WESTERN TESTERS

P. O. BOX 793 PHONE 793-7903
GREAT BEND, KANSAS

WESTERN TESTING CO., INC.
FORMATION TESTING
TICKET 22595

Formation Layton Elevation 1435 KB Eff. Pay ——— Ft.

District Augusta Date 11-17-77 Customer Order No. ———

COMPANY NAME Jerry E. Shawver
ADDRESS Suite 950 - 200 W. Douglas - Wichita - Ks - 67202
LEASE AND WELL NO. Young & Cooper Cattle Co #1-A COUNTY Cowley STATE Ks. Sec. 19 Twp. 31S Rge. 8W
Mail Inv. To Same (Co. Name) (Address) No. Copies Requested 1
Mail Charts To Same (Address) No. Copies Requested 5

Formation Test No. 1 O.K. X Misrun — Interval Tested From 1980 to 2026 Total Depth 2026
Size Main Hole 7⅞ Rat Hole ——— Conv. — B.T. X Damaged — Yes — No Conv. X B.T. — Damaged — Yes X No
Top Packer Depth 1975 Ft. Size 6¾ Bottom Packer Depth 1980 Ft. Size 6¾
Straddle ——— Conv. — B.T. — Damaged — Yes — No Packer Depth ——— Ft. Size ———
Tool Size 5½ Tool Joint Size 4½ FH Anchor Length 46 Ft. Size 5½ Surface Choke Size ¾ In. Bottom Choke Size ¾ In.

RECORDERS Depth 1987 Ft. Clock No. 9103 Depth 1990 Ft. Clock No. 9727
Top Make Kuster Cap. 3150 No. 1562 Inside Outside Bottom Make Kuster Cap. 3200 No. 1561 Inside Outside
Below Straddle: Depth ——— Rec. No. ——— Clock No. ——— Inside Outside Depth ——— Ft. Rec. No. ——— Clock No. ——— Inside Outside

Time Set Packer 7:27 A M
Tool Open I.F.P. From 7:30 A M. to 8:00 A M. ——— Hr. 30 Min. From (B) 39 38 P.S.I. To (C) 54 47 P.S.I.
Tool Closed I.C.I.P. From 8:00 A M. to 9:00 A M. ——— Hr. 60 Min. (D) 512 502 P.S.I.
Tool Open F.F.P. From 9:00 A M. to 10:00 A M. ——— Hr. 60 Min. From (E) 2887 P.S.I. To (F) 94 89 P.S.I.
Tool Closed F.C.I.P. From 10:00 A M. to 12:00 A M. ——— Hr. 120 Min. (G) 520 515 P.S.I.
Initial Hydrostatic Pressure (A) 1010 P.S.I. 1002 Final Hydrostatic Pressure (H) 987 976 P.S.I. Maximum Temp. 100

INFORMATION

BLOW Fair decreasing to very weak

Did Well Flow — Yes X No Recovery Total Ft. 140' Dsly. mud (Chlorides 2200)

Reversed Out — Yes X No Mud Type Chem Viscosity 53 Weight 9.7 Water Loss 8.8 cc. Chlorides 1900
EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint ——— Jars: Size — In. Make ——— Ser. No. ———
Dual Packers Yes Did Packers Hold? Yes Did Tool Plug? No Where? ———
DRILLING CONTRACTOR White & Ellis #3 Length Drill Pipe 1806 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½ XH In.
Length Weight Pipe ——— ft. I.D. Weight Pipe ——— In. Tool Joint Size ——— In. Length Drill Collars 155 ft. I.D. Drill Collars 2¼ In.
Tool Joint Size 4-2490 In. Length D.S.T. Tool 65 ft.

Remarks

INVOICE SECTION

Open Hole Test	$ 415.00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Misrun	$
Evaluation	$
Packer	$
Circ. Sub.	$
	$
Total	$ 415.00

COMPANY TERMS

Western Testing Co., Inc., shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 10% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Charles D. Slagle (Signature of Customer or his Authorized Representative) Western Representative Jim Wilson

Operator's Time ——— Hrs.

WESTERN TESTING CO., INC.

Pressure Data

Date 11-17-77 Test Ticket No. 22595

Recorder No. 1562 Capacity 3150 Location 1987 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 100 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1002 P.S.I.	Open Tool	7:27A M	
B First Initial Flow Pressure	38 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	47 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	502 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	82 P.S.I.	Final Closed-in Pressure	120 Mins.	120 Mins.
F Second Final Flow Pressure	89 P.S.I.			
G Final Closed-in Pressure	515 P.S.I.			
H Final Hydrostatic Mud	976 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	38
P 2 5	29
P 3 10	31
P 4 15	35
P 5 20	38
P 6 25	41
P 7 30	47
P 8 ~~35~~	
P 9 40	
P10 45	
P11 50	
P12 ~~55~~	
P13 60	
14	
15	
16	
17	
18	
19	
20	

Initial Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	47
3	74
6	133
9	212
12	280
15	331
18	366
21	395
24	414
27	430
30	444
33	456
36	465
39	472
42	480
45	486
48	492
51	497
54	501
57	502
~~60~~	

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

Point Minutes	Press.
0	82
5	71
10	71
15	72
20	73
25	75
30	79
35	~~515~~ 80
40	82
45	84
50	85
55	88
60	89
~~65~~	
~~70~~	
~~75~~	
~~80~~	
~~85~~	
~~90~~	

Final Shut-In
Breakdown: 40 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	89
3	111
6	156
9	209
12	261
15	307
18	339
21	363
24	381
27	397
30	410
33	422
36	431
39	439
42	447
45	453
48	459
51	464
54	468
57	473
60	477

Cont'd on next page

WESTERN TESTING CO., INC.

Pressure Data

Date _____ Test Ticket No. _____

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ mins. and a	
final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	481
P 2						66	484
P 3						69	488
P 4						72	491
P 5						75	494
P 6						78	496
P 7						81	497
P 8						84	499
P 9						87	502
P10						90	504
P11						93	506
P12						96	507
P13						99	508
P14						102	509
P15						105	510
P16						108	511
P17						111	512
P18						114	513
P19						117	514
P20						120	515

WTC - 4

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Jerry E. Shawver Lease & Well No. Young & Cooper Cattle Co #1-A

Elevation 1435 Kelly Bush. Formation Layton Effective Pay - Ft. Ticket No. 22595

Date 11-17-77 Sec. 19 Twp. 31S Range 8W County Cowley State Kansas

Test Approved by Charle I. Slagle Western Representative Tim Wilson

Formation Test No. 1 O.K. X Misrun - Interval Tested From 1980' to 2026' Total Depth 2026'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 1975 Ft. Size 6 3/4 Bottom Packer Depth 1980 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 46 Ft. Size 5½OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 1987 Ft. Clock No. 9103 Depth 1990 Ft. Clock No. 9727

Top Make Kuster Cap. 3150 No. 1562 ~~Inside~~ Outside Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 7:27A M

Tool Open I.F.P. From 7:30 M. to 8:00 M. - Hr. 30 Min. From (B) 38 P.S.I. To (C) 47 P.S.I.

Tool Closed I.C.I.P. From 8:00 M. to 9:00 M. - Hr. 60 Min (D) 502 P.S.I.

Tool Open F.F.P. From 9:00 M. to 10:00 M. - Hr. 60 Min. From (E) 82 P.S.I. To (F) 89 P.S.I.

Tool Closed F.C.I.P. From 10:00 M. to 12:00 M. - Hr. 120 Min. (G) 515 P.S.I.

Initial Hydrostatic Pressure (A) 1002 P.S.I. Final Hydrostatic Pressure (H) 976 P.S.I. Maximum Temp. 100

INFORMATION

BLOW Fair decreasing to very weak.

Did Well Flow - Yes X No Recovery Total Ft. 140' drilling mud. (Chlorides 2200 ppm)

Reversed Out - Yes X No Mud Type Chem Viscosity 53 Weight 9.7 Water Loss 8.8 cc. Chlorides 1900 ppm

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR White & Ellis #3 Length Drill Pipe? 1806 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½XH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 155 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4-H90 In. Length D.S.T. Tool 65 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 11-17-77 Test Ticket No. 22595

Recorder No. 1562 Capacity 3150 Location 1987 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 100 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1002	P.S.I.
B	First Initial Flow Pressure	38	P.S.I.
C	First Final Flow Pressure	47	P.S.I.
D	Initial Closed-in Pressure	502	P.S.I.
E	Second Initial Flow Pressure	82	P.S.I.
F	Second Final Flow Pressure	89	P.S.I.
G	Final Closed-in Pressure	515	P.S.I.
H	Final Hydrostatic Mud	976	P.S.I.

	Time Given	Time Computed
Open Tool	7:27A M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	60 Mins.	60 Mins.
Second Flow Pressure	60 Mins.	60 Mins.
Final Closed-in Pressure	120 Mins.	120 Mins.

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	38
P 2	5	29
P 3	10	31
P 4	15	35
P 5	20	38
P 6	25	41
P 7	30	47
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	47
	3	74
	6	133
	9	212
	12	280
	15	331
	18	366
	21	395
	24	414
	27	430
	30	444
	33	456
	36	465
	39	472
	42	480
	45	486
	48	492
	51	497
	54	501
	57	502

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

Point	Minutes	Press.
	0	82
	5	71
	10	71
	15	72
	20	73
	25	75
	30	79
	35	80
	40	82
	45	84
	50	85
	55	88
	60	89

Final Shut-In
Breakdown: 40 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	89
	3	111
	6	156
	9	209
	12	261
	15	307
	18	339
	21	363
	24	381
	27	397
	30	410
	33	422
	36	431
	39	439
	42	447
	45	453
	48	459
	51	464
	54	468
	57	473

Cont. on next page

WESTERN TESTING CO., INC.
Pressure Data

Date 11-17-77 Test Ticket No. 22595

Recorder No. 1562 Capacity 3150 Location 1987 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 100 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1002 P.S.I.	Open Tool	7:27A M	
B First Initial Flow Pressure	38 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	47 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	502 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	82 P.S.I.	Final Closed-in Pressure	120 Mins.	120 Mins.
F Second Final Flow Pressure	89 P.S.I.			
G Final Closed-in Pressure	515 P.S.I.			
H Final Hydrostatic Mud	976 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 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: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

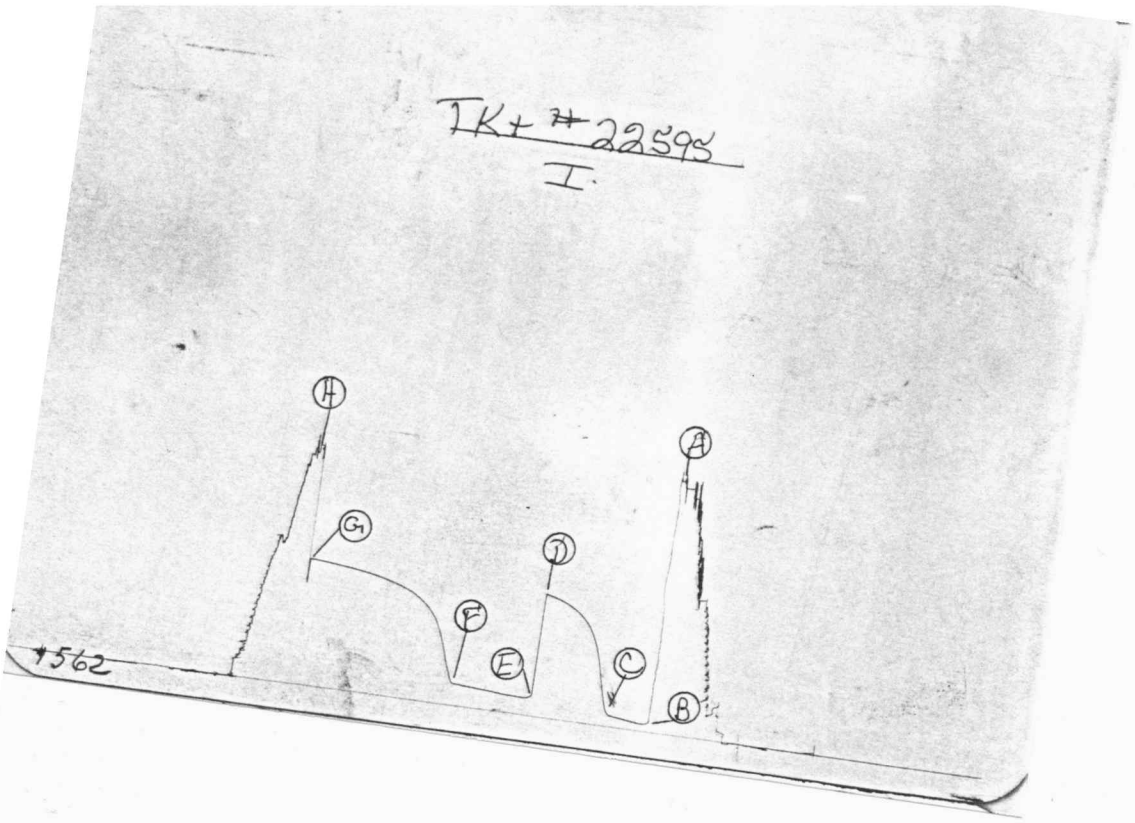
Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

Final Shut-In
Breakdown: 40 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
60	477
63	481
66	484
69	488
72	491
75	494
78	496
81	497
84	499
87	502
90	504
93	506
96	507
99	508
102	509
105	510
108	511
111	512
114	513
117	514
120	515

TK # 22595
I.



WESTERN TESTERS

P. O. BOX 793 PHONE 793-7903
GREAT BEND, KANSAS

WESTERN TESTING CO., INC.
FORMATION TESTING
TICKET 22596

Formation Layton Elevation 1435 KB Eff. Pay ——— Ft.

District Augusta Date 11-17-77 Customer Order No. ———

OMPANY NAME Jerry C. Shawver
DDRESS Suite 950 - 200 W. Douglas - Wichita - Kansas - 67202
ASE AND WELL NO. Young & Cooper Cattle Co. 1-A COUNTY Cowley STATE Ks. Sec. 19 Twp. 31S Rge. 8W
ail Inv. To Same No. Copies Requested 1
Co. Name Address
ail Charts To Same No. Copies Requested 5
Address

rmation Test No. 2 O.K. X Misrun — Interval Tested From 2026 to 2050 Total Depth 2050
e Main Hole 7 7/8 Rat Hole — Conv. — B.T. X Damaged — Yes X No Conv. X B.T. — Damaged — Yes X No
p Packer Depth 2021 Ft. Size 6 3/4 Bottom Packer Depth 2026 Ft. Size 6 3/4
addle — Conv. — B.T. — Damaged — Yes — No Packer Depth — Ft. Size —
ol Size 5 1/2 Tool Joint Size 4 1/2 FH Anchor Length 24 Ft. Size 5 1/2 Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

CORDERS Depth 2044 Ft. Clock No. 9103 Depth 2047 Ft. Clock No. 9727
Top Make Kuster Cap. 3150 No. 1562 Inside / ~~Outside~~ Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ / Outside
low Straddle: Depth — Rec. No. — Clock No. — ~~Inside~~ / ~~Outside~~ Depth — Ft. Rec. No. — Clock No. — ~~Inside~~ / ~~Outside~~

ne Set Packer 8:02 PM
ol Open I.F.P. From 8:05 PM. to 8:35 PM. Hr. 30 Min. From (B) 70 61 P.S.I. To (C) 122 166 P.S.I.
ol Closed I.C.I.P. From 8:35 PM. to 9:35 PM. Hr. 60 Min. (D) 574 564 P.S.I.
ol Open F.F.P. From 9:35 PM. to 10:35 PM. Hr. 60 Min. From (E) 204 308 P.S.I. To (F) 283 276 P.S.I.
ol Closed F.C.I.P. From 10:35 PM. to 12:35 PM. Hr. 120 Min. (G) 574 564 P.S.I.
tial Hydrostatic Pressure (A) 1042 1030 P.S.I. Final Hydrostatic Pressure (H) 1026 1015 P.S.I. Maximum Temp. 98

INFORMATION

OW Strong throughout

d Well Flow — Yes X No Recovery Total Ft. 480' 300' muddy wtr. (w) show of oil
180' slightly muddy wtr. (Chlorides 75,000)

versed Out — Yes X No Mud Type Chem Viscosity 46 Weight 9.6 Water Loss 8.8 cc. Chlorides 1900
XTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint ——— Jars: Size — In. Make — Ser. No. —
ual Packers Yes Did Packers Hold? Yes Did Tool Plug? No Where? ———
RILLING CONTRACTOR White & Ellis #3 Length Drill Pipe 1737 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.
ngth Weight Pipe — ft. I.D. Weight Pipe — In. Tool Joint Size — In. Length Drill Collars 270 ft. I.D. Drill Collars 2 1/4 In.
ol Joint Size 4-3/4 XH In. Length D.S.T. Tool 4.3 ft.

marks

INVOICE SECTION

Open Hole Test	$415.00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Misrun	$
Evaluation	$
Packer	$
Circ. Sub.	$
	$
Total	$415.00

OMPANY TERMS

estern Testing Co., Inc., shall not be liable for damage of any kind to the property or personnel the one for whom a test is made or for any loss suffered or sustained directly or indirectly ough the use of its equipment, or its statements or opinion concerning the results of any test. ols lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

charges subject to 10% interest after 60 days from date of invoice. Any expense incurred for llection will be added to the original amount.

st Approved By Charles D. Slayle Western Representative Tim Wilson
Signature of Customer or his Authorized Representative

Operator's Time ——— Hrs.

WESTERN TESTING CO., INC.

Pressure Data

Date 11-17-77 Test Ticket No. 22596

Recorder No. 1562 Capacity 3150 Location 2044 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 98 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1036	P.S.I.	Open Tool	8:02P M	
B	First Initial Flow Pressure	61	P.S.I.	First Flow Pressure	30 Mins.	~~30~~ 30 Mins.
C	First Final Flow Pressure	166	P.S.I.	Initial Closed-in Pressure	60 Mins.	~~60~~ 60 Mins.
D	Initial Closed-in Pressure	564	P.S.I.	Second Flow Pressure	60 Mins.	55 Mins.
E	Second Initial Flow Pressure	208	P.S.I.	Final Closed-in Pressure	120 Mins.	111 Mins.
F	Second Final Flow Pressure	276	P.S.I.			
G	Final Closed-in Pressure	564	P.S.I.			
H	Final Hydrostatic Mud	1015	P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	61
P 2 5	68
P 3 10	99
P 4 15	129
P 5 20	146
P 6 25	159
P 7 30	166
P 8 35	
P 9 40	
P10 45	
P11 50	
P12 55	
P13 60	
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	166
3	369
6	423
9	476
12	497
15	510
18	520
21	528
24	534
27	539
30	543
33	547
36	550
39	553
42	554
45	556
48	559
51	560
54	561
57	563
60	564

Second Flow Pressure
Breakdown: 11 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	208
5	198
10	202
15	209
20	219
25	227
30	236
35	245
40	253
45	260
50	268
55	276
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 37 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	276
3	414
6	461
9	481
12	494
15	505
18	512
21	519
24	524
27	528
30	531
33	534
36	538
39	540
42	543
45	545
48	547
51	548
54	550
57	551
60	552

WESTERN TESTING CO., INC.

Pressure Data

Date _____ Test Ticket No. _____

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: ____ Inc. of ____ mins. and a final inc. of ____ Min.		Breakdown: ____ Inc. of ____ mins. and a final inc. of ____ Min.		Breakdown: ____ Inc. of ____ mins. and a final inc. of ____ Min.		Breakdown: ____ Inc. of ____ mins. and a final inc. of ____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	553
P 2						66	554
P 3						69	555 ~~556~~
P 4						72	556
P 5						75	557
P 6						78	558
P 7						81	559
P 8						84	~~560~~ 559
P 9						87	560
P10						90	561
P11						93	562
P12						96	563
P13						99	563
P14						102	564
P15						105	564
P16						108	564
P17						111	564
P18						~~114~~	
P19						~~117~~	
P20						~~120~~	

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Jerry E. Shawver Lease & Well No. Young & Cooper Cattle Co. #1-A

Elevation 1435 Kelly Bush. Formation Layton Effective Pay - Ft. Ticket No. 22596

Date 11-17-77 Sec. 19 Twp. 31S Range 8W County Cowley State Kansas

Test Approved by Charles I. Slagle Western Representative Tim Wilson

Formation Test No. 2 O.K. X Misrun - Interval Tested From 2026' to 2050' Total Depth 2050'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 2021 Ft. Size 6 3/4 Bottom Packer Depth 2026 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 24 Ft. Size 5½OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2044 Ft. Clock No. 9103 Depth 2047 Ft. Clock No. 9727

Top Make Kuster Cap. 3150 No. 1562 ~~Inside~~ ~~Outside~~ Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 8:02P M

Tool Open I.F.P. From 8:05P M. to 8:35P M. - Hr. 30 Min. From (B) 61 P.S.I. To (C) 166 P.S.I.

Tool Closed I.C.I.P. From 8:35 M. to 9:35 M. - Hr. 60 Min (D) 564 P.S.I.

Tool Open F.F.P. From 9:35 M. to 10:35 M. - Hr. 60 Min. From (E) 208 P.S.I. To (F) 276 P.S.I.

Tool Closed F.C.I.P. From 10:35 M. to 12:35 M. - Hr. 120 Min. (G) 564 P.S.I.

Initial Hydrostatic Pressure (A) 1036 P.S.I. Final Hydrostatic Pressure (H) 1015 P.S.I. Maximum Temp. 98

INFORMATION

BLOW Strong blow throughout test.

Did Well Flow - Yes X No Recovery Total Ft. 480' total recovery, 300' muddy water with show of oil. 180' slightly muddy water. Chlorides 75,000 ppm

Reversed Out - Yes X No Mud Type Chem Viscosity 46 Weight 9.6 Water Loss 8.8 cc. Chlorides 1900 ppm

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR White & Ellis #3 Length Drill Pipe? 1737 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½XH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 270 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4H-90 In. Length D.S.T. Tool 43 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 11-17-77 Test Ticket No. 22596

Recorder No. 1562 Capacity 3150 Location 2044 Ft.

Clock No. 9103 Elevation 1430 Kelly Bushing Well Temperature 98 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1036 P.S.I.	Open Tool	8:02P M	
B First Initial Flow Pressure	61 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	166 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	564 P.S.I.	Second Flow Pressure	60 Mins.	55 Mins.
E Second Initial Flow Pressure	208 P.S.I.	Final Closed-in Pressure	120 Mins.	111 Mins.
F Second Final Flow Pressure	276 P.S.I.			
G Final Closed-in Pressure	564 P.S.I.			
H Final Hydrostatic Mud	1015 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 6 Inc.		Breakdown: 20 Inc.		Breakdown: 11 Inc.		Breakdown: 37 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	61	0	166	0	208	0	276
P 2 5	68	3	369	5	198	3	414
P 3 10	99	6	443	10	202	6	461
P 4 15	129	9	476	15	209	9	481
P 5 20	146	12	497	20	219	12	494
P 6 25	159	15	510	25	227	15	505
P 7 30	166	18	520	30	236	18	512
P 8		21	528	35	245	21	519
P 9		24	534	40	253	24	524
P10		27	539	45	260	27	528
P11		30	543	50	268	30	531
P12		33	547	55	276	33	534
P13		36	550			36	538
P14		39	553			39	540
P15		42	554			42	543
P16		45	556			45	545
P17		48	559			48	547
P18		51	560			51	548
P19		54	561			54	550
P20		57	563			57	551
		60	564				

Cont. on next page

WESTERN TESTING CO., INC.
Pressure Data

Date 11-17-77 Test Ticket No. 22596

Recorder No. 1562 Capacity 3150 Location 2044 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 98 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1036 P.S.I.	Open Tool	8:02P M	
B First Initial Flow Pressure	61 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	166 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	564 P.S.I.	Second Flow Pressure	60 Mins.	55 Mins.
E Second Initial Flow Pressure	208 P.S.I.	Final Closed-in Pressure	120 Mins.	111 Mins.
F Second Final Flow Pressure	276 P.S.I.			
G Final Closed-in Pressure	564 P.S.I.			
H Final Hydrostatic Mud	1015 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 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: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

Second Flow Pressure
Breakdown: 11 Inc.
of 5 mins. and a
final inc. of 0 Min.

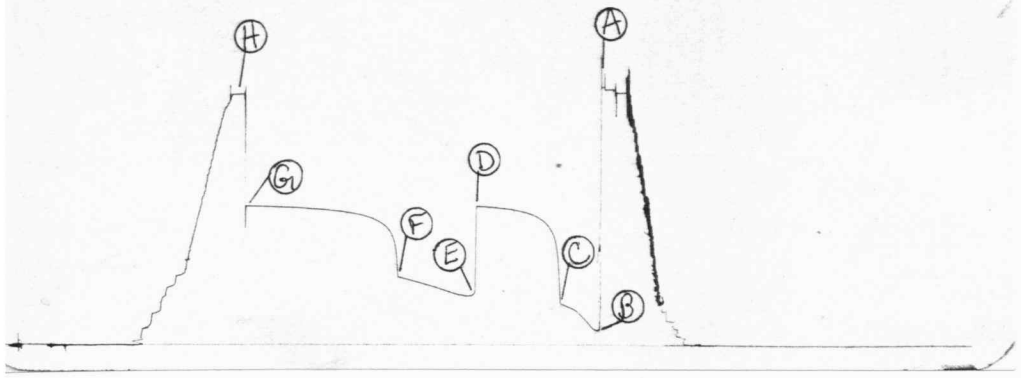
Point Minutes	Press.

Final Shut-In
Breakdown: 37 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
60	552
63	553
66	554
69	555
72	556
75	557
78	558
81	559
84	559
87	560
90	561
93	562
96	563
99	563
102	564
105	564
108	564
111	564

TKT# 22596

I.



WESTERN TESTERS

P. O. BOX 793 PHONE 793-7903

GREAT BEND, KANSAS

WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET 22597

Formation _____ Elevation 1435 KB Eff. Pay _____ Ft.

District Augusta Date 11-18-77 Customer Order No. _____

COMPANY NAME Jerry E. Shawver

ADDRESS Suite 950 - 200 W. Douglas - Wichita Ks. 67202

LEASE AND WELL NO. Young & Cooper Cattle Co. 1-A COUNTY Cowley STATE Ks. Sec. 19 Twp. 31S Rge. 8E

Mail Inv. To Same (Co. Name / Address) No. Copies Requested 1

Mail Charts To Same (Address) No. Copies Requested 5

Formation Test No. 3 O.K. X Misrun — Interval Tested From 2208 to 2230 Total Depth 2230

Size Main Hole 7 7/8 Rat Hole — Conv. — B.T. X Damaged — Yes X No Conv. X B.T. — Damaged — Yes X No

Top Packer Depth 2203 Ft. Size 6 3/4 Bottom Packer Depth 2208 Ft. Size 6 3/4

Straddle — Conv. — B.T. — Damaged — Yes — No Packer Depth — Ft. Size —

Tool Size 5 1/2 Tool Joint Size 4 1/2 FH Anchor Length 22 Ft. Size 5 1/2 Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2224 Ft. Clock No. 9103 Depth 2227 Ft. Clock No. 9727

Top Make Kuster Cap. 3150 No. 1562 (Inside) Outside Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ (Outside)

Below Straddle: Depth — Rec. No. — Clock No. — ~~Inside~~ Outside Depth — Ft. Rec. No. — Clock No. — ~~Inside~~ Outside

Time Set Packer 8:12 P M

Tool Open I.F.P. From 8:15 P M. to 8:45 P M. — Hr. 30 Min. From (B) 31 35 P.S.I. To (C) 31 23 P.S.I.

Tool Closed I.C.I.P. From 8:45 P M. to 9:45 P M. — Hr. 60 Min. (D) 54 42 P.S.I.

Tool Open F.F.P. From 9:45 P M. to 10:45 P M. — Hr. 60 Min. From (E) 31 33 P.S.I. To (F) 31 25 P.S.I.

Tool Closed F.C.I.P. From 10:45 P M. to 12:45 A M. — Hr. 120 Min. (G) 102 91 P.S.I.

Initial Hydrostatic Pressure (A) 1120 1125 P.S.I. Final Hydrostatic Pressure (H) 1120 1109 P.S.I. Maximum Temp. 102

INFORMATION

BLOW Very Weak on I.F.P. Dead on F.F.P.

Did Well Flow — Yes X No Recovery Total Ft. 2 ft. slightly oil specked drlg. mud

Reversed Out — Yes — No Mud Type Chem Viscosity 42 Weight 9.6 Water Loss 9.2 cc. Chlorides 2200

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint — Jars: Size — In. Make — Ser. No. —

Dual Packers Yes Did Packers Hold? Yes Did Tool Plug? No Where? —

DRILLING CONTRACTOR White & Ellis #3 Length Drill Pipe 1919 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.

Length Weight Pipe — ft. I.D. Weight Pipe — In. Tool Joint Size — In. Length Drill Collars 270 ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4-2 H 90 In. Length D.S.T. Tool 41 ft.

Remarks

INVOICE SECTION

Open Hole Test	$ 415.00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Misrun	$
Evaluation	$
Packer	$
Circ. Sub.	$
	$
Total	$ 415.00

COMPANY TERMS

Western Testing Co., Inc., shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 10% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Charles D. Slagle (Signature of Customer or his Authorized Representative) Western Representative Tim Wilson

Operator's Time _____ Hrs.

WESTERN TESTING CO., INC.
Pressure Data

Date 11-18-77 Test Ticket No. 22597

Recorder No. 1562 Capacity 3150 Location 2224 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 102 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1125 P.S.I.	Open Tool	8:12P M	
B	First Initial Flow Pressure	33 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	23 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D	Initial Closed-in Pressure	42 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	33 P.S.I.	Final Closed-in Pressure	120 Mins.	117 Mins.
F	Second Final Flow Pressure	25 P.S.I.			
G	Final Closed-in Pressure	91 P.S.I.			
H	Final Hydrostatic Mud	~~1125~~ 1109 P.S.I.			

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	35
P 2	5	25
P 3	10	23
P 4	15	23
P 5	20	23
P 6	25	23
P 7	30	23
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	22
3	24
6	25
9	25
12	26
15	27
18	27
21	28
24	~~30~~ 29
27	30
30	31
33	32
36	33
39	34
42	36
45	37
48	38
51	40
54	42
57	42
~~60~~	

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

Point Minutes	Press.
0	33
5	27
10	26
15	25
20	
25	
30	
35	
40	
45	
50	
55	
60	25
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 39 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	25
3	26
6	27
9	28
12	29
15	31
18	32
21	33
24	34
27	37
30	39
33	40
36	41
39	43
42	45
45	47
48	49
51	50
54	52
57	53
60	55

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. _____

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ mins. and a	
final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	57
P 2						66	60
P 3						69	61
P 4						72	63
P 5						75	65
P 6						78	66
P 7						81	68
P 8						84	71
P 9						87	72
P10						90	73
P11						93	75
P12						96	77
P13						99	79
P14						102	82
P15						105	83
P16						108	85
P17						111	87
P18						114	88
P19						117	91
P20							

Company Jerry E. Shawver Lease & Well No. Young & Cooper Cattle Co. #1-A

Elevation 1435 Kelly Bush. Formation - Effective Pay - Ft. Ticket No. 22597

Date 11-18-77 Sec. 19 Twp. 31S Range 8E County Cowley State Kansas

Test Approved by Charles I. Slagle Western Representative Tim Wilson

Formation Test No. 3 O.K. X Misrun - Interval Tested From 2208' to 2230' Total Depth 2230'

Size Main Hole 7 7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 2203 Ft. Size 6 3/4 Bottom Packer Depth 2208 Ft. Size 6 3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 22 Ft. Size 5½OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2224 Ft. Clock No. 9103 Depth 2227 Ft. Clock No. 9727

Top Make Kuster Cap. 3150 No. 1562 ~~Outside~~ Inside Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - ~~Outside~~ Inside Depth - Ft. Rec. No. - Clock No. - Outside Inside

Time Set Packer 8:12P M

Tool Open I.F.P. From 8:15 M. to 8:45 M. - Hr. 30 Min. From (B) 35 P.S.I. To (C) 23 P.S.I.

Tool Closed I.C.I.P. From 8:45 M. to 9:45 M. - Hr. 60 Min (D) 42 P.S.I.

Tool Open F.F.P. From 9:45 M. to 10:45 M. - Hr. 60 Min. From (E) 33 P.S.I. To (F) 25 P.S.I.

Tool Closed F.C.I.P. From 10:45 M. to 12:45 M. - Hr. 120 Min. (G) 91 P.S.I.

Initial Hydrostatic Pressure (A) 1125 P.S.I. Final Hydrostatic Pressure (H) 1109 P.S.I. Maximum Temp. 102

INFORMATION

BLOW Very weak on initial flow period. Dead on final flow period.

Did Well Flow - Yes X No Recovery Total Ft. 2' slightly oil specked drilling mud.

Reversed Out - Yes X No Mud Type Chem Viscosity 42 Weight 9.6 Water Loss 9.2 cc. Chlorides 2200 ppm

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR White & Ellis #3 Length Drill Pipe? 1919 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½XH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 270 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4-H90 In. Length D.S.T. Tool 41 Ft.

Remarks:

WESTERN TESTING CO., INC.

Pressure Data

Date 11-18-77 Test Ticket No. 22597

Recorder No. 1562 Capacity 3150 Location 2224 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 102 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1125 P.S.I.		Open Tool	8:12P M	
B	First Initial Flow Pressure	35 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	23 P.S.I.		Initial Closed-in Pressure	60 Mins.	57 Mins.
D	Initial Closed-in Pressure	42 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	33 P.S.I.		Final Closed-in Pressure	120 Mins.	117 Mins.
F	Second Final Flow Pressure	25 P.S.I.				
G	Final Closed-in Pressure	91 P.S.I.				
H	Final Hydrostatic Mud	1109 P.S.I.				

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	35
P 2 5	25
P 3 10	23
P 4 15	23
P 5 20	23
P 6 25	23
P 7 30	23
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	23
3	24
6	25
9	25
12	26
15	27
18	27
21	28
24	29
27	30
30	31
33	32
36	33
39	34
42	36
45	37
48	38
51	40
54	42
57	42

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

Point Minutes	Press.
0	33
5	27
10	26
15	25
20	25
25	25
30	25
35	25
40	25
45	25
50	25
55	25
60	25

Final Shut-In
Breakdown: 39 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	25
3	26
6	27
9	28
12	29
15	31
18	32
21	33
24	34
27	37
30	39
33	40
36	41
39	43
42	45
45	47
48	49
51	50
54	52
57	53

Cont. on next page

WESTERN TESTING CO., INC.
Pressure Data

Date 11-18-77 Test Ticket No. 22597

Recorder No. 1562 Capacity 3150 Location 2224 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 102 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1125	P.S.I.	Open Tool	8:12P M	
B	First Initial Flow Pressure	35	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	23	P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D	Initial Closed-in Pressure	42	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	33	P.S.I.	Final Closed-in Pressure	120 Mins.	117 Mins.
F	Second Final Flow Pressure	25	P.S.I.			
G	Final Closed-in Pressure	91	P.S.I.			
H	Final Hydrostatic Mud	1109	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 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: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

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

Point Minutes	Press.

Final Shut-In
Breakdown: 39 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
60	55
63	57
66	60
69	61
72	63
75	65
78	66
81	68
84	71
87	72
90	73
93	75
96	77
99	79
102	81
105	83
108	85
111	87
114	88
117	91

TK# 22597

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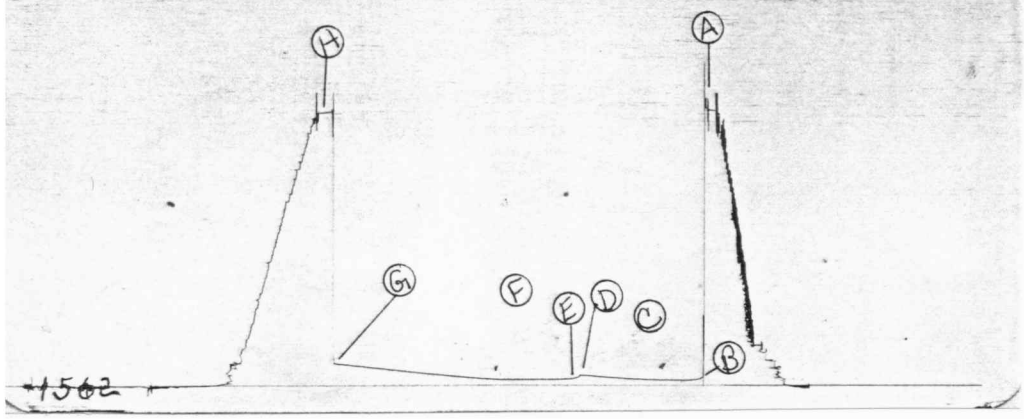


P. O. BOX 793 PHONE 793-7903
GREAT BEND, KANSAS

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET 22598

Formation Cleveland Elevation 1435 KB Eff. Pay ____ Ft.
(added in handwriting above the Elevation line: "elly bushing")

District Augusta Date 11-19-77 Customer Order No. ____

OMPANY NAME Jerry E. Shawver
DDRESS Suite 956 - 200 W. Douglas - Wichita - Ks. - 67202
EASE AND WELL NO. Young & Cooper Cattle Co. 1-A COUNTY Cowley STATE Ks. Sec. 19 Twp. 31S Rge. 8E
ail Inv. To Same — Co. Name — Address — No. Copies Requested 1
ail Charts To Same — Address — No. Copies Requested 5

rmation Test No. 4 O.K. X Misrun — Interval Tested From 2300' to 2330' Total Depth 2330'
ze Main Hole 7 7/8 Rat Hole 6 1/8 Conv. — B.T. X Damaged — Yes X No Conv. X B.T. — Damaged — Yes X No
p Packer Depth 2295 Ft. Size 6 3/4 Bottom Packer Depth 2300 Ft. Size 6 3/4
raddle — Conv. — B.T. — Damaged — Yes — No Packer Depth ____ Ft. Size ____
ol Size 5 1/2 Tool Joint Size 4 1/2 FH Anchor Length 30 Ft. Size 4 1/2 Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

CORDERS Depth 2323 Ft. Clock No. 9103 Depth 2326 Ft. Clock No. 9727
Top Make Kuster Cap. 3150 No. 1562 Inside (circled) ~~Outside~~ Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside (circled)
low Straddle: Depth — Rec. No. — Clock No. — Inside ~~Outside~~ Depth — Ft. Rec. No. — Clock No. — Inside ~~Outside~~

me Set Packer 9:17 PM
ol Open I.F.P. From 9:20 PM. to 9:50 PM. — Hr. 30 Min. From (B) 188 P.S.I. To (C) 196 P.S.I.
ol Closed I.C.I.P. From 9:50 PM. to 10:50 PM. — Hr. 60 Min. (D) 940 P.S.I.
ol Open F.F.P. From 10:50 PM. to 11:50 PM. — Hr. 60 Min. From (E) 228 P.S.I. To (F) 236 P.S.I.
ol Closed F.C.I.P. From 11:50 PM. to 1:50 PM. — Hr. 120 Min. (G) 862 P.S.I.
itial Hydrostatic Pressure (A) 1199 P.S.I. Final Hydrostatic Pressure (H) 1144 P.S.I. Maximum Temp. 106

INFORMATION

LOW Strong decreasing to weak.

d Well Flow — Yes X No Recovery Total Ft. 480' total recovery 300' slightly gas cut mud
180' watery drlg. mud (40,000 chlorides)
100' gas in pipe

eversed Out — Yes X No Mud Type Chem Viscosity 44 Weight 9.7 Water Loss 9.6 cc. Chlorides 2200 PPM
XTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint ____ Jars: Size — In. Make — Ser. No. —
ual Packers Yes Did Packers Hold? Yes Did Tool Plug? No Where? ____
RILLING CONTRACTOR White & Ellis #3 Length Drill Pipe 2011 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH In.
ngth Weight Pipe — ft. I.D. Weight Pipe — In. Tool Joint Size — In. Length Drill Collars 270 ft. I.D. Drill Collars 2 1/4 In.
ol Joint Size 4-H90 In. Length D.S.T. Tool 49 ft.

emarks

INVOICE SECTION

Open Hole Test	$ 415.00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Misrun	$
Evaluation	$
Packer	$
Circ. Sub.	$
	$
Total	$ 415.00

st Approved By Charles I. Slagle Western Representative Tim Wilson
Signature of Customer or his Authorized Representative Charles I. Slagle Operator's Time ____ Hrs.

WESTERN TESTING CO., INC.
Pressure Data

Date 11-19-77 Test Ticket No. 22598

Recorder No. 1562 Capacity 3150 Location 2323 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 106 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1197 P.S.I.	Open Tool	9:17P M	
B First Initial Flow Pressure	182 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	191 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	930 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	241 P.S.I.	Final Closed-in Pressure	120 Mins.	120 Mins.
F Second Final Flow Pressure	226 P.S.I.			
G Final Closed-in Pressure	851 P.S.I.			
H Final Hydrostatic Mud	1140 P.S.I.			

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	182
P 2	5	185
P 3	10	188
P 4	15	191
P 5	20	191
P 6	25	191
P 7	30	191
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
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	191
3	467
6	643
9	711
12	755
15	786
18	808
21	828
24	841
27	855
30	865
33	875
36	885
39	893
42	900
45	906
48	913
51	917
54	921
57	926
60	930

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

Point Minutes	Press.
0	241
5	221
10	216
15	215
20	215
25	217
30	218
35	219
40	220
45	222
50	224
55	225
60	226
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 40 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	226
3	332
6	437
9	501
12	548
15	584
18	614
21	637
24	651
27	666
30	681
33	695
36	707
39	718
42	728
45	736
48	746
51	754
54	760
57	768
60	774

Cont'd on next page

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. _____

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ mins. and a	
final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	780
P 2						66	786
P 3						69	792
P 4						72	796
P 5						75	802
P 6						78	806
P 7						81	810
P 8						84	815
P 9						87	819
P10						90	821
P11						93	825
P12						96	829
P13						99	832
P14						102	835
P15						105	838
P16						108	841
P17						111	843
P18						114	846
P19						117	849
P20						120	851

WESTERN TESTERS

Home Office: Wichita, Kansas 67201
P. O. Box 1599 (316) 838-0601

Company Jerry E. Shawver Lease & Well No. Young & Cooper Cattle Co. 1-A

Elevation 1435 Kelly Bushing Formation Cleveland Effective Pay - Ft. Ticket No. 22598

Date 11-19-77 Sec. 19 Twp. 31S Range 8E County Cowley State Kansas

Test Approved by Charles I. Slagle Western Representative Tim Wilson

Formation Test No. 4 O.K. X Misrun - Interval Tested From 2300' to 2330' Total Depth 2330'

Size Main Hole 7-7/8 Rat Hole 6-1/8 Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 2295 Ft. Size 6-3/4 Bottom Packer Depth 2300 Ft. Size 6-3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 30 Ft. Size 5½OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2323 Ft. Clock No. 9103 Depth 2326 Ft. Clock No. 9727

Top Make Kuster Cap. 3150 No. 1562 ~~Inside~~ Outside Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 9:17P M

Tool Open I.F.P. From 9:20 M. to 9:50 M. - Hr. 30 Min. From (B) 182 P.S.I. To (C) 191 P.S.I.

Tool Closed I.C.I.P. From 9:50 M. to 10:50 M. - Hr. 60 Min (D) 930 P.S.I.

Tool Open F.F.P. From 10:50 M. to 11:50 M. - Hr. 60 Min. From (E) 241 P.S.I. To (F) 226 P.S.I.

Tool Closed F.C.I.P. From 11:50 M. to 1:50P M. - Hr. 120 Min. (G) 851 P.S.I.

Initial Hydrostatic Pressure (A) 1197 P.S.I. Final Hydrostatic Pressure (H) 1140 P.S.I. Maximum Temp. 106°

INFORMATION

BLOW Strong decreasing to weak.

Did Well Flow - Yes X No Recovery Total Ft. 480' total recovery 300' slightly gas cut mud
180' watery drlg. mud. 100' gas in pipe (40.000 Chlorides)

Reversed Out - Yes X No Mud Type Chem Viscosity 44 Weight 9.7 Water Loss 9.6 cc. Chlorides 2200 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR White & Ellis #3 Length Drill Pipe? 2011 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½XH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 270 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4H90 In. Length D.S.T. Tool 49 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

te 11-19-77 Test Ticket No. 22598

order No. 1562 Capacity 3150 Location 2323 Ft.

ck No. 9103 Elevation 1435 Kelly Bushing Well Temperature 106 °F

int	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	1197 P.S.I.	Open Tool	9:17P M	
First Initial Flow Pressure	182 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
First Final Flow Pressure	191 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
Initial Closed-in Pressure	930 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
Second Initial Flow Pressure	241 P.S.I.	Final Closed-in Pressure	120 Mins.	120 Mins.
Second Final Flow Pressure	226 P.S.I.			
Final Closed-in Pressure	851 P.S.I.			
Final Hydrostatic Mud	1140 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: 20 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: 40 Inc.
of 3 mins. and a
final inc. of 0 Min.

oint lins.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1	0	182	0	191	0	241	0	226
2	5	185	3	467	5	221	3	332
3	10	188	6	643	10	216	6	437
4	15	191	9	711	15	215	9	501
5	20	191	12	755	20	215	12	548
6	25	191	15	786	25	217	15	584
7	30	191	18	808	30	218	18	614
8			21	828	35	219	21	637
9			24	841	40	220	24	651
10			27	855	45	222	27	666
11			30	865	50	224	30	681
12			33	875	55	225	33	695
13			36	885	60	226	36	707
P14			39	893			39	718
P15			42	900			42	728
P16			45	906			45	736
P17			48	913			48	746
P18			51	917			51	754
P19			54	921			54	760
P20			57	926			57	768
			60	930			60	774

WTC - 4

continue on next page

WESTERN TESTING CO., INC.
Pressure Data

te 11-19-77 Test Ticket No. 22598

order No. 1562 Capacity 3150 Location 2323 Ft.

ck No. 9103 Elevation 1435 Kelly Bushing Well Temperature 106 °F

nt	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	1197 P.S.I.	Open Tool	9:17P M	
First Initial Flow Pressure	182 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
First Final Flow Pressure	191 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
Initial Closed-in Pressure	930 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
Second Initial Flow Pressure	241 P.S.I.	Final Closed-in Pressure	120 Mins.	120 Mins.
Second Final Flow Pressure	226 P.S.I.			
Final Closed-in Pressure	851 P.S.I.			
Final Hydrostatic Mud	1140 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: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

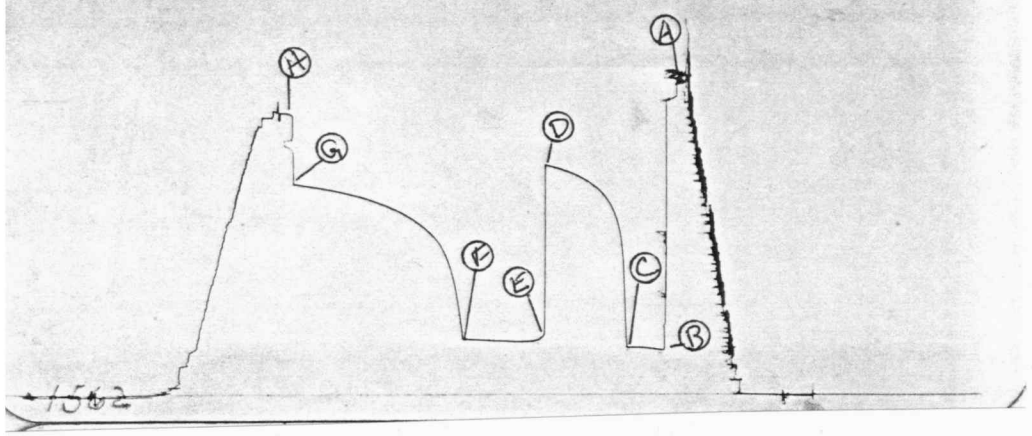
Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 40 Inc.
of 3 mins. and a
final inc. of 0 Min.

int ns.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1						63	780
2						66	786
3						69	792
4						72	796
5						75	802
6						78	806
7						81	810
8						84	815
9						87	819
0						90	821
1						93	825
2						96	829
3						99	832
4						102	835
5						105	838
6						108	841
7						111	843
8						114	846
9						117	849
0						120	851

TK# 22598

I.



TESTERS WESTERN

P. O. BOX 793 PHONE 793-7903

GREAT BEND, KANSAS

WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET 22599

Formation Cleveland Elevation 1435 KB Eff. Pay Dly Aching ——— Ft.

District Augusta WVel Date 11-20-77 Customer Order No. ———

COMPANY NAME Jerry E. Shawver

ADDRESS Suite 950-200 W. Douglas - Wichita Ks. - 67202

LEASE AND WELL NO. Young & Cooper Cattle Co. 1-A COUNTY Cowley STATE Ks. Sec. 19 Twp. 31S Rge. 8E

Mail Inv. To Same (Co. Name / Address) No. Copies Requested 1

Mail Charts To Same (Address) No. Copies Requested 5

Formation Test No. 5 O.K. X Misrun ——— Interval Tested From 2330' to 2342' Total Depth 2342'

Size Main Hole 7 7/8 Rat Hole ——— Conv. ——— B.T. X Damaged ——— Yes X No Conv. X B.T. ——— Damaged ——— Yes X No

Top Packer Depth 2325 Ft. Size 6 3/4 Bottom Packer Depth 2330 Ft. Size 6 3/4

Straddle ——— Conv. ——— B.T. ——— Damaged ——— Yes ——— No Packer Depth ——— Ft. Size ———

Tool Size 5 1/2 Tool Joint Size 4 1/2 FH Anchor Length 12 Ft. Size 5 1/2 Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2336 Ft. Clock No. 9103 Depth 2339 Ft. Clock No. 9727

Top Make Kuster Cap. 3150 No. 1562 (Inside) Bottom Make Kuster Cap. 3200 No. 1561 (Outside)

Below Straddle: Depth ——— Rec. No. ——— Clock No. ——— Inside/Outside Depth ——— Ft. Rec. No. ——— Clock No. ——— Inside/Outside

Time Set Packer 1:57 P M

Tool Open I.F.P. From 2:00 P M. to 2:30 P M. ——— Hr. 30 Min. From (B) ~~39~~ 44 P.S.I. To (C) ~~47~~ 40 P.S.I.

Tool Closed I.C.I.P. From 2:30 P M. to 3:30 P M. ——— Hr. 60 Min. (D) ~~831~~ 826 P.S.I.

Tool Open F.F.P. From 3:30 P M. to 4:30 P M. ——— Hr. 60 Min. From (E) ~~70~~ 93 P.S.I. To (F) ~~78~~ 76 P.S.I.

Tool Closed F.C.I.P. From 4:30 P M. to 6:30 P M. ——— Hr. 120 Min. (G) ~~847~~ 843 P.S.I.

Initial Hydrostatic Pressure (A) ~~1176~~ 1174 P.S.I. Final Hydrostatic Pressure (H) ~~1176~~ 1171 P.S.I. Maximum Temp. 99

INFORMATION

BLOW Strong on ~~I.F.P.~~ initial flow period Weak on ~~F.F.P.~~ final flow period

Did Well Flow ——— Yes X No Recovery Total Ft. 365' total recovery 175' Gas in pipe

130' slightly oil cut mud 15% oil 85% dily mud.

60' 5% water 5% oil 90% mud

Reversed Out ——— Yes X No Mud Type Chem Viscosity 40 Weight 9.5 Water Loss 9.2 cc. Chlorides 3300 PPM

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint ——— Jars: Size ——— In. Make ——— Ser. No. ———

Dual Packers Yes Did Packers Hold? Yes Did Tool Plug? No Where? ———

DRILLING CONTRACTOR White & Ellis #3 Length Drill Pipe 2041 ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4 1/2 XH

Length Weight Pipe ——— ft. I.D. Weight Pipe ——— In. Tool Joint Size ——— In. Length Drill Collars 270 ft. I.D. Drill Collars 2 1/4 In.

Tool Joint Size 4 2H90 In. Length D.S.T. Tool 31 ft.

Remarks

INVOICE SECTION

Open Hole Test	$ 415.00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Misrun	$
Evaluation	$
Packer	$
Circ. Sub.	$
	$
Total	$ 415.00

COMPANY TERMS

Test Approved By Charles I. Slagle Western Representative Tim Wilson

Signature of Customer or his Authorized Representative Charles I. Slagle Operator's Time ——— Hrs.

WESTERN TESTING CO., INC.

Pressure Data

Date 11-20-77 Test Ticket No. 22599

Recorder No. 1562 Capacity 3150 Location 2336 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 99 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1174	P.S.I.	Open Tool 1:57PM	
B First Initial Flow Pressure	44	P.S.I.	First Flow Pressure 30 Mins.	30 Mins.
C First Final Flow Pressure	40	P.S.I.	Initial Closed-in Pressure 60 Mins.	60 Mins.
D Initial Closed-in Pressure	826	P.S.I.	Second Flow Pressure 60 Mins.	60 Mins.
E Second Initial Flow Pressure	93	P.S.I.	Final Closed-in Pressure 120 Mins.	111 Mins.
F Second Final Flow Pressure	76	P.S.I.		
G Final Closed-in Pressure	843	P.S.I.		
H Final Hydrostatic Mud	1171	P.S.I.		

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	44
P 2	5	35
P 3	10	31
P 4	15	33
P 5	20	36
P 6	25	38
P 7	30	40
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
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	40
3	43
6	48
9	60
12	97
15	176
18	277
21	386
24	481
27	560
30	622
33	677
36	711
39	740
42	760
45	779
48	792
51	803
54	813
57	819
60	826

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

Point Minutes	Press.
0	93
5	71
10	65
15	65
20	65
25	65
30	66
35	68
40	70
45	72
50	74
55	75
60	76
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 37 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	76
3	85
6	114
9	168
12	236
15	314
18	387
21	451
24	508
27	559
30	600
33	637
36	667
39	692
42	712
45	730
48	745
51	758
54	771
57	777
60	785

Contd on next pag

WESTERN TESTING CO., INC.

Pressure Data

Date _____ Test Ticket No. _____

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Mins.
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Mins.
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ mins. and a	
final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	793
P 2						66	797
P 3						69	802
P 4						72	810
P 5						75	813
P 6						78	816
P 7						81	821
P 8						84	824
P 9						87	827
P10						90	830
P11						93	833
P12						96	835
P13						99	838
P14						102	840
P15						105	842
P16						108	843
P17						111	843
P18						114	
P19						117	
P20						120	

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P. O. Box 1599 (316) 838-0601

Company Jerry E. Shawver Lease & Well No. Young & Cooper Cattle Co. 1-A

Elevation 1435 Kelly Bushing Formation Cleveland Effective Pay - Ft. Ticket No. 22599

Date 11-20-77 Sec. 19 Twp. 31S Range 8E County Cowley State Kansas

Test Approved by Charles I. Slagle Western Representative Tim Wilson

Formation Test No. 5 O.K. X Misrun - Interval Tested From 2330' to 2342' Total Depth 2342'

Size Main Hole 7-7/8 Rat Hole - Conv. - B.T. X Damaged - Yes X No Conv. X B.T. - Damaged - Yes X No

Top Packer Depth 2325 Ft. Size 6-3/4 Bottom Packer Depth 2330 Ft. Size 6-3/4

Straddle - Conv. - B.T. - Damaged - Yes - No Packer Depth - Ft. Size -

Tool Size 5½OD Tool Joint Size 4½FH Anchor Length 12 Ft. Size 5½OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 2336 Ft. Clock No. 9103 Depth 2339 Ft. Clock No. 9727

Top Make Kuster Cap. 3150 No. 1562 Inside ~~Outside~~ Bottom Make Kuster Cap. 3200 No. 1561 ~~Inside~~ Outside

Below Straddle: Depth - Rec. No. - Clock No. - Inside Outside Depth - Ft. Rec. No. - Clock No. - Inside Outside

Time Set Packer 1:57P M

Tool Open I.F.P. From 2:00P M. to 2:30P M. - Hr. 30 Min. From (B) 44 P.S.I. To (C) 40 P.S.I.

Tool Closed I.C.I.P. From 2:30 M. to 3:30 M. - Hr. 60 Min (D) 826 P.S.I.

Tool Open F.F.P. From 3:30 M. to 4:30 M. - Hr. 60 Min. From (E) 93 P.S.I. To (F) 76 P.S.I.

Tool Closed F.C.I.P. From 4:30 M. to 6:30P M. - Hr. 120 Min. (G) 843 P.S.I.

Initial Hydrostatic Pressure (A) 1174 P.S.I. Final Hydrostatic Pressure (H) 1171 P.S.I. Maximum Temp. 99o

INFORMATION

BLOW Strong on initial flow period. Weak on final flow period.

Did Well Flow - Yes X No Recovery Total Ft. 365' Total Recovery 175' Gas in pipe

130' slightly oil cut mud 15% Oil 85% Drlg. mud.

60' 5% water 5% Oil 90% Mud.

Reversed Out - Yes X No Mud Type Chem Viscosity 40 Weight 9.5 Water Loss 9.2 cc. Chlorides 3300 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer Yes Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR White & Ellis #3 Length Drill Pipe? 2041 Ft. I.D. Drill Pipe 3.8 In. Tool Joint Size 4½XH In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 270 Ft. I.D. Drill Collars 2¼ In.

Tool Joint Size 4H90 In. Length D.S.T. Tool 31 Ft.

Remarks:

WESTERN TESTING CO., INC.
Pressure Data

ate 11-20-77 Test Ticket No. 22599

ecorder No. 1562 Capacity 3150 Location 2336 Ft.

ock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 99 °F

oint	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	1174 P.S.I.	Open Tool	1:57 P M	
First Initial Flow Pressure	44 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
First Final Flow Pressure	40 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
Initial Closed-in Pressure	826 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
Second Initial Flow Pressure	93 P.S.I.	Final Closed-in Pressure	120 Mins.	111 Mins.
Second Final Flow Pressure	76 P.S.I.			
Final Closed-in Pressure	843 P.S.I.			
Final Hydrostatic Mud	1171 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: 20 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: 37 Inc.
of 3 mins. and a
final inc. of 0 Min.

oint lins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1 0	44	0	40	0	93	0	76
2 5	35	3	43	5	71	3	85
3 10	31	6	48	10	65	6	114
4 15	33	9	60	15	65	9	168
5 20	36	12	97	20	65	12	236
6 25	38	15	176	25	65	15	314
7 30	40	18	277	30	66	18	387
8		21	386	35	68	21	451
9		24	481	40	70	24	508
10		27	560	45	72	27	559
11		30	622	50	74	30	600
12		33	677	55	75	33	637
13		36	711	60	76	36	667
14		39	740			39	692
15		42	760			42	712
16		45	779			45	730
17		48	792			48	745
18		51	803			51	758
19		54	813			54	771
20		57	819			57	777
WTC - 4		60	826			60	785

continued on next page

WESTERN TESTING CO., INC.

Pressure Data

Date 11-20-77 Test Ticket No. 22599

Recorder No. 1562 Capacity 3150 Location 2336 Ft.

Clock No. 9103 Elevation 1435 Kelly Bushing Well Temperature 99 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1174	P.S.I.	Open Tool	1:57 P M	
B	First Initial Flow Pressure	44	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	40	P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	826	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	93	P.S.I.	Final Closed-in Pressure	120 Mins.	111 Mins.
F	Second Final Flow Pressure	76	P.S.I.			
G	Final Closed-in Pressure	843	P.S.I.			
H	Final Hydrostatic Mud	1171	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 6 Inc.		Breakdown: 20 Inc.		Breakdown: 12 Inc.		Breakdown: 37 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	793
P 2						66	797
P 3						69	802
P 4						72	810
P 5						75	813
P 6						78	816
P 7						81	821
P 8						84	824
P 9						87	827
P10						90	830
P11						93	833
P12						96	835
P13						99	838
P14						102	840
P15						105	842
P16						108	843
P17						111	843
P18							
P19							
P20							

TR# 22599

I.