SN 4837 -

BEST AVAILABLE COPY

Williams 2-2-87
Kelly 2/2/87
Stauffer 2/2/87

In Reply Refer To: FO-2-2

FEB 0 3 1987

ANR Pipeline Company
Attention: Mr. Roland M. Lindemann
500 Renaissance Center
Detroit, Michigan 48243

Gentlemen:

Your letter dated April 8, 1986, supplemented October 17, 1986, requested approval to remove the pressure safety valve (PSV) on the facilities upstream of the following pipelines:

	Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
1.	2294 (OCS-G 1505)	8 5/8	663	Gas/Oil	Platform A Eugene Island Block 63 Lease OCS 0425	A 20-inch subsea tie-in Eugene Island Block 63 Lease OCS 0425
2.	2295 (OCS-G 1503-A)	10 3/4	21,499	Gas	Platform B Eugene Island Block 158 Lease OCS-G 1220	A 20-inch subsea tie-in Eugene Island Block 175 Lease OCS 0438
3.	3651 (OCS-G 1503-A)	8 5/8	1,155	Gas	Platform B Eugene Island Block 175 Lease OCS 0438	A 10 3/4-inch subsea tie-in Eugene Island Block 175 Lease OCS 0438
4.	7984 (OCS-G 1687-B)	12 3/4	1,155	Gas	Platform A Eugene Island Block 231 Lease OCS-G 0980	A 12 3/4-inch subsea tie-in Eugene Island Block 231 Lease OCS-G 0980
5.	7278	8 5/8	12,656	Gas	Platform A Eugene Island Block 247 Lease OCS-G 1888	A 12 3/4-inch subsea tie-in Eugene Island Block 266 Lease OCS 0811

ANR General file

G 3641

	Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
6.	7291 (OCS-G 7538)	6 5/8	7,469	Gas	Platform A Eugene Island Block 248 Lease OCS-G 5506	A 8 5/8-inch subsea tie-in Eugene Island Block 247 Lease OCS-G 1888
7.	2303 (OCS-G 1687-O)	12 3/4	1,771	Gas	Platform C Eugene Island Block 266 Lease OCS 0811	A 24-inch subsea tie-in Eugene Island Block 266 Lease OCS 0811
8.	2304 (OCS-G 1687-A)	12 3/4	3,186	Gas	Platform E Eugene Island Block 266 Lease OCS 0811	A 24-inch subsea tie-in Eugene Island Block 266 Lease OCS 0811
9.	2302 (OCS-G 1687-K)	12 3/4	6,062	Gas	Platform F Eugene Island Block 266 Lease OCS 0811	A 24-inch subsea tie-in Eugene Island Block 266 Lease OCS 0811
).	4253 (OCS-G 1687-M)	30	147,809	Gas	Platform B Eugene Island Block 296 Lease OCS-G 2105	Platform A Eugene Island Block 188 Lease OCS 0443
l.	4792 (OCS-G 3453)	16	23,199	Gas	Platform A Eugene Island Block 307 Lease OCS-G 2110	A 16-inch subsea tie-in Eugene Island Block 305 Lease OCS-G 2108
?.	4793 (OCS-G 3453)	16	44,034	Gas	Platform A Eugene Island Block 327 Lease OCS-G 2910	Platform B Eugene Island Block 296 Lease OCS-G 2105
.	2308 (OCS-G 1503-A)	12 3/4	93,849	Gas	Platform A South Marsh Island Block 10 Lease OCS-G 1181	A 20-inch subsea tie-in Eugene Island Block 115 (Unleased)
.	2310 (OCS-G 1687)	20	106,847	Gas	Platform A South Marsh Island Block 58 Lease OCS-G 1194	Platform A Eugene Island Block 199 Lease OCS 0437

	Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
5.	2311 (OCS-G 1687-A)	24	215,468	Gas	Platform D South Marsh Island Block 108 Lease OCS 0792	Platform A Eugene Island Block 188 Lease OCS 0443
6.	4617 (OCS-G 3371)	8 5/8	5,799	Gas	Platform G South Marsh Island Block 108 Lease OCS 0792	Platform D South Marsh Island Block 108 Lease OCS 0792
7.	6661	6 5/8	2,536	Gas	Platform J South Marsh Island Block 108 Lease OCS 0792	A 24-inch subsea tie-in South Marsh Island Block 108 Lease OCS 0792
8.	6390	12 3/4	5,986	Gas	Platform B South Marsh Island Block 136 Lease OCS-G 2588	A 24-inch subsea tie-in South Marsh Island Block 137 Lease OCS-G 2589
9.	5311 (OCS-G 4014)	12 3/4	1,017	Gas	Platform A South Marsh Island Block 137 Lease OCS-G 2589	A 24-inch subsea tie-in South Marsh Island Block 137 Lease OCS-G 2589
0.	5488 (OCS-G 4157)	12 3/4	37,739	Gas	Platform A South Marsh Island Block 260 Lease OCS-G 2305	A 12 3/4-inch subsea tie-in South Marsh Island Block 249 Lease OCS-G 2301
1.	3988 (OCS-G 1693-J)	6 5/8	21,820	Gas	Platform 1 Ship Shoal Block 115 Lease OCS-G 2619	Platform 1 Ship Shoal Block 139 (Unleased)
2.	2313 (OCS-G 1687-B)	12 3/4	3,324	Gas/Oil	Platform A Ship Shoal Block 204 Lease OCS-G 1520	A 24-inch subsea tie-in Ship Shoal Block 204 Lease OCS-G 1520
3.	2314 (OCS-G 1687-E)	6 5/8	5,578	Gas	Platform A Ship Shoal Block 206 Lease OCS-G 1522	Platform A Ship Shoal Block 207 Lease OCS-G 1523

Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
2315 (OCS-G 1687)	24	167,694	Gas	Platform A Ship Shoal Block 207 Lease OCS-G 1523	Platform A Eugene Island Block 188 Lease OCS 0443
2316 (OCS-G 1687-I)	12 3/4	8,666	Gas	Platform A Ship Shoal Block 219 Lease OCS 0829	Platform A Ship Shoal Block 204 Lease OCS-G 1520
5100 (OCS-G 3654)	10 3/4	86,501	Gas	Platform A Ship Shoal Block 291 Lease OCS-G 2923	A 12-inch subsea tie-in Ship Shoal Block 219 Lease OCS 0829
4873 (OCS-G 3641)	6 5/8	17,612	Gas	Platform A Ship Shoal Block 292 Lease OCS-G 1042	Platform A Ship Shoal Block 291 Lease OCS-G 2923
6288	8 5/8	565	Gas	Platform A South Pelto Block 12 Lease OCS 072	An 8-inch subsea tie-in South Pelto Block 12 Lease OCS 072
6286	8 5/8	22,613	Gas	Platform A South Pelto Block 18 Lease OCS-G 3589	A 20-inch subsea tie-in South Pelto Block 13 Lease OCS-G 3171
5325 (OCS-G 3922)	6 5/8	4,597	Gas	Platform B Ship Shoal Block 115 Lease OCS-G 2619	Platform A Ship Shoal Block 115 Lease OCS-G 2619
3762 (OCS-G 1907-AA)	6 5/8	13,403	Gas	Platform A Vermilion Block 182 Lease OCS-G 2074	A 30-inch subsea tie-in East Cameron Block 181 (Unleased)
5501 (OCS-G 4033)	10 3/4	4,346	Gas	Platform A Vermilion Block 242 Lease OCS-G 3133	A 20-inch subsea tie-in Vermilion Block 241 Lease OCS-G 3132

	Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
3.	5503 (OCS-G 4054)	24	105,144	Gas	Platform A Vermilion Block 397 Lease OCS-G 3141	A 24-inch subsea tie-in South Marsh Island Block 137 Lease OCS-G 2589
4.	6026	6 5/8	5,565	Gas	Platform A Ship Shoal Block 135 Lease OCS-G 3164	A 26-inch subsea tie-in Ship Shoal Block 135 Lease OCS-G 3164
5.		10 3/4	19,332	Gas	Platform A West Cameron Block 2	To Shore
6.		10 3/4	87,395	Gas	Platform 18 West Cameron Block 17	To Shore

The safety equipment which you requested approval to eliminate is not necessary for the above pipelines numbered 1 through 33 since overpressure protection for each is provided by high pressure sensors. Therefore, these pressure safety valves (PSV) are not required by the provisions of applicable regulations and standards.

Item number 34 will be addressed under a separate cover by the Minerals Management Service, Houma District.

Item numbers 35 and 36 are not located within the Federal Outer Continental Shelf, and therefore do not come under the jurisdiction of this office.

Sincerely yours,

(Orig. Sgd.) William H. Martin

for D. J. Bourgeois
Regional Supervisor
Field Operations

bcc: 1502-01 ANR General File (w/orig appln) (Schmatics filed in each segment file)
(FO-2-2)
FO-4
FO-5
FO-6

CWilliams:CWalker:mcs:1/27/87:LEXITYPE Disk 1

ANR Pipeline Company
An American Natural Resources Company

October 17, 1986

Mr. J. Rogers Pearcy
Regional Director
U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico, OCS Region
1420 South Clearview Parkway
New Orleans, LA 70123-2394

Dear Mr. Pearcy:

Attention: FO-2-2

RE: Removal of Relief Valves from
ANR Facilities on Producers
Offshore Platforms

ANR Pipeline Company (formerly Michigan Wisconsin Pipe Line Company) is requesting MMS approval to modify its facilities on Offshore Producer Platforms. ANR Pipeline Company included relief valves on their Safety Shut-Down Systems on producer platforms to protect their pipelines from a sudden surge or reduction in pressure.

Offshore producers must comply with Department of Interior (DOI) regulations OCS Order 9, requiring the producers to protect all gas pipelines leaving their platforms from overpressure. The DOI requirements for set points and inspections of overpressure protection are more stringent than those of the Department of Transportation (DOT).

A regulatory review conducted by ANR Pipeline Company's Codes and Standards Department has led us to conclude that the overpressure protection requirements of DOT for our facilities on these platforms are met through producer compliance to OCS Order 9. Since none of our offshore permits are conditioned on having relieving devices on our facilities, we further conclude that the relief valves that we have on producer platforms are not needed. The producers we have contacted concur. The removal of these devices would have no consequence on system safety.

Since MMS approval is required for all offshore facility modifications, ANR Pipeline Company hereby asks permission to remove the above-mentioned relief devices from their facilities on the producers' platforms located in the blocks and areas listed below:

Eugene Island Area

Block	Platform	Producer
*42	A	Chevron, U.S.A., Inc.- OCS-G7585
63	A	Hunt Oil Company
158	B	Shell Offshore (W)

Eugene Island Area
(Cont'd)

Block	Platform	Producer
175	B	Arco Oil & Gas Company
*208	E	Conoco OCS-G 7584
231	A	Chevron, U.S.A., Inc.
247	A	Samedan Oil Corporation
*247	H	Samedan Oil Corporation OCS-G 3367
248	A	Samedan Oil Corporation
266	C	Conoco
266	E	Conoco
266	F	Conoco
*267	I	Conoco Seg # 6063
296	B	Placid
307	A	Cities Service
*307	B	Cities Service Seg # 6635
327	A	Cities Service

South Marsh Island Area

Block	Platform	Producer
10		Shell Offshore (W)
58	A	Shell Offshore (W)
108	D	Conoco
108	G	Conoco
108	J	Conoco
136	B	Conoco
137	A	Conoco
260		Amoco Production Company
*265		Ocean Production OCS-G 4167

Ship Shoal Area

Block	Platform	Producer
115	A&B	Cities Service
135	A	Ocean Production
204	A	Placid
206	A	Conoco
207	A	Placid
219	A	Amoco Production Company
291	A	Placid

South Pelto Area

Block	Platform	Producer
12	A	ANR Production Company
18	A	ANR Production Company

Vermilion Area

Block	Platform	Producer
182	A	Mobil
242		Conoco
397	A	Mesa Petroleum Company

West Cameron Area

Block	Platform	Producer
2	A	Union Oil of California
17		Chevron, U.S.A.

Enclosed is a copy of a list of platforms for which the MMS requested platform piping drawings, some of which were not provided at the time the original permits were issued. The list shows three platforms from which ANR no longer is receiving gas, namely, S.M.I. Block 6, Platform B; S.M.I. Block 51, Platform A; and S.M.I. Block 146, Platform A.

Please send all correspondence to my attention at ANR Pipeline Company, 500 Renaissance Center, Environmental Engineering Department, 16th Floor, Detroit, Michigan 48243. If additional information is required, please call me at (313) 496-5626.

The ANR Area Office personnel to contact for additional information are:

Mr. Melvin J. Peoples
P. O. Box 53318
112 Rue Beauregard
Lafayette, LA 70505
(318) 237-0314

- or -

Mr. James A. Mears
P. O. Box 428
7912 South First Avenue
Sabine Pass, TX 77655
(409) 983-2713

Yours truly,

Roland M. Lindemann

Roland M. Lindemann
Sr. Permitting Specialist

c: Messrs. J. S. Chin
J. A. Mears
M. J. Peoples
T. J. Purcel
T. M. Steinbauer
M. J. Williams

* Per ANR personnel (Mr. Joe Butler) approval was not needed for these pipelines - No PSV's. ccw.

MAY 15 1986

May 14, 1986

TO: Mr. John Dunne
FROM: M. J. Peoples

Re: Platforms That Carol Williams MMS Requested Sketches For

Ms. Carol Williams, MMS, requested we provide sketches of our piping and facilities for the following listed platforms. Sketches were not required to be sent in with the Permit Applications when these were applied for. She said they must have these sketches prior to a decision being made on relief valve removals on the various producer platforms that are listed below:

E.I. Block 63	Platform "A"	OCSG 1503
E.I. Block 158	Platform "B"	OCSG 1503-A
E.I. Block 175	Platform "B"	OCSG 1503-A
E.I. Block 208	Platform "E"	OCSG 7584
E.I. Block 231	Platform "CA"	OCSG 1503-A
E.I. Block 266	Platform "C"	OCSG 1687-0
E.I. Block 266	Platform "E"	OCSG 1687-A
E.I. Block 266	Platform "F"	OCSG 1687-K
E.I. Block 276	Platform "A"	Segment #4390
E.I. Block 296	Platform "B"	OCSG 1687-M
S.M.I. Blk. 6	Platform "B"	OCSG 1503-B
S.M.I. Blk. 10	Platform "A"	OCSG 1503-A
S.M.I. Blk. 11	None	OCSG 1503-C
S.M.I. Blk. 51	Platform "A"	OCSG 1687
S.M.I. Blk. 58	Platform "A"	OCSG 1687
S.M.I. Blk. 108	Platform "D"	OCSG 1687-A
S.M.I. Blk. 108	Platform "J"	Segment #6661
S.M.I. Blk. 136	Platform "B"	Segment #6390
S.M.I. Blk. 146	Platform "A"	OCSG 3847
S.S. Block 115	Well #2 and Platform "PP"	OCSG 3922; OCSG 1693-J
S.S. Block 204	Well # 1	OCSG 1687
S.S. Block 204	Platform "A"	OCSG 1687-B
S.S. Block 206	Platform "A"	OCSG 1687-E
S.S. Block 207	Platform "A"	OCSG 1687
S.S. Block 219	Platform "A"	OCSG 1687-1
Verm. Block 182	Platform "A"	OCSG 1907-AA
Verm. Block 242	Platform "A"	OCSG 4033

M. J. Peoples

lrg

cc: Mr. M. J. Williams
Mr. R. M. Lindemann

ANR Pipeline Company
An American Natural Resources Company

April 8, 1986

Mr. J. Rogers Pearcy
Regional Director
U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
P.O. Box 7944
Metairie, Louisiana 70010

Dear Mr. Pearcy:

Attention: RP-2-2

RE: Removal of Offshore Relief Devices on Producer Platforms

Offshore producers must comply with the DOI (Department of Interior) regulations OCS Order 9 requiring the producers to protect all gas pipelines leaving their platforms from over-pressure. The DOI requirements for set points and inspections of over-pressure protection are more stringent than those of the DOT (Department of Transportation).

A regulatory review conducted by ANR Pipeline Company's Codes and Standards Department has led us to conclude that the over-pressure protection requirements of DOT for our facilities on these platforms are met through producer compliance to OCS Order 9. Since none of our offshore permits are conditioned on having relieving devices on our facilities, we further conclude that the relief valves that we have on producer platforms are not needed. The producers we have contacted concur. The removal of these devices would have no consequence on system safety.

Since MMS approval is required for all offshore facility modifications, ANR Pipeline Company hereby asks permission to remove the above-mentioned relief devices from their facilities on the producers' platforms located in the blocks and areas listed below:

Eugene Island Area

Block	Platform	Producer
42	A	Chevron, U.S.A., Inc.
77		Hunt Oil Co.
158		Shell Offshore (W)
175		Arco Oil & Gas Co.
208	E	Conoco
231		Chevron, U.S.A., Inc.
247	A	Samedan Oil Corp.
247	H	Samedan Oil Corp.
248	A	Samedan Oil Corp.
266	C	Conoco
266	E	Conoco
266	F	Conoco

Eugene Island Area (cont'd)

Block	Platform	Producer
267	I	Conoco
276		Union Oil of California
296		Placid
307		Cities Service
307	A	Cities Service
307	B	Cities Service
327		Cities Service

South Marsh Island Area

Block	Platform	Producer
6		Exxon
10		Shell Offshore (W)
11		Texaco
51		Shell Offshore (W)
58		Shell Offshore (W)
108	D	Conoco
108	G	Conoco
108	J	Conoco
136		Conoco
137		Conoco
146		Aminoil U.S.A.
260		Amoco Production Co.
265		Ocean Production

Ship Shoal Area

Block	Platform	Producer
115		Cities Service
135		Ocean Production
204		Placid
206		Conoco
207		Placid
219		Amoco Production Co.
291		Placid
292		Amoco Production Co.

South Pelto Area

Block	Platform	Producer
12	A	ANR Production Co.
18	A	ANR Production Co.

Vermilion Area

Block	Platform	Producer
182		Mobil
242		Conoco
397		Mesa Petroleum Co.

West Cameron Area

Block	Platform	Producer
2		Union Oil of California
17		Chevron, U.S.A.
71		Mobil

Please send all correspondence to my attention at ANR Pipeline Company, 500 Renaissance Center, Environmental Engineering Department, 16th floor, Detroit, Michigan 48243. If additional information is required, please call me at (313) 496-5626.

The ANR Area Office personnel to contact for additional information are:

Mr. Melvin J. Peoples
Area Manager
P.O. Box 53318
112 Rue Beauregard
Lafayette, LA 70505
(318) 237-0314

-or-

Mr. James A. Mears
Area Manager
P.O. Box 428
7912 South First Ave.
Sabine Pass, TX 77655
(409) 983-2713

Yours truly,

Roland M. Lindemann

Roland M. Lindemann
Sr. Permitting Specialist

df
c: Messrs. J. S. Chin
J. A. Mears
M. J. Peoples
T. J. Purcel
M. J. Williams

10

UNITED STATES GOVERNMENT
MEMORANDUM

January 27, 1987

To: Regional Supervisor, Field Operations, Gulf of Mexico OCS Region (FO)
(Attention: C. Williams)

From: District Supervisor, Houma District, Gulf of Mexico OCS Region
(FO-4)

Subject: Removal of Pressure Safety Valves

Your memorandum of November 19, 1986, transmitted for our review a copy of ANR Pipeline Company's letter and attachments requesting the removal of pressure safety valves (PSV's) from their facilities. Specifically, ANR requests approval to remove PSV's from the following departing pipelines:

Pipeline Segment No.	Size (Inches)	Length (Feet)	Service	From	To
3988 (OCS-G 1693-J)	6 5/8	21,820	Gas	Platform 1 Ship Shoal Area Block 115 Lease OCS-G 2619	Platform 1 Ship Shoal Area Block 139 Unleased
2313 (OCS-G 1687-B)	12 3/4	3,324	Gas/Oil	Platform A Ship Shoal Area Block 204 Lease OCS-G 1520	Subsea tie-in with 24" pipeline Ship Shoal Area Block 204 Lease OCS-G 1520
2314 (OCS-G 1687-E)	6 5/8	5,578	Gas	Platform A Ship Shoal Area Block 206 Lease OCS-G 1522	Platform A Ship Shoal Area Block 207 Lease OCS-G 1523
2315 (OCS-G 1687)	24	167,694	Gas	Platform A Ship Shoal Area Block 207 Lease OCS-G 1523	Platform A Eugene Island Area Block 188 Lease OCS 0443
2316 (OCS-G 1687-I)	12 3/4	8,666	Gas	Platform A Ship Shoal Area Block 219 Lease OCS 0829	Platform A Ship Shoal Area Block 204 Lease OCS-G 1520
5100 (OCS-G 3654)	10 3/4	86,501	Gas	Platform A Ship Shoal Area Block 291 Lease OCS-G 2923	Subsea tie-in with 12" pipeline Ship Shoal Area Block 219 Lease OCS 0829

G 3641

Pipeline Segment No.	Size (Inches)	Length (Feet)	Service	From	To
4873 (OCS-G 3641)	6 5/8	17,612	Gas	Platform A Ship Shoal Area Block 292 Lease OCS-G 1042	Platform A Ship Shoal Area Block 291 Lease OCS-G 2923
6288	8 5/8	565	Gas	Platform A South Pelto Area Block 12 Lease OCS 072	Subsea tie-in with 8" pipeline South Pelto Area Block 12 Lease OCS 072
6286	8 5/8	22,613	Gas	Platform A South Pelto Area Block 18 Lease OCS-G 3589	Subsea tie-in with 20" pipeline South Pelto Area Block 13 Lease OCS-G 3171
5325 (OCS-G 3922)	6 5/8	4,597	Gas	Platform B Ship Shoal Area Block 115 Lease OCS-G 2619	Platform A Ship Shoal Area Block 115 Lease OCS-G 2619

Additionally, ANR requested approval to remove the PSV located on the header upstream of the following pipeline.

Pipeline Segment No.	Size (Inches)	Length (Feet)	Service	From	To
6026	6 5/8	5,565	Gas	Platform A Ship Shoal Area Block 135 Lease OCS-G 3164	Subsea tie-in with 26" pipeline Ship Shoal Area Block 135 Lease OCS-G 3164

The pipelines and header are protected from overpressure by pressure safety high (PSH) sensors. The PSV's located on the pipelines and header are not a required safety device and their removal meets with applicable regulations. Therefore, we give consent to ANR's request to remove PSV's on the departing pipelines and header.

for John D. Borne

cc: Lease OCS-G 2619 Platform No. 1 w/ltr (FO-4)
Lease OCS-G 1520 Platform A w/cy ltr (FO-4)
Lease OCS-G 1522 Platform A w/cy ltr (FO-4)
Lease OCS-G 1523 Platform A w/cy ltr (FO-4)
OCS 0829 Platform A w/cy ltr (FO-4)

Lease OCS-G 2923 Platform A w/cy ltr (FO-4)
Lease OCS-G 1042 Platform A w/cy ltr (FO-4)
Lease OCS 072 Platform A w/cy ltr (FO-4)
Lease OCS-G 3589 Platform A w/cy ltr (FO-4)
Lease OCS-G 2619 Platform A w/cy ltr (FO-4)
Lease OCS-G 3164 Platform A w/cy ltr (FO-4)
1104-02 (FO-4)
Lease OCS-G 2619 w/cy ltr (OPS-3-2)
Lease OCS-G 1520 w/cy ltr (OPS-3-2)
Lease OCS-G 1522 w/cy ltr (OPS-3-2)
Lease OCS-G 1523 w/cy ltr (OPS-3-2)
Lease OCS 0829 w/cy ltr (OPS-3-2)
Lease OCS-G 2923 w/cy ltr (OPS-3-2)
Lease OCS-G 1042 w/cy ltr (OPS-3-2)
Lease OCS 072 w/cy ltr (OPS-3-2)
Lease OCS-G 3589 w/cy ltr (OPS-3-2)
Lease OCS-G 3164 w/cy ltr (OPS-3-2)

JDBrock:bb/DiscII/43

Williams
11-18-86

UNITED STATES GOVERNMENT
MEMORANDUM

November 19, 1986

To: District Supervisor, Houma District, Gulf of Mexico OCS Region (FO-4) (Attention: Mr. James Brock)

From: Supervisor, Platform/Pipeline Unit, Plans, Platform, and Pipeline Section, Field Operations, Gulf of Mexico OCS Region (FO-2-2)

Subject: Departure Request

Transmitted herewith, for your review is a copy of ANR Pipeline Company's letter of October 17, 1986, requesting departures from the requirements of OCS Order No. 9. Specifically, ANR Pipeline Company requests approval to remove relief devices from their facilities on the following pipelines:

Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
3988 (OCS-G 1693-J)	6 5/8	21,820	Gas	Platform 1 Ship Shoal Area Block 115 Lease OCS-G 2619	Platform 1 Ship Shoal Area Block 139 Unleased
2313 (OCS-G 1687-B)	12 3/4	3,324	Gas/Oil	Platform A Ship Shoal Area Block 204 Lease OCS-G 1520	Subsea tie-in with 24" pipeline Ship Shoal Area Block 204 Lease OCS-G 1520
2314 (OCS-G 1687-E)	6 5/8	5,578	Gas	Platform A Ship Shoal Area Block 206 Lease OCS-G 1522	Platform A Ship Shoal Area Block 207 Lease OCS-G 1523
2315 (OCS-G 1687)	24	167,694	Gas	Platform A Ship Shoal Area Block 207 Lease OCS-G 1523	Platform A Eugene Island Area Block 188 Lease OCS 0443
2316 (OCS-G 1687-I)	12 3/4	8,666	Gas	Platform A Ship Shoal Area Block 219 Lease OCS 0829	Platform A Ship Shoal Area Block 204 Lease OCS-G 1520
5100 (OCS-G 3654)	10 3/4	86,501	Gas	Platform A Ship Shoal Area Block 291 Lease OCS-G 2923	Subsea tie-in with 12" pipeline Ship Shoal Area Block 219 Lease OCS 0829

Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
4873 (OCS-G 3641)	6 5/8	17,612	Gas	Platform A Ship Shoal Area Block 292 Lease OCS-G 1042	Platform A Ship Shoal Area Block 291 Lease OCS-G 2923
6288	8 5/8	565	Gas	Platform A South Pelto Area Block 012 Lease OCS 0072	Subsea tie-in with 8" pipeline South Pelto Area Block 012 Lease OCS 0072
6286	8 5/8	22,613	Gas	Platform A South Pelto Area Block 18 Lease OCS-G 3589	Subsea tie-in with 20" pipeline South Pelto Area Block 13 Lease OCS-G 3171
5325 (OCS-G 3922)	6 5/8	4,597	Gas	Platform B Ship Shoal Area Block 115 Lease OCS-G 2619	Platform A Ship Shoal Area Block 115 Lease OCS-G 2619

Your final action is requested for approval to remove the relief valve located on the header upstream of the following pipeline.

Pipeline Segment No.	Size (inches)	Length (feet)	Service	From	To
6026	6 5/8	5,565	Gas	Platform A Ship Shoal Area Block 135 Lease OCS-G 3164	Subsea tie-in with 26" pipeline Ship Shoal Area Block 135 Lease OCS-G 3164

Robert F. Kelly

cc: 1502-01 ANR Pipeline Company (Seg. No. 6026) (FO-2-2)

CWilliams:mcs:LEXITYPE Disk 1

UNITE. TATES DEPARTMENT OF TH NTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO REGION
IMPERIAL OFFICE BLDG., 3301 N. CAUSEWAY BLVD.
P. O. BOX 7944
METAIRIE, LOUISIANA 70010

504-837-4720

SN 4823

In Reply Refer To: LE-3-1
N. O. Misc. No. 160

October 9, 1984

ACTION

ANR PIPELINE COMPANY

Right-of-Way

CHANGE OF NAME RECOGNIZED

On October 4, 1984, there was filed in this office evidence of change of name from Michigan Wisconsin Pipe Line Company to ANR PIPELINE COMPANY, effective January 1, 1984.

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

1. Certificate duly executed by Lewis R. Hellman, Secretary of ANR PIPELINE COMPANY on March 8, 1984, reflecting the following:

   A. Officers listed therein are empowered to execute for and on behalf of the company;

   B. Attached thereto are true and correct copies of the Certificate of Amendment of Certificate of Incorporation including the Certificate of the Secretary of State of the State of Delaware;

   C. ANR PIPELINE COMPANY is incorporated under the laws of the State of Delaware;

   D. ANR PIPELINE COMPANY is authorized to hold mineral leases and/or rights-of-way on the Outer Continental Shelf;

2. Copy of a resolution unanimously adopted by Consent Action of the Board of Directors of ANR PIPELINE COMPANY as of September 25, 1984, duly certified by Lewis R. Hellman, Secretary of the corporation, on October 3, 1984;

3. Bond Rider to be attached to and form a part of Outer Continental Shelf Right-of-Way Grant Bond Number U 76 88 93 changing the name of the principal from Michigan Wisconsin Pipe Line Company to ANR PIPELINE COMPANY, effective January 1, 1984;

b3641

4. Listing of the pipeline rights-of-way to be affected by the change of name.

In view of the evidence submitted, the change of ownership as to the pipeline rights-of-way listed below is recognized and the records so noted:

OCS-G NO.	OCS-G NO.	OCS-G NO.
1503	3353	4023
1503-A	3367	4033
1503-B	3371	4052
1505	3427	4053
1687	3428	4054
1687-A	3429	4151
1687-B	3453	4157
1687-D	3456	4159
1687-E	3457	4167
1687-I	3623	4168
1687-K	3625	4272
1687-M	3641	4278
1693-J	3642	4279
1905	3653	4280
1907-AA	3654	4293
2124	3847	4312
2124-A	3859	4621
2124-B	3922	5138
2124-D	3923	5155
2124-E	4014	5266

John L. Rankin
Regional Director

cc:
Lessee/Grantee and Associates
Case Files
N. O. Misc. No. 160

SN 4873

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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

IN REPLY REFER TO

OCS-G 3641

Ship Shoal Area,
South Addition

October 17, 1979

OCT 2 3 1979

DECISION

Michigan Wisconsin Pipe Line Company	:	Right of Way for Pipe Line
	:	Date of Permit: 2/23/78
	:	Decision Requesting Proof of Construction Dated:
	:	Proof of Construction Received: 9/27/79

Proof of Construction Accepted

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

John L. Rankin
Manager

CC: U. S. Geological Survey
(w/dwgs. and reports)

NOTED—MC INTOSH

Ford, Bacon & Davis
Construction Corporation

TELEPHONE 318/388-1530

ENGINEERS – CONSTRUCTORS

TWX: 510-977-5395

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

September 24, 1979

H-2502B
MW-OS-3.2

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

Dear Mr. Rankin:

OCS-G-3641
Block 291 to Block 292
Ship Shoal Area

In accordance with the requirements contained in the above referenced decision, we have enclosed three (3) copies of the as-built drawings indicating the route of the 6-5/8-inch pipeline. This routing is shown on drawings O-22E as trunk number 612-32. In addition to the as-built maps we have enclosed three (3) copies of the hydrostatic test reports for the line pipe and related facilities. This work was completed in October of 1978.

All requirements of the individual leaseholders have been met. Should you require additional data concerning this project, please contact our office to the attention of the writer.

Very truly yours,

W. K. Peaker
Project Manager - Offshore

crn
Enclosure

cc: Mr. Walter Dunn
Ms. Alta B. Lawn

PRESSURE TEST REPORT

AMERICAN NATURAL SERVICE COMP

BEST AVAILABLE COPY

[X] Michigan Wisconsin Pipe Line Company
[ ] Michigan Consolidated Gas Company
[ ] Great Lakes Gas Transmission Company

Report No. 78-22-1

Sheet 1 Of 2

RECEIVED SEP 26 11 26 AM '78 BUREAU OF LAND MGMT. OUTER CONTINENTAL SHELF NEW ORLEANS, LA.

Project Name: Ship Shoal Blk. 291A to 292 and 291A to 219 Design Pressure: 1300 PSIG

State: Offshore, Louisiana County: Outer Continental Shelf

Job No.: H-2159-B Work Order No.: 4497 and 4498

Construction Contractor: Brown and Root, Inc.

Testing Contractor: Brown and Root, Inc.

Test Medium: [X] Water [ ] Gas [ ] Air [ ] Other ______

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. ______ Station ______ + ______ to M.P. ______ Station ______ + ______

Pipe Specifications: ______ "O.D. X ______ "W.T. Grade ______ Manuf. ______

Gauge Point Pressure: Maximum ______ PSIG, Minimum ______ PSIG

Gauge Point Elevation: ______ Ft. Station ______ + ______

Low Point Pressure: ______ PSIG Elevation: ______ Ft.

High Point Pressure: ______ PSIG Elevation: ______ Ft.

Drawing No.

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 2600 PSIG, Minimum: 2470 PSIG

Description of Assembly—Including Related Drawing Numbers: Drawing #AL-PL-01-88, 8" Tap Connection in Ship Shoal Block 219A; M(LA)DP 903, 10" Riser Assembly for Placid Oil Co. Platform 291A, Ship Shoal Blk.291

M(LA)DP-901, 6" Riser Assembly for Placid Oil Co. Platform 291A, Ship Shoal Block 291

M(LA)DN-901, 6" Riser Assembly for Amoco Platform 292A, Ship Shoal Block 292

TESTING EQUIPMENT

Pressure Pump: Make: N/A Serial No.: 6610 Capacity: ______ Gals/Stroke

Deadweight Gauge: Make: Chandler Serial No.: 9249

Pressure Recorder: Make: Foxboro Serial No.: 242A-1073

Temperature Recorder: Make: Foxboro Serial No.: 265A-2032

EADWEIGHT READINGS (PSIG)

BEST AVAILABLE COPY

Date Test On 8/30/78 | Date Test Off

ME P.M.	PRESSURE PSIG	TEMP °F AMB. | PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. | PIPE	REMARKS
1445 HR	2600	76 | 93	Begin Test	2300 Hr	2500	71 | 90	
1500 HR	2600	76 | 93	2580 PSIG	2345 HR	2490	71 | 90	* 2600 PSIG
1530 HR	2592	78 | 94		2400 HR	2584	71 | 88	8/30/78 Midnight
1540 HR	2600	78 | 94	2555 PSIG	0100 HR	2540	70 | 87	8/31/78 a.m.
1600 HR	2581	78 | 96		0200 HR	2500	69 | 86	
1625 HR	2600	78 | 95	2555 PSIG	0212 HR	2485	70 | 86	* 2600 PSIG
1700 HR	2600	79 | 96	2560 PSIG	0300 HR	2575	70 | 86	
1730 HR	2593	78 | 96		0400 HR	2532	70 | 86	
1740 HR	2600	78 | 97	2580 PSIG	0500 HR	2486	70 | 85	* 2600 PSIG
1800 HR	2590	78 | 96		0600 HR	2590	69 | 85	
1830 HR	2580	78 | 96		0700 HR	2555	69 | 85	
1900 HR	2510	76 | 94		0800 HR	2564	75 | 87	
1935 HR	2500	75 | 92	* 2600 PSIG	0850 HR	2600	83 | 90	2550 PSIG
2000 HR	2580	75 | 92		0900 HR	2560	84 | 91	
2100 HR	2500	74 | 90		0935 HR	2600	90 | 92	2550 PSIG
2138 HR	2490	73 | 90	* 2600 PSIG	1005 HR	2600	90 | 94	2550 PSIG
2200 HR	2565	72 | 90		1035 HR	2600	96 | 95	2550 PSIG

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: 1935 HRS - Air lock in pressure hose

BROWN & ROOT, INC.
P.O. BOX 425
HARVEY, LA. 70058
W.R. Tucker
OFFSHORE MGR.

Weather Conditions: Clear to Party Cloudy and Warm

Test Witness (Company Representative): Roy Mullins Date: 8/31/78

Contractor Representative: R Sowers Date: 10/30/78

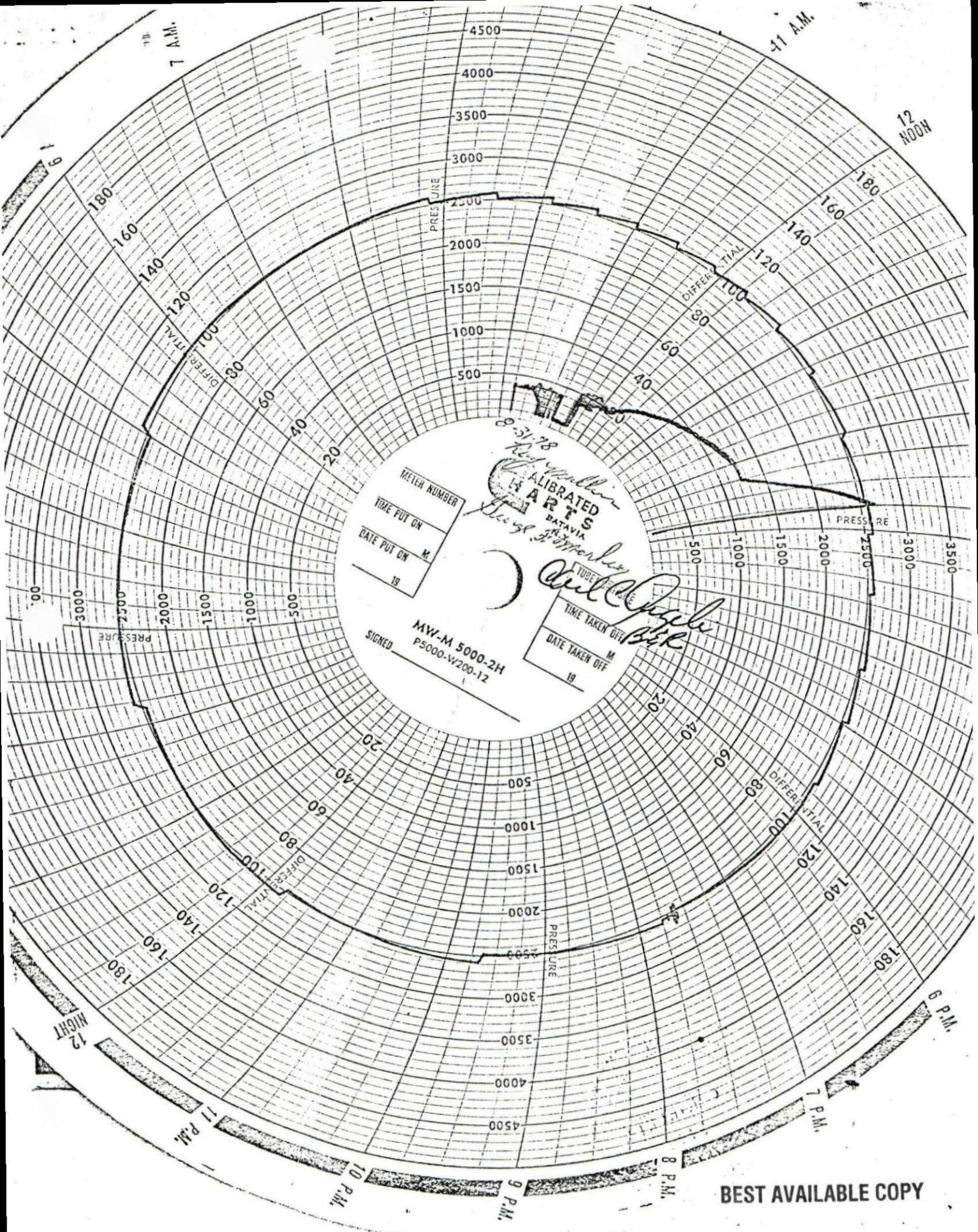
Reviewed by: Scott Davis Scott Davis JB&D. Date: 10/20/78

Approved by: W. R. Tucker Date: 10-20-78

DEADWEIGHT READINGS (

Date Test On 8/30/78 | Date Test Off 8/31/78

TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB.	TEMP °F PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB.	TEMP. °F PIPE	REMARKS
1100 HR	2600	95	95	2550 PSIG					
1130 HR	2600	98	98	2550 PSIG					
1158 HR	2600	102	100	2550 PSIG					
1228 HR	2600	100	101	2550 PSIG					
1245 HR	2600	101	99	2550 PSIG					
1320 HR	2600	102	98	2550 PSIG					
1400 HR	2600	102	96	2550 PSIG					
1445 HR	2600	102	96	End Test					



BEST AVAILABLE COPY

PRESSURE TEST REPORT

AMERICAN NATURAL SERVICE COMPA

☒ Michigan Wisconsin Pipe Line Company
☐ Michigan Consolidated Gas Company
☐ Great Lakes Gas Transmission Company

BEST AVAILABLE COPY

Report No. 78-22-2

Sheet 1 of 2

Project Name: Ship Shoal Blk. 291A to 292 and 291A to 219 Design Pressure: 1300 PSIG

State: Offshore Louisiana County: Outer Continental Shelf

Job No.: H-2159-B Work Order No.: 4497 and 4498

Construction Contractor: Brown and Root, Inc.

Testing Contractor: Brown and Root, Inc.

Test Medium: ☒ Water ☐ Gas ☐ Air ☐ Other _____

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. _____ Station _____ + _____ to M.P. _____ Station _____ + _____

Pipe Specifications: _____ "O.D. X _____ "W.T. Grade _____ Manuf. _____

Gauge Point Pressure: Maximum _____ PSIG, Minimum _____ PSIG

Gauge Point Elevation: _____ Ft. Station _____ + _____

Low Point Pressure: _____ PSIG Elevation: _____ Ft.

High Point Pressure: _____ PSIG Elevation: _____ Ft.

Drawing No.

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 2600 PSIG, Minimum: 2470 PSIG

Description of Assembly—Including Related Drawing Numbers:

Drawing #M(LA)DP-902, Sheet 1 & 2 of 3, Deck Piping, Meter Runs and Assembly Piping Blk. 291

Drawing #M(LA)DP-903, Sheet 1 of 2 from Riser Elevation +7.6' up Blk. 291

Drawing #M(LA)DP-901, Sheet 1 of 2 from Riser Elevation +7.6' up, Blk. 292

Drawing #M(LA)DN-902 Sheet 1 of 1, M(LA)DN-903 Sheet 2 of 2 Extra Piping for Block 292A

TESTING EQUIPMENT

Pressure Pump: Make: Udell Serial No.: B & R # 001 Capacity: .033 Gals/Stroke

Deadweight Gauge: Make: Chandler Serial No.: B & R # 002

Pressure Recorder: Make: Barton Serial No.: 242 A 1073

Temperature Recorder: Make: Barton Serial No.: 265 A2032

DEADWEIGHT READINGS (PSIG)

Date Test On 9/22/78 | Date Test Off 9/23/78

TIME P.M.	PRESSURE PSIG	TEMP °F AMB. | PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. | PIPE	REMARKS
0740 HR		|	STARTED PRESSURING	1130 HR	2560	80 | 92	
0755 HR	2490	78 | 84		1200 HR	2530	77 | 89	Noon
0815 HR	2520	78 | 84		1230 HR	2519	78 | 88	
0830 HR	2540	78 | 86		1243 HR	2600	82 | 92	2500 PSIG
0845 HR	2560	79 | 87		1300 HR	2574	84 | 94	
0855 HR	2600	79 | 87	2455 PSIG	1308 HR	2600	84 | 95	2500 PSIG
* 0900 HR	2470	80 | 87	TEST STARTED	1325 HR	2600	85 | 96	2500 PSIG
0915 HR	2502	80 | 87		1350 HR	2600	85 | 96	2500 PSIG
0930 HR	2540	80 | 88		1415 HR	2600	85 | 97	2500 PSIG
0945 HR	2600	80 | 89	2550 PSIG	1430 HR	2542	86 | 97	
1000 HR	2569	78 | 88		1450 HR	2600	86 | 97	2500 PSIG
1015 HR	2582	79 | 88		1500 HR	2520	86 | 97	
1022 HR	2600	78 | 89	2550 PSIG	1530 HR	2590	86 | 98	
1030 HR	2569	79 | 90		1600 HR	2595	85 | 96	
1039 HR	2600	80 | 90	2520 PSIG	1605 HR	2600	85 | 96	2555 PSIG
1100 HR	2560	81 | 91		1625 HR	2480	82 | 94	* 2600 PSIG
1120 HR	2600	81 | 92	2550 PSIG	1700 HR	2530	83 | 94'	

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: At 0900 Hrs. test had to be restarted because testing technician bled pressure to below minimum requirements and had to repressure.

BROWN & ROOT, INC.
P.O. BOX 425
HARVEY, LA. 70058
OFFSHORE MGR

Weather Conditions: Clear and hot to cloudy and rain

Witness (Company Representative): George F. Black Date: 9/23/78

Contractor Representative: R. Savery Date: 10/30/78

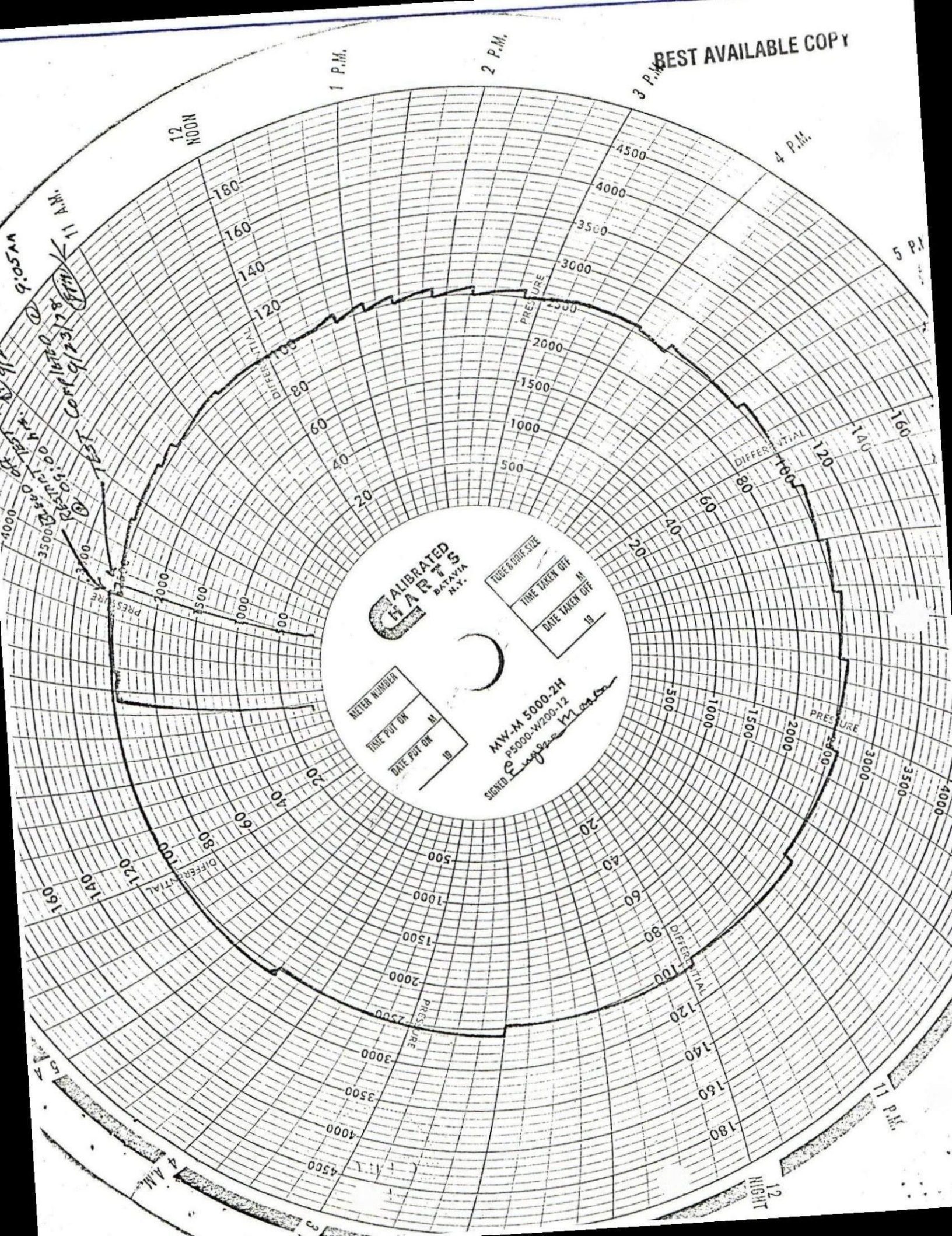
Reviewed by: Scott Davis Scott Davis FB+D Date: 10/20/78

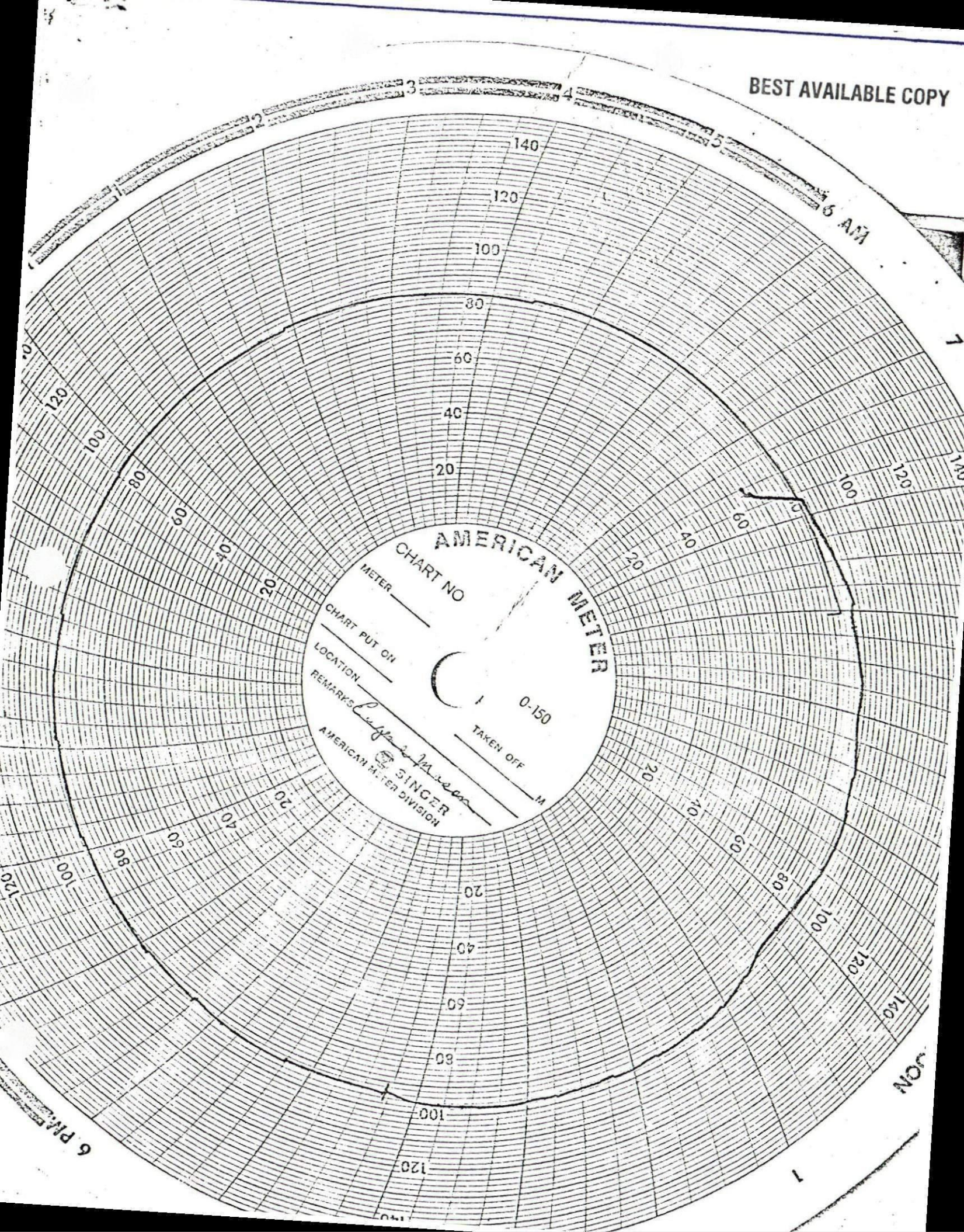
Approved by: D. R. Seaton Date: 10-20-78

DEADWEIGHT READINGS (P[illegible]G)

Date Test On 9/22/78 | Date Test Off 9/23/78

TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB.	PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB.	PIPE	REMARKS
1722 HR	2500	82	94	* 2600 PSIG	0600 HR	2560	72	82	
1800 HR	2543	83	93		0630 HR	2537	72	82	
1823 HR	2490	82	92	* 2600 PSIG	0700 HR	2520	72	81	
1900 HR	2490	80	91	* 2600 PSIG	0730 HR	2510	72	81	
1930 HR	2495	79	90	* 2600 PSIG	0800 HR	2515	72	81	
2000 HR	2541	79	89		0830 HR	2521	72	82	
2015 HR	2490	78	89	* 2600 PSIG	0900 HR	2550	73	83	
2030 HR	2574	77	88		0905 HR	2550	73	83	End Test
2100 HR	2510	77	88						
2110 HR	2490	77	88	* 2600 PSIG					
2130 HR	2580	76	88						
2200 HR	2530	76	87						
2225 HR	2490	76	86	* 2600 PSIG					
2300 HR	2580	75	86						
2330 HR	2535	75	86						
2352	2490	75	86	* 2600 PSIG					
2400 HR	2590	75	86	Midnight					
0030 HR	2555	75	86						
0100 HR	2525	75	86						
0130 HR	2502	75	86						
0200 HR	2480	75	85	* 2600 PSIG					
0230 HR	2578	75	85						
0300 HR	2552	75	84						
0330 HR	2530	75	84						
0400 HR	2505	73	83						
0430 HR	2480	73	83	* 2600 PSIG					
0500 HR	2592	73	83						
0530 HR	2576	72	82						





PRESSURE TEST REPORT

AMERICAN NATURAL SERVICE COMPANY

☒ Michigan Wisconsin Pipe Line Company
☐ Michigan Consolidated Gas Company
☐ Great Lakes Gas Transmission Company

Report No. 78-22-3

Sheet 1 Of 1

Project Name: 6" Pipeline Ship Shoal 291 to 292 Design Pressure: 1300 PSIG

State: Offshore, Louisiana County: Outer Continental Shelf

Job No.: H-2159-B Work Order No.: 4497

Construction Contractor: Brown and Root Incorporated

Testing Contractor: Halliburton Services

Test Medium: ☒ Water ☐ Gas ☐ Air ☐ Other

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. 0.00 Station 0 + 00 to M.P. 3.33 Station 175 + 70

Pipe Specifications: 6 5/8" "O.D. X 0.280 "W.T. Grade B Manuf.

Gauge Point Pressure: Maximum 2600 PSIG, Minimum 2595 PSIG

Gauge Point Elevation: 0.00 Ft. Station 176 + 12

Low Point Pressure: 2600 PSIG Elevation: +0.00 MLG Ft.

High Point Pressure: 2580 PSIG Elevation: +47 MLG Ft.

Drawing No. PH-612-32-1

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum PSIG, Minimum: PSIG

Description of Assembly—Including Related Drawing Numbers:

TESTING EQUIPMENT

ressure Pump: Make: Kerr Serial No.: 105A Capacity: 0.0398 Gals/Stroke

Deadweight Gauge: Make: Chandler Serial No.: 9506

Pressure Recorder: Make: Foxboro Serial No.: 1830912

Temperature Recorder: Make: Hildebrandt Engineering Co. Serial No.: H-27

DEADWEIGHT READINGS (PSIG)

Date Test On 10/28/78 | Date Test Off 10/29/78

ME .M. P.M.	PRESSURE PSIG	TEMP. °F. AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. PIPE	REMARKS
0700 HR	2595	76 | 69	Start Test	2200 HR	2599	77 | 68	2594.2
0800 HR	2594	76 | 68		2300 HR	2596.5	77 | 67	
0900 HR	2593	76 | 68		2400	2597.5	77 | 67	
1000 HR	2592.5	76 | 68		0100	2598	77 | 68	
1100 HR	2592	76 | 68		0200	2599	76 | 67	
1200 HR	2592	76 | 69		0300	2599	76 | 66	
1300 HR	2592	76 | 69		0400	2599	76 | 66	
1400 HR	2590.2	76 | 69	* 2597	0500	2598.8	76 | 68	
1401 HR	2597	76 | 69		0600	2598.8	76 | 67	
1502 HR	2597	77 | 70		0700	2598.8	76 | 67	End Test
1530 HR	2596.5	77 | 70				|	
[illegible]0 HR	2596.5	77 | 70				|	
1700 HR	2596.5	80 | 70				|	
1800	2596.5	80 | 71				|	
1900	2597.5	78 | 69				|	
2000	2600	78 | 68	2595.5			|	
2100	2596.5	77 | 68				|	

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: ______________________

BEST AVAILABLE COPY

Weather Conditions: ______________________

Test Witness (Company Representative): Roy Mullins Date: 10/29/78

Contractor Representative: John C. DuBose, Jr. Date: 10/29/78

Reviewed by: Scott Davis *Scott Davis FB&D* Date: 4/16/79

Approved by: *[signature] Halliburton Services* Date: 4/27/79

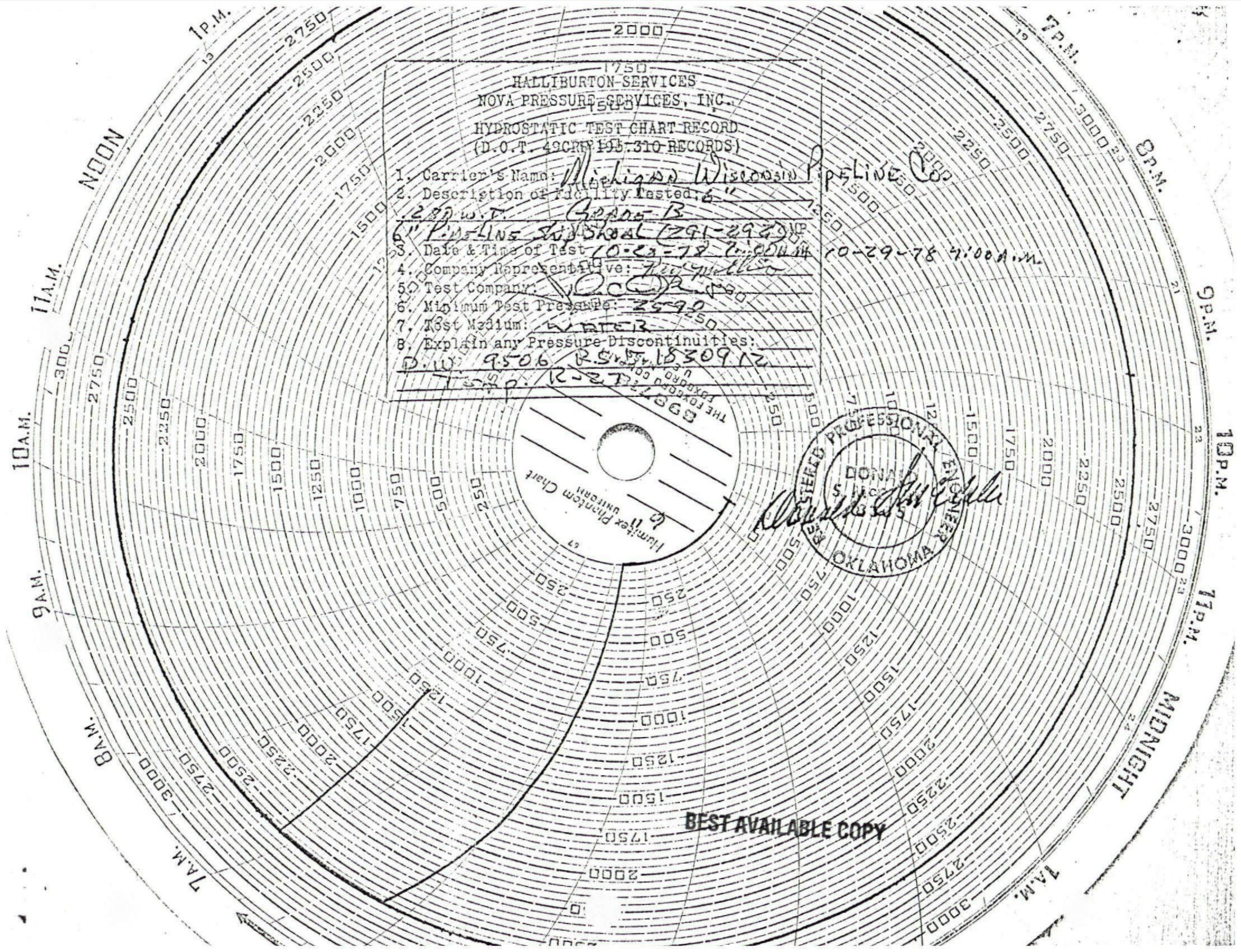
HALLIBURTON SERVICES
NOVA PRESSURE SERVICES, INC.

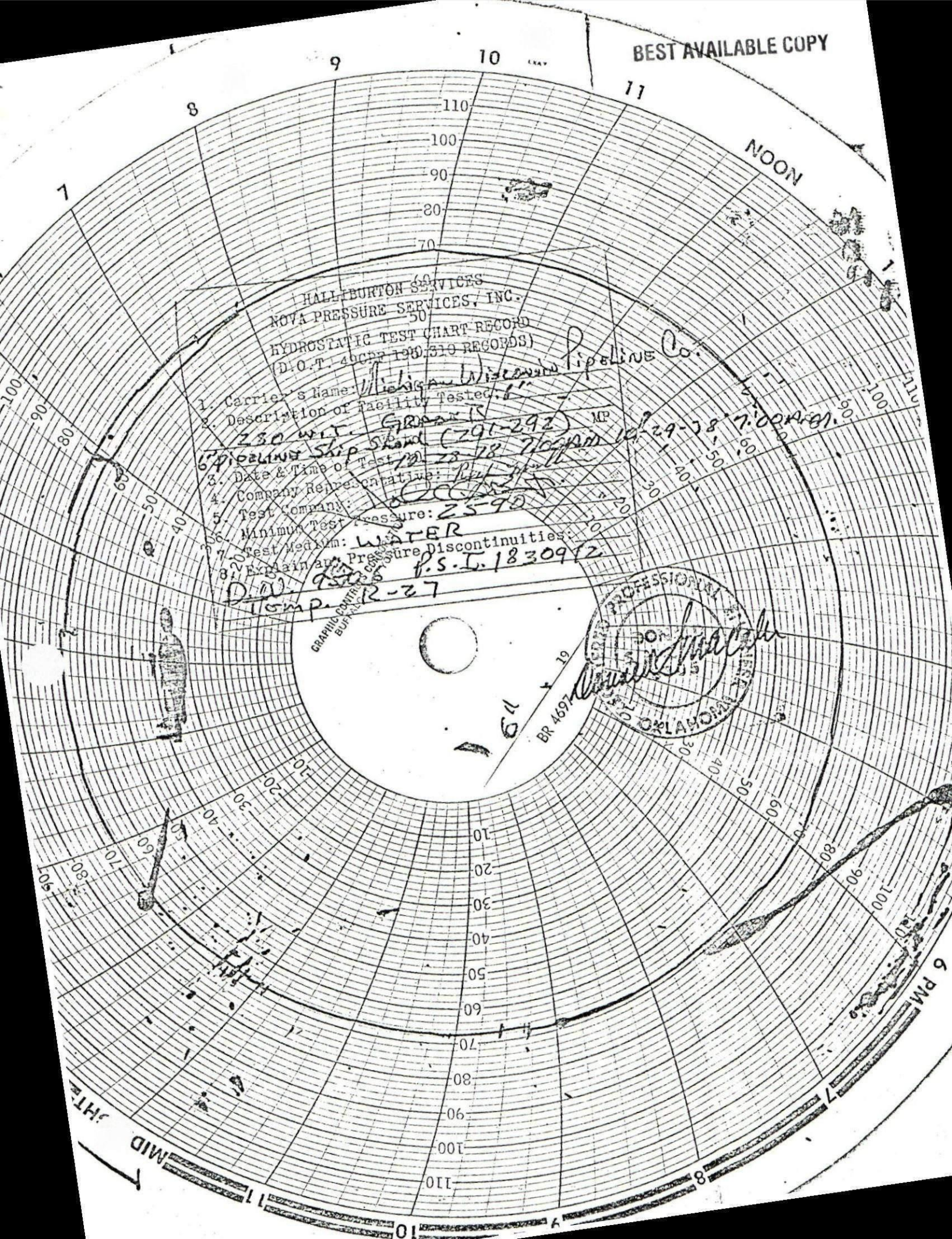
HYDROSTATIC TEST CHART RECORD
(D.O.T. 49CFR 195.310 RECORDS)

1. Carrier's Name: Michigan Wisconsin Pipeline Co
2. Description of Facility Tested: 6" .280 w.t. Grade B 6" Pipeline Sub Segment (291-292) MP
3. Date & Time of Test 10-28-78 7:00 A.M. 10-29-78 4:00 A.M.
4. Company Representative: Ted Miller
5. Test Company: HOC
6. Minimum Test Pressure: 2590
7. Test Medium: WATER
8. Explain any Pressure Discontinuities:
D.W. 9506 RSV 1830912
Temp. R-2 Pen 2989

THE FOXBORO CO. FOXBORO, MASS. U.S.A.
6" Hi-Ex Flipton Chart UNICHAM

REGISTERED PROFESSIONAL ENGINEER
DONALD
STATE OF OKLAHOMA


HALLIBURTON-SERVICES
NOVA PRESSURE SERVICES, INC.
HYDROSTATIC TEST CHART RECORD
(D.O.T. 49CFR 195.310 RECORDS)
1. Carrier's Name: Michigan Wisconsin Pipeline Co.
2. Description of Facility Tested: 6"
.280 w.T. Grade B
6" Pipeline
3. Date & Time of Test 10-28-78 10-29-78 7:00 A.M.
4. Company Representative:
5. Test Company:
6. Minimum Test Pressure: 2592
7. Test Medium: WATER
8. Explain any Pressure Discontinuities:
D.W. 9506
THE FOXBORO CO.
Humitex Phantom Chart
PROFESSIONAL ENGINEER
OKLAHOMA
NOON
1 P.M.
7 P.M.
8 P.M.
9 P.M.
10 P.M.
11 P.M.
MIDNIGHT
1 A.M.
7 A.M.
8 A.M.
9 A.M.
10 A.M.
11 A.M.
BEST AVAILABLE COPY



PRESSURE TEST REPORT

AMERICAN NATURAL SERVICE COMPANY

OCS-G 3654 a/3

☒ Michigan Wisconsin Pipe Line Company
☐ Michigan Consolidated Gas Company
☐ Great Lakes Gas Transmission Company

Report No. 78-22-4

Sheet _____ Of _____

Project Name: 10" Pipeline Ship Shoal 291 to 219 Design Pressure: 1300 PSIG

State: Offshore, Louisiana County: Outer Continental Shelf

Job No.: H-2159-B Work Order No.: 4497

Construction Contractor: Brown and Root, Inc.

Testing Contractor: Halliburton Services

Test Medium: ☒ Water ☐ Gas ☐ Air ☐ Other _____

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. 0.00 Station 0 + 00 to M.P. 16.34 Station 862 + 85

Pipe Specifications: 10 3/4" "O.D. X 0.308 "W.T. Grade B Manuf. _____

Gauge Point Pressure: Maximum 1900 PSIG, Minimum 1895 PSIG

Gauge Point Elevation: + 10 Ft. Station 0 + 00

Low Point Pressure: 1905 PSIG Elevation: 0.00 MLG Ft.

High Point Pressure: 1886 PSIG Elevation: +44 MLG Ft.

Drawing No.

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum _____ PSIG, Minimum: _____ PSIG

Description of Assembly—Including Related Drawing Numbers: _____

TESTING EQUIPMENT

Pressure Pump: Make: Wheatley Quintuplex Serial No.: PI 8656 Capacity: 0.238 Gals/Stroke

Deadweight Gauge: Make: Chandler Serial No.: 9121

Pressure Recorder: Make: Foxboro Serial No.: 2566152

Temperature Recorder: Make: Hildebrandt Engineering Co. Serial No.: F-744

DEADWEIGHT READINGS (PSIG)

Date Test On 10/28/79 | Date Test Off 10/29/79

TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB.	PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB.	PIPE	REMARKS
0530	1900	76	70		1900	1898.7	78	72	
0600	1899	76	70		2000	1898.7	77	72	
0700	1897	71	76		2100	1898	77	71	
0800	1896	76	71		2200	1897.5	77	71	
0900	1895	76	71	* 1900	2300	1897.5	77	71	
0905	1900	76	71		2400	1897.4	77	71	
1000	1900	76	71		0100	1896.5	77	71	
1100	1899	76	72		0200	1896.5	76	70	
1200	1898	76	72		0300	1896.3	76	70	
1300	1897	76	72		0400	1896	76	70	
1400	1896.1	76	73	* 1902	0430	1896	76	70	
5	1902	77	73		0530	1895	76	69	* 1900 End Test
1500	1902	77	73		0600	1900	76	70	
1530	1901.5	77	73		0700	1900	76	71	
1600	1900.7	77	73		0800	1900	76	71	
1700	1900	80	73		0830	1900	76	71	
1800	1899	80	72		0845	1900	76	71	

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: _____

Weather Conditions: _____

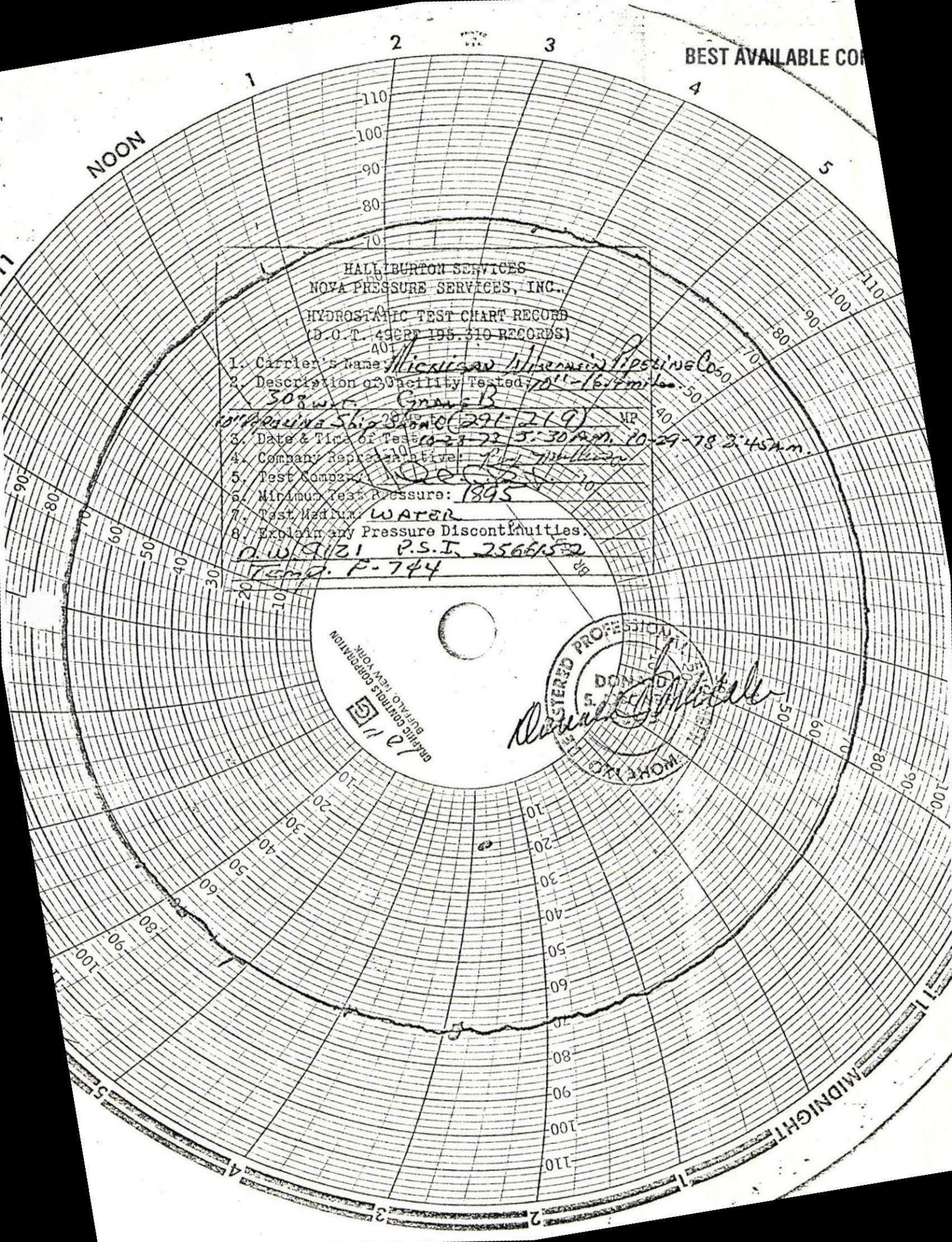
Test Witness (Company Representative): Roy Mullins Date: 10/29/78

Contractor Representative: John C. DuBose, Jr. Date: 10/29/78

Reviewed by: Scott Davis Scott Davis F.B.&D Date: 4/17/79

Approved by: Daniel McCall Halliburton Services Date: 4/23/79


HALLIBURTON SERVICES
NOVA PRESSURE SERVICES, INC.
HYDROSTATIC TEST CHART RECORD
(D.O.T. 49CFR 195.310 RECORDS)
1. Carrier's Name: Mid-Continent Pipeline Co
2. Description of Facility Tested: 10" 6.2 miles 30 Sml. T. B grade
Cor. Pipeline Spstm. (291-619) MOP 1250
3. Date & Time of Test: 10-25-78 5:30 P.M. to 10-29-78 7:45 A.M.
4. Company Representative: Ed Gentry
5. Test Company: OSCO
6. Minimum Test Pressure: 1895
7. Test Medium: WATER
8. Explain any Pressure Discontinuities:
P.S.I. 25-6152 Dum. D.W. 9.1
Temp. F-744
Phantom Chart
89871B
THE FOXBORO COMPANY
FOXBORO, MASS.
U.S.A.
REGISTERED PROFESSIONAL ENGINEER
DONALD W. OTTINGER
OKLAHOMA
BEST AVAILABLE



HALLIBURTON SERVICES
NOVA PRESSURE SERVICES, INC.

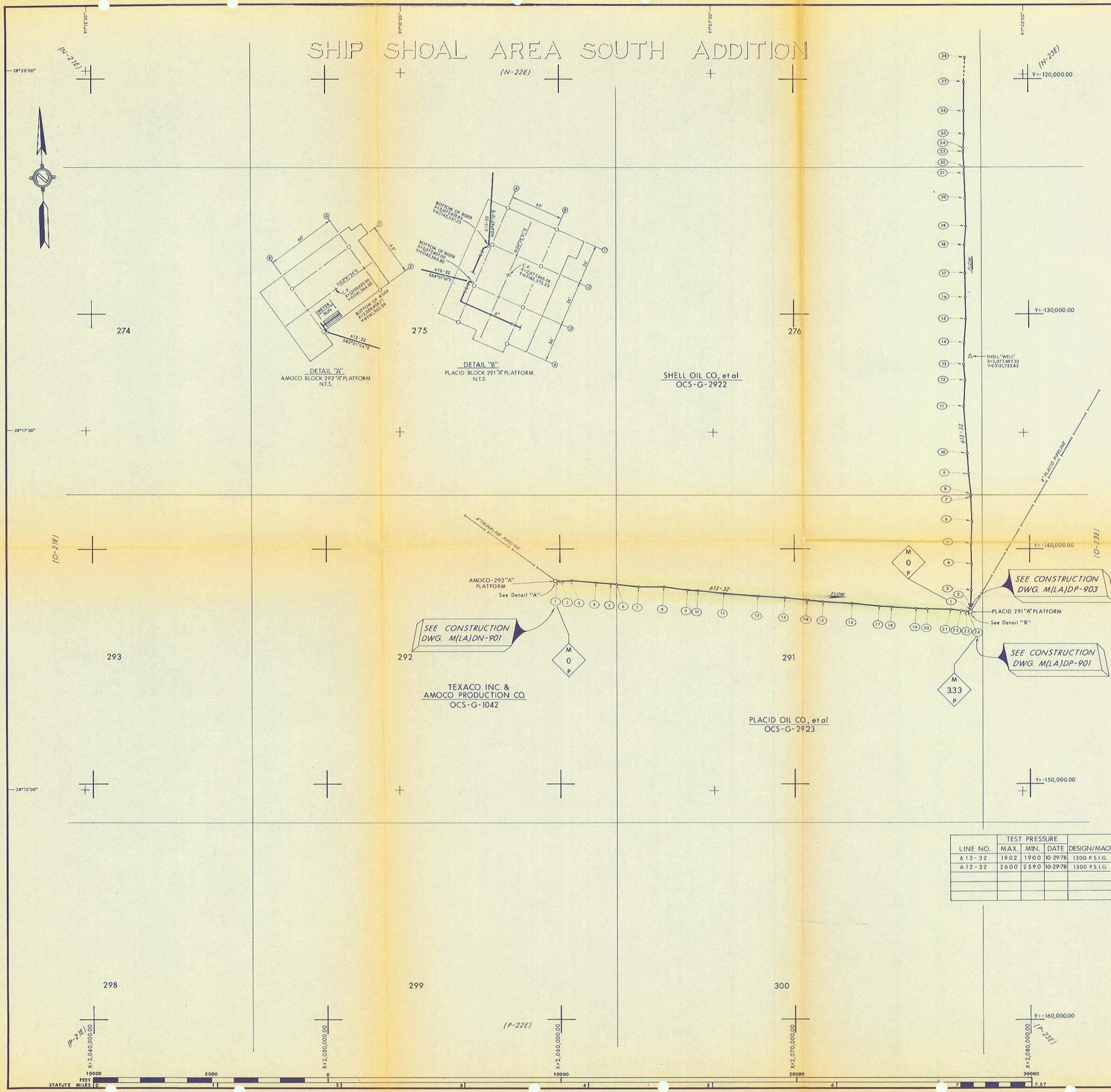
HYDROSTATIC TEST CHART RECORD
(D.O.T. 49CFR 195.310 RECORDS)

1. Carrier's Name: Michigan Wisconsin Pipeline Co
2. Description of Facility Tested: 20"-16.7 mile 508 w.c. Gnan-B
20" Aguina-Sabinal (291-219) MP
3. Date & Time of Test: 10-28-78 5:30 P.M. 10-29-78 3:45 A.M.
4. Company Representative: [illegible]
5. Test Company: N.P.S.
6. Minimum Test Pressure: 1895
7. Test Medium: WATER
8. Explain any Pressure Discontinuities:
O.W.O. #121 P.S.I. 2566/52
Temp. F-744

GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
11 27

REGISTERED PROFESSIONAL ENGINEER
S. DONALD [illegible]

SHIP SHOAL AREA SOUTH ADDITION



LINE NO.	TEST PRESSURE MAX.	MIN.	DATE	DESIGN/MAOP
613-32	1902	1900	10-29-78	1300 P.S.I.G.
612-32	2600	2590	10-29-78	1300 P.S.I.G.

TRAVERSE DATA / MATERIAL SUMMARY

POINT	STATION	BEARING	X	Y	REMARKS	W/D COVER	DESCRIPTION	QUANTITY
613-32, 10" MICH. WISC. BLOCK 219 TO BLOCK 291								
1	0+00	N04°47'12"E	2,077,419.85	-142,537.53	℄ Ell. at Bottom of Riser	233'/7'	See Const Dwg. M(LA)DP-903	
2	0+15	N04°48'41"E	2,077,421.06	-142,523.08	TRANSITION BEGIN ANODES ON 937.4'℄	233'/7'		
3	8+76	N00°22'15"E	2,077,493.32	-141,664.59		232'/0'	Pipe, Line, 10 3/4" O.D.×0.308" W.T., API-5L-Gr."B",	22,420 L.F.
4	20+09	N01°04'10"W	2,077,500.65	-140,532.11		230'/0'	American Steel, 5/32" Asphalt Enamel & 1.5"	
5	28+59	N03°16'07"E	2,077,484.79	-139,682.52		228'/0'	Continuous Concrete Coating (140#/Cu. Ft.)	
6	38+35	N02°10'03"W	2,077,540.46	-138,707.77		226'/0'	260# Zinc Anodes	24 Ea.
7	48+21	N05°38'40"W	2,077,503.21	-137,723.58		225'/0'		
8	48+67	N05°38'40"W	2,077,498.63	-137,677.24	S/L 276	225'/0'		
9	58+32	N03°46'57"W	2,077,403.79	-136,717.66		223'/0'		
10	67+05	N04°16'07"W	2,077,346.17	-135,846.12		221'/0'		
11	87+02	N03°06'49"E	2,077,197.60	-133,855.65		218'/0'		
12	98+09	N04°29'01"W	2,077,257.73	-132,750.27		216'/0'		
13	105+02	N01°55'08"E	2,077,203.55	-132,059.32		215'/0'		
14	114+19	N04°00'31"E	2,077,234.26	-131,142.72		214'/0'		
15	124+31	N01°02'32"W	2,077,304.97	-130,133.70		212'/0'		
16	133+47	N00°05'52"W	2,077,288.32	-129,218.50		211'/0'		
17	143+54	N01°40'43"W	2,077,286.60	-128,211.15		210'/0'		
18	155+45	N04°58'18"E	2,077,251.73	-127,021.30		207'/0'		
19	163+24	N01°57'58"W	2,077,319.24	-126,245.23		206'/0'		
20	175+10	N02°11'35"W	2,077,278.57	-125,060.57		204'/0'		
21	185+81	N02°18'32"W	2,077,237.61	-123,990.99		202'/0'		
22	188+56	N02°18'28"W	2,077,226.51	-123,715.70	S/L 267	201'/0'		
23	194+85	N02°37'58"E	2,077,201.20	-123,087.66		200'/3'		
24	196+31	N02°38'09"E	2,077,207.91	-122,941.96	200' Contour	200'/3'		
25	202+74	N00°51'21"E	2077237.48	-122,299.63		199'/3'		
26	212+28	N00°03'29"E	2,077,251.73	-121,345.63		198'/3'		
27	224+35		2,077,252.95	-120,140.03	Match Point	195'/3'		
612-32, 6" MICH. WISC. BLOCK 291 TO BLOCK 292								
1	0+00	S83°01'04"E	2,059,908.71	-141,345.59	℄ Ell. at Bottom of Riser	236'/8'	See Const. Dwg. M(LA)DN-901	
2	0+23	S83°00'39"E	2,059,931.41	-141,348.37	BEGIN 0.375" W.T. TRANS. BEGIN ANODES ON 518.6'℄	236'/8'	Pipe, Line, 6 5/8" O.D.×0.375" W.T., API-5LX-X52,	
3	6+18	S86°59'56"E	2,060,521.52	-141,420.71	Begin 0.280" W.T.	236'/5'	U.S. STEEL, 5/32" Coal Tar Enamel W/ Felt Wrap	1,013 L.F.
4	16+39	S86°19'05"E	2,061,541.44	-141,474.18		236'/0'	Pipe, Line, 6 5/8" O.D.×0.280" W.T., API-5LX-Gr."B",	
5	23+11	S87°12'46"E	2,062,211.65	-141,517.31		235'/0'	U.S. STEEL, 60 Mil X-Tru Coat	16,519 L.F.
6	25+00	S87°12'45"E	2,062,400.00	-141,526.48	W/L 291	235'/0'	80# Zinc Anodes	34 Ea.
7	34+93	S81°49'59"E	2,063,390.79	-141,574.72		235'/0'		
8	45+52	S88°13'28"E	2,064,438.57	-141,725.09		236'/0'		
9	55+62	S86°18'02"E	2,065,446.93	-141,756.35		234'/0'		
10	60+26	S87°39'55"E	2,065,909.23	-141,786.24		234'/0'		
11	71+47	S85°33'20"E	2,067,028.22	-141,831.86		234'/0'		
12	86+08	S85°21'41"E	2,068,484.10	-141,945.02		234'/0'		
13	97+41	S87°04'35"E	2,069,612.69	-142,036.59		234'/0'		
14	107+03	S87°58'35"E	2,070,572.72	-142,085.62		233'/0'		
15	113+49	S84°39'39"E	2,071,217.43	-142,108.40		233'/0'		
16	125+79	S87°10'32"E	2,072,441.62	-142,222.81		233'/0'		
17	137+26	S85°29'11"E	2,073,586.24	-142,279.28		233'/0'		
18	142+38	S84°36'27"E	2,074,096.51	-142,319.56		233'/0'		
19	152+69	S83°56'29"E	2,075,121.89	-142,416.35		233'/0'		
20	157+51	S82°44'50"E	2,075,600.79	-142,365.52		233'/0'		
21	167+64	S84°50'07"E	2,076,604.66	-142,493.28		233'/0'		
22	171+37	S84°50'03"E	2,076,975.56	-142,526.80	BEGIN 0.375" W.T. END ANODES ON 518.6'℄	233'/9'	See Const. Dwg. M(LA)DP-901	
23	175+55	S84°51'16"E	2,077,392.23	-142,564.47	Transition	233'/9'		
24	175+70		2,077,407.00	-142,565.80	℄ Ell. at Bottom of Riser	233'/9'		

NOTES

1. Stationing Indicates Pipe Footage.
2. Grid Based on Louisiana (Lambert) Plane Coordinate System – South Zone.
3. Locations of Platforms and Pipelines owned by others, based on owner's data.
4. Facilities Installed In Accordance With D.O.T. Regulations.

LEGEND

- Main Line Valve
- Check Valve
- Side Valve (Single)
- Side Valve (Dual)
- Rectifier
- Platform
- Platform w/Heliport
- Survey Point
- Mile Post

N-21E	N-22E	N-23E
O-21E	O-22E	O-23E
P-21E	P-22E	P-23E

KEY

STATE OF LOUISIANA
DAVID L. EDGAR
REG. No. 14270
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL ENGINEERING

RECEIVED
SEP 27 11 25 AM '79
BUR. OF LAND MGMT.
OUTER CONTINENTAL SHELF OFFICE
NEW ORLEANS, LA.

AS BUILT

Seg 4873

REFERENCE	NUMBER
10" RISER ASSEMBLY PLAN & DETAILS, COLUMN A-2	M(LA)DP-903
6" RISER ASSEMBLY PLAN & DETAILS, COLUMN A-3	M(LA)DP-901
6" RISER ASSEMBLY PLAN & DETAILS, AMOCO PLATFORM 292 'A'	M(LA)DN-901

PREPARED BY
Ford, Bacon & Davis Construction Corporation
MONROE LOUISIANA

MICHIGAN WISCONSIN PIPE LINE CO.
ENGINEERING DEPARTMENT
DETROIT, MICHIGAN

DRAWN BY B.C.M.	DATE 11-14-78	APPROVED BY	DATE 3-30-79
DRAFTING CHK. WAH	DATE 2-28-79	APPROVED BY	
DESIGN CHK.	DATE		
SCALE 1"=2,000'		PROJECT MANAGER-OFFSHORE	

REVISION — NO. | DATE | BY | CHK | APPD

OFFSHORE GATHERING SYSTEM
TRUNK 613 & TRUNK 612
SHIP SHOAL AREA, SOUTH ADDITION

DRAWING NUMBER O-22E — SHEET 1 OF 1

SEP 19 1979

OCS-G 364

Ford, Bacon & Davis
Construction Corporation

ACTING AS AGENT FOR
MICHIGAN WISCONSIN PIPE LINE COMPANY

NEW YORK — MONROE

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

October 25, 1978

Mr. Jesse Hunt
Bureau of Land Management
New Orleans Outer Continental Shelf Office
New Orleans, Louisiana 70130

Re: Michigan Wisconsin Pipeline Company
10" Pipeline; Ship Shoal 219 to 291
OCS-G-3654

6" Pipeline; Ship Shoal 291 to 292
OCS-G-3641

16" Pipeline; High Island 309 to 332
OCS-G-3625

Dear Sir:

Please be advised that in accordance with the referenced OCS permits, hydrostatic testing of the 16" Pipeline, High Island 309 to 332, will commence Wednesday, October 25, 1978.

Our letter of October 21, 1978 advised you that the hydrostatic testing of the 10" and 6" pipelines would begin October 23, 1978. Due to delayed construction progress, this commemcement date will be Wednesday, October 25, 1978.

Please contact our office in Monroe, La., in you have any questions.

Sincerely,

John M. Kelley

John M. Kelley
Field Engineer

RECEIVED
OCT 30 10 47 AM '78

cc: Mr. W.K. Peaker
Mr. A. D. Perot

afb 10-24-78

Ford, Bacon & Davis
Construction Corporation

TELEPHONE 318/388-1530 | ENGINEERS – CONSTRUCTORS | TWX: 510-977-5395

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

21 October 1978
Lafayette, Louisiana

Mr. Jesse Hunt
Bureau of Land Management
New Orleans Outer Continental Shelf Office
500 Camp Street Suite 841
New Orleans, Louisiana 70130

Ref: 10" Pipeline; Ship Shoal 219 to 291
OCS-G 3654

6" Pipeline; Ship Shoal 291 to 292
OCS-G 3641

Dear Sir:

Please be advised that hydrostatic testing of the subject pipelines, in accordance with the referenced OCS permits, will commence on Monday, October 23, 1978. Please call our Monroe, La. office if you have any questions.

Sincerely,

John M. Kelley

John M. Kelley
Field Engineer
Lafayette, Louisiana

SN4873

BEST AVAILABLE COPY

3341 (400)

RMB 3/3/78

OCS-G 3641

Ship Shoal Area,
South Addition

CERTIFIED MAIL NO. 085284

February 23, 1978

DECISION

Michigan Wisconsin Pipe Line Company

Right-of-way

Application Approved

The above application was filed for approval on October 27, 1977, pursuant to Sec. 5(c) of the Outer Continental Shelf Lands Act of August 7, 1953 (67 Stat. 462) and the regulations promulgated thereunder (43 CFR 2883).

This application is for a right-of-way 200 feet in width for the construction, maintenance, and operation of a 6 5/8-inch natural gas pipeline, 3.34 miles in length from the Amoco-Texaco Platform in Block 292 to Placid Oil Company's Platform "A" in Block 291, all in Ship Shoal Area, South Addition, as shown on Drawing No. 612-32-1, Sheet 1 of 1 dated October 20, 1977, submitted with the application.

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

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

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

The annual rental for the pipeline is $20.00. Operator submitted two drafts totaling $30.00 to cover the rental for 1978 and the required application fee of $10.00.

Approval of this right-of-way is subject to the proposed pipeline being designed, constructed, operated, and maintained in compliance with applicable Department of Transportation regulations.

This application is approved under the express condition that all valves and taps will be buried to a minimum of one (1) foot below the mudline. The pipeline is not required to be buried; however, should the pipeline prove to be an obstruction to commercial fishing activities, its subsequent burial to a depth specified by the Manager may later be required.

BEST AVAILABLE COPY

RMS 11/29/77

NOTED: SPOKES

Pausina 11-17-77
Spokes 11-17-77
McIntosh 11/17
Krebs 11/17

NOV 18 1977

Memorandum

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

From: Conservation Manager, Gulf of Mexico OCS Operations

Subject: Michigan Wisconsin Pipe Line Company's Pipeline Right-of-Way Application, BLM OCS-G 3641, Reference 3341(400)

We have reviewed the safety features and design specifications for the subject Right-of-Way Application, dated October 12, 1977, in accordance with the MOU dated August 1, 1974. It is for the construction, maintenance, and operation of a 6 5/8-inch gas pipeline 17,612 feet in length from the Amoco-Texaco Platform, Ship Shoal Block 292, lease OCS-G 1042, to Placid Oil Company's Platform "A", Ship Shoal Block 291, lease OCS-G 2923.

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

Pipeline Component	Maximum Allowable Operating Pressure/WP Ratings
Submerged component	2,130 psig
Riser component	1,981 psig
Piping, fittings, valves	1,440 psig

Hydrostatic pressure test with water will be conducted from 2,470 psig to 2,600 psig for 24 hours.

Based on these calculations, we recommend that the maximum allowable operating pressure for this pipeline be 1,440 psig and that this pressure may be exceeded only when hydrostatically pressure-testing the pipeline.

NUTER - PAUSINA

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

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

-Original Signed-
Lowell G. Hammons

For Conservation Manager

cc: CM Reading File
Drafting (w/cy of location plat)
1502-01 - Michigan Wisconsin Pipe Line Co. (W/orig. application)
(Pipeline Section)
PC File

FMPausina:JJSpokes:cal:11-17-77

Ford, Bacon & Davis
Construction Corporation

TELEPHONE 318/388-1530 | ENGINEERS – CONSTRUCTORS | TWX: 510-977-5395

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

November 4, 1977

H-2159-B
File: MW-25.6

Mrs. LaNelle Boehm
OCS Land Office
Bureau of Land Management
U. S. Department of the Interior
Suite 841
Hale Boggs Federal Building
500 Camp Street
New Orleans, LA. 70130

Dear Mrs. Boehm:

OCS-G-3641
OCS-G-3642

In response to your recent request, the following items involving the above application filings are attached for your review and reference:

OCS-G-3641
1) Four (4) prints of revised Drawing RC-612-32-1 as noted.
2) Copy of Amoco Production Company's return receipt with date of delivery, October 17, 1977, shown.
3) Copy of letter dated November 3, 1977 requesting a letter of no objection from Texaco, Inc. % Mr. Alton McClung.

OCS-G-3642
1) Four (4) prints of revised Drawing RC-615-32-1 as noted.

Should you require any additional information, please advise.

Sincerely,

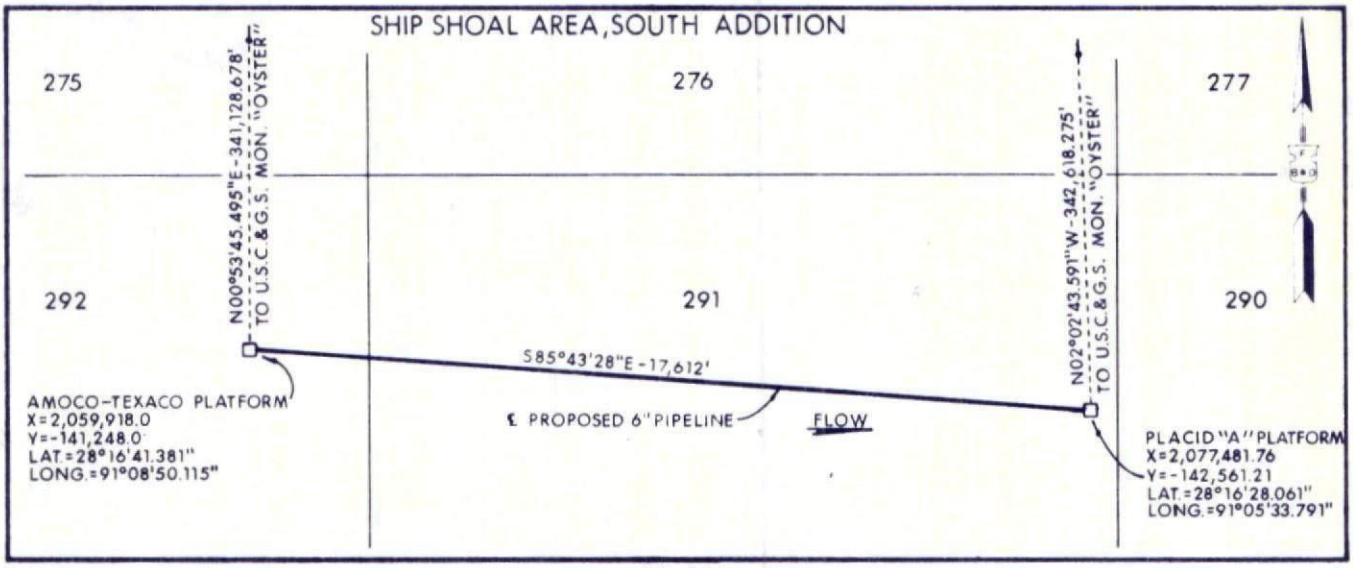
R. Dean Dick

R. Dean Dick
Project Engineer

mgh
Enclosures

cc: Messrs. M. J. Williams/with map attachments
D. L. Edgar/with map attachments

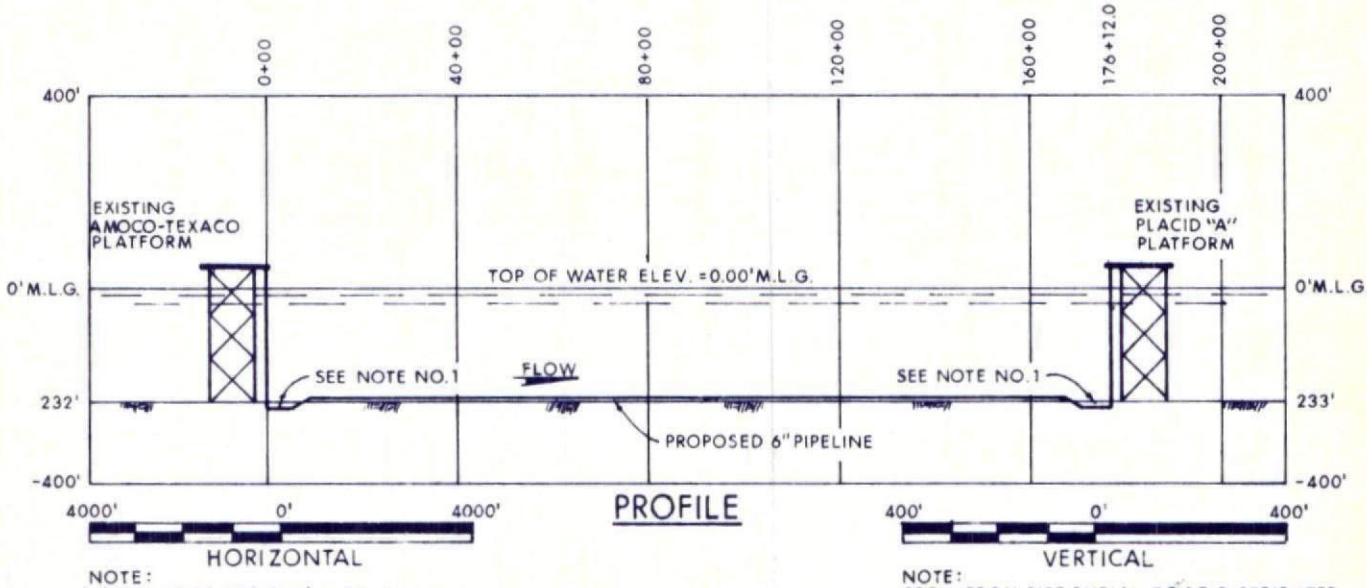
BEST AVAILABLE COPY



NOTE:
FACILITIES DESIGNED IN ACCORDANCE WITH D.O.T. REGULATIONS

PLAN

4000' 0' 4000'



PROFILE

4000' 0' 4000' HORIZONTAL

400' 0' 400' VERTICAL

NOTE:
(1.) PIPE TO BE BURIED 8' WITHIN 500' RADIUS OF PLATFORM

NOTE:
SPOIL FROM PIPE BURIAL TO BE DISTRIBUTED SO AS NOT TO DECREASE WATER DEPTH BY MORE THAN SIX INCHES.

APPLICATION BY

Ford, Bacon & Davis Construction Corporation

ACTING AS AGENT FOR
MICHIGAN WISCONSIN PIPE LINE COMPANY

PROPOSED
6" GAS PIPE LINE
CROSSING UNDER THE
GULF OF MEXICO
LOCATED FROM BLOCK 291 TO BLOCK 292
SHIP SHOAL AREA, SOUTH ADDITION,
OFFSHORE LA.

NOV 1 1977

R Dean Dick DATE 9/27/77

1 ADDED WATER DEPTH AT PLATFORMS 10-4-77 2 REV. PIPE SIZE CH 10-17-77 3 ADD. NOTE C.H. 11-1-77

DWG. C.E.H.	DATE 9-13-77	THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM VARIOUS GAS FIELDS OFFSHORE LA. TO VARIOUS DISTRIBUTION POINTS	MICHIGAN WISCONSIN PIPE LINE COMPANY
SCALE AS SHOWN	APP'D.		DETROIT, MICHIGAN
CHK'D.	APP'D.		DWG. NO. RC-612-32-1 REV. 11-1-77

OCS-G 3641

UNITED STATES GO VMENT

Memorandum

DEPARTMENT OF TH. NTERIOR
BUREAU OF LAND MANAGEMENT

IN REPLY REFER TO:
3341 (400)

TO : Conservation Manager
Gulf of Mexico OCS Operations

Date: November 8, 1977

FROM : Manager
New Orleans OCS Office

SUBJECT : Michigan Wisconsin Pipe Line Company's Pipeline Right-of-way Application (OCS-G 3641)

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

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

Attachments
1. Application dated October 12, 1977
2. Exhibit "A", Drawing No. RC-612-32-1, as revised
3. Exhibit "C", Schematic Safety Shut Down System, Drawing No. PL-612-32-1
4. Drawing No. 612-32-1

NOTED—MC INTOSH

NOTED—MC BEE

DSC-1541-2
Mar. 1974

MICHIGAN WISCONSIN PIPE LINE COMPANY
MEMBER OF THE AMERICAN NATURAL GAS SYSTEM
ONE WOODWARD AVENUE, DETROIT, MICHIGAN 48226

October 12, 1977

H-2159-B
File: MW-25.1 & 16.1

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

Dear Mr. Rankin:

Michigan Wisconsin Pipe Line Company's Proposed Pipeline Located From Block 291 to Block 292, Ship Shoal Area, South Addition, Gulf of Mexico

Pursuant to the authority granted in Section 5(c) of the Outer Continental Shelf Lands Act of August 7, 1953 (67 Stat. 462) and in compliance with regulations contained in Title 43, Subpart 2883, Section 2883.1, Title 30, Subpart 250, Section 250.19, and requirements contained in OCS Orders No. 8 and 9 issued on October 30, 1970, Michigan Wisconsin Pipe Line Company hereby applies, in duplicate, for a right of way two hundred feet (200 ft.) in width to construct a pipeline as shown on the following Drawing Number, RC-612-32-1, Revision No. 1, (Exhibit "A") attached and made a part hereof:

1. Proposed 6-inch pipeline located from Block 291 to Block 292, Ship Shoal Area, South Addition, Offshore Louisiana.

This pipeline will be used to gather and transport natural gas from Federal Waters offshore Louisiana to customers in various North Central states. The tentative construction date is May or June, 1978.

Michigan Wisconsin Pipe Line Company has previously filed all necessary papers required under Subparagraph 2883.1, Part (c) of the regulations, said filing being found in Qualification File Number 160 in your office.

Attached hereto find our Draft Number 75598 in the amount of $10.00 covering the application fee and Draft Number 75599 in the amount of $20.00 (based on $5.00 per mile or fraction thereof for 3.34 total miles through Zone 4).

In accordance with Subparagraph (d) under Paragraph 2882.2-1 applications, Michigan Wisconsin Pipe Line Comapny has this date, by certified mail, forwarded copies of this application with map Number RC-612-32-1 to the leaseholders in the blocks traversed by the proposed pipeline.

The certified receipt of these letters of notification are attached to this application as required under the above regulations (Exhibit "B").

In compliance with your notice of April 1, 1976, the following is the design data for the proposed pipeline:

DESIGN DATA

Product to be transported	Natural gas
Pipe size	6.625" O.D.
Pipe wall thickness	0.280" W.T.
Pipe grade	API-5L, Gr. "B"
Riser pipe wall thickness	0.375" W.T.
Riser pipe grade	API-5L, Gr. "B"
Type corrosion protection	86# zinc bracelets spaced @ 500' centers 5/32" bituminous enamel and X-tru coated
Specific gravity of line (empty)	1.25
Specific gravity @ 60° F	Gas 0.57 - 0.63
Design working pressure and capacity	5,000 MCF per day @1300 psi
Maximum working pressure and capacity	5,000 MCF per day @1300 psi
Hydrostatic test pressure	2600 psi Max., 2470 psi Min. for 24 hrs.

Upon the granting of the right of way herein applied for, Michigan Wisconsin Pipe Line Company agrees to abide by the terms and conditions of the aforementioned regulations including the provisions of the "Nondiscrimination in Employment" form attached to this application.

If this application and enclosures meet with your approval, we will appreciate your issuance of the necessary permit at your earliest convenience.

Very truly yours,

MICHIGAN WISCONSIN PIPE LINE COMPANY

By: W. A. Batton

Title: Senior Vice President

daw
Attachments

I, John W. Barnes, Assistant Secretary of Michigan Wisconsin Pipe Line Company, hereby certify that W. A. Batten, Senior Vice President of said Company has corporate Authority to file and execute on behalf of said Corporation the foregoing application.

This 13th day of October, 1977.

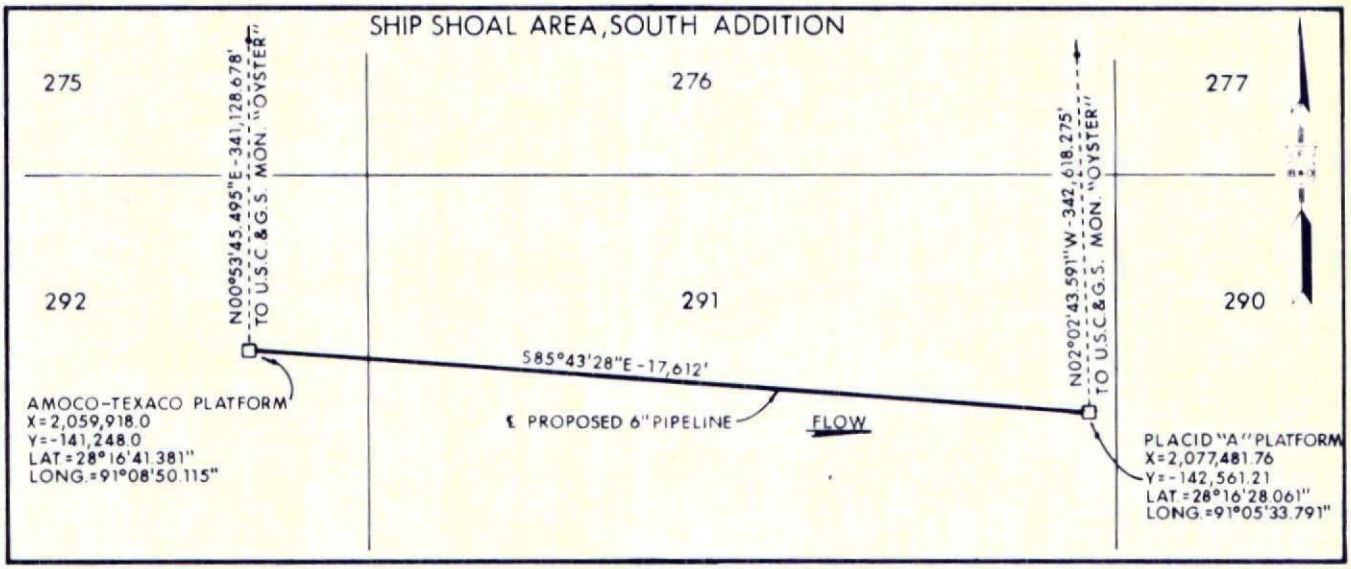
John W. Barnes

Assistant Secretary of Michigan Wisconsin Pipe Line Company

CORPORATE SEAL

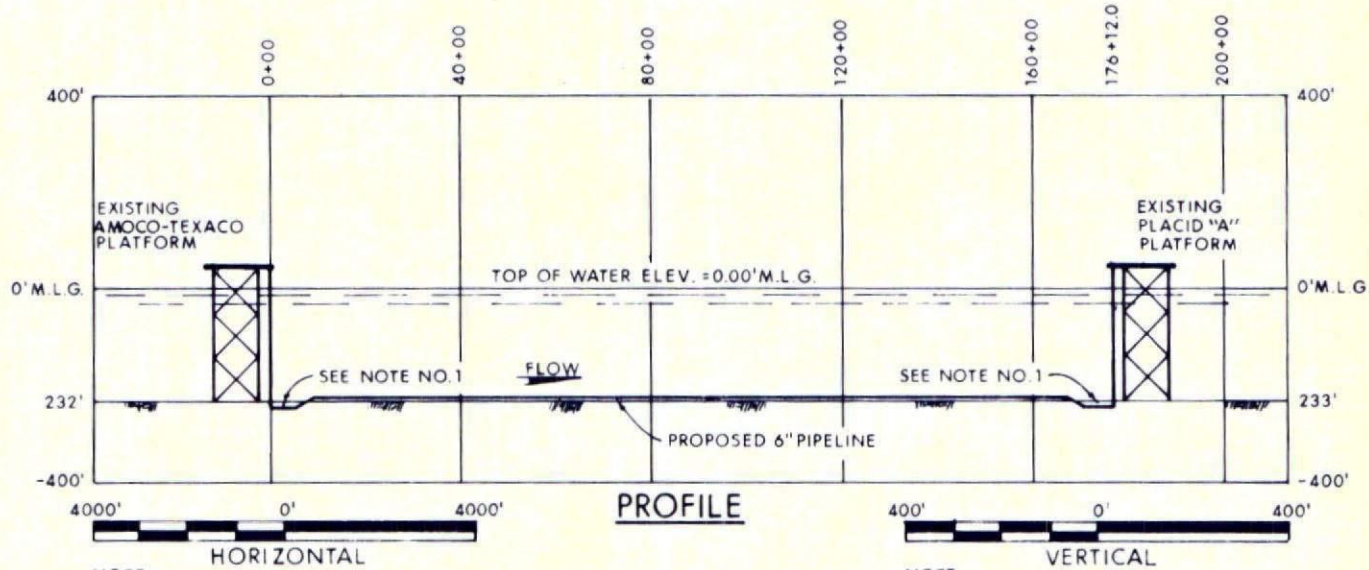
EXHIBIT "A"

Drawing Number RC-612-32-1



PLAN

4000' 0' 4000'



PROFILE

4000' 0' 4000' HORIZONTAL

400' 0' 400' VERTICAL

NOTE:
(1.) PIPE TO BE BURIED 8' WITHIN 500' RADIUS OF PLATFORM

NOTE:
SPOIL FROM PIPE BURIAL TO BE DISTRIBUTED SO AS NOT TO DECREASE WATER DEPTH BY MORE THAN SIX INCHES.

OCT 18 1977

APPLICATION BY

Ford, Bacon & Davis Construction Corporation

ACTING AS AGENT FOR
MICHIGAN WISCONSIN PIPE LINE COMPANY

R Dean Dick DATE 9/27/77

PROPOSED
6" GAS PIPE LINE
CROSSING UNDER THE
GULF OF MEXICO
LOCATED FROM BLOCK 291 TO BLOCK 292
SHIP SHOAL AREA, SOUTH ADDITION,
OFFSHORE LA.

⚠ ADDED WATER DEPTH AT PLATFORMS 10-4-77 ⚠ REV PIPE SIZE CH 10-17-77 MB RDD

DWG. C.E.H.	DATE 9-13-77	THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM VARIOUS GAS FIELDS OFFSHORE LA. TO VARIOUS DISTRIBUTION POINTS	MICHIGAN WISCONSIN PIPE LINE COMPANY
SCALE AS SHOWN	APP'D.		DETROIT, MICHIGAN
CHK'D. SC	APP'D. RDD		DWG. NO. RC-612-32-1 REV. 10-17-77

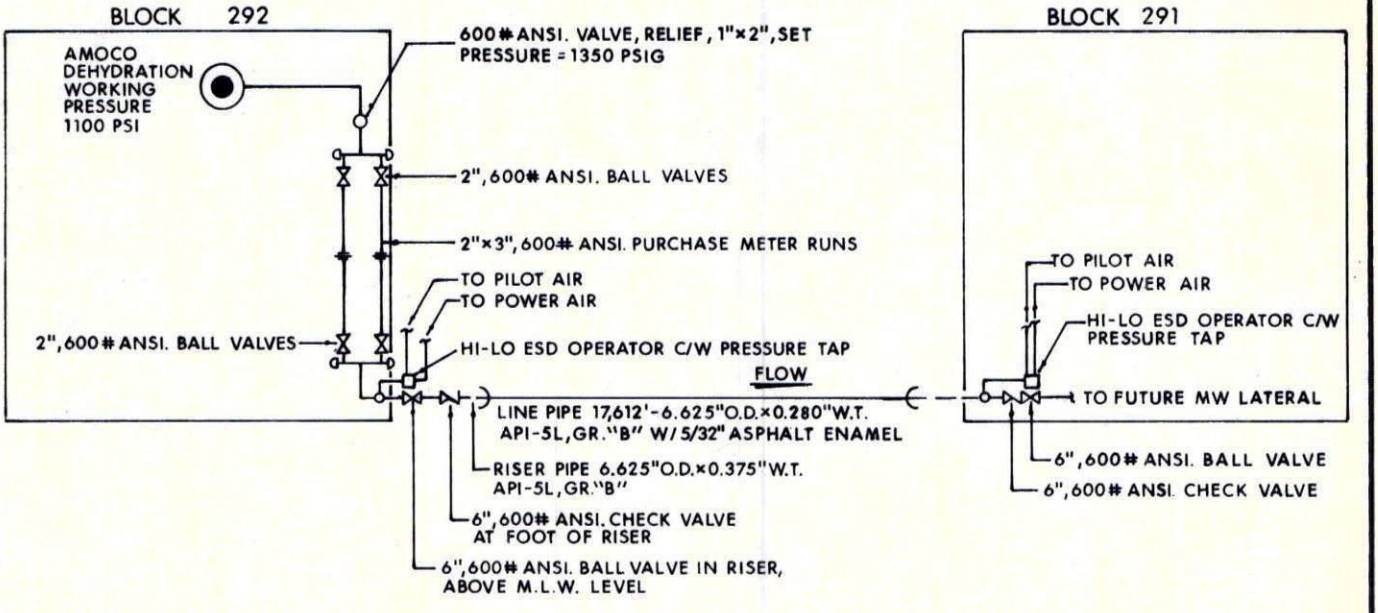
OCS-G-3641

EXHIBIT "C"

Safety Shutdown Schematic

for Platforms

FACILITIES DESIGNED IN ACCORDANCE
WITH D.O.T. REGULATIONS



BLOCK 291, BLOCK 292
SHIP SHOAL AREA, SOUTH ADDITION,
OFFSHORE LA.

STATE OF LOUISIANA
DAVID L. EDGAR
REG. No. 14270
REGISTERED
PROFESSIONAL ENGINEER
IN
MECHANICAL ENGINEERING

David L. Edgar

OCT 18 1977

SCALE NO SCALE		SCHEMATIC	MICHIGAN WISCONSIN PIPE LINE CO. DETROIT, MICHIGAN
DRAWN C.E.H.	DATE 10-17-77		
CHECKED TB	DATE 10-18-77	SAFETY SHUT DOWN SYSTEM	DWG. NO. PL-612-32-1 A
APPROV. RJDD	DATE 10-18-77		

SUPERIOR Buffalo, New York Printed in U.S.A.
ASTROFILM N685.4M

OCS-G 3641

REFERENCE	NUMBER
MICHIGAN WISCONSIN PIPE LINE CO. ENGINEERING DEPARTMENT DETROIT, MICHIGAN	10/20/77
DRAWN BY C.E. HOWSE — DATE 9-15-77 — APPROVED BY — DATE 11-20-77	
DRAFTING CHK. TB — DATE 10-20-77 — APPROVED BY	
DESIGN CHK. CKE — DATE 10-20-77 — David L Edgar DESIGN ENGINEER	
SCALE AS SHOWN	
PROPOSED 6" GAS PIPELINE BLOCK 291 TO BLOCK 292 SHIP SHOAL AREA, SOUTH ADDITION OFFSHORE LOUISIANA	
DRAWING NUMBER 612-32-1	SHEET 1 OF 1
PREPARED BY FORD, BACON & DAVIS CONSTRUCTION CORPORATION MONROE LOUISIANA	

NO. | DATE | REVISION | BY | CHK'D | APP'D

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, NOTE BOOK, AT OF WAY CHECKED, BY, DATE

Y=137,677.24

X=2,061,900.00
Y= 38,177.00

X=2,058,000.00
Y=140,000.00

X=2,068,000.00
Y=140,000.00

X=2,078,000.00
Y=140,000.00

PLACID OIL CO., et al
OCS-G-2923

EXISTING
AMOCO-TEXACO PLATFORM
X=2,059,918.0
Y=141,248.0
LAT.=28°10'41.381"
LONG.=91°08'50.115"

Y=141,433.55

S85°43'28"E-17,612'
PROPOSED 6" PIPELINE

FLOW

EXISTING
PLACID "W" PLATFORM
X=2,077,481.76
Y=142,561.21
LAT.=28°16'28.061"
LONG.=91°05'33.791"

X=2,058,800.00'
Y=142,077.00

TEXACO INC.
&
AMOCO PRODUCTION CO.
OCS-G-1042

292

291

290

X=2,062,400.00

NOTE:
FACILITIES DESIGNED IN ACCORDANCE WITH D.O.T. REGULATIONS

STATE OF LOUISIANA
DAVID L. EDGAR
REGISTERED
ENGINEER

David L Edgar

SHIP SHOAL AREA, SOUTH ADDITION

PLAN
SCALE 1"=1000'

0+00 — 176+12

6⅝"O.D.×0.280"W.T., API-5L-GR."B" LINE PIPE
5/32" BITUMINOUS ENAMEL AND X TRU COATED
CATHODIC PROTECTION, 86# ZINC ANODE BRACELETS ON 500' CENTERS

306' — 306'

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, NOTE BOOK, STRUCTURE NOTATNS CK'D, NO., BY, DATE

0+00 10+00 20+00 30+00 40+00 50+00 60+00 70+00 80+00 90+00 100+00 110+00 120+00 130+00 140+00 150+00 160+00 170+00 176+12

100'
0' M.L.G.
-100'
-200'
-300'

EXISTING
AMOCO-TEXACO
PLATFORM

MEAN LOW GULF

GULF OF MEXICO

MEAN LOW GULF

EXISTING
PLACID "A" PLATFORM

8' MIN. COVER

PROPOSED 6" PIPELINE

8' MIN. COVER

500'

500'

NOTE:
1. PIPE TO BE BURIED 8' WITHIN 500 RADIUS OF PLATFORM.

PROFILE
SCALE
1"=1000' HORIZ
1"=100' VERT

PLATE 1 - PLAN - PROFILE - F.A.S.
CLEARPRINT PAPER CO., S. F. CAL.
No. 1025-1

OCT 24 1977

OCS-G 3641

Ford, Bacon & Davis
Construction Corporation
3901 JACKSON STREET, MONROE, LOUISIANA 71201

COPY

September 29, 1977

H-2159-B
File: MW-25.1

U. S. Corps of Engineers
New Orleans District
P. O. Box 60267
New Orleans, La. 70160

Attention: Permit Section

Gentlemen:

Ford, Bacon and Davis Construction Corporation is acting as agent for Michigan Wisconsin Pipe Line Company in the construction of a 8-inch natural gas pipeline from Block 292 to Block 291 in Ship Shoal Area, South Addition, Offshore Louisiana.

The proposed routing is indicated in red on the attached Drawing Number RC-612-32-1. In accordance with your requirements, we have enclosed one completed copy of Form Number 4345 for this work including a reproducible sepia and seven (7) prints.

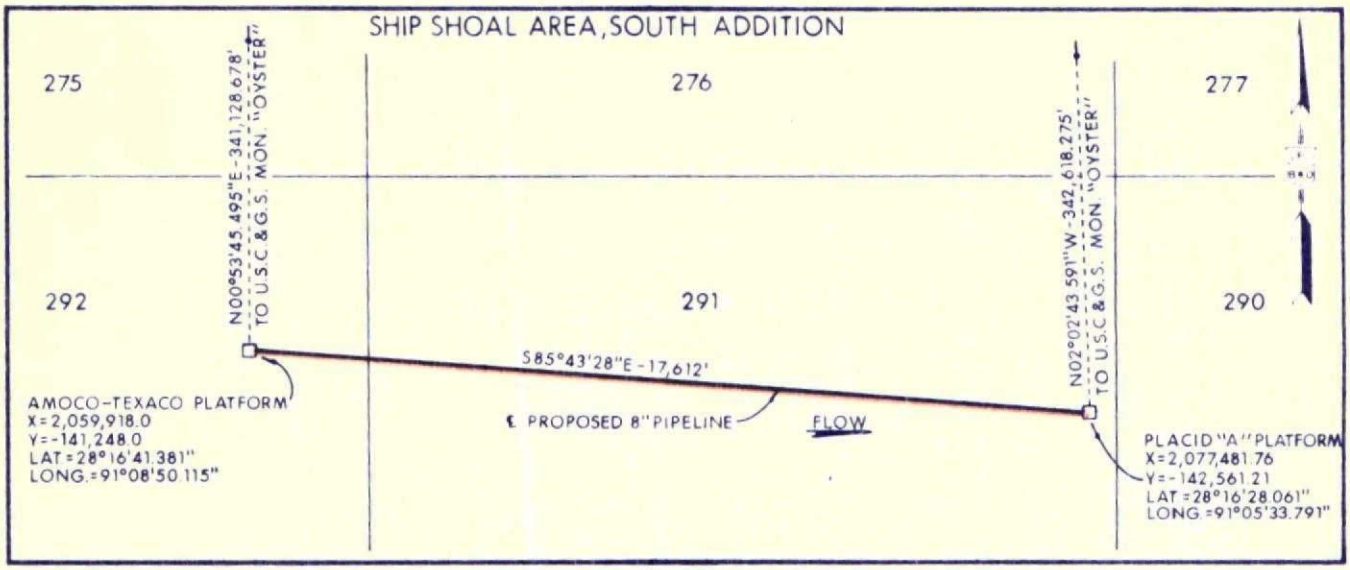
We would appreciate your prompt attention to this matter and thank you for your continued cooperation in the handling of our permits.

Very truly yours,

COPY (ORIGINAL SIGNED BY) R. D. DICK
R. Dean Dick
Project Engineer

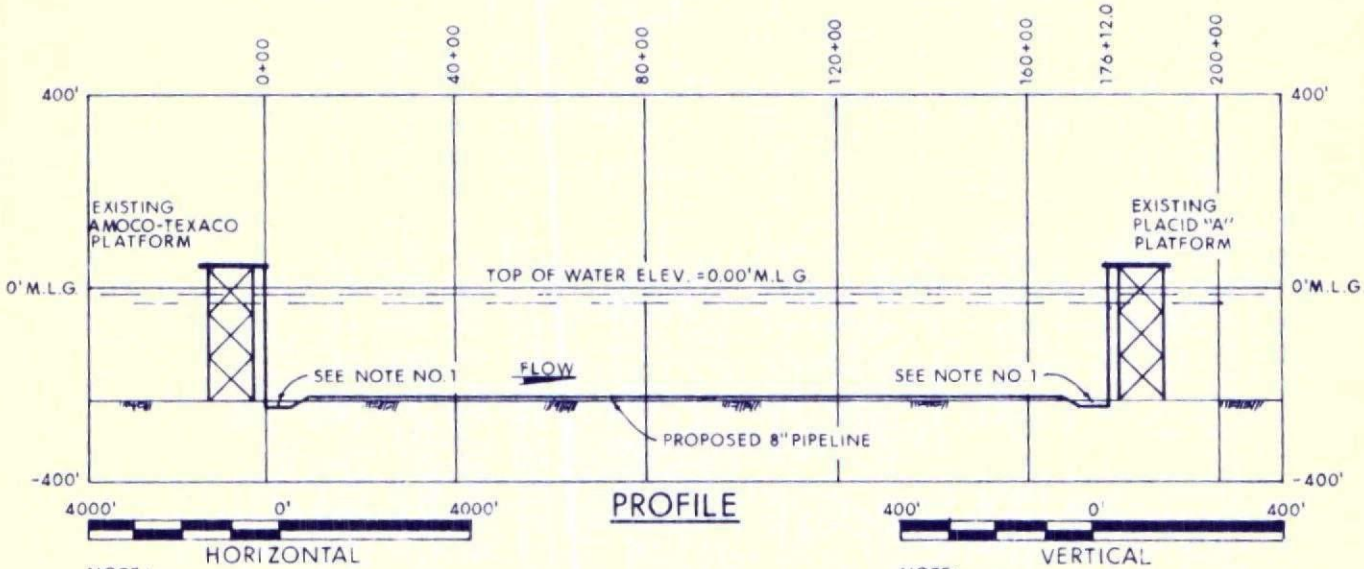
mgh
Enclosures

cc: Bureau of Land Management/with attachments
Federal Communications Commission/with attachments
Data Com/with attachments
Mr. D. L. Edgar/with attachments



PLAN

4000' 0' 4000'



PROFILE

4000' 0' 4000' HORIZONTAL

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APPLICATION BY **Ford, Bacon & Davis Construction Corporation**

ACTING AS AGENT FOR
MICHIGAN WISCONSIN PIPE LINE COMPANY

R Dean Dick DATE 9/27/77

PROPOSED
8" GAS PIPE LINE
CROSSING UNDER THE
GULF OF MEXICO
LOCATED FROM BLOCK 291 TO BLOCK 292
SHIP SHOAL AREA, SOUTH ADDITION,
OFFSHORE LA.

DWG. C.E.H.	DATE 9-13-77	THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM VARIOUS GAS FIELDS OFFSHORE LA. TO VARIOUS DISTRIBUTION POINTS	MICHIGAN WISCONSIN PIPE LINE COMPANY
SCALE AS SHOWN	APP'D.		DETROIT, MICHIGAN
CHK'D.	APP'D.		DWG. NO. RC-612-32-1 REV.

SEP 27 1977

EHS.

UNITED STATES GOVERNMENT

Memorandum

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

IN REPLY REFER TO:
3341 (400)

TO : Conservation Manager
Gulf of Mexico OCS Operations

Date: November 8, 1977

FROM : Manager
New Orleans OCS Office

SUBJECT : Michigan Wisconsin Pipe Line Company's Pipeline Right-of-way Application (OCS-G 3641)

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

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

Attachments
1. Application dated October 12, 1977
2. Exhibit "A", Drawing No. RC-612-32-1, as revised
3. Exhibit "C", Schematic Safety Shut Down System, Drawing No. PL-612-32-1
4. Drawing No. 612-32-1

DSC-1541-2
Mar. 1974

Phone Log No. 3641

PIPELINE APPLICATION CHECK LIST

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

A. Verify the following general information:

NO I. Do the leases involved on the P/L application appear on the current Suspension of Production (SOP) Lease List?

II. USGS Application

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

____1. Moving production to a control point for gathering, treating, storing, or measuring.

____2. Delivery of production to a point of sale.

____3. Delivery of production to a pipeline operated by a transportation company.

____4. Moving fluids in connection with lease operations, such as for injection purposes.

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

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

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

____ e. Lessee's "intent to cross" letters are received.

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

____1. FWS notified _____.

____2. FWS comment received _____.

____3. BLM notified _____.

____4. BLM comment received _____.

____5. Environmental assessment required _____.

III. BLM Application

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

IV. DOT Pipelines

✓ a. The pipelines are shoreward of the outlet flange at the first process facility (If yes, include 40 CFR 192 for gas P/L or 49 CFR 195 for oil P/L in approval).

V. DOI Pipelines

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

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

✓ I. The pipeline leaving the platform receiving production from the platform is equipped with high and low pressure sensors located upstream of departing check valves to directly or indirectly shut-in the well or wells on the platform.

N/A II. The pipeline delivering production to production facilities on the platform is equipped with an automatic fail close valve tied into the automatic and remote shut-in system.

N/A III. The pipeline crossing the platform which does not deliver production to the platform, but which may or may not receive production from the platform, is equipped with high and low pressure sensors connected to an automatic fail close valve located in the upstream portion of the pipeline at the platform. In addition, the sensors are tied into either the platform's automatic and remote shut-in system or an independent remote shut-in system.

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

✓ 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.

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

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

✓ a. Source Dehydrator.

✓ b. Maximum source pressure, psig 1100.

✓ IX. The rated working pressures of all separators, pumps, compressors, valves, flanges, and fittings upstream of and including the boarding automatic fail close valve are shown.

C. Verify that the location plat depicts the following:

✓ I. Location of P/L

✓ II. Length of P/L

✓ III. Size of P/L

✓ IV. Type of service

✓ V. Direction of flow

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

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

a. Size of P/L, inches 6.625.

b. Weight of P/L, lbs./ft. 18.97.

c. Grade of P/L B.

d. Wall thickness, inches 0.280.

e. Size of riser, inches 6.625 → from schematic

f. Weight of riser, lbs./ft. 25.03.

g. Grade of riser B.

h. Wall thickness of riser, inches .375.

i. Minimum WP rating of piping, fittings, valves, psig 1440.

j. Hydrostatic test pressure (HTP), psig 2600 max. 2470 min

k. Hold time, hrs. 24.

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

II. DOI Pipelines

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

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

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

d. (.60 x IP @ SMYS) for riser = _____ ($MAOP_{rc}$)

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

_____f. Are b, d, and e $\geq$ MSP

_____ $\geq$ _____

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

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

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

_____ $\leq$ _____ $\leq$ _____

NOTE: If not, inquire of the operator as to what he considers a limit of testing as a percentage of IP @ SMYS.

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

_____h. HTP/1.25 = _____

_____i. Is HTP hold time $\geq$ 2 hours

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

_____ ($MAOP_{p/1}$)

III. DOT Pipelines

a. IP @ SMYS for submerged pipeline = $\frac{2st}{D}$ = $\frac{2(35000)(.280)}{6.625}$ = 2958

b. (.72 x IP @ SMYS) for submerged pipeline = 2130 ($MAOP_{sc}$)

c. IP @ SMYS for riser = $\frac{2st}{D}$ = $\frac{2(35000)(.375)}{6.625}$ = 3962

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

For gas P/L (.50 x IP @ SMYS) for riser = 1981 ($MAOP_{rc}$)

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

✓ f. Are b, d, and e ≥ MSP

1440 ≥ 1100

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

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

g. Limit of Testing

N/A 1. For oil P/L:

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

_____ ≤ _____ ≤ _____

✓ 2. For gas P/L riser component:

Is 1.50 MSP ≤ HTP of riser ≤ .95 (IP @ SMYS of c above)

1650 ≤ 2600 max / 2470 min ≤ 3764

✓ 3. For gas P/L submerged component:

Is 1.25 MSY (MSP) ≤ HTP of submerged component ≤ .95 (IP @ SMYS of a above)

1375 ≤ 2600 max / 2470 min ≤ 2810

NOTE: If not, inquire of the operator as to what he considers a limit of testing as a percentage of IP @ SMYS.

N/A Operator's answer _____ % of IP @ SMYS (for smaller IP)

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

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

2. For gas P/L riser component HTP/1.5 = 1733 max 1646 min of riser

3. For gas P/L submerged component HTP/1.25 = 2080 max 1976 min of submerged component

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

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

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

1440 ($MAOP_{p/1}$)

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

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

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

N/A b. If platform anodes are used:

1. Type of anode _____

2. Weight of unit anode, lbs. _____

✓ c. If pipeline anodes are used:

1. Type of anode Zinc

2. Spacing interval, ft. 500

3. Weight of unit anode, lbs. 86

II. Calculated Life Expectancy of Corrosion Protection

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

✓ b. If pipeline anodes are used:

$LE_{p/1} = 3.82 \times 10^4 \times W^o/DIR? =$ 38.14

W^o = weight of one anode, pounds = 86

D = outside diameter of pipe, inches = 6.625

I = interval = length of pipe, feet ÷ total number of anodes 500

R = consumption rate, lbs./amp-yr. 20

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

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

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

a. Description of pipelines protective coating Bituminous enamel And X-TRU coated

b. Description of risers protective coating same

c. Description of pre-concrete coating N/A

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

e. Thickness of concrete, inches _____

f. Thickness of asphalt/somastic _____

g. Gravity or density of products _____

For gas .57 → .63 (air = 1.0)

For oil/condensate _____ ° API, _____ (water = 1.0)

h. Given $SG_{p/l}$ 1.25

II. $SG_{p/1}$

✓ a. Expoxy-coated pipelines:

$SG_{p/1} = 2.865\ W/D^2 = \frac{(2.865 \times 18.97)}{(6.625)^2} = 1.24$

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

D = diameter of pipe, inches

N/A b. For weighted pipelines:

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

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

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

k_1, k_2, k_3 = coefficients from tables

T = thickness of concrete coating, inches

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

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

$SG_{p/1}$ = 1.24

✓ c. Is our calculated SG $\cong$ operator's given SG

1.24 $\cong$ 1.25

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

G. Verify the following general information:

I. Water Depth, ft. 263 (Max) — (Min)

II. Burial depth, ft. 8' within 500' radius of platform. otherwise NO BURIAL

III. Maximum Operating Pressure (MOP) _____

IV. Capacity 5MMCFD