Case File 9079

Levers Federal No. 1

Log-off Test

Introduction

The purpose of this log-off test is to satisfy an NMOCD request that one be conducted prior to granting the Levers Federal No. 1 well a hardship classification. This log-off test will determine the minimum flowrate at which this well can flow without endangering its ability to produce. The varying flowrate tests can be conducted in 24 hour cycles.

Well Data

Location: 1594' FNL & 660' FWL of Section 2, T-21S, R-25E, Eddy County, New Mexico

TD: 10,362' PBTD: 9390' Elev: 3311' KB Zero: 13' AGL

Casing: 16", 65#, H-40 casing @241' w/250 sx
9-5/8", 36#, J-55 casing @ 2764' w/1325 sx
7", 23#, J-55 & N-80 casing @ 9495' w/350 sx

Tubing: 256 jts, 3-1/2", 9.3#, EUE 8rd @ 7805'

Production Packer: Baker Model D pkr @ 7805 w/10 pts compression

Perforations: Cisco perfs @ 8088, 90, 92, 94, 96, 98, 8100, 02 & 04 w/1 jspf

Recommended Procedure:

Note: The log-off test is anticipated to take approximately 4-5 days.

Keep all documentation of testing, this will be required as proof for the NMOCD.

Please notify Mr. Mike Williams, NMOCD in Artesia @ (505) 748-1283 prior to commencing test and of daily results.

This well produced an average of 8 BOPD, 2323 BWPD and 564 MCFGPD for April, 1987 on wide open choke.

Due to GCNM plant turn around all gas production is temporarily being flared.

1. Insure wellhead choke is properly calibrated and operational. Zero out prior to commencing log-off test.

2. Install 1000 psi surface pressure recorder with a minimum 24 hour clock upstream of choke.

   a. Check pressure gauge on backside and replace if necessary.
   b. Note casing pressure at beginning of test and check for anomalies for duration of test.

3. Accurate production tests will be necessary throughout duration of test therefore:

   a. Gauge oil production tanks and note beginning counter reading on water disposal at the start of each cycle.
   b. Install new gas chart (24 hr minimum) on meter run upstream of flare.

Begin Log-off Test

4. Adjust choke setting to reduce gas flow rate by approximately 25% to about 425 MCFGPD.

   a. Allow stabilization of surface pressure and flow rate, open choke as necessary if evidence of logging off is apparent.
   b. Record chokesettings and all stabilized flowrates and pressures, with the appropriate time of day.
   c. Continue the test cycle for a 24 hours.

5. For following cycles repeat step 4.

   a. Attempt to reduce the previous days flowrate by 25%.

6. Continue testing until a minimum flow rate is established. Do not allow well to die, if so nitrogen lifting will be necessary to resume production.

Approvals:

J. E. Rechtzigel Production Engineer	5/4/87 Date
Ray Pugh Supervising Production Engineer	5/4/87 Date
Division Engineering Manager	5/4/87 Date
Frank Patton Production Superintendent	5/4/87 Date

JER:jr
cc: JER, BLB, RRP, FEP, EEL, PAB, ELK

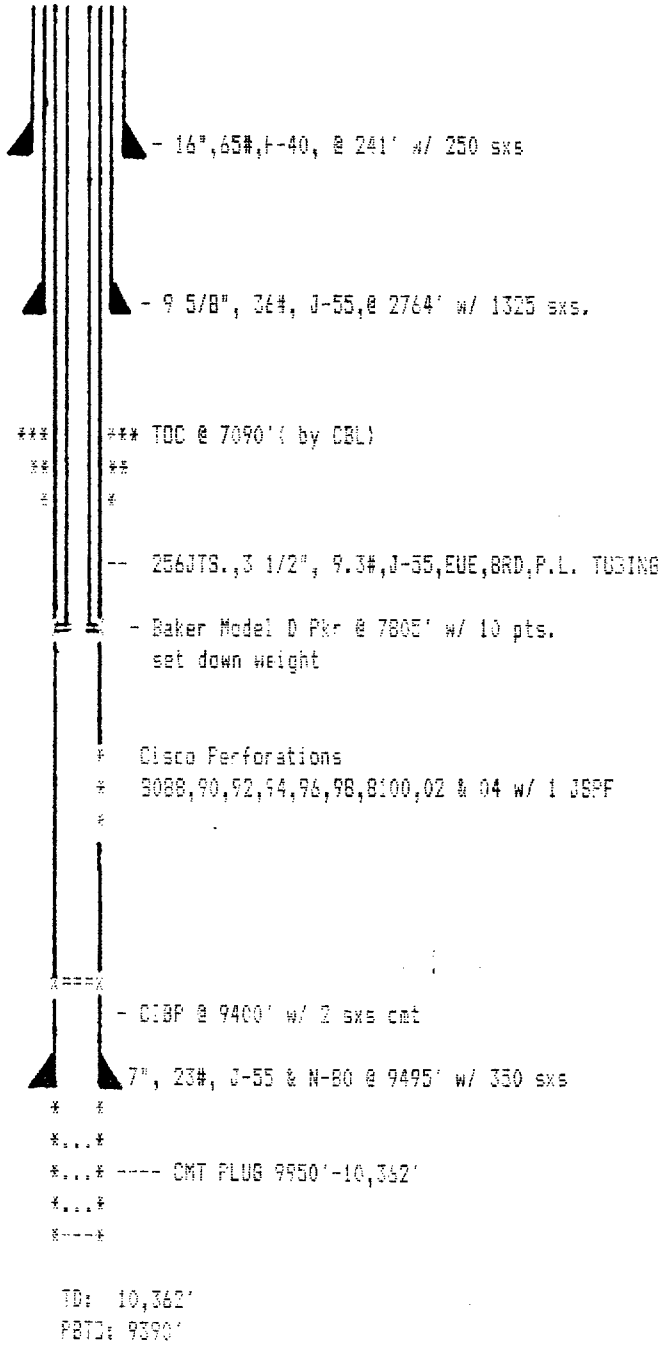
Levers Federal No. 1

FIELD: Springs

ELEVATION: 3311' KB
ZERO: 13' AGL

LOCATION:
1594' FNL & 660' FWL
Section 2, T-21S, R-25E
Eddy County, N.M.

TOPS:
1. Bone Springs 2761'
2. Wolfcamp 7676'
3. Cisco Canyon 8066'
4. Strawn 8735'
5. Morrow 10036'



TD: 10,362'
PBTD: 9390'

DRAWN BY: JER 8/1/87

LOG OFF TEST DATA SHEET

Flow Test No. 10

Company Conoco Lease and Well No. Levers Fed #1

Pool Name Springs Cisco Section E 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/13/87

Date Test Ended _____ Time Test Started 9:00 Time Test Ended _____

Company Rep. Lee

Division Rep. MW

PRODUCTION DATA

OIL/CONSENSATE		WATER Meter 9/0813 9/2193	
Tank No. 97/05	Size 380	Tank No. _____	Size _____
Closing Gauge ' "	Bbls. 03bbls	Closing Gauge ' "	Bbls. 1380 25 HRS
Opening Gauge ' "	Bbls. _____	Opening Gauge ' "	Bbls. _____
Total Produced ' "	Bbls. _____	Total Produced ' "	Bbls. _____

Total Fluid - Condensate + Water _____

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100"

Meter Loop Size 3 Plate Size 1.375

Flange Tap _____ Or Pipe Tap _____

Chart L-10 ✓ Or Standard _____

Gas Gravity _____ Average Gas Temp. _____

WELL DATA

Choke Size 10/64 Tubing Recorder Range 1000# Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure 375 Casing Opening Pressure 1600#

Tubing Closing Pressure 385* Casing Closing Pressure 1600#

Did well stablilize in 24 hour test period? Yes ✓ No _____

If YES how long stabilized flow? 6 hrs.

CALCULATIONS

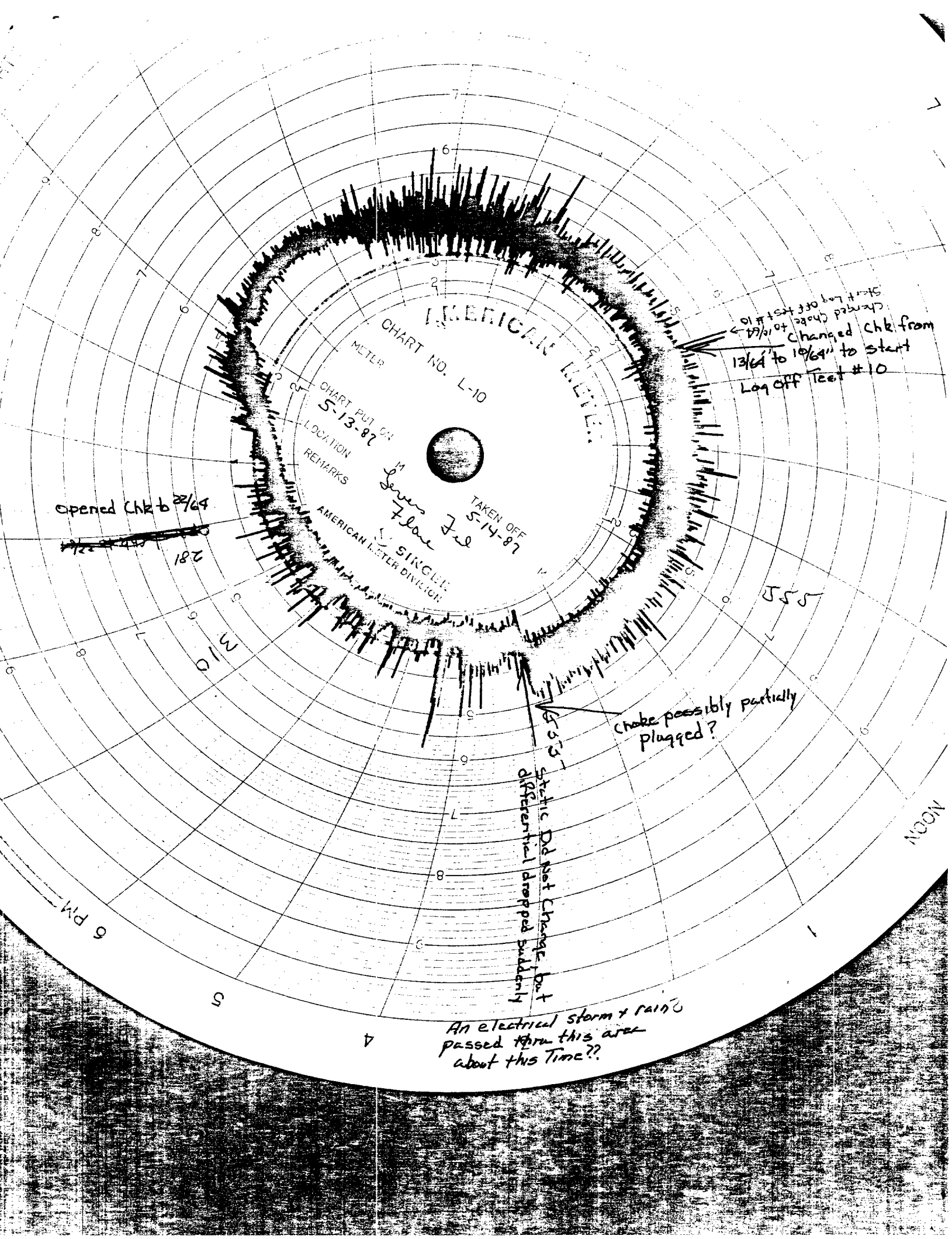
Average Static _____ Average Differential _____

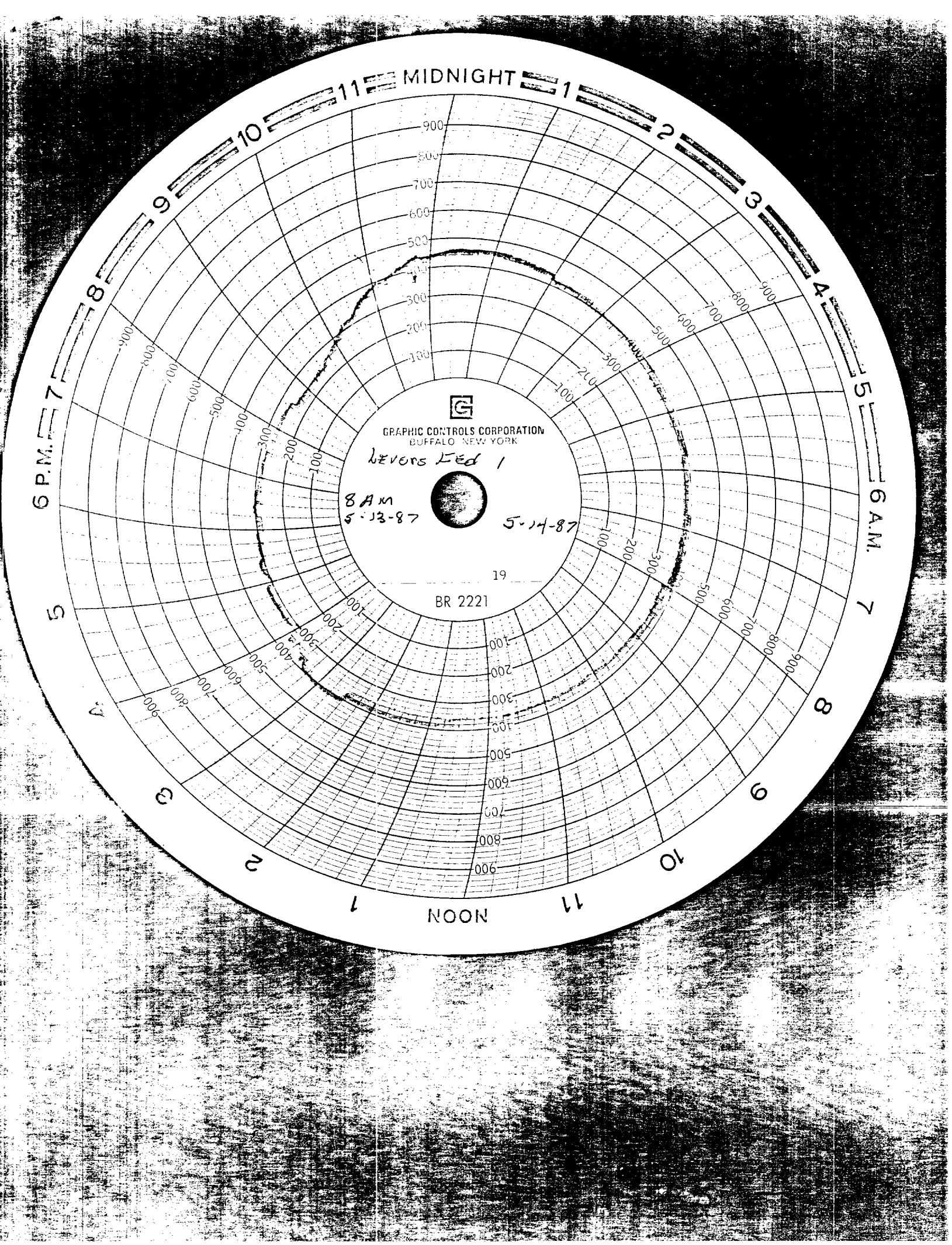
Orfice Factor _____ X Diff. _____ X Stat. Ext. _____ X Temp. Factor _____

X Sp.Gr. Factor _____ = Volume/Gas* 555 MCF ÷ Fluid 1380

_____ Fluid/Gas Ratio Cu. ft./bbl. Rate For 6 HRS Calc to 24 HRS

* Maxium During Night 460#


AMERICAN METER
CHART NO. L-10
METER
CHART PUT ON 5-13-87
LOCATION
REMARKS
Lower Flow Tee
TAKEN OFF 5-14-87
SINGLE
AMERICAN METER DIVISION
Changed Chk from 13/64" to 19/64" to start Log off Test #10
Changed Choke to 19/64 Start Log off Test #10
Opened Chk to 28/64
Choke possibly partially Plugged?
Static Did Not Change but differential dropped Suddenly
An electrical storm + rain passed thru this area about this Time??
MIDNIGHT
1
2
3
4
5
6 P.M.


MIDNIGHT
NOON
6 P.M.
6 A.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK
Levers Fed 1
8 AM
5-13-87
5-14-87
19
BR 2221

LOG OFF TEST DATA SHEET

Flow Test No. 9

Company Conoco Lease and Well No. Levers Fed #1

Pool Name Springs Cisco Section E 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/12/87

Date Test Ended 5/13/87 Time Test Started 9:00 Time Test Ended 9:00

Company Rep. Les

Division Rep. mw

PRODUCTION DATA

OIL/CONSENSATE		WATER meter 809294	
Tank No. 9705	Size 380	Tank No. _____	Size _____
Closing Gauge ' "	Bbls. 2	Closing Gauge ' "	Bbls. 1519
Opening Gauge ' "	Bbls. _____	Opening Gauge ' "	Bbls. _____
Total Produced ' "	Bbls. _____	Total Produced ' "	Bbls. _____

Total Fluid - Condensate + Water _____

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100

Meter Loop Size 3 Plate Size 1.375

Flange Tap _____ Or Pipe Tap _____

Chart L-10 ✓ Or Standard _____

Gas Gravity _____ Average Gas Temp. _____

WELL DATA

Choke Size 13/64 Tubing Recorder Range 1000# Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure 365 Casing Opening Pressure 1600

Tubing Closing Pressure 375 Casing Closing Pressure 1600

Did well stablilize in 24 hour test period? Yes ✓ No _____

If YES how long stabilized flow? 23 hrs.

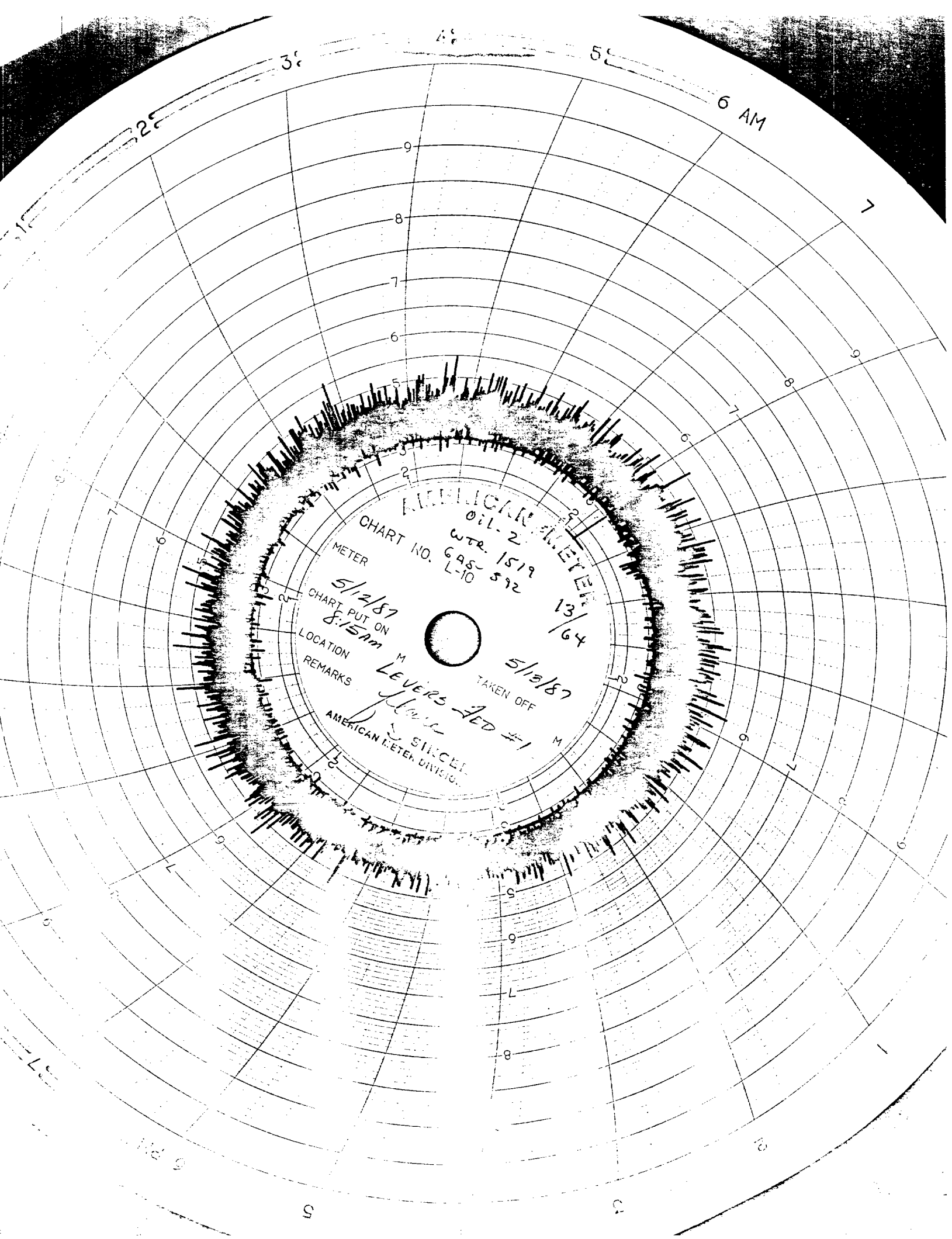
CALCULATIONS

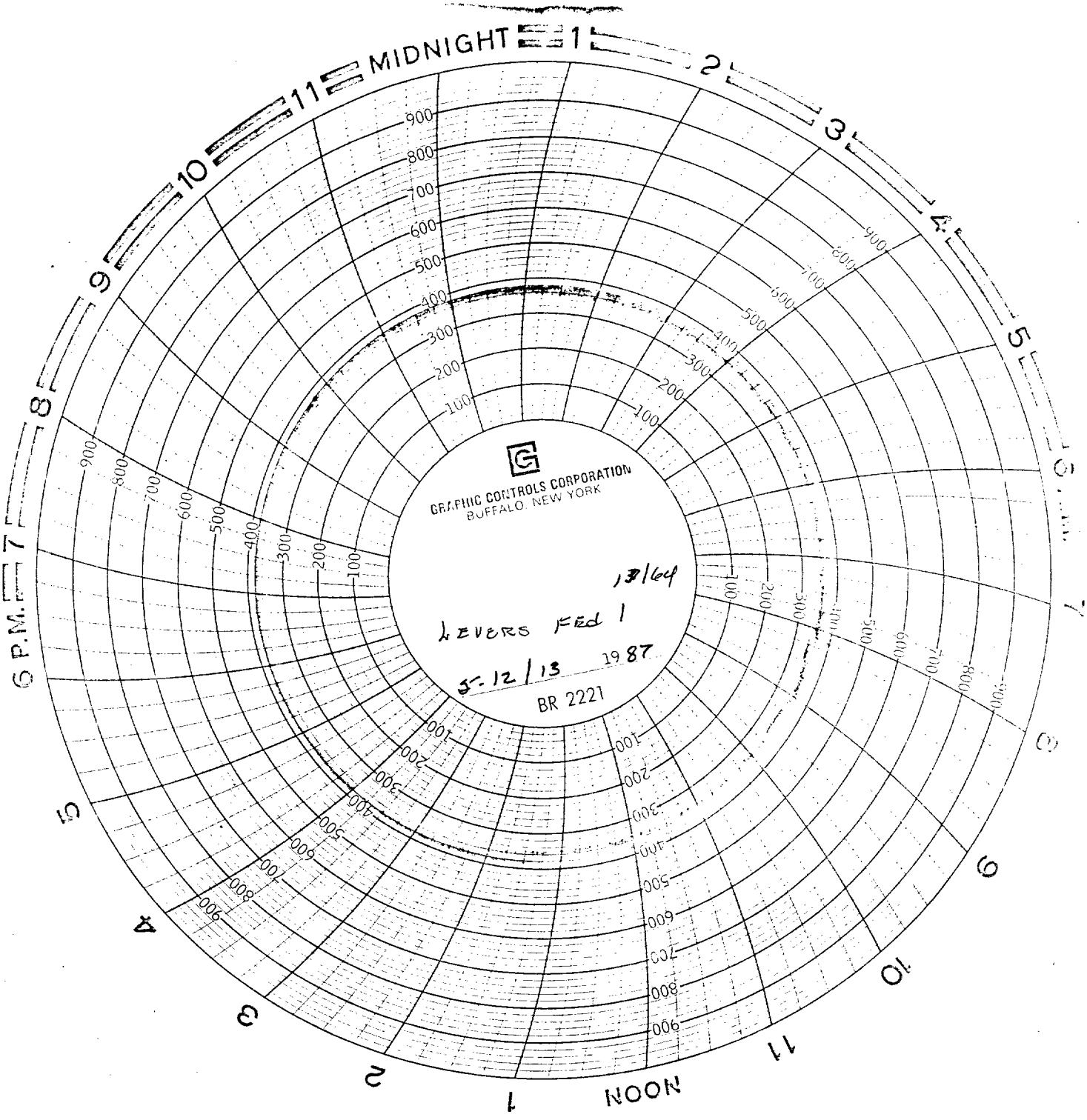
Average Static _____ Average Differential _____

Orfice Factor _____ X Diff. _____ X Stat. Ext. _____ X Temp. Factor _____

X Sp.Gr. Factor _____ = Volume/Gas 592 MCF ÷ Fluid 1521

~~592~~ 389 Fluid/Gas Ratio Cu. ft./bbl.


6 AM
AMERICAN METER DIVISION
Oil-2
wtr. 1519
CHART NO. GAS L-10 592
13/64
METER
5/2/87
CHART PUT ON
8:15 AM
LOCATION
Levers Fed #1
REMARKS
5/3/87
TAKEN OFF
SIMCO
AMERICAN METER DIVISION


MIDNIGHT
NOON
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
13/64
LEVERS FED 1
5-12/13 1987
BR 2221

LOG OFF TEST DATA SHEET

Flow Test No. 8

Company Conoco Lease and Well No. Lewers Fed #1

Pool Name Springs Cisco Section E 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/11/87

Date Test Ended 5/12/87 Time Test Started 9:00 Time Test Ended 9:00

Company Rep. Lee

Division Rep. MW

PRODUCTION DATA

OIL/CONSENSATE		WATER meter 807 712	
Tank No. 97105	Size 380	Tank No.	Size 805294
Closing Gauge 1' 7"	Bbls. 0	Closing Gauge ' "	Bbls. 1582
Opening Gauge 1' 7"	Bbls.	Opening Gauge ' "	Bbls.
Total Produced ' "	Bbls.	Total Produced ' "	Bbls.

Total Fluid - Condensate + Water

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100"

Meter Loop Size 3 Plate Size 1.375

Flange Tap Or Pipe Tap

Chart L-10 ✓ Or Standard

Gas Gravity Average Gas Temp.

WELL DATA

Choke Size 17/64 Tubing Recorder Range 1000 Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure 350 Casing Opening Pressure 1600#

Tubing Closing Pressure 365 Casing Closing Pressure 1600#

Did well stablilize in 24 hour test period? Yes ✓ No

If YES how long stabilized flow? 23 hrs.

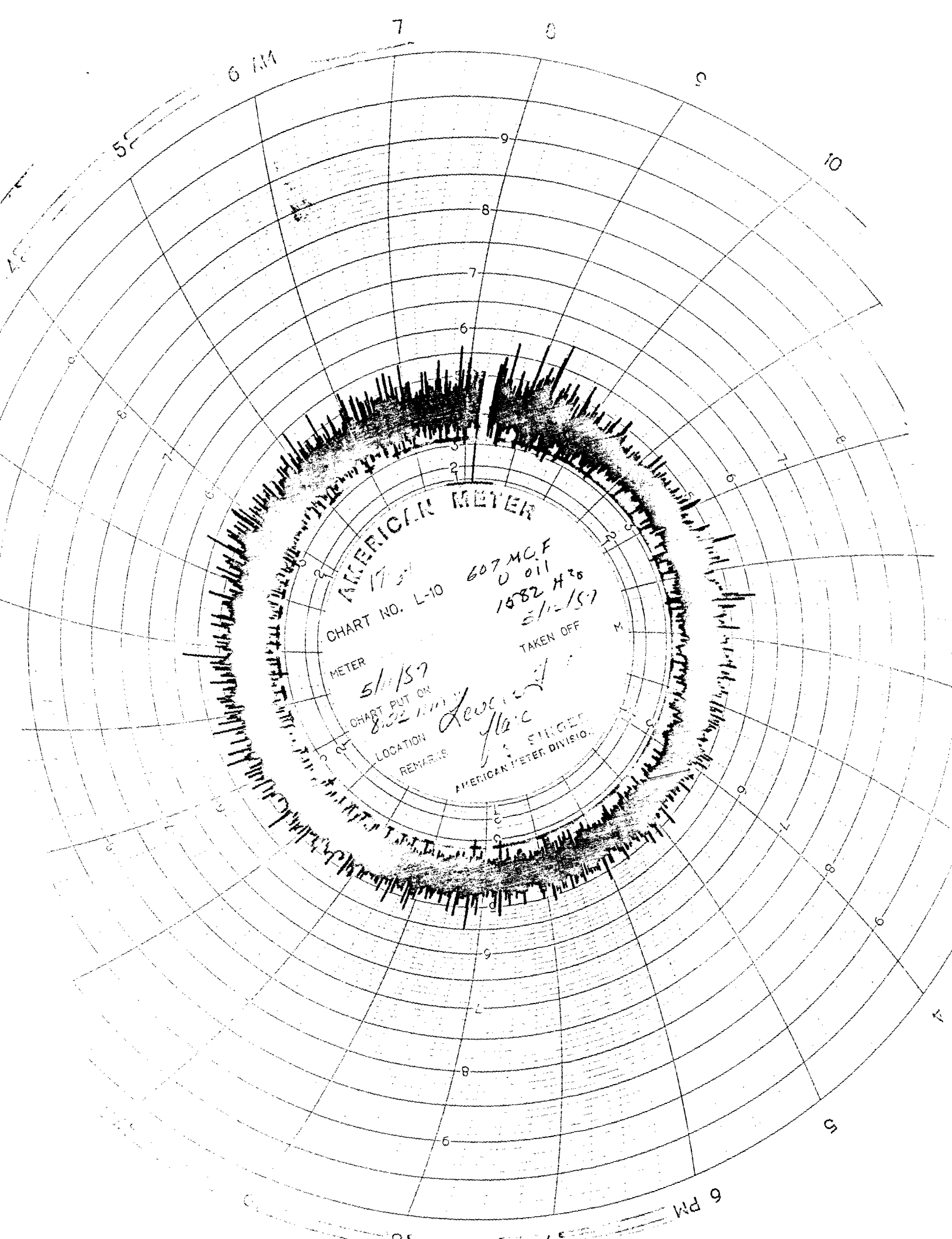
CALCULATIONS

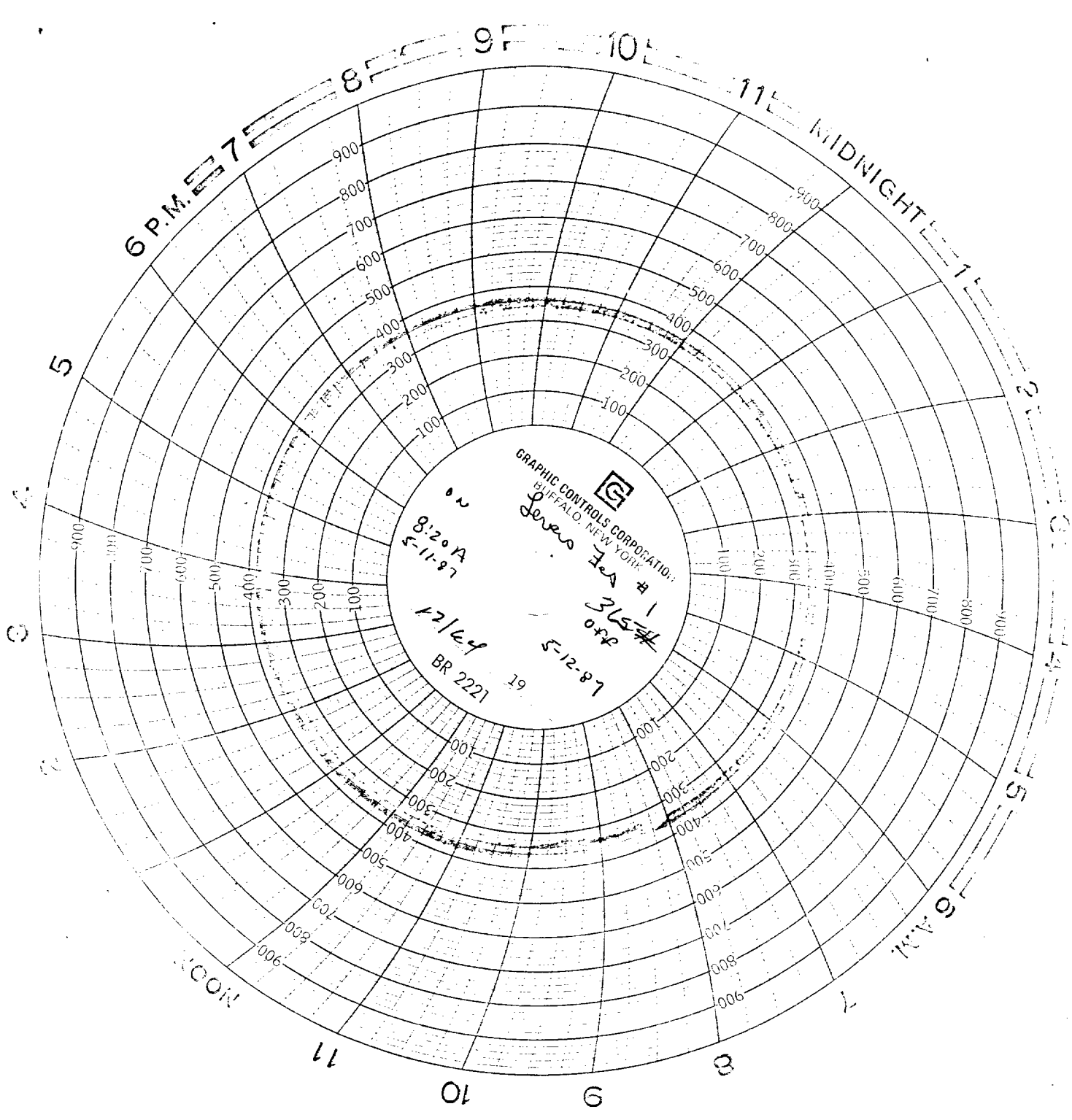
Average Static Average Differential

Orfice Factor X Diff. X Stat. Ext. X Temp. Factor

X Sp.Gr. Factor = Volume/Gas 607 MCF ÷ Fluid 1582

384 Fluid/Gas Ratio Cu. ft./bbl.


AMERICAN METER
CHART NO. L-10
METER
CHART PUT ON
LOCATION
REMARKS
607 MCF
0 011
1082 H20
5/12/57
TAKEN OFF
5/11/57
AMERICAN METER DIVISION
6 AM
6 PM


6 P.M.
MIDNIGHT
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
BR 2221
19

LOG OFF TEST DATA SHEET

Flow Test No. 7

Company Conoco Lease and Well No. Lewis Fed #1

Pool Name Springs Cisco Section E 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/10/87

Date Test Ended 5/11/87 Time Test Started 9:00 Time Test Ended 9:00

Company Rep. [redacted] Lee

Division Rep. MW

PRODUCTION DATA

OIL/CONSENSATE		WATER meter 805886	
Tank No. 97105	Size 350	Tank No. _____	Size _____
Closing Gauge 1' 7"	Bbls. 2	Closing Gauge ' "	Bbls. 1741
Opening Gauge 1' 6"	Bbls. _____	Opening Gauge ' "	Bbls. _____
Total Produced ' "	Bbls. _____	Total Produced ' "	Bbls. _____

Total Fluid - Condensate + Water _____

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100

Meter Loop Size 3 Plate Size 1.375

Flange Tap _____ Or Pipe Tap _____

Chart L-10 ✓ Or Standard _____

Gas Gravity _____ Average Gas Temp. _____

WELL DATA

Choke Size 20/64 Tubing Recorder Range 1000 Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure 330 Casing Opening Pressure 1600

Tubing Closing Pressure 350 Casing Closing Pressure 1600

Did well stablilize in 24 hour test period? Yes ✓ No _____

If YES how long stabilized flow? 22 hrs.

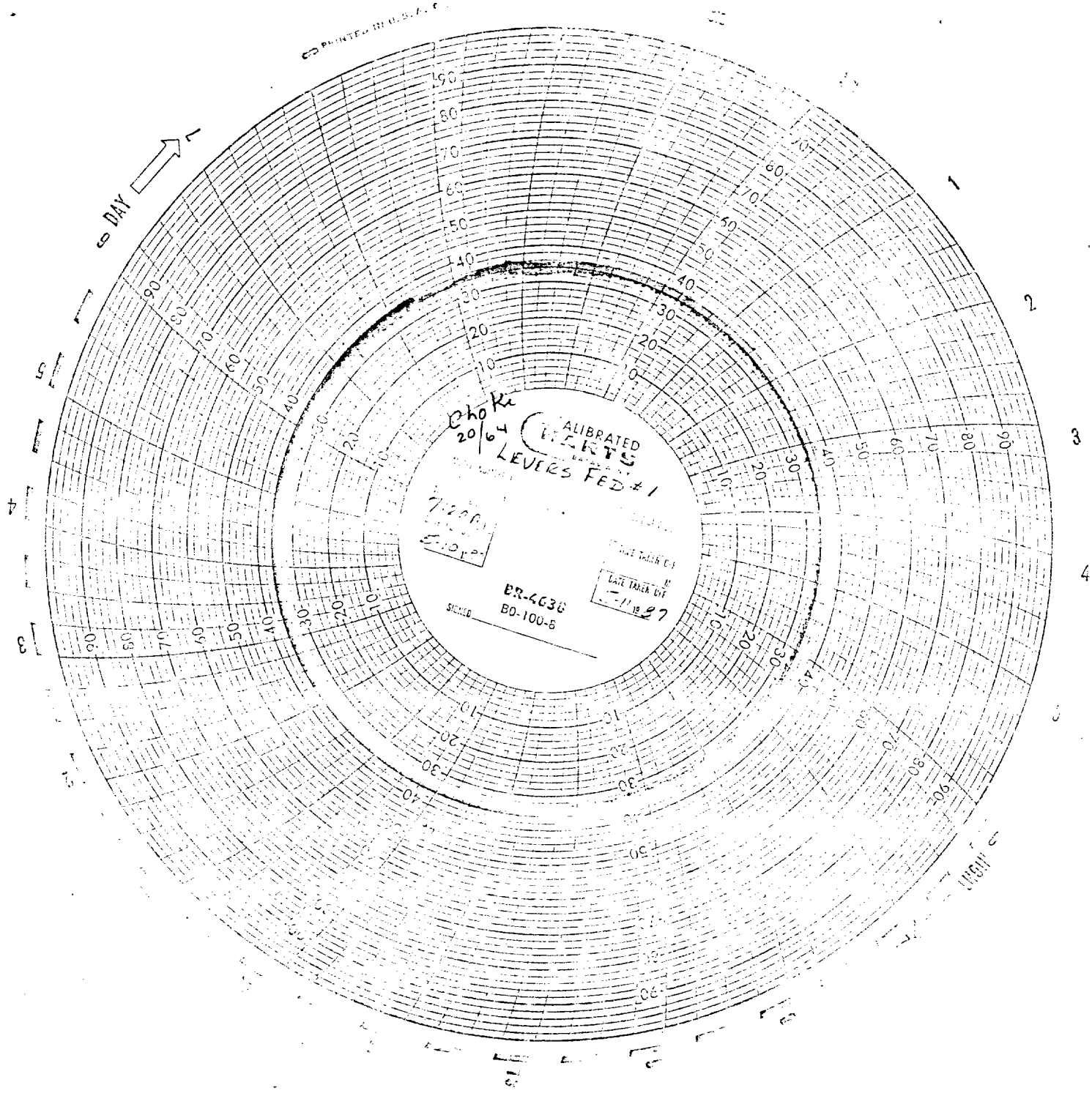
CALCULATIONS

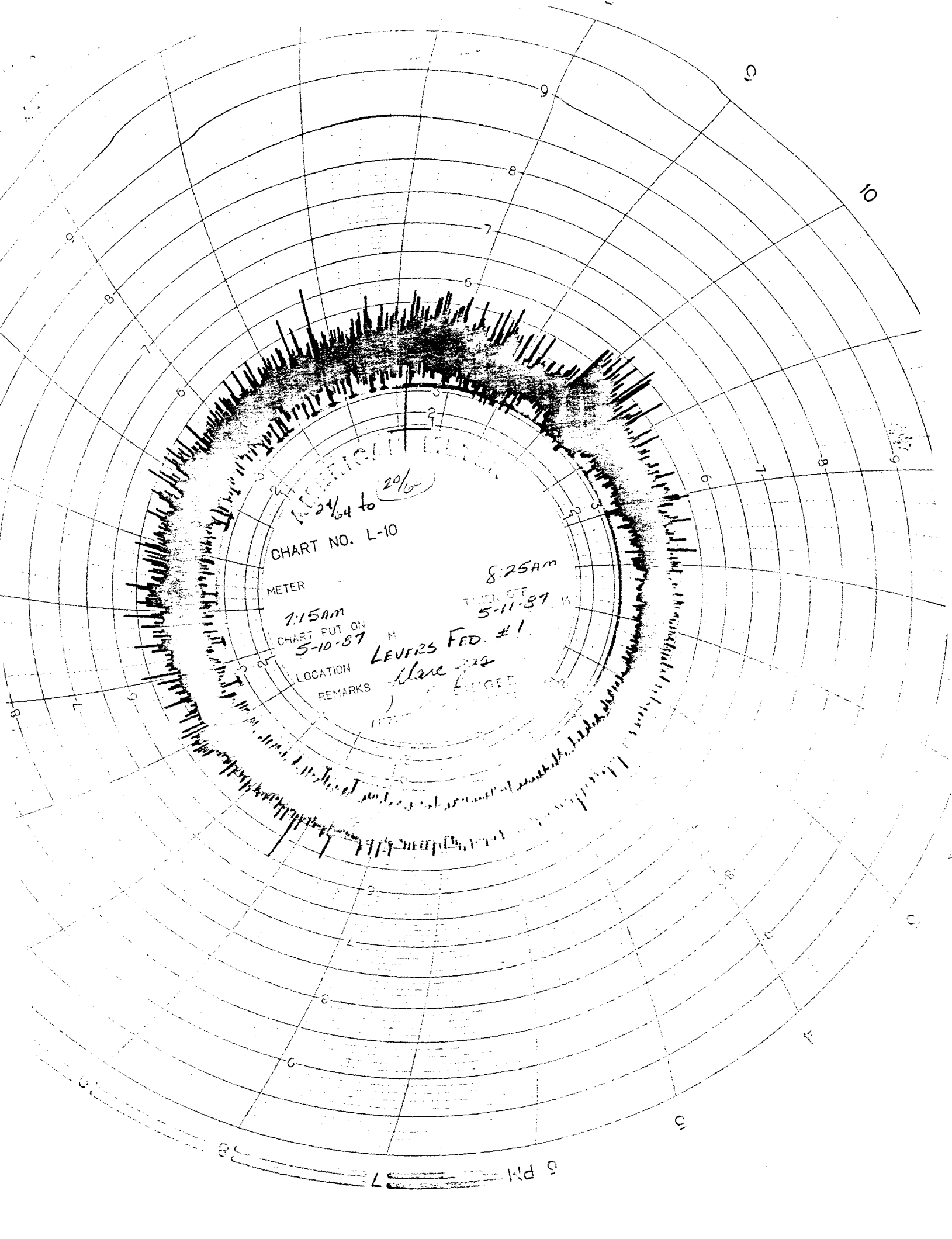
Average Static _____ Average Differential _____

Orfice Factor _____ X Diff. _____ X Stat. Ext. _____ X Temp. Factor _____

X Sp.Gr. Factor _____ = Volume/Gas 629 MCF ÷ Fluid 1743

361 Fluid/Gas Ratio Cu. ft./bbl.


DAY
Choke
20/64
CALIBRATED
LEVERS FED #1
BR-4636
BO-100-B
DATE TAKEN OFF


1-24/64 to 20/64
CHART NO. L-10
METER
7:15AM
CHART PUT ON
5-10-87
LOCATION
LEVERS FED. #1
REMARKS
8:25AM
TAKEN OFF
5-11-87
6 PM

LOG OFF TEST DATA SHEET

Flow Test No. 6

Company Conoco Lease and Well No. Fevers Fed #1

Pool Name Springs Cisco Section E 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/9/87

Date Test Ended 5/10/87 Time Test Started 9:00 Time Test Ended 9:00

Company Rep. Lee

Division Rep. mw

PRODUCTION DATA

OIL/CONSENSATE		WATER meter 804336 → 805886	
Tank No. 97105	Size 380	Tank No.	Size
Closing Gauge 1' 6"	Bbls. 3.3	Closing Gauge ' "	Bbls. 1808
Opening Gauge 1' 4"	Bbls.	Opening Gauge ' "	Bbls.
Total Produced ' "	Bbls.	Total Produced ' "	Bbls.

Total Fluid - Condensate + Water

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100

Meter Loop Size 3 Plate Size 1.375

Flange Tap Or Pipe Tap

Chart L-10 ✓ Or Standard

Gas Gravity .65 Average Gas Temp. 110-120

WELL DATA

Choke Size 24/64 Tubing Recorder Range 1000 Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure 320 Casing Opening Pressure 1600

Tubing Closing Pressure 330 Casing Closing Pressure 1600

Did well stablilize in 24 hour test period? Yes No

If YES how long stabilized flow? hrs.

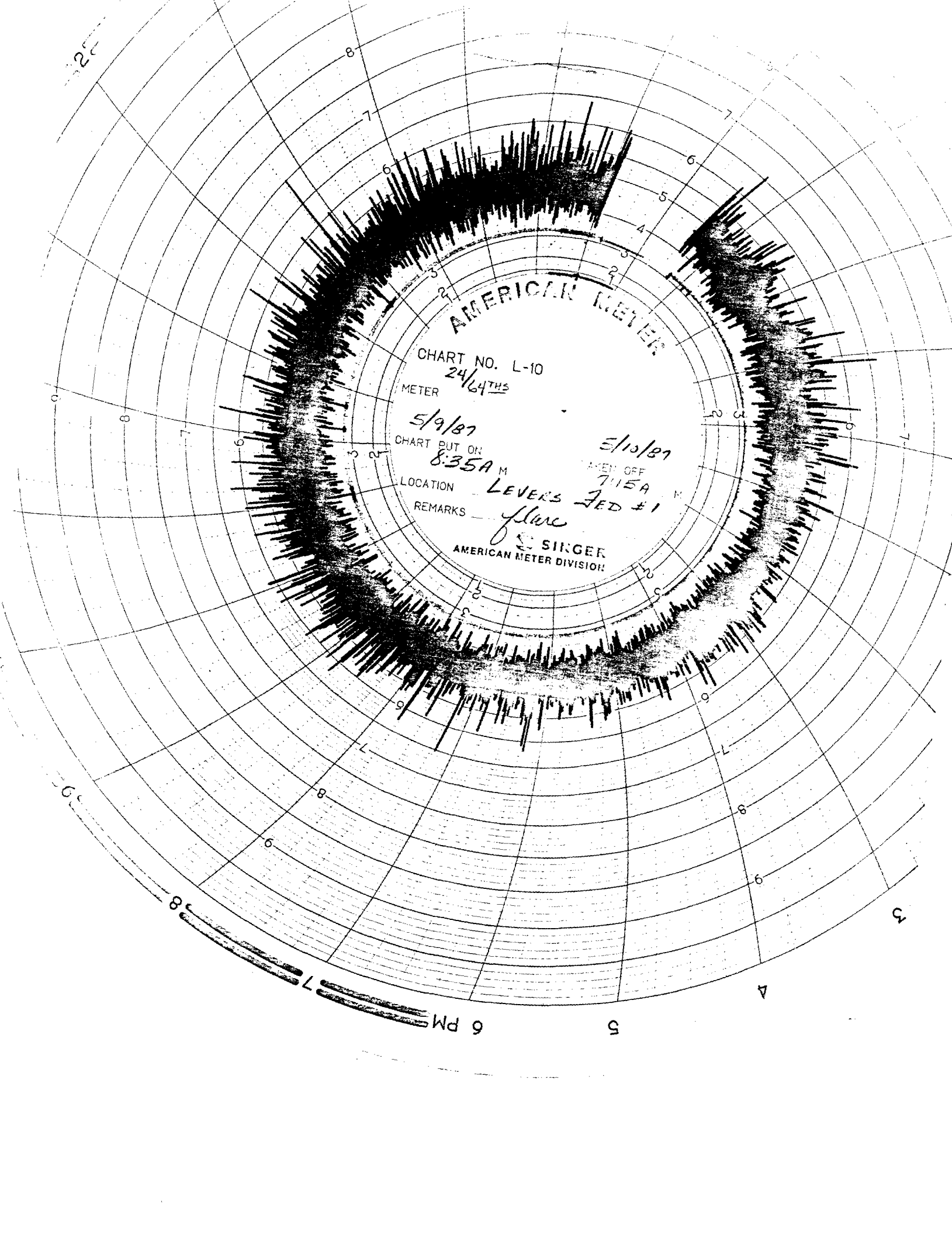
CALCULATIONS

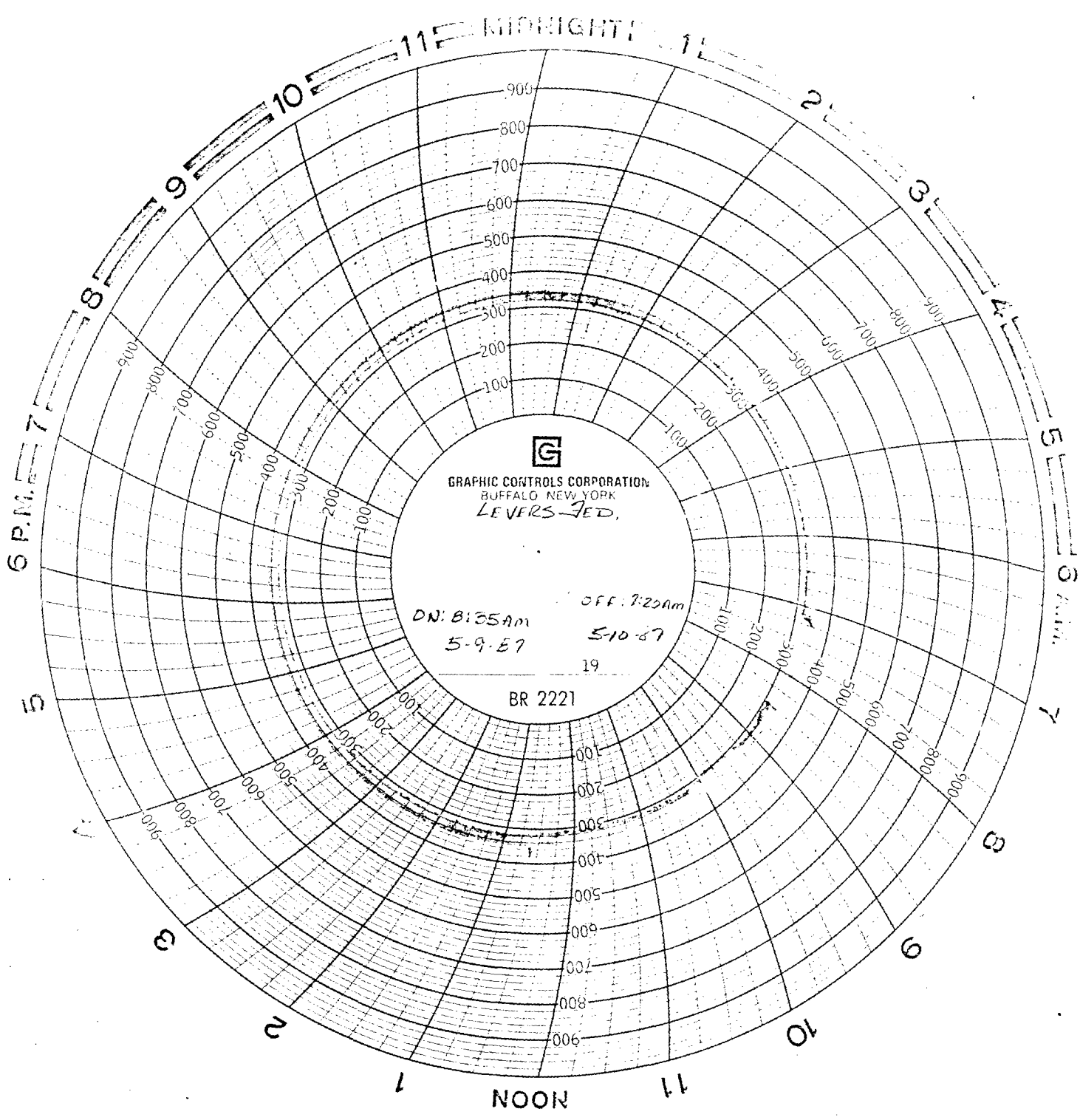
Average Static Average Differential

Orfice Factor X Diff. X Stat. Ext. X Temp. Factor

X Sp.Gr. Factor = Volume/Gas 666 MCF ÷ Fluid 1821

366 Fluid/Gas Ratio Cu. ft./bbl.


AMERICAN METER
CHART NO. L-10
24/64THS
METER
5/9/87
CHART PUT ON
8:35A M
5/15/87
TAKEN OFF
7:15A M
LOCATION LEVERS FED #1
REMARKS flare
SINGER
AMERICAN METER DIVISION
6 PM


MIDNIGHT
NOON
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK
LEVERS-3ED.
ON: 8:35Am
5-9-67
OFF: 7:25Am
5-10-67
19
BR 2221

LOG OFF TEST DATA SHEET

Flow Test No. 5

Company Conoco Lease and Well No. Levers Fed #1

Pool Name Springs Cisco Section E 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/8/87

Date Test Ended 5/9/87 Time Test Started 9:30 Time Test Ended 9:30

Company Rep. Lee

Division Rep. MW

PRODUCTION DATA

OIL/CONSENSATE		WATER - Meter - 802372	
Tank No.	97105 Size 380	Tank No.	Size
Closing Gauge	' " Bbls.	Closing Gauge	' " Bbls. 1964
Opening Gauge	1' 4" Bbls. 0	Opening Gauge	' " Bbls.
Total Produced	' " Bbls.	Total Produced	' " Bbls.

Total Fluid - Condensate + Water

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100

Meter Loop Size 3 Plate Size 1.375

Flange Tap Or Pipe Tap

Chart L-10 ✓ Or Standard

Gas Gravity .65 Average Gas Temp. est 110°-120°

WELL DATA

Choke Size 27/64 Tubing Recorder Range 1000 Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure 310 Casing Opening Pressure 1600

Tubing Closing Pressure 320 Casing Closing Pressure 1600

Did well stablilize in 24 hour test period? Yes ✓ No

If YES how long stabilized flow? 24 hrs.

CALCULATIONS

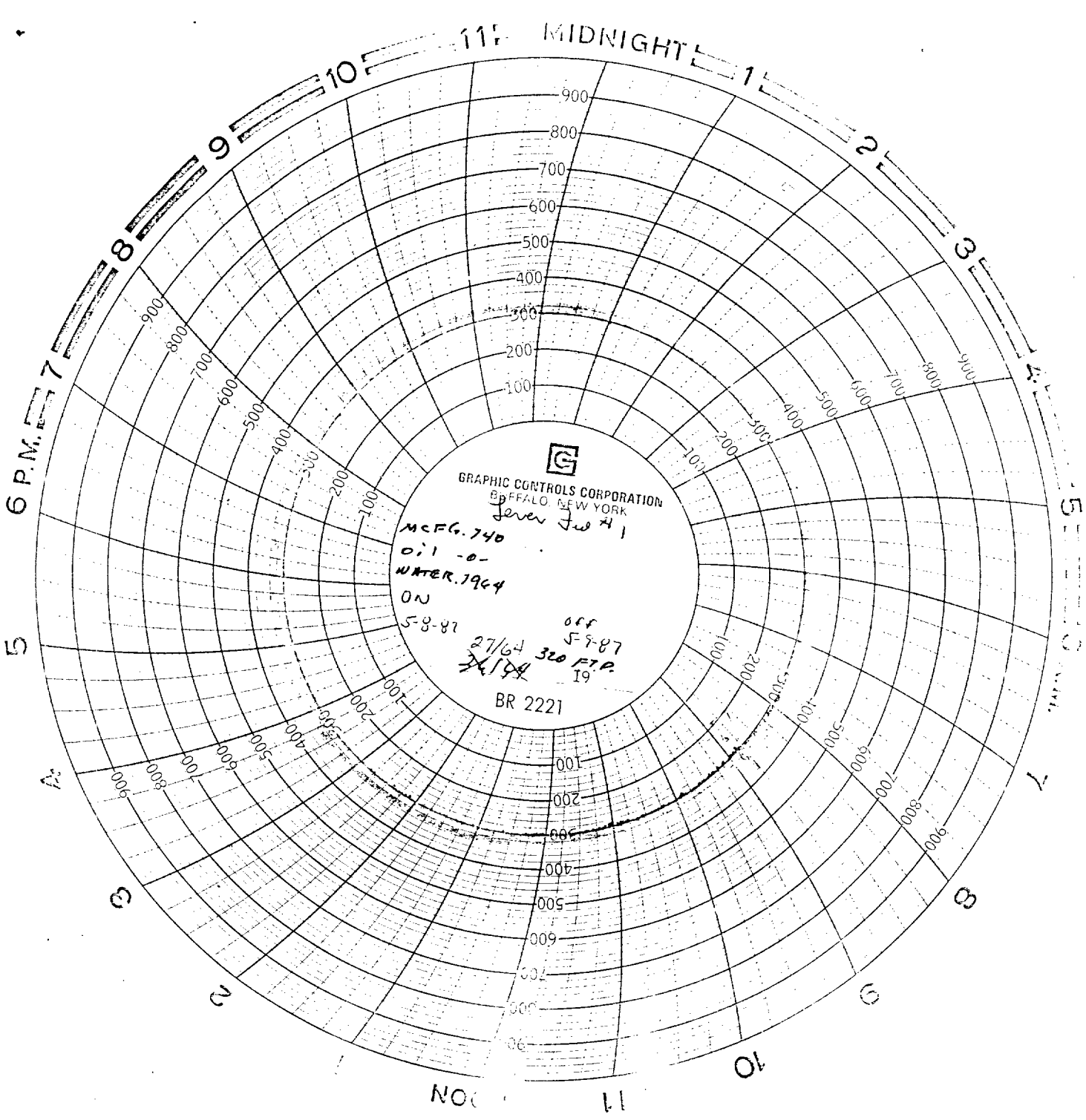
Average Static Average Differential

Orfice Factor X Diff. X Stat. Ext. X Temp. Factor

X Sp.Gr. Factor = Volume/Gas 740 MCF ÷ Fluid 1964

377 Fluid/Gas Ratio Cu. ft./bbl.

AMERICAN METER
0 oil
1964 water
740 mcf
CHART NO. L-10
METER
CHART PUT ON
5-8-87
LOCATION
REMARKS
Sevus Fed #1
Flare
TAKEN OFF
5-9-87
Choke
28/64
SINGER
AMERICAN METER DIVISION
6 PM
5
4


MIDNIGHT
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
Seven Lakes #1
MCFG. 740
OIL -0-
WATER. 1964
ON
5-8-87
OFF
5-9-87
27/64
320 F.T.P.
BR 2221

LOG OFF TEST DATA SHEET

Flow Test No. 4

Company Conoco Lease and Well No. Levers Fed #1

Pool Name Springs Cisco Section E 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/7/87

Date Test Ended 5/8/87 Time Test Started 9:30 Time Test Ended 9:30

Company Rep. Lee

Division Rep. MW

PRODUCTION DATA

OIL/CONSENSATE		WATER meter 800370	
Tank No.	97105	Tank No.	
Size	380	Size	
Closing Gauge	1' 4"	Closing Gauge	' "
Bbls.	0	Bbls.	2002
Opening Gauge	1' 4"	Opening Gauge	' "
Bbls.		Bbls.	
Total Produced	' "	Total Produced	' "
Bbls.		Bbls.	

Total Fluid - Condensate + Water

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100 3.823

Meter Loop Size 3 Plate Size 1.375 11.9¢

Flange Tap Or Pipe Tap

Chart L-10 ✓ Or Standard

Gas Gravity .65 Average Gas Temp. Est 110-120

WELL DATA

Choke Size 30/64 Tubing Recorder Range 1000 Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure 300 Casing Opening Pressure 1600

Tubing Closing Pressure 310 Casing Closing Pressure 1600

Did well stablilize in 24 hour test period? Yes ✓ No

If YES how long stabilized flow? 23 hrs.

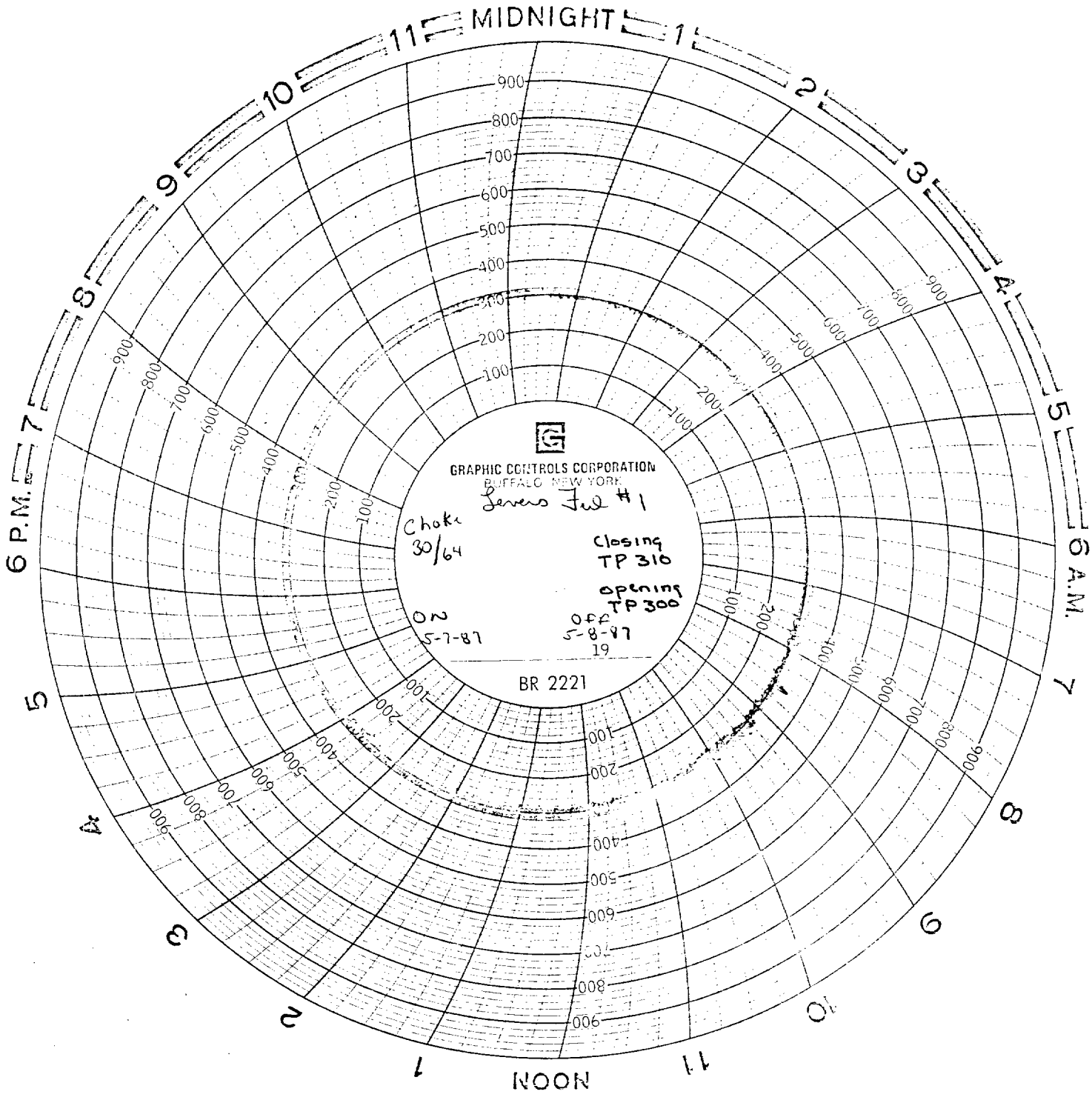
CALCULATIONS

Average Static Average Differential

Orfice Factor X Diff. X Stat. Ext. X Temp. Factor

X Sp.Gr. Factor = Volume/Gas 759 MCF ÷ Fluid 2002

379 Fluid/Gas Ratio Cu. ft./bbl.


MIDNIGHT
NOON
6 P.M.
6 A.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO NEW YORK
Sevens Fed #1
Choke
30/64
Closing
TP 310
opening
TP 300
ON
5-7-87
OFF
5-8-87
19
BR 2221

AMERICAN METER

Oil - 0

Wtr - 2002

CHART NO. Gas- 759 mcf

L-10

METER

30/64

Choke

CHART PUT ON 5-7-87

LOCATION

TAKEN OFF 5-8-87

REMARKS

Jenco Check

SINGER

AMERICAN METER DIVISION

6 PM

LOG OFF TEST DATA SHEET

Flow Test No. 3

Company Conoco Lease and Well No. Levers Fed #1

Pool Name Springs Cisco Section 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/6/87

Date Test Ended 5/7/87 Time Test Started 9:30 Time Test Ended 9:30

Company Rep. Lee Lehman

Division Rep. MW

PRODUCTION DATA

OIL/CONSENSATE		WATER – meter 798009	
Tank No. 97105	Size 380	Tank No.	Size
Closing Gauge 1' 4"	Bbls. 0	Closing Gauge ' "	Bbls. 2361
Opening Gauge 1'4"	Bbls.	Opening Gauge ' "	Bbls.
Total Produced ' "	Bbls.	Total Produced ' "	Bbls.

Total Fluid - Condensate + Water

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100 (3.873)

Meter Loop Size 3 Plate Size 1.375 (11.94)

Flange Tap Or Pipe Tap

Chart L-10 ✓ Or Standard

Gas Gravity .65 Average Gas Temp. Est 110°-120°

WELL DATA

Choke Size 36/64 Tubing Recorder Range 1000 Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure 300 Casing Opening Pressure 1600

Tubing Closing Pressure 300 Casing Closing Pressure 1600

Did well stablilize in 24 hour test period? Yes ✓ No

If YES how long stabilized flow? 24 hrs.

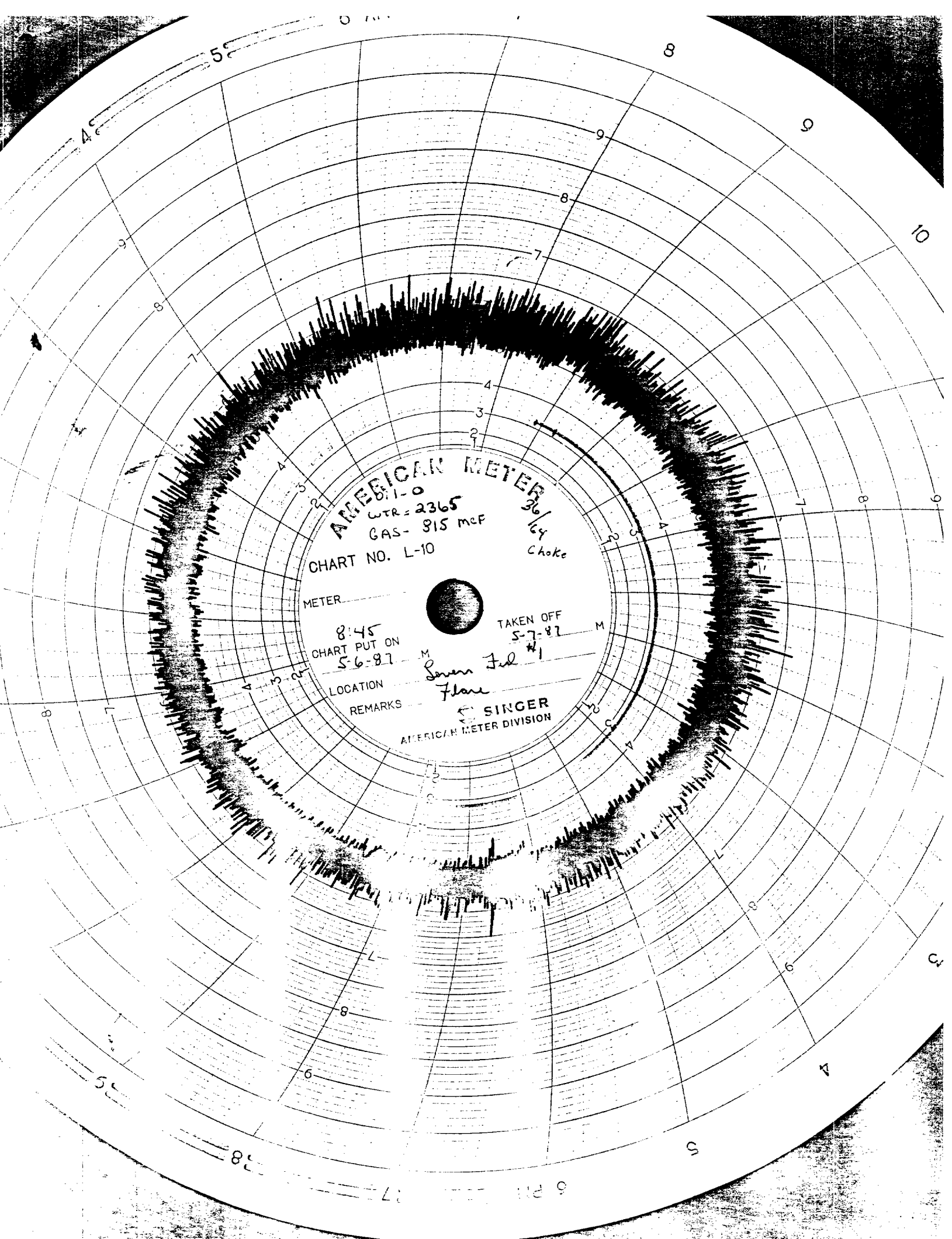
CALCULATIONS

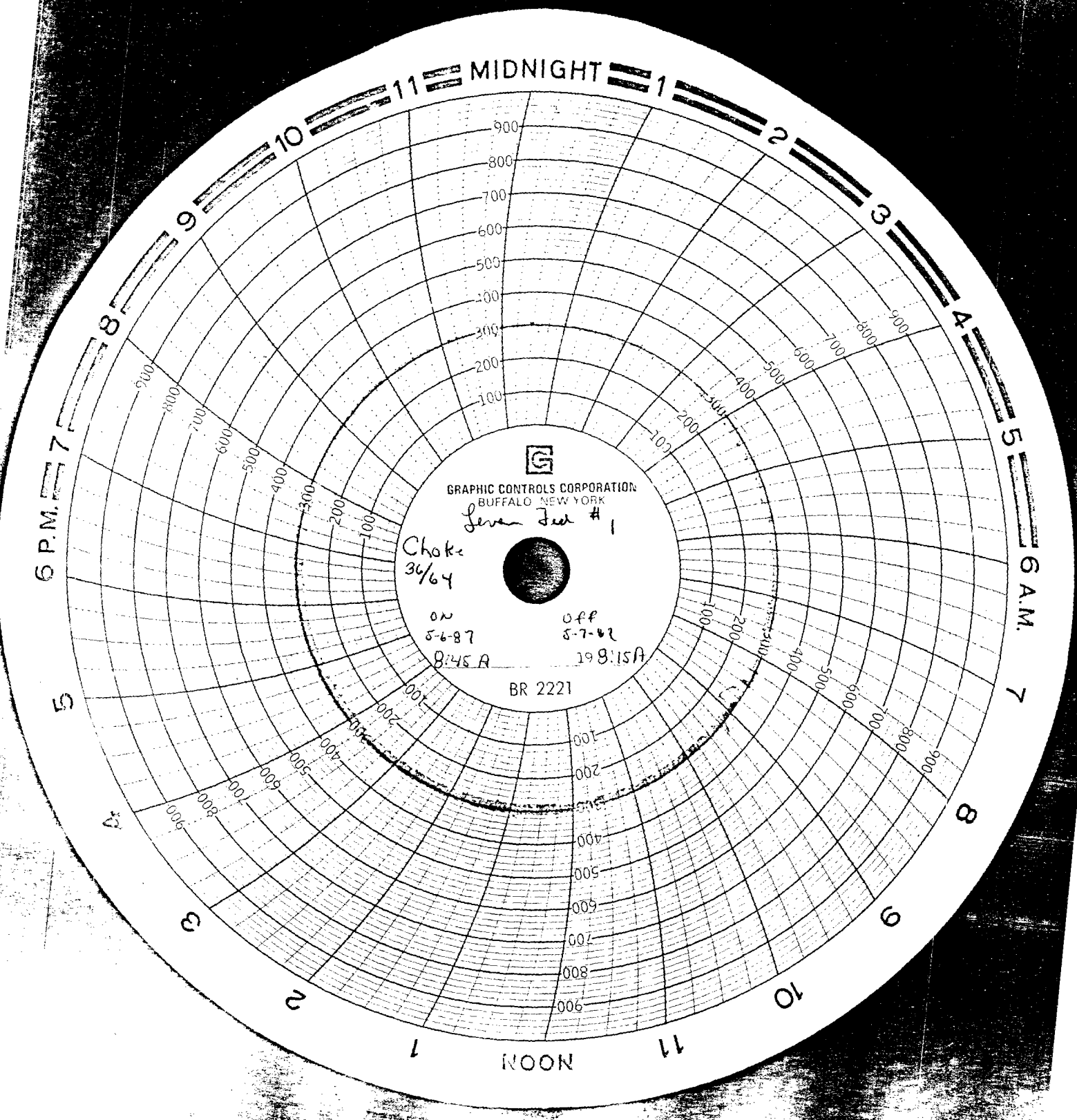
Average Static Average Differential

Orfice Factor X Diff. X Stat. Ext. X Temp. Factor

X Sp.Gr. Factor = Volume/Gas 815 MCF ÷ Fluid 2361

345 Fluid/Gas Ratio Cu. ft./bbl.


AMERICAN METER
1-0
WTR = 2365
GAS- 815 mcf
36/64
Choke
CHART NO. L-10
METER
8:45
CHART PUT ON
5-6-87
M
LOCATION
Govern Fed #1
REMARKS
Flare
TAKEN OFF
5-7-87
M
SINGER
AMERICAN METER DIVISION


MIDNIGHT
NOON
6 P.M.
6 A.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
Seven Test #1
Choke
36/64
ON
5-6-87
8:45 A
OFF
5-7-87
8:15A
BR 2221

LOG OFF TEST DATA SHEET

Flow Test No. 2

Company Conoco Lease and Well No. Leuers Fed # 1

Pool Name Springs Cisco Section E 2 Township 21 Range 25

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/5/87

Date Test Ended 5/6/87 Time Test Started 9:30AM Time Test Ended 9:30 Am

Company Rep. Lee Lehman

Division Rep. Mike Williams

PRODUCTION DATA

OIL/CONSENSATE (1.67 861/in)		WATER - meter 798009	
Tank No.	97105	Tank No.	
Size	380	Size	
Closing Gauge	1' 4"	Closing Gauge	798'00"
Bbls.	0	Bbls.	2328
Opening Gauge	1' 4"	Opening Gauge	795'681.0"
Bbls.		Bbls.	2328
Total Produced	' "	Total Produced	' "
Bbls.		Bbls.	

Total Fluid - Condensate + Water

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100# (3.873)

Meter Loop Size 3 Plate Size 1.375 (11.94)

Flange Tap Or Pipe Tap

Chart L-10 ✓ Or Standard

Gas Gravity .65 Average Gas Temp. Est 110°-120°

WELL DATA

Choke Size 44/64" Tubing Recorder Range 1000 Lbs.

Casing Recorder Range Gauge Lbs.

Tubing Opening Pressure ~~44/64~~ 300# Casing Opening Pressure 600

Tubing Closing Pressure 300# Casing Closing Pressure 600

Did well stablilize in 24 hour test period? Yes ✓ No

If YES how long stabilized flow? 24 hrs.

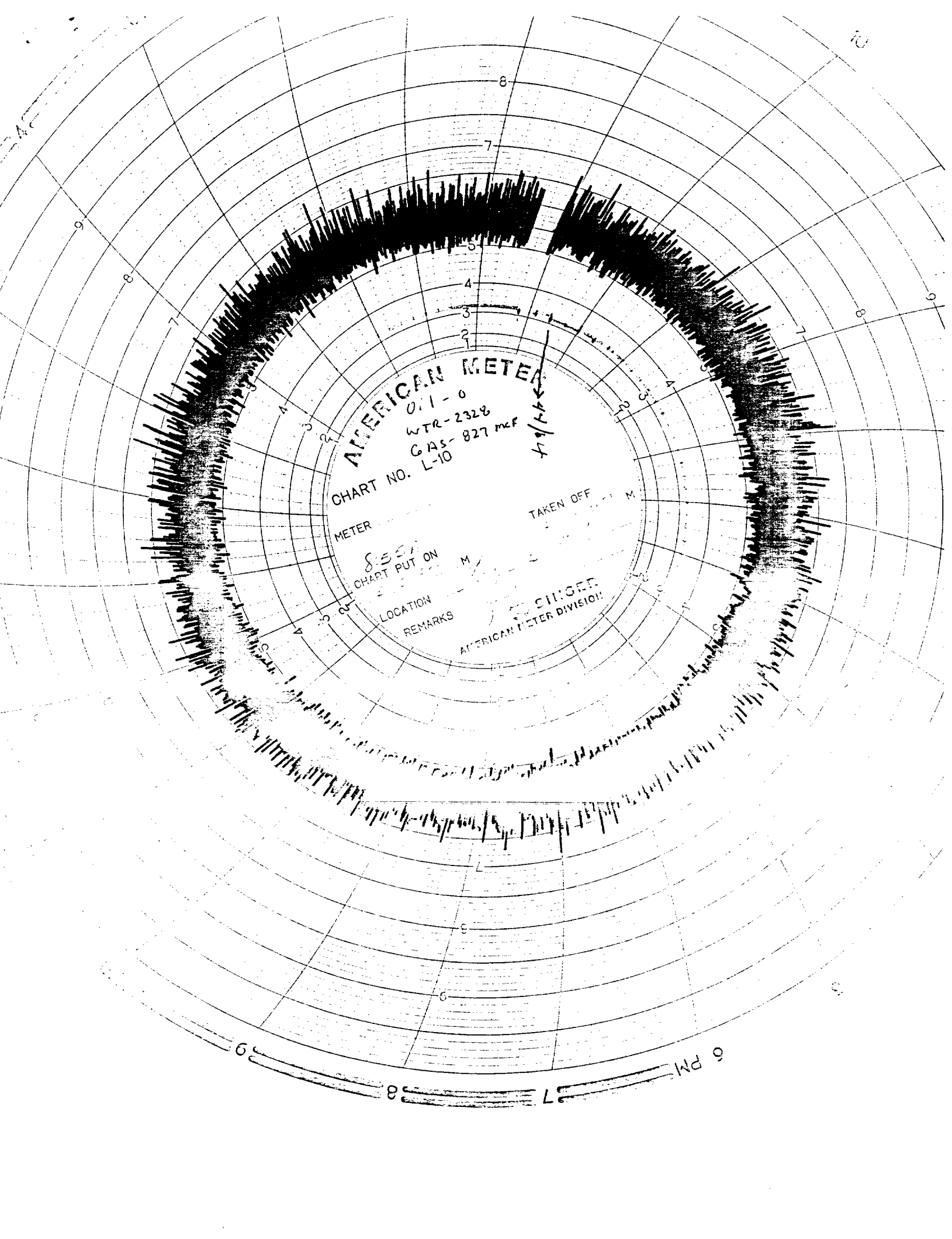
CALCULATIONS

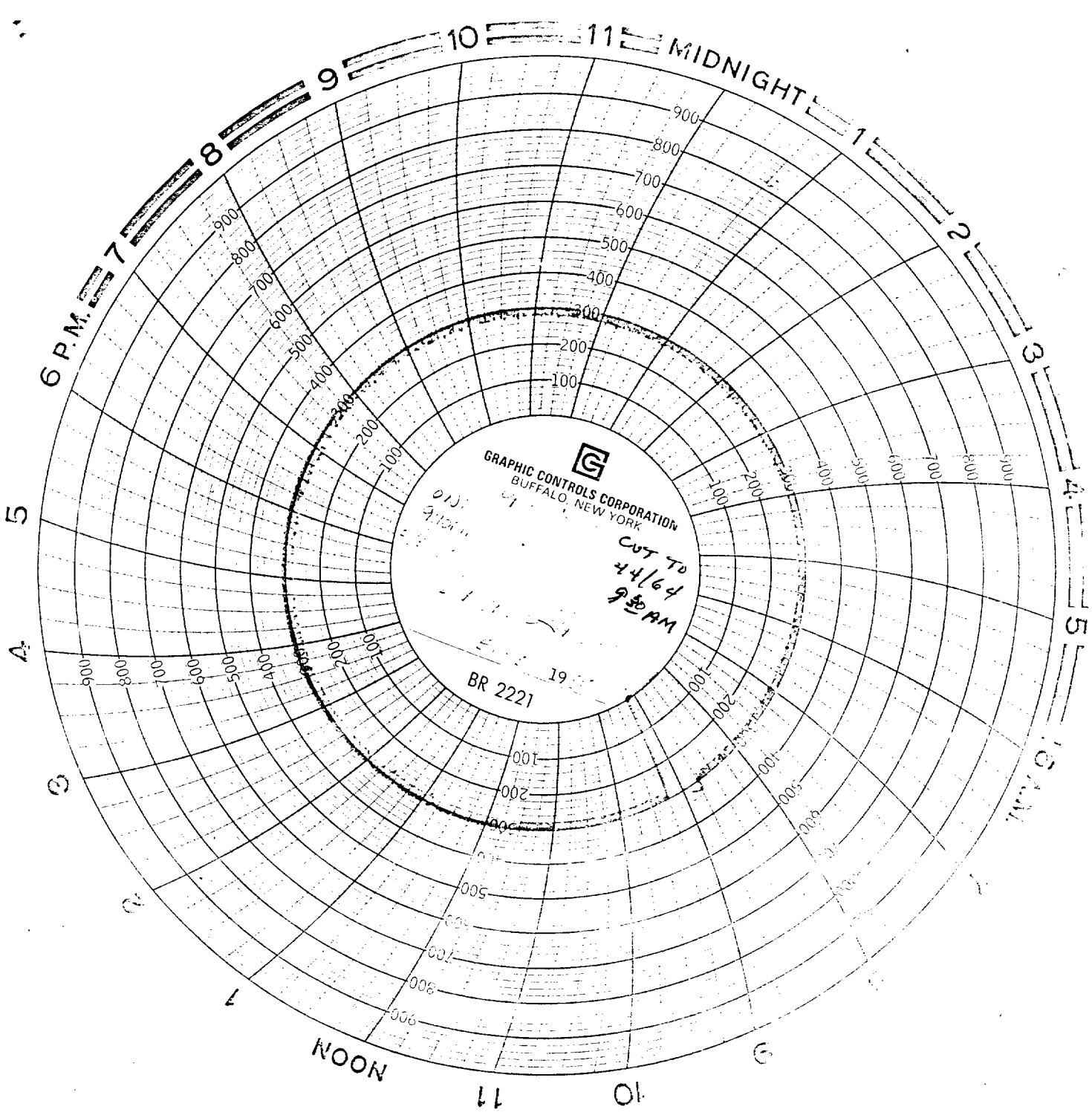
Average Static Average Differential

Orfice Factor X Diff. X Stat. Ext. X Temp. Factor

X Sp.Gr. Factor = Volume/Gas 827 MCF ÷ Fluid 2328

355 Fluid/Gas Ratio Cu. ft./bbl.


AMERICAN METER
0.1 - 0
WTR-2328
GAS- 827 mcf
CHART NO. L-10
METER
TAKEN OFF
CHART PUT ON
LOCATION
REMARKS
SINGER
AMERICAN METER DIVISION
6 PM


MIDNIGHT
NOON
6 P.M.
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
BR 2221
CUT TO
4 1/64
9 AM

LOG OFF TEST DATA SHEET

Flow Test No. 1 Normal Production

Company Conoco Lease and Well No. Levers Fed #1

Pool Name Big Springs Cisco Section _____ Township _____ Range _____

Min. Rate Requested by Co. 350 Mcf Date Test Started 5/4/87

Date Test Ended 5/5/87 Time Test Started 9:30 Time Test Ended 9:30

Company Rep. Lee Lehman

Division Rep. mw

PRODUCTION DATA

OIL/CONSENSATE (20 BBL/ft, 1.67 Bbl/in)		WATER – meter	
Tank No.	97105	Tank No.	
Size	380	Size	
Closing Gauge	1' 4"	Closing Gauge	795' 6"
Bbls.	7	Bbls.	= 2528 Bw
Opening Gauge	' "	Opening Gauge	' "
Bbls.		Bbls.	
Total Produced	' "	Total Produced	' "
Bbls.		Bbls.	

Total Fluid - Condensate + Water 2535

GAS MEASUREMENT DATA

Orfice Meter Static Lbs. 1500# Differential-Inches 100" (3.873)

Meter Loop Size 3 Plate Size 1.375 ~~(3.873)~~ (11.94)

Flange Tap _____ Or Pipe Tap _____

Chart L-10 ✓ Or Standard _____

Gas Gravity .65 Average Gas Temp. Est 110°-120°

WELL DATA

Choke Size Open-3/4" steam 64/64 Tubing Recorder Range 1000 Lbs.

Casing Recorder Range None Lbs.

Tubing Opening Pressure 300# Casing Opening Pressure 0

Tubing Closing Pressure 300# Casing Closing Pressure 0

Did well stablilize in 24 hour test period? Yes ✓ No _____

If YES how long stabilized flow? 24 hrs.

CALCULATIONS

Average Static _____ Average Differential _____

Orfice Factor _____ X Diff. _____ X Stat. Ext. _____ X Temp. Factor _____

X Sp.Gr. Factor _____ = Volume/Gas 827 MCF ÷ Fluid 2535

.326 Fluid/Gas Ratio Cu. ft./bbl.

7-0
2528 @
CHART NO. L-10
82.7 MCF
METER
CHART PUT ON
5-4-81 M
TAKEN OFF
5-5-87 M
LOCATION Levers Check
REMARKS Flare
SINGER
AMERICAN METER DIVISION
6 PM

Anadarko Production Company

APC 206 9/80

PROJECT COMPUTATIONS

NO. _____ OF _____ SHEETS

DATE _____ PROJECT _____ JOB NO. _____

BY _____ CHK.: _____ SUBJECT Log Off Test - Conoco Inc - Levers Fed #1
minium Rate Requested 350#

Date	Choke	T P	B.O.	B.W.	T F	Gas mcF	Gas Fluid Ratio	Remarks
5/5/87	44/64	300#	7	2528	2535	827	326	Choke has 3/4" stem - Normal Production
5/6/87	44/64	300#	0	2328	2328	827	355	[redacted] -200 Bw 0 mcF GFR + 29
5/7/87	36/64	300#	0	2361	2361	815	345	+33 Bw -12 mcF GFR -10
5/8/87	30/64	310#	0	2002	2002	759	379	-359 Bw -46 mcF GFR +34
5/9/87	27/64	320#	0	1964	1964	740	377	-38 Bw -19 mcF GFR -2
5/10/87	24/64	330#	3	1808	1821	666	366	-156 Bw -74 mcF GFR -11
5/11/87	20/64	350#	2	1741	1743	629	361	-67 Bw -37 mcF GFR -5
5/12/87	17/64	365#	0	1582	1582	607	384	-139 Bw -22 mcF GFR +23
5/13/87	13/64	375#	2	1519	1521	592	389	-63 Bw -15 mcF GFR +5
5/14/87	10/64	375-400#	0	1380	1380	555	402	Flowed 6 HRS on 10/64" before dropping well flowed @ a rate of 555 mcF per day. w/a Gas fluid ratio of 402 mcF PD - Well either logged off immediately or there is a possibility the Chk plugged off or partially plugged off. wtr -139 mcF -36 GFR +13
	28/64					488		
	25/64					400		

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

July 30, 1987

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Conoco Inc.
P.O. Box 460
Hobbs, New Mexico 88240

Attention: Hugh Ingram

Re: Federal "34" Well No. 1, 960 FSL & 1980 FWL, Unit (N)
Section 34, Township 20 South, Range 26 East

Levers Federal Well No. 1, 1594 FNL & 660 FWL, Unit (E)
Section 2, Township 21 South, Range 25 East

Dear Sir:

Reference is made to your request dated July 8, 1987 for an increase in the minimum approved flow rate for the above referenced approved hardship gas wells. It is our understanding that the log off tests which were required to be conducted on these wells as per the provisions of R-8425 and R-8427 have been completed and that the results of the tests have been verified by Mr. Mike Williams of the Artesia district office of the Division.

By authority granted me under the provisions of Division Order Nos. R-8425 and R-8427, the minimum flow rates for the above referenced wells are hereby approved as follows:

WELL	MINIMUM APPROVED FLOW RATE
Federal "34" Well No. 1	270 MCFPD
Levers Federal Well No. 1	500 MCFPD

Sincerely,

William J. LeMay
Director

xc: Case Files: 9079, 9080
OCD-Hobbs

R. E. Irelan
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 East Michigan
Hobbs, NM 88240
(505) 393-4141

July 8, 1987

William J. Lemay, Director
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
Santa Fe, NM 87501

Dear Sir:

Federal 34 No. 1 - Hardship Gas Well - Order No. R-8427

Conoco Inc. performed the required log-off test on the subject well as dictated in Order No. R-8427. Mike Williams of the Artesia District Office witnessed the test and submitted the results and documentation to your office. Conoco Inc. concurs with Mr. Williams and officially reports an average minimum sustainable flow rate of 270 MCFPD. We request that this rate be designated the minimum approved flow rate for the subject well. If you have any questions regarding the log-off test, please contact Hugh Ingram or Becky Barnes at (505) 393-4141.

Very truly yours,

R. E. Irelan
RLB

RLB:mgt

cc: file, HAI

R. E. Irelan
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 East Michigan
Hobbs, NM 88240
(505) 393-4141

July 8, 1987

William J. Lemay, Director
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
Santa Fe, NM 87501

Dear Sir:

Levers Federal No. 1 - Hardship Gas Well - Order No. 8425

Conoco Inc. performed the required log-off test on the subject well as dictated in Order No. R-8425. Mike Williams of the Artesia District Office witnessed the test and submitted the results and documentation to your office. Conoco Inc. concurs with Mr. Williams and officially reports a minimum sustainable flow rate of 488-518 MCFPD. Test results indicated a borderline log-off condition at 488 MCFPD and a strong, continuous flow rate at 518 MCFPD. We request that 500 MCFPD be designated the minimum approved flow rate for the subject well. If you have any questions regarding the log-off test, please contact Hugh Ingram or Becky Barnes at (505) 393-4141.

Very truly yours,

R. E. Irelan
MRS

RLB:mgt

cc: file, HAI

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
ARTESIA DISTRICT OFFICE

GARREY CARRUTHERS
Governor

January 12, 1987

P.O. DRAWER DD
ARTESIA, NEW MEXICO 88210
(505) 748-1283

Conoco, Inc.
P.O. Box 460
Hobbs, New Mexico 88240

Case 9079

DISTRICT II EHGWC NO. 24

Re: Emergency Hardship Gas Well
Classification
Levers Federal No. 1-E-2-21-25
Springs Upper Penn Pool

Gentlemen:

Under provisions of Rule 411, you are hereby granted an emergency hardship classification for the above captioned well. This well is not to be produced in excess of 619 MCFD.

In the matter of permanent hardship classification for this well, it has been set for an examiners hearing on February 18, 1987.

Please notify Mr. Mike Williams, of this office, of your log-off test schedule.

Very truly yours,

Les A. Clements

Les A. Clements
Supervisor District II

LAC/mm

cc Vic Lyon
Gas Co. of New Mexico
Florene Davidson
Harold Garcia
Mike Williams

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
ARTESIA DISTRICT OFFICE

GARREY CARRUTHERS
Governor

January 12, 1987

P.O. DRAWER DD
ARTESIA, NEW MEXICO 88210
(505) 748-1283

Conoco, Inc.
P.O. Box 460
Hobbs, New Mexico 88240

Case 9079

DISTRICT II EHGWC NO. 24

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Classification
Levers Federal No. 1-E-2-21-25
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Very truly yours,

Les A. Clements

Les A. Clements
Supervisor District II

LAC/mm

cc Vic Lyon
Gas Co. of New Mexico
Florene Davidson
Harold Garcia
Mike Williams