

Phone
(303) 830-8080

Drill Stem Testers, Inc.

Denver Center Bldg.
1776 Lincoln St., Suite 408
Denver, CO 80203

Contractor Wheatstate
Rig No. 2
Spot W-C-NE
Sec. 4
Twp. 32S
Rng. 11W
Field --
County Barber
State Kansas
Elevation 1563'KB
Formation --
On Location @ 4:30 pm

Surface Choke 1"
Bottom Choke 5/8"
Hole Size 7 7/8"
Core Hole Size --
DP Size & Wt. 4 1/2" AH 16.60
Wt. Pipe --
I.D. of DC 2.25"
Length of DC 120'
Total Depth 3683'
Type Test Conventional
Interval 3654-3683'
Off Location @ 1:30 am

Mud Type --
Weight 9.1
Viscosity 41
Water Loss 11.0
Filter Cake 2/32
Resistivity -- @ -- of
7200 Ppm. NaCl
B.H.T. 129 of
Co. Rep. Scott Alberg
Tester Roy Bowman

	REPORTED	CORRECTED
Opened Tool @	<u>7:45 pm</u>	<u>hrs.</u>
Flow No. 1	<u>30</u>	<u>29</u> min.
Shut-in No. 1	<u>60</u>	<u>62</u> min.
Flow No. 2	<u>45</u>	<u>45</u> min.
Shut-in No. 2	<u>90</u>	<u>90</u> min.
Flow No. 3	<u>--</u>	<u>--</u> min.
Shut-in No. 3	<u>--</u>	<u>--</u> min.

Recorder Type	<u>Kuster AK-1</u>
No. <u>13309</u>	Cap. <u>4700</u> psi
Depth <u>3683</u>	feet
Inside	Outside X
Clock No. <u>5761</u>	Hr. <u>12</u>
Initial Hydrostatic	A <u>1766</u>
Final Hydrostatic	K <u>1733</u>
Initial Flow	B <u>66</u>
Final Initial Flow	C <u>48</u>
Initial Shut-in	D <u>1363</u>
Second Initial Flow	E <u>63</u>
Second Final Flow	F <u>57</u>
Second Shut-in	G <u>1224</u>
Third Initial Flow	H <u>--</u>
Third Final Flow	I <u>--</u>
Third Shut-in	J <u>--</u>

Pipe Recovery: 60' Mud with slight film of oil = .29 bbls.
Less than 1% oil.
Top Sample - 9000 ppm NaCl

Surface Blow:

1st Flow: Tool opened with a strong blow and remained throughout flow period.

2nd Flow: Tool opened with a strong blow. Gas to surface in 30 minutes, see gas volume report.

Remarks: An attempt was made to perform an analysis but due to the insufficient shut-in times, the build-up curves have insufficient character to determine reliable extrapolated reservoir pressures. Also, because the extrapolated pressure is a key factor used in the Horner equations, it is not possible to calculate reliable numerical values for the various reservoir properties.

Operator **TEXAS ENERGIES, INC.**
Ticket No. **582**

Well Name & No. **RICKE #1-4**
Date **1-15-85**

DST No. **1**
Interval **3654-3683'**

Drill Stem Testers, Inc.

INCREMENTAL READING DATA

TEXAS ENERGIES, INC.

Operator

RICKE #1-4

Well Name and No.

1

DST No.

RECORDER NO. 13309

DEPTH 3683 Ft.

INITIAL SHUT-IN
INITIAL FLOW TIME: T = 29

dt min	(T+dt/dt) min	PRESSURE PSIG
0	0.00	48
2	15.62	75
4	8.04	179
6	5.75	317
8	4.58	456
10	3.88	577
12	3.38	701
14	3.04	799
16	2.79	883
18	2.60	955
20	2.43	1018
25	2.14	1132
30	1.95	1205
35	1.82	1257
40	1.72	1291
45	1.64	1316
50	1.57	1336
55	1.52	1350
60	1.48	1359
62	1.46	1363

Drill Stem Testers, Inc.

INCREMENTAL READING DATA

TEXAS ENERGIES, INC.

Operator

RICKE #1-4

Well Name and No.

1

DST No.

RECORDER NO. 13309

DEPTH 3683 Ft.

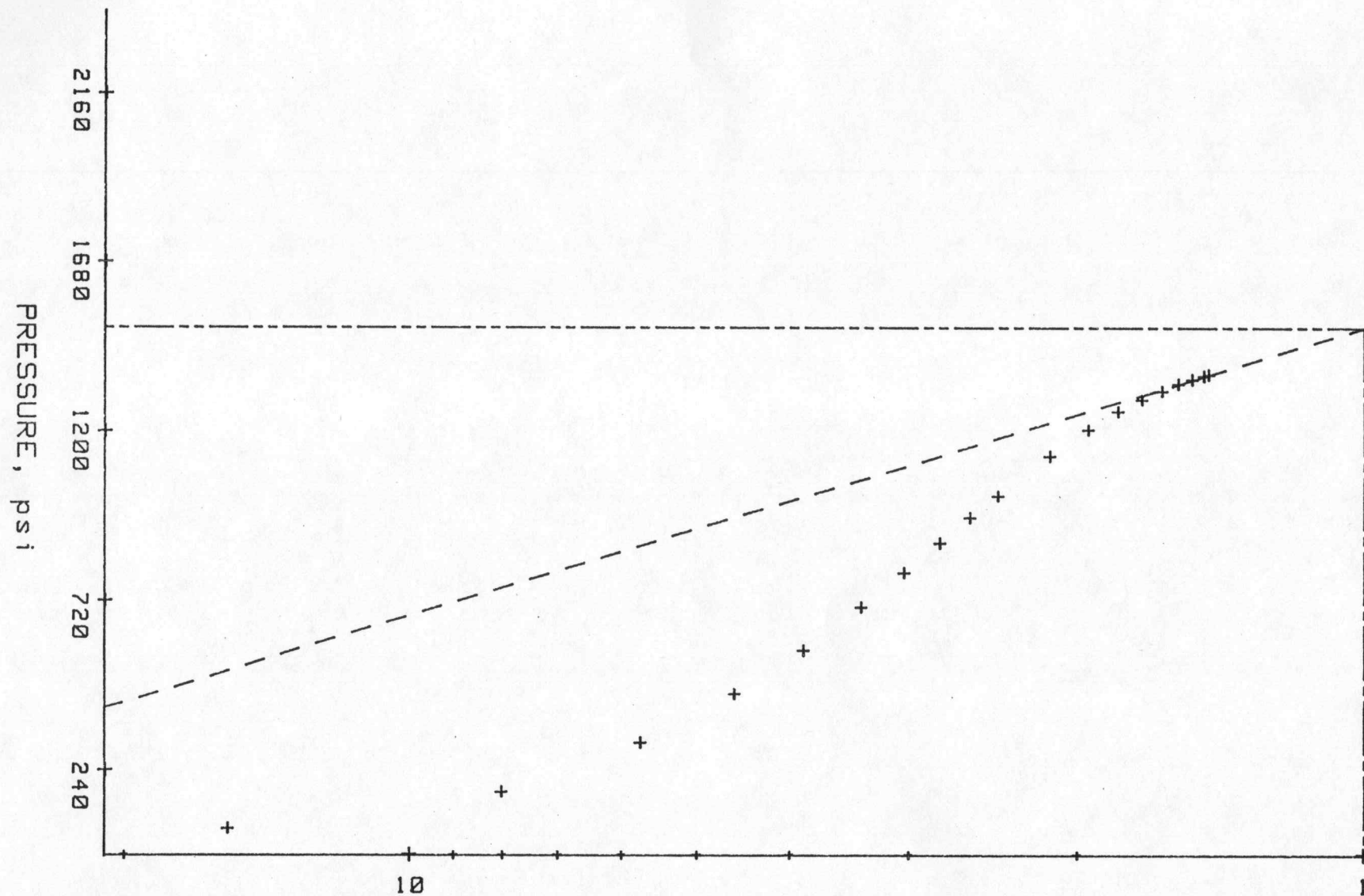
FINAL SHUT-IN
TOTAL FLOW TIME: T = 74

dt min	(T+dt/dt) min	PRESSURE PSIG
0	0.00	57
2	38.69	78
4	19.15	127
6	13.25	178
8	10.25	232
10	8.42	289
12	7.12	340
14	6.27	389
16	5.62	438
18	5.12	483
20	4.68	529
25	3.95	621
30	3.46	707
35	3.11	788
40	2.85	855
45	2.64	916
50	2.48	970
55	2.34	1019
60	2.23	1071
65	2.14	1107
70	2.05	1136
75	1.98	1160
80	1.92	1182
85	1.87	1205
90	1.82	1224

TICKET # : 582
RECORDER # : 13309
DATE : 1-15-84

P* = 1497 PSI
SLOPE = 817.04 PSI/LOG-CYCLE
POINTS USED = 4

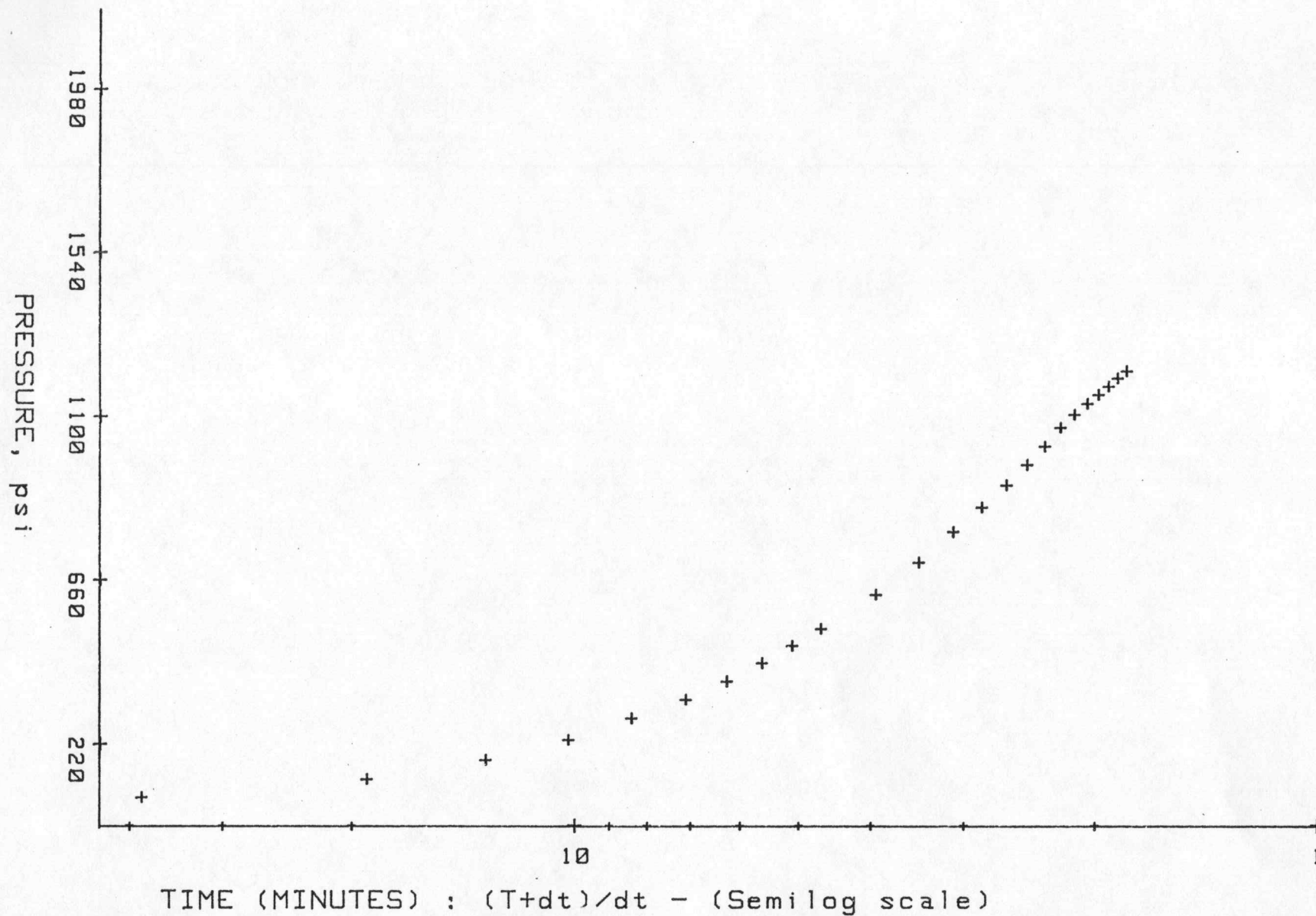
HORNER PLOT FOR INITIAL SHUT-IN



TIME (MINUTES) : (T+dt)/dt - (Semilog scale)

TICKET # : 582
RECORDER # : 13309
DATE : 1-15-84

HORNER PLOT FOR FINAL SHUT-IN



LOG-LOG PLOT FOR INITIAL SHUT-IN

Ticket # : 582

DELTA TIME (min)

100

10

DELTA PRESSURE (psi)

10

100

1000

10000

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

+

LOG-LOG PLOT FOR FINAL SHUT-IN

Ticket # : 582

DELTA TIME (min)

100

10

DELTA PRESSURE (psi)

10

100

1000

10000

+

+

+

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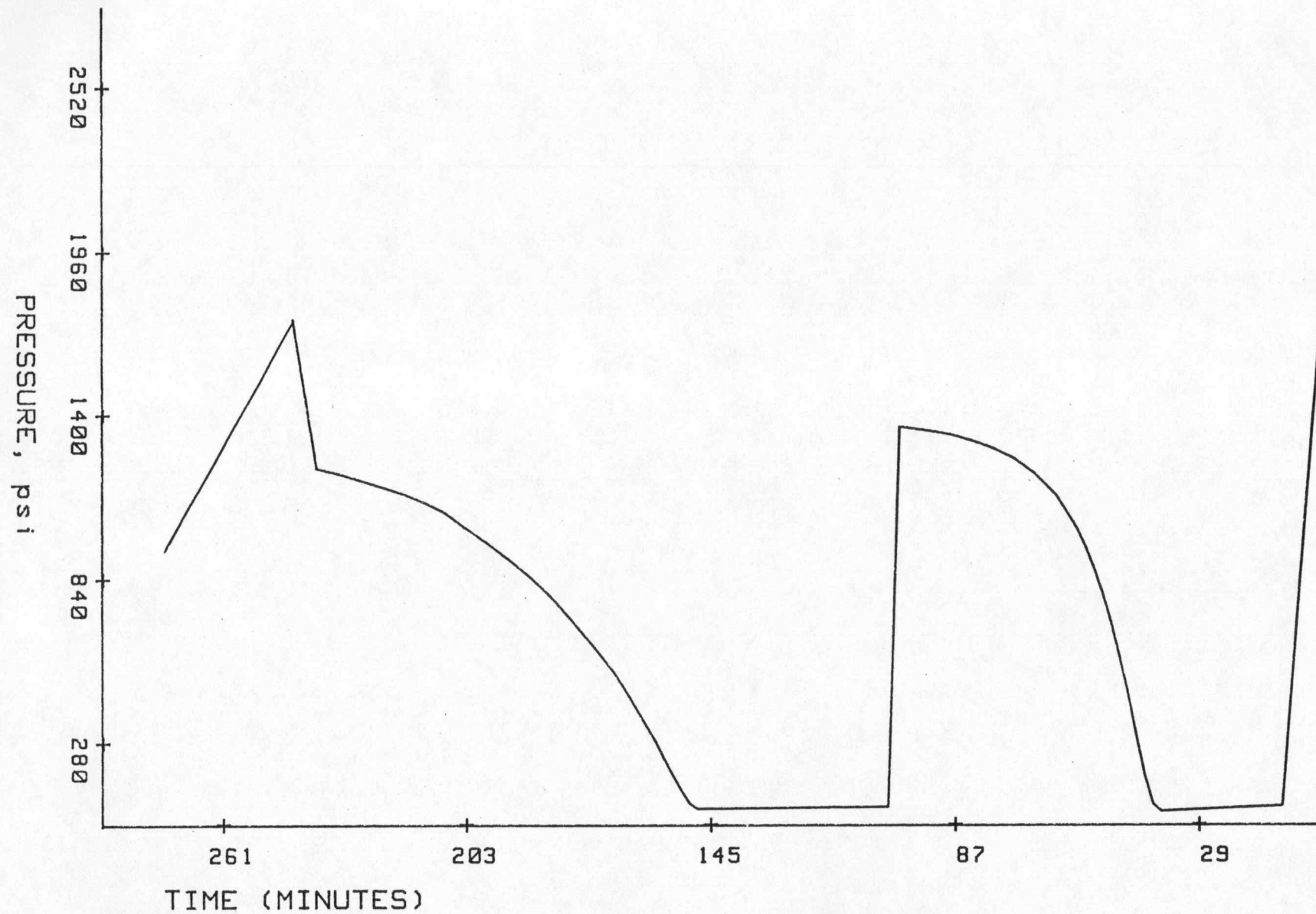
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TICKET # : 582
RECORDER # : 13309
DATE : 1-15-84



Drill Stem Testers, Inc.

1

DST No.

SAMPLER REPORT

Pressure in Sampler: No sampler run. _____ psig

Total Volume of Sampler: _____ cc.

Total Volume of Sample: _____ cc.

Oil: _____ cc.

Water: _____ cc.

Mud: _____ cc.

Gas: _____ cu. ft.

Other: _____

Resistivity

Sample RW: _____ @ _____ °F of Chloride Content _____ ppm.
 Make Up Water _____ @ _____ °F of Chloride Content _____ ppm.
 Mud Pit Sample _____ @ _____ °F of Chloride Content _____ ppm.
 Gas/Oil Ratio _____ Gravity _____ °API @ _____ °F

Where was sample drained.

Remarks:

GAS VOLUME REPORT

Second Flow Period.

[illegible]

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Denver, CO 80203

Contractor <u>Wheatstate</u>	Surface Choke <u>1"</u>	Mud Type <u>Drispac</u>
Rig No. <u>2</u>	Bottom Choke <u>5/8"</u>	Weight <u>9.5</u>
Spot <u>NE</u>	Hole Size <u>7 7/8"</u>	Viscosity <u>42</u>
Sec. <u>4</u>	Core Hole Size <u>--</u>	Water Loss <u>12.4</u>
Twp. <u>32S</u>	DP Size & Wt. <u>4 1/2"XH 16.60</u>	Filter Cake <u>2/32</u>
Rng. <u>11W</u>	Wt. Pipe <u>--</u>	Resistivity <u>--</u> @ <u>--</u> OF
Field <u>--</u>	I.D. of DC <u>2.25"</u>	<u>9200</u> Ppm. NaCl
County <u>Barber</u>	Length of DC <u>120'</u>	B.H.T. <u>--</u> OF
State <u>Kansas</u>	Total Depth <u>4395'</u>	Co. Rep. <u>Scott Alberg</u>
Elevation <u>1563'KB</u>	Type Test <u>Conventional</u>	Tester <u>Roy Bowman</u>
Formation <u>Mississippi</u>	Interval <u>4382-4395'</u>	
On Location @ <u>11:00 am</u>	Off Location @ <u>7:00 pm</u>	

	REPORTED	CORRECTED
Opened Tool @	<u>1:15 pm</u>	<u>hrs.</u>
Flow No. 1	<u>30</u>	<u>28</u> min.
Shut-in No. 1	<u>60</u>	<u>59</u> min.
Flow No. 2	<u>45</u>	<u>45</u> min.
Shut-in No. 2	<u>90</u>	<u>86</u> min.
Flow No. 3	<u>--</u>	<u>--</u> min.
Shut-in No. 3	<u>--</u>	<u>--</u> min.

Recorder Type Kuster AK-1
No. 13624 Cap. 5625 psi
Depth 4367 feet

Inside X Outside

Clock No. 23860 Hr. 12

Initial Hydrostatic	A	<u>2073</u>
Final Hydrostatic	K	<u>2049</u>
Initial Flow	B	<u>39</u>
Final Initial Flow	C	<u>29</u>
Initial Shut-in	D	<u>989</u>
Second Initial Flow	E	<u>55</u>
Second Final Flow	F	<u>42</u>
Second Shut-in	G	<u>994</u>
Third Initial Flow	H	<u>--</u>
Third Final Flow	I	<u>--</u>
Third Shut-in	J	<u>--</u>

Pipe Recovery: 90' Gas in pipe above fluid.
30' Mud = .15 bbls.
Top Sample - 8000 ppm NaCl

Surface Blow:
1st Flow: Tool opened with a weak blow, increased to a fair blow in 8 minutes and remained throughout flow period.
2nd Flow: Tool opened with a fair blow and remained throughout flow period.

Operator **TEXAS ENERGIES, INC.**
Ticket No. **583**

Well Name & No. **RICKE #1-4**
Date **1-18-85**

DST No. **2**
Interval **4382-4395'**

Drill Stem Testers, Inc.

INCREMENTAL READING DATA

TEXAS ENERGIES, INC.

Operator

RICKE #1-4

Well Name and No.

2

DST No.

RECORDER NO. 13624

DEPTH 4367 Ft.

INITIAL SHUT-IN
INITIAL FLOW TIME: T = 28

dt min	(T+dt/dt) min	PRESSURE PSIG
0	0.00	29
2	14.21	52
4	7.85	86
6	5.63	114
8	4.49	136
10	3.80	176
12	3.31	226
14	2.99	272
16	2.75	316
18	2.54	360
20	2.39	399
25	2.11	513
30	1.93	622
35	1.80	706
40	1.70	791
45	1.62	855
50	1.56	910
55	1.51	958
59	1.47	989

Drill Stem Testers, Inc.

INCREMENTAL READING DATA

TEXAS ENERGIES, INC.

Operator

RICKE #1-4

Well Name and No.

2

DST No.

RECORDER NO. 13624

DEPTH 4367 Ft.

FINAL SHUT-IN
TOTAL FLOW TIME: T = 73

dt min	(T+dt/dt) min	PRESSURE PSIG
0	0.00	42
2	38.15	56
4	18.89	80
6	13.07	104
8	10.11	131
10	8.21	163
12	7.04	194
14	6.19	228
16	5.56	257
18	5.02	289
20	4.63	330
25	3.91	400
30	3.43	486
35	3.07	560
40	2.82	626
45	2.62	684
50	2.45	736
55	2.32	788
60	2.21	834
70	2.04	906
80	1.91	965
86	1.85	994

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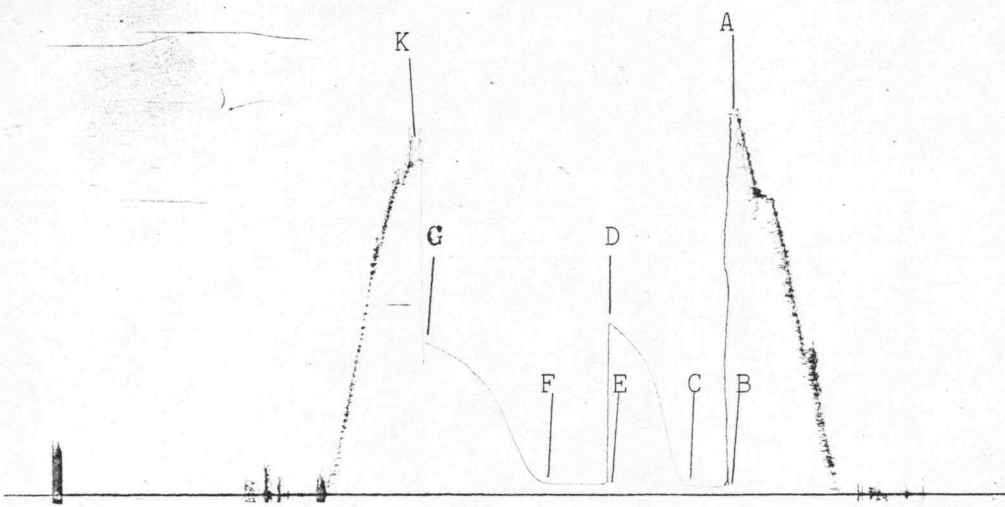
Contractor Wheatstate
Rig No. 2
Spot C-NE
Sec. 4
Twp. 32S
Rng. 11W
Field --
County Barber
State Kansas
Elevation 1563'KB
Formation Mississippi
On Location @ 12:00

Surface Choke 1"
Bottom Choke 5/8"
Hole Size 7 7/8"
Core Hole Size --
DP Size & Wt. 4 1/2"XH 16.60
Wt. Pipe --
I.D. of DC 2.25"
Length of DC 120'
Total Depth 4415'
Type Test Conventional
Interval 4395-4415'
Off Location @ 9:30

Mud Type Driscap
Weight 9.4
Viscosity 47
Water Loss 11.4
Filter Cake 2/32
Resistivity -- @ -- of
6200 Ppm. NaCl
B.H.T. 139 of
Co. Rep. Scott Alberg
Tester Roy Bowman

	REPORTED	CORRECTED
Opened Tool @	<u>3:05</u>	hrs.
Flow No. 1	<u>30</u>	<u>30</u> min.
Shut-in No. 1	<u>60</u>	<u>58</u> min.
Flow No. 2	<u>45</u>	<u>46</u> min.
Shut-in No. 2	<u>90</u>	<u>92</u> min.
Flow No. 3	<u>--</u>	min.
Shut-in No. 3	<u>--</u>	min.

Recorder Type Kuster AK-1
No. 13309 Cap. 4700 psi
Depth 4415 feet
Inside Outside X
Clock No. 5761 Hr. 12
Initial Hydrostatic A 2155
Final Hydrostatic K 2123
Initial Flow B 67
Final Initial Flow C 61
Initial Shut-in D 1053
Second Initial Flow E 84
Second Final Flow F 77
Second Shut-in G 935
Third Initial Flow H --
Third Final Flow I --
Third Shut-in J --



Pipe Recovery: 65' Mud cut water = .32 bbls. (70% water, 30% mud)
Bottom Sample - 120,000 ppm NaCl

Surface Blow:

1st Flow: Tool opened with a weak blow and remained throughout flow period.
2nd Flow: Tool opened with a weak blow and remained throughout flow period.

Operator **TEXAS ENERGIES, INC.**
Ticket No. **584**

Well Name & No. **RICKE #1-4**
Date **1-19-85**

DST No. **3**
Interval **4395-4415'**

Drill Stem Testers, Inc.

INCREMENTAL READING DATA

TEXAS ENERGIES, INC.

Operator

RICKE #1-4

Well Name and No.

3

DST No.

RECORDER NO. 13309

DEPTH 4415 Ft.

INITIAL SHUT-IN
INITIAL FLOW TIME: T = 30

dt min	(T+dt/dt) min	PRESSURE PSIG
0	0.00	61
2	16.23	68
4	8.33	79
6	5.83	96
8	4.74	123
10	4.00	160
12	3.44	219
14	3.13	280
16	2.87	359
18	2.65	446
20	2.49	525
25	2.19	684
30	1.99	792
35	1.85	864
40	1.74	919
45	1.66	964
50	1.60	1000
55	1.54	1036
58	1.52	1053

Drill Stem Testers, Inc.

INCREMENTAL READING DATA

TEXAS ENERGIES, INC.

Operator

RICKE #1-4

Well Name and No.

3

DST No.

RECORDER NO. 13309

DEPTH 4415 Ft.

FINAL SHUT-IN
TOTAL FLOW TIME: T = 76

dt min	(T+dt/dt) min	PRESSURE PSIG
0	0.00	77
2	39.54	80
4	19.56	85
6	13.53	92
8	10.28	100
10	8.48	115
12	7.26	130
14	6.39	150
16	5.68	176
18	5.14	202
20	4.74	239
25	4.00	325
30	3.52	421
35	3.16	512
40	2.88	592
45	2.68	652
50	2.51	701
55	2.37	743
60	2.26	786
70	2.08	844
80	1.94	890
90	1.84	928
92	1.82	935