Company Beren Corporation — Lease & Well No. #2 Dehaven

Elevation 2096 Kelly Bushing — Formation Cherokee-Mississippi — Effective Pay - Ft. — Ticket No. 16152

Date 8/ 15/82 — Sec. 11 — Twp. 27S — Range 16W — County Kiowa — State Kansas

Test Approved by Robert C. Lewellyn — Western Representative Karl Leo West, Jr.

Formation Test No. 1 — Interval Tested from 4488 ft. to 4598 ft. — Total Depth 4659 ft.

Packer Depth 4483 ft. — Size 6 5/8 in. — Packer Depth 4598 ft. — Size 6 3/4 in.

Packer Depth 4488 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4491 ft. — Recorder Number 1051 — Cap. 4250

Bottom Recorder Depth (Outside) 4494 ft. — Recorder Number 15640 — Cap. 6600

Below Straddle Recorder Depth 4657 ft. — Recorder Number 13267 — Cap. 4050

Drilling Contractor Baradco Drlg. Rig #2 — Drill Collar Length 360 — I. D. 2.26 in.

Mud Type starch — Viscosity 53 — Weight Pipe Length - — I. D. - in.

Weight 9.1 — Water Loss 11.6 cc. — Drill Pipe Length 4180 — I. D. 3.8 in.

Chlorides 13,000 P.P.M. — Test Tool Length 30 ft. — Tool Size 5½OD in.

Jars: Make WTC — Serial Number 419 — Anchor Length 92'DC/18'P. = 110 ft. — Size 5½OD 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 few weak bubbles. No blow on final flow period.

Recovered 10 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: 59' tailpipe;31' D.C.'28 Perf. (Mandral broke in hydralulic tool) I.S.I. went longer wanted; rig was repairing broken airline. Read bottom recorder.

Time Set Packer(s) 6:00 ~~A.M.~~ P.M. — Time Started Off Bottom 8:15 ~~A.M.~~ P.M. — Maximum Temperature 119°

Initial Hydrostatic Pressure			(A)	2216	P.S.I.	
Initial Flow Period	Minutes	27	(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)	165 P.S.I.
Final Closed In Period	Minutes	--	(G)	1649	P.S.I.	
Final Hydrostatic Pressure			(H)	2147	P.S.I.	

WTC-1

WESTERN TESTING CO., INC.
Pressure Data

Date 8/15/82 Test Ticket No. 16152

Recorder No. 15640 Capacity 6600 Location 4494 Ft.

Clock No. - Elevation -- Well Temperature 119° °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2216	P.S.I.	Open Tool	30	M.	27	
B	First Initial Flow Pressure	--	P.S.I.	First Flow Pressure	45	Mins.	--	Mins.
C	First Final Flow Pressure	--	P.S.I.	Initial Closed-in Pressure	30	Mins.	--	Mins.
D	Initial Closed-in Pressure	--	P.S.I.	Second Flow Pressure	30	Mins.	--	Mins.
E	Second Initial Flow Pressure	--	P.S.I.	Final Closed-in Pressure		Mins.	--	Mins.
F	Second Final Flow Pressure	165	P.S.I.					
G	Final Closed-in Pressure	1649	P.S.I.					
H	Final Hydrostatic Mud	2147	P.S.I.					

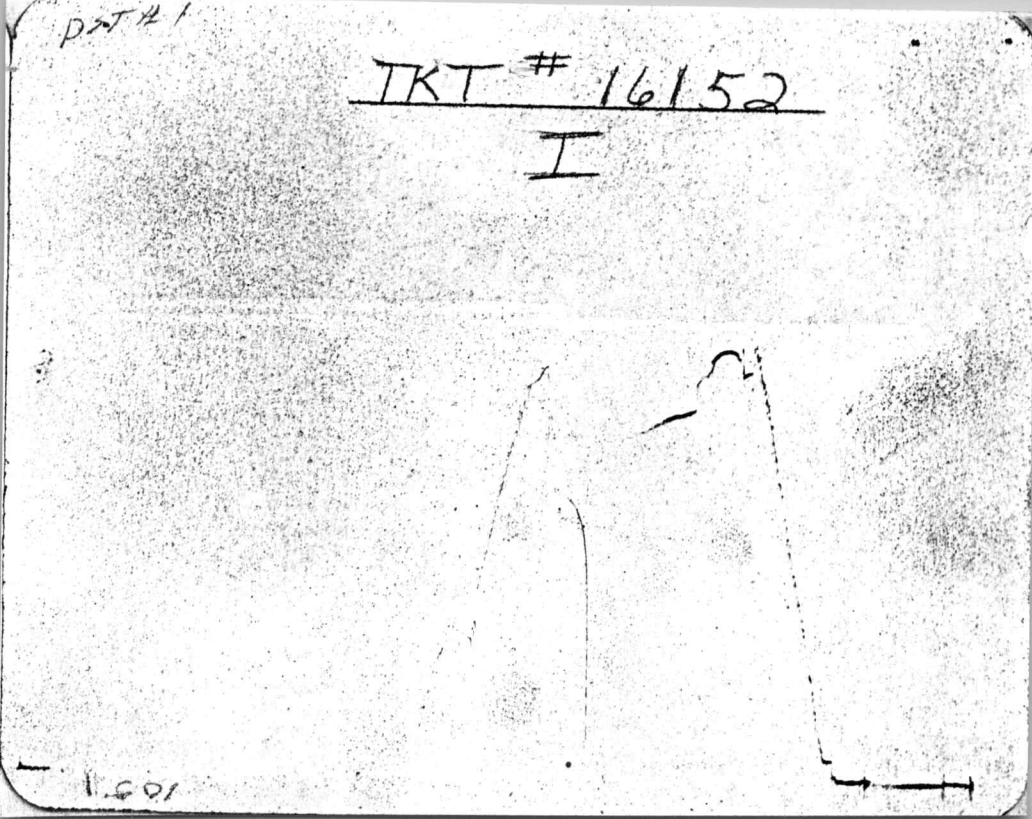
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 0 Inc.		Breakdown: 0 Inc.		Breakdown: 0 Inc.		Breakdown: 9 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	165
P 2						3	1421
P 3						6	1505
P 4						9	1550
P 5						12	1581
P 6						15	1601
P 7						18	1617
P 8						21	1630
P 9						24	1640
P10						27	1649
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

part 1

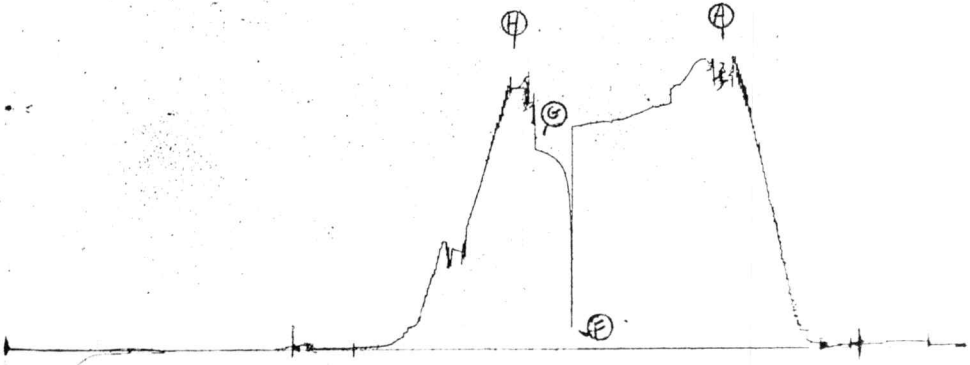
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DST #1

TKT # 16152



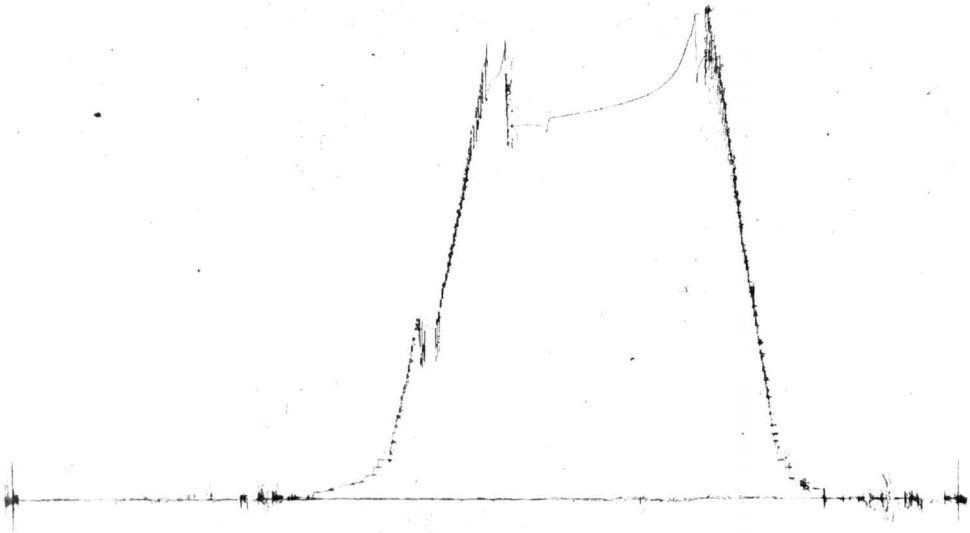
15640

DST #1

1324-7

TKT # 16152

Below Straddle



Company Beren Corporation — Lease & Well No. #2 Dehaven

Elevation 2096 Kelly Bushing — Formation Cherokee-Mississippi — Effective Pay - Ft. — Ticket No. 16153

Date 8/ 16/82 — Sec. 11 — Twp. 27S — Range 16W — County Kiowa — State Kansas

Test Approved by Robert C. Lewellyn — Western Representative Karl Leo West, Jr.

Formation Test No. 2 — Interval Tested from 4497 ft. to 4603 ft. — Total Depth 4659 ft.

Packer Depth 4492 ft. — Size 6 5/8 in. — Packer Depth 4603 ft. — Size 6 3/4 in.

Packer Depth 4497 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4500 ft. — Recorder Number 1051 — Cap. 4250

Bottom Recorder Depth (Outside) 4503 ft. — Recorder Number 15640 — Cap. 6600

Below Straddle Recorder Depth 4657 ft. — Recorder Number 13267 — Cap. 4050

Drilling Contractor Baradco Drlg. Rig #2 — Drill Collar Length 360 — I. D. 2.26 in.

Mud Type starch — Viscosity 53 — Weight Pipe Length - — I. D. - in.

Weight 9.1 — Water Loss 11.6 cc. — Drill Pipe Length 4180 — I. D. 3.8 in.

Chlorides 13,000 P.P.M. — Test Tool Length 30 ft. — Tool Size 5½OD in.

Jars: Make WTC — Serial Number 419 — Anchor Length 92'DG/14'P. = 106 ft. — Size 5½OD 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 very weak decreasing to surface of water. VEry weak decreasing to surface of water on final flow period.

Recovered 155 ft. of heavy mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Plugging in both flow periods.

Time Set Packer(s) 3:10 A.M. P.M. — Time Started Off Bottom 7:55 A.M. P.M. — Maximum Temperature 119°

Initial Hydrostatic Pressure			(A)	2320	P.S.I.	
Initial Flow Period	Minutes	30	(B)	93 *	P.S.I. to (C)	170 * P.S.I.
Initial Closed In Period	Minutes	48	(D)	1169	P.S.I.	
Final Flow Period	Minutes	120	(E)	101 *	P.S.I. to (F)	906 P.S.I.
Final Closed In Period	Minutes	72	(G)	1143	P.S.I.	
Final Hydrostatic Pressure			(H)	2284	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 8/16/82 Test Ticket No. 16153

Recorder No. 1051 Capacity 4250 Location 4500 Ft.

Clock No. --- Elevation 2096 Kelly Bushing Well Temperature 119 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2320	P.S.I.
B	First Initial Flow Pressure	93 *	P.S.I.
C	First Final Flow Pressure	170 *	P.S.I.
D	Initial Closed-in Pressure	1169	P.S.I.
E	Second Initial Flow Pressure	101 *	P.S.I.
F	Second Final Flow Pressure	906	P.S.I.
G	Final Closed-in Pressure	1143	P.S.I.
H	Final Hydrostatic Mud	2284	P.S.I.

	Time Given	Time Computed
Open Tool	3:10A M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	45 Mins.	48 Mins.
Second Flow Pressure	120 Mins.	120 Mins.
Final Closed-in Pressure	90 Mins.	72 Mins.

* PRESSURES QUESTIONABLE DUE TO PLUGGING ACTION

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	93 *
P 2 5	105 *
P 3 10	138 *
P 4 15	254 *
P 5 20	263 *
P 6 25	263 *
P 7 30	170 *
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 16 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	170 *
3	589
6	691
9	763
12	809
15	859
18	893
21	940
24	969
27	996
30	1037
33	1055
36	1071
39	1095
42	1127
45	1148
48	1169

Second Flow Pressure
Breakdown: 24 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	101 *
5	172 *
10	151 *
15	142 *
20	136 *
25	133 *
30	140 *
35	140 *
40	170 *
45	183 *
50	165 *
55	151 *
60	144 *
65	140 *
70	398 *
75	481 *
80	575 *
85	636 *
90	689 *
95	734 *
100	776 *

CONTINUED NEXT PAGE

Final Shut-In
Breakdown: 24 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	906
3	925
6	938
9	953
12	967
15	979
18	991
21	1003
24	1015
27	1024
30	1035
33	1045
36	1055
39	1062
42	1071
45	1080
48	1089
51	1096
54	1103
57	1111
60	1117

CONTINUED NEXT PAGE

WESTERN TESTING CO., INC.
Pressure Data

Date 8/16/82 Test Ticket No. 16153

Recorder No. 1051 Capacity 4250 Location 4500 Ft.

Clock No. --- Elevation 2096 Kelly Bushing Well Temperature 119 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2320 P.S.I.		Open Tool	3:10A M	
B	First Initial Flow Pressure	93 * P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	170 * P.S.I.		Initial Closed-in Pressure	45 Mins.	48 Mins.
D	Initial Closed-in Pressure	1169 P.S.I.		Second Flow Pressure	120 Mins.	120 Mins.
E	Second Initial Flow Pressure	101 * P.S.I.		Final Closed-in Pressure	90 Mins.	72 Mins.
F	Second Final Flow Pressure	906 P.S.I.				
G	Final Closed-in Pressure	1143 P.S.I.				
H	Final Hydrostatic Mud	2284 P.S.I.				

* PRESSURES QUESTIONABLE DUE TO PLUGGING ACTION

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 16 Inc. of 3 mins. and a final inc. of 0 Min.

Second Flow Pressure
Breakdown: 24 Inc. of 5 mins. and a final inc. of 0 Min.

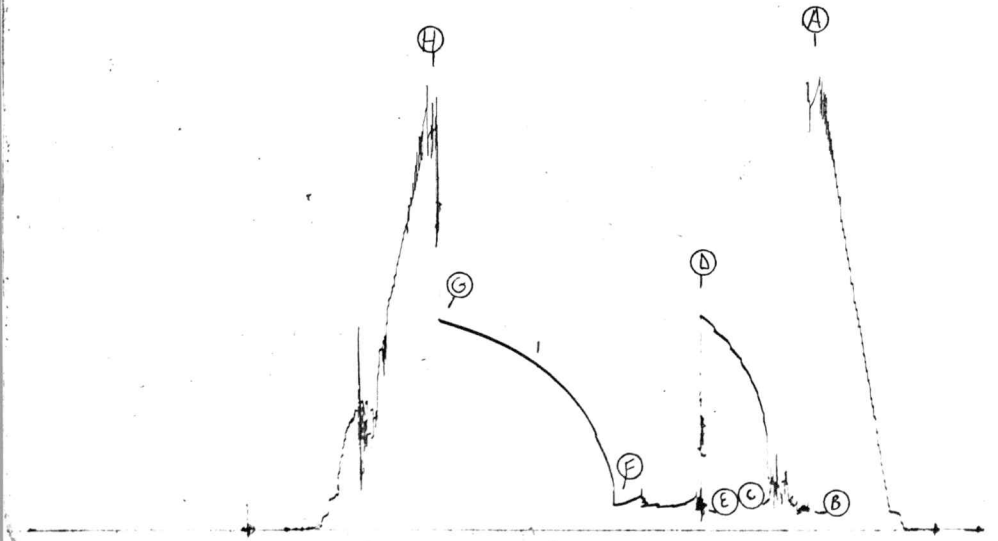
Final Shut-In
Breakdown: 24 Inc. of 3 mins. and a final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1				105	810 *	63	1125
P 2				110	846 *	66	1132
P 3				115	878 *	69	1138
P 4				120	906 *	72	1143
P 5							
P 6							
P 7							
P 8							
P 9							
P10							
P11							
P12							
P13							
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P17							
P18							
P19							
P20							

DST #2

IKT #16153

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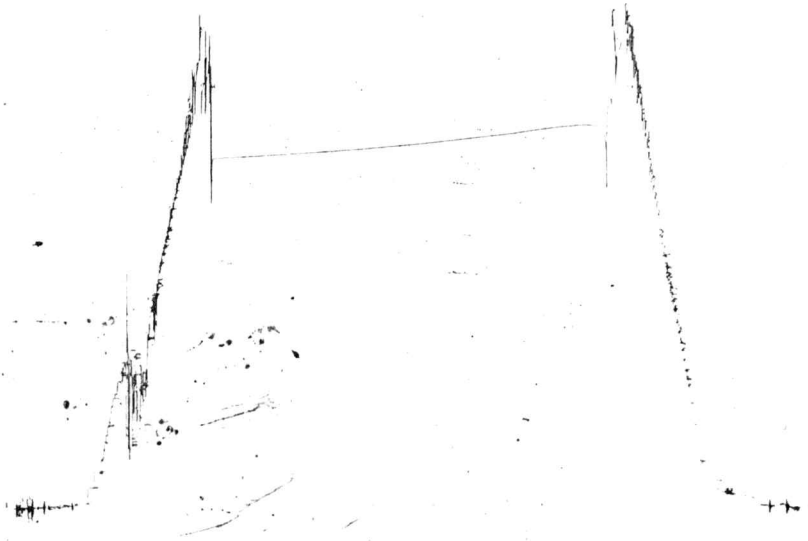


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DST #2

TKT # 16153

Below Straddle

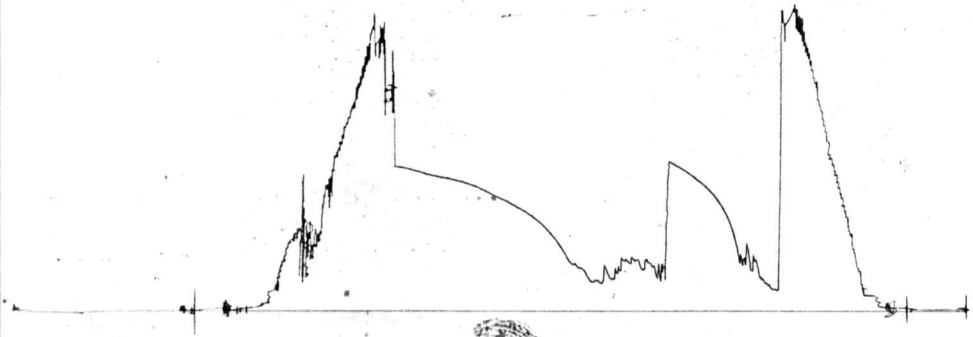


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DST #2

TKT # 16153

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Company Beren Corporation — Lease & Well No. #2 Dehaven

Elevation 2096 Kelly Bushing — Formation Cherokee-Mississippi — Effective Pay - Ft. — Ticket No. 16154

Date 8/16/82 — Sec. 11 — Twp. 27S — Range 16W — County Kiowa — State Kansas

Test Approved by Robert C. Lewellyn — Western Representative Karl Leo West, Jr.

Formation Test No. 3 — Interval Tested from 4490 ft. to 4610 ft. — Total Depth 4659 ft.

Packer Depth 4485 ft. — Size 6 5/8 in. — Packer Depth 4610 ft. — Size 6 3/4 in.

Packer Depth 4490 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4498 ft. — Recorder Number 1051 — Cap. 4250

Bottom Recorder Depth (Outside) 4501 ft. — Recorder Number 15640 — Cap. 6600

Below Straddle Recorder Depth 4657 ft. — Recorder Number 13267 — Cap. 4050

Drilling Contractor Beredco Drlg. Rig #2 — Drill Collar Length 360 — I. D. 2.26 in.

Mud Type starch — Viscosity 60 — Weight Pipe Length - — I. D. - in.

Weight 9.2 — Water Loss 9.0 cc. — Drill Pipe Length 4180 — I. D. 3.8 in.

Chlorides 14,000 P.P.M. — Test Tool Length 30 ft. — Tool Size 5½OD in.

Jars: Make WTC — Serial Number 419 — Anchor Length 120 ft. — Size 5½OD 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 building to fair blow. Weak building to strong blow on final flow period.

Recovered 390 ft. of watery mud — 21% water;63% mud;16% gas

Recovered ft. of — Chlorides 42,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: 49' tailpipe;31' DC & 18' Perf.

Time Set Packer(s) 8:10 ~~A.M.~~ P.M. — Time Started Off Bottom 12:55 A.M. ~~P.M.~~ — Maximum Temperature 119°

Initial Hydrostatic Pressure			(A)	2200	P.S.I.	
Initial Flow Period	Minutes 30	(B)	79	P.S.I. to (C)	82	P.S.I.
Initial Closed In Period	Minutes 45	(D)	700	P.S.I.		
Final Flow Period	Minutes 120	(E)	155	P.S.I. to (F)	174	P.S.I.
Final Closed In Period	Minutes 78	(G)	397	P.S.I.		
Final Hydrostatic Pressure		(H)	2164	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 8/16/82 Test Ticket No. 16154

Recorder No. 1051 Capacity 4250 Location 4498 Ft.

Clock No. - Elevation 2096 Kelly Bushing Well Temperature 119 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2200 P.S.I.	Open Tool	8:10P M	
B	First Initial Flow Pressure	79 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	82 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	700 P.S.I.	Second Flow Pressure	120 Mins.	120 Mins.
E	Second Initial Flow Pressure	155 P.S.I.	Final Closed-in Pressure	90 Mins.	78 Mins.
F	Second Final Flow Pressure	174 P.S.I.			
G	Final Closed-in Pressure	397 P.S.I.			
H	Final Hydrostatic Mud	2164 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	79
P 2 5	79
P 3 10	79
P 4 15	79
P 5 20	79
P 6 25	80
P 7 30	82
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	82
3	88
6	113
9	150
12	195
15	247
18	300
21	363
24	419
27	467
30	520
33	564
36	604
39	640
42	680
45	700

Second Flow Pressure
Breakdown: 24 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	155
5	155
10	155
15	155
20	155
25	155
30	157
35	169
40	190
45	219
50	237
55	262
60	197
65	182
70	176
75	175
80	175
85	175
90	175
95	174
100	173

CONTINUED

Final Shut-In
Breakdown: 26 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	174
3	180
6	184
9	191
12	199
15	210
18	218
21	227
24	233
27	237
30	242
33	248
36	256
39	265
42	270
45	279
48	288
51	300
54	313
57	323
60	334

CONTINUED

WESTERN TESTING CO., INC.

Pressure Data

Date 8/16/82 Test Ticket No. 16154

Recorder No. 1051 Capacity 4250 Location 4498 Ft.

Clock No. - Elevation 2096 Kelly Bushing Well Temperature 119 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2200 P.S.I.	Open Tool	8:10P M	
B First Initial Flow Pressure	79 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	82 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	700 P.S.I.	Second Flow Pressure	120 Mins.	120 Mins.
E Second Initial Flow Pressure	155 P.S.I.	Final Closed-in Pressure	90 Mins.	78 Mins.
F Second Final Flow Pressure	174 P.S.I.			
G Final Closed-in Pressure	397 P.S.I.			
H Final Hydrostatic Mud	2164 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: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

Second Flow Pressure
Breakdown: 24 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
105	172
110	171
115	171
120	174

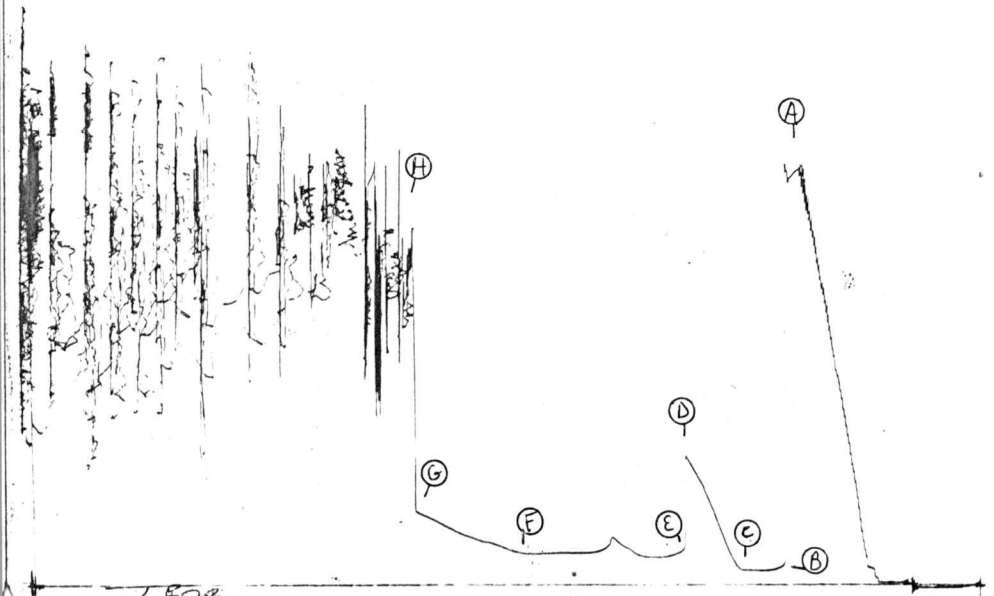
Final Shut-In
Breakdown: 26 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
63	347
66	356
69	368
72	377
75	389
78	397

WTC - 4

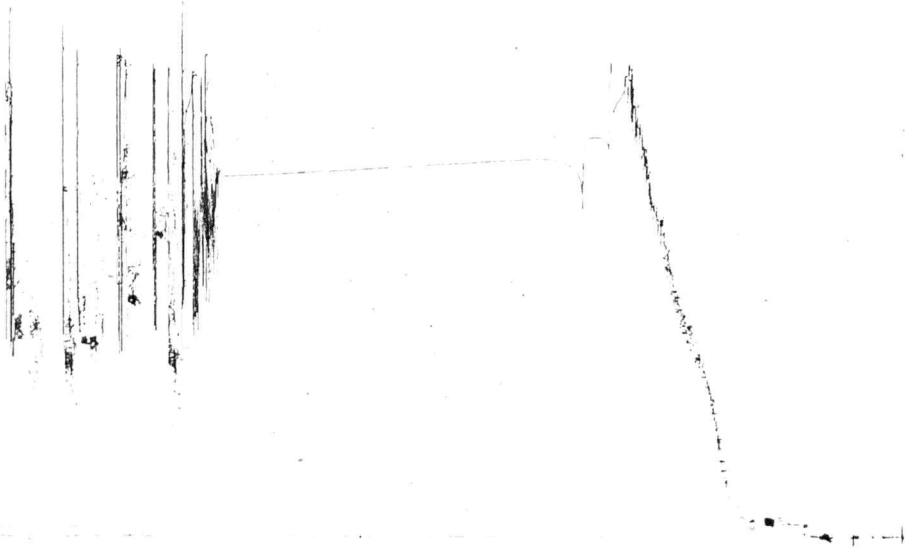
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Below Straddle



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