Company W. L. Kirkman, Inc. Lease & Well No. Ricke #1

Elevation 1305 Ground Level Formation Mississippi Effective Pay ----- Ft. Ticket No. 6311

Date 7/9/80 Sec. 8 Twp. 34S Range 9W County Barber State Kansas

Test Approved by Ken A. Deutsch Western Representative Roger Mounts

Formation Test No. 1 Interval Tested from 4524 ft. to 4560 ft. Total Depth 4560 ft.

Packer Depth 4519 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4524 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4531 ft. Recorder Number 1565 Cap. 4900

Bottom Recorder Depth (Outside) 4534 ft. Recorder Number 5673 Cap. 5400

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

Drilling Contractor H-30 Drlg. Inc. Rig #3 Drill Collar Length 240 I. D. 2.2 in.

Mud Type chemical Viscosity 38-46 Weight Pipe Length - I. D. - in.

Weight 9.2 - 9.0 Water Loss 17.8 cc. Drill Pipe Length 4264 I. D. 3.8 in.

Chlorides 11,000 P.P.M. Test Tool Length 20 ft. Tool Size 5½OD in.

Jars: Make No Serial Number - Anchor Length 36 ft. Size 5½OD in.

Did Well Flow? Yes Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: Strong blow Initial flow period three inches (no gas) Strong blow, gas to surface one minute on final flow period. See attached sheet for gas measurements.

Recovered 60 ft. of very slightly gas cut mud

Recovered 60 ft. of very slightly gas cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 6:05 A.M. P.M. Time Started Off Bottom 10:20 A.M. ~~P.M.~~ Maximum Temperature 118°

Initial Hydrostatic Pressure ..... (A) 2232 P.S.I.

Initial Flow Period ..... Minutes 45 (B) 51 P.S.I. to (C) 35 P.S.I.

Initial Closed In Period ..... Minutes 63 (D) 1623 P.S.I.

Final Flow Period ..... Minutes 60 (E) 86 P.S.I. to (F) 53 P.S.I.

Final Closed In Period ..... Minutes 96 (G) 1700 P.S.I.

Final Hydrostatic Pressure ..... (H) 2214 P.S.I.

GAS FLOW REPORT

Date 7/9/80 Ticket 6311 Company W. L. Kirkman, Inc.

Well Name and No. Ricke #1 Dst No. 1 Interval Tested 4524'-4560'

County Barber State Kansas Sec. 8 Twp. 34S Rg. 9W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
Strong blow forty five minutes			**PRE FLOW**			(No gas)
Gas to surface in one minute. 7:50			**SECOND FLOW**			
7:55						
10 min.	15" of water		1/8" orifice			2,050 CFPD
20 min.	36" of water		1/8" orifice			3,170 CFPD
30 min.	1 lbs.		1/8" orifice			2,760 CFPD
40 min.	1.5 lbs.		1/8" orifice			3,390 CFPD
50 min.	1.5 lbs.		1/8" orifice			3,390 CFPD
60 min.	1.5 lbs.		1/8" orifice			3,390 CFPD

GAS BOTTLE

Serial No. #211 Lot #7 Date Bottle Filled 7/9/80 Date to be Invoiced 7/9/80

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME W. L. Kirkman, Inc.

Authorized by Kent A. Deutsch

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 7-9-80 Test Ticket No. 6311

Recorder No. 1565 Capacity 4900 Location 4531 Ft.

Clock No. ------- Elevation 1305 Ground Level Well Temperature 118 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2232	P.S.I.	Open Tool	6:05 A M	
B	First Initial Flow Pressure	51	P.S.I.	First Flow Pressure	45 Mins.	45 Mins.
C	First Final Flow Pressure	35	P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins.
D	Initial Closed-in Pressure	1623	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	86	P.S.I.	Final Closed-in Pressure	90 Mins.	96 Mins.
F	Second Final Flow Pressure	53	P.S.I.			
G	Final Closed-in Pressure	1700	P.S.I.			
H	Final Hydrostatic Mud	2214	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	51
P 2	5	39
P 3	10	35
P 4	15	35
P 5	20	35
P 6	25	35
P 7	30	35
P 8	35	35
P 9	40	35
P10	45	35
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 21 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	35
3	126
6	237
9	342
12	495
15	611
18	722
21	824
24	910
27	1017
30	1093
33	1177
36	1239
39	1315
42	1366
45	1416
48	1461
51	1502
54	1541
57	1562
60	1603
63	1623

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

Point Minutes	Press.
0	86
5	59
10	54
15	49
20	44
25	42
30	41
35	42
40	47
45	48
50	52
55	53
60	53

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

Point Minutes	Press.
0	53
3	131
6	237
9	336
12	438
15	535
18	634
21	713
24	802
27	871
30	928
33	1008
36	1062
39	1128
42	1165
45	1224
48	1266
51	1313
54	1359
57	1399
60	1438

WESTERN TESTING CO., INC.
Pressure Data

Date 7-9-80 Test Ticket No. 6311

Recorder No. 1565 Capacity 4900 Location 4531 P

Clock No. ------- Elevation 1305 Ground Level Well Temperature 118 °

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2232 P.S.I.		Open Tool	6:05 A M	
B	First Initial Flow Pressure	51 P.S.I.		First Flow Pressure	45 Mins.	45 Min
C	First Final Flow Pressure	35 P.S.I.		Initial Closed-in Pressure	60 Mins.	63 Min
D	Initial Closed-in Pressure	1623 P.S.I.		Second Flow Pressure	60 Mins.	60 Min
E	Second Initial Flow Pressure	86 P.S.I.		Final Closed-in Pressure	90 Mins.	96 Min
F	Second Final Flow Pressure	53 P.S.I.				
G	Final Closed-in Pressure	1700 P.S.I.				
H	Final Hydrostatic Mud	2214 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

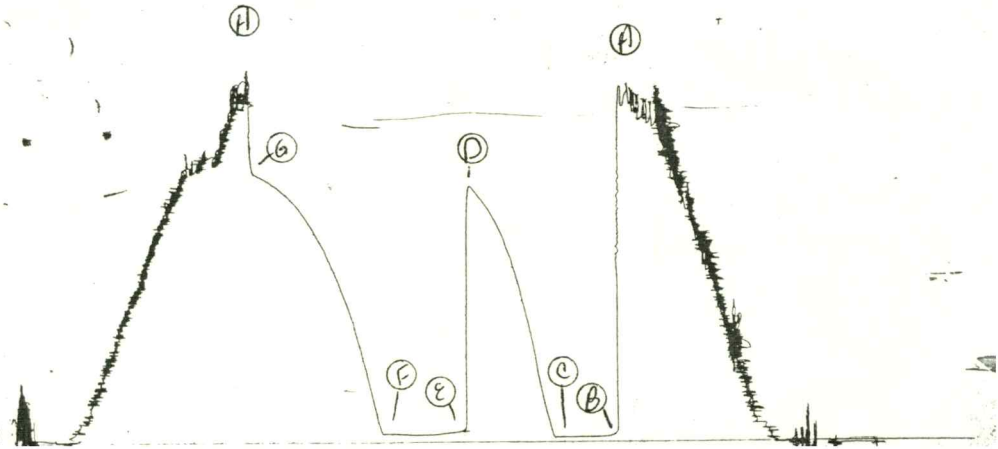
Final Shut-In
Breakdown: 32 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	1476
P 2						66	1510
P 3						69	1537
P 4						72	1564
P 5						75	1584
P 6						78	1606
P 7						81	1625
P 8						84	1641
P 9						87	1663
P10						90	1675
P11						93	1690
P12						96	1700
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

JK# 6311

1565

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Company W. L. Kirkman, Inc. Lease & Well No. Ricke #1

Elevation 1305 Ground Level Formation Mississippi Effective Pay ---- Ft. Ticket No. 6312

Date 7/10/80 Sec. 8 Twp. 34S Range 9W County Barber State Kansas

Test Approved by Ken A. Dentsch Western Representative Roger Mounts

Formation Test No. 2 Interval Tested from 4562 ft. to 4580 ft. Total Depth 4580 ft.

Packer Depth 4557 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4562 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4569 ft. Recorder Number 1565 Cap. 4900

Bottom Recorder Depth (Outside) 4572 ft. Recorder Number 5673 Cap. 5400

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

Drilling Contractor H-30 Drlg. Inc. Rig #3 Drill Collar Length 240 I. D. 2.2 in.

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

Weight 9.0 Water Loss 15.8 cc. Drill Pipe Length 4302 I. D. 3.8 in.

Chlorides 9,000 P.P.M. Test Tool Length 26 ft. Tool Size 5½OD in.

Jars: Make No Serial Number - Anchor Length 18 ft. Size 5½OD in.

Did Well Flow? No Reversed Out - -- Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: Weak blow initial flow period.

Recovered 70 ft. of gas and oil cut mud (5% gas;5% oil;80% mud & 10% water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 3:34 A.M. P.M. Time Started Off Bottom 6:34 A.M. ~~P.M.~~ Maximum Temperature ?

Initial Hydrostatic Pressure			(A) 2256	P.S.I.		
Initial Flow Period	Minutes 35	(B) 59	P.S.I. to	(C) 49	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 1477	P.S.I.			
Final Flow Period	Minutes 30	(E) 76	P.S.I. to	(F) 67	P.S.I.	
Final Closed In Period	Minutes 63	(G) 1305	P.S.I.			
Final Hydrostatic Pressure			(H) 2216	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 7-10-80 Test Ticket No. 6312

Recorder No. 1565 Capacity 4900 Location 4569 Ft.

Clock No. ------- Elevation 1305 Ground Level Well Temperature ---- °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2256 P.S.I.		Open Tool	3:34 A M	
B	First Initial Flow Pressure	59 P.S.I.		First Flow Pressure	30 Mins	35 Mins.
C	First Final Flow Pressure	49 P.S.I.		Initial Closed-in Pressure	60 Mins	60 Mins.
D	Initial Closed-in Pressure	1477 P.S.I.		Second Flow Pressure	30 Mins	30 Mins.
E	Second Initial Flow Pressure	76 P.S.I.		Final Closed-in Pressure	60 Mins	63 Mins.
F	Second Final Flow Pressure	67 P.S.I.				
G	Final Closed-in Pressure	1305 P.S.I.				
H	Final Hydrostatic Mud	2216 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 7 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	59
P 2	5	44
P 3	10	40
P 4	15	40
P 5	20	42
P 6	25	47
P 7	30	47
P 8	35	49
P 9		
P10		
P11		
P12		
P13		
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	49
3	59
6	74
9	94
12	126
15	185
18	260
21	374
24	492
27	668
30	829
33	975
36	1073
39	1172
42	1231
45	1298
48	1347
51	1399
54	1431
57	1467
60	1477

Second Flow Pressure
Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.

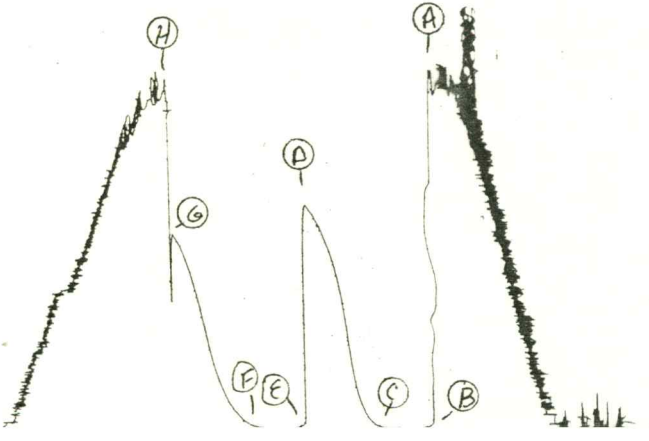
Point Minutes	Press.
0	76
5	62
10	56
15	57
20	58
25	59
30	67

Final Shut-In
Breakdown: 21 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	67
3	75
6	84
9	99
12	118
15	146
18	176
21	220
24	260
27	319
30	388
33	455
36	547
39	650
42	764
45	878
48	997
51	1096
54	1170
57	1231
60	1280
63	1305

DK # 6312

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Company W. L. Kirkman, Inc. Lease & Well No. Ricke #1

Elevation 1305 Ground Level Formation Mississippi Effective Pay ------ Ft. Ticket No. 6313

Date 7/11/80 Sec. 8 Twp. 34S Range 9W County Barber State Kansas

Test Approved by Kent A. Deutsch Western Representative Roger A. MOunts

Formation Test No. 3 Interval Tested from 4574 ft. to 4600 ft. Total Depth 4600 ft.

Packer Depth 4569 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4574 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4581 ft. Recorder Number 1565 Cap. 4900

Bottom Recorder Depth (Outside) 4584 ft. Recorder Number 5673 Cap. 5400

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

Drilling Contractor H-30 Drilling, Inc. Rig #3 Drill Collar Length 240 I. D. 2.2 in.

Mud Type chemical Viscosity 48 Weight Pipe Length - I. D. - in.

Weight 9.0 Water Loss 16.8 cc. Drill Pipe Length 4314 I. D. 3.8 in.

Chlorides 9,500 P.P.M. Test Tool Length 20 ft. Tool Size 5½OD in.

Jars: Make No Serial Number No Anchor Length 26 ft. Size 5½OD.

Did Well Flow? No Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: Weak initial flow period;weak, fair blow final flow period.

Recovered 120 ft. of oil and gas cut mud (5% oil;5% gas;80% mud;10% water

Recovered 60 ft. of oil and gas cut muddy water (5% oil;5% gas;50% water;40% mud)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 3:38 ~~A.M.~~ ~~P.M.~~ Time Started Off Bottom 6:08 ~~A.M.~~ ~~P.M.~~ Maximum Temperature 118°

Initial Hydrostatic Pressure ..... (A) 2347 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 99 P.S.I. to (C) 83 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 1485 P.S.I.

Final Flow Period ..... Minutes 30 (E) 153 P.S.I. to (F) 116 P.S.I.

Final Closed In Period ..... Minutes 48 (G) 1414 P.S.I.

Final Hydrostatic Pressure ..... (H) 2226 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 7/11/80 Test Ticket No. 6313

Recorder No. 1565 Capacity 4900 Location 4581 Ft.

Clock No. -- Elevation 1305 Ground Level Well Temperature 118 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2347	P.S.I.	Open Tool	3:38A M	
B	First Initial Flow Pressure	99	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	83	P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1485	P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	153	P.S.I.	Final Closed-in Pressure	45 Mins.	48 Mins.
F	Second Final Flow Pressure	116	P.S.I.			
G	Final Closed-in Pressure	1414	P.S.I.			
H	Final Hydrostatic Mud	2226	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Second Flow Pressure
Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.

Final Shut-In
Breakdown: 16 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	99		0	83		0	153		0	116
P 2	5	84		3	104		5	119		3	138
P 3	10	79		6	156		10	111		6	193
P 4	15	77		9	260		15	106		9	258
P 5	20	79		12	423		20	109		12	371
P 6	25	82		15	631		25	111		15	542
P 7	30	83		18	834		30	116		18	730
P 8				21	988					21	903
P 9				24	1094					24	1012
P10				27	1185					27	1111
P11				30	1254					30	1189
P12				33	1318					33	1254
P13				36	1377					36	1300
P14				39	1416					39	1340
P15				42	1458					42	1372
P16				45	1485					45	1399
P17										48	1414
P18											
P19											
P20											

WTC - 4

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