NOMENCLATURE

b	=	Approximate Radius of Investigation	Feet
b^1	=	Approximate Radius of Investigation (Net Pay Zone h^1)	Feet
D.R.	=	Damage Ratio	——
El	=	Elevation	Feet
GD	=	B.T. Gauge Depth (From Surface Reference)	Feet
h	=	Interval Tested	Feet
h^1	=	Net Pay Thickness	Feet
K	=	Permeability	md
K^1	=	Permeability (From Net Pay Zone h^1)	md
m	=	Slope Extrapolated Pressure Plot (Psi^2/cycle Gas)	psi/cycle
OF^1	=	Maximum Indicated Flow Rate	MCF/D
OF^2	=	Minimum Indicated Flow Rate	MCF/D
OF^3	=	Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF^4	=	Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P^S	=	Extrapolated Static Pressure	Psig.
P^F	=	Final Flow Pressure	Psig.
$P^{\circ T}$	=	Potentiometric Surface (Fresh Water*)	Feet
Q	=	Average Adjusted Production Rate During Test	bbls/day
Q^1	=	Theoretical Production w/Damage Removed	bbls/day
Q^g	=	Measured Gas Production Rate	MCF/D
R	=	Corrected Recovery	bbls
r^w	=	Radius of Well Bore	Feet
t	=	Flow Time	Minutes
t°	=	Total Flow Time	Minutes
T	=	Temperature Rankine	°R
Z	=	Compressibility Factor	——
u	=	Viscosity Gas or Liquid	CP
Log	=	Common Log	

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

WESTERN TESTERS

Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Madel & Gusman Lease & Well No. Brandt "B" #1

Elevation 2661 Kelly Bushings Formation Lansing Effective Pay Ft. Ticket No. 14219

Date 3-21-70 Sec. 26 Twp. 6S Range 26W County Sheridan State Kansas

Test Approved by Bill Iversen Western Representative Kenneth Cheney

Formation Test No. 1 O.K. X Misrun Interval Tested From 3760' to 3830' Total Depth 3830'

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 3755 Ft. Size 6 3/4" Packer Depth 3760 Ft. Size 6 3/4"

Straddle Yes No X Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 70 Ft. Size 5 1/2" O.D.

RECORDERS Top Depth 3793 Ft. Clock No. 9102 Depth 3795 Ft. Clock No. 6892

Top Make Kuster Cap. 4150 No. 2607 Inside Outside Bottom Make Kuster Cap. 4150 No. 969 Inside Outside

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

Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer 2:19 A. M

Tool Open I.F.P. From 2:20 M. to 2:35A. M. Hr. 15 Min. From (B) 71 P.S.I. To (C) 133 P.S.I.

Tool Closed I.C.I.P. From 2:35 M. to 3:05A. M. Hr. 30 Min. (D) 1239 P.S.I.

Tool Open F.F.P. From 3:05 M. to 4:35A. M. Hr. 90 Min. From (E) 152 P.S.I. To (F) 353 P.S.I.

Tool Closed F.C.I.P. From 4:35 M. to 5:05A. M. Hr. 30 Min. (G) 1175 P.S.I.

Initial Hydrostatic Pressure (A) 2031 P.S.I. Final Hydrostatic Pressure (H) 1986 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/8 In.		M.	
			M.	
			M.	

BLOW Good blow thru out flow period Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 420 feet salty oil and water cut mud

180 feet muddy water

180 feet water

Reversed Out Yes X No Mud Type Chem. Viscosity 49 Weight 10.1 Water Loss 8.1 cc. Maximum Temp. 111 °F

Type Circ. Sub. Plug Did Tool Plug? No Jars: Size 3½ IF Make WTC Ser. No. 410

EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where?

Length Drill Pipe 3613 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe ft. I.D. Weight Pipe in. Length Drill Collars 120 ft.

I. D. Drill Collars 2.7 in. Length D.S.T. Tool 97 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 3-21-70 Test Ticket No. 14219

Recorder No. 2607 Capacity 4150 Location 3793 Ft.

Clock No. 9102 Elevation 2661 Kelly Bushings Well Temperature 111 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2031 P.S.I.	Open Tool	2:19A. M	
B First Initial Flow Pressure	71 P.S.I.	First Flow Pressure	15 Mins.	15 Mins.
C First Final Flow Pressure	133 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	1239 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	152 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	353 P.S.I.			
G Final Closed-in Pressure	1175 P.S.I.			
H Final Hydrostatic Mud	1986 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 3 Inc.
of 5 mins. and a
final inc. of ____ Min.

Point Mins.	Press.
P 1 0	71
P 2 5	95
P 3 10	116
P 4 15	133
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: 10 Inc.
of 3 mins. and a
final inc. of ____ Min.

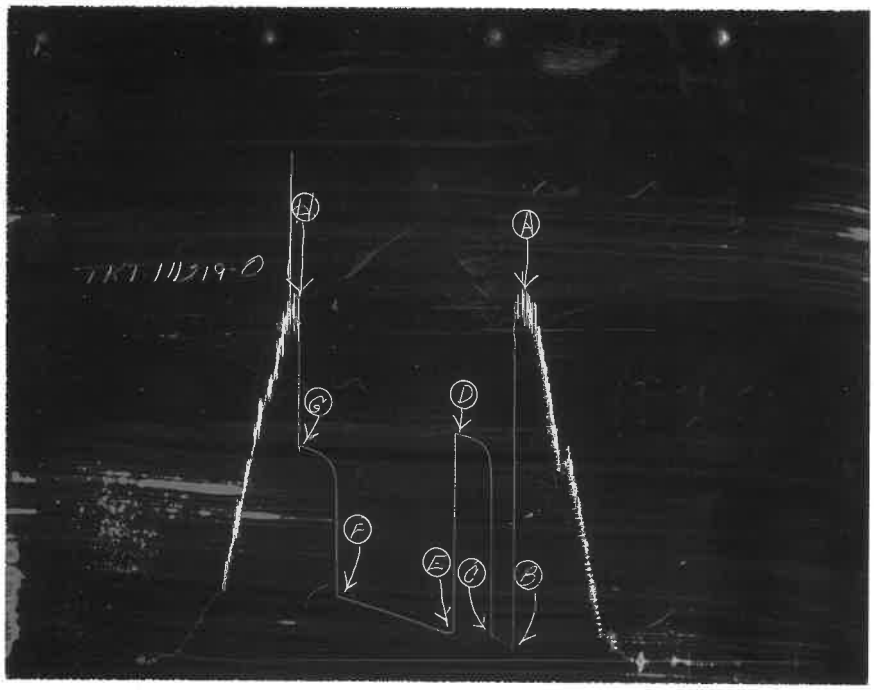
Point Minutes	Press.
0	133
3	1081
6	1148
9	1181
12	1200
15	1211
18	1219
21	1227
24	1231
27	1235
30	1239

Second Flow Pressure
Breakdown: 18 Inc.
of 5 mins. and a
final inc. of ____ Min.

Point Minutes	Press.
0	152
5	153
10	160
15	173
20	188
25	201
30	215
35	228
40	241
45	254
50	264
55	277
60	290
65	300
70	314
75	324
80	336
85	347
90	353

Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of ____ Min.

Point Minutes	Press.
0	353
3	1004
6	1073
9	1102
12	1123
15	1133
18	1146
21	1156
24	1165
27	1171
30	1175



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2046	2031	PSI
(B)	First Initial Flow Pressure	73	71	PSI
(C)	First Final Flow Pressure	133	133	PSI
(D)	Initial Closed-in Pressure	1248	1239	PSI
(E)	Second Initial Flow Pressure	158	152	PSI
(F)	Second Final Flow Pressure	355	353	PSI
(G)	Final Closed-in Pressure	1171	1175	PSI
(H)	Final Hydrostatic Mud	1993	1986	PSI

COMPANY Nadel & Gusman LEASE AND WELL NO. Brandt "B" #1 SEC. 26 TWP. 6S RGE. 26W TEST NO. 1 DATE 3-21-70

WESTERN

Home Office: Great Bend, Kansas

P. O. Box 793 (316) 793-7903

Company Nadel & Gusman Lease & Well No. Brandt "B" #1

Elevation 2661 Kelly Bushings Formation Lansing Effective Pay Ft. Ticket No. 14220

Date 3-21-70 Sec. 26 Twp. 6S Range 26W County Sheridan State Kansas

Test Approved by Bill Iversen Western Representative Kenneth Cheney

Formation Test No. 2 O.K. X Misrun Interval Tested From 3828' to 3873' Total Depth 3873'

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

Top Packer Depth 3823 Ft. Size 6 3/4" Packer Depth 3828 Ft. Size 6 3/4"

Straddle Yes No X Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 45 Ft. Size 5 1/2" O.D.

RECORDERS Depth 3865 Ft. Clock No. 9102 Depth 3867 Ft. Clock No. 6892

Top Make Kuster Cap. 4150 No. 2607 Inside Outside Bottom Make Kuster Cap. 4150 No. 969 Inside Outside

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

Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer 3:55 P. M

Tool Open I.F.P. From 4:00 M. to 4:15P. M. Hr. 15 Min. From (B) 48 P.S.I. To (C) 82 P.S.I.

Tool Closed I.C.I.P. From 4:15 M. to 4:45P. M. Hr. 30 Min. (D) 1300 P.S.I.

Tool Open F.F.P. From 4:45 M. to 6:15P. M. Hr. 90 Min. From (E) 107 P.S.I. To (F) 179 P.S.I.

Tool Closed F.C.I.P. From 6:15 M. to 6:45P. M. Hr. 30 Min. (G) 1154 P.S.I.

Initial Hydrostatic Pressure (A) 2021 P.S.I. Final Hydrostatic Pressure (H) 1978 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/8 In.		M.	
			M.	
			M.	

BLOW Good blow thru out test Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 140 feet oil cut watery mud

120 feet mud

60 feet muddy water

Reversed Out Yes X No Mud Type Chem. Viscosity 50 Weight 9.7 Water Loss 6.0 cc. Maximum Temp. 109 °F

Type Circ. Sub. Plug Did Tool Plug? No Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where?

Length Drill Pipe 3753 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe ft. I.D. Weight Pipe in. Length Drill Collars 120 ft.

I. D. Drill Collars 2.7 in. Length D.S.T. Tool 65 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 3-21-70 Test Ticket No. 14220

Recorder No. 2607 Capacity 4150 Location 3865 Ft.

Clock No. 9102 Elevation 2661 Kelly Bushings Well Temperature 109 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2021 P.S.I.		Open Tool	3:55 P. M	
B	First Initial Flow Pressure	48 P.S.I.		First Flow Pressure	15 Mins.	15 Mins.
C	First Final Flow Pressure	82 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1300 P.S.I.		Second Flow Pressure	90 Mins.	90 Mins.
E	Second Initial Flow Pressure	107 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	179 P.S.I.				
G	Final Closed-in Pressure	1154 P.S.I.				
H	Final Hydrostatic Mud	1978 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 3 Inc.
of 5 mins. and a
final inc. of ____ Min.

Point Mins.	Press.
P 1 0	48
P 2 5	48
P 3 10	73
P 4 15	82
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: 10 Inc.
of 3 mins. and a
final inc. of ____ Min.

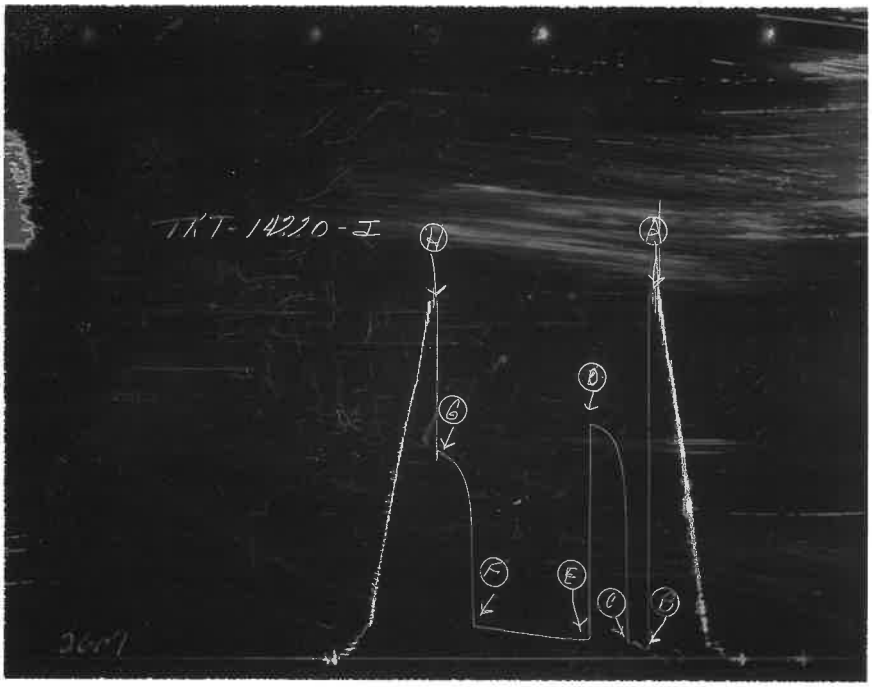
Point Minutes	Press.
0	82
3	987
6	1112
9	1179
12	1225
15	1248
18	1265
21	1280
24	1288
27	1294
30	1300

Second Flow Pressure
Breakdown: 18 Inc.
of 5 mins. and a
final inc. of ____ Min.

Point Minutes	Press.
0	107
5	107
10	107
15	110
20	114
25	117
30	120
35	127
40	133
45	138
50	143
55	148
60	152
65	157
70	162
75	167
80	171
85	175
90	179

Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of ____ Min.

Point Minutes	Press.
0	179
3	743
6	924
9	1002
12	1045
15	1079
18	1102
21	1121
24	1136
27	1146
30	1154



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2067	2021	PSI
(B)	First Initial Flow Pressure	52	48	PSI
(C)	First Final Flow Pressure	84	82	PSI
(D)	Initial Closed-in Pressure	1300	1300	PSI
(E)	Second Initial Flow Pressure	112	107	PSI
(F)	Second Final Flow Pressure	186	179	PSI
(G)	Final Closed-in Pressure	1154	1154	PSI
(H)	Final Hydrostatic Mud	2014	1978	PSI

COMPANY Nadel & Gusman LEASE AND WELL NO. Brandt "B" #1 SEC. 26 TWP. 6S RGE. 26W TEST NO. 2 DATE 3-21-70

WESTERN TESTERS

Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Nadel & Gusman Lease & Well No. Brandt B-1

Elevation 2661 Kelly Bushings Formation Kansas City Effective Pay Ft. Ticket No. 14221

Date 3-22-70 Sec. 26 Twp. 6S Range 26W County Sheridan State Kansas

Test Approved by Bill Iversen Western Representative Kenneth Cheney

Formation Test No. 3 O.K. X Misrun Interval Tested From 3880' to 3963' Total Depth 3963'

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 3876 Ft. Size 6 3/4" Packer Depth 3880 Ft. Size 6 3/4"

Straddle Yes No X Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 83 Ft. Size 1 Stand D.C. 27' 5 1/2" O.D.

RECORDERS Depth 3898 Ft. Clock No. 9102 Depth 3900 Ft. Clock No. 6892

Top Make Kuster Cap. 4150 No. 2607 Inside Outside Bottom Make Kuster Cap. 4150 No. 969 Inside Outside

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

Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer 8:23 AM

Tool Open I.F.P. From 8:25 M. to 8:40A. M. Hr. 15 Min. From (B) 10 P.S.I. To (C) 10 P.S.I.

Tool Closed I.C.I.P. From 8:40 M. to 9:10A. M. Hr. 30 Min. (D) 914 P.S.I.

Tool Open F.F.P. From 9:10 M. to 10:20A. M. Hr. 70 Min. From (E) 14 P.S.I. To (F) 21 P.S.I.

Tool Closed F.C.I.P. From 10:20 M. to 10:50A M. Hr. 30 Min. (G) 633 P.S.I.

Initial Hydrostatic Pressure (A) 2070 P.S.I. Final Hydrostatic Pressure (H) 2016 P.S.I.

SURFACE INFORMATION	Size Choke	Max. Press. P.S.I.	Time	Description of Flow
	3/8 In.		M.	
			M.	
			M.	

BLOW Weak for 18 minutes Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 20 feet mud

Reversed Out Yes X No Mud Type Chem. Viscosity 50 Weight 9.7 Water Loss 6.0 cc. Maximum Temp. 111 °F

Type Circ. Sub. Plug Did Tool Plug? No Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where?

Length Drill Pipe 3800 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe ft. I.D. Weight Pipe in. Length Drill Collars 60 ft.

I. D. Drill Collars 2.7 in. Length D.S.T. Tool 103 ft.

Remarks Flushed tool after 10 minutes on final flow period.

WESTERN TESTING CO., INC.
Pressure Data

Date 3-22-70 Test Ticket No. 14221

Recorder No. 2607 Capacity 4150 Location 3898 Ft.

Clock No. 9102 Elevation 2661 Kelly Bushings Well Temperature 111 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2070 P.S.I.	Open Tool	8:23 A.M	
B First Initial Flow Pressure	10 P.S.I.	First Flow Pressure	15 Mins.	16 Mins.
C First Final Flow Pressure	10 P.S.I.	Initial Closed-in Pressure	30 Mins.	27 Mins.
D Initial Closed-in Pressure	914 P.S.I.	Second Flow Pressure	70 Mins.	70 Mins.
E Second Initial Flow Pressure	14 P.S.I.	Final Closed-in Pressure	30 Mins.	27 Mins.
F Second Final Flow Pressure	21 P.S.I.			
G Final Closed-in Pressure	633 P.S.I.			
H Final Hydrostatic Mud	2016 P.S.I.			

PRESSURE BREAKDOWN

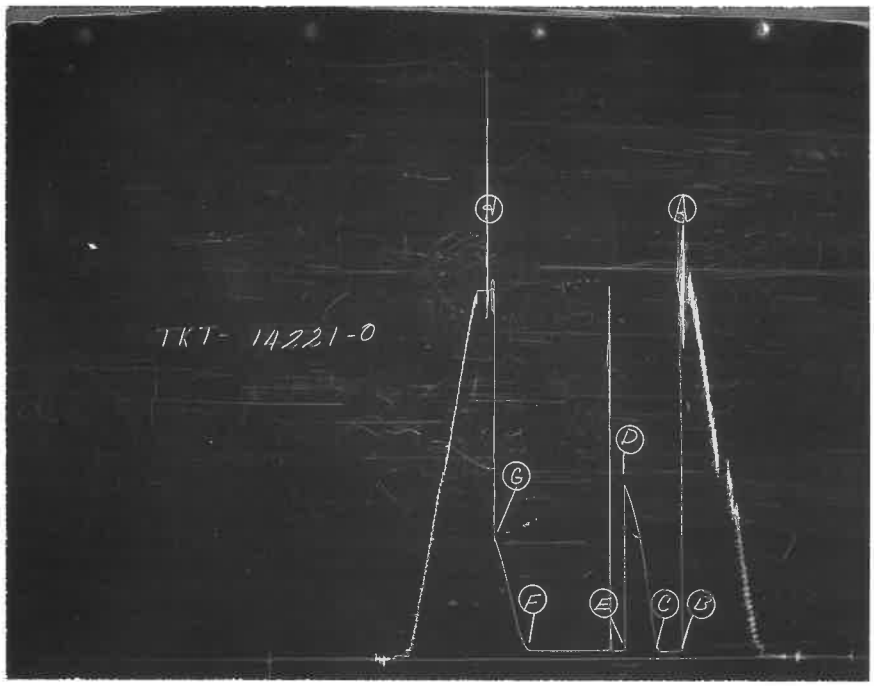
First Flow Pressure
Breakdown: 3 Inc.
of 5 mins. and a
final inc. of 1 Min.

Initial Shut-In
Breakdown: 9 Inc.
of 3 mins. and a
final inc. of ____ Min.

Second Flow Pressure
Breakdown: 14 Inc.
of 5 mins. and a
final inc. of ____ Min.

Final Shut-In
Breakdown: 9 Inc.
of 3 mins. and a
final inc. of ____ Min.

Point	First Flow Pressure Mins.	First Flow Pressure Press.	Initial Shut-In Minutes	Initial Shut-In Press.	Second Flow Pressure Minutes	Second Flow Pressure Press.	Final Shut-In Minutes	Final Shut-In Press.
P 1	0	10	0	10	0	14	0	21
P 2	5	10	3	63	5	14	3	37
P 3	10	10	6	188	10	14	6	78
P 4	15	10	9	349	15	18	9	145
P 5	16	10	12	533	20	18	12	230
P 6			15	653	25	18	15	309
P 7			18	730	30	18	18	410
P 8			21	807	35	19	21	493
P 9			24	868	40	19	24	560
P10			27	914	45	19	27	633
P11					50	19		
P12					55	20		
P13					60	20		
P14					65	21		
P15					70	21		
P16								
P17								
P18								
P19								
P20								



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2099	2070	PSI
(B)	First Initial Flow Pressure	10	10	PSI
(C)	First Final Flow Pressure	10	10	PSI
(D)	Initial Closed-in Pressure	903	914	PSI
(E)	Second Initial Flow Pressure	10	14	PSI
(F)	Second Final Flow Pressure	21	21	PSI
(G)	Final Closed-in Pressure	633	633	PSI
(H)	Final Hydrostatic Mud	2046	2016	PSI

COMPANY Nadel & Gusman LEASE AND WELL NO. Brandt B-1 SEC. 26 TWP. 6S RGE. 26W TEST NO. 3 DATE 3-22-70

WESTERN

Home Office: Great Bend, Kansas

P. O. Box 793 (316) 793-7903

Company Nadel & Gusman Lease & Well No. Brandt B-1

Elevation 2661 Kelly Bushings Formation Kansas City Effective Pay Ft. Ticket No. 14222

Date 3-22-70 Sec. 26 Twp. 6S Range 26W County Sherdian State Kansas

Test Approved by Bill Iversen Western Representative Kenneth Cheney

Formation Test No. 4 O.K. X Misrun Interval Tested From 3956' to 4002' Total Depth 4002'

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

Packer Depth 3951 Ft. Size 6 3/4" Packer Depth 3956 Ft. Size 6 3/4"

Straddle Yes No X Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 46 Ft. Size 5 1/2" O.D.

RECORDERS Depth 3996 Ft. Clock No. 9102 Depth 3998 Ft. Clock No. 6892

Top Make Kuster Cap. 4150 No. 2607 Inside Outside Bottom Make Kuster Cap. 4150 No. 969 Inside Outside

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

Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer 8:06 P.M

Tool Open I.F.P. From 8:10 M. to 8:25P. M. Hr. 15 Min. From (B) 218 P.S.I. To (C) 520 P.S.I.

Tool Closed I.C.I.P. From 8:25 M. to 8:55P.M. Hr. 30 Min. (D) 1307 P.S.I.

Tool Open F.F.P. From 8:55 M. to 9:55P.M. Hr. 60 Min. From (E) 593 P.S.I. To (F) 1123 P.S.I.

Tool Closed F.C.I.P. From 9:55 M. to 10:25P.M. Hr. 30 Min. (G) 1303 P.S.I.

Initial Hydrostatic Pressure (A) 2200 P.S.I. Final Hydrostatic Pressure (H) 2160 P.S.I.

SURFACE INFORMATION	Size Choke 3/8 In.	Max. Press. P.S.I.	Time	Description of Flow
			M.	
			M.	
			M.	

BLOW Strong blow thru test Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 2520 feet salt water

Reversed Out X Yes No Mud Type Chem. Viscosity 42 Weight 9.8 Water Loss 6.0 cc. Maximum Temp. 114 °F

Type Circ. Sub. Plug Did Tool Plug? No Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers Yes Safety Joint No Did Packer Hold? Yes Where?

Length Drill Pipe 3882 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe ft. I.D. Weight Pipe in. Length Drill Collars 120 ft.

I. D. Drill Collars 2.7 in. Length D.S.T. Tool 66 ft.

Remarks

WESTERN TESTING CO., INC.
Pressure Data

Date 3-22-70 Test Ticket No. 14222

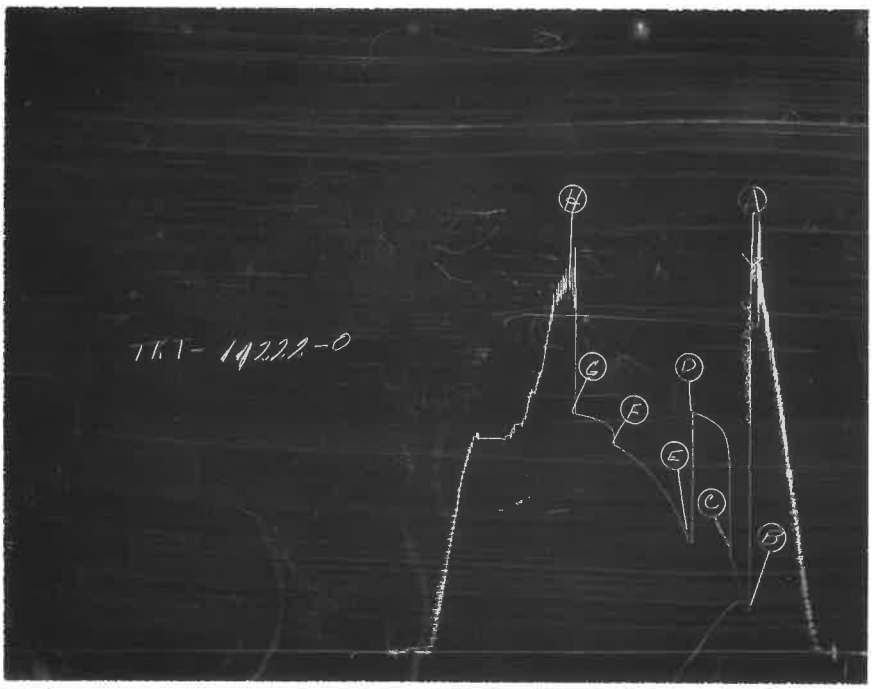
Recorder No. 2607 Capacity 4150 Location 3996 Ft.

Clock No. 9102 Elevation 2661 Kelly Bushings Well Temperature 114 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2200 P.S.I.		Open Tool	8:06 P.M	
B	First Initial Flow Pressure	218 P.S.I.		First Flow Pressure	15 Mins.	15 Mins.
C	First Final Flow Pressure	520 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1307 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	593 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	1123 P.S.I.				
G	Final Closed-in Pressure	1303 P.S.I.				
H	Final Hydrostatic Mud	2160 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 3 Inc.		Breakdown: 10 Inc.		Breakdown: 12 Inc.		Breakdown: 10 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 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 0	218	0	520	0	593	0	1123
P 2 5	298	3	1131	5	653	3	1231
P 3 10	423	6	1194	10	735	6	1250
P 4 15	520	9	1227	15	803	9	1259
P 5		12	1142	20	862	12	1267
P 6		15	1261	25	908	15	1275
P 7		18	1275	30	956	18	1284
P 8		21	1286	35	993	21	1290
P 9		24	1296	40	1026	24	1296
P10		27	1303	45	1056	27	1298
P11		30	1307	50	1083	30	1303
P12				55	1106		
P13				60	1123		
P14							
P15							
P16							
P17							
P18							
P19							
P20							



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	2236	2200	PSI
(B)	First Initial Flow Pressure	212	218	PSI
(C)	First Final Flow Pressure	498	520	PSI
(D)	Initial Closed-in Pressure	1322	1307	PSI
(E)	Second Initial Flow Pressure	592	593	PSI
(F)	Second Final Flow Pressure	1123	1123	PSI
(G)	Final Closed-in Pressure	1291	1303	PSI
(H)	Final Hydrostatic Mud	2173	2160	PSI

COMPANY Nadel & Gusman LEASE AND WELL NO. Brandt B-1 SEC. 26 TWP. 6S RGE. 26W TEST NO. 4 DATE 3-22-70