WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company Texas Energies, Inc. Lease & Well No. Curtis #1

Elevation -- Formation Mississippi Effective Pay --- Ft. Ticket No. 5320

Date 1/26/80 Sec. 2 Twp. 27S Range 15W County Pratt State Kansas

Test Approved by Toby Elster Western Representative Stuart Stover

Formation Test No. 1 Interval Tested from 4393 ft. to 4435 ft. Total Depth 4435 ft.

Packer Depth 4388 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4393 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4432 ft. Recorder Number 11018 Cap. 4425

Bottom Recorder Depth (Outside) 4435 ft. Recorder Number 11019 Cap. 4500

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Gabbert-Jones Drilling Rig #6 Drill Collar Length 152 I. D. 2.25 in.

Mud Type premix Viscosity 51 Weight Pipe Length - I. D. - in.

Weight 9.8 Water Loss 7.2 cc. Drill Pipe Length 4220 I. D. 3.8 in.

Chlorides 22,000 P.P.M. Test Tool Length 21 ft. Tool Size 3½ in.

Jars: Make -- Serial Number -- Anchor Length 42 ft. Size 4½ in.

Did Well Flow? - Reversed Out - Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½ in.

Blow: Good throughout. Gas to surface in firty-five minutes on second flow period. 10.5 MCFGPD through ⅛" orifice

Recovered 180 ft. of gas cut drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Chlorides 15,000 ppm

Time Set Packer(s) 2:30 A.M. ~~P.M.~~ Time Started Off Bottom 7:15 A.M. ~~P.M.~~ Maximum Temperature

Initial Hydrostatic Pressure ..... (A) 2327 P.S.I.

Initial Flow Period ..... Minutes 60 (B) 106 P.S.I. to (C) 111 P.S.I.

Initial Closed In Period ..... Minutes 66 (D) 998 P.S.I.

Final Flow Period ..... Minutes 80 (E) 104 P.S.I. to (F) 118 P.S.I.

Final Closed In Period ..... Minutes 90 (G) 1251 P.S.I.

Final Hydrostatic Pressure ..... (H) 2251 P.S.I.

WTC

WESTERN TESTING CO., INC.

Pressure Data

Date 1/26/80 Test Ticket No. 5320

Recorder No. 11018 Capacity 4425 Location 4432 Ft.

Clock No. -- Elevation ------- Well Temperature -- °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2327 P.S.I.		Open Tool	2:30A M	
B	First Initial Flow Pressure	106 P.S.I.		First Flow Pressure	60 Mins.	60 Mins.
C	First Final Flow Pressure	111 P.S.I.		Initial Closed-in Pressure	60 Mins.	66 Mins.
D	Initial Closed-in Pressure	998 P.S.I.		Second Flow Pressure	75 Mins.	80 Mins.
E	Second Initial Flow Pressure	104 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	118 P.S.I.				
G	Final Closed-in Pressure	1251 P.S.I.				
H	Final Hydrostatic Mud	2251 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

Point Mins.	Press.
P 1 0	106
P 2 5	106
P 3 10	101
P 4 15	99
P 5 20	95
P 6 25	101
P 7 30	111
P 8 35	110
P 9 40	109
P10 45	109
P11 50	109
P12 55	110
P13 60	111
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 22 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	111
3	153
6	202
9	262
12	313
15	367
18	404
21	453
24	496
27	542
30	582
33	626
36	664
39	701
42	743
45	777
48	810
51	847
54	878
57	914
60	940
63	967
66	998

Second Flow Pressure
Breakdown: 16 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	104
5	111
10	112
15	114
20	114
25	115
30	116
35	116
40	117
45	118
50	118
55	118
60	118
65	118
70	118
75	118
80	118

Final Shut-In
Breakdown: 30 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	118
3	153
2	213
9	276
12	336
15	398
18	451
21	507
24	560
27	611
30	655
33	706
36	750
39	796
42	843
45	878
48	918
51	954
54	982
57	1002
60	1042

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WESTERN TESTING CO., INC.

Pressure Data

Date 1/26/80 Test Ticket No. 5320

Recorder No. 11018 Capacity 4425 Location 4432 Ft.

Clock No. -- Elevation ------- Well Temperature -- °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2327 P.S.I.		Open Tool	2:30A M	
B	First Initial Flow Pressure	106 P.S.I.		First Flow Pressure	60 Mins.	60 Mins.
C	First Final Flow Pressure	111 P.S.I.		Initial Closed-in Pressure	60 Mins.	66 Mins.
D	Initial Closed-in Pressure	998 P.S.I.		Second Flow Pressure	75 Mins.	80 Mins.
E	Second Initial Flow Pressure	104 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	118 P.S.I.				
G	Final Closed-in Pressure	1251 P.S.I.				
H	Final Hydrostatic Mud	2251 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1	
P 2	
P 3	
P 4	
P 5	
P 6	
P 7	
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 22 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

Second Flow Pressure
Breakdown: 16 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
63	1073
66	1097
69	1119
72	1139
75	1159
78	1178
81	1196
84	1214
87	1231
90	1251

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11018-5320

TKt #5320
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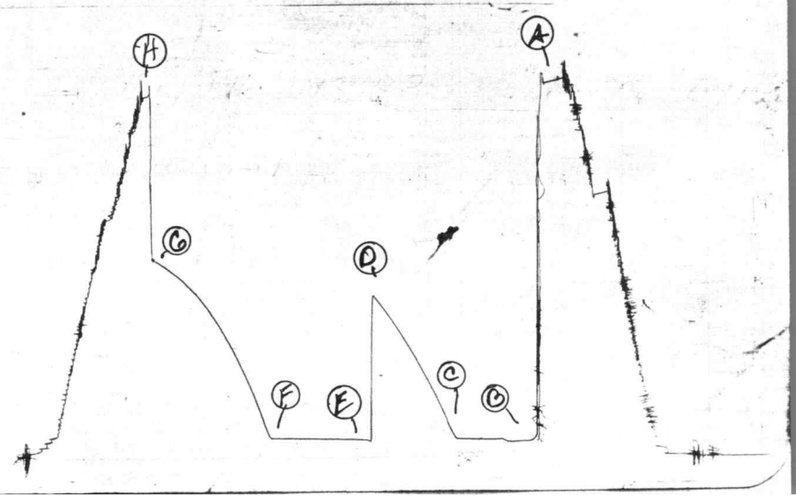

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company Texas Energies, Inc. Lease & Well No. Curtis #1

Elevation 2044 Rotary Bushing Formation Mississippi Effective Pay --- Ft. Ticket No. 5321

Date 1/26/80 Sec. 2 Twp. 27S Range 15W County Pratt State Kansas

Test Approved by Toby Elster Western Representative Stuart Stover

Formation Test No. 2 Interval Tested from 4430 ft. to 4465 ft. Total Depth 4465 ft.

Packer Depth 4425 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4430 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4462 ft. Recorder Number 11018 Cap. 4425

Bottom Recorder Depth (Outside) 4465 ft. Recorder Number 11019 Cap. 4500

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Gabbert-Jones Drilling Rig #6 Drill Collar Length 152 I. D. 2.25 in.

Mud Type premix Viscosity 44 Weight Pipe Length - I. D. - in.

Weight 9.7 Water Loss 10.8 cc. Drill Pipe Length 4157 I. D. 3.8 in.

Chlorides 23,000 P.P.M. Test Tool Length 21 ft. Tool Size 3½ in.

Jars: Make - Serial Number - Anchor Length 35 ft. Size 4½ in.

Did Well Flow? - Reversed Out -. Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½ in.

Blow: Fair increasing to good.

Recovered 200 ft. of gas cut mud ; few oil specks in top of tool

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 10:30 ~~A.M.~~ P.M. Time Started Off Bottom 3:15 A.M. ~~P.M.~~ Maximum Temperature 122°

Initial Hydrostatic Pressure			(A) 2347	P.S.I.		
Initial Flow Period	Minutes 60	(B) 73	P.S.I. to	(C) 84	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 527	P.S.I.			
Final Flow Period	Minutes 75	(E) 87	P.S.I. to	(F) 102	P.S.I.	
Final Closed In Period	Minutes 96	(G) 1082	P.S.I.			
Final Hydrostatic Pressure			(H) 2278	P.S.I.		

WESTERN TESTING CO., INC.

Pressure Data

Date 1/26/80 Test Ticket No. 5321

Recorder No. 11018 Capacity 4425 Location 4462 Ft.

Clock No. ------ Elevation 2044 Rotary Bushing Well Temperature 122 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2347 P.S.I.		Open Tool	10:30P M	
B	First Initial Flow Pressure	73 P.S.I.		First Flow Pressure	60 Mins.	60 Mins.
C	First Final Flow Pressure	84 P.S.I.		Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	527 P.S.I.		Second Flow Pressure	75 Mins.	75 Mins.
E	Second Initial Flow Pressure	87 P.S.I.		Final Closed-in Pressure	90 Mins.	96 Mins.
F	Second Final Flow Pressure	102 P.S.I.				
G	Final Closed-in Pressure	1082 P.S.I.				
H	Final Hydrostatic Mud	2278 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	73
P 2 5	72
P 3 10	87
P 4 15	83
P 5 20	91
P 6 25	118
P 7 30	78
P 8 35	78
P 9 40	76
P10 45	82
P11 50	86
P12 55	84
P13 60	84
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	84
3	107
6	142
9	178
12	207
15	236
18	262
21	2 7
24	311
27	336
30	356
33	378
36	397
39	419
42	437
45	456
48	470
51	484
54	499
57	514
60	527

Second Flow Pressure
Breakdown: 15 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	87
5	88
10	90
15	92
20	93
25	94
30	95
35	95
40	96
45	96
50	97
55	98
60	99
65	100
70	101
75	102

Final Shut-In
Breakdown: 32 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	102
3	138
6	180
9	224
12	262
15	307
18	351
21	391
24	429
27	469
30	509
33	540
36	580
39	613
42	648
45	684
48	717
51	746
54	777
57	808
60	836

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WESTERN TESTING CO., INC.
Pressure Data

Date 1/26/80 Test Ticket No. 5321

Recorder No. 11018 Capacity 4425 Location 4462 Ft.

Clock No. ------ Elevation 2044 Rotary Bushing Well Temperature 122 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2347	P.S.I.	Open Tool	10:30P	M		
B	First Initial Flow Pressure	73	P.S.I.	First Flow Pressure	60	Mins.	60	Mins.
C	First Final Flow Pressure	84	P.S.I.	Initial Closed-in Pressure	60	Mins.	60	Mins.
D	Initial Closed-in Pressure	527	P.S.I.	Second Flow Pressure	75	Mins.	75	Mins.
E	Second Initial Flow Pressure	87	P.S.I.	Final Closed-in Pressure	90	Mins.	96	Mins.
F	Second Final Flow Pressure	102	P.S.I.					
G	Final Closed-in Pressure	1082	P.S.I.					
H	Final Hydrostatic Mud	2278	P.S.I.					

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

Initial Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Second Flow Pressure
Breakdown: 15 Inc. of 5 mins. and a final inc. of 0 Min.

Final Shut-In
Breakdown: 32 Inc. of 3 mins. and a final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	860
P 2						66	884
P 3						69	905
P 4						72	932
P 5						75	956
P 6						78	977
P 7						81	995
P 8						84	1017
P 9						87	1036
P10						90	1057
P11						93	1075
P12						96	1082
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

WTC - 4

11018-5321

Tkt #5321
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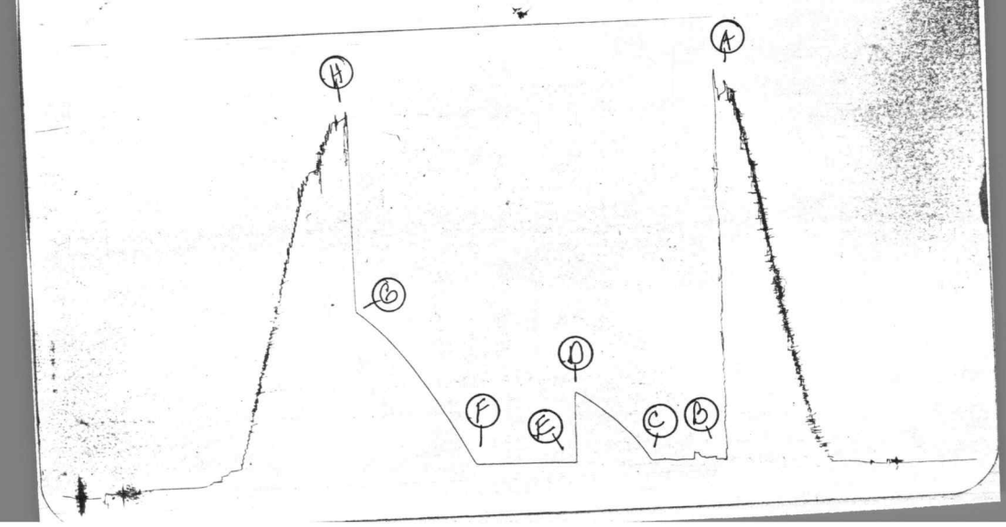

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company Texas Energies, Inc. Lease & Well No. Curtis #1

Elevation 2044 Rotary Bushing Formation Kinderhook Effective Pay --- Ft. Ticket No. 5322

Date 1/27/80 Sec. 2 Twp. 27S Range 15W County Pratt State Kansas

Test Approved by ? Western Representative Stuart Stover

Formation Test No. 3 Interval Tested from ft. to ft. Total Depth 4495 ft.

Packer Depth ft. Size in. Packer Depth ft. Size in.

Packer Depth ft. Size in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) ft. Recorder Number 11018 Cap. 4425

Bottom Recorder Depth (Outside) ft. Recorder Number 11019 Cap. 4500

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Gabbert-Jones Drilling Rig# 6 Drill Collar Length 152 I. D. 2.25 in.

Mud Type Viscosity Weight Pipe Length I. D. in.

Weight 9.7 Water Loss cc. Drill Pipe Length I. D. in.

Chlorides 25,000 P.P.M. Test Tool Length 21 ft. Tool Size 3½ in.

Jars: Make -- Serial Number -- Anchor Length 30 ft. Size 4½ in.

Did Well Flow? -- Reversed Out -- Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½ in.

Blow:

Recovered ft. of

Recovered ft. of

Recovered ft. of MISRUN

Recovered ft. of

Recovered ft. of

Remarks: Bridge 530 feet from bottom; tool would not go through

Time Set Packer(s) A.M. P.M. Time Started Off Bottom 9:30 ~~A.M.~~ P.M. Maximum Temperature

Initial Hydrostatic Pressure ..... (A) P.S.I.

Initial Flow Period ..... Minutes (B) P.S.I. to (C) P.S.I.

Initial Closed In Period ..... Minutes (D) P.S.I.

Final Flow Period ..... Minutes (E) P.S.I. to (F) P.S.I.

Final Closed In Period ..... Minutes (G) P.S.I.

Final Hydrostatic Pressure ..... (H) P.S.I.

WTC-

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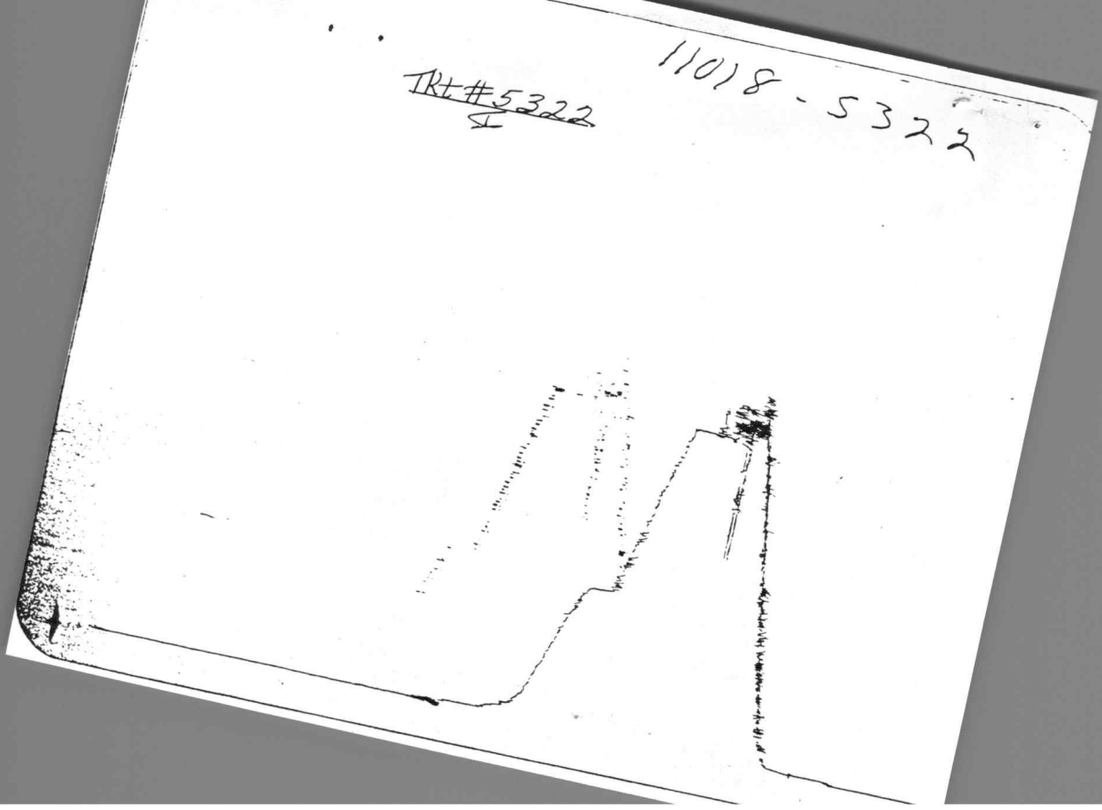
11018-5322



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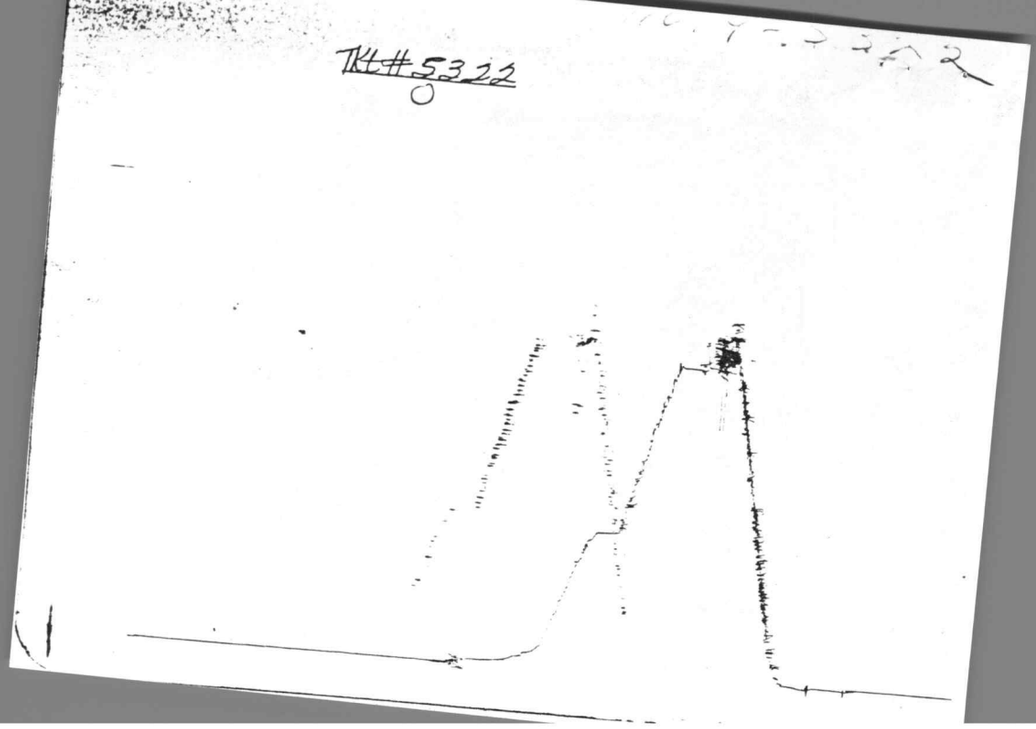

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company Texas Energies, Inc. Lease & Well No. Curtis #1

Elevation 2044 Rotary Bushing Formation Kinderhook Effective Pay --- Ft. Ticket No. 5323

Date 1/28/80 Sec. 2 Twp. 27S Range 15W County Pratt State Kansas

Test Approved by Toby Elster Western Representative Stuart Stover

Formation Test No. 4 Interval Tested from 4465 ft. to 4495 ft. Total Depth 4495 ft.

Packer Depth 4460 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4465 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4492 ft. Recorder Number 11018 Cap. 4425

Bottom Recorder Depth (Outside) 4495 ft. Recorder Number 11019 Cap. 4500

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Gabbert-Jones Drilling Rig #6 Drill Collar Length 336 I. D. 2.25 in.

Mud Type starch - salt Viscosity 46 Weight Pipe Length - I. D. - in.

Weight 9.7 Water Loss 12.8 cc. Drill Pipe Length 4108 I. D. 3.8 in.

Chlorides 26,000 P.P.M. Test Tool Length 21 ft. Tool Size 3½ in.

Jars: Make -- Serial Number -- Anchor Length 30 ft. Size 4½ in.

Did Well Flow? -- Reversed Out -- Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½ in.

Blow: Weak steady throughout test.

Recovered 75 ft. of drilling mud No show.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: 30,000 chlorides ppm

Time Set Packer(s) 6:00 A.M. P.M. Time Started Off Bottom 10:45 A.M. P.M. Maximum Temperature 118°

Initial Hydrostatic Pressure			(A)	2493	P.S.I.	
Initial Flow Period	Minutes 60		(B)	111	P.S.I. to (C)	59 P.S.I.
Initial Closed In Period	Minutes 60		(D)	458	P.S.I.	
Final Flow Period	Minutes 75		(E)	120	P.S.I. to (F)	71 P.S.I.
Final Closed In Period	Minutes 90		(G)	1132	P.S.I.	
Final Hydrostatic Pressure			(H)	2253	P.S.I.	

WTC-

WESTERN TESTING CO., INC.
Pressure Data

Date 1/28/80 Test Ticket No. 5323

Recorder No. 11018 Capacity 4425 Location 4492 Ft.

Clock No. ------ Elevation 2044 Rotary Bushing Well Temperature 118 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2493	P.S.I.
B	First Initial Flow Pressure	111	P.S.I.
C	First Final Flow Pressure	59	P.S.I.
D	Initial Closed-in Pressure	458	P.S.I.
E	Second Initial Flow Pressure	120	P.S.I.
F	Second Final Flow Pressure	71	P.S.I.
G	Final Closed-in Pressure	1132	P.S.I.
H	Final Hydrostatic Mud	2253	P.S.I.

	Time Given		Time Computed	
Open Tool	6:00	M		
First Flow Pressure	60	Mins.	60	Mins.
Initial Closed-in Pressure	60	Mins.	60	Mins.
Second Flow Pressure	75	Mins.	75	Mins.
Final Closed-in Pressure	90	Mins.	90	Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

Initial Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Second Flow Pressure
Breakdown: 15 Inc. of 5 mins. and a final inc. of 0 Min.

Final Shut-In
Breakdown: 30 Inc. of 3 mins. and a final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	111	0	59	0	120	0	71
P 2 5	89	3	61	5	96	3	72
P 3 10	78	6	61	10	82	6	74
P 4 15	71	9	63	15	76	9	76
P 5 20	69	12	67	20	71	12	79
P 6 25	68	15	69	25	69	15	89
P 7 3	66	18	70	30	66	18	100
P 8 35	65	21	75	35	68	21	118
P 9 40	64	24	80	40	70	24	138
P10 45	64	27	84	45	71	27	169
P11 5	66	30	89	50	71	30	213
P12 55	61	33	96	55	71	33	273
P13 60	59	36	102	60	71	36	327
P14		39	122	65	71	39	382
P15		42	151	70	71	42	453
P16		45	202	75	71	45	520
P17		48	253			48	584
P18		51	322			51	646
P19		54	368			54	704
P20		57	413			57	757
		60	458			60	801

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WESTERN TESTING CO., INC.
Pressure Data

Date 1/28/80 Test Ticket No. 5323

Recorder No. 11018 Capacity 4425 Location 4492 Ft.

Clock No. ------ Elevation 2044 Rotary Bushing Well Temperature 118 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2493 P.S.I.	Open Tool	6:00 M	
B	First Initial Flow Pressure	111 P.S.I.	First Flow Pressure	60 Mins.	60 Mins.
C	First Final Flow Pressure	59 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	458 P.S.I.	Second Flow Pressure	75 Mins.	75 Mins.
E	Second Initial Flow Pressure	120 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	71 P.S.I.			
G	Final Closed-in Pressure	1132 P.S.I.			
H	Final Hydrostatic Mud	2253 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 15 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	847
P 2						66	892
P 3						69	936
P 4						72	978
P 5						75	1018
P 6						78	1041
P 7						81	1064
P 8						84	1087
P 9						87	1109
P10						90	1132
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

WTC - 4

11018-5323

Tkt # 5323
I