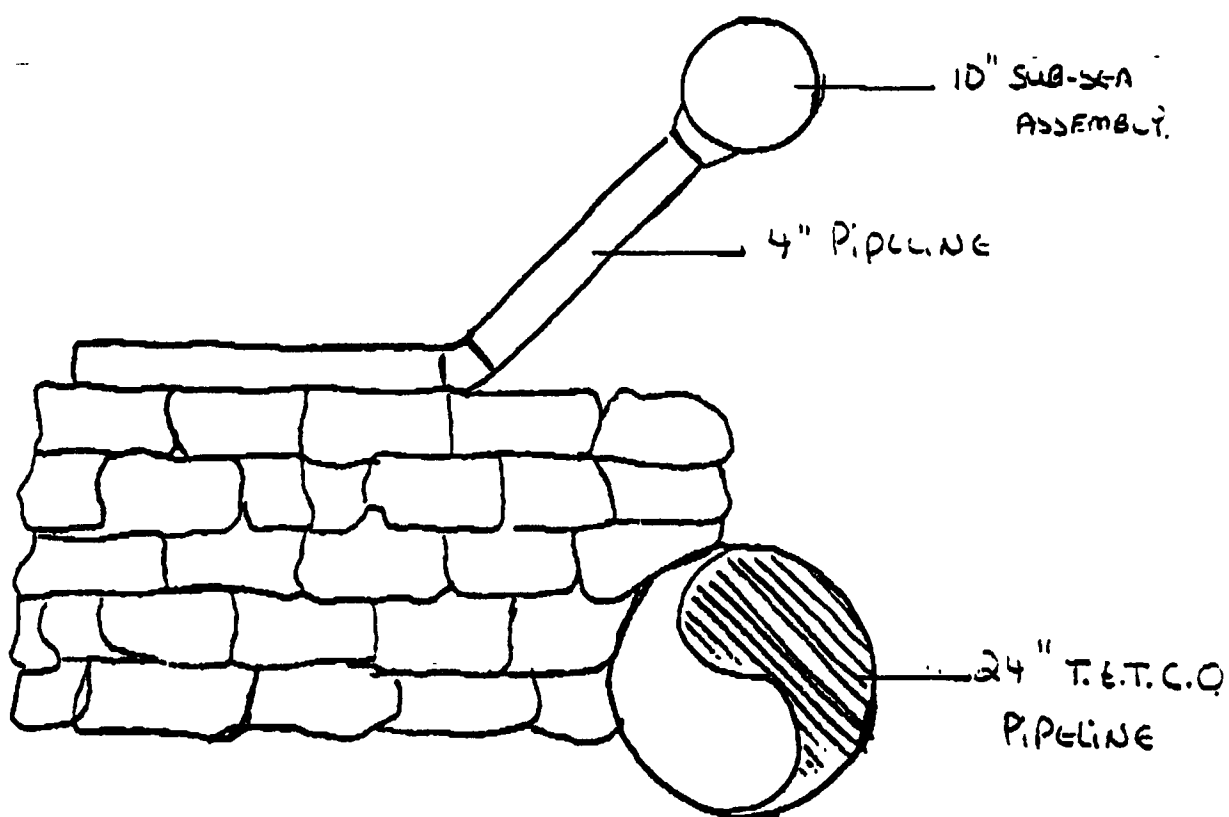
Sub-sea assembly was aligned with T.E.T.C.O. 24" pipeline, running perpendicular 90° straight off of the 12 o'clock position of the 24" pipeline. It was secured by two T.Y.P. clamps measuring 28" diameter with straight 90° vertical 8" pipe stand offs, upper saddle clamps measuring 11½" I.D., with 3/8" neoprene vulcanized to I.D. of clamp inserts for the 4" Union Texas Pipeline to lay in. Divers inspection revealed clamps in place and properly aligned. Clamps were set to correspond with existing tap valve and rubber was in place and all bolts tight. The upper 10" assembly rested on the two main clamps and was attached to top valve by a 10" swivel flange. The 4" pipe came off of the sub-sea assembly directly behind first clamp away from top valve and swivel flange. The 4" pipeline runs at a 45° angle down and is supported by sand bags beneath the 4" pipeline continued outward and runs beneath a 16" chandelier pipeline. Sand bags were placed between the 16" and 4" approximately 2 foot minimum separation. Then sand bags were continued completely covering the 16" pipeline to bring the sand bags to natural bottom level. Divers inspection confirmed proper position of all bags. After final assembly, a final inspection revealed stainless steel flange protector were in place and flanges were filled with grease.

BEST AVAILABLE COPY



SUB-SEA ASSEMBLY

BEST AVAILABLE COPY



4" PIPELINE - OFF 10" SUB SEA
ASSEMBLY

**NON-WARRANTY DEED
AND INDEMNITY AGREEMENT**

STATE OF TEXAS

COUNTY OF HARRIS

KNOW ALL MEN BY THESE PRESENTS:

That, UNION TEXAS PETROLEUM CORPORATION, a Delaware Corporation, qualified to do business in the State of Louisiana (hereinafter referred to as "Grantor") represented herein by its duly authorized representative, who declares that Grantor, for and in consideration of (i) Grantee's assumption of Grantor's liabilities as set forth below and (ii) Grantee's agreement to provide indemnity as set forth below, does by these presents, QUITCLAIM, GRANT, TRANSFER, ASSIGN, SET OVER, ABANDON AND DELIVER, without any warranty or recourse whatsoever, unto ENERGY DEVELOPMENT CORPORATION, a Delaware corporation, qualified to do business in the State of Louisiana (hereinafter referred to as "Grantee"), represented herein by its duly authorized representative here present, accepting for itself, its successors and assigns, and acknowledging due delivery and possession thereof, subject to the matters described below, all of Grantor's right, title and interest, if any, in and to a certain pipeline abandoned in place by Grantor in October 1988, the location of which is described in Exhibit A attached hereto and made a part hereof, together with all appurtenances thereto, such pipeline and appurtenances being hereinafter referred to as the "Property."

Grantee understands and agrees that this transfer of all of Grantor's right, title and interest, if any, in and to the Property is made without warranty whatsoever by Grantor as to title or otherwise. Furthermore, Grantee understands and agrees that this transfer is at Grantee's sole peril and risk of eviction.

Grantee acknowledges that the Property is in a used condition, and that Grantor is neither a manufacturer or distributor of, nor dealer or merchant therein. GRANTOR MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE IN RESPECT OF

THE PROPERTY, AND THE SAME IS TRANSFERRED IN AN "AS IS, WHERE IS" CONDITION, WITH ALL FAULTS. By acceptance of delivery, Grantee affirms that it has not relied on Grantor's skill or judgment to select or furnish the Property for any particular purpose, that Grantor makes no warranty that the Property is fit or useable for any particular purpose or fit or useable at all for any purpose and that Grantor makes no representations or warranties, express, implied or statutory with respect to the Property. Grantee acknowledges that it has relied solely on its own examination and inspection of the Property and not upon any warranty or representation from Grantor. Grantor makes no warranty or representation, express or implied, as to the accuracy or completeness of any data, information, documents or materials heretofore or hereinafter furnished to or for the use of Grantee, or furnished to or for the use of ^{SEP} Energy Devel. Corp. in connection with the Property. Any and all such data, information, documents and other materials furnished by Grantor have been provided to or for the use of Grantee as a convenience, and any reliance on or use of the same shall be at Grantee's risk.

Grantee assumes any and all liability of Grantor, whether past, present, future, arising from or in connection with any and all laws, regulations, permits, mortgages, liens, encumbrances, claims, servitudes, rights-of-way, easements, leases, reservations, restrictions, covenants and other matters (whether recorded or unrecorded) affecting, or formerly affecting, and arising from or in connection with the Property or with Grantor's use, operation, nonuse and/or abandonment of the Property. Such liability includes, but is not limited to (i) liability for the relocation and/or removal, or the costs of relocation and/or removal, of the Property from its present or any future location; (ii) liability for restoration, or the costs of restoration, of the premises on which the Property is currently located or on which the Property may be located in the future; (iii) liability for any pollution or environmental damages (including, but not limited to, damages to aquatic life) which have been, are or may be attributed to the Property or the ownership, maintenance, use, operation, failure to operate,

relocation, removal, nonuse, and plugging and abandonment thereof.

Grantee agrees to protect, defend, indemnify and hold Grantor, Grantor's subsidiaries and affiliated companies, and its or their co-lessees, partners, joint venturers, co-owners, agents, officers, directors, employees, representatives, insurers, contractors and subcontractors and all agents, officers, directors, employees, representatives, insurers, contractors, subcontractors, and parent, subsidiary and affiliated companies of all of the foregoing (hereinafter collectively referred as "Grantor Group") harmless from and against all claims, losses, costs, demands, damages, suits, judgments, penalties, liabilities, debts, expenses and causes of action of whatsoever nature or character, including but not limited to reasonable attorney's fees and other costs and expenses, without limit and without regard to the cause or causes thereof, whether known or unknown, whether predating this agreement or not and whether arising out of contract, tort, ownership, strict liability, misrepresentation, violation or alleged violation of applicable law or regulation (including but not limited to any and all environmental laws and regulations) and/or any cause whatsoever, which in any way arise out of, in connection with or relate to the Property (including, but not limited to, the ownership, maintenance, use, operation, failure to operate, relocation, removal, nonuse, and plugging and abandoning thereof), whether or not caused by the sole, joint and/or concurrent negligence, fault or strict liability of Grantor Group or any member thereof.

IN TESTIMONY WHEREOF, this instrument is executed by the parties hereto on the 16th day of March, 1990, said parties signed in the presence of the witnesses whose names appear opposite their respective signatures.

WITNESSES:

Ken McCallen
Paula Garcia

UNION TEXAS PETROLEUM CORPORATION

By: John A. McMan

Name:

Title:

James E. Beckman
James Brock Morre, III

ENERGY DEVELOPMENT CORPORATION

By: James Brock Morre, III

Name: James Brock Morre, III

Title: Vice President - Production

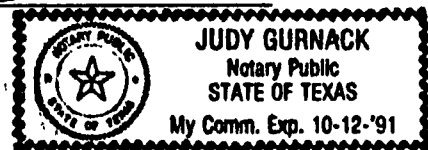
STATE OF TEXAS

COUNTY OF HARRIS

On this 16 day of March, 1990,
before me appeared John A. Freeman, to me
personally known, who, being by me duly sworn, did say that he is
the Gen. Manager, Offshore Production of Union Texas Petroleum
and the foregoing instrument was signed on behalf of said
corporation by authority of its Board of Directors and said
Appearer acknowledged said instrument to be the free act and deed
of said corporation.

Judy Gurnack

NOTARY PUBLIC



STATE OF TEXAS

COUNTY OF HARRIS

On this 21 day of May, 1990,
before me appeared James Brock Moore, III, to me
personally known, who, being by me duly sworn, did say that he is
the Vice President, Production of Energy Development Corp.
and the foregoing instrument was signed on behalf of said
corporation by authority of its Board of Directors and said
Appearer acknowledged said instrument to be the free act and deed
of said corporation.

Kathryn A. Leathers

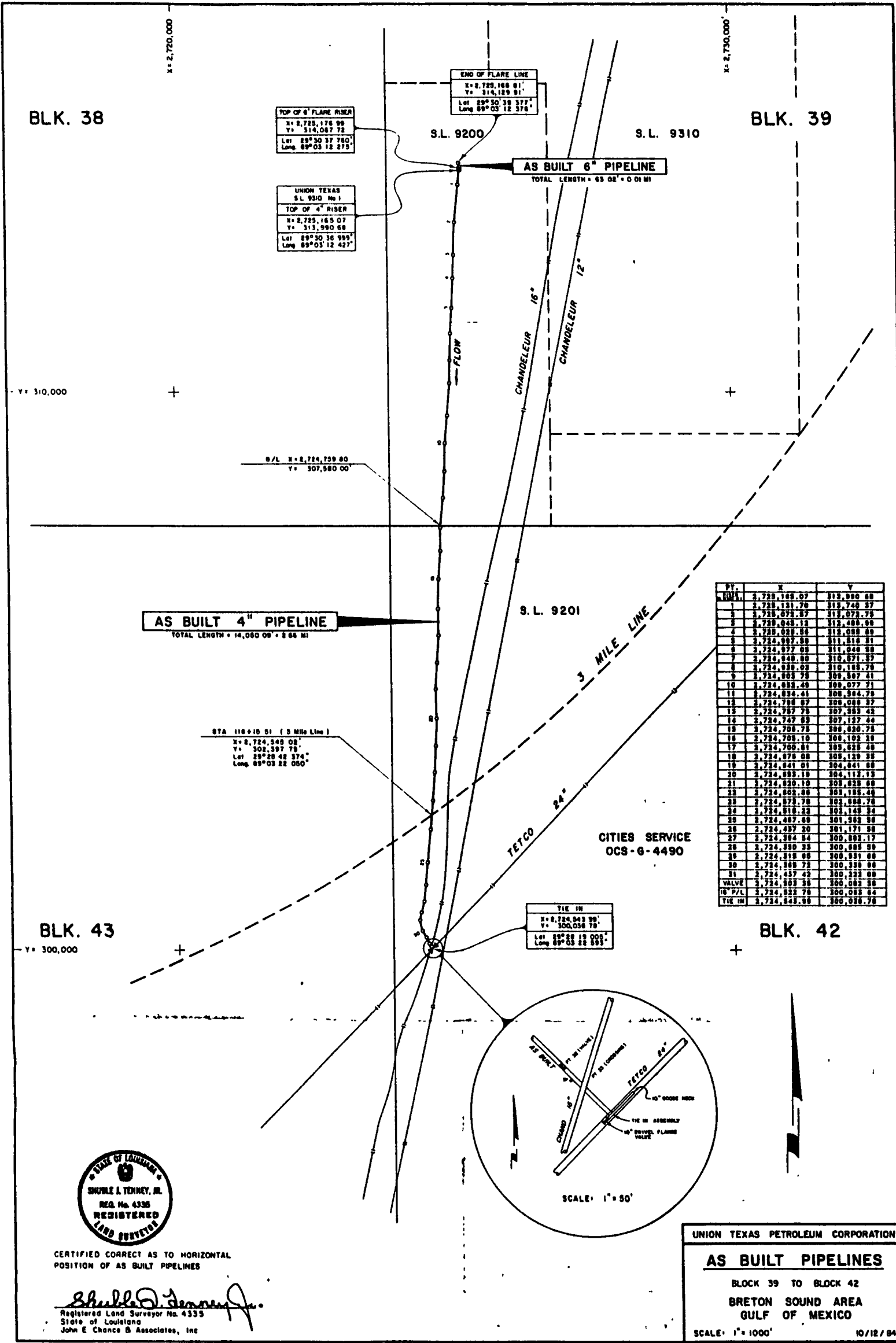
NOTARY PUBLIC

KATHRYN A. LEATHERS
Notary Public, State of Texas
My Commission Expires 8-3-91

EXHIBIT A

That certain pipeline, and all appurtenances thereto, plugged and abandoned in place by Grantor on October 10, 1988, commencing from a certain point on former State Lease No. 9200, granted by the State Mineral Board of the State of Louisiana, in the Southwest Quarter of Breton Sound Block 39, Plaquemines Parish, Louisiana, and proceeding South-Southwesterly a distance of 14,050.09 feet to the point of termination, said point of termination being at a tie-in with a 24 inch pipeline located in the Western Half of Breton Sound Block 42 on that portion of the Outer Continental Shelf subject to the control of the United States, all as more fully shown on the plat attached hereto. Said pipeline is on the location of (i) former State Right-of-Way No. 2256, granted to Grantor by the State of Louisiana on July 6, 1984, and recorded at COB 596, Folio 353 of the records of Plaquemines Parish, Louisiana, and (ii) Segment No. 7086, issued to Grantor by the Minerals Management Service, Department of the Interior, on August 2, 1984.

[ATTACH PLAT]



CERTIFIED CORRECT AS TO HORIZONTAL POSITION OF AS BUILT PIPELINES

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

UNION TEXAS PETROLEUM CORPORATION

AS BUILT PIPELINES

BLOCK 39 TO BLOCK 42
BRETON SOUND AREA
GULF OF MEXICO

SCALE: 1" = 1000'

10/12/84

STATE OF LOUISIANA

BEST AVAILABLE COPY

PIPELINE RIGHT-OF-WAY GRANT

STATE OF LOUISIANA

STATE R/W NO. 2745

KNOW ALL MEN BY THESE PRESENTS: That pursuant to R.S. 41:1173 & 36:1 et. seq. the State of Louisiana, appearing herein by and through the Governor and the Commissioner of the Division of Administration (hereinafter called Grantor), for and in consideration of the sum of Seven thousand eight hundred fifty-eight and 50/100 (\$ 7,858.50) DOLLARS and other valuable considerations as may be provided elsewhere herein or in exhibit attached and made part hereof does grant unto Energy Development Corporation, 1000 Louisiana Street, Suite 2900, Houston, Texas 77002 (hereinafter called Grantee), the right, privilege and authority to lay, construct, maintain, operate, alter, repair, replace and remove a pipeline (with underground fittings, tie-overs and appliances, including Cathodic Protection Equipment) for the transportation of Natural gas

(PRODUCT)

in interstate commerce under, upon, over and through the following described (INTERSTATE)-(INTRASTATE)

land, situated in the Parish of Plaquemines, State of Louisiana, to wit:

Beginning at a point on the south line of State Lease 13044, Breton Sound Block 39; said point bearing coordinates X=2,724,759.80' and Y=307,580.00', thence S02°32'55"W 5,186.66' (314.34 rods) to a point on the state/federal boundary in Breton Sound Block 42; said point bearing coordinates X=2,724,545.02' and Y=302,397.79', all in Louisiana state waters, GOM, Offshore Plaquemines Parish, LA.

The rights and privileges herein granted shall include the right to replace the said pipeline by one of a similar or smaller class as set forth in current Rules and Regulations of the Division of Administration and shall be exercised over a course up to but not in excess of 75 feet in width to revert to 35 feet after construction. The route of the proposed pipeline is shown on plat identified as Exhibit "A" (Sheets 2 of 2) which is attached hereto and made a part hereof.

In the exercise of its rights under this grant, Grantee shall have the right, in the construction, operation and maintenance of the pipeline to dig underwater trenches in or on said premises as Grantee may deem necessary or convenient, and to lay its line in the beds of such trenches.

TO HAVE AND TO HOLD the said right, privileges and authority, unto said Grantee, without warranty and without recourse even for the return of the aforementioned consideration for this grant, until such pipeline is constructed and so long thereafter as a pipeline is maintained thereon.

It is understood and agreed that this right-of-way is for a term of twenty (20) years with option to renew for additional twenty (20) year term. The option to renew shall be on the same terms and conditions as the original agreement except that the consideration shall be adjusted to reflect the percentage of increase or decrease in the cost of living index as established by the Consumer Price Index for Urban Wage Earners and Clerical Workers published by the Bureau of Labor Statistics of the United States Department of Labor or any revision or equivalent of any such index published by the United States Government, which has occurred from date of this instrument to the date of renewal provided however that in no event shall consideration of such renewal be less than the consideration paid herein for the original term, and it is further understood and agreed that non-use thereof for a continuous period of two (2) years shall operate as a forfeiture by the Grantee of this grant and consideration and that all rights hereunder shall be thereupon terminated except when existing causes of force majeure actually prevent the use of the right-of-way and satisfactory evidence thereof is submitted to the Commissioner of the Division of Administration. In the event of such forfeiture, the Grantee shall have the right to remove the pipeline, together with fittings, tie-overs, appliances and equipment from the right-of-way within a period of one (1) year from the date of forfeiture, provided that Grantee restores such area of the grant disturbed by the removal as near as practical to its natural state. There shall be no above-ground facilities except those designated and set out on the attached plat(s).

The Grantor reserves the right to fully use and enjoy the said premises subject to the rights herein granted.

If operations for construction are not commenced within two (2) years of the date of the execution of this agreement by the Grantor, then, all rights of the Grantee thereunder shall terminate and the consideration shall be forfeited to Grantor.

All terms and expressed or implied covenants of this grant shall be subject to all Federal and State Laws.

Grantee agrees that due care shall be exercised in the construction operation and removal of the pipeline and its appurtenances and that Grantee shall be fully and solely responsible for and shall defend, protect, indemnify and hold the State of Louisiana and its agencies, boards and commissions free and harmless from and against any and all claims for damages and all costs and expenses arising out of or incidental to Grantee's exercise of the rights herein granted.

The granting of this right-of-way shall not be a bar or defense to the right of the State of Louisiana and its agencies, boards and commissions to take any and all action necessary to seek abatement of construction or operations that unreasonably or unlawfully interfere with or disturb the existing ecological regimen, including but not limited to the fishing, hunting, trapping and oyster industries, and to take action for any and all damage to the existing ecological regimen which does not result from a reasonable exercise of the rights herein granted.

Nothing herein contained shall be construed as to prohibit or preclude the Grantor herein from granting to other persons, associations or corporations the right to cross over or under the right-of-way herein granted, provided that if such crossing should necessitate the alteration or relocation of the pipeline of the Grantee herein, all cost thereof shall be at the expense of such subsequent Grantee, subject to the following:

The parties hereto recognize that it might hereafter become necessary or desirable to widen, deepen or make some other work of public improvement on land or on the streams or water bottoms within the right-of-way herein granted, and this grant is accepted under the express condition and with the distinct understanding that, if any such work by the United States, the State of Louisiana, or any agency, board, commission, department or political subdivision of either, makes it necessary to alter or relocate said pipeline, the entire cost of such alteration or relocation shall be borne by the Grantee, this responsibility on the part of the Grantee being part of the consideration for which this grant is made. This provision, however, shall not prejudice the Grantee's right to receive indemnification and/or relocation costs, from the United States, the State of Louisiana or any agency, board, commission, department or political subdivision of either when there is an appropriation for payment of such costs.

It is agreed that Grantee shall not assign the rights granted hereunder without the written consent of Grantor and due payment of assignment fees, but this prohibition shall not be applicable to any mortgage, deed of trust, pledge or other security contract which may be executed by Grantee, and the consent of the Grantor to the execution of such agreements shall not be required.

Grantee agrees to construct and maintain said pipeline and its appurtenances in accordance with Parts 191, 192 and/or 195 of Title 49 of the Code of Federal Regulations, as amended, which sets forth minimum design, construction and maintenance standards for safety of pipelines. Grantee further agrees to comply with all other Federal and State Laws not in conflict which apply to pipeline design, construction, maintenance and operation.

It is further agreed that after the completion of the construction of the pipeline, Grantee shall file in the office of the Commissioner of the Division of Administration a plat showing the actual location of the pipeline on the above described lands.

The provisions of this agreement shall extend to and be binding upon the successors and assigns of Grantee, regardless of the appointment of a receiver, adjudication in bankruptcy, reorganization, voluntary or otherwise, or the suspension, failure or insolvency of Grantee, or any successor or assignee thereof.

Failure of Grantor to strictly or promptly enforce the rights and obligations herein shall not operate as a waiver thereof.

IN WITNESS WHEREOF, the STATE OF LOUISIANA has executed this right-of-way grant on this, the 19th day of April, 19 90.

WITNESSES:

[Signature]
Dianne S. Villeneuve

STATE OF LOUISIANA
 BY [Signature]
 GOVERNOR OF THE STATE OF LOUISIANA
 BY [Signature]
 COMMISSIONER OF THE DIVISION OF
 ADMINISTRATION

IN WITNESS WHEREOF, GRANTEE has executed this right-of-way on this, the 27
day of February, 19 90.

BEST AVAILABLE COPY

WITNESSES:

Edith M. Schack

Rosario Carrillo

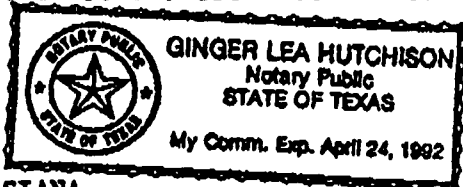
ENERGY DEVELOPMENT CORPORATION

BY Patricia A. Rygg
TITLE: Consulting Regulatory Agent

STATE OF Texas

County OF Travis

On this 27 day of February, 19 90, before me appeared
Patricia A. Rygg, who, being duly sworn, did say that he is Consulting
of Energy Development Corporation and that the foregoing instrument was signed on
behalf of the corporation by authority of its board of directors, and affiant acknowledged
the instrument to be the free act and deed of the corporation.



Ginger Lea Hutchison
Notary Public

STATE OF LOUISIANA

PARISH OF EAST BATON ROUGE

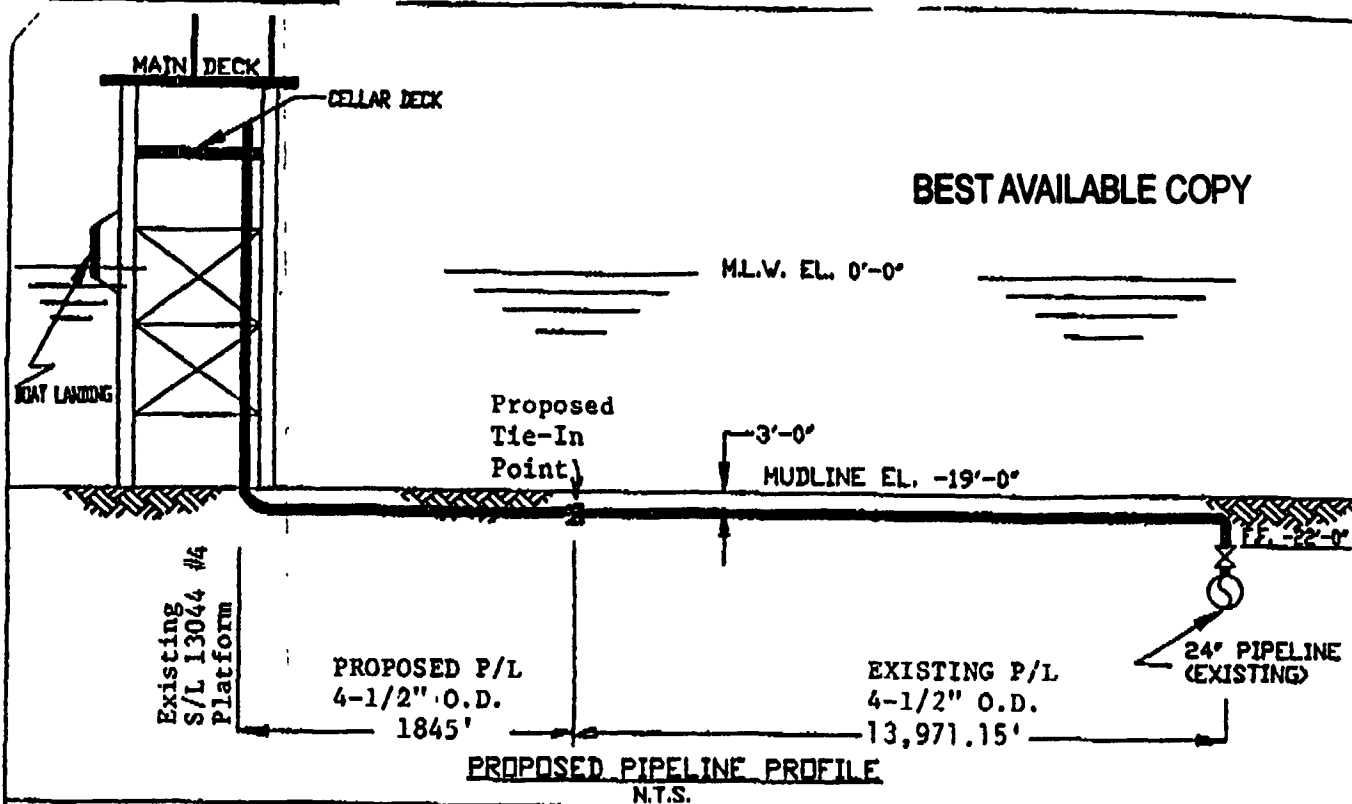
BEFORE ME, the undersigned authority, personally came and appeared Dianne S. Villeneuve
who, being first duly sworn, did depose and say that the within foregoing instrument was
signed by the Honorable Buddy Roemer, Governor of the State of Louisiana,
and Dennis Stine, the Commissioner of the Division of Administration,
on behalf of the State of Louisiana, in affiant's presence and in the presence of the other
subscribing witness.

Dianne S. Villeneuve
Affiant

SWORN TO AND SUBSCRIBED before me this 19th day of April, 19 90.

Gerald P. Theriot
NOTARY PUBLIC in and for the East Baton
Rouge Parish, Louisiana

Gerald P. Theriot
Notary Public
Parish of East Baton Rouge
My Commission is for Life

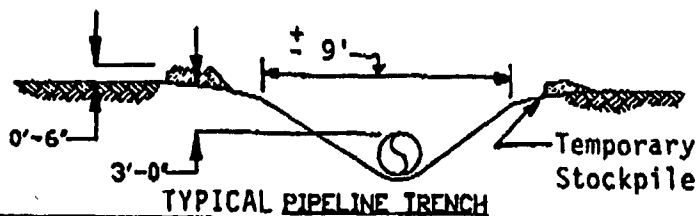


1. <u>DRY NATURAL GAS</u>	TRANSPORTED PRODUCT
2. <u>4" 10.79 #/FT. SCH. 40, 237' W.T.</u>	SIZE, WEIGHT, GRADE OF PIPE
3. <u>13,971.15' EXISTING PLUS 1845' PROPOSED</u>	LENGTH OF LINE
4. <u>19'</u>	MAXIMUM WATER DEPTH
5. <u>CATHODIC PROTECTION</u>	CORROSION PROTECTION
6. <u>SCOTCH COAT 212</u>	PROTECTIVE COATING
7. <u>48.6 #/FT.³</u>	ANTICIPATED DENSITY
8. <u>1.527</u>	BULK SPECIFIC GRAVITY
9. <u>1200 # 5.0 mmscfd</u>	DESIGN WORKING PRESSURE & CAPACITY
10. <u>1440 # 7.0 mmscfd</u>	MAXIMUM WORKING PRESSURE & CAPACITY

NOTE: Proposed pipeline to be installed a minimum of 3' BML by diskimg, jetting or plowing such that existing water depths will not be decreased by more than 0.5'. Approx. 1014 cu. yds. of material to be displaced during pipeline installation.

GENERAL PIPELINE INFORMATION

Sheet 2 of 2



ENGICON

ENERGY DEVELOPMENT CORPORATION
BRETON SOUND BLOCK 39

TITLE

PROPOSED 4" PIPELINE

SCALE

NAME

DATE

DRAWING NUMBER

REV

BY

CHK

DATE

039-804

0

REV. 2/23/90

PIPELINE RIGHT-OF-WAY APPLICATION "ENGINEERING CHECKLIST"

MINERALS MANAGEMENT SERVICE
GOM REGIONAL OFFICEexisting 4 1/2 inch
pipeline originally owned
by Union Texas Petroleum under
Segment No. 7086

Date: 3-5-90

OCS-G 11731

- 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 pipeline from the Federal/State line to a Subsea tie-in with Texas Eastern Transmission Corporation's 24 inch pipeline (OCS-G 1689) all in Block 42 Breton Sound Area
- 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) Separatorb. design working pressure 1200

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 - 1440

- N/A 3. Pressure relief valves, where applicable, are shown with the setting set no higher than the maximum working pressure (MWP) of the vessel.

- N/A 4. If the maximum input source pressure is greater than the maximum allowable operating pressure (MAOP) of the pipeline, redundant safety equipment is required.

- ✓ 5. MAOP of proposed pipeline does not exceed MAOP of connecting pipeline. Seg # 3427 1440

- ✓ 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.

- N/A 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.

2361.01'
or
.45 miles
in length

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.
12. Where applicable, high-low sensors are located downstream of the back pressure regulator.
13. If there is liquid injection into the line, are pumps associated with the injection? (Yes or No) _____
14. Direction of flow indicated. BEST AVAILABLE COPY
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. 1440
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: Nat. Gas

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

- (1) Size 4.5 Wall Thickness .237 Grade B Weight 10.79 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 _____ 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 17 Minimum _____

4. Type of corrosion protection:

_____ a. Impressed current system

_____ b. Sacrificial anode system

(1) Type of anode aluminum

BEST AVAILABLE COPY

(2) Spacing interval _____ ft.

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

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

Yes _____ No _____

_____ d. If pipeline anodes are used:

Formula: $L_{p/l} = 3.82 \times 10^4 \times W^0 / DIR =$

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

Does the calculated life expectancy equal or exceed 20 years?

Yes _____ No _____

✓ 5. Description of protective coating:

a. Pipeline

Scotchote 212 - 4mils

State

b. Riser 1/2" Sonastick & 1/2" splashtron

c. Subsea valve assembly

N/A

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)

Segment No.
7086
approved in 1984
with an anode
life of 54 years

✓ a. For epoxy coating: $SG = 2.865W/D^2$ 1.52

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

 c. Lines with a specific thickness of concrete:

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

BEST AVAILABLE COPY

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

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

Where:

SG = specific gravity

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

K₁, K₂, K₃ = 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. 1.527 b. c.

 9. Gravity or density of product(s) .62

 10. Design capacity of pipeline 5,000 mcf/d

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

Preinstallation Test Riser 2160 Hold Time 8 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:

BEST AVAILABLE COPY

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 =

$$\frac{2(35,000)(.237)}{4.5} \times .72 = 2,654$$

b. MAOP =

c. MAOP =

13. MAOP of riser pipe.

in state water

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

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

a. MAOP =

$$\frac{2(35,000)(.337)}{4.5} = 5242 \times .50 = 2,621$$

b. MAOP =

14. MAOP of flanges, fittings, and valves:

2.4 x ANSI rating =

ANSI 600 - 1440

15. MAOP of proposed pipeline as determined in accordance with Title 49 CFR Part 195 or 192, as applicable, is 1440 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)

$$\underline{\hspace{2cm}} \leq \underline{2160} \leq \underline{3502}$$

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

$$IP \leq SMYS = \frac{2 \pi \times S \times t}{D}$$

3687

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 guards used: 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.
- 1 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 *AMS* 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:

- N/A 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 *15 days*
- ✓ 5. Time required to complete project *20 days*

3-15-90

G. Applicant complies with current OCS pipeline guidelines:

Yes No

BEST AVAILABLE COPY

SN 7086

1/19/90
Alvarado 1-19-90
Stauffer 1/19/90

JAN 19 1990

In Reply Refer To: FO-2-2 (Segment No. 7086)

Union Texas Petroleum
Attention: Ms. Kay L. Morgan
Post Office Box 2120
Houston, Texas 77252-2120

Gentlemen:

Your letter dated January 12, 1990, notified this office of the abandonment of the following pipeline, located in Breton Sound Block 42, Lease OCS-G 8751:

<u>Pipeline Segment No.</u>	<u>Size (inches)</u>	<u>Length (feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
7086	4 1/2	2,435	Abandon	Federal/State Boundary	A 24-inch SSTI

You are reminded that 30 CFR 250.150(b) requires an application be submitted to the Regional Supervisor and approval obtained prior to an abandonment. Adherence to this requirement is expected in the future.

Your request to abandon the subject pipeline is hereby approved, as performed. 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 Outer Continental Shelf, Union Texas Petroleum shall be required to remove it.

Sincerely,

(Orig. Sgd.) William H. Martin

D. J. Bourgeois
Regional Supervisor
Field Operations

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

bcc: 1502-01 Union Texas Petroleum (w/orig appln)(File w/Seg. No. 7086)(FO-2-2)
Lease OCS-G 8751 (OPS-3-2)
FO-3
FO-2-2 Carto

SLedet:ds:1/18/90:Disk 4

on mp
1/24/90
KX



Union Texas Petroleum

January 12, 1990

1330 Post Oak Boulevard
P. O. Box 2120
Houston, Texas 77252-2120
(713) 623-6544

United States Department of the Interior
Minerals Management Service (FO-2-2)
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394



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

RE: Pipeline Abandonment
Segment No. 7086
Breton Sound Block 42

*Flushed, cut Both
Ends capped
And Buried 3 feet!
Per
Kay Morgan
1/17/90*

Gentlemen:

Please be advised that the subject pipeline was plugged and abandoned by Union Texas Petroleum on October 10, 1988, in accordance with the provisions of 30 CFR 250.156. The 4 1/2" gas pipeline was installed in October 84. The platform only produced for a few months before going off production. This pipeline, therefore, has not been in service since early 1985. It has been abandoned in place.

The platform that was abandoned in conjunction with this pipeline segment was located in Breton Sound Block 39, State Lease 9200. Union Texas Petroleum held a pipeline right-of-way from the State of Louisiana for the pipeline departing the platform. It has just been brought to my attention that a portion of the line did in fact cross Federal waters, and was issued the above-referenced Segment No. on August 2, 1984 (2435' from the 3 mile Federal/State boundary to a subsea tie-in, all in Breton Sound Block 42). Approval was not received from the Minerals Management Service, therefore, before the line was abandoned in place.

Union Texas Petroleum wishes to relinquish the subject permit, as the pipeline is abandoned and we no longer hold any of the affected leases. Should you have any questions or require additional information, please contact me at 713/968-3656 at your earliest convenience.

Sincerely,

Kay L. Morgan
Permit Coordinator

Attachment

BLK. 39

S.L. 9310

S.L. 9200

2,725,176.99'
314,067.72'
Lat. 29°30'37.760"
Long. 89°03'12.275"

UNION TEXAS
S.L. 9310 No. 1
TOP OF 4" RISER
X = 2,725,165.07'
Y = 313,990.68'
Lat. 29°30'36.999"
Long. 89°03'12.427"

AS BUILT 6" PIPELINE

TOTAL LENGTH = 63.02' = 0.01 MI.

Y = 310,000'

B/L X = 2,724,759.80'
Y = 307,580.00'

AS BUILT 4" PIPELINE

TOTAL LENGTH = 14,050.09' = 2.66 MI.

S.L. 9201

STA. 116+15.51' (3 Mile Line)

X = 2,724,545.02'
Y = 302,397.79'
Lat. 29°28'42.374"
Long. 89°03'22.050"

BLK. 43

Y = 300,000'

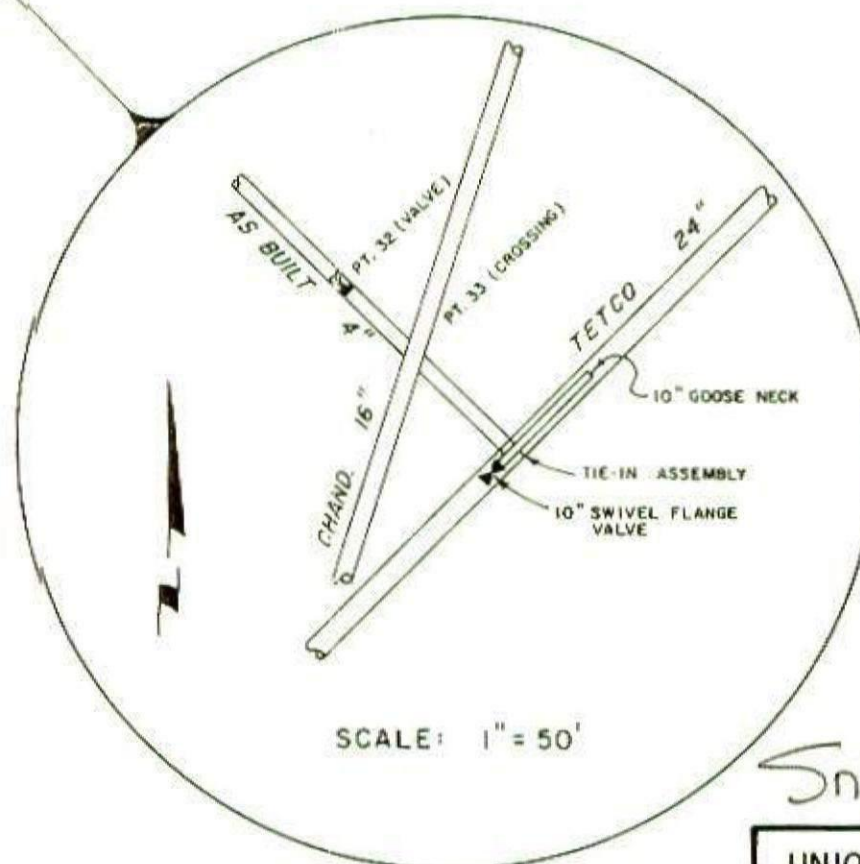
PT.	X	Y
1	2,725,165.07	313,990.68
2	2,725,131.70	313,740.37
3	2,725,072.57	313,072.75
4	2,725,045.12	312,486.99
5	2,725,026.56	312,055.89
6	2,724,997.56	311,516.31
7	2,724,977.05	311,046.58
8	2,724,948.80	310,571.37
9	2,724,939.03	310,165.79
10	2,724,903.75	309,567.41
11	2,724,852.49	309,077.71
12	2,724,834.41	308,584.79
13	2,724,798.87	308,086.37
14	2,724,747.53	307,127.44
15	2,724,706.73	306,620.75
16	2,724,705.10	306,102.29
17	2,724,700.81	305,625.46
18	2,724,676.08	305,129.35
19	2,724,641.01	304,641.68
20	2,724,653.19	304,113.13
21	2,724,620.10	303,625.66
22	2,724,602.86	303,155.46
23	2,724,573.78	302,668.78
24	2,724,518.22	302,145.34
25	2,724,467.69	301,582.56
26	2,724,437.20	301,171.58
27	2,724,394.54	300,882.17
28	2,724,350.33	300,685.59
29	2,724,315.65	300,531.88
30	2,724,365.72	300,339.96
31	2,724,437.42	300,222.08
VALVE	2,724,503.35	300,082.58
16" P/L	2,724,522.79	300,063.64
TIE-IN	2,724,543.99	300,036.78

CITIES SERVICE
OCS - G - 4490

TETCO 24"

TIE-IN
X = 2,724,543.99'
Y = 300,036.78'
Lat. 29°28'19.005"
Long. 89°03'22.593"

BLK. 42



SCALE: 1" = 50'



CERTIFIED CORRECT AS TO HORIZONTAL
POSITION OF AS BUILT PIPELINES.

Shuble J. Tenney, Jr.
Registered Land Surveyor No. 4335
State of Louisiana
John F. Chance & Associates, Inc.

BEST AVAILABLE COPY

UNION TEXAS PETROLEUM CORPORATION

AS BUILT PIPELINES

BLOCK 39 TO BLOCK 42
BRETON SOUND AREA
GULF OF MEXICO

Sn. # 7086 (G-11731)

BEST AVAILABLE COPY

Walker 12/18/84

Kelly 12/18/84

Stauffer 12/19/84

SN 7086

In Reply Refer To: RP-2-2

DEC 20 1984

Union Texas Petroleum
Attention: Mr. Stephen W. Persky
Post Office Box 52087
Lafayette, Louisiana 70505

Gentlemen:

Your letter dated December 5, 1984, transmitted a hydrostatic test pressure (HTP) chart and an "as-built" location plat for the following pipeline, all located in Breton Sound Block 42, Lease OCS-G 4490:

<u>Pipeline Segment No.</u>	<u>Size (inches)</u>	<u>Length (feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
7086	4 1/2	2,435	Gas	The Federal/State lease boundary	A 24-inch subsea tie-in

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

<u>Pipeline Segment No.</u>	<u>Test Pressure (psig)</u>	<u>Duration (hours)</u>	<u>MAOP (psig)</u>	<u>MAOP Determination</u>
7086	2,176	12	1,440	Receiving Pipeline

The high- and low-pressure sensors shall be set, respectively, at 10 percent above and below the normal operating pressure range. However, the high pilot shall not be set higher than the MAOP.

In future correspondence, please refer to the above pipeline by its assigned segment number.

Sincerely yours,

(Orig. Sgd.) D.W. Solanas

D. W. Solanas
Regional Supervisor
Rules and Production

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

bcc: 1502-01 Union Texas Petroleum (w/orig report) (RP-2-2)
Lease OCS-G 4490 (OPS-2-3)
DO-5 (w/cy of report)
OPS-4 (w/cy of location plat)

CWalker:lv:12/18/84:Disk 1

on map
1/4/85
K7

PWQ
CCW
12/20/84

RP 2-2
SEG 7086

Continental Engineering
& Construction Services, Inc.

P.O. Box 2817

Lafayette, Louisiana 70502

(318) 837-3140

December 5, 1984

U. S. Dept. of the Interior
Mineral Management Service
P.O. Box 7944
Metairie, La. 70010

Attn: Mr. Carl Walker

Re: RP-2-2

Dear Sir:

Please accept this letter as notice of the completion of the above referenced project. Also please find the necessary information you require in your OCS Order No. 9

If we can be of any further assistance please feel free to call me.

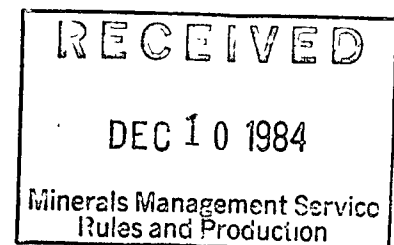
Sincerely

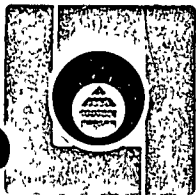


Curt Clark

CC:

Enclosure





DOUBLE "L" HYDROTEST, INC.

ROUTE 2, BOX 22
GONZALES, LOUISIANA 70737

TELEPHONE: (504) 644-1048

HYDROSTATIC TEST REPORT

14,000 Ft.

Sheet 1 of 4

BEST AVAILABLE COPY

General Contractor Torch
Test Section Breton Sound BK. 39-4 Mainline Minimum Pipe Elevation 0'
Maximum Pipe Elevation 15' Riser (ins flange) Elev. Base Dead Weight Tester 19' above high Point
Date Begun 10-10-84 Date Completed 10-11-84

Time	Dead Weight Reading-psi	TEMPERATURE	
		Ambient	Water Temp.
12:00	Repressure P/L	173S	170
12:05	1790 LB.	72°	
12:45	Bleed Down to 0 Change Recorder		
1:00 AM	0	72°	
1:15	1807 20 LB. to much		
1:30	1806	Bleed Down 1700	
1:40	1700	72°	72°
1:45	1699	72°	72°
2:00	1696	72°	
2:15	1695		
2:15	1695	72°	72°
2:30	1695	71°	72°
2:35	Repressing From 1695 to 2180		
2:45	2180	Bled Down	
2:50	2172		
3:00	2172	71°	72
3:12	Repressure 2172 to 2178		
3:16	2178		72°
3:30	2177	71°	72°
4:00	2177	71°	72°
4:30	2177	71°	72°
5:00	2177	71°	72°

Time	Dead Weight Reading-psi	TEMPERATURE	
		Ambient	Water Temp.
5:30	2177	70°	72°
6:00	2177	70°	72°
7:00	2177	70°	72°
7:30	2177	70°	72°
8:00	2177	70°	72°
8:30 AM	2177	70°	72°
9:00	2177	70°	72°
9:30	2177	70°	72°
10:00	2176	72°	72°
10:30	2176	72°	72°
11:00	2176	72°	72°
11:30	2176	72°	72°
12:00	2176	72°	72°
12:30 PM	2176	72°	72°
1:00	2176	72°	72°
1:30	2176	72°	72°
2:00	2176	73°	72°
2:30	2176	74°	72°
2:45	2177	75°	72°
3:00 PM	Bleed Down	Test Completed	

Note: 7 PSI G CORRECTION FOR ELEVATION OF DEAD WEIGHT.

RESULTS OF TEST: ☒ Acceptable ☐ Unacceptable
Hydrostatic tested in accordance
with D.O.T. 49 C.F.R. 192.

Certified By: [Signature]
DOUBLE "L" HYDROTEST, INC.

Contractor's Superintendent

2178 = 2185 @
RISER FLANGE
[Signature] D.T.P.
Owner's Representative
Union Texas Pet.
Company DR. master TETCO
STROTHER PRINTING



BEST AVAILABLE COPY

DOUBLE "L" HYDROTEST, INC.

ROUTE 2, BOX 22

GONZALES, LOUISIANA 70737

TELEPHONE: (504) 644-3048

AIR T.R. 9

CALIBRATION CERTIFICATE

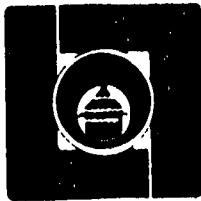
This is to certify that this gauge has been inspected and calibrated.

Serial No. of Gauge 198240
Size of Gauge 12"
Mfg. of Gauge 0-150
Pressure of Range Standard Instrument

TESTER READING	GAUGE READING
20	20
40	40
60	60
80	80
100	100
120	120
140	140
150	150

TYPE TESTER USED: _____

DATE TESTED: 8/22/84 BY: L.E. Lankford



BEST AVAILABLE COPY

DOUBLE "L" HYDROTEST, INC.

ROUTE 2, BOX 22

GONZALES, LOUISIANA 70737

TELEPHONE: (504) 644-3048

T.R. 8

CALIBRATION CERTIFICATE

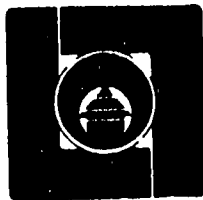
This is to certify that this gauge has been inspected and calibrated.

Serial No. of Gauge S.E. 2589
Size of Gauge 12"
Mfg. of Gauge Barton
Pressure of Range 0-150

TESTER READING	GAUGE READING
20	20
40	40
60	60
80	80
100	100
120	120
140	140
150	150

TYPE TESTER USED: _____

DATE TESTED: 7/5/84 BY: [Signature]



BEST AVAILABLE COPY

DOUBLE "L" HYDROTEST, INC.

ROUTE 2, BOX 22

GONZALES, LOUISIANA 70737

TELEPHONE: (504) 644-3048

P.R. #1

CALIBRATION CERTIFICATE

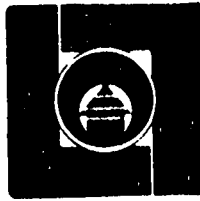
This is to certify that this gauge has been inspected and calibrated.

Serial No. of Gauge 242A 7409
Size of Gauge 12"
Mfg. of Gauge Barton
Pressure of Range 0-5000

TESTER READING	GAUGE READING
500	500
1000	1000
1500	1500
2000	2000
2500	2500
3000	3000
3500	3500
4000	4000
4500	4500
5000	5000

TYPE TESTER USED: _____

DATE TESTED: 7/10/84 BY: SE L. L. X



BEST AVAILABLE COPY

DOUBLE "L" HYDROTEST, INC.

ROUTE 2, BOX 22

GONZALES, LOUISIANA 70737

TELEPHONE: (504) 644-3048

P.R. 6

CALIBRATION CERTIFICATE

This is to certify that this gauge has been inspected and calibrated.

Serial No. of Gauge LL012
Size of Gauge 12"
Mfg. of Gauge Standard Instrument
Pressure of Range 0-3000

TESTER READING	GAUGE READING
500	500
1000	1000
1500	1500
2000	2000
2500	2500
3000	3000

TYPE TESTER USED: _____

DATE TESTED: 6/7/84 BY: Z. E. Smith



BEST AVAILABLE COPY

DOUBLE "L" HYDROTEST, INC.

ROUTE 2, BOX 22

GONZALES, LOUISIANA 70737

TELEPHONE: (504) 644-3048

Final D.W.#4

CALIBRATION CERTIFICATE

This is to certify that this gauge has been inspected and calibrated.

Serial No. of Gauge 172

Size of Gauge _____

Mfg. of Gauge Refinery Supply

Pressure of Range 50-3000

TESTER READING	GAUGE READING
50	50
500	500
1000	1000
1500	1500
2000	2000
2500	2500
3000	3000

TYPE TESTER USED: _____

DATE TESTED: 9/13/84

BY: [Signature]



BEST AVAILABLE COPY

DOUBLE "L" HYDROTEST, INC.

ROUTE 2, BOX 22

GONZALES, LOUISIANA 70737

TELEPHONE: (504) 644-3048

D.W. 5

CALIBRATION CERTIFICATE

This is to certify that this gauge has been inspected and calibrated.

Serial No. of Gauge J123

Size of Gauge _____

Mfg. of Gauge Refinery Supply

Pressure of Range 50-3000

TESTER READING	GAUGE READING
50	50
500	500
1000	1000
1500	1500
2000	2000
2500	2500
3000	3000

TYPE TESTER USED: _____

DATE TESTED: 9/15/84 BY: LC Lamb



BEST AVAILABLE COPY

DOUBLE "L" HYDROTEST, INC.

ROUTE 2, BOX 22

GONZALES, LOUISIANA 70737

TELEPHONE: (504) 644-3048

D.W. #19

CALIBRATION CERTIFICATE

This is to certify that this gauge has been inspected and calibrated.

Serial No. of Gauge 202

Size of Gauge _____

Mfg. of Gauge Refinery Supply

Pressure of Range 50-5000

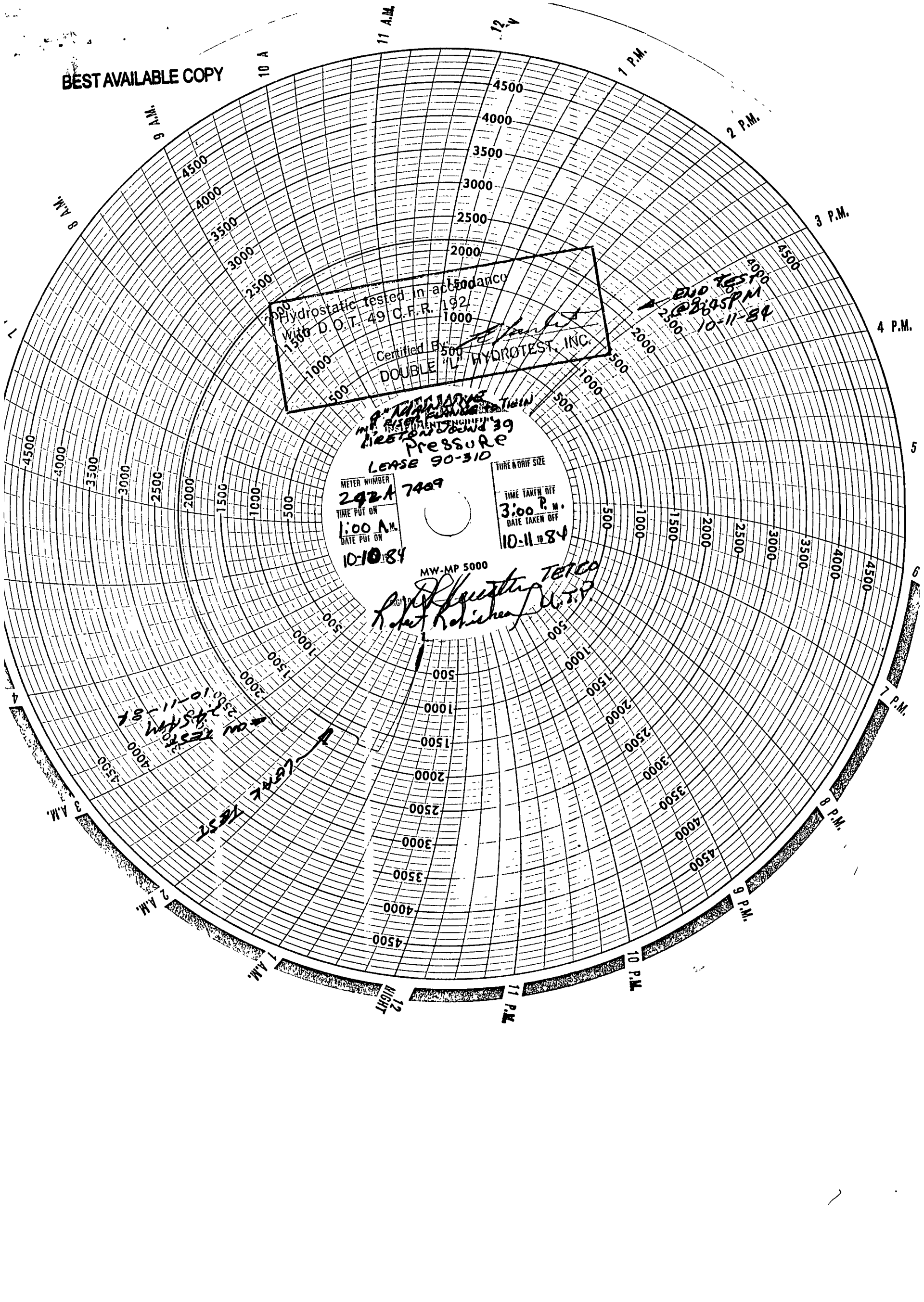
TESTER READING	GAUGE READING
50	50
1000	1000
1500	1500
2000	2000
2500	2500
3000	3000
3500	3500
4000	4000
4500	4500
5000	5000

TYPE TESTER USED: _____

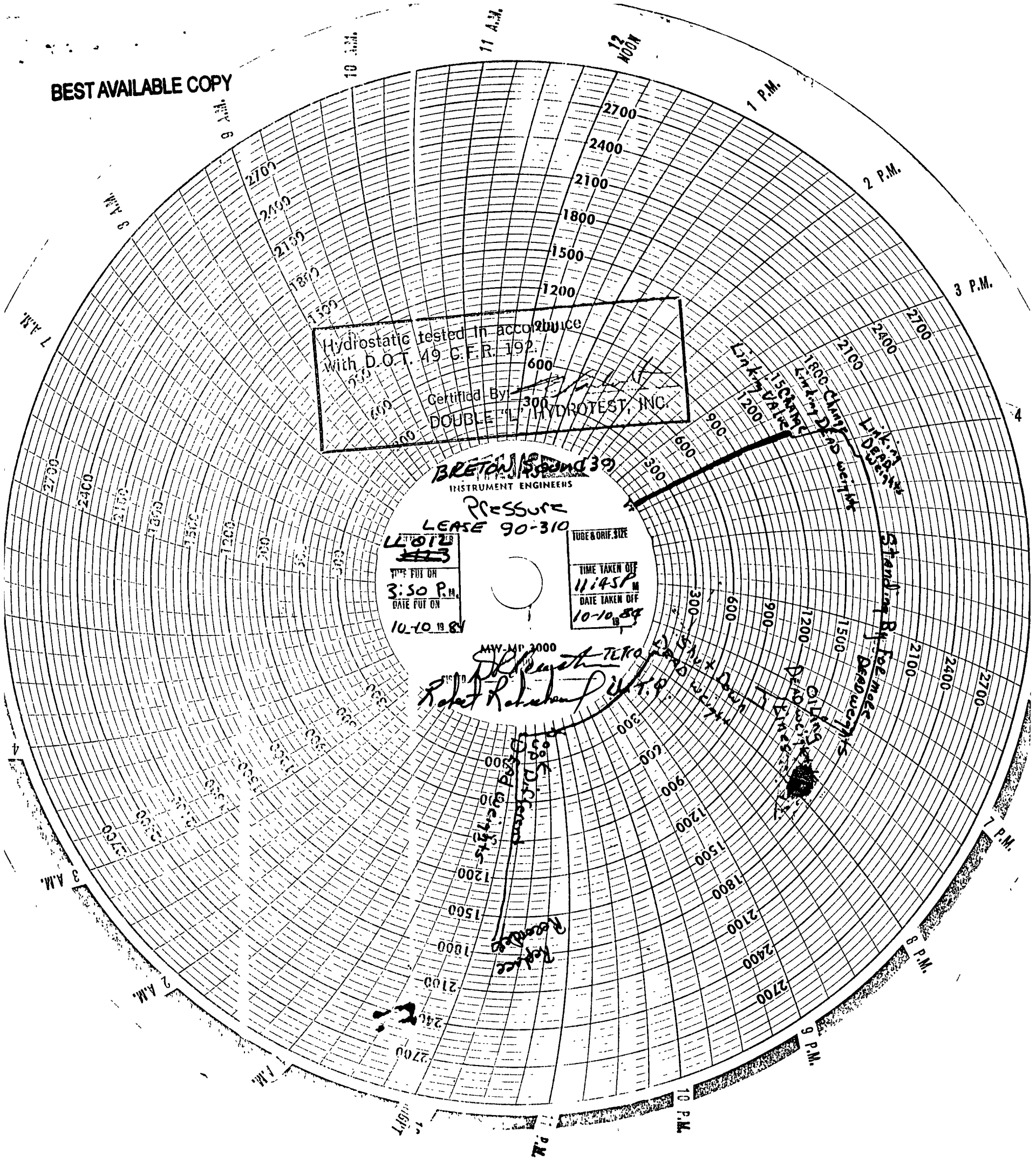
DATE TESTED: 9/12/84

BY: [Signature]

BEST AVAILABLE COPY



BEST AVAILABLE COPY

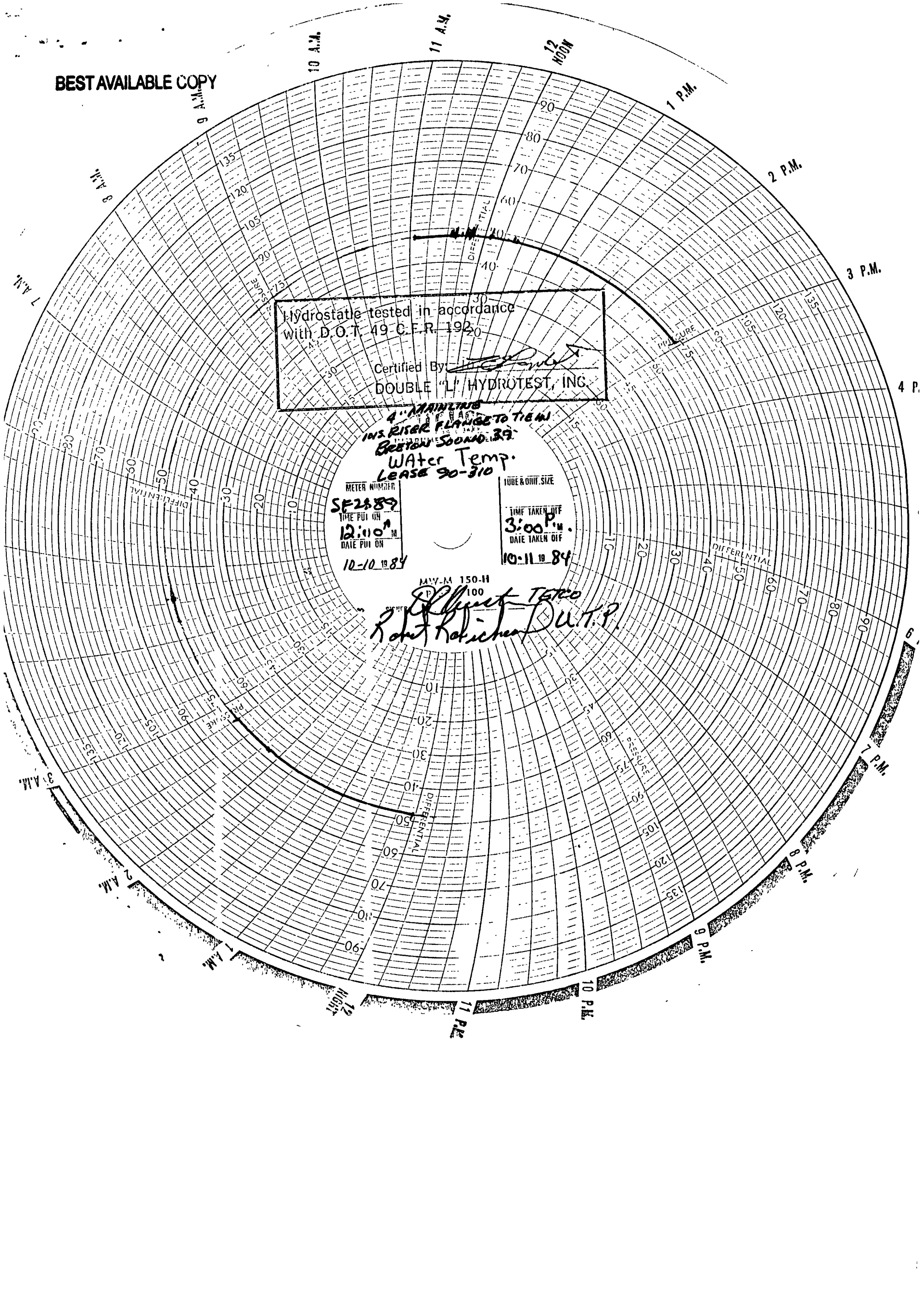


RECEIVED

DEC 10 1984

Minerals Management Service
Rules and Production

BEST AVAILABLE COPY



Hydrostatic tested in accordance
with D.O.T. 49 C.F.R. 192

Certified By *[Signature]*
DOUBLE "L" HYDROTEST, INC.

4" MAINLINE
INS. RISER FLANGE TO TIE IN
BEHIND SODNO 39
Water Temp.
LEASE 90-310

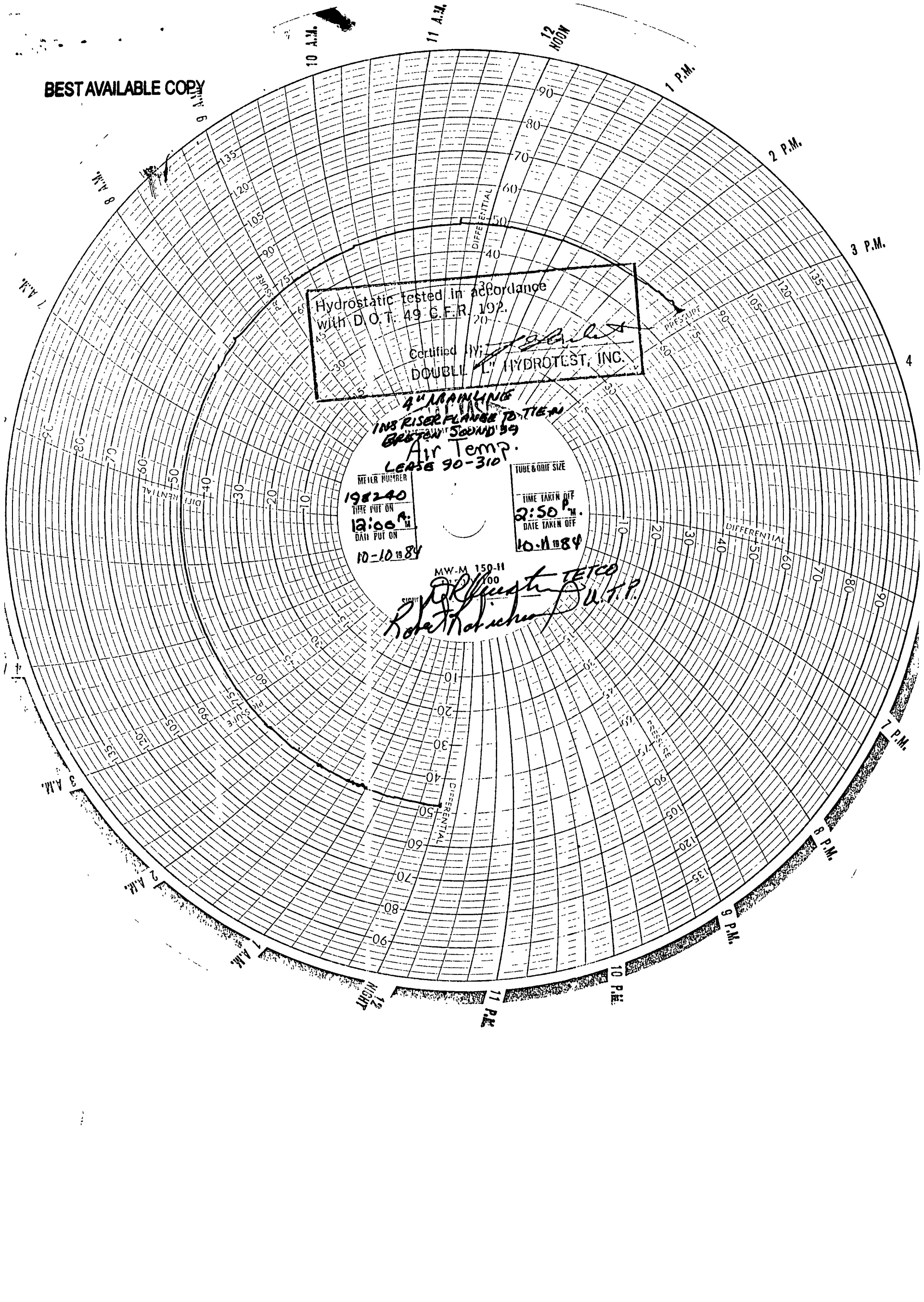
METER NUMBER
SF2889
TIME PUT ON
12:00^M
DATE PUT ON
10-10-84

PIPE & ORIF. SIZE
TIME TAKEN OFF
3:00 P.M.
DATE TAKEN OFF
10-11-84

M.V.M. 150-H
100

[Signature] T.E.C.O.
Robert Reichert D.U.T.P.

BEST AVAILABLE COPY



BLK. 38

BLK. 39

BEST AVAILABLE COPY

AS BUILT 4" PIPELINE

TOTAL LENGTH = 14,060.00' = 2.66 MI.

SEG NO 7086

FED WATERS 2435'

Per H. Pourcelan

12/14/84

CCW

STA 110+10.91' (2 000' Line)

N=8,724,845.00'
Y=300,397.70'
Lat. 29°55'42.374"
Long. 89°05'21.060"

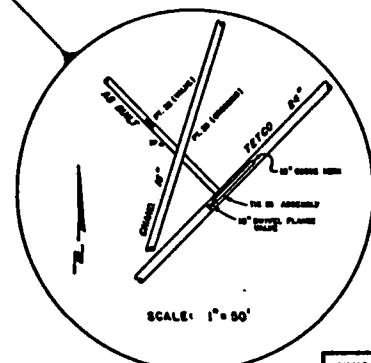
BLK. 43

BLK. 42



CERTIFIED CORRECT AS TO HORIZONTAL POSITION OF AS BUILT PIPELINES.

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



SCALE: 1" = 50'

STATION	N	E	Y
1	8,724,845.00	300,397.70	300,397.70
2	8,724,845.00	300,397.70	300,397.70
3	8,724,845.00	300,397.70	300,397.70
4	8,724,845.00	300,397.70	300,397.70
5	8,724,845.00	300,397.70	300,397.70
6	8,724,845.00	300,397.70	300,397.70
7	8,724,845.00	300,397.70	300,397.70
8	8,724,845.00	300,397.70	300,397.70
9	8,724,845.00	300,397.70	300,397.70
10	8,724,845.00	300,397.70	300,397.70
11	8,724,845.00	300,397.70	300,397.70
12	8,724,845.00	300,397.70	300,397.70
13	8,724,845.00	300,397.70	300,397.70
14	8,724,845.00	300,397.70	300,397.70
15	8,724,845.00	300,397.70	300,397.70
16	8,724,845.00	300,397.70	300,397.70
17	8,724,845.00	300,397.70	300,397.70
18	8,724,845.00	300,397.70	300,397.70
19	8,724,845.00	300,397.70	300,397.70
20	8,724,845.00	300,397.70	300,397.70
21	8,724,845.00	300,397.70	300,397.70
22	8,724,845.00	300,397.70	300,397.70
23	8,724,845.00	300,397.70	300,397.70
24	8,724,845.00	300,397.70	300,397.70
25	8,724,845.00	300,397.70	300,397.70
26	8,724,845.00	300,397.70	300,397.70
27	8,724,845.00	300,397.70	300,397.70
28	8,724,845.00	300,397.70	300,397.70
29	8,724,845.00	300,397.70	300,397.70
30	8,724,845.00	300,397.70	300,397.70
31	8,724,845.00	300,397.70	300,397.70
32	8,724,845.00	300,397.70	300,397.70
33	8,724,845.00	300,397.70	300,397.70
34	8,724,845.00	300,397.70	300,397.70
35	8,724,845.00	300,397.70	300,397.70
36	8,724,845.00	300,397.70	300,397.70
37	8,724,845.00	300,397.70	300,397.70
38	8,724,845.00	300,397.70	300,397.70
39	8,724,845.00	300,397.70	300,397.70
40	8,724,845.00	300,397.70	300,397.70
41	8,724,845.00	300,397.70	300,397.70
42	8,724,845.00	300,397.70	300,397.70
43	8,724,845.00	300,397.70	300,397.70
44	8,724,845.00	300,397.70	300,397.70
45	8,724,845.00	300,397.70	300,397.70
46	8,724,845.00	300,397.70	300,397.70
47	8,724,845.00	300,397.70	300,397.70
48	8,724,845.00	300,397.70	300,397.70
49	8,724,845.00	300,397.70	300,397.70
50	8,724,845.00	300,397.70	300,397.70
51	8,724,845.00	300,397.70	300,397.70
52	8,724,845.00	300,397.70	300,397.70
53	8,724,845.00	300,397.70	300,397.70
54	8,724,845.00	300,397.70	300,397.70
55	8,724,845.00	300,397.70	300,397.70
56	8,724,845.00	300,397.70	300,397.70
57	8,724,845.00	300,397.70	300,397.70
58	8,724,845.00	300,397.70	300,397.70
59	8,724,845.00	300,397.70	300,397.70
60	8,724,845.00	300,397.70	300,397.70
61	8,724,845.00	300,397.70	300,397.70
62	8,724,845.00	300,397.70	300,397.70
63	8,724,845.00	300,397.70	300,397.70
64	8,724,845.00	300,397.70	300,397.70
65	8,724,845.00	300,397.70	300,397.70
66	8,724,845.00	300,397.70	300,397.70
67	8,724,845.00	300,397.70	300,397.70
68	8,724,845.00	300,397.70	300,397.70
69	8,724,845.00	300,397.70	300,397.70
70	8,724,845.00	300,397.70	300,397.70
71	8,724,845.00	300,397.70	300,397.70
72	8,724,845.00	300,397.70	300,397.70
73	8,724,845.00	300,397.70	300,397.70
74	8,724,845.00	300,397.70	300,397.70
75	8,724,845.00	300,397.70	300,397.70
76	8,724,845.00	300,397.70	300,397.70
77	8,724,845.00	300,397.70	300,397.70
78	8,724,845.00	300,397.70	300,397.70
79	8,724,845.00	300,397.70	300,397.70
80	8,724,845.00	300,397.70	300,397.70
81	8,724,845.00	300,397.70	300,397.70
82	8,724,845.00	300,397.70	300,397.70
83	8,724,845.00	300,397.70	300,397.70
84	8,724,845.00	300,397.70	300,397.70
85	8,724,845.00	300,397.70	300,397.70
86	8,724,845.00	300,397.70	300,397.70
87	8,724,845.00	300,397.70	300,397.70
88	8,724,845.00	300,397.70	300,397.70
89	8,724,845.00	300,397.70	300,397.70
90	8,724,845.00	300,397.70	300,397.70
91	8,724,845.00	300,397.70	300,397.70
92	8,724,845.00	300,397.70	300,397.70
93	8,724,845.00	300,397.70	300,397.70
94	8,724,845.00	300,397.70	300,397.70
95	8,724,845.00	300,397.70	300,397.70
96	8,724,845.00	300,397.70	300,397.70
97	8,724,845.00	300,397.70	300,397.70
98	8,724,845.00	300,397.70	300,397.70
99	8,724,845.00	300,397.70	300,397.70
100	8,724,845.00	300,397.70	300,397.70

UNION TEXAS PETROLEUM CORPORATION
AS BUILT PIPELINES
BLOCK 39 TO BLOCK 42
BRETON SOUND AREA
GULF OF MEXICO
SCALE: 1" = 1000'
10/12/84

SN 7086

Continental Engineering
& Construction Services, Inc.

P.O. Box 2817

Lafayette, Louisiana 70502

(318) 837-3140

October 12, 1984

U. S. Department of Interior
Mineral Management Service
P.O. Box 7944
Metairie, La. 70010

Attn: Mr. A. Alverado

UNION TEXAS
Re: Pipeline Segment 7086
RP-2-2

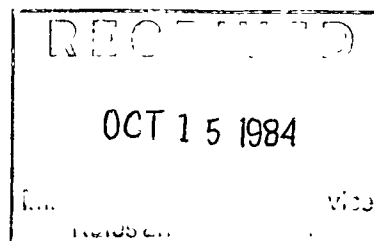
Dear Sir:

As per our conversation, we would like to amend our permit to increase our maximum working pressure from 1200 P.S.I. to 1440 P.S.I., which is the maximum working pressure of the Texas Eastern pipeline.

If you have any questions or request concerning this matter please feel free to call me at 318-837-3140

Sincerely

Herb Pourciau
Herb Pourciau



HP/cc

OP 447

UNION TEXAS

NOTED-ALVARADO

BEST AVAILABLE COPY

Colorado
7-30-84
SN 7086

AUG 2 1984

In Reply Refer To: RP-2-2

Union Texas Petroleum
Attention: Mr. Stephen W. Persky
Post Office Box 52087
Lafayette, Louisiana 70505

Gentlemen:

Your letter dated April 11 and amended May 1, 1984, requests a permit for the installation of the following pipeline, all located in Breton Sound Block 42, Lease OCS-G 4490:

<u>Pipeline Segment No.</u>	<u>Size (inches)</u>	<u>Length (feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
7086	4 1/2	2,423	Natural Gas	The Federal/State lease boundary	A subsea tie-in with a 24-inch Texas Eastern Transmission Corporation pipeline

Based on our calculations, the maximum allowable operating pressure for this pipeline is 1,200 psig.

The proposed installation of this pipeline meets the design requirements of OCS Order No. 9. Pursuant to Section 5(a)(7) of the OCS Lands Act, 43 USC 1334(a)(7), and Department of the Interior Regulations promulgated thereunder (see 30 CFR 250.20), the design, other features, and plan of installation are hereby approved, as proposed.

Pursuant to Section 5(f)(1) of the OCS Lands Act Amendments of 1978, effective September 18, 1978, this approval is granted upon the condition that the applicant agrees to operate said pipeline in accordance with the following competitive principles: Except as provided in Section 5(f)(2) of the OCS Lands Act, as amended, the pipeline must provide open and nondiscriminatory access to both owner and nonowner shippers.

You are required to conform to the following:

1. Notify the Platform/Pipeline Unit, Rules and Production, Metairie, Louisiana, 48 hours prior to installing this pipeline and prior to hydrostatic pressure testing.

2. Adhere to the conditions of Notice to Lessees and Operators No. 83-3.

PWQ
8-3-84
AA

on map
1/4
8/6/84

BEST AVAILABLE COPY

2

3. Submit an "as-built" location plat and a hydrostatic pressure-test report within 30 days from the completion of the hydrostatic pressure test.

4. This permit is conditioned on the pipeline being designed, constructed, operated, and maintained in compliance with Transportation Department Regulations 49 CFR 192.

In future correspondence, please refer to the above pipeline by its assigned segment number.

Sincerely yours,

Sup. Sgd.) D.W. Solanas

D. W. Solanas
Regional Supervisor
Rules and Production

cc: U.S. Fish and Wildlife Service
1612 June Avenue
Panama City, Florida 32405

bcc: 1502-01 Union Texas (w/orig appln) (RP-2-2)
Lease OCS-G 4490 (OPS-2-3)
OPS-4 (w/cy of plat)
DO-5 (w/cy of appln)
LE (P/L No. 7086)

AA1varado:RKelly:jj:7/23/84:Disk 6

PIPELINE APPLICATION CHECK LIST

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

A. Verify the following general information:

BEST AVAILABLE COPY

I. SOP

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

II. POD

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

III. USGS Application

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

- ☒ 1. A single lease.
☐ 2. Unitized leases.
☐ 3. Contiguous (not cornering) leases of the same owner or operator

IV. BLM Application

- N/A a. Pipelines not covered by III above.

V. DOT Pipelines

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

VI. DOI Pipelines

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

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

- ☒ I. The pipeline leaving the platform receiving production from the platform is equipped with high- and low-pressure sensors to directly or indirectly shut-in the well or wells on the platform.
- N/A II. The pipeline delivering production to production facilities on the platform is equipped with automatic fail close valve tied into the automatic and remote shut-in system.
- N/A III. The pipeline crossing the production platform which does not deliver production to the platform, but which may or may not receive production from the platform, is equipped with high- and low-pressure sensors connected to an automatic fail close valve located in the upstream portion of the pipeline at the platform. In addition, the sensors are tied into either the platform's automatic and remote shut-in system or an independent remote shut-in system.
- N/A IV. The pipeline boarding the platform is equipped with a check valve.
- ☒ V. The pipeline leaving the platform is equipped with a check valve.
- ☒ N/A VI. The pipeline pump is shown as well as its associated high- and low-pressure shut-in device.
- ☒ VII. Check valves are located such that the low-pressure shut-in devices in I, II, III, and VI are not isolated.
- N/A VIII. If pipeline pilots are located on any pressure vessel or downstream of a departing check valve, all flow restriction(s), [backpressure valve(s), choke(s)], downstream of the process vessel, or wellhead, and upstream of check valve(s) must be indicated on the schematic.

If flow restriction(s) exist downstream of any process vessel a low-pressure sensor must be installed between the flow restriction(s) and the departing check valve(s). High-pressure sensor(s) must be installed downstream of the wellhead choke.
- N/A IX. If safety equipment associated with the pipeline is located on a pig trap, so that it would be bypassed during pigging operations, add statement in approval letter referring to letter to lessees and operators, dated February 25, 1980, (Procedures for Temporary Removal of Pipeline-Related Safety Equipment)
- ☒ X. Pressure source is drawn into the schematic with the following:
 - ☒ a. Source PRODUCTION EQUIPMENT.
 - ☒ b. Maximum source pressure, psig 3000 WELL HEAD PRESSURE & PRODUCTION EQUIPMENT
- ☒ XI. The rated working pressures of all separators, pumps, compressors, valves, flanges, and fittings upstream of and including the boarding automatic fail close valve are shown. ANSI 600

C. Verify that the location plat depicts the following:

- ☒ I. Location of pipeline
- ☒ II. Length of pipeline 2423 (IN FEDERAL WATERS)
- ☒ III. Size of pipeline
- ☒ IV. Type of service
- ☒ V. Direction of flow
- ☒ VI. X-Y coordinates of key points

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

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

- a. Size of pipeline, inches 4.5
- b. Weight of pipeline, lbs./ft. 10.79
- c. Grade of pipeline B, SCH. 40
- d. Wall thickness, inches 0.237
- e. Size of riser, inches _____
- f. Weight of riser, lbs./ft. SAME AS LINE
- g. Grade of riser _____
- h. Wall thickness of riser, inches _____
- i. ^{MAX} ~~Minimum~~ WP rating of piping, fittings, valves, psig 1440
- X j. Hydrostatic test pressure (HTP), psig 1800
- X k. Hold time, hrs. 24
- ... l. Classification of pipeline (oil or gas) NAT. GAS

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

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

- ☒ a. Type of corrosion protection (platform anodes, P/L anodes, or rectif
- ☒ b. If pipeline anodes are used:
1. Type of anode ALUMINUM
 2. Spacing interval, ft. 500
 3. Weight of unit anode, lbs. 24

II. Calculate Life Expectancy of Corrosion Protection

- N/A a. If platform anodes are used, annual pipe-to-electrolyte potential measurements are required.

- ☒ b. If pipeline anodes are used:

$$LE_{p/1} = 3.82 \times 10^4 \times W^0 / DIR? = \underline{54}$$

W^0 = weight of one anode, pounds

D = outside diameter of pipe, inches

I = interval = length of pipe, feet + total number of anodes

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

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

If not, one of the following is necessary:

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

$$3.82 \times 10^4 \times \frac{24}{4.5(500)(7.6)} = 53.61$$

III. DOT Pipelines

- a. IP @ SMYS for submerged pipeline = $\frac{2st}{D}$ = 3686
- b. $(.72 \times \text{IP @ SMYS})$ for submerged pipeline = 2654 (MAOP_{sc})
- c. IP @ SMYS for riser = $\frac{2st}{D}$ = 3686
- d. For oil P/L $(.60 \times \text{IP @ SMYS})$ for riser = N/A (MAOP_{TC})
 For gas P/L $(.50 \times \text{IP @ SMYS})$ for riser = 1843
- e. See DI1 above 1440 (MAOP_{pfv})

f. Limit of Testing

1. For oil P/L

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

$$\underline{\quad} \leq \underline{\quad} \leq \underline{3502}$$

2. For gas P/L riser component:

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

$$\underline{\quad} \leq \underline{1800} \leq \underline{3502}$$

3. For gas P/L submerged component:

Is $1.25 \text{ MSP} = \text{HTP of submerged component} = .95 (\text{IP @ SMYS of a a})$

$$\underline{\quad} \leq \underline{1800} \leq \underline{3502}$$

g. MAOP_{p/l} based on HTP1. For oil P/L HTP 1.25 = 2. For gas P/L riser component HTP/1.5 = 1200
of riser3. For gas P/L submerged component HTP/1.25 = 1440
or submerged
component

- h. For oil P/L Is HTP hold time \geq 24 hours N/A
 For gas P/L Is HTP hold time \geq 8 hours ✓

i. MAOP of receiving pipeline from IV 1440

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

1200 (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 $k \geq$ 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

1200 \geq 3000

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

1. Redundant safety equipment is afforded

2. A departure from the requirement for redundant safety equipment.

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

	<u>Submerged Component</u>	<u>Riser</u>
a. Size, inches	_____	
b. Grade	_____	
c. Wall thickness, inches	_____	
d. Minimum working pressure of valves and flanges	_____	(MAOP _{pfv})
e. Date of last hydrostatic test	_____	
f. HTP, psig	_____	
g. Hold time, hrs.	_____	
h. MAOP based on HTP HTP/1.25	_____	
i. IP ₀ SMYS for submerged P/L 2ST/D	_____	
j. (.72 x IP ₀ SMYS) for submerged P/L	_____	(MAOP _{sc})
k. IP ₀ SMYS for riser 2ST/D	_____	
l. (.60 x IP ₀ SMYS) for riser	_____	(MAOP _{rc})
m. If the receiving P/L is a DOT gas P/L and has not been tested since July 1, 1971, then what is the MAOP to which the segment was subjected during the 5 years prior to July 1, 1976?	_____	
n. MAOP of receiving P/L <u>MAOP of proposed P/L</u> MSP of proposed P/L	_____	

G-1689
FROM MP 92

1440
1200 WORKING
PRESSURE

*HAOP - Highest actual operating pressure

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

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

a. Description of pipelines protective coating 12-15 MILS SCOTCHKOTE 212

b. Description of risers protective coating 11

c. Description of pre-concrete coating

d. Gravity or density of products:

For gas 0.6 (air = 1.0)

For oil/condensate ° API (water = 1.0)

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

a. Given $SG_{p/1}$

b. Weight of bare pipe (W) lb/ft

c. Weight of pre-concrete coating (P)

d. K_3 (coefficients from table)

e. Density of concrete (dc)

f. Thickness of concrete (T)

g. K_1 (coefficient from table)

h. K_2 (coefficient from table)

III. Specific gravity for weighted pipelines:

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

IV. Specific gravity for epoxy-coated pipelines:

$$a. SG_{p/1} = 2.865 w/d^2 = \underline{1.518}$$

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

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

$$\underline{1.518} \approx \underline{1.784}$$

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

6. Pipeline crossing and subsea taps and valves

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

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

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

3. Slope of sandbags

- / a. Diameter of both pipelines is $\leq 8 \frac{5}{8}$ -inch - 2:1 slope
/ b. Diameter of either pipeline is $> 8 \frac{5}{8}$ -inch - 3:1 slope
/ c. At pipe crossings if both pipelines are unburied (regardless of size) - 3:1 slope

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

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

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

H. Verify the following general information:

I. Water depth, ft. 17 (Max) _____ (Min)

II. Burial depth, ft. 3

III. Anticipated Operating Pressure (MOP) 1200

IV. Capacity 10 MM SCFD

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

UNITED STATES GOVERNMENT
MEMORANDUM

Date April 23, 1984

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

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

Subject: National Environmental Policy Act (NEPA) Review for Action No. P-7086

Union Texas Petroleum

Pipeline Application

Lease OCS-G 4490, Breton Sound Block 42

The operator proposes to install a 4.5-inch natural gas pipeline from the
Federal/State boundary line X=2,724,650.53' Y=302,472.75' to a subsea tie-in
with the Texas Eastern Transmission Corp. 24-inch gas pipeline.

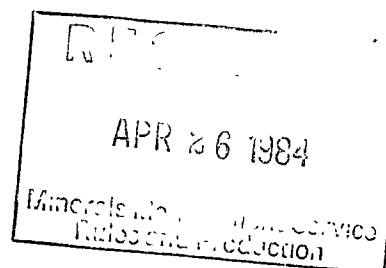
Our NEPA review of the subject action is complete. The following environmental protective measures intended to avoid or mitigate potential impacts associated with the action are provided for inclusion in the plan/application approval letter.

Compliance with NTL 83-3 is required due to the proximity of existing pipelines to the proposed pipeline.

Les Dauterive
Les Dauterive

cc: Lease OCS-G 4490 POD File w/CER (OPS-4)

ODeWald:wrđ





EDWIN W. EDWARDS
GOVERNOR
WILLIAM C. HULS
SECRETARY

DEPARTMENT OF NATURAL RESOURCES

MICHAEL BOURGEOIS
DEPUTY SECRETARY

July 12, 1984

Mr. Autry J. Britton, General Engineer
Minerals Management Service
P. O. Box 7944
Metairie, LA 70010

RE: C840330, Coastal Zone Consistency
Union Texas Petroleum Corporation
Propose to install and maintain a 4-inch.
Natural Gas Pipeline, Breton Sound Blk. # 39
& 42 near Venice, La., Off Plaquemines Parish
Offshore, Louisiana

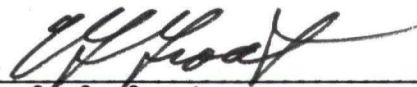
Dear Mr. Britton:

After a careful review of the pipeline application of the above captioned project, the Coastal Management Division of the La. Dept. of Natural Resources concurs with the consistency certification provided by Union Texas Petroleum Corporation, as required in Section 307(c)(3)(B) (Subpart E) of the Coastal Zone Management Act of 1972 as amended.

Sincerely,

WILLIAM C. HULS

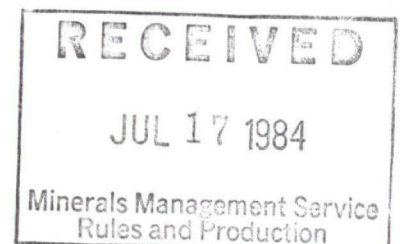
BY:


Dr. C. G. Groat
Assistant to the Secretary

WCH:CGG/se

cc: Ron Ventola
U.S. Army Corps of Engineers

Union Texas Petroleum Corporation
c/o Continental Engineering & Construction
Services, Inc.





CITIES SERVICE OIL AND GAS CORPORATION
1980 POST OAK BOULEVARD
BOX 27570
HOUSTON, TEXAS 77227

RP-2-2
7086

June 1, 1984

(713) 850-6100

Union Texas Petroleum
P. O. Box 52087
Building 15A, Claco Blvd.
Lafayette, Louisiana 70505
Attn: Mr. Stephen W. Persky

Re: Breton Sound Block 39
Proposed 4" Pipeline

Gentlemen:

Cities Service Oil and Gas Corporation has no objection to the routing of your 4" line from the production facility in Breton Sound Blk. 39 to the tie-in to Texas Eastern's line in Block 42.

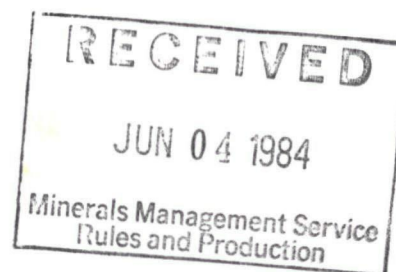
Yours very truly,

CITIES SERVICE OIL AND GAS CORPORATION

T. Hill Hooks
T. Hill Hooks
Landman
Gulf of Mexico Region

gr
encl.

cc: Gulf of Mexico Region
Minerals Management Service
P. O. Box 7944
Metairie, LA 70010
Attn: Alex Alverado



**Union Texas
Petroleum**

P O Box 52087
Building 15A, Claco Boulevard
Lafayette, Louisiana 70505

May 21, 1984

City Service
1980 Post Oak Blvd.
Houston, TX 77227

Attention John Yard

RE: Breton Sound Blk. 39
MMS #7086

Dear Mr. Yard:

As per our telephone conversation please find attached a pipeline map. This map indicates the routing of our proposed 4" line from the production facility in Breton Sound Blk. 39 to the tie-in to Texas Eastern Transmission Company line in Blk. 42 as denoted by the listed X, Y coordinates. The above referenced MMS # is your return correspondence.

Please advise if you have any objections to this line or its proposed route.

Thank you,

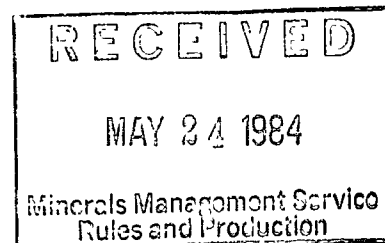


Stephen W. Persky
Sr. Petroleum Engineer

SWP/par

Enclosure: Attachment

cc: Gulf of Mexico Region
Minerals Management Service
P. O. Box 7944
Metairie, LA 70010
Attention Alex Alverado



BEST AVAILABLE COPY

Base Data Orig
SP-36-447

Bois Enterprises Prod
SP-36-447

38

39

40

Y = 320,000.00'

Supron Energy No. 1
SP-36-447

Supron Energy No. 1

Surf Loc :

X = 2,725,211.00'

Y = 314,000.00'

S.L.

BML
10050' MD
8408' TVD

S/L 9310

S/L 9200

13,963.7'

43

S/L 9201
1-19-86

42

41

Y = 2,740,000.00'

Y = 310,000.00'

BRETON SOUND AREA

PIPELINE TAP

X = 2,724,532.85'

Y = 300,052.78'

Y = 300,000.00'

54

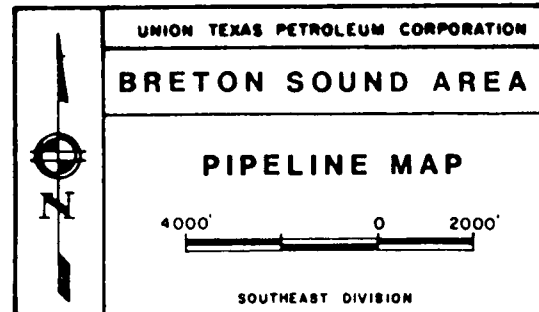
55

56

X = 2,720,000.00'

X = 2,730,000.00'

FAIR



BEST AVAILABLE COPY

May 1, 1984

U. S. Dept. of Interior
Mineral Management Service
P.O. Box 7944
Metairie, La. 70010

Re: Pipeline Segment 7086

Attn: Mr. Carl Walker

Dear Sir:

Enclosed please find the drawings and specifications you requested for the Union Texas Petroleum Corp. pipeline permit application.

1. Pipe: 4" Sch. 40, Grade B
2. Well-Head Pressure: 3000 #
3. Anode: 20 Year Life, 500' apart, 24# Aluminum
4. The working pressure of all valves, flanges and fittings is 1440 psi
5. Pipe coating: 12 to 15 mills of Scotch Coat 212
6. Buoyancy of Pipe: Empty .5604 with Gas .575 *Density of Pipe*
7. Length of line in Federal waters: 2422.83'
8. The working pressure of Texas Eastern pipeline is 1200 psi

$SG = \frac{1}{0.5604}$
EMPTY

If you have any questions or requests regarding this information, please contact Mr. Curt Clark or myself at 318-837-3140

Sincerely

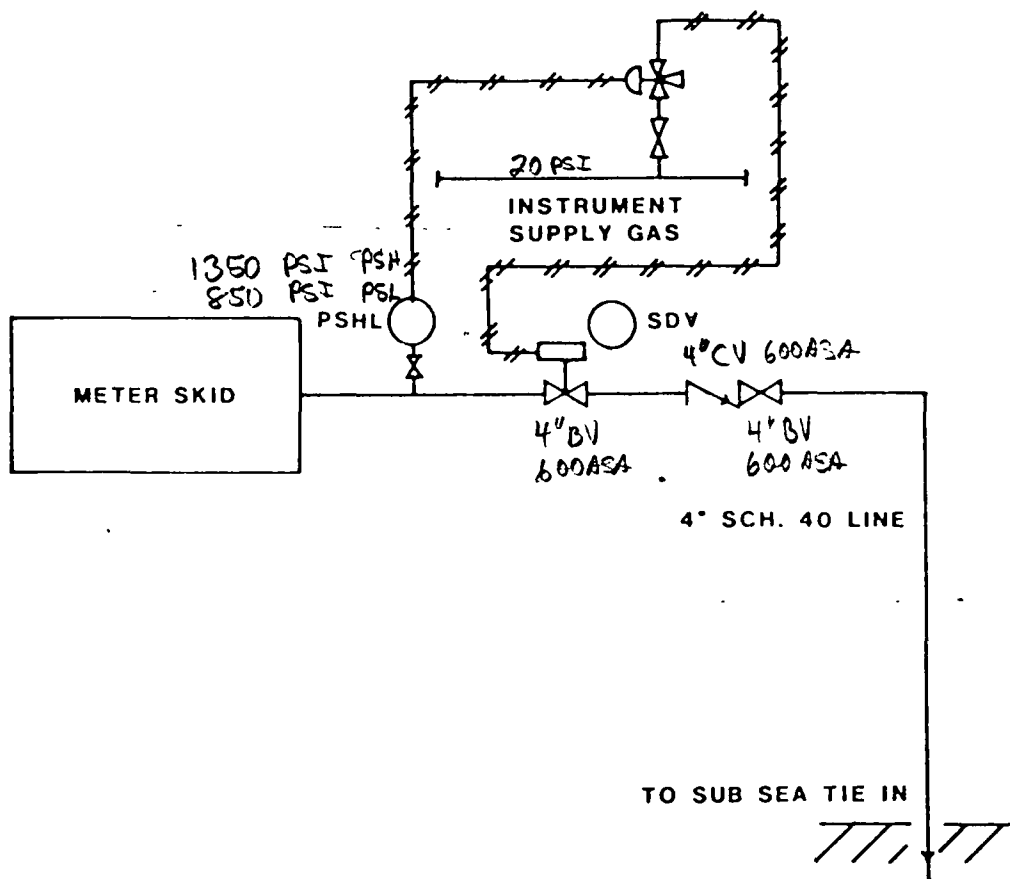


Herb Pourciau

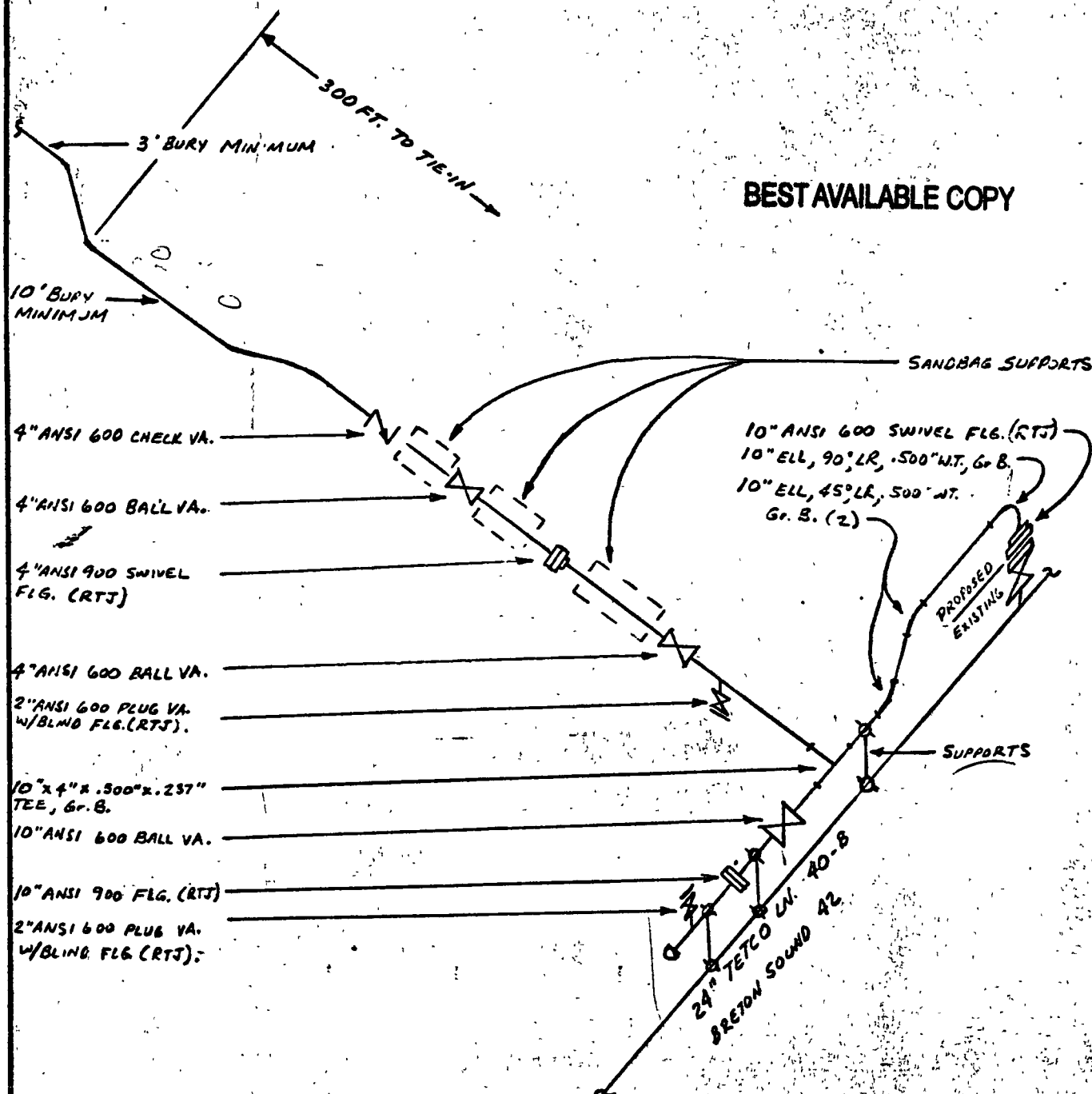
HP:sc

MAY 09 1984

BEST AVAILABLE COPY



BRETON SOUND BLK. 32
SAFETY SCHEMATIC FOR SALES LINE



- NOTES: ① ALL FABRICATION PIPING TO BE TARSET COATED.
- ② FABRICATIONS TO BE IN ACCORDANCE WITH TETCO SPECIFICATIONS.
- ③ BURY SHALL BE SUFFICIENT TO MAINTAIN 3 FT. OF COVER OVER TOP OF VALVES.

TEXAS EASTERN GAS PIPELINE COMPANY
ENGINEERING DIVISION-PIPELINE DESIGN

BRETON SOUND 39
TIE-IN FABRICATION FACILITIES.
NO SCALE

PREPARED BY:

[Signature]

DATE: 4/4/84

Continental Engineering
& Construction Services, Inc.

P.O. Box 2817

Lafayette, Louisiana 70502

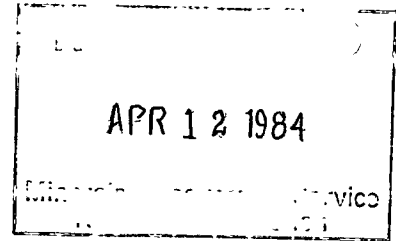
(318) 367-0032

RP-2-2
no. 7086

BEST AVAILABLE COPY

April 11, 1984

U. S. Dept. of Interior
Mineral Management Service
P. O. Box 7944
Metairie, LA 70010



Re: Permit Application for
4" Ø Natural Gas Pipeline
Breton Sound 39-42

Attention: Mr. Don Solanas
RP-22

Dear Sir:

Enclosed please find the appropriate documents for our pipeline right-of-way application. The applicant and owner of the line will be:

Union Texas Petroleum
P. O. Box 52087
Building 15A Calco Blvd.
Lafayette, LA 70505

You should have the appropriate corporate records on file, as a result of the pipelines that have been installed in Eugene Island Blks. 384 and 43.

If you have any questions or requests regarding this application, please contact Mr. Curt Clark or the undersigned at 318-837-3140, Continental Engineering & Construction Services, Inc.

Sincerely,

Herb Pourciau, P.E. No. 12464

HP:jh

For use of this form, see EP 1145-2-

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and checklist) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

BEST AVAILABLE COPY

10. Date activity is proposed to commence.

June 11-1984

Date activity is expected to be completed

June 25 1984

11. Is any portion of the activity for which authorization is sought now complete? ☐ YES ☒ NO

If answer is "Yes" give reasons in the remark section. Month and year the activity was completed

. Indicate the existing work on the drawings.

12. List all approvals or certifications required by other federal, interstate, state or local agencies for any structures, construction, discharges, deposits or other activities described in this application.

Issuing Agency	Type Approval	Identification No.	Date of Application	Date of Approval
Dept. of Transportation & Development	Office of public Works			No objection
Enviromental Section	La. Dept of Wildlife & Fisheries			" "
Coastal Use Permit Section	Dept. of Wildlife & Fisheries			" "
Office of Environmental Affairs	Div. Water Pollution Control			" "
La. Dept. of Natural Resources	Coastal Management Section			" "
Plaquemines Parish	Police Jury			" "

13. Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?

☐

Yes

☒

No

(If "Yes" explain in remarks)

14. Remarks or additional information.

BEST AVAILABLE COPY

15. Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Continental
Signature of Applicant or Authorized Agent

Continental Engineering & Const. Svcs. Inc

The application must be signed by the applicant; however, it may be signed by a duly authorized agent (named in Item 5) if this form is accompanied by a statement by the applicant designating the agent and agreeing to furnish upon request, supplemental information in support of the application.

18 U. S. C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both. Do not send a permit processing fee with this application. The appropriate fee will be assessed when a permit is issued.

Union Texas
Petroleum

P O Box 52087
Building 15A, Clacof
Lafayette, Louisiana 70501
ward
5

March 27, 1984

Department of Natural Resources
Office of Environmental Affairs
Water Pollution Control Division
P. O. Box 44066, Capitol Station
Baton Rouge, LA 70804

BEST AVAILABLE COPY

Attention: Mr. J. Dale Givens

RE: P811309
Breton Sound Blk #39
S/L 9310 #1 & 1D

Dear Sir:

State Lease 9310 #1 and 1D were recently completed in Breton Sound Blk. #39 Field and will be put on production within approximately 90 to 120 days after the construction of production facilities. The test indicated little to no liquid production, however, the production facilities will be designed to handle the potential production of condensate and saltwater.

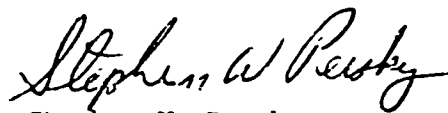
Storage will be made available for condensate production with removal by barge transport. Approval is requested to dispose of the produced saltwater overboard from the facilities sump. This sump is designed to separate any small amounts of hydrocarbons from the waste water. The maximum projected water production should not exceed 200 bbl/day. All production equipment will have a 6" pollution barrier to contain any hydrocarbon pollution.

The precise designated location of this well and facilities are Lat 29°30' 37.083"N Long 80°03' 11.905"W.

If you receive any further information concerning this matter, please advise.

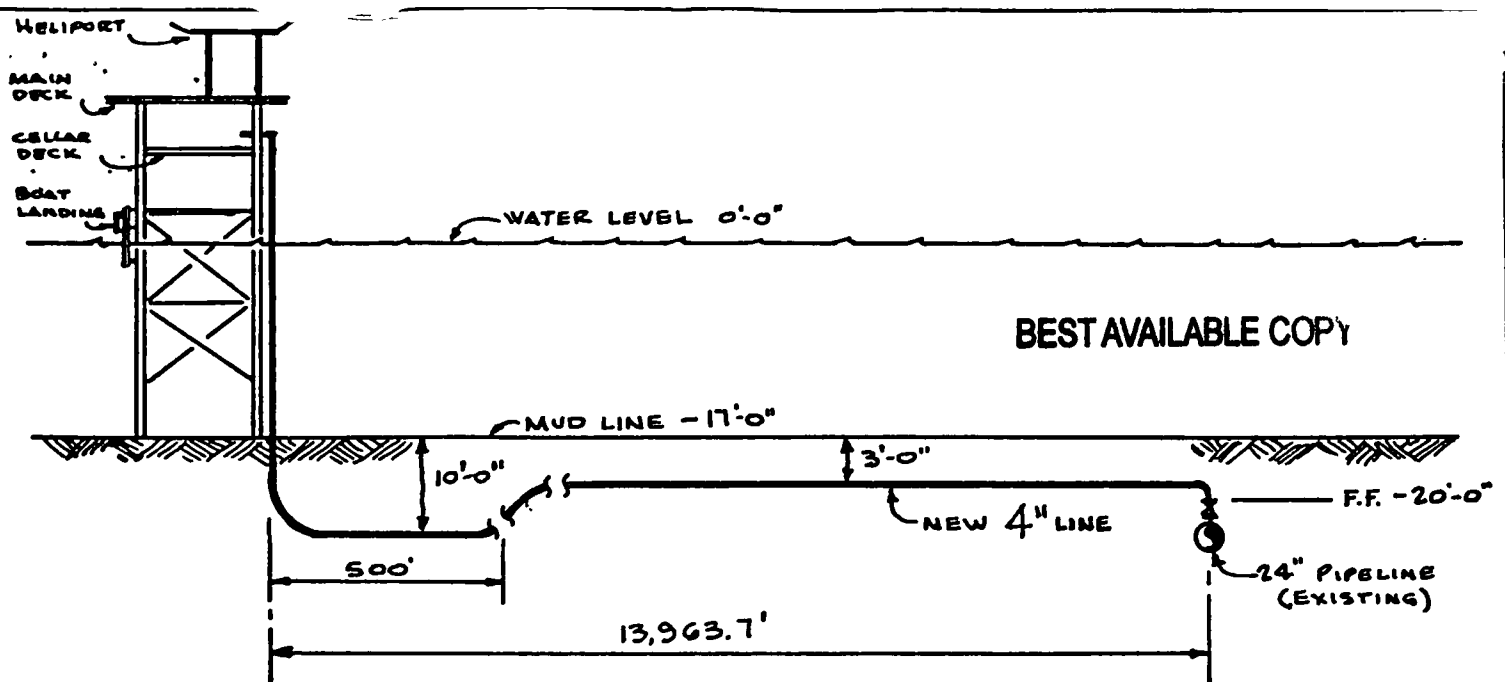
Sincerely yours,

UNION TEXAS PETROLEUM CORPORATION



Stephen W. Persky
Sr. Petroleum Engineer

SWP/par



PROPOSED PIPELINE PROFILE
N.T.S.

1.	<u>DRY NATURAL GAS</u>	TRANSPORTED PRODUCT
2.	<u>4" 10.75# / ft, SCH 40, .237" WALL</u>	SIZE, WEIGHT, GRADE OF PIPE
3.	<u>13,963'</u>	LENGTH OF LINE
4.	<u>17'</u>	MAXIMUM WATER DEPTH
5.	<u>CATHODIC PROTECTION</u>	CORROSION PROTECTION
6.	<u>SCOTCH COAT 212</u>	PROTECTIVE COATING
7.	<u>48.6# / ft³</u>	BULK SPECIFIC GRAVITY
8.	<u>.5604</u>	ANTICIPATED DENSITY
9.	<u>1200⁺, 10 MM SCED</u>	DESIGN WORKING PRESSURE & CAPACITY
10.	<u>1200⁺, 14.8 MM SCED</u>	MAXIMUM WORKING PRESSURE & CAPACITY

GENERAL PIPELINE INFORMATION

CONTINENTAL ENGINEERING & CONST. SVCS. INC.

UNION TEXAS PETROLEUM
CORPORATION

BRETON SOUND 39

PROPOSED 4" PIPELINE



APPROX. 11,400 CUBIC YARDS

PIPELINE TRENCH

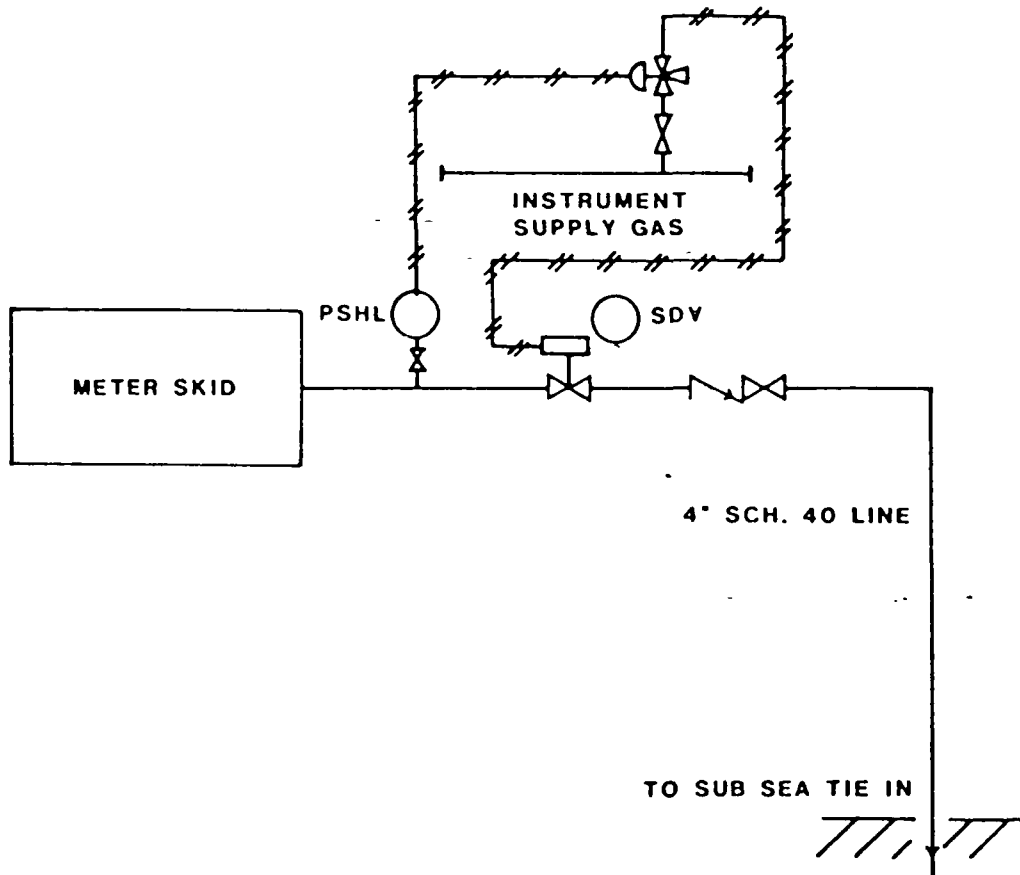
DATE
10 APR 84

DRAWN BY
MMORGAN

PROJECT NO.
P 84 E 108

SHEET NO.
1

BEST AVAILABLE COPY



BRETON SOUND BLK. 32
SAFETY SCHEMATIC FOR SALES LINE

BEST AVAILABLE COPY

Supron Energy No. 1
Surf. Loc.:
X = 2,725,211.00'
Y = 314,000.00'

38

39

40 MILES

Y = 320,000.00'

BHL
10050' MD
8408' TVD

S/L 9310

S/L 9200

X = 2,724,898.85'
Y = 307,550.00' 43

S/L 9201
1-9-86

X = 2,724,650.53'
Y = 302,472.75'

PIPELINE TAP

X = 2,724,532.85'
Y = 300,052.78'

BRETON SOUND AREA

GCS-G 4490
CITIES

Y = 300,000.00'

54

55

56

