

18808

JAN 04 1999

In Reply Refer To: MS 5232

Mr. G. W. Sanders
Shell Oil Company
Post Office Box 2648
Houston, Texas 77252-2648

Dear Mr. Sanders:

In accordance with 30 CFR 250.1008(b), your letter dated October 13, 1998, transmitted a pipeline construction report for the following right-of-way pipeline:

<u>Pipeline Segment No.</u>	<u>Size (inches)</u>	<u>Length (feet)</u>	<u>Service</u>	<u>From</u>	<u>To</u>
11493 (Right-of-Way OCS-G 18808)	12	157,274	Oil	A flange Block 240 East Cameron Area Lease OCS-G 15145	Platform B Block 255 Vermilion Area Lease OCS-G 1152

The data provided in the report, including the following test information, establishes the assigned maximum allowable operating pressure (MAOP) for the pipeline:

<u>Test Pressure (psig)</u>	<u>Duration (hours)</u>	<u>MAOP (psig)</u>	<u>MAOP Determination</u>
2,976	8	2,160	Valve/flange rating

The high- and low-pressure sensors shall be set, respectively, no higher than 15 percent above and below the normal operating range. However, the high pilot shall not be set higher than the MAOP of the pipeline.

The total length of the "as-built" pipeline right of way is 29.79 miles.

Sincerely,

(Signature) J. R. Hennessee

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 Segment No. 11493, ROW OCS-G 18808 (MS 5232)
1502-01 ROW OCS-G 18808 (Microfilm) (MS 5033)
MS 5232 Carto

FPatton:amm:11/3/98:Shell.493

MS 5232
Shell Oil Company



Two Shell Plaza
PO Box 2648
Houston TX 77252-2648

October 13, 1998

VIA AIRBORNE EXPRESS

Mr. Frank Patton, Jr. (MS 5232)
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

Dear Mr. Patton:

BEST AVAILABLE COPY

**OFFSHORE LOUISIANA
12-INCH COASTAL OIL PIPELINE
FROM EAST CAMERON BLOCK 240 SUBSEA TIE-IN
TO VERMILION BLOCK 255 "B"
ROW: OCS-G18808, SEGMENT NO. 11493; JOB NO. 187231
AS-BUILT DATA**

Pursuant to the captioned right-of-way permit, I enclose three copies of the as-built construction drawings, two copies of the hydrostatic pressure test data, and a 3½-inch diskette containing as-built location data in a fixed format ASC file, all for your review. If you need additional information, please contact me at (713) 241-6586.

Yours very truly,

A handwritten signature in cursive script, appearing to read "G.W. Sanders".

G.W. Sanders, Sr. Land Agent
Representing Shell Oil Company

AJB:rms

Enclosures

0CS-G18808



"Comp-U-Test"
Hydrostatic Testing
Equipment Rentals

HYDROSTATIC TEST REPORT

FOR

SHELL

TEST REPORT NUMBER 10398 - B

10" PIPELINE FROM VERM 255-B TO E. C. 240

12" @ .41" W.T. X - 42 @ 150,000' LONG

JOB NUMBER 97B6897

GLOBAL DIVERS & CONTRACTORS, INC.

NEW ORLEANS, LOUISIANA

CERTIFIED BY:


JERRY L. LEWIS B.S.M.E.

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"Comp-U-Test"
Hydrostatic Testing
Equipment Rentals

JANUARY 5, 1998

MR. AL BERTLEMAN
GLOBAL DIVERS & CONTRACTORS, INC.
203 CARONDELET
SUITE 203
NEW ORLEANS, LOUISIANA 70130

RE: SHELL
VERM 255
12" PIPELINE

MR. BERTLEMAN:

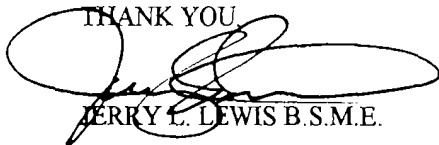
ENCLOSED YOU WILL FIND A COPY OF HYDROSTATIC TEST DATA RECORDED ON 150,000' OF 12" PIPE BELONGING TO SHELL. THE PIPELINE WAS TESTED TO A MAXIMUM PRESSURE OF 2980 PSIG AND A MINIMUM OF 2870 PSIG FOR EIGHT (8) HOURS.

THE HYDROSTATIC TEST WAS CONDUCTED IN ACCORDANCE WITH INDUSTRY STANDARDS AS WELL AS STANDARDS SET FORTH BY SHELL PROVING THE STRUCTURAL INTEGRITY OF SAID PIPELINE.

MR. WILLIAM J. MALTMAN OF MAGELLAN MARINE, INC., REPRESENTING SHELL, WITNESSED THE HYDROSTATIC TEST.

IF FURTHER INFORMATION IS REQUIRED, PLEASE CONTACT ME @ THE NUMBER BELOW.

THANK YOU

A handwritten signature in black ink, appearing to read 'Jerry L. Lewis', is written over the typed name.

JERRY L. LEWIS B.S.M.E.

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DESCRIPTION	PAGE
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L.G.S. HYDROSTATIC TESTING, INC.

TEST REPORT NUMBER 010398-B

*** DEADWEIGHT LOG ***

JOB #'S: LGS 97164-2 CONTRACTORS 9786897 COMPANYS 187231
 LINE OWNER SHELL COASTAL PIPELINE CONTRACTOR GLOBAL DIVERS
 LOCATION: OFFSHORE LAND VERM. 255-B
 LINE DESCRIPTION COASTAL PIPELINE FROM VERM 255-B TO E.C. 240
 PIPE DIA. 12 3/4" W.T. .41 SCHD. _____ GRADE _____ LENGTH 150,000'
 ELEVATIONS: DWT +80 MAX. PIPE +55 MIN. PIPE -156'
 MAXIMUM TEST PRESSURE 3000 MINIMUM TEST PRESSURE 2870
 MAXIMUM RECORDED T.P. 2980 MINIMUM RECORDED T.P. 2976
 DATE & TIME TEST: STARTED (1/3/98 7:10PM) COMPLETED (1/4/98)

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INSTRUMENT READINGS													
TIME	DWT	TA	TI	TE	TG	TW	TIME	DWT	TA	TI	TE	TG	TW
<u>3:55pm</u>	<u>0</u>	<u>START</u>	<u>PRESSURING</u>				<u>9:00</u>	<u>2980</u>	<u>60</u>	<u>59</u>			
<u>4:50pm</u>	<u>2980</u>	<u>AT TEST</u>	<u>PRESSURE, HOLD 1HR</u>				<u>9:15</u>	<u>2980</u>	<u>60</u>	<u>59</u>			
<u>5:00</u>	<u>2980</u>	<u>60</u>	<u>62</u>				<u>9:30</u>	<u>2979</u>	<u>60</u>	<u>59</u>			
<u>5:15</u>	<u>2979</u>	<u>60</u>	<u>60</u>				<u>9:45</u>	<u>2979</u>	<u>60</u>	<u>59</u>			
<u>5:30</u>	<u>2978</u>	<u>60</u>	<u>60</u>				<u>10:00</u>	<u>2979</u>	<u>60</u>	<u>59</u>			
<u>5:45</u>	<u>2977</u>	<u>60</u>	<u>60</u>				<u>10:15</u>	<u>2979</u>	<u>60</u>	<u>59</u>			
<u>5:50</u>	<u>2977</u>	<u>60</u>	<u>59</u>	<u>START BLEED TO 50%</u>			<u>10:30</u>	<u>2979</u>	<u>60</u>	<u>59</u>			
<u>6:17</u>	<u>1500</u>	<u>AT</u>	<u>50%</u>				<u>10:45</u>	<u>2978</u>	<u>60</u>	<u>59</u>			
<u>6:24</u>	<u>1500</u>	<u>START</u>	<u>PRESSURING</u>				<u>11:00</u>	<u>2978</u>	<u>60</u>	<u>59</u>			
<u>7:10</u>	<u>2980</u>	<u>60</u>	<u>59</u>				<u>11:15</u>	<u>2978</u>	<u>59</u>	<u>59</u>			
<u>7:15</u>	<u>2980</u>	<u>60</u>	<u>59</u>				<u>11:30</u>	<u>2978</u>	<u>59</u>	<u>58</u>			
<u>7:30</u>	<u>2980</u>	<u>60</u>	<u>59</u>				<u>11:45</u>	<u>2978</u>	<u>59</u>	<u>58</u>			
<u>7:45</u>	<u>2980</u>	<u>60</u>	<u>59</u>				<u>12:00</u>	<u>2978</u>	<u>59</u>	<u>58</u>			
<u>8:00</u>	<u>2980</u>	<u>60</u>	<u>59</u>				<u>12:15</u>	<u>2978</u>	<u>59</u>	<u>59</u>			
<u>8:15</u>	<u>2980</u>	<u>60</u>	<u>59</u>				<u>12:30</u>	<u>2978</u>	<u>59</u>	<u>59</u>			
<u>8:30</u>	<u>2980</u>	<u>60</u>	<u>59</u>				<u>12:45</u>	<u>2977</u>	<u>59</u>	<u>59</u>			
<u>8:45</u>	<u>2980</u>	<u>60</u>	<u>59</u>				<u>1:00</u>	<u>2977</u>	<u>59</u>	<u>59</u>			

1/3/98

1/4/98

TEST RESULTS: ACCEPTABLE UNACCEPTABLE TIME ON TEST 8 HRS 20 MIN
 REPORT REQUIRED? YES NO CHART STATUS: C I T M O
 CONTRACTOR _____ CO-REP. Wm. J. Maltman L.G.S. Frank J. Bell
 PRINT NAME _____
 (NAME OF INSPECTOR'S COMPANY & PHONE #) 504 872 6680 "MAGELLAN"
 SERIAL NUMBERS: D-5 P-13 T-4 T-7
 DWT/GUAGE 1: 2509 PR: MIG 1408 TA: MIG 1429 TI: MIG 1271
 TE: _____ TG: _____ TW: _____ TEST MEDIUM WATER

L.G.S. HYDROSTATIC TESTING, INC.

TEST REPORT NUMBER 010398-B

*** DEADWEIGHT LOG ***

PAGE NUMBER 2 OF 1

INSTRUMENT READINGS													
TIME	DWT	TA	TI	TE	TG	TW	TIME	DWT	TA	TI	TE	TG	TE
1:15	2977	59	59	---	---	---							
1:30	2977	59	59	---	---	---							
1:45	2977	59	59	---	---	---							
2:00	2977	59	59	---	---	---							
2:15	2976	59	59	---	---	---							
2:30	2976	59	59	---	---	---							
2:45	2976	59	59	---	---	---							
3:00	2976	59	59	---	---	---							
3:15	2976	60	59	---	---	---							
3:30	2976	60	59	---	---	---							
3:32	2976	60	59	BLEED DOWN, TEST COMPLETE									

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CONTRACTOR _____ CO-REP. *Wm. J. Maltman* L.G.S. *Henry J. Bell*

NOTES: _____

- DEFINITIONS:
- TA: AMBIENT TEMPERATURE
 - TI: INTERNAL TEMPERATURE
 - TE: EXTERNAL TEMPERATURE
 - TG: GROUND TEMPERATURE
 - TW: WATER TEMPERATURE
 - PR: PRESSURE RECORDER
 - DWT: DEADWEIGHT TESTER
 - C: CONTRACTOR
 - I: INSPECTOR
 - T: TESTER
 - O: OWNER

Hydrostatic Test Report

ATTACHMENT TO PL - 318

SHELL JOB NO. 187231 - COASTEL	ES NO.
DATE PREPARED 01/03/98	PAGE 01

TEST SECTION COASTEL P/L FROM E.C. 240 TO V.M. 255 B	CONTRACTOR GLOBAL INDUSTRIES INC.
---	--------------------------------------

EQUIPMENT			
TYPE	MAKE	MODEL	SERIAL NO.
DEAD-WEIGHT TESTER	REFINERY Supply	2-1	2509
AMBIENT TEMP RECORDER	AMERICAN METER	AM-12	MIG 1429
TEST MEDIUM TEMP RECORDER	AMERICAN METER	AM-12	MIG 1271
PRESSURE RECORDER	AMERICAN METER	AM-12	MIG 1408

RECORD OF TEST DATA				
TIME	PRESSURE	AMBIENT TEMP.	TEST MEDIUM TEMP.	REMARKS
3:05pm	0			START PRESSURING
4:50pm	2980	60°	62°	AT TEST PRESSURE, HOLD 1 HOUR
5:00	2980	60°	60°	
5:15	2979	60°	60°	
5:30	2978	60°	60°	
5:45	2977	60°	59°	
5:50	2977	60°	59°	START BLEED TO 1500 PSI
6:17	1500	60°	59°	AT 1500 PSI
6:24	1500	60°	59°	START PRESSURING
7:10	2980	60°	59°	ON TEST
7:15	2980	60°	59°	
7:30	2980	60°	59°	
7:45	2980	60°	59°	
8:00	2980	60°	59°	
8:15	2980	60°	59°	
8:30	2980	60°	59°	
8:45	2980	60°	59°	
9:00	2980	60°	59°	
9:15	2980	60°	59°	
9:30	2979	60°	59°	
9:45	2979	60°	59°	
10:00	2979	60°	59°	
10:15	2979	60°	59°	
10:30	2979	60°	59°	
10:45	2978	60°	59°	
11:00	2978	60°	59°	
11:15	2978	59°	59°	
11:30	2978	59°	58°	
11:45	2978	59°	58°	
12:00 AM	2978	59°	58°	
12:15	2978	59°	59°	
12:30	2978	59°	59°	
12:45	2977	59°	59°	
1:00	2977	59°	59°	

CONTRACTOR REPRESENTATIVE <i>James J. Bell LGS</i>	COMPANY REPRESENTATIVE <i>Wm. J. Maltrano</i>
---	--

PL-318A (REV 7-94)

Hydrostatic Test Report

ATTACHMENT TO PL - 318

SHELL JOB NO. 187231 - COASTEL	ES NO.
DATE PREPARED 01/03/98	PAGE 02

TEST SECTION COASTEL P/L FROM E.C. 240 TO V.M. 255 B	CONTRACTOR GLOBAL INDUSTRIES INC.
---	--------------------------------------

EQUIPMENT

TYPE	MAKE	MODEL	SERIAL NO.
DEAD-WEIGHT TESTER	REFINERY Supply	2-1	2509
AMBIENT TEMP RECORDER	AMERICAN METER	Am-12	MIG 1429
TEST MEDIUM TEMP RECORDER	AMERICAN METER	AM-12	MIG 1271
PRESSURE RECORDER	AMERICAN METER	AM-12	MIG 1408

RECORD OF TEST DATA

TIME	PRESSURE	AMBIENT TEMP.	TEST MEDIUM TEMP.	REMARKS
1:15	2977	59°	59°	
1:30	2977	59°	59°	
1:45	2977	59°	59°	
2:00	2977	59°	59°	
2:15	2976	59°	59°	
2:30	2976	59°	59°	
2:45	2976	59°	59°	
3:00	2976	59°	59°	
3:15	2976	60°	59°	
3:30	2976	60°	59°	
3:32	2976	60°	59°	BLEED DOWN, TEST COMPLETE

CONTRACTOR REPRESENTATIVE <i>Fred J. Bell</i> LGS	COMPANY REPRESENTATIVE <i>Wm. J. Meltman</i>
--	---

HYDROSTATIC TEST CERTIFICATION DATA (OFFSHORE)

SHELL JOB NO.	▶	
ES NO.	▶	

TEST SECTION LOCATION			
PIPELINE S COASTAL S WELL TO CENTRAL GULF GATHERING	LOCATION CODE	DIVISION OFFSHORE PIPELINE	
SECTION TESTED FROM SURVEY STATION VERM. 255-B	TO SURVEY STATION E.C. 240	PRESSURE RECORDER LOCATION +80'	

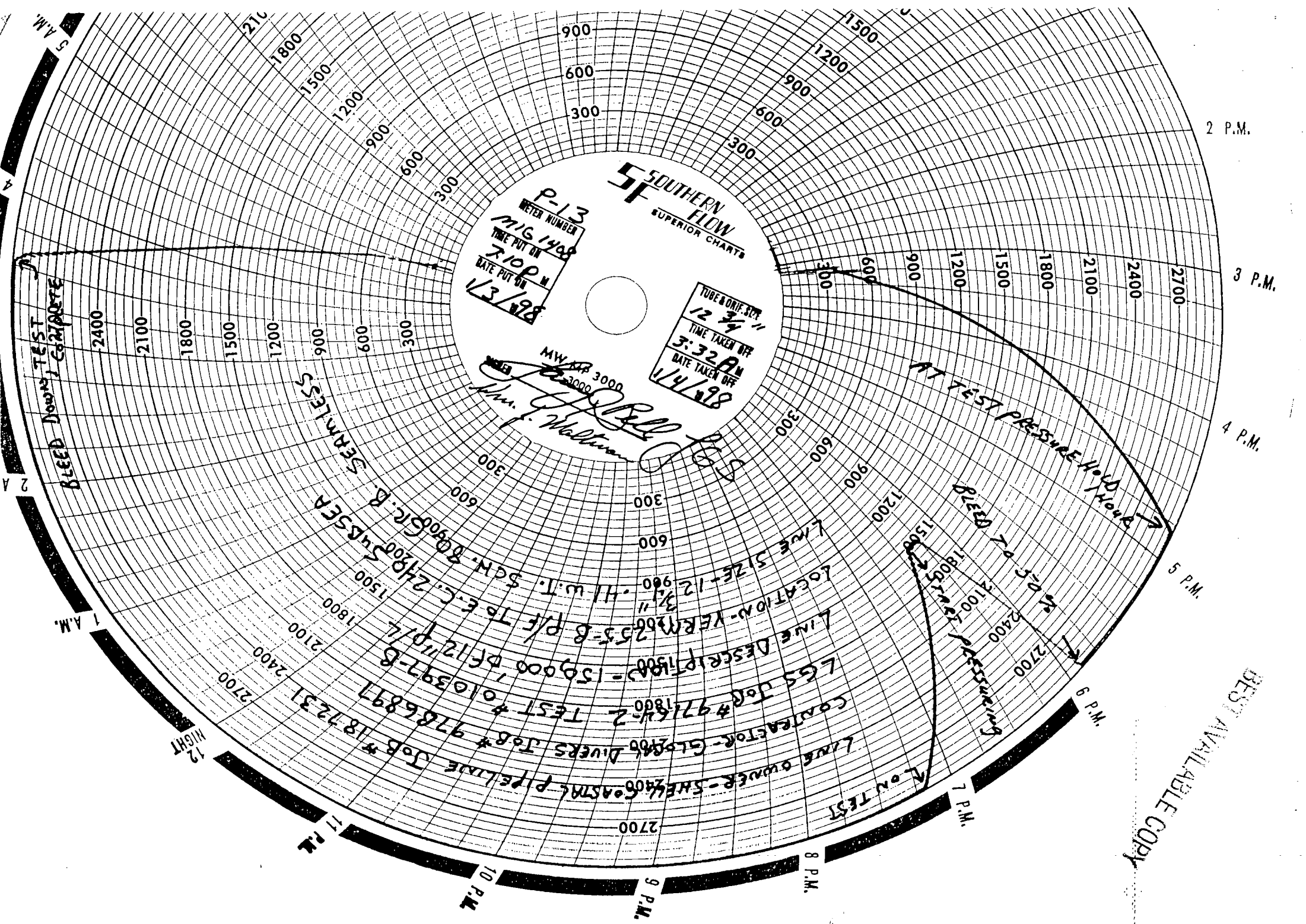
LINE HISTORY			
DATE CONSTRUCTED 1/3/98	OUTSIDE DIAMETER - IN. 12 3/4"	TYPE (Seamless, ERW, etc.) SEAMLESS	
SPEC. MIN. YIELD - PSI	WALL THICKNESS - IN. .41	ANSI RATING ▶	VALVES 12" 900#
			FLANGES 12" 900#

DATA CHECK LIST	DATA / RESULTS
TEST MEDIUM	WATER
TESTED BY	LGS Hydrostatic Testers
TEST PRESSURE - MINIMUM *	2870 PSI
LIST PRINCIPAL TEST EQUIPMENT	D 338-4 TEST Pump .9996 G.P.S.
AVERAGE TEMPERATURE OF TESTING MEDIUM	
PRESSURE AT LOWEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION. *	-156'
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION. *	+55'
TEST DURATION (Including time started and completed)	DURATION ▶ 8 HRS 22 MIN. HOURS
	STARTED ▶ DATE: 1/3/98 7:10 AM <input checked="" type="checkbox"/> PM
	COMPLETED ▶ DATE: 1/4/98 3:32 AM <input checked="" type="checkbox"/> PM
ARE PRESSURES CONTINUOUS? If not, explain.	YES
DESCRIPTION OF FACILITY TESTED. (River, Pump Sta., Buried Line, Riser, Main Line, Etc.)	
GENERAL COMMENTS	
SIGNATURE OF COMPANY REPRESENTATIVE <i>William J. Maltman</i>	SIGNATURE OF CONTRACTOR REPRESENTATIVE <i>Ray J. Bell LGS</i>

INSTRUCTIONS FOR COMPLETION:

- I. Test section location - The line section being tested should be adequately described by survey alignment sheets which indicate section number, section, township, range, block no. and names of facilities. For existing pipelines, the description should be the same as that shown on the "Pipeline Facilities Information List".
 - II. Line History - All data on pipeline should be filled out.
 - III. Data Check List
 - A. Test Medium - medium used; such as sea water, fresh water, crude oil, etc.
 - B. Tested By - name of company performing test.
 - C. Test Pressure - minimum pressure used in test from recorder.
 - D. Principal Test Equipment - a list of principal test equipment.
 - E. Average Temperature of Test Medium - average testing fluid temperature should be recorded at both ends of test section to facilitate pressure calculations based on a temperature differential.
 - F. Pressure at Lowest Elevation Point in Test Section - the pressure at the lowest elevation point in the section tested shall be calculated and recorded along with the elevation and the location of that point. The location should be made from established topographic surveys on alignment sheets.
 - G. Pressure at Highest Elevation Point in Test Section - the pressure at the highest elevation point in the section tested shall be calculated and recorded along with the elevation and the location of that point. The location should be made from established topographic surveys on alignment sheets.
 - H. Test Duration - must record test pressure for entire test. Starting and completion times are to be recorded.
Are Test Pressure Continuous - if the test pressure fluctuates, explain briefly the cause, whether it be faulty equipment, gauges, or line failure.
 - Description of Facility Tested - Pipeline section, pump station manifold, riser, main line, etc.
 - K. Signature of contractor and company employee responsible for test.
- * Values to be "corrected" from calibration chart.

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2 P.M.

3 P.M.

4 P.M.

5 P.M.

6 P.M.

7 P.M.

8 P.M.

9 P.M.

10 P.M.

11 P.M.

12 MIGHT

1 A.M.

2 A.M.

3 A.M.

4 A.M.

5 A.M.

SOUTHERN FLOW
SUPERIOR CHARTS

METER NUMBER
P-13
MIG NUMBER
MIG 1498
TIME PUT ON
7:10 P.M.
DATE PUT ON
1/3/98

TUBE & DRIF. SIZE
12 3/4"
TIME TAKEN OFF
3:32 P.M.
DATE TAKEN OFF
1/4/98

METER NO. 3000
METER NO. 3000
Waltman
DIVERS

LINE OWNER - SHELL COASTAL PIPELINE JOB # 187231
CONTRACTOR - GLOTT DIVERS JOB # 9786897
LOG JOB # 971642-2 TEST # 010397-B
LINE DESCRIPTION - 15900' OF 12 3/4" P/L
LOCATION - VERMONT - H.W.T. \$DM-80906R-B
LINE SIZE - 12 3/4"

BLEED DOWN TEST
COMPARE

AT TEST PRESSURE HOLD HEAD

BLEED PRESSURING

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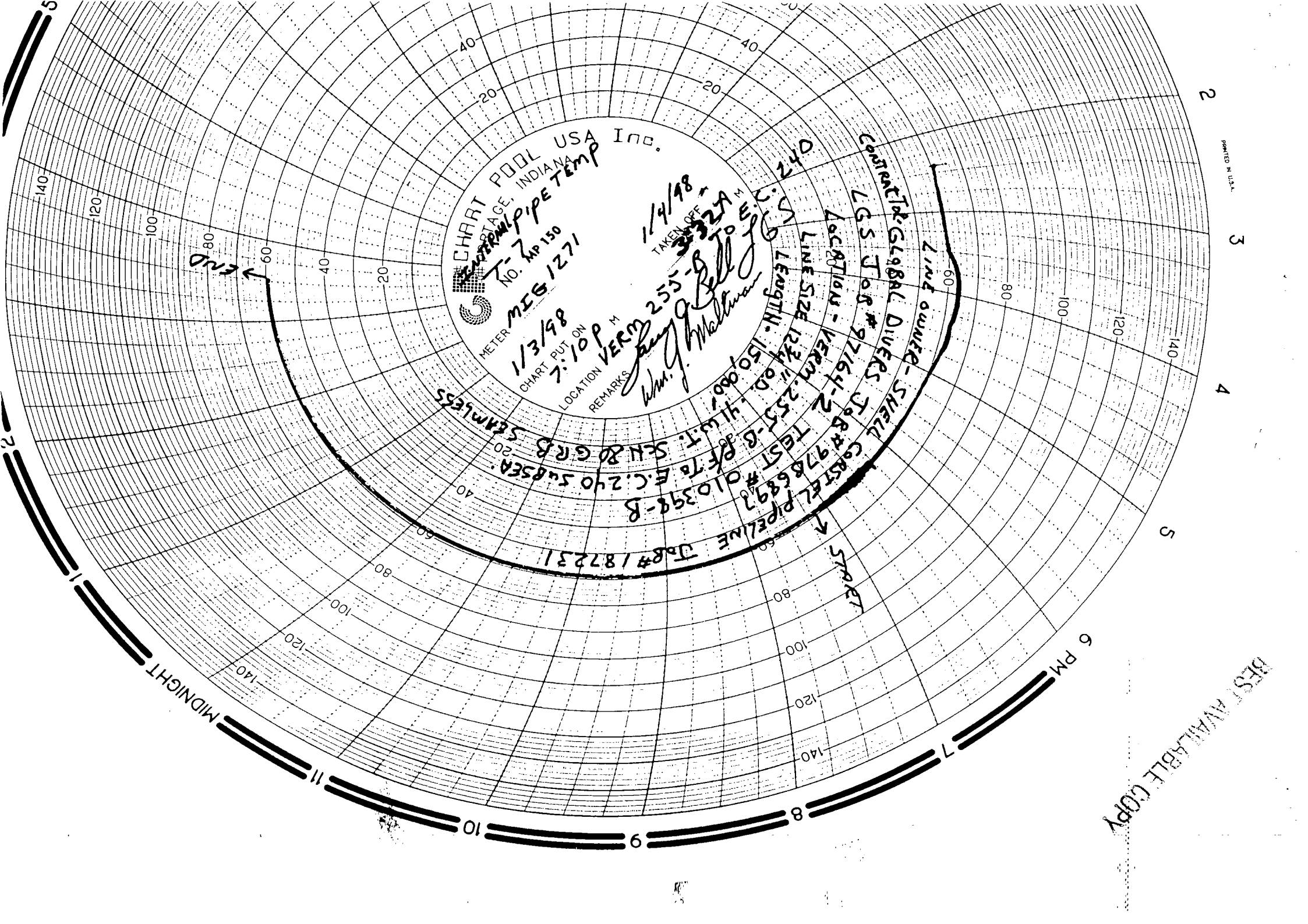


CHART POOL USA
STAGE, INDIANA, Inc.
METER No. MP 150
1/3/98
CHART PUT ON 2:10P
LOCATION VERM 255-B
REMARKS

PIPE TEMP
NO. 7
MSG 1271
1/4/98
TAKEN OFF
332A
Wm. J. Malin
JOB # 182231
CORROSION CONTROL PIPELINE
JOB # 97066897
TEST # 010398-B
PF TO E.C. 240 54858.
SEN 80 GRB
SEMNESS
4 WIT. SEN 80 GRB
150' 100' 200'

LINE SIZE 12 3/4"
LINE LENGTH 150'
JOB # 97164-2
CORROSION CONTROL PIPELINE
JOB # 97066897
TEST # 010398-B
PF TO E.C. 240 54858.
SEN 80 GRB
SEMNESS
4 WIT. SEN 80 GRB
150' 100' 200'

MIDNIGHT

6 PM

7

9

10

2

3

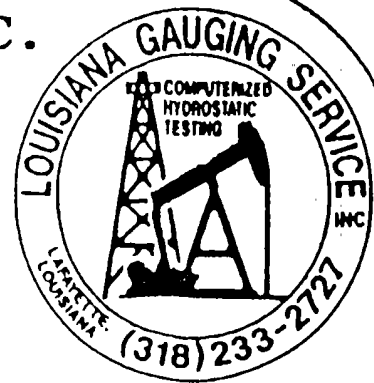
4

5

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LOUISIANA GAUGING SERVICE, INC.
P.O. BOX 30838 - LAFAYETTE, LOUISIANA 70593
318-233-2727 OR 800-726-0288



DEADWEIGHT/GAUGE 1 CERTIFICATION

ACCURACY +/- .10% FULL SCALE

MAKE REFINERY SUPPLY
MODEL NUMBER 2-1
SERIAL NUMBER 2809
PRESSURE RANGE 50-5000 PSIG

THIS INSTRUMENT TESTED
IN THE VERTICAL POSITION
TEST TEMPERATURE 80 OF
ACCURACY +/- 5 PSIG

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THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED INSTRUMENT HAS BEEN INSPECTED AND CALIBRATED USING AN ASHCROFT GAUGE TESTER SERIAL NUMBER 2HH 34220-9 WHICH WAS UTILIZED AS A PRESSURE STANDARD. THE STANDARD HAS AN ACCURACY OF 0.093% AND IS TRACEABLE TO THE NATIONAL BUREAU OF STANDARDS. THE INSTRUMENT CALIBRATED HAS BEEN FOUND TO CONFORM TO ACCEPTED LEVELS OF PERFORMANCE IN ACCORDANCE WITH ASME QUALITY CONTROL STANDARDS AND MIL-C-45662A.

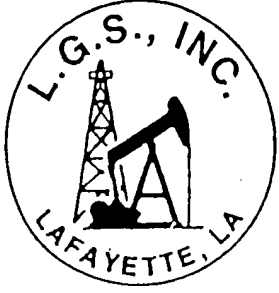
S P E C I A L C O N D I T I O N S :

TEST DATE: OCT 01 1997

CERTIFIED BY: *[Signature]*

WPCERT.003

Engineering * Sandblasting * Painting * Hydrostatic Testing
Rentals * Instrument/Pump Repairs * Calibrations/Certifications



Hydrostatic Testing
Equipment Rentals

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PRESSURE RECORDER CALIBRATION

ACCURACY +/- 1.00% FULL SCALE

MAKE	<u>AMERICAN MTR.</u>	THIS INSTRUMENT TESTED
MODEL NUMBER	<u>AM-12</u>	IN THE VERTICAL POSITION
SERIAL NUMBER	<u>M16-1408</u>	TEST TEMPERATURE <u>80</u> °F
PRESSURE RANGE #1	<u>3000</u> PSIG	ACCURACY +/- <u>30</u> PSIG
PRESSURE RANGE #2	_____ PSIG	ACCURACY +/- _____ PSIG

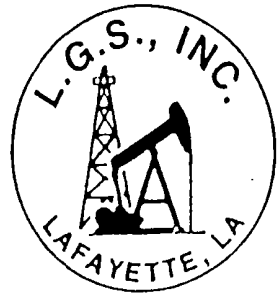
THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED INSTRUMENT HAS BEEN INSPECTED AND CALIBRATED USING AN ASIICROFT GAUGE TESTER SERIAL NUMBER 2III 34220-9 WHICH WAS UTILIZED AS A PRESSURE STANDARD. THE STANDARD HAS AN ACCURACY OF 0.093% AND IS TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST). THE INSTRUMENT CALIBRATED HAS BEEN FOUND TO CONFORM TO ACCEPTED LEVELS OF PERFORMANCE IN ACCORDANCE WITH ASME QUALITY CONTROL STANDARDS AND MIL-C-45662A.

TEST DATE: OCT 01 1997

CERTIFIED BY: *[Signature]*

WPCERT.002

Hydrostatic Testing
Equipment Rentals



TEMPERATURE RECORDER CALIBRATION

ACCURACY +/- 1.00% FULL SCALE

MAKE AMERICAN MTR.
 MODEL NUMBER AM-12
 SERIAL NUMBER MIG1271
 RANGE 0-150°F

THIS INSTRUMENT TESTED
 IN THE VERTICAL POSITION
 TEST TEMPERATURE 80 °F

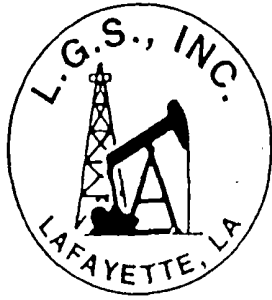
THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED INSTRUMENT HAS BEEN INSPECTED AND CALIBRATED USING A YELLOWBACK LABORATORY GRADE THERMOMETER (RANGE: 0 - 220°F) FROM 20% TO 80% OF SCALE. THIS INSTRUMENT PERFORMS WITHIN GUIDELINES SET BY ASME QUALITY CONTROL STANDARDS AND MIL-C-45662A.

TEST DATE: OCT 01 1997

CERTIFIED BY: *M. Johnson*

WERT.001

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Hydrostatic Testing
Equipment Rentals

TEMPERATURE RECORDER CALIBRATION

ACCURACY +/- 1.00% FULL SCALE

MAKE AMERICAN MTR
 MODEL NUMBER AM-12
 SERIAL NUMBER MIG 1429
 RANGE 0-150°F

THIS INSTRUMENT TESTED
IN THE VERTICAL POSITION

TEST TEMPERATURE 80°F

THIS IS TO CERTIFY THAT THE ABOVE DESCRIBED INSTRUMENT HAS BEEN INSPECTED AND CALIBRATED USING A YELLOWBACK LABORATORY GRADE THERMOMETER (RANGE: 0 - 220°F) FROM 20% TO 80% OF SCALE. THIS INSTRUMENT PERFORMS WITHIN GUIDELINES SET BY ASME QUALITY CONTROL STANDARDS AND MIL-C-45662A.

TEST DATE: OCT 01 1997

CERTIFIED BY: *[Signature]*

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