Company J. Mark Richardson — Lease & Well No. #2 McFadden "B"

Elevation 2294 Kelly Bushing — Formation Cottonwood — Effective Pay - Ft. — Ticket No. 10286

Date 4/26/81 — Sec. 34 — Twp. 27S — Range 20W — County Kiowa — State Kansas

Test Approved by J Mark Richardson — Western Representative David Sloan

Formation Test No. 1 — Interval Tested from 3020 ft. to 3100 ft. — Total Depth 3100 ft.

Packer Depth 3015 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 3020 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3057 ft. — Recorder Number 2604 — Cap. 4150

Bottom Recorder Depth (Outside) 3060 ft. — Recorder Number 6246 — Cap. 5200

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

Drilling Contractor Gabbert & Jones Rig #9 — Drill Collar Length 384 — I. D. 2.2 in.

Mud Type Gel — Viscosity 35 — Weight Pipe Length - — I. D. - in.

Weight 9.4 — Water Loss N/C cc. — Drill Pipe Length 2608 — I. D. 3.8 in.

Chlorides 34,000 P.P.M. — Test Tool Length 28 ft. — Tool Size 5½OD in.

Jars: Make WTC — Serial Number 408 — Anchor Length 31 DC + 49 ft. — Size 5½OD in.

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

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

Blow: Strong throughout test.

Recovered 690 ft. of muddy water — Chlorides 58,000 PPM

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:50 A.M. P.M. — Time Started Off Bottom 5:20 A.M. P.M. — Maximum Temperature 106

Initial Hydrostatic Pressure			(A)	1495	P.S.I.	
Initial Flow Period	Minutes 30	(B)	78*	P.S.I. to (C)	203*	P.S.I.
Initial Closed In Period	Minutes 33	(D)	949	P.S.I.		
Final Flow Period	Minutes 60	(E)	246	P.S.I. to (F)	361	P.S.I.
Final Closed In Period	Minutes 30	(G)	933	P.S.I.		
Final Hydrostatic Pressure		(H)	1464	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 4/26/81 Test Ticket No. 10286

Recorder No. 2604 Capacity 4150 Location 3057 Ft.

Clock No. - Elevation 2294 Kelly Bushing Well Temperature 106 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1495 P.S.I.	Open Tool	2:50P M	
B First Initial Flow Pressure	78* P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	203* P.S.I.	Initial Closed-in Pressure	30 Mins.	33 Mins.
D Initial Closed-in Pressure	949 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	246 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	361 P.S.I.	*Pressures questionable due to plugging.		
G Final Closed-in Pressure	933 P.S.I.			
H Final Hydrostatic Mud	1464 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	78*
P 2 5	111*
P 3 10	111*
P 4 15	130*
P 5 20	166*
P 6 25	188*
P 7 30	203*
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	203*
3	795
6	853
9	881
12	899
15	914
18	924
21	931
24	937
27	943
30	946
33	949

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

Point Minutes	Press.
0	246
5	246
10	247
15	254
20	265
25	279
30	292
35	305
40	318
45	331
50	342
55	352
60	361

Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	361
3	818
6	858
9	876
12	892
15	902
18	911
21	918
24	924
27	929
30	933

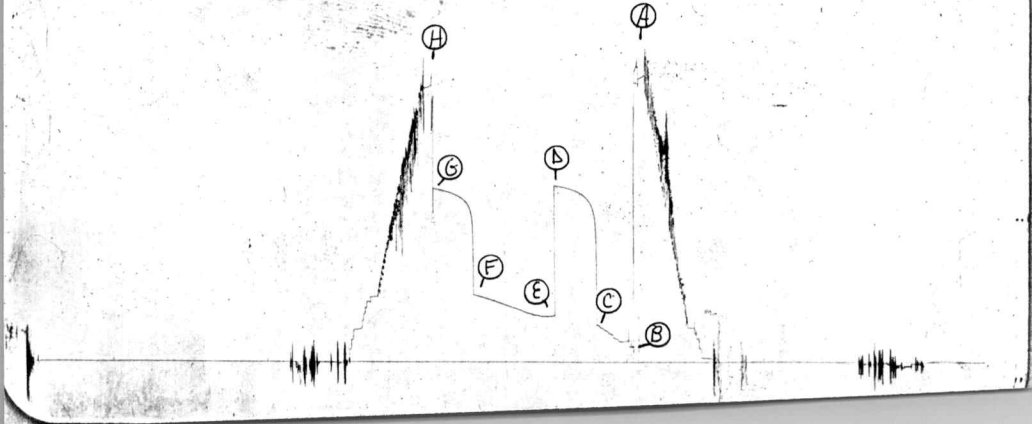
2604

TKT # 10286

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M4 Fallen Bx

DSTI



Company J. Mark Richardson — Lease & Well No. McFadden "B"#2

Elevation 2300 Kelly Bush. — Formation — Effective Pay - Ft. — Ticket No. 10772

Date 4-28-81 — Sec. 34 — Twp. 27S — Range 20W — County Kiowa — State Kansas

Test Approved by J. Mark Richardson — Western Representative Jeff Piotrowski

Formation Test No. 2 — Interval Tested from 3664 ft. to 3761 ft. — Total Depth 3761 ft.

Packer Depth 3659 ft. — Size 6 3/4 in. — Packer Depth 3664 ft. — Size 6 3/4 in.

Packer Depth - ft. — Size - in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3667 ft. — Recorder Number 5673 — Cap. 5400

Bottom Recorder Depth (Outside) 3670 ft. — Recorder Number 1565 — Cap. 4900

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

Drilling Contractor Gabbert-Jones Drlg. (#9) — Drill Collar Length 420 — I. D. 2.2 in.

Mud Type Chemical -Gel — Viscosity 37 — Weight Pipe Length - — I. D. - in.

Weight 9.4 — Water Loss N/C cc. — Drill Pipe Length 3225 — I. D. 3.8 in.

Chlorides 22,000 P.P.M. — Test Tool Length 29 ft. — Tool Size 5½OD in.

Jars: Make W.T.C. — Serial Number 405 — Anchor Length D.C.61-36 ft. — Size 5½OD in.

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

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

Blow: Strong blow throughout test.

Recovered 1920 ft. of water Chlorides: 70,000 PPM

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 10:37 ~~A.M.~~ ~~P.M.~~ — Time Started Off Bottom 1:97 ~~A.M.~~ ~~P.M.~~ — Maximum Temperature 112

Initial Hydrostatic Pressure			(A)	1781	P.S.I.	
Initial Flow Period	Minutes 30		(B)	98	P.S.I. to (C)	544 P.S.I.
Initial Closed In Period	Minutes 30		(D)	1219	P.S.I.	
Final Flow Period	Minutes 60		(E)	587	P.S.I. to (F)	956 P.S.I.
Final Closed In Period	Minutes 30		(G)	1224	P.S.I.	
Final Hydrostatic Pressure			(H)	1769	P.S.I.	

WTC-1

WESTERN TESTING CO., INC.
Pressure Data

Date 4/28/81 Test Ticket No. 10772

Recorder No. 5673 Capacity 5400 Location 3667 Ft.

Clock No. - Elevation - Well Temperature 112 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1781 P.S.I.	Open Tool	10:37A M	
B	First Initial Flow Pressure	98 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	544 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1219 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	587 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	956 P.S.I.			
G	Final Closed-in Pressure	1224 P.S.I.			
H	Final Hydrostatic Mud	1769 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: 10 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.

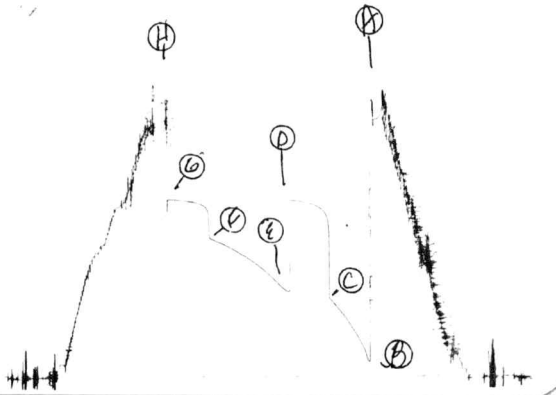
Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Mins.	Press.	Point	Minutes	Press.	Point	Minutes	Press.	Point	Minutes	Press.
P 1	0	98		0	544		0	587		0	956
P 2	5	210		3	1097		5	609		3	1168
P 3	10	295		6	1146		10	658		6	1189
P 4	15	366		9	1170		15	705		9	1197
P 5	20	432		12	1184		20	743		12	1205
P 6	25	486		15	1195		25	784		15	1211
P 7	30	544		18	1203		30	814		18	1214
P 8				21	1208		35	844		21	1216
P 9				24	1211		40	872		24	1218
P10				27	1216		45	902		27	1221
P11				30	1219		50	924		30	1224
P12							55	943			
P13							60	956			
P14											
P15											
P16											
P17											
P18											
P19											
P20											

5693
DST #2

Tkt #10772

I



Company J. Mark Richardson — Lease & Well No. McFadden "B" #2

Elevation 2300 Kelly Bush. Formation Kansas City — Effective Pay - Ft. — Ticket No. 10318

Date 4-30-81 — Sec. 34 — Twp. 27S — Range 20W — County Kiowa — State Kansas

Test Approved by J. Mark Richardson — Western Representative John Critser

Formation Test No. 3 — Interval Tested from 4512 ft. to 4623 ft. — Total Depth 4623 ft.

Packer Depth 4507 ft. — Size 6 3/4 in. — Packer Depth 4512 ft. — Size 6 3/4 in.

Packer Depth - ft. — Size - in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4517 ft. — Recorder Number 2608 — Cap. 4150

Bottom Recorder Depth (Outside) 4620 ft. — Recorder Number 3473 — Cap. 4000

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

Drilling Contractor Gabbert-Jones Drlg. (#9) — Drill Collar Length 415 — I. D. 3.8 in.

Mud Type Chemical -Gel — Viscosity 48 — Weight Pipe Length - — I. D. 2.25 in.

Weight 9.4 — Water Loss 10.5 cc. — Drill Pipe Length 4178 — I. D. 3.8 in.

Chlorides 16,000 P.P.M. — Test Tool Length 27 ft. — Tool Size 4½ in.

Jars: Make W.T.C. — Serial Number 415 — Anchor Length 111 ft. — Size 4½ in.

Did Well Flow? No — Reversed Out No — 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 off bottom of bucket in 7 minutes on initial flow period. Strong blow off bottom of bucket in 14 minutes on final flow period.

Recovered 1194 ft. of salt water Chlorides 54,000 PPM

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:20 ~~A.M.~~ P.M. — Time Started Off Bottom 2:20 A.M. ~~P.M.~~ — Maximum Temperature 116

Initial Hydrostatic Pressure			(A)	2254	P.S.I.	
Initial Flow Period	Minutes 30	(B)	146	P.S.I. to (C)	254	P.S.I.
Initial Closed In Period	Minutes 30	(D)	1517	P.S.I.		
Final Flow Period	Minutes 100	(E)	320	P.S.I. to (F)	547	P.S.I.
Final Closed In Period	Minutes 27	(G)	1473	P.S.I.		
Final Hydrostatic Pressure		(H)	2254	P.S.I.		

WTC-1

WESTERN TESTING CO., INC.
Pressure Data

Date 4/30/81 Test Ticket No. 10318

Recorder No. 2608 Capacity 4150 Location 4517 Ft.

Clock No. - Elevation 2300 Kelly Bushing Well Temperature 116 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2254	P.S.I.
B	First Initial Flow Pressure	146	P.S.I.
C	First Final Flow Pressure	254	P.S.I.
D	Initial Closed-in Pressure	1517	P.S.I.
E	Second Initial Flow Pressure	320	P.S.I.
F	Second Final Flow Pressure	547	P.S.I.
G	Final Closed-in Pressure	1473	P.S.I.
H	Final Hydrostatic Mud	2254	P.S.I.

	Time Given		Time Computed	
Open Tool	11:20P	M		
First Flow Pressure	30	Mins.	30	Mins.
Initial Closed-in Pressure	30	Mins.	30	Mins.
Second Flow Pressure	90	Mins.	100	Mins.
Final Closed-in Pressure	30	Mins.	27	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	146
P 2 5	148
P 3 10	175
P 4 15	198
P 5 20	218
P 6 25	235
P 7 30	254
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 0 Min.

Point Minutes	Press.
0	254
3	1112
6	1298
9	1363
12	1406
15	1436
18	1458
21	1475
24	1492
27	1504
30	1517

Second Flow Pressure
Breakdown: 20 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	320
5	312
10	312
15	322
20	335
25	352
30	366
35	383
40	396
45	410
50	425
55	439
60	452
65	464
70	479
75	492
80	504
85	514
90	527
95	539
100	547

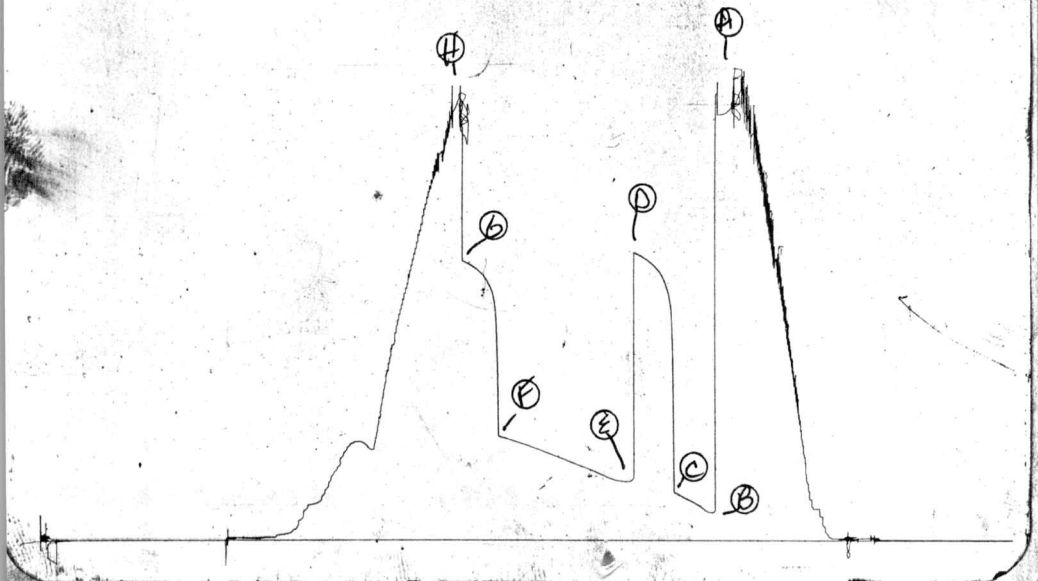
Final Shut-In
Breakdown: 9 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	547
3	1164
6	1306
9	1354
12	1392
15	1413
18	1433
21	1450
24	1463
27	1473

DST3 Top 2604

JR # 10318

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Company J. Mark Richardson — Lease & Well No. McFadden #2-B

Elevation 2300 Kelly Bushing — Formation - — Effective Pay - Ft. — Ticket No. 10319

Date 5/2/81 — Sec. 34 — Twp. 27S — Range 20W — County Kiowa — State Kansas

Test Approved by J. Mark Richardson — Western Representative John Critser

Formation Test No. 4 — Interval Tested from 4816 ft. to 4885 ft. — Total Depth 4885 ft.

Packer Depth 4811 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4816 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4821 ft. — Recorder Number 2608 — Cap. 4150

Bottom Recorder Depth (Outside) 4882 ft. — Recorder Number 3473 — Cap. 4000

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

Drilling Contractor Gabbert & Jones Inc. — Drill Collar Length 415 — I. D. 2.76 in.

Mud Type Chemical — Viscosity 73 — Weight Pipe Length - — I. D. 2.25 in.

Weight 9.3 — Water Loss 11.5 cc. — Drill Pipe Length 4428 — I. D. 3.8 in.

Chlorides 17,000 P.P.M. — Test Tool Length 28 ft. — Tool Size 4½ in.

Jars: Make WTC — Serial Number 415 — Anchor Length 69 ft. — Size 4½ in.

Did Well Flow? - — 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 throughout test.

Recovered 415 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 12:04 A.M. P.M. — Time Started Off Bottom 3:04 A.M. P.M. — Maximum Temperature 109

Initial Hydrostatic Pressure			(A)	2441	P.S.I.	
Initial Flow Period	Minutes 30		(B)	270 P.S.I.	to (C)	220 P.S.I.
Initial Closed In Period	Minutes 33		(D)	441 P.S.I.		
Final Flow Period	Minutes 90		(E)	239 P.S.I.	to (F)	218 P.S.I.
Final Closed In Period	Minutes 30		(G)	638 P.S.I.		
Final Hydrostatic Pressure			(H)	2389 P.S.I.		

WESTERN TESTING CO., INC.

Pressure Data

Date 5/2/81 Test Ticket No. 10319

Recorder No. 2608 Capacity 4150 Location 4821 Ft.

Clock No. - Elevation 2300 Kelly Bushing Well Temperature 109 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2441 P.S.I.	Open Tool	12:04A M	
B First Initial Flow Pressure	270 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	220 P.S.I.	Initial Closed-in Pressure	30 Mins.	33 Mins.
D Initial Closed-in Pressure	441 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	239 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	218 P.S.I.			
G Final Closed-in Pressure	638 P.S.I.			
H Final Hydrostatic Mud	2389 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	270
P 2 5	237
P 3 10	223
P 4 15	220
P 5 20	220
P 6 25	220
P 7 30	220
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	220
3	223
6	239
9	262
12	287
15	312
18	337
21	360
24	383
27	406
30	431
33	441

Second Flow Pressure
Breakdown: 18 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	239
5	225
10	218
15	218
20	218
25	218
30	218
35	218
40	218
45	218
50	218
55	218
60	218
65	218
70	218
75	218
80	218
85	218
90	218

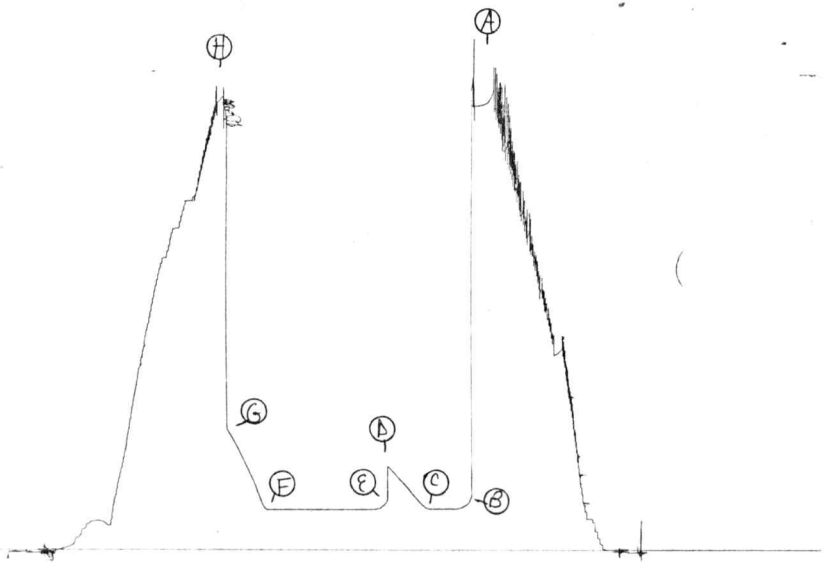
Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	218
3	241
6	295
9	347
12	396
15	444
18	485
21	529
24	568
27	605
30	638

IKT # 10319

DST4 TOP 2608

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Company J. Mark Richardson — Lease & Well No. McFadden #2-B

Elevation 2300 Kelly Bushing — Formation Mississippi — Effective Pay - Ft. — Ticket No. 10320

Date 5/2/81 — Sec. 34 — Twp. 27S — Range 20W — County Kiowa — State Kansas

Test Approved by J. Mark Richardson — Western Representative John Critser

Formation Test No. 5 — Interval Tested from 4884 ft. to 4895 ft. — Total Depth 4895 ft.

Packer Depth 4879 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4884 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4889 ft. — Recorder Number 2608 — Cap. 4150

Bottom Recorder Depth (Outside) 4892 ft. — Recorder Number 3473 — Cap. 4000

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

Drilling Contractor Gabbert & Jones Inc. — Drill Collar Length 415 — I. D. 2.76 in.

Mud Type Chemical — Viscosity 68 — Weight Pipe Length - — I. D. 2.25 in.

Weight 9.4 — Water Loss 10.5 cc. — Drill Pipe Length 4438 — I. D. 3.8 in.

Chlorides 16,000 P.P.M. — Test Tool Length 28 ft. — Tool Size 4½ in.

Jars: Make WTC — Serial Number 415 — Anchor Length 11 ft. — Size 4½ in.

Did Well Flow? - — 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: Initial flow period weak blow - 17 minutes then died. Final flow period no blow.

Recovered 425 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 4:45 ~~A.M.~~ P.M. — Time Started Off Bottom 7:15 ~~A.M.~~ P.M. — Maximum Temperature 110

Initial Hydrostatic Pressure			(A)	2494	P.S.I.	
Initial Flow Period	Minutes 30		(B)	253 P.S.I.	to (C)	254 P.S.I.
Initial Closed In Period	Minutes 30		(D)	1153	P.S.I.	
Final Flow Period	Minutes 60		(E)	289 P.S.I.	to (F)	257 P.S.I.
Final Closed In Period	Minutes 33		(G)	961	P.S.I.	
Final Hydrostatic Pressure			(H)	2441	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 5/2/81 Test Ticket No. 10320

Recorder No. 2608 Capacity 4150 Location 4889 Ft.

Clock No. - Elevation 2300 Kelly Bushing Well Temperature 110 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2494	P.S.I.
B	First Initial Flow Pressure	253	P.S.I.
C	First Final Flow Pressure	254	P.S.I.
D	Initial Closed-in Pressure	1153	P.S.I.
E	Second Initial Flow Pressure	289	P.S.I.
F	Second Final Flow Pressure	257	P.S.I.
G	Final Closed-in Pressure	961	P.S.I.
H	Final Hydrostatic Mud	2441	P.S.I.

	Time Given	Time Computed
Open Tool	4:45P M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	60 Mins.	60 Mins.
Final Closed-in Pressure	30 Mins.	33 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	253
P 2 5	254
P 3 10	254
P 4 15	254
P 5 20	254
P 6 25	254
P 7 30	254
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 0 Min.

Point Minutes	Press.
0	254
3	268
6	460
9	619
12	772
15	876
18	963
21	1023
24	1072
27	1114
30	1153

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

Point Minutes	Press.
0	289
5	270
10	262
15	260
20	258
25	257
30	257
35	257
40	257
45	257
50	257
55	257
60	257

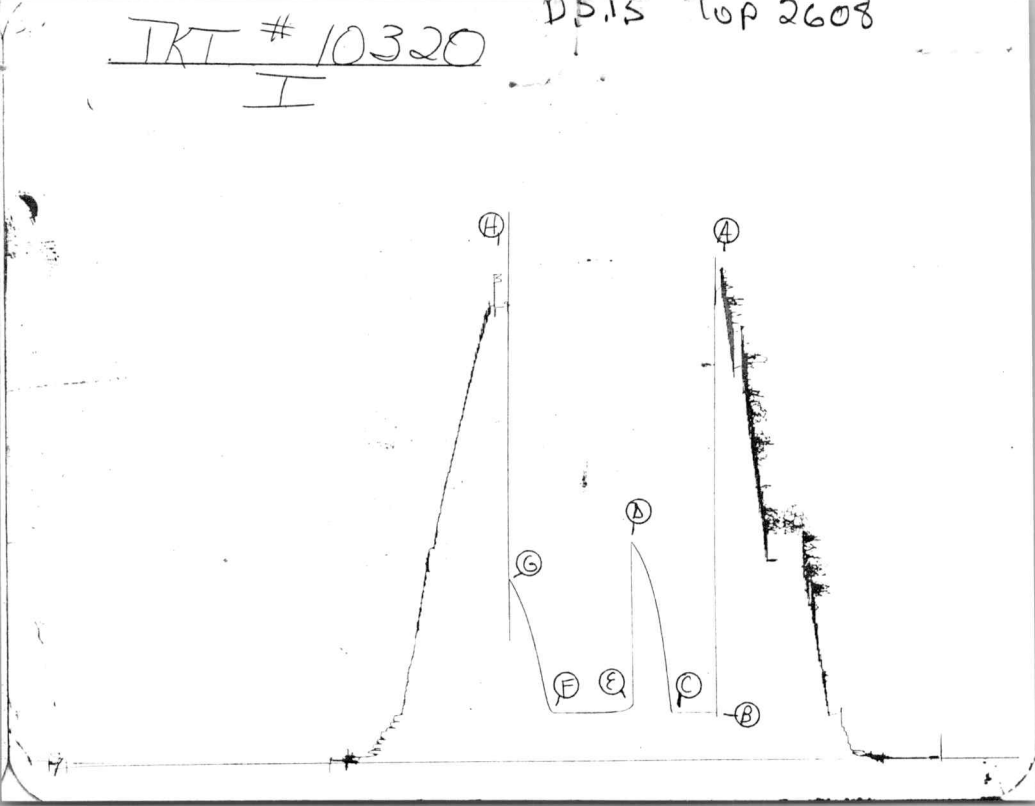
Final Shut-In
Breakdown: 11 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	257
3	287
6	381
9	487
12	591
15	675
18	747
21	810
24	861
27	907
30	944
33	961

DST #1 Top 2608

IKT # 10320

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Company J. Mark Richardson | Lease & Well No. McFadden #2-B

Elevation 2300 Kelly Bushing | Formation Mississippi | Effective Pay - Ft. | Ticket No. 10321

Date 5/4/81 | Sec. 34 | Twp. 29S | Range 20W | County Kiowa | State Kansas

Test Approved by J. Mark Richardson | Western Representative John Critser

Formation Test No. 6 | Interval Tested from 4882 ft. to 4900 ft. | Total Depth 4900 ft.

Packer Depth 4877 ft. | Size 6 3/4 in. | Packer Depth - ft. | Size - in.

Packer Depth 4882 ft. | Size 6 3/4 in. | Packer Depth - ft. | Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4887 ft. | Recorder Number 2608 | Cap. 4150

Bottom Recorder Depth (Outside) 4897 ft. | Recorder Number 3473 | Cap. 4000

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

Drilling Contractor Gabbert & Jones Inc | Drill Collar Length 415 | I. D. 2.76 in.

Mud Type Chemical | Viscosity 74 | Weight Pipe Length - | I. D. - in.

Weight 9.5 | Water Loss 9.5 cc. | Drill Pipe Length 4443 | I. D. 3.8 in.

Chlorides 19,000 P.P.M. | Test Tool Length 28 ft. | Tool Size 4½ in.

Jars: Make WTC | Serial Number 415 | Anchor Length 18 ft. | Size 4½ in.

Did Well Flow? No | Reversed Out No | 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: Initial flow period weak blow throughout opening. Final flow period no blow.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Slid tool 10 ft. to bottom. PLUGGED TOOL. MISRUN

Time Set Packer(s) 8:55 A.M. P.M. | Time Started Off Bottom 11:55 A.M. P.M. | Maximum Temperature -

Initial Hydrostatic Pressure			(A) 2602	P.S.I.		
Initial Flow Period	Minutes 30	(B) 431	P.S.I. to	(C) 1473	P.S.I.	
Initial Closed In Period	Minutes 27	(D) 1483	P.S.I.			
Final Flow Period	Minutes 85	(E) 412	P.S.I. to	(F) 362	P.S.I.	
Final Closed In Period	Minutes 30	(G) 1334	P.S.I.			
Final Hydrostatic Pressure			(H) 2592	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 5/4/81 Test Ticket No. 10321

Recorder No. 2608 Capacity 4150 Location 4887 Ft.

Clock No. - Elevation 2300 Kelly Bushing Well Temperature - °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2602 P.S.I.	Open Tool	8:55P M	
B First Initial Flow Pressure	431 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	1473 P.S.I.	Initial Closed-in Pressure	30 Mins.	27 Mins.
D Initial Closed-in Pressure	1483 P.S.I.	Second Flow Pressure	90 Mins.	85 Mins.
E Second Initial Flow Pressure	412 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	362 P.S.I.			
G Final Closed-in Pressure	1334 P.S.I.			
H Final Hydrostatic Mud	2592 P.S.I.			

ALL PRESSURES QUESTIONABLE DUE TO PLUGGED TOOL.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	431
P 2 5	1108
P 3 10	1375
P 4 15	1431
P 5 20	1454
P 6 25	1465
P 7 30	1473
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 9 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	1473
3	1475
6	1477
9	1479
12	1481
15	1483
18	1483
21	1483
24	1483
27	1483

Second Flow Pressure
Breakdown: 17 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	412
5	389
10	1228
15	1317
20	1354
25	1381
30	1394
35	1398
40	1400
45	1369
50	1021
55	1248
60	1319
65	1348
70	1361
75	1367
80	1371
85	362

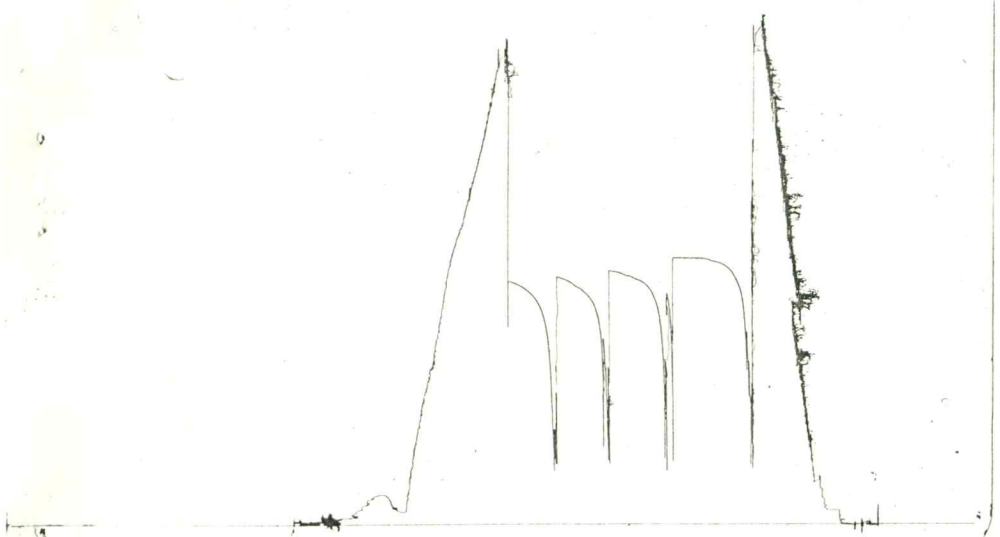
Final Shut-In
Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	362
3	1021
6	1153
9	1213
12	1253
15	1275
18	1296
21	1309
24	1319
27	1324
30	1334

TKT #10321

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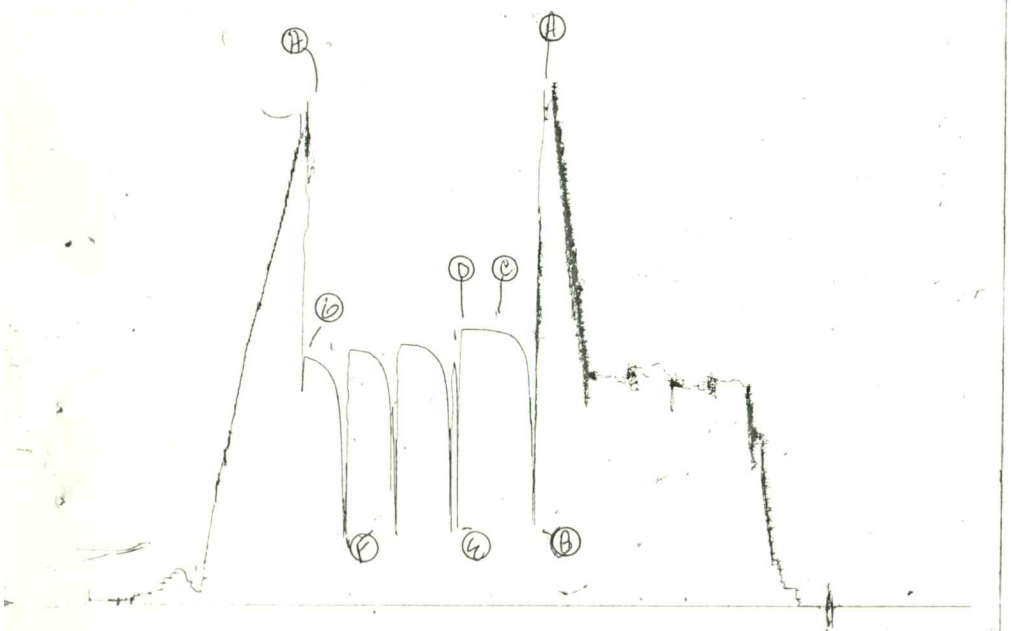
Bottom DST 6 5473



TKT #10321

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DST 6 Top 2608



Company J. Mark Richardson — Lease & Well No. McFadden #2-B

Elevation 2300 Kelly Bushing — Formation Mississippi — Effective Pay - Ft. — Ticket No. 10322

Date 5/5/81 — Sec. 34 — Twp. 27S — Range 20W — County Kiowa — State Kansas

Test Approved by J. Mark Richardson — Western Representative John Critser

Formation Test No. 7 — Interval Tested from 4884 ft. to 4902 ft. — Total Depth 4902 ft.

Packer Depth 4879 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4884 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4889 ft. — Recorder Number 2608 — Cap. 4150

Bottom Recorder Depth (Outside) 4899 ft. — Recorder Number 3473 — Cap. 4000

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

Drilling Contractor Gabbert & Jones Inc — Drill Collar Length 415 — I. D. 2.76 in.

Mud Type Chemical — Viscosity 38 — Weight Pipe Length - — I. D. - in.

Weight 9.5 — Water Loss 8.5 cc. — Drill Pipe Length 4445 — I. D. 3.8 in.

Chlorides ~~24,000~~ P.P.M. — Test Tool Length 28 ft. — Tool Size 4½ in.

Jars: Make WTC — Serial Number 415 — Anchor Length 18 ft. — Size 4½ in.

Did Well Flow? - — 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: No blow. Tried flushing tool - no good. No blow.

Recovered 558 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Picked up mud before we got to bottom.

MISRUN - NO PRESSURES AVAILABLE

Time Set Packer(s) 9:50 ~~P.M.~~ A.M. — Time Started Off Bottom 10:00 ~~P.M.~~ A.M. — Maximum Temperature -

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

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

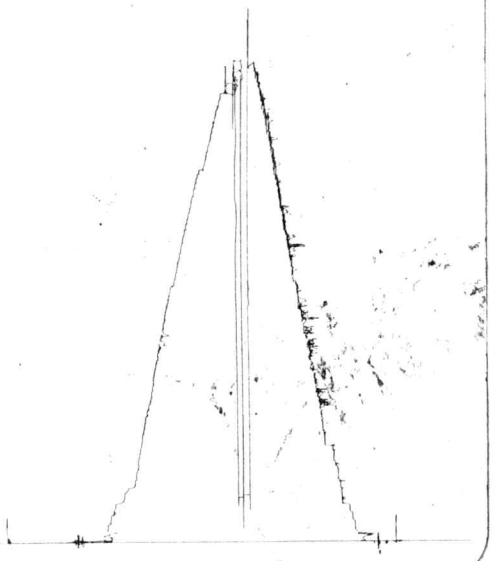
Initial Closed In Period ..... Minutes - (D) - P.S.I.

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

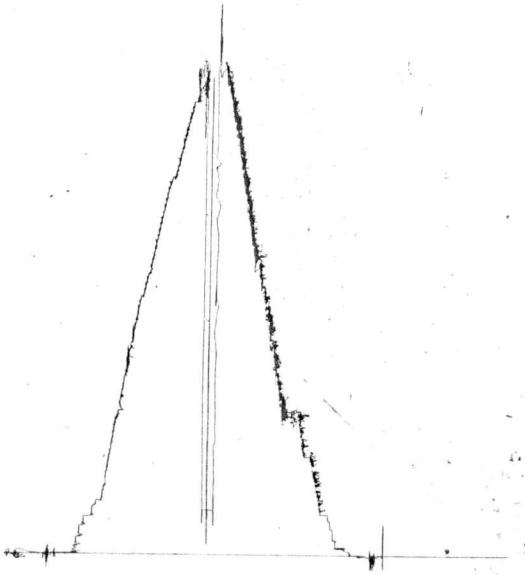
Final Closed In Period ..... Minutes - (G) - P.S.I.

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

TKT # 10322



TKT # 10322



Company J. Mark Richardson — Lease & Well No. McFadden #2-B

Elevation 2300 Kelly Bushing — Formation Mississippi — Effective Pay - Ft. — Ticket No. 10323

Date 5/5/81 — Sec. 34 — Twp. 27S — Range 20W — County Kiowa — State Kansas

Test Approved by J. Mark Richardson — Western Representative John Critser

Formation Test No. 8 — Interval Tested from 4884 ft. to 4902 ft. — Total Depth 4902 ft.

Packer Depth 4879 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4884 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4889 ft. — Recorder Number 2608 — Cap. 4150

Bottom Recorder Depth (Outside) 4899 ft. — Recorder Number 3473 — Cap. 4000

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

Drilling Contractor Gabbert & Jones Inc — Drill Collar Length 415 — I. D. 2.76 in.

Mud Type Chemical — Viscosity 38 — Weight Pipe Length - — I. D. - in.

Weight 9.5 — Water Loss 8.5 cc. — Drill Pipe Length 4445 — I. D. 3.8 in.

Chlorides 24,000 P.P.M. — Test Tool Length 28 ft. — Tool Size 4½ in.

Jars: Make WTC — Serial Number 415 — Anchor Length 18 ft. — Size 4½ in.

Did Well Flow? - — 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: Initial flow period weak blow (2 inches in bucket) slowly dying dow to ½ inch blow. Final flow period no blow.

Recovered 90 ft. of slightly oil cut gassy mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: slid tool 5 ft. to bottom. Plugging on blow.

MISRUN

Time Set Packer(s) 2:40 ~~A.M.~~ P.M. — Time Started Off Bottom 5:40 ~~A.M.~~ P.M. — Maximum Temperature 110

Initial Hydrostatic Pressure ..... (A) 2567 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 77 P.S.I. to (C) 73 P.S.I.

Initial Closed In Period ..... Minutes 33 (D) 725 P.S.I.

Final Flow Period ..... Minutes 90 (E) 437 P.S.I. to (F) 1093 P.S.I.

Final Closed In Period ..... Minutes 30 (G) 894 P.S.I.

Final Hydrostatic Pressure ..... (H) 2462 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 5/5/81 Test Ticket No. 10323

Recorder No. 2608 Capacity 4150 Location 4889 Ft.

Clock No. - Elevation 2300 Kelly Bushing Well Temperature 110 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2567 P.S.I.	Open Tool	2:40P M	
B First Initial Flow Pressure	77 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	73 P.S.I.	Initial Closed-in Pressure	30 Mins.	33 Mins.
D Initial Closed-in Pressure	725 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	437 P.S.I.	Final Closed-in Pressure	30 Mins.	30 Mins.
F Second Final Flow Pressure	1093 P.S.I.			
G Final Closed-in Pressure	894 P.S.I.			
H Final Hydrostatic Mud	2462 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	77
P 2 5	77
P 3 10	75
P 4 15	72
P 5 20	70
P 6 25	70
P 7 30	73
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	73
3	73
6	73
9	177
12	258
15	356
18	460
21	539
24	597
27	644
30	685
33	725

Second Flow Pressure
Breakdown: 18 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	437
5	698
10	766
15	822
20	861
25	899
30	930
35	957
40	979
45	1002
50	1021
55	1041
60	1058
65	1075
70	1089
75	1104
80	1116
85	1071
90	1093

Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	1093
3	162
6	302
9	492
12	630
15	710
18	764
21	807
24	845
27	874
30	894