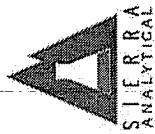


Product Characteristics



Los Angeles County Dept. of Public Works
 900 S. Fremont Ave.
 Alhambra CA, 91803

Project: Dominguez Channel
 Project Number: PCA.F6060278
 Project Manager: Gregory Sena

Total Petroleum Hydrocarbons Carbon Range Analy

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch
---------	--------	-----------------	-------	----------	-------

DC-1 (1102183-01) Liquid Sampled: 02/11/11 12:30 Received: 02/11/11 15:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch
HC < C8	400	400	mg/L	400	B1B0906
C8 <= HC < C9	6400	400	"	"	"
C9 <= HC < C10	6100	400	"	"	"
C10 <= HC < C11	4900	400	"	"	"
C11 <= HC < C12	2800	400	"	"	"
C12 <= HC < C14	2200	400	"	"	"
C14 <= HC < C16	400	400	"	"	"
C16 <= HC < C18	ND	400	"	"	"
C18 <= HC < C20	ND	400	"	"	"
C20 <= HC < C24	ND	400	"	"	"
C24 <= HC < C28	ND	400	"	"	"
C28 <= HC < C32	ND	400	"	"	"
HC >= C32	ND	400	"	"	"
Total Petroleum Hydrocarbons (C7-C36)	23000	2000	"	"	"

Primarily gasoline- and jet fuel-range hydrocarbons in channel sample DC-1.

Hydrocarbon Ranges	
Gasoline	C ₄ -C ₁₂
Jet Fuel	C ₇ -C ₁₆
Diesel	C ₁₃ -C ₂₅

Surrogate: o-Terphenyl

%

S-03





Product Characteristics

**United States Coast Guard
Marine Safety Laboratory
Oil Spill Identification Report
11-125**

Requestor: U. S. EPA Region IX

Unit Case/Activity Number: E11908

Received: 15-Feb-11

Via: Federal Express 8710 1056 5463

RESULTS:

1. Sample 11-125-1 was specified to be representative of spilled oil. Analysis indicates this sample contains gasoline mixed with traces of heavier petroleum oil. It is not possible based on the analysis conducted to determine if the heavier petroleum product is lubricating oil or a degraded fuel oil due to the limited quantity of product in the sample.



Product Characteristics

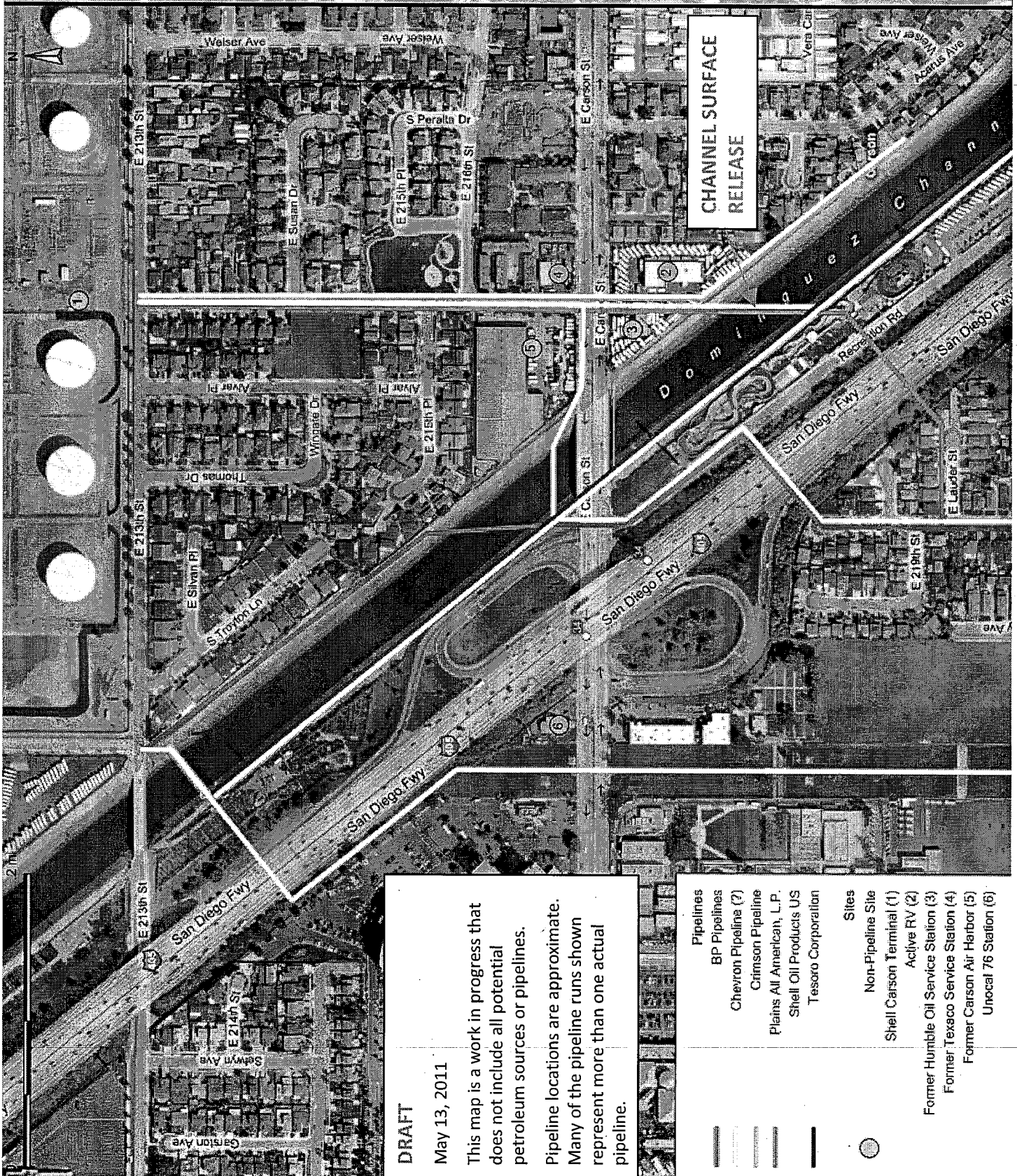
- Summary
 - Gasoline;
 - Jet Fuel or Diesel (?); and/or
 - Heavier Oil (?).



Working Ideas

- LNAPL flowing through pipeline trench on east side of channel (Active RV side)
 - Proven negative by excavation at Active RV site
- LNAPL entering subdrains and getting under channel
 - Mechanism unknown
- Groundwater plume
 - Groundwater elevation rise exposed LNAPL to channel bottom and subdrains
 - One or more petroleum release sources

Dominguez Channel Release Vicinity Facilities



CHANNEL SURFACE
RELEASE

DRAFT
May 13, 2011

This map is a work in progress that does not include all potential petroleum sources or pipelines.

Pipeline locations are approximate. Many of the pipeline runs shown represent more than one actual pipeline.

- | | |
|---|---|
| <ul style="list-style-type: none"> — Pipelines — BP Pipelines — Chevron Pipeline (7) — Crimson Pipeline — Plains All American, L.P. — Shell Oil Products US — Tesoro Corporation | <ul style="list-style-type: none"> ● Sites ○ Non-Pipeline Site ○ Shell Carson Terminal (1) ○ Active RV (2) ○ Former Humble Oil Service Station (3) ○ Former Texaco Service Station (4) ○ Former Carson Air Harbor (5) ○ Unocal 76 Station (6) |
|---|---|



Assessment Goals

1. Physical subsurface sampling to fully delineate soil, ***groundwater***, and soil gas impact around petroleum infrastructure and the Dominguez Channel.
 - LNAPL
 - Other petroleum (dissolved phase, soil gas, etc.)
 - Other contaminants (?)
 - Full lateral and vertical extents
 - Connection to bottom of channel
 - Connection to subdrains
 - Transport along subdrains



Assessment Goals

2. Gain an understanding of the subsurface conditions delivering LNAPL to the channel bottom and the levee subdrains.
3. Determine whether individual petroleum infrastructures are contributing to the Dominguez Channel release.



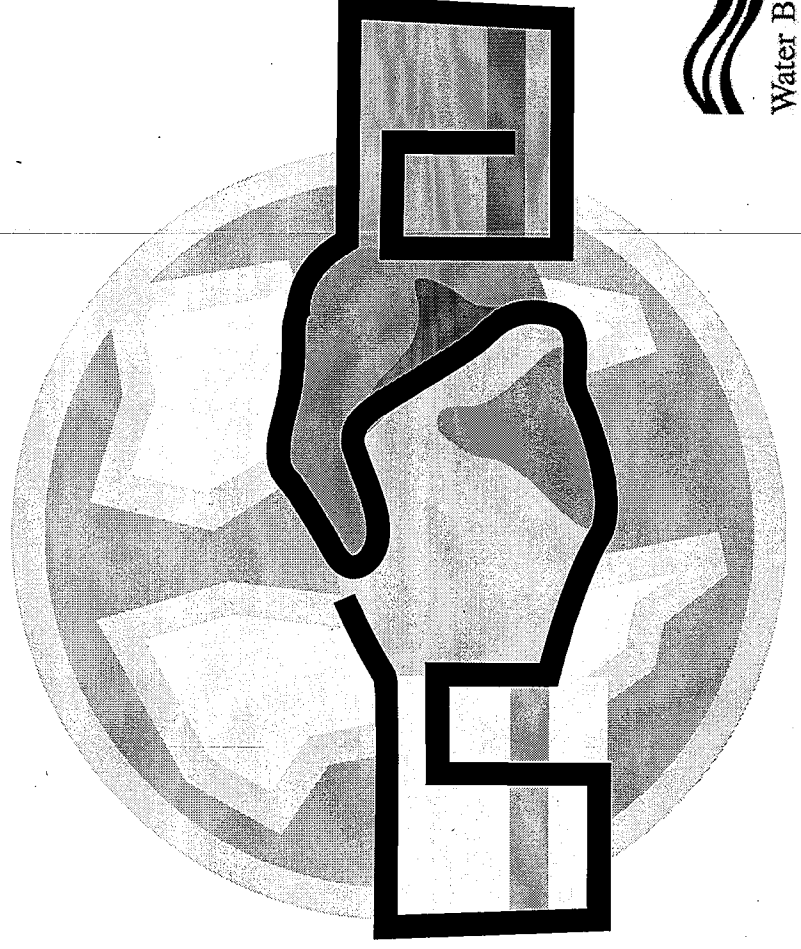
Assessment Goals

4. Complete sufficient assessment to design a remediation approach.

Assessment Goals

5. Collaborate to improve efficiency to achieve Goals 1 to 4.

- Faster results
- Better results
- Lower costs



Regional Board Contact

Greg Bishop, P.G.
Engineering Geologist

LARWQCB

320 W. 4th Street, Suite 200
Los Angeles, CA 90013

(213) 576-6727

gbishop@waterboards.ca.gov

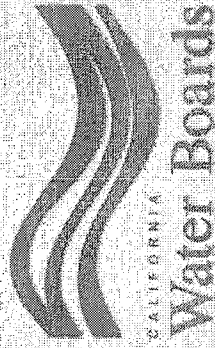


EXHIBIT D



TESORO

Tesoro Refining and Marketing Co.
Pipelines, Terminals, Trucking & Rail
300 Concord Plaza Drive
San Antonio, TX 78216-6999
www.TsoCorp.com

Office of the State Fire Marshal
Pipeline Safety Division
P.O. Box 944246
Sacramento, CA 94244-2460

April 25th of 2008

Subject: 2008 Hazardous Liquid Pipeline Operator Questionnaire

Dear Office of the State Fire Marshal,

This letter is being submitted with the updated 2008 Hazardous Liquid Pipeline Operator Questionnaire for the Tesoro Los Angeles Refinery (LAR). Historically, four jurisdictional pipelines (CSFM ID # 438, 439, 440, and 680) and six non-jurisdictional pipelines (CSFM ID # 740, 741, 742, 743, 744, 749) have been operated between the Long Beach Marine Terminal and the Los Angeles Refinery. The 2007 Tesoro Refining and Marketing Company acquisition included four additional jurisdictional pipelines (CSFM pipeline ID numbered 1236, 684, 366, and 418). Tesoro Refining and Marketing Company acquired the Los Angeles Refinery from Equilon Enterprises LLC (d.b.a.) Shell Oil Products US on May 10, 2007. As of May 11, 2007, Tesoro Refining and Marketing Company has been the operator of the Los Angeles Refinery, and accompanying DOT jurisdictional pipelines. All of these DOT covered pipelines have a total length of 15.03 miles, and are located within the county of Los Angeles.

If you have any questions regarding the attached CSFM Questionnaire, please contact Lori Menke at L.Menke@tsocorp.com or (210) 626-6526.

Sincerely,

Lori Menke
DOT Compliance Specialist
Pipeline, Terminals, Trucking & Rail
Tesoro Refining & Marketing Company
300 Concord Plaza Drive
San Antonio, Texas 78216
(a) 210-626-6526
(c) 210-216-9472
(f) 210-745-4631
L.Menke@tsocorp.com



TESORO

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Sincerely,

Lori Menke
DOT Compliance Specialist
Pipelines, Terminals, Trucking & Rail
Tesoro Refining & Marketing Company
300 Concord Plaza Drive
San Antonio, Texas 78216
(a) 210-626-6526
(e) 210-216-9472
(f) 210-745-4631
L.Menke@tsocorp.com

EXHIBIT E

HYDROSTATIC TEST CERTIFICATION DATA

LINES FALLING WITHIN D.O.T. LIQUID AND GAS PIPELINE REGULATIONS

SHELL PIPE LINE CORPORATION

Instructions for Completion on Reverse side

JOB NO.	
ES NO.	#35

PIPELINE <i>INTER-REFY D.E.A. LEAN #21</i>	LOCATION CODE <i>71946</i>	DIVISION <i>W.C.D. 510</i>
SECTION TESTED FROM STATION SURVEY <i>26+93 ARCO REEF</i>	TO STATION SURVEY <i>146+99 DOM REEF</i>	TEST SITE LOCATION <i>DOM. REEF</i>

LINE HISTORY			
DATE CONSTRUCTED	O.D. <i>8"</i>	TYPE (Seamless, ERW, etc.) <i>GRADE-B SMLS</i>	
SPEC. MIN. YIELD <i>GRADE-B</i>	WALL <i>.375</i>	ANSI RATING	VALVES <i>600#</i>
			FLANGES <i>600#</i>

DATE TEST PERFORMED
2/8/83

DATA CHECK LIST	REMARKS
TEST MEDIUM	<i>WATER</i>
TEST BY	<i>LONG BEACH MAINT.</i>
TEST PRESSURE - MINIMUM	<i>700 P.S.I.</i>
LIST PRINCIPAL TEST EQUIPMENT (Pump, Tester, Recorder, etc.)	<i>TEST PUMP, RECORDER</i>
AVERAGE TEMPERATURE OF TESTING MEDIUM	<i>62°</i>
PRESSURE AT LOWEST ELEVATION POINT IN THE SECTION, INCLUDING ELEVATION AND LOCATION.	<i>700 P.S.I.</i>
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION.	<i>300 P.S.I.</i>
TEST DURATION (Including time started and completed)	DURATION ▶ <i>4</i> HOURS
	STARTED ▶ <i>9:30</i> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM
	COMPLETED ▶ <i>1:30</i> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
ARE PRESSURES CONTINUOUS? If not, explain.	<i>YES</i>
DESCRIPTION OF FACILITY TESTED: (Hwy-xing, River, Pump Sta., Buried Line, etc.)	<i>BURIED LINE</i>
GENERAL COMMENTS	
SIGNATURE OF OPERATOR'S EMPLOYEE RESPONSIBLE FOR TEST	<i>J. L. [Signature]</i>

- ATTACHMENTS REQUIRED FOR EACH TEST**
1. Dead Weight Tester Data.
 2. Recording Gauge Charts.
 3. Elevation Profile of Line Indicating Test Site (Required if Elevation Difference Greater than 100').

DISTRIBUTION:
 HEAD OFFICE PROJECT: Original: Engineering - Products - General Engineering
 Copy: Division
 DIVISION PROJECT: Original: Division
 Copies: Local Procedures

RETENTION: As Long As Facility Tested In Use.

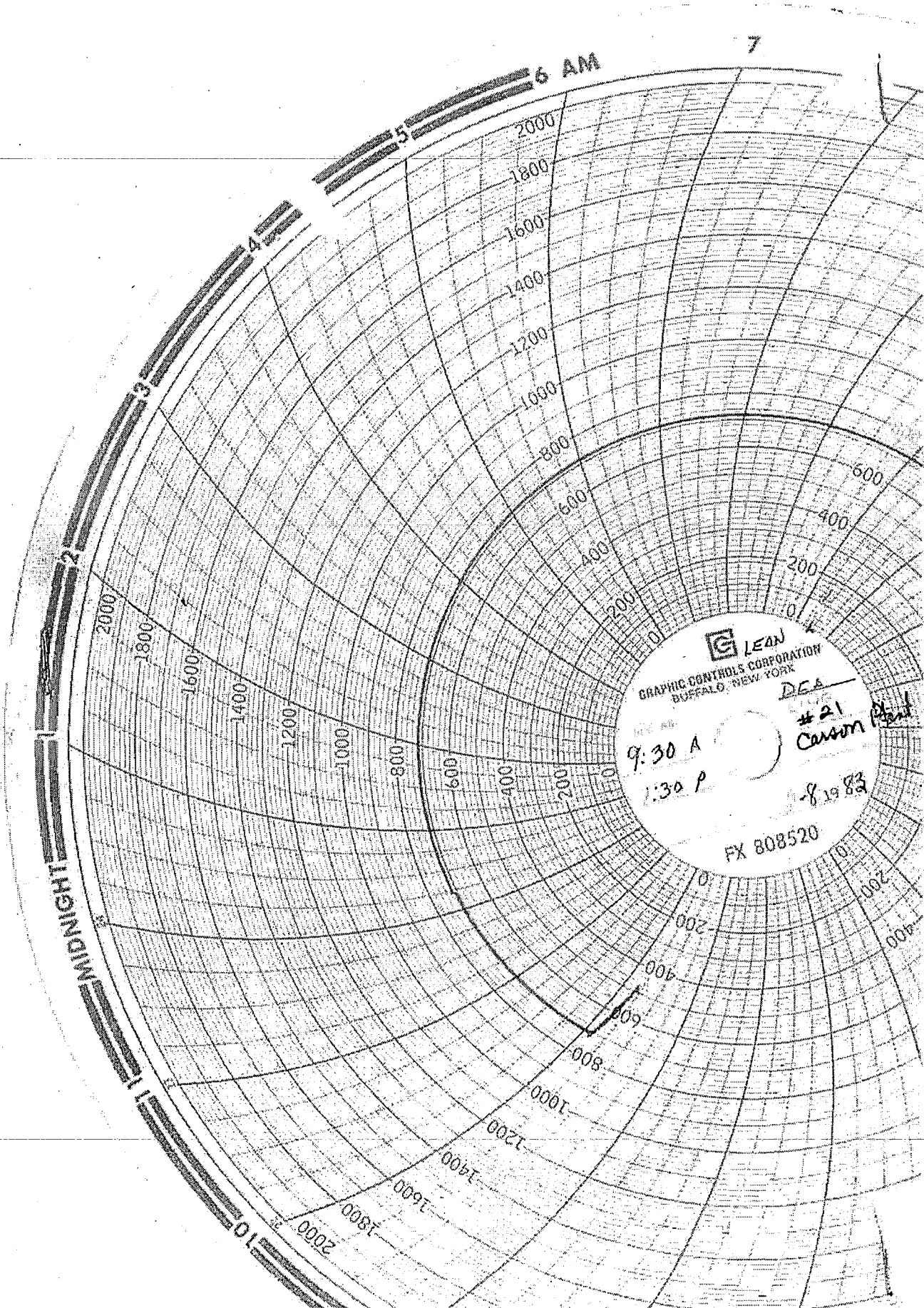
#21 - Carson Plans

DER LINES
(TEST)

LEKAJ

2-8-1983

TIME		TEMP
9:30	AM	62°
10:00	AM	62°
10:30	AM	62°
11:00	AM	62°
11:30	AM	62°
12:00	N	62°
12:30	PM	63°
1:00	PM	63°
1:30	PM	63°



LEAN
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK

9:30 A
1:30 P

DEA
#21
Carson Plant

8/19/83

FX 808520

HYDROSTATIC TEST CERTIFICATION DATA

LINES FALLING WITHIN D.O.T. LIQUID AND GAS PIPELINE REGULATIONS

SHELL PIPE LINE CORPORATION

JOB NO.	#35
ES NO.	

Instructions for Completion on Reverse side

PIPELINE <i>INTER-REFY DEA LEON #21</i>	LOCATION CODE <i>71946</i>	DIVISION <i>REGD. SID</i>
SECTION TESTED <i>WILM. REFY</i>	FROM STATION SURVEY <i>TEXACO REFY</i>	TEST SITE LOCATION <i>WILM. REFY</i>

LINE HISTORY			
DATE CONSTRUCTED <i>"</i>	O.D. <i>8"</i>	TYPE (Seamless, ERW, etc.) <i>GRADE-B SMLS</i>	
SPEC. MIN. YIELD <i>GRADE-B</i>	WALL <i>.312</i>	ANSI RATING	VALVES <i>300* & 600*</i>
			FLANGES <i>300* & 600*</i>

DATE TEST PERFORMED <i>2-15-83</i>	
---------------------------------------	--

DATA CHECK LIST	REMARKS
TEST MEDIUM	<i>WATER</i>
TEST BY	<i>LONG BEACH MAINT.</i>
TEST PRESSURE - MINIMUM	<i>780 P.S.I.</i>
LIST PRINCIPAL TEST EQUIPMENT (Pump, Tester, Recorder, etc.)	<i>TEST PUMP - RECORDER</i>
AVERAGE TEMPERATURE OF TESTING MEDIUM	<i>58°</i>
PRESSURE AT LOWEST ELEVATION POINT IN THE SECTION, INCLUDING ELEVATION AND LOCATION.	<i>780 P.S.I.</i>
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION.	<i>780 P.S.I.</i>
TEST DURATION (including time started and completed)	DURATION <input type="checkbox"/> HOURS <i>4</i>
	STARTED <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM <i>9:00</i>
	COMPLETED <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM <i>1:00</i>
ARE PRESSURES CONTINUOUS? If not, explain.	<i>NO - ONE BLEED OFF.</i>
DESCRIPTION OF FACILITY TESTED. (Hwy-rising, River, Pump Sta., Buried Line, etc.)	<i>BURIED LINE</i>
GENERAL COMMENTS	<i>PRESSURE RISE DUE TO APPROX. 30% OF PIPE EXPOSED TO SUN ON ABOVE GROUND PIPE RACKS.</i>

SIGNATURE OF OPERATOR'S EMPLOYEE RESPONSIBLE FOR TEST *J. F. Hanson* **DRM ROW**

- ATTACHMENTS REQUIRED FOR EACH TEST**
1. Dead Weight Tester Data.
 2. Recording Gauge Charts.
 3. Elevation Profile of Line Indicating Test Site (Required if Elevation Difference Greater than 100').

DISTRIBUTION:
 HEAD OFFICE PROJECT: Original: Engineering - Products - General Engineering
 Copy: Division
 DIVISION PROJECT: Original: Division
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RETENTION: As Long As Facility Tested In Use.

DEA LINE TEST LEAN

DATE 2-15-8.

TIME	TEMP	REMARKS
9:00 AM	58°	
9:30	58°	
10:00	58°	
10:30	58°	
11:00	58°	
11:30 ↓	58°	
12:00 N.	59°	bled down 1 qt.
12:30 PM	57°	
1:00 ↓	60°	

HYDROSTATIC TEST CERTIFICATION DATA

LINES FALLING WITHIN D.O.T. LIQUID AND GAS PIPELINE REGULATIONS

SHELL PIPE LINE CORPORATION

Instructions for Completion on Reverse side

JOB NO.	#
ES NO.	

PIPELINE INTER-REFY DEALIAN #21	LOCATION CODE 71946	DIVISION WCD SD.
SECTION TESTED FROM STATION SURVEY Wilm Ref.	TO STATION SURVEY Dom. Ref.	TEST SITE LOCATION Wilm Ref.

LINE HISTORY			
DATE CONSTRUCTED	O.D. 8.625"	TYPE (Seamless, ERW, etc.) Grade B SMLS	
SPEC. MIN. YIELD 35000 PSI	WALL .312"	ANSI RATING	VALVES ANSI 300# + 600#
			FLANGES 300 + 600#

DATE TEST PERFORMED
12/11/84

DATA CHECK LIST	REMARKS
TEST MEDIUM	Demineralized Water
TEST BY	Long Beach Maint.
TEST PRESSURE - MINIMUM	720 PSIG
LIST PRINCIPAL TEST EQUIPMENT (Pump, Tester, Recorder, etc.)	TEST PUMP RECORDER
AVERAGE TEMPERATURE OF TESTING MEDIUM	60°F
PRESSURE AT LOWEST ELEVATION POINT IN THE SECTION, INCLUDING ELEVATION AND LOCATION.	720 No elevation change
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION.	720 No elevation change
TEST DURATION (including time started and completed)	DURATION 4 HOURS
	STARTED 2:20 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
	COMPLETED 6:20 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
ARE PRESSURES CONTINUOUS? If not, explain.	Continuous with temp
DESCRIPTION OF FACILITY TESTED. (Hwy-xing, River, Pump Sta., Buried Line, etc.)	Buried mostly - some exposed piping
GENERAL COMMENTS	Pressure fluctuations were consistent with temperature conditions of the test medium.
SIGNATURE OF OPERATOR'S EMPLOYEE RESPONSIBLE FOR TEST	J. Hanson AFB RM

- ATTACHMENTS REQUIRED FOR EACH TEST**
1. Dead Weight Tester Data.
 2. Recording Gauge Charts.
 3. Elevation Profile of Line Indicating Test Site (Required if Elevation Difference Greater than 100').

DISTRIBUTION:

HEAD OFFICE PROJECT: Original: Engineering - Products - General Engineering
Copy: Division

DIVISION PROJECT: Original: Division
Copies: Local Procedures

RETENTION: As Long As Facility Tested In Use.

HYDROSTATIC TEST CERTIFICATION DATA

LINES FALLING WITHIN D.O.T. LIQUID AND GAS PIPELINE REGULATIONS

SHELL PIPE LINE CORPORATION

Instructions for Completion on Reverse side

JOB NO.	▶	
ES NO.	▶	

PIPELINE INTER-REFINERY LINE #21	LOCATION CODE 71946	DIVISION WCD SOUTHERN DISTRICT
SECTION TESTED ▶ FROM STATION SURVEY 66+80	TO STATION SURVEY 67+27	TEST SITE LOCATION ARCO REFINERY

LINE HISTORY			
DATE CONSTRUCTED 1965	O.D. 8.625	TYPE (Seamless, ERW, etc.) ERW	
SPEC. MIN. YIELD 35,000	WALL .322	ANSI RATING ▶	VALVES - FLANGES -

DATE TEST PERFORMED 8-6-88

DATA CHECK LIST	REMARKS
TEST MEDIUM	WATER
TEST BY	LONG BEACH MAINTENANCE CREW
TEST PRESSURE - MINIMUM	2180
LIST PRINCIPAL TEST EQUIPMENT (Pump, Tester, Recorder, etc.)	PUMP, DEAD WEIGHT
AVERAGE TEMPERATURE OF TESTING MEDIUM	67
PRESSURE AT LOWEST ELEVATION POINT IN THE SECTION, INCLUDING ELEVATION AND LOCATION.	N/A
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION.	N/A
TEST DURATION (including time started and completed)	DURATION ▶ (8) EIGHT HOURS
	STARTED ▶ 2:15 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
	COMPLETED ▶ 6:15 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
ARE PRESSURES CONTINUOUS? <i>If not, explain.</i>	YES
DESCRIPTION OF FACILITY TESTED. (Hwy-xing, River, Pump Sta., Buried Line, etc.)	EXPOSED SECTION
GENERAL COMMENTS	TESTED NEW SECTION FOR LINE REPAIR. CERTIFIED BY METCO EQUIPMENT.
SIGNATURE OF OPERATOR'S EMPLOYEE RESPONSIBLE FOR TEST	

ATTACHMENTS REQUIRED FOR EACH TEST

1. Dead Weight Tester Data.
2. Recording Gauge Charts.
3. Elevation Profile of Line Indicating Test Site (Required if Elevation Difference Greater than 100').

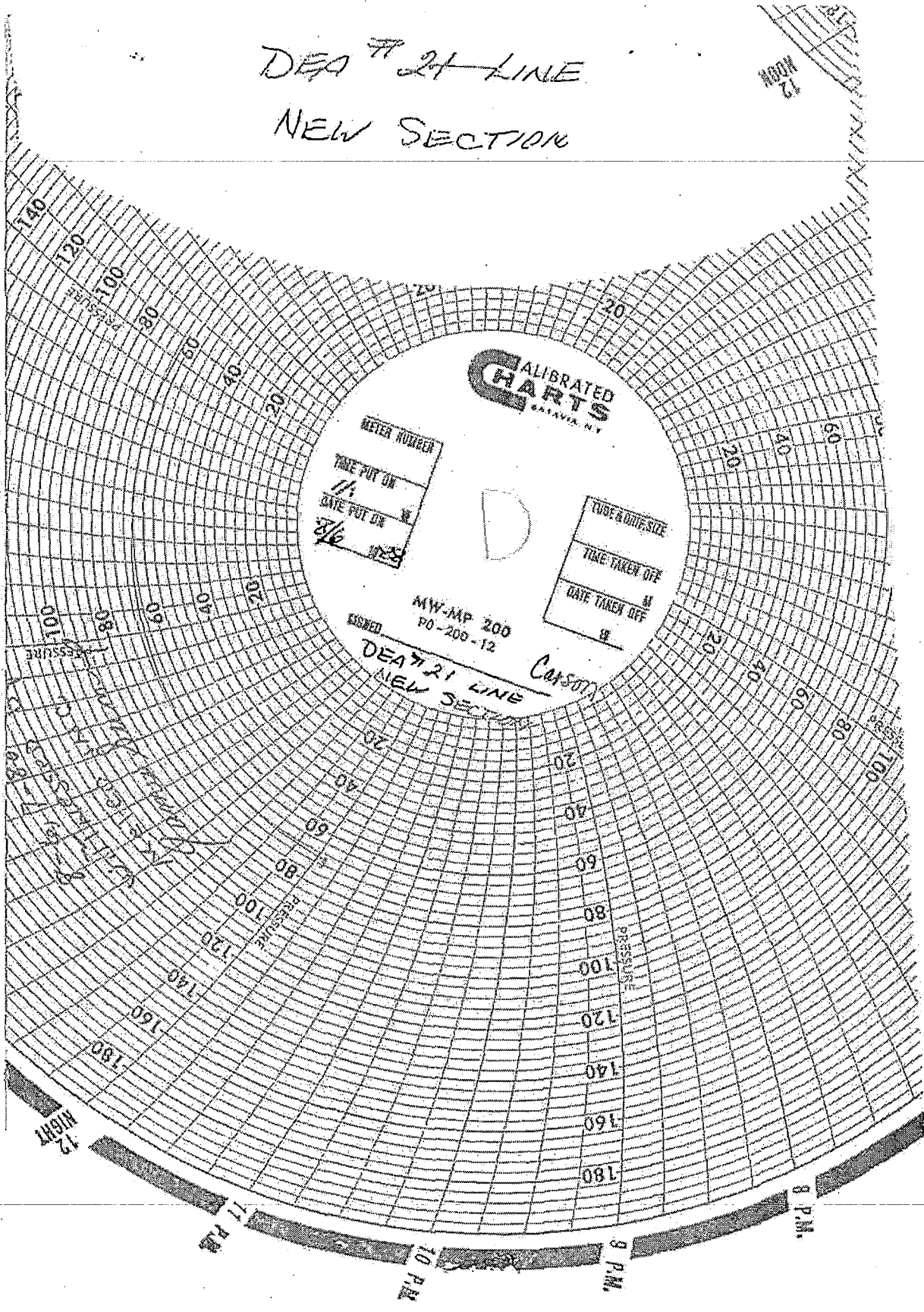
DISTRIBUTION:

HEAD OFFICE PROJECT: Original: Engineering - Products - General Engineering
Copy: Division

DIVISION PROJECT: Original: Division
Copies: Local Procedures.

RETENTION: As Long As Facility Tested In Use.

DEA # 21 LINE
NEW SECTION



HYDROSTATIC TEST CERTIFICATION DATA

LINES FALLING WITHIN D.O.T. LIQUID AND GAS PIPELINE REGULATIONS

SHELL PIPE LINE CORPORATION

Instructions for Completion on Reverse side

JOB NO.	
ES NO.	

PIPELINE DEA LEAN INTER-REFINERY #21 LINE.	LOCATION CODE 71946	DIVISION WCD-SO. DIST.
SECTION TESTED 0+00	FROM STATION SURVEY	TO STATION SURVEY 146 + 49.9
		TEST SITE LOCATION WILMINGTON REFINERY

LINE HISTORY				
DATE CONSTRUCTED	O.D. 8.625	TYPE (Seamless, ERW, etc.) VARIOUS		
SPEC. MIN. YIELD GRADE B	WALL .312 & .277	ANSI RATING	VALVES 300#	FLANGES 300#

DATE TEST PERFORMED
8/8/88

DATA CHECK LIST	REMARKS
TEST MEDIUM	WATER
TEST BY	LONG BEACH MAINTENANCE CREW
TEST PRESSURE - MINIMUM	1120
LIST PRINCIPAL TEST EQUIPMENT (Pump, Tester, Recorder, etc.)	PUMP, RECORDER, & DEAD WEIGHT
AVERAGE TEMPERATURE OF TESTING MEDIUM	79.5
PRESSURE AT LOWEST ELEVATION POINT IN THE SECTION, INCLUDING ELEVATION AND LOCATION.	N/A
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION.	N/A
TEST DURATION (Including time started and completed)	DURATION ▶ EIGHT (8) HOURS
	STARTED ▶ 2:30 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
	COMPLETED ▶ 10:30 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
ARE PRESSURES CONTINUOUS? <i>If not, explain.</i>	YES
DESCRIPTION OF FACILITY TESTED: (Hwy-xing, River, Pump Sta., Buried Line, etc.)	BURIED LINE

GENERAL COMMENTS

STATE FIRE MARSHAL TEST I.D. #8-7

LINE RECERTIFIED DUE TO INCREASE IN TEST PRESSURE

CERTIFIED BY METCO EQUIPMENT INC.

SIGNATURE OF OPERATOR'S EMPLOYEE RESPONSIBLE FOR TEST ▶ 

- ATTACHMENTS REQUIRED FOR EACH TEST
1. Dead Weight Tester Data.
 2. Recording Gauge Charts.
 3. Elevation Profile of Line Indicating Test Site (Required if Elevation Difference Greater than 100').

DISTRIBUTION:
HEAD OFFICE PROJECT: Original: Engineering - Products - General Engineering
Copy: Division

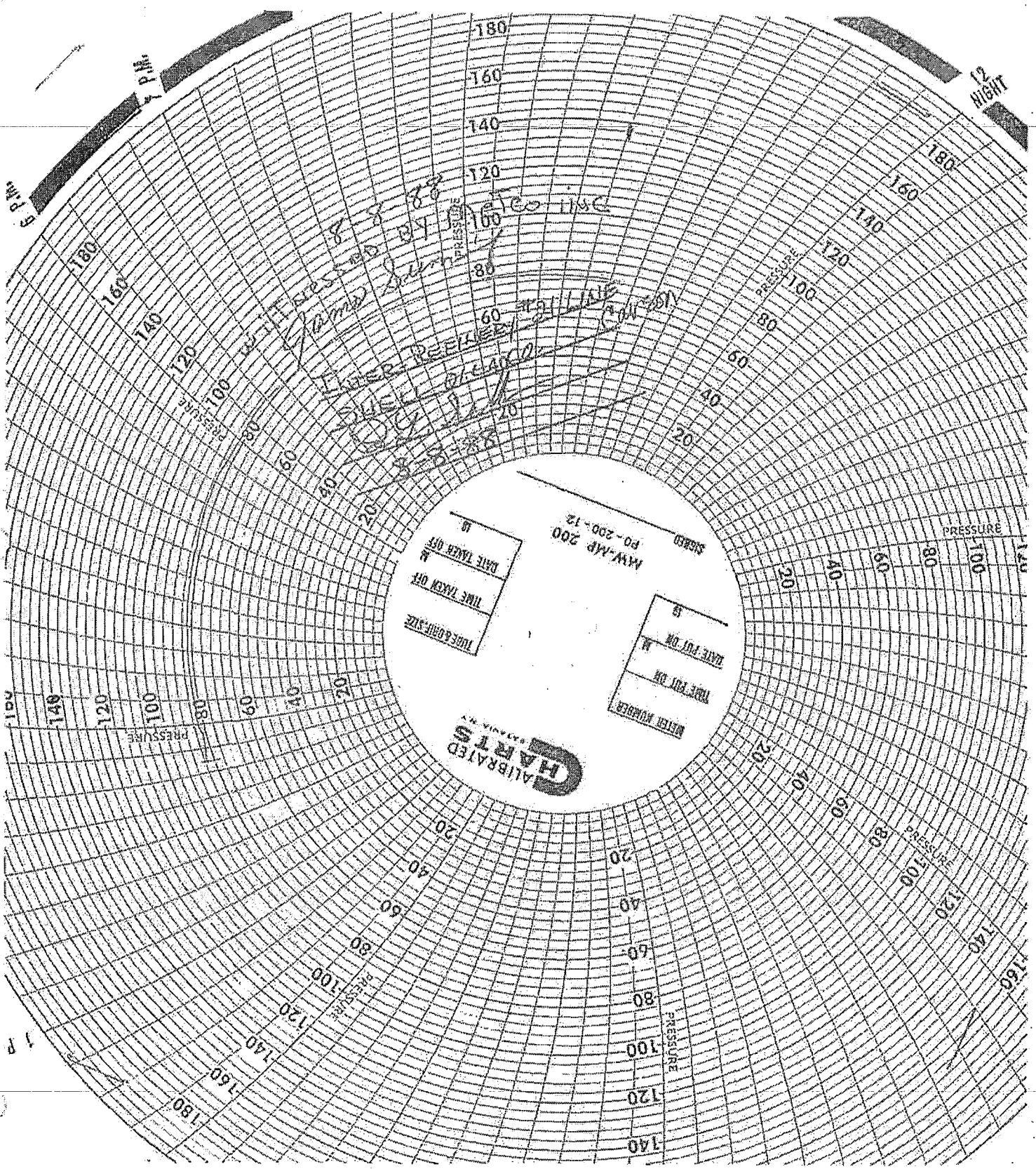
DIVISION PROJECT: Original: Division
Copies: Local Procedures

RETENTION: As Long As Facility Tested In Use.

1/2 #21 LINE TEST - LEAN

8-8-88

TIME	DEAD WT.	RECORDED	GAGES	LINE TEMP.	AMBIENT	COMMENTS
2:30	1140	1140	/	84°	80°	
3:00	1154	1155		82°	78°	SUNNY
3:30	1159	1160		82°	79°	↓
4:00	1164	1160		82°	77°	
4:30	1165	1162		82°	76°	
5:00	1164	1162		82°	76°	
5:30	1167	1162		83°	75°	
6:00	1162	1160		82°	73°	COOLER
6:30	1157	1155		82°	74°	↓
7:00	1152	1150		80°	72°	
7:30	1150	1145		80°	70°	
8:00	1150	1140		77°	70°	
8:30	1131	1125		76°	69°	
9:00	1131	1125		76°	67°	
9:30	1121	1115		75°	67°	
10:00	1121	1115		75°	67°	
10:30	1116	1115		72°	67°	



5 P.M.

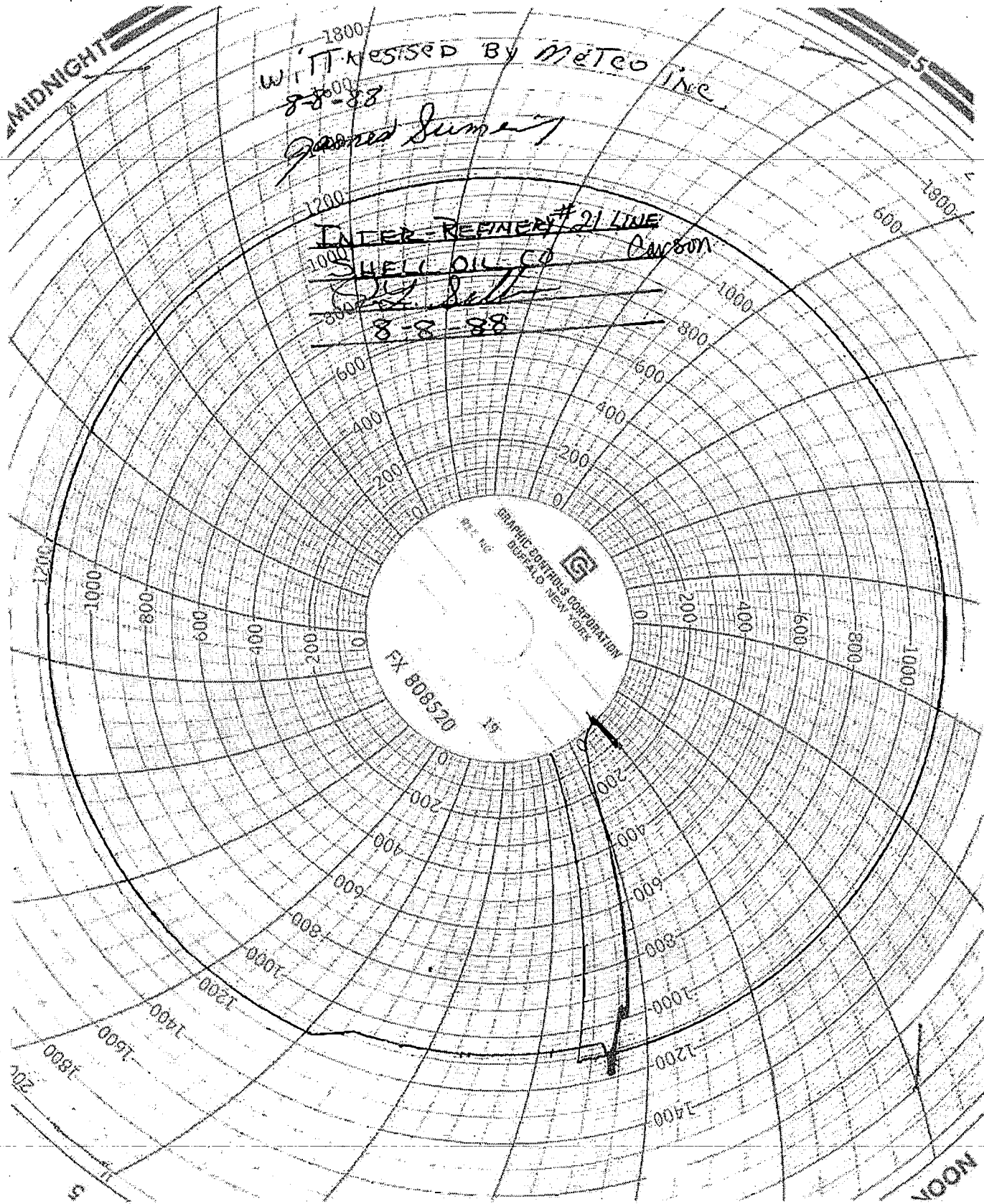
P.M.

12 NIGHT

CALIBRATED CHARTS
MAY-MP 200

DATE TAKEN OFF	NO.
TIME TAKEN OFF	DATE PUT ON
TUBE & BORE SIZE	TIME PUT ON
	WATER NUMBER

W-H PRESS 88
W-H PRESS 84
W-H PRESS 80
W-H PRESS 76
W-H PRESS 72
W-H PRESS 68
W-H PRESS 64
W-H PRESS 60
W-H PRESS 56
W-H PRESS 52
W-H PRESS 48
W-H PRESS 44
W-H PRESS 40
W-H PRESS 36
W-H PRESS 32
W-H PRESS 28
W-H PRESS 24
W-H PRESS 20
W-H PRESS 16
W-H PRESS 12
W-H PRESS 8
W-H PRESS 4
W-H PRESS 0



WITNESSED BY METEO INC.
8-8-88

Dawned Summary

INTER-REFINERY #21 LINE
SHELL OIL CO
CANTON
8-8-88

GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
FX 808520

MIDNIGHT

NOON



METCO EQUIPMENT INC.

P. O. BOX 4709

18601 SOUTH MAIN STREET
CAHILLON, CALIFORNIA 90745

STATE FIRE MARSHAL
Pipeline Safety Division
7171 Bowling Dr., Suite 600
Sacramento, CA 95823

August 30, 1988

Gentlemen:

Attached for your further handling is a copy of a pipeline hydrotest report, as per California State Fire Marshal's Office.

PIPELINE OWNER: Shell Oil Company
PIPELINE TESTED: IR-21
DATE TESTED: August 8, 1988
CONDUCTED BY: Shell Oil Company
WITNESSED BY: Metco Equipment inc.

Should you need any further information, please contact the undersigned at (213) 532-0210.

Sincerely,

METCO EQUIPMENT INC.

A handwritten signature in cursive script that reads "Dusty Hilyar". The signature is written in dark ink and is positioned above the printed name and title.

DUSTY HILYAR,
Vice President

/slc
Attachments

**OFFICE OF STATE FIRE MARSHAL
LIQUID PIPELINE SAFETY DIVISION
HYDROSTATIC TEST RESULTS**

PIPELINE DATA		Test Date 08-08-88
Pipeline Operator Shell Oil Company		Company conducting test if other than operator
Kind of Test <input type="checkbox"/> New <input type="checkbox"/> Replacement <input type="checkbox"/> Annual <input type="checkbox"/> 3 Year <input checked="" type="checkbox"/> 5 Year <input type="checkbox"/> Other		
Pipeline Identification (line number, name, etc) IR-21		
Pipeline Location (mile post, street, station, etc) From: <u>Refinery - Wilmington</u> To: <u>Dominguez Refinery</u>		
Normal Product Transported DEA Lean	Normal Operating Pressure P.S.I. at (location) 350	
Maximum Operating pressure P.S.I. at (location) 720	Test pressure 1140	

PIPE DATA

Pipe O.D.	Wall Thickness	Specification & Grade (SMYS)	Length of Pipe Being Tested	Volume (Barrels)
8"	.277	Grade B	1.7 miles	572 bbls.

TEST DATA

Test Medium <input checked="" type="checkbox"/> Water <input type="checkbox"/> Petroleum*		*Has Waiver been granted ?	
Location of Pressure Recording Equipment			Elevation
Other Elevations	Pipeline--High Point	Pipeline--Low Point	
Test Equipment	Make & Model of Deadweight Tester Chandler	Serial # 10173	Date Last Calibrated 06-15-87
	Make & Model of Chart Recorder Foxboro	Serial # 1175573	Date Last Calibrated 04-29-88
	Make & Model of Temperature Recorder Reynolds	Serial #	Date Last Calibrated

TEST DATA

Date	Time	Pressure Recorded by		Temperature Source of Readings			Test Medium Change (+) Added (-) Drained
		<input checked="" type="checkbox"/> DWT <input type="checkbox"/> Gauge	<input checked="" type="checkbox"/> Recorder <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Pipe Wall <input type="checkbox"/> Test Medium <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Air <input type="checkbox"/> Ambient		
		SEE ATTACHED					
Total Change of Test Medium							

FAILURES DURING TEST

Location	Cause	Disposition

CERTIFICATION

Pipeline Operator's Representative Rick Sellen	Shell	Title Supervisor	Date 08-08-88
Hydrostatic Testing Firm's Representative Bill Arambula	Shell	Title Foreman	Date 08-08-88
Person Witnessing Test for Certifying Firm James Sumerix	Metco	Title Cert. Witness	Date 08-08-88
Test Data Certified By		Title	Date

NOTE: Test results must be sent to the Office of State Fire Marshal within 30 days of the hydrostatic test.

HYDROSTATIC TEST CERTIFICATION DATA

LINES FALLING WITHIN D.O.T. LIQUID AND GAS PIPELINE REGULATIONS

SHELL PIPE LINE CORPORATION

Instructions for Completion on Reverse side

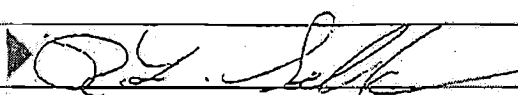
JOB NO.	
ES NO.	

PIPELINE INTEGRITY-REFINERY #21 LINE (LEAN DEA)		LOCATION CODE 71946	DIVISION WEST COAST DIVISION
SECTION TESTED	FROM STATION SURVEY 0+00	TO STATION SURVEY 146+49.9	TEST SITE LOCATION WILMINGTON REFINERY

LINE HISTORY				
DATE CONSTRUCTED 1966	O.D. 8.625	TYPE (Seamless, ERW, etc.) VARIOUS		
SPEC. MIN. YIELD GRADE B	WALL .312 & 277	ANSI RATING	VALVES 300#	FLANGES 300#

DATE TEST PERFORMED MAY 18, 1989
--

DATA CHECK LIST	REMARKS
TEST MEDIUM	WATER
TEST BY	LONG BEACH CREW
TEST PRESSURE - MINIMUM	1000
LIST PRINCIPAL TEST EQUIPMENT (Pump, Tester, Recorder, etc.)	PUMP, DEAD WEIGHT, RECORDER
AVERAGE TEMPERATURE OF TESTING MEDIUM	72°
PRESSURE AT LOWEST ELEVATION POINT IN THE SECTION, INCLUDING ELEVATION AND LOCATION.	N/A
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION.	N/A
TEST DURATION (including time started and completed)	DURATION <input type="checkbox"/> HOURS
	STARTED <input type="checkbox"/> 11:15 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM
	COMPLETED <input type="checkbox"/> 3:15 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
ARE PRESSURES CONTINUOUS? If not, explain.	YES
DESCRIPTION OF FACILITY TESTED. (Hwy-xing, River, Pump Sta., Buried Line, etc.)	BURIED LINE

GENERAL COMMENTS	1989 INTEGRITY TEST
SIGNATURE OF OPERATOR'S EMPLOYEE RESPONSIBLE FOR TEST	

ATTACHMENTS REQUIRED FOR EACH TEST

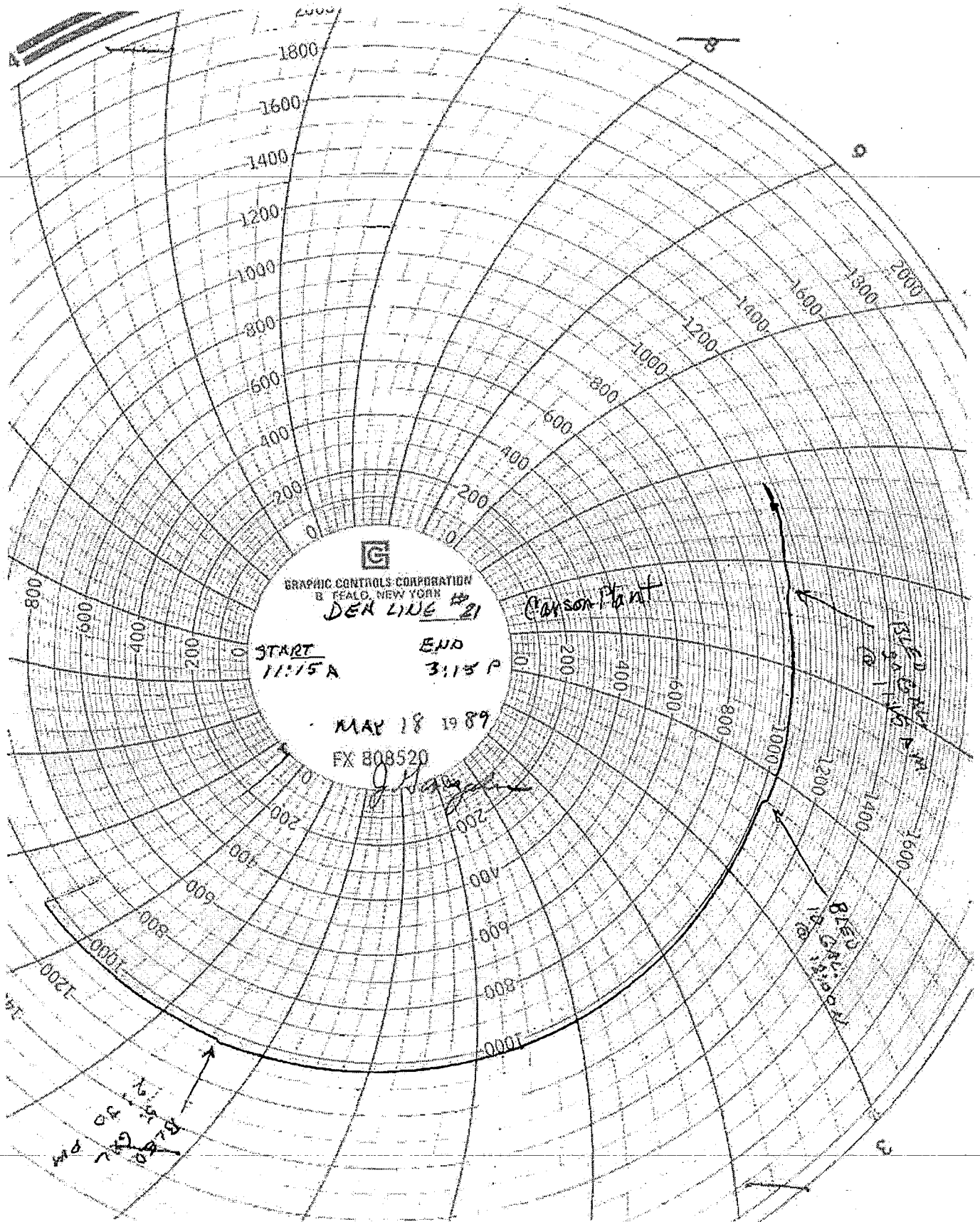
1. Dead Weight Tester Data.
2. Recording Gauge Charts.
3. Elevation Profile of Line Indicating Test Site (Required If Elevation Difference Greater than 100').

DISTRIBUTION:

HEAD OFFICE PROJECT: Original: Engineering - Products - General Engineering
Copy: Division

DIVISION PROJECT: Original: Division
Copies: Local Procedures

RETENTION: As Long As Facility Tested In Use.



G
GRAPHIC CONTROLS CORPORATION
SEALD, NEW YORK
DEX LINE #21

START 11:15 A END 3:15 P

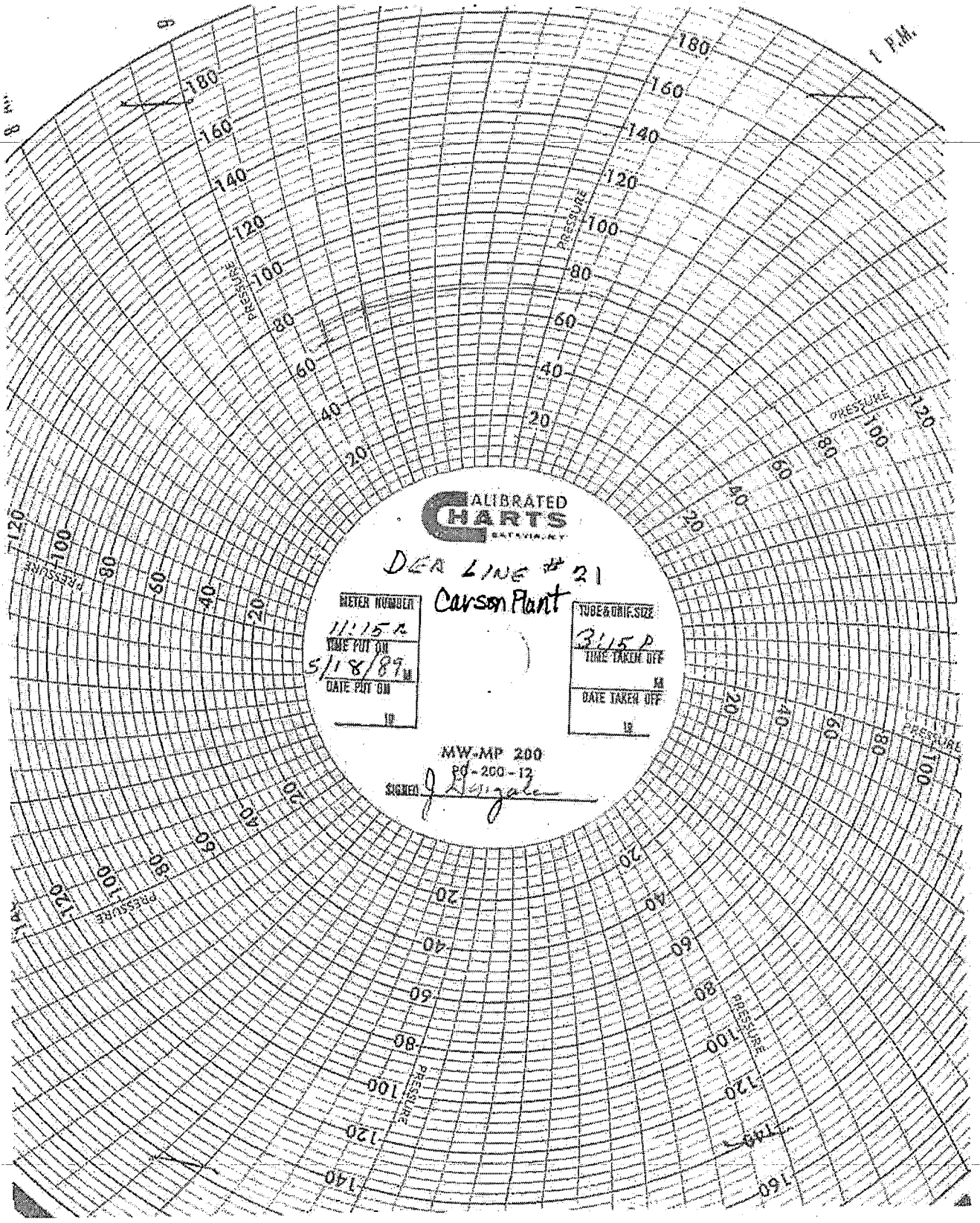
MAY 18 1989
FX 808520

CLAYSON PLANT

BLED GAVIN 18:15:00

BLED GAVIN 18:15:00

BLED GAVIN 18:15:00



ALIBRATED
HARTS
BATHING, N.Y.

DEA LINE # 21
Carson Plant

METER NUMBER
1115 R
TIME PUT ON
5/18/89 M
DATE PUT ON
19

TUBE & ORIF. SIZE
3/15 P
TIME TAKEN OFF
M
DATE TAKEN OFF
19

MW-MP 200
PG-200-13

SIGNED *J. H. Gale*

8 AM

1 P.M.

HYDROSTATIC TEST CERTIFICATION DATA
 LINES FALLING WITHIN D O T. LIQUID AND GAS PIPELINE REGULATIONS
 COULON PIPELINE COMPANY LLC

JOB NO.	
ES NO.	

INSTRUCTIONS FOR COMPLETION ON REVERSE SIDE

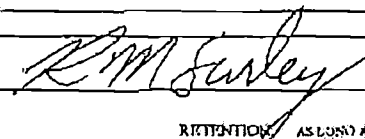
PIPELINE	Carson Plant #21 Line CSFM #366	LOCATION CODE	71946	REGION	WCA
SECTION	FROM STATION 0+000	TO STATION 0+163	+ 95.0	LINE MILELOCATION	Carson Plant

LINE HISTORY					
DATE CONSTRUCTED	1966	O.D.	8.625	PIPE WALL THICKNESS, PER API 5L	SMLS
MIN. API YIELD	35000	WALL	2771.322	ANSI RATING	VALVES 300#
					FLANGES 300#

DATE TEST PERFORMED	11/7/00
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DATA CHECKLIST	REMARKS		
TEST MEDIUM	Water		
TESTED BY	Long Beach Crew		
TEST PRESSURE - MINIMUM	1,098 psi		
LIST PRINCIPAL TEST EQUIPMENT (PUMP, METER, RECORDER, ETC.)	Dead Weight, Recorders, Pump		
AVERAGE TEMPERATURE OF TESTING MEDIUM	71.0		
PRESSURE AT LOWEST ELEVATION POINT IN THE SECTION, INCLUDING ELEVATION AND LOCATION	N/A		
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION	N/A		
TEST DURATION	DURATION	Four	HOURS
	STARTED	6:30	AM X PM
	COMPLETED	10:30	AM X PM
ARE PRESSURES CONTINUOUS? IF NOT, EXPLAIN	Yes		
DESCRIPTION OF FACILITY TESTED (HIGH-VOL, RIVER, PUMP STATION, BURIED LINE, ETC.)	Buried pipe		

GENERAL COMMENTS
CSFM TEST ID # 00-260
WITNESSED BY JOHNSON CONSTRUCTION

SIGNATURE OF OPERATOR'S EMPLOYER RESPONSIBLE FOR TEST	
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- ATTACHMENTS REQUIRED FOR EACH TEST**
- 1) DEAD WEIGHT TESTER DATA
 - 2) RECORDING CHARTS
 - 3) ELEVATION PROFILE OF LINE INDICATING TEST SITE (REQUIRED IF ELEVATION DIFFERENCE IS GREATER THAN 100')
 - 4) RECORDS OF FAILURE (CHECK MARKS PL-11 & A)
 - 5) GENERAL DRAWING OR SKETCH
 - 6) RECORD OF TEST DATA PL-11 & A

RETENTION AS LISTED AT FACILITY TESTED & IN USE

DISTRIBUTION:
 ORIGINAL - HEAD OFFICE
 1ST COPY - PROJECT FILES
 ADDITIONAL COPIES - LOCAL PROJECT FILES

47
CALIFORNIA STATE FIRE MARSHAL (SFM)
PIPELINE SAFETY DIVISION
NOTIFICATION OF PROPOSED HYDROSTATIC TEST
CPSA TEST NOTIFICATION

Date: 11/2/00

TEST ID: 00 - 260

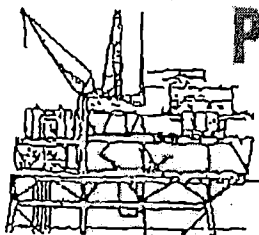
1. Operator: **Equilon Pipeline Company**
Address: **20945 S. Wilmington Ave.**
City: **Carson, CA 90810**
Person calling: **Rod Turley office (310) 816-2049 mobile (310) 629-8635**
2. Specific location of pipeline to be tested:
Carson Plant #21 Line, Sepulveda & Alameda to Equilon's Carson Plant, 20945 S. Wilmington Ave., Carson, CA
3. Information on pipeline to be tested:
Line Number: **Carson Plant #21 Line CSFM # 366**
Pipe Diameter: **8"**
Length of line: **3.0 miles**
Test pressure: **1,080 lbs.**
4. Location of test equipment: **Carson Plant**
5. Date and time test is to be conducted: **11/8/00 @ 0600 hrs. Test duration: Four hrs.**
6. Test Medium: **Water** If other than water, has a waiver been granted?: **N/A**
7. Type of Test: new 2 year 5 year 10 year
8. Name and telephone number of independent testing firm or person responsible for certification of test results: **Johnson Construction 562-426-1955**
9. Call received by: **Rosa** Time: **3:30 p.m. 11/2/00**
10. Assigned to: _____ Date and time _____
11. Date test results received: _____

TEST ID: 00 - 260

Local Fire Department contact:

Carson Fire Dept. Fax (323) 266-6925

CSFM Fax (562) 491-9104



PFT/Alexander Service, Inc.

2250 Grant Street • SIGNAL HILL, CA 90804
Tel (562) 595-1741 • Fax (562) 424-3833

3650 Imhoff Drive, Suite D • CONCORD, CA 94520
Tel (925) 676-3881 • Fax (925) 676-8125

9710 Erno Lane • BAKERSFIELD, CA 93312
Tel (805) 740-6681 • Fax (805) 740-6885

Letter of Certification

Customer Name: EQUILON PIPELINE
COMPANY LLC
2459 Redondo Avenue
Long Beach, California 90806
(562) 988-3314

Job No./Site:

INSTRUMENT INFORMATION

Instrument Mfr: CHANDLER
Description: Dead Weight Gauge
Range: 50-3000 P.S.I.
Serial No: 22681

Calibration Site: PFT/ALEXANDER SERVICE
Date of Calib: 10/2/2000
Calib. Due Date:
Test Room Temp: 73 Deg. F.

CALIBRATION RESULTS

CALIBRATION STANDARD (True Reading)

50
400
800
1200
1800
2000
2400
2800
3000

EQUIPMENT UNDER TEST (Indicated Reading)

50
400
800
1200
1800
2000
2400
2800
3000

STANDARD USED

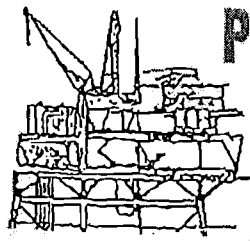
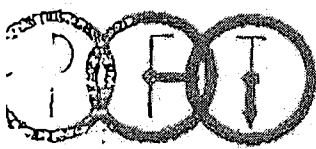
Calib. Instrument: Dead Weight Tester
Manufacturer: ASHCROFT
Calibration Date: 4/17/2000
N.I.S.T. Test No: 238487

Range: 50-10,000 P.S.I. Model No: 1327B
Serial No: 1KA-40589
Calibration Due Date: 4/17/2001

Test Certified By:

John Molla/Bob Clandneng

PFT/ALEXANDER SERVICE, INC. certifies that the above listed instrument and Test Standard meets or exceeds all published specifications. They have been calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technology. Documents are on file and may be reviewed by Authorized Personnel.



PFT/Alexander Service, Inc.

3258 Grant Street • SIGNAL HILL, CA 90204
 Tel (562) 596-1741 • Fax (562) 424-3633

5650 Imhoff Drive, Suite D • CONCORD, CA 94520
 Tel (925) 676-3231 • Fax (925) 676-8125

8710 Enos Lane • BAKERSFIELD, CA 93312
 Tel (805) 746-6881 • Fax (805) 746-8885

Letter of Certification

Customer Name: EQUILON PIPELINE
 COMPANY LLC
 2458 Redondo Avenue
 Long Beach, California 90808
 (562) 988-3314

Job No./Site:

INSTRUMENT INFORMATION			
Instrument Mfr:	REYNOLDS	Calibration Site:	PFT/ALEXANDER SERVICE
Description:	12" Pressure Recorder	Date of Calib:	10/2/2000
Range:	0-3000 P.S.I.	Calib. Due Date:	
Serial No:	2925-PR	Test Room Temp:	73 Deg. F.

CALIBRATION RESULTS

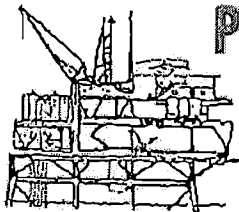
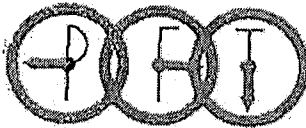
CALIBRATION STANDARD (True Reading)	EQUIPMENT UNDER TEST (Indicated Reading)
0	0
400	400
800	800
1200	1200
1600	1600
2000	2000
2400	2400
2800	2800
3000	3000

STANDARD USED

Calib. Instrument: 16" Test Gauge Range: 0-5000 P.S.I. Model No: 540
 Manufacturer: U.S. GAUGE Serial No: 1-58819
 Calibration Date: 2/16/2000 Calibration Due Date: 2/16/2001
 N.I.S.T. Test No: 4082 & 4153

Test Certified By: *[Signature]* John Molla/Bob Clendinning

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3250 Grant Street • SIGNAL HILL, CA 90304
Tel (562) 595-1741 • Fax (562) 424-3633

5650 Imhoff Drive, Suite D - CONCORD, CA 94620
Tel (925) 676-0331 • Fax (925) 676-9125

9710 Enos Lane • BAKERSFIELD, CA 93312
Tel (661) 746-6881 • Fax (661) 746-6885

Letter of Certification

Customer Name: EQUILON PIPELINE
COMPANY LLC
2459 Redondo Avenue
Long Beach, California 90806
(562) 988-3314

Job No./Site:

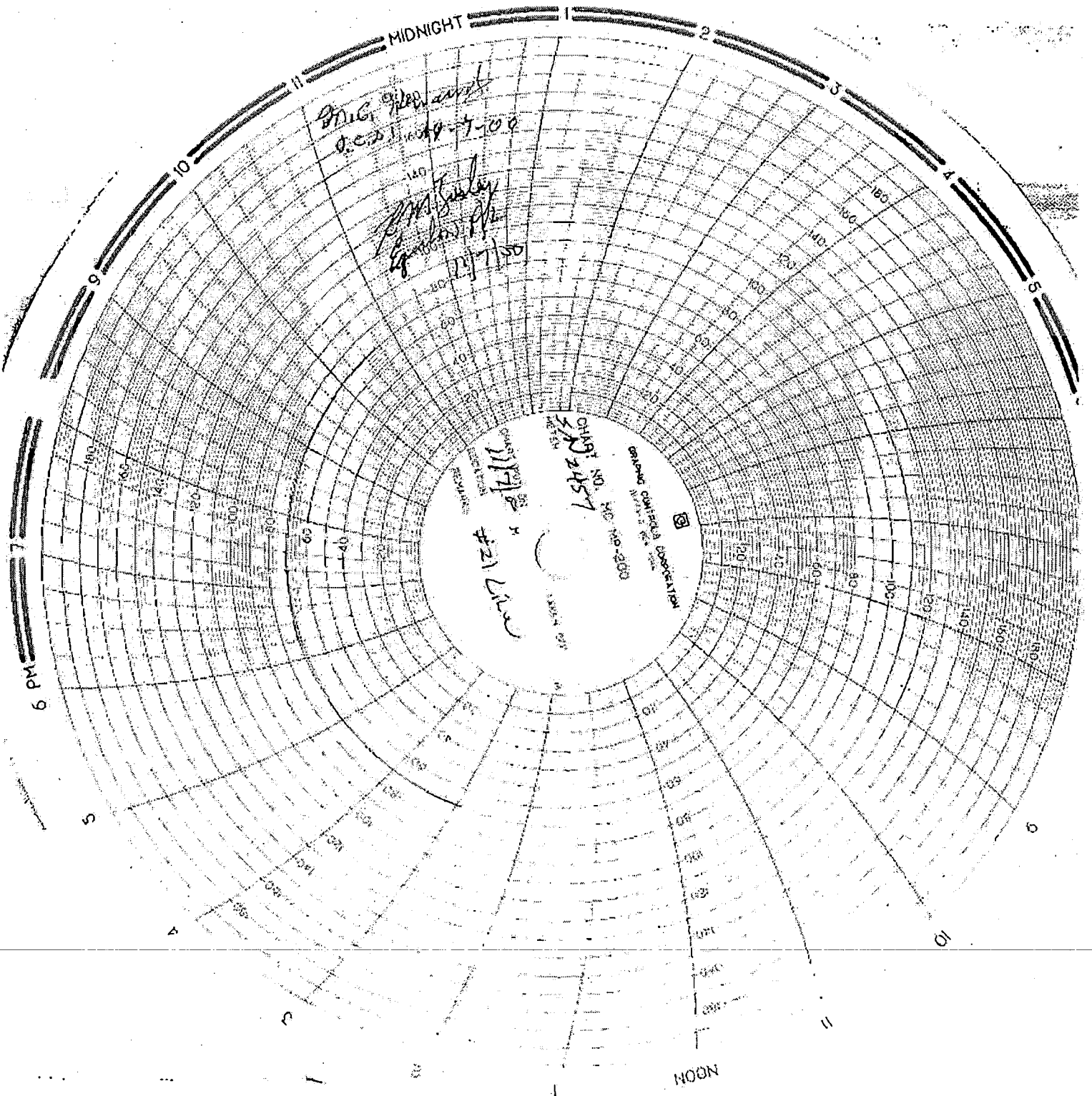
INSTRUMENT INFORMATION			
Instrument Mfr	MOCK	Calibration Site:	PFT/ALEXANDER SERVICE
Description:	12" Temperature Recorder	Date of Calib:	10/2/2000
Range:	0-200 Deg. F.	Calib. Due Date:	
Serial No.	2457	Test Room Temp	73 Deg. F.

CALIBRATION RESULTS

CALIBRATION STANDARD (True Reading)	EQUIPMENT UNDER TEST (Indicated Reading)
0	0
20	20
40	40
60	60
80	80
100	100
120	120
140	140
160	160
180	180
200	200

STANDARD USED			
Calib. Instrument:	Digital Thermometer	Range:	0-500 Deg. F.
Manufacturer:	FLUKE	Model No:	52K/JJ
Calibration Date:	4/14/2000	Serial No:	6169048
N.I.S.T. Test No:	251439	Calibration Due Date:	4/14/2001
Test Certified By:	<i>[Signature]</i>		
	John Molla/Bob Clendinning		

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MIG. 11/11/50
O.C. 11/11/50

M. 11/11/50
11/11/50

#21
L. 11/11/50
M. 11/11/50

6 PM

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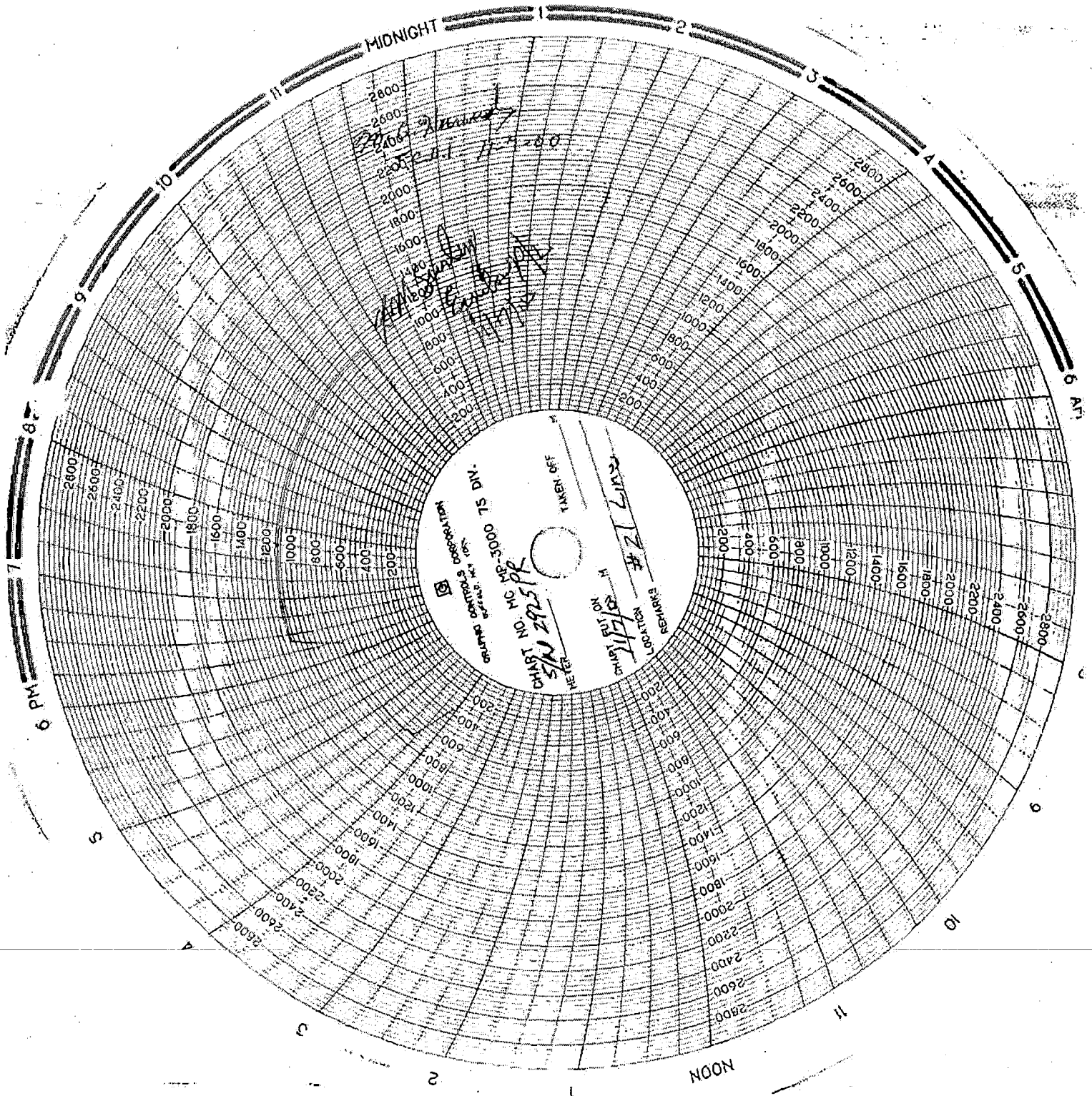
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PL-318 (REV. 11-02)
HYDROSTATIC TEST CERTIFICATION DATA
 LINES FALLING WITHIN D.O.T. LIQUID AND
 GAS PIPELINE REGULATIONS
 SHELL PIPE LINE CORPORATION

JOB NO.	
ES NO.	

Instructions for Completion on Reverse side

PIPELINE INTER-REFINERY #21 LINE	LOCATION CODE 71946	DIVISION WCD - SO. DISTRICT
SECTION TESTED	FROM STATION SURVEY 0+00	TO STATION SURVEY 146+49.9
		TEST SITE LOCATION WILMINGTON REFINERY

LINE HISTORY			
DATE CONSTRUCTED 1966	O.D. 8.625	TYPE (Seamless, ERW, etc.) ERW/SMLS	
SPEC. MIN. YIELD GRADE B	WALL 0.307/.277	ANSI HATING	VALVES 300#
		FLANGES 300#	

DATE TEST PERFORMED OCTOBER 12, 1990
--

DATA CHECK LIST	REMARKS
TEST MEDIUM	WATER
TEST BY	LONG BEACH MAINTENANCE CREW
TEST PRESSURE - MINIMUM	1080 psi
LIST PRINCIPAL TEST EQUIPMENT <i>(Pump, Tester, Recorder, etc.)</i>	DEAD WEIGHT, RECORDER, PUMP
AVERAGE TEMPERATURE OF TESTING MEDIUM	78
PRESSURE AT LOWEST ELEVATION POINT IN THE SECTION, INCLUDING ELEVATION AND LOCATION.	N/A
PRESSURE AT HIGHEST ELEVATION POINT IN THE TEST SECTION, INCLUDING ELEVATION AND LOCATION.	N/A
TEST DURATION <i>(including time started and completed)</i>	DURATION ▶ (4) FOUR HOURS
	STARTED ▶ 09:20 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM
	COMPLETED ▶ 01:20 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM
ARE PRESSURES CONTINUOUS? <i>If not, explain.</i>	YES
DESCRIPTION OF FACILITY TESTED. <i>(Hwy-xing, River, Pump Sta., Buried Line, etc.)</i>	BURIED PIPE

GENERAL COMMENTS
1990 INTEGRITY PRESSURE TEST - STATE FIRE MARSHAL NOTIFICATION
I.D. No. 90-241. LINE TEST CERTIFIED BY METCO EQUIPMENT INC.
(CLAUDE PARKER)

NOTE: BLED PRESSURE FROM LINE AS TEMPERATURE INCREASED. HOT OIL LINE RUNNING PARALLEL WITH PIPE LINE.

SIGNATURE OF OPERATOR'S EMPLOYEE RESPONSIBLE FOR TEST


- ATTACHMENTS REQUIRED FOR EACH TEST
- Dead Weight Tester Data.
 - Recording Gauge Charts.
 - Elevation Profile of Line Indicating Test Site (Required if Elevation Difference Greater than 100').
- DISTRIBUTION:
 HEAD OFFICE PROJECT: Original: Engineering - Products - General Engineering
 Copy: Division
 DIVISION PROJECT: Original: Division
 Copies: Local Procedures
 RETENTION: As Long As Facility Tested In Use.