Company Leben Drilling Company — Lease & Well No. #1 Betschart

Elevation 2081 Kelly Bushing — Formation Lansing — Effective Pay -- Ft. — Ticket No. 16141

Date 9/20/82 — Sec. 4 — Twp. 28S — Range 15W — County Pratt — State Kansas

Test Approved by Kenneth Spear — Western Representative Mike Rogers

Formation Test No. 1 — Interval Tested from 4308 ft. to 4383 ft. — Total Depth 4383 ft.

Packer Depth 4303 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 4308 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4310 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4314 ft. — Recorder Number 13267 — Cap. 4050

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

Drilling Contractor Leben Drilling Rig #11 — Drill Collar Length 156 — I. D. 2.2 in.

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

Weight 9.6+ — Water Loss 10.0 cc. — Drill Pipe Length 4131 — I. D. 3.2 in.

Chlorides 21,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 4-1/2 in.

Jars: Make - — Serial Number - — Anchor Length DC in anchor 31 44 ft. — Size 4 -1/2in.

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 4" in.

Blow: Weak building to strong in twelve minutes then weam building to fair ten inch blow initial flow period. Weak building to strong in twenty-five minutes on final flow period.

Recovered 1150 ft. of gas in pipe

Recovered 120 ft. of gas cut and oil stained drilling mud with 15% gas;2% oil;83% mud

Recovered 120 ft. of gassy watery mud / oil specks 10% gas;2% oil;50% mud;38% water

Recovered 360 ft. of gassy oil stained muddy water with 15% mud;85% water with 85,000ppmchlorides

Recovered ft. of

Remarks:

Time Set Packer(s) 11:15 A.M. P.M. — Time Started Off Bottom 2:15 A.M. P.M. — Maximum Temperature 120°

Initial Hydrostatic Pressure		(A) 2208 P.S.I.		
Initial Flow Period	Minutes 30	(B) 75 P.S.I.	to (C) 147 P.S.I.	
Initial Closed In Period	Minutes 60	(D) 1538 P.S.I.		
Final Flow Period	Minutes 30	(E) 209 P.S.I.	to (F) 250 P.S.I.	
Final Closed In Period	Minutes 60	(G) 1519 P.S.I.		
Final Hydrostatic Pressure		(H) 2174 P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 9/20/82 Test Ticket No. 16141

Recorder No. 1566 Capacity 4300 Location 4310 Ft.

Clock No. -- Elevation 2081 Kelly Bushing Well Temperature 120 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2208	P.S.I.
B	First Initial Flow Pressure	75	P.S.I.
C	First Final Flow Pressure	147	P.S.I.
D	Initial Closed-in Pressure	1538	P.S.I.
E	Second Initial Flow Pressure	209	P.S.I.
F	Second Final Flow Pressure	250	P.S.I.
G	Final Closed-in Pressure	1519	P.S.I.
H	Final Hydrostatic Mud	2174	P.S.I.

	Time Given	Time Computed
Open Tool	11:15P M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	60 Mins.	60 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	60 Mins.	60 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	75
P 2	5	82
P 3	10	92
P 4	15	104
P 5	20	121
P 6	25	137
P 7	30	147
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.
	0	147
	3	809
	6	1102
	9	1216
	12	1289
	15	1337
	18	1371
	21	1398
	24	1422
	27	1441
	30	1457
	33	1472
	36	1483
	39	1494
	42	1504
	45	1512
	48	1518
	51	1526
	54	1530
	57	1536
	60	1538

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

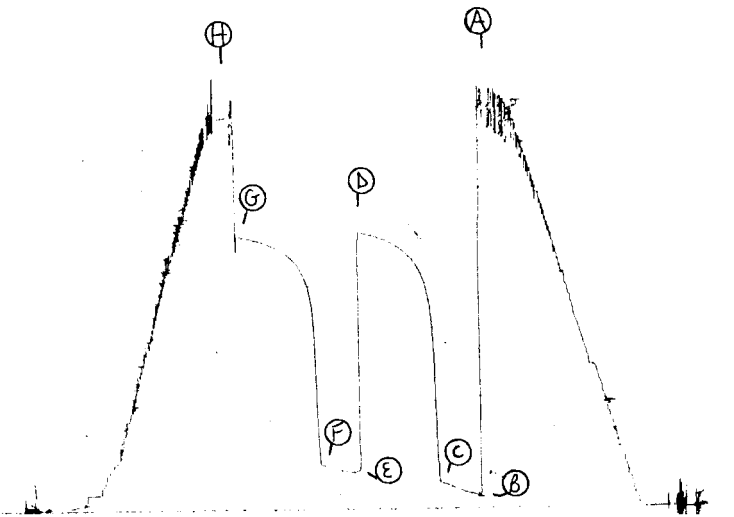
Point	Minutes	Press.
	0	209
	5	209
	10	213
	15	225
	20	237
	25	245
	30	250

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	250
	3	1024
	6	1195
	9	1274
	12	1324
	15	1361
	18	1386
	21	1408
	24	1427
	27	1443
	30	1454
	33	1465
	36	1475
	39	1483
	42	1490
	45	1497
	48	1504
	51	1509
	54	1513
	57	1517
	60	1519

TKT # 16141

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OK

WESTERN TESTING CO., INC.
FORMATION TESTING TICKET No 16141

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 2081 KB Formation Lansing Eff. Pay Ft.

District Pratt Date 9-20-82 Customer Order No.

COMPANY NAME Leben Drlg. Company

ADDRESS 105 S. Broadway Bdwy Plaza Bldg. Suite 640 Wichita, Ks 67202

LEASE AND WELL NO. Betschart #1 COUNTY Pratt STATE Ks. Sec. 4 Twp. 28 Rge. 15 W

Mail Invoice To #1 BETSCHART (Co. Name) Address No. Copies Requested

Mail Charts To Address No. Copies Requested 10

Formation Test No. 1 Interval Tested From 4304' ft. to 4383' ft. Total Depth 4383' ft.

Packer Depth 4303' ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 4308' ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4310 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 4314 ft. Recorder Number 13267 Cap. 4050

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

Drilling Contractor Co Tool Rig 11

Mud Type Starch Viscosity 46

Weight 9.6+ Water Loss 10.6 cc.

Chlorides ~~1~~ 21,000 P.P.M.

Jars: Make — Serial Number —

Did Well Flow? no Reversed Out no

Drill Collar Length 156' I. D. 2.2 in.

Weight Pipe Length — I. D. — in.

Drill Pipe Length 4131' I. D. 3.2 in.

Test Tool Length 21' ft. Tool Size 4 1/2 in.

DC in Anchor

Anchor Length 31' 44' ft. Size 4 1/2 in.

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4" in.

Blow ~~Steady~~ ~~Built to~~ Wk Building to Strong in 12 min. Bld off Then Wk Building to Fair 10 inch Blow I.F.P. Wk Building to Strong in 25 min. F.F.P.

Recovered 1150' ft. of Gas in Pipe

Recovered 120' ft. of gassy oil stained oily mud w/15% gas 2% oil 83% mud

Recovered 120' ft. of gassy ~~mud~~ ~~water~~ oil Spks 10% gas 2% oil 50% mud 38% wtr

Recovered — ft. of watery mud

Recovered 360' ft. of gassy oil ~~Spotted~~ Stained Muddy Water w/ 15% mud 85% wtr w/ 86,000 Chlorides

Remarks: Original only rec'd

Time On Location 6:15 A.M. (P.M.) Time Pick Up Tool 9:00 (A.M.) P.M. Time Off Location 6:00 (A.M.) P.M.

Time Set Packer(s) 11:15 (A.M.) P.M. Time Started Off Bottom 2:15 (A.M.) P.M. Maximum Temperature 120°

Initial Hydrostatic Pressure			(A)	2340	P.S.I.	
Initial Flow Period	Minutes	30	(B)	54	P.S.I. to (C)	140 P.S.I.
Initial Closed In Period	Minutes	60	(D)	1517	P.S.I.	
Final Flow Period	Minutes	30	(E)	183	P.S.I. to (F)	248 P.S.I.
Final Closed In Period	Minutes	60	(G)	1506	P.S.I.	
Final Hydrostatic Pressure			(H)	2264	P.S.I.	

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages 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, of 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 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the ~~original~~ amount.

Test Approved By Kenneth Spear
Signature of Customer or his authorized representative

RECEIVED SEP 22 1982

Western Representative Mike Rogus Thank You!

FIELD INVOICE

Open Hole Test	$	675.00
Misrun	$	
Straddle Test	$	
Jars	$	
Selective Zone	$	
~~Safety Joint~~	$	
Sandb	$	
Evaluation	$	
Extra Packer	$	
Circ. Sub.	$	
Mileage 15	$	—0—
Fluid Sampler	$	
5 Extra Charts @ 2.50	$	12.50
Insurance	$	
Telecopier	$	
TOTAL	$	687.50

WESTERN TESTING CO., INC.
Pressure Data

Date 9-20-82 Test Ticket No. 16141

Recorder No. 1566 Capacity 4300 Location 4310 Ft.

Clock No. — — — — Elevation 2081 KB Well Temperature 120 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2208	P.S.I.	Open Tool	11:15P M	
B	First Initial Flow Pressure	75	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	147	P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	1538	P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	209	P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F	Second Final Flow Pressure	250	P.S.I.			
G	Final Closed-in Pressure	1519	P.S.I.			
H	Final Hydrostatic Mud	2174	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	75
P 2 5	82
P 3 10	92
P 4 15	104
P 5 20	121
P 6 25	137
P 7 30	147
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: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	147
3	809
6	1102
9	1216
12	1289
15	1337
18	1371
21	1398
24	1422
27	1441
30	1457
33	1472
36	1483
39	1494
42	1504
45	1512
48	1518
51	1526
54	1530
57	1536
60	1538

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

Point Minutes	Press.
0	209
5	209
10	213
15	225
20	237
25	245
30	250
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

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

Point Minutes	Press.
0	250
3	1024
6	1195
9	1274
12	1324
15	1361
18	1386
21	1408
24	1427
27	1443
30	1454
33	1465
36	1475
39	1483
42	1490
45	1497
48	1504
51	1509
54	1513
57	1517
60	1519

Company Leben Drilling Company — Lease & Well No. #1 Betschart

Elevation 2081 Kelly Bushing Formation --- — Effective Pay -- Ft. — Ticket No. 16142

Date 9/ 22 /82 — Sec. 4 — Twp. 28S — Range 15W — County Pratt — State Kansas

Test Approved by Robert L. Layman — Western Representative Mike Rogers

Formation Test No. 2 — Interval Tested from 4460 ft. to 4490 ft. — Total Depth 4490 ft.

Packer Depth 4455 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 4460 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4463 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4467 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Leben Drilling Rig #11 — Drill Collar Length 156 — I. D. 2.2 in.

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

Weight 9.7 — Water Loss 9.2 cc. — Drill Pipe Length 4283 — I. D. 3.2 in.

Chlorides 26,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½ in.

Jars: Make - — Serial Number - — Anchor Length 30 ft. — Size 5½ 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 4" in.

Blow: Weak and died in twenty=five minutes on initial flow period. Dead on final flow period.

Recovered 120 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Reset packer twice - Packer seat failed first attempt.

Time Set Packer(s) 5:30 A.M. P.M. — Time Started Off Bottom 7:30 A.M. P.M. — Maximum Temperature 121°

Initial Hydrostatic Pressure			(A)	2340	P.S.I.	
Initial Flow Period	Minutes 30		(B)	108	P.S.I. to (C)	108 P.S.I.
Initial Closed In Period	Minutes 24		(D)	501	P.S.I.	
Final Flow Period	Minutes 30		(E)	121	P.S.I. to (F)	121 P.S.I.
Final Closed In Period	Minutes 30		(G)	137	P.S.I.	
Final Hydrostatic Pressure			(H)	2323	P.S.I.	

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WESTERN TESTING CO., INC.
Pressure Data

Date 9/22/82 Test Ticket No. 16142

Recorder No. 1566 Capacity 4300 Location 4463 Ft.

Clock No. --- Elevation 2081 Kelly Bushing Well Temperature 121 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2340 P.S.I.	Open Tool	5:30A M	
B	First Initial Flow Pressure	108 P.S.I.	First Flow Pressure	30 Mins	30 Mins.
C	First Final Flow Pressure	108 P.S.I.	Initial Closed-in Pressure	30 Mins	24 Mins.
D	Initial Closed-in Pressure	501 P.S.I.	Second Flow Pressure	30 Mins	30 Mins.
E	Second Initial Flow Pressure	121 P.S.I.	Final Closed-in Pressure	30 Mins	30 Mins.
F	Second Final Flow Pressure	121 P.S.I.			
G	Final Closed-in Pressure	137 P.S.I.			
H	Final Hydrostatic Mud	2323 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	108
P 2	5	108
P 3	10	108
P 4	15	108
P 5	20	108
P 6	25	108
P 7	30	108
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 8 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	108
3	109
6	119
9	463
12	473
15	478
18	483
21	493
24	501

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

Point Minutes	Press.
0	121
5	121
10	121
15	122
20	126
25	121
30	121

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

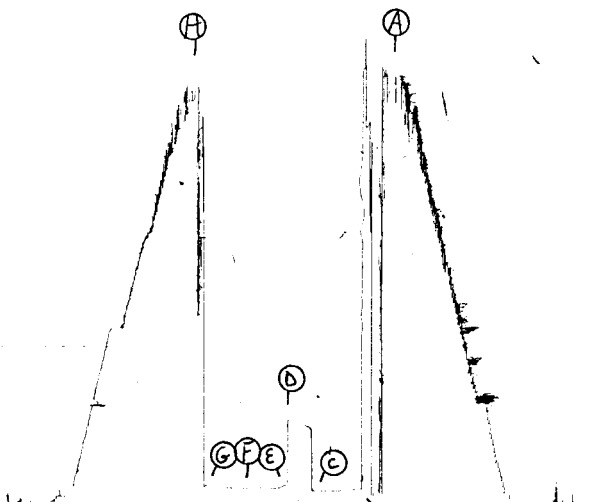
Point Minutes	Press.
0	121
3	121
6	122
9	123
12	124
15	125
18	127
21	129
24	131
27	134
30	137

1566

10

TKT # 16142

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OK

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 16142

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 2081 KB Formation _____ Eff. Pay _____ Ft.

District Pratt Date 9-22-82 Customer Order No. _____

COMPANY NAME Leben Drlg Company

ADDRESS 105 S. Bdwy. Bdwy Plaza Bldg Suite 640 Wichita Ks 67202

LEASE AND WELL NO. Betschart #1 COUNTY Pratt STATE Ks. Sec. 4 Twp. 28 Rge. 15W

Mail Invoice To #1 BETSCHART (Co. Name) (Address) No. Copies Requested _____

Mail Charts To _____ (Address) No. Copies Requested 10

Formation Test No. 2 Interval Tested From 4460 ft. to 4490 ft. Total Depth 4490 ft.

Packer Depth 4455 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 4460 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4463 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 4467 ft. Recorder Number 3086 Cap. 4500

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

Drilling Contractor Leben Rig 11

Mud Type Starch Viscosity 60

Weight 9.7 Water Loss 9.2 cc.

Chlorides 26,000 P.P.M.

Jars: Make — Serial Number —

Did Well Flow? NO Reversed Out NO

Drill Collar Length 156' I. D. 2.2 in.

Weight Pipe Length _____ I. D. _____ in.

Drill Pipe Length 4283' I. D. 3.2 in.

Test Tool Length 21 ft. Tool Size 5 1/2 in.

Anchor Length 30 ft. Size 5 1/2 in.

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4" in.

Blow: WK died in 25 min in I.F.P. Dead F.F.P.

RECEIVED
SEP 24 1982

Recovered 120' ft. of Drlg. mud.

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: Reset Packer Twice b/Test as Packer Seat Failed 1st attempt!

Time On Location 12:45 A.M./P.M. Time Pick Up Tool 3:15 A.M./P.M. Time Off Location 11:00 A.M./P.M.

Time Set Packer(s) 5:30 A.M./P.M. Time Started Off Bottom 7:30 A.M./P.M. Maximum Temperature 121°

Initial Hydrostatic Pressure			(A)	2340	P.S.I.	
Initial Flow Period	Minutes	30	(B)	118	P.S.I. to (C)	108 P.S.I.
Initial Closed In Period	Minutes	30	(D)	454	P.S.I.	
Final Flow Period	Minutes	30	(E)	140	P.S.I. to (F)	118 P.S.I.
Final Closed In Period	Minutes	30	(G)	129	P.S.I.	
Final Hydrostatic Pressure			(H)	2384	P.S.I.	

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages 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, of 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 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Robert L Laymon
Signature of Customer or his authorized representative

Western Representative Mike Rogers Thanks Again!

FIELD INVOICE

Open Hole Test	$	675.00
Misrun	$	
Straddle Test	$	
Jars	$	
Selective Zone	$	
Safety Joint	$	
Standby	$	
Evaluation	$	
Extra Packer	$	250.00
Circ. Sub.	$	
Mileage	$	
Fluid Sampler	$	
5 Extra Charts @ 2.50	$	12.50
Insurance	$	
Telecopier	$	
TOTAL	$	937.50

WESTERN TESTING CO., INC.
Pressure Data

Date 9-22 | Test Ticket No. 16142

Recorder No. 1566 | Capacity 4300 | Location 4463 Ft.

Clock No. — — — — | Elevation 2081 KB | Well Temperature 121 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2340	P.S.I.
B	First Initial Flow Pressure	108	P.S.I.
C	First Final Flow Pressure	108	P.S.I.
D	Initial Closed-in Pressure	501	P.S.I.
E	Second Initial Flow Pressure	121	P.S.I.
F	Second Final Flow Pressure	121	P.S.I.
G	Final Closed-in Pressure	137	P.S.I.
H	Final Hydrostatic Mud	2323	P.S.I.

	Time Given	Time Computed
Open Tool	5:30 AM	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	30 Mins.	24 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	30 Mins.	30 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	108
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	108
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: 8 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	108
3	109
6	119
9	463
12	473
15	478
18	483
21	493
24	501
27	
30	
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	121
5	121
10	121
15	122
20	126 ok
25	121
30	121
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

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

Point Minutes	Press.
0	121
3	128
6	122
9	123
12	124
15	125
18	127
21	129
24	131
27	134
30	137
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

WTC - 4

Company Leben Drilling Company — Lease & Well No. #1 Betschart

Elevation 2081 Kelly Bushing — Formation Cherokee — Effective Pay -- Ft. — Ticket No. 16143

Date 9/ 23/82 — Sec. 4 — Twp. 28S — Range 15W — County Pratt — State Kansas

Test Approved by Robert L. Layman — Western Representative Mike Rogers

Formation Test No. 3 — Interval Tested from 4542 ft. to 4566 ft. — Total Depth 4566 ft.

Packer Depth 4537 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 4542 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4545 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4549 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Leben Drilling Rig #11 — Drill Collar Length 156 — I. D. 2.2 in.

Mud Type starch — Viscosity 47 — Weight Pipe Length - — I. D. - in.

Weight 9.6+ — Water Loss 10.4 cc. — Drill Pipe Length 4365 — I. D. 3.2 in.

Chlorides 26,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½ in.

Jars: Make - — Serial Number - — Anchor Length 24 ft. — Size 5½ 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 4" in.

Blow: Weak and dead in twenty-seven minutes on initial flow period. Dead on final flow period.

Recovered 10 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 6:30 ~~P.M.~~ A.M. — Time Started Off Bottom 8:30 ~~A.M.~~ P.M. — Maximum Temperature 123°

Initial Hydrostatic Pressure			(A) 2378	P.S.I.		
Initial Flow Period	Minutes 30	(B) 50	P.S.I. to	(C) 50	P.S.I.	
Initial Closed In Period	Minutes 30	(D) 50	P.S.I.			
Final Flow Period	Minutes 30	(E) 50	P.S.I. to	(F) 50	P.S.I.	
Final Closed In Period	Minutes 30	(G) 56	P.S.I.			
Final Hydrostatic Pressure			(H) 2369	P.S.I.		

WTC

WESTERN TESTING CO., INC.
Pressure Data

Date 9/23/82 Test Ticket No. 16143

Recorder No. 1566 Capacity 4300 Location 4545 Ft.

Clock No. -- Elevation 2081 Kelly Bushing Well Temperature 123 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2378 P.S.I.		Open Tool	6:30A M.	
B	First Initial Flow Pressure	50 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	50 P.S.I.		Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	50 P.S.I.		Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	50 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	50 P.S.I.				
G	Final Closed-in Pressure	56 P.S.I.				
H	Final Hydrostatic Mud	2369 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.

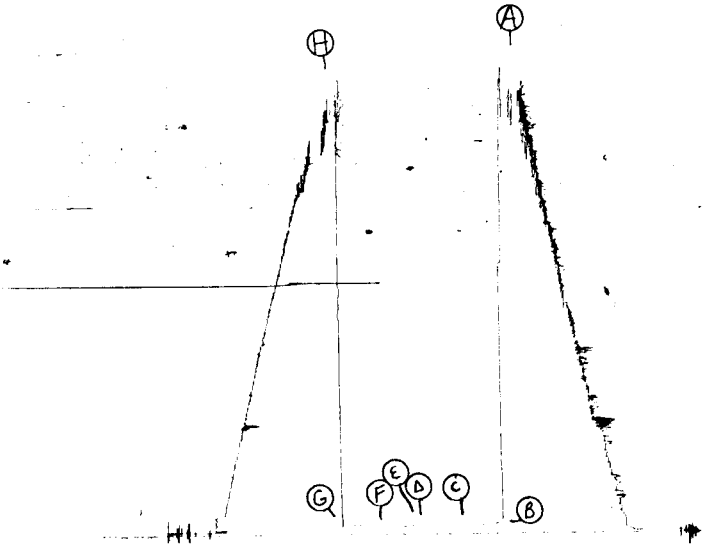
Second Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

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

Point	First Flow Pressure Mins.	First Flow Pressure Press.	Initial Shut-In Point Minutes	Initial Shut-In Press.	Second Flow Pressure Point Minutes	Second Flow Pressure Press.	Final Shut-In Point Minutes	Final Shut-In Press.
P 1	0	50	0	50	0	50	0	50
P 2	5	50	3	50	5	50	3	51
P 3	10	50	6	50	10	50	6	52
P 4	15	50	9	50	15	50	9	53
P 5	20	50	12	50	20	50	12	54
P 6	25	50	15	50	25	50	15	55
P 7	30	50	18	50	30	50	18	56
P 8			21	50			21	56
P 9			24	50			24	56
P10			27	50			27	56
P11			30	50			30	56
P12								
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								

TKT # 16143

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OK

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 16143

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 2081 KB Formation Cherokee Eff. Pay Ft.

District Pratt Date 9-23-82 Customer Order No.

COMPANY NAME Leben Drlg Co.

ADDRESS

LEASE AND WELL NO. #1 BETSCHART COUNTY Pratt STATE Ks. Sec. 4 Twp. 28 Rge. 15W

Mail Invoice To Co. Name Address No. Copies Requested 10

Mail Charts To Address No. Copies Requested

Formation Test No. 3 Interval Tested From 4542 ft. to 4566 ft. Total Depth 4566 ft.

Packer Depth 4537 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 4542 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4545 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 4549 ft. Recorder Number 3086 Cap. 4500

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

Drilling Contractor Cotools Rig 11

Mud Type STARCH Viscosity 47

Weight 9.6+ Water Loss 10.4 cc.

Chlorides 26,000 P.P.M.

Jars: Make — Serial Number —

Did Well Flow? no Reversed Out no

Drill Collar Length 156' I. D. 2.2 in.

Weight Pipe Length — I. D. — in.

Drill Pipe Length 4365' I. D. 3.2 in.

Test Tool Length 21' ft. Tool Size 5 1/2 in.

Anchor Length 24' ft. Size 5 1/2 in.

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4" in.

Blow: WK dead in 27 min I.F.P. dead F.F.P.

Recovered 10' ft. of Drlg. mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time On Location 3:45 A.M./P.M. Time Pick Up Tool 4:00 A.M./P.M. Time Off Location 11:00 A.M./P.M.

Time Set Packer(s) 6:30 A.M./P.M. Time Started Off Bottom 8:30 A.M./P.M. Maximum Temperature 123°

Initial Hydrostatic Pressure			(A)	2515	P.S.I.	
Initial Flow Period	Minutes 30	(B)	64	P.S.I. to (C)	54	P.S.I.
Initial Closed In Period	Minutes 30	(D)	54	P.S.I.		
Final Flow Period	Minutes 30	(E)	54	P.S.I. to (F)	54	P.S.I.
Final Closed In Period	Minutes 30	(G)	54	P.S.I.		
Final Hydrostatic Pressure		(H)	2537	P.S.I.		

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages 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, of 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 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Robert L Leben
Signature of Customer or his authorized representative

Western Representative Mike Rogers Thanks Again!

FIELD INVOICE

Open Hole Test	$	675.00
Misrun	$	
Straddle Test	$	
Jars	$	
Selective Zone	$	
Safety Joint	$	
Standby	$	
Evaluation	$	
Extra Packer	$	
Circ. Sub.	$	
Mileage	$	
Fluid Sampler	$	
5 Extra Charts @ 2.50	$	12.50
Insurance	$	
Telecopier	$	
TOTAL	$	687.50

WESTERN TESTING CO., INC.
Pressure Data

Date 9-23 | Test Ticket No. 16143

Recorder No. 1566 | Capacity 4300 | Location 4545 Ft.

Clock No. — — — — | Elevation 2081 KB | Well Temperature 123 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2378	P.S.I.		
B	First Initial Flow Pressure	50	P.S.I.	Open Tool 6:30 AM	
C	First Final Flow Pressure	50	P.S.I.	First Flow Pressure 30 Mins.	30 Mins.
D	Initial Closed-in Pressure	50	P.S.I.	Initial Closed-in Pressure 30 Mins.	30 Mins.
E	Second Initial Flow Pressure	50	P.S.I.	Second Flow Pressure 30 Mins.	30 Mins.
F	Second Final Flow Pressure	50	P.S.I.		
G	Final Closed-in Pressure	56	P.S.I.	Final Closed-in Pressure 30 Mins.	30 Mins.
H	Final Hydrostatic Mud	2369	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	50
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	50
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: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	50
3	
6	
9	
12	
15	50
18	
21	
24	
27	
30	50
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

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

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

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

Point Minutes	Press.
0	50
3	51
6	52
9	53
12	54
15	55
18	56
21	
24	
27	
30	56
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

WTC - 4

Company Leben Drilling Company | Lease & Well No. Betschart #1

Elevation 2081 Kelly Bushing | Formation Mississippi | Effective Pay -- Ft. | Ticket No. 16144

Date 9/ 23 /82 | Sec. 4 | Twp. 28S | Range 15W | County Pratt | State Kansas

Test Approved by Robert L. Layman | Western Representative Mike Rogers

Formation Test No. 4 | Interval Tested from 4591 ft. to 4606 ft. | Total Depth 4606 ft.

Packer Depth 4586 ft. | Size 6 5/8 in. | Packer Depth - ft. | Size - in.

Packer Depth 4591 ft. | Size 6 5/8 in. | Packer Depth - ft. | Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4594 ft. | Recorder Number 1566 | Cap. 4300

Bottom Recorder Depth (Outside) 4598 ft. | Recorder Number 3086 | Cap. 4500

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

Drilling Contractor Leben Drilling Rig #11 | Drill Collar Length 156 | I. D. 2.2 in.

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

Weight 9.7 | Water Loss 12.6 cc. | Drill Pipe Length 4414 | I. D. 3.2 in.

Chlorides 26,000 P.P.M. | Test Tool Length 21 ft. | Tool Size 5½ in.

Jars: Make - | Serial Number - | Anchor Length 15 ft. | Size 5½ 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 4" in.

Blow: Fair three inches building to strong ten inches then depleting to four inches on initial flow period. Strong fluctuating blow on final flow period.

Recovered 90 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 1:15 A.M. ~~P.M.~~ | Time Started Off Bottom 5:15 A.M. ~~P.M.~~ | Maximum Temperature 123°

Initial Hydrostatic Pressure			(A)	2411	P.S.I.	
Initial Flow Period	Minutes 45		(B)	58	P.S.I. to (C)	58 P.S.I.
Initial Closed In Period	Minutes 57		(D)	342	P.S.I.	
Final Flow Period	Minutes 45		(E)	78	P.S.I. to (F)	78 P.S.I.
Final Closed In Period	Minutes 90		(G)	631	P.S.I.	
Final Hydrostatic Pressure			(H)	2402	P.S.I.	

WTC

WESTERN TESTING CO., INC.
Pressure Data

Date 9/23/82 Test Ticket No. 16144

Recorder No. 1566 Capacity 4300 Location 4594 Ft.

Clock No. -- Elevation 2081 Kelly Bushing Well Temperature 123 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2411 P.S.I.	Open Tool	1:15A M	
B First Initial Flow Pressure	58 P.S.I.	First Flow Pressure	45 Mins.	45 Mins.
C First Final Flow Pressure	58 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D Initial Closed-in Pressure	342 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E Second Initial Flow Pressure	78 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	78 P.S.I.			
G Final Closed-in Pressure	631 P.S.I.			
H Final Hydrostatic Mud	2402 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	58
P 2 5	58
P 3 10	58
P 4 15	58
P 5 20	58
P 6 25	58
P 7 30	58
P 8 35	58
P 9 40	58
P10 45	58
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	58
3	67
6	78
9	91
12	106
15	120
18	135
21	149
24	165
27	183
30	198
33	215
36	229
39	245
42	259
45	278
48	294
51	310
54	326
57	342

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

Point Minutes	Press.
0	78
5	78
10	78
15	78
20	78
25	78
30	78
35	78
40	78
45	78

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	78
3	82
6	94
9	112
12	130
15	149
18	170
21	191
24	214
27	235
30	252
33	270
36	292
39	313
42	336
45	358
48	377
51	398
54	418
57	438
60	456

CONTINUED

WESTERN TESTING CO., INC.
Pressure Data

Date 9/23/82 Test Ticket No. 16144

Recorder No. 1566 Capacity 4300 Location 4594 Ft.

Clock No. -- Elevation 2081 Kelly Bushing Well Temperature 123 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2411	P.S.I.	Open Tool	1:15A M	
B	First Initial Flow Pressure	58	P.S.I.	First Flow Pressure	45 Mins.	45 Mins.
C	First Final Flow Pressure	58	P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D	Initial Closed-in Pressure	342	P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	78	P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	78	P.S.I.			
G	Final Closed-in Pressure	631	P.S.I.			
H	Final Hydrostatic Mud	2402	P.S.I.			

PRESSURE BREAKDOWN

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

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

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

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

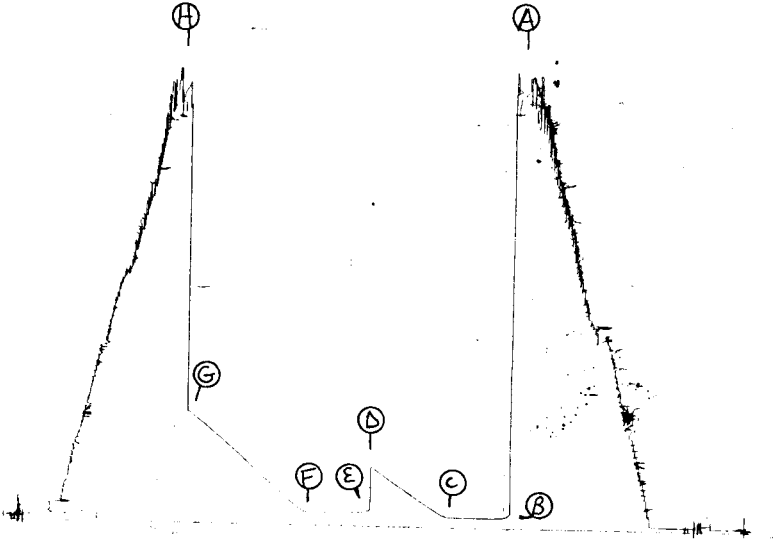
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	475
P 2						66	497
P 3						69	515
P 4						72	533
P 5						75	553
P 6						78	571
P 7						81	586
P 8						84	603
P 9						87	620
P10						90	631
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

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1560

TKT # 16144

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WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET Nº 16144

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 2081 KB Formation Miss Eff. Pay Ft.

District Pratt Date 9-23-82 Customer Order No.

COMPANY NAME Leben Drlg. Company

ADDRESS 105 S. Emery Emery Plaza Bldg. Suite 640 Wichita, Ks 67202

LEASE AND WELL NO. Betschart #1 COUNTY Pratt STATE Ks. Sec. 4 Twp. 28 Rge. 15W

Mail Invoice To #1 BETSCHART No. Copies Requested
Co. Name Address

Mail Charts To No. Copies Requested 10
Address

Formation Test No. 4 Interval Tested From 4591 ft. to 4606 ft. Total Depth 4606 ft.

Packer Depth 4586 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 4591 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4594 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 4598 ft. Recorder Number 3086 Cap. 4500

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Rig 11

Mud Type Starch Viscosity 52

Weight 9.7 Water Loss 12.6 cc.

Chlorides 24,000 P.P.M.

Jars: Make — Serial Number —

Did Well Flow? no Reversed Out no

Drill Collar Length 156' I. D. 2.2 in.

Weight Pipe Length — I. D. — in.

Drill Pipe Length 4414' I. D. 3.2 in.

Test Tool Length 21 ft. Tool Size 5 1/2 in.

Anchor Length 15 ft. Size 5 1/2 in.

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4" in.

Blow: Fair 3 inch Building to STRONG 10 inch Then depleting to 4 inches I.F.P STRONG Fluctuating Blow F.F.P.

Recovered 90' ft. of Drlg. mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Original only

RECEIVED
SEP 29 1982

Time On Location 9:45 A.M. Time Pick Up Tool 11:00 A.M. Time Off Location 8:15 A.M.

Time Set Packer(s) 1:15 P.M. Time Started Off Bottom 5:15 P.M. Maximum Temperature 123°

Initial Hydrostatic Pressure			(A)	2308	P.S.I.	
Initial Flow Period	Minutes	45	(B)	64	P.S.I. to (C)	64 P.S.I.
Initial Closed In Period	Minutes	60	(D)	335	P.S.I.	
Final Flow Period	Minutes	45	(E)	86	P.S.I. to (F)	75 P.S.I.
Final Closed In Period	Minutes	90	(G)	615	P.S.I.	
Final Hydrostatic Pressure			(H)	2319	P.S.I.	

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages 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, of 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 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Robert L Wagner
Signature of Customer or his authorized representative

Western Representative Mike Rogers Thank You!

FIELD INVOICE

Open Hole Test	$	675.00
Misrun	$	
Straddle Test	$	
Jars	$	
Selective Zone	$	
Safety Joint	$	
Standby	$	
Evaluation	$	
Extra Packer	$	
Circ. Sub.	$	
Mileage	$	
Fluid Sampler	$	
5 Extra Charts 2.50	$	12.50
Insurance	$	
Telecopier	$	
TOTAL	$	~~675.00~~ 687.50

WESTERN TESTING CO., INC.
Pressure Data

Date 9-23 | Test Ticket No. 16144

Recorder No. 1566 | Capacity 4300 | Location 4594 Ft.

Clock No. — — — — | Elevation 2081 KB | Well Temperature 123 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2411	P.S.I.		
B First Initial Flow Pressure	58	P.S.I.	Open Tool 1:15 AM	
C First Final Flow Pressure	58	P.S.I.	First Flow Pressure 45 Mins.	45 Mins.
D Initial Closed-in Pressure	342	P.S.I.	Initial Closed-in Pressure 60 Mins.	57 Mins.
E Second Initial Flow Pressure	78	P.S.I.	Second Flow Pressure 45 Mins.	45 Mins.
F Second Final Flow Pressure	78	P.S.I.	Final Closed-in Pressure 90 Mins.	90 Mins.
G Final Closed-in Pressure	631	P.S.I.		
H Final Hydrostatic Mud	2402	P.S.I.		

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	58
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	
P 8	35	
P 9	40	
P10	45	58
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	58
3	67
6	78
9	91
12	106
15	120
18	135
21	149
24	165
27	183
30	198
33	215
36	229
39	245
42	259
45	278
48	294
51	310
54	326
57	342

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

Point Minutes	Press.
0	78
5	
10	
15	
20	
25	
30	
35	
40	
45	78
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	78
3	82
6	94
9	112
12	130
15	149
18	170
21	191
24	214
27	235
30	252
33	270
36	292
39	313
42	336
45	358
48	377
51	398
54	418
57	438
60	456

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WESTERN TESTING CO., INC.
Pressure Data

Date. _____ Test Ticket No. 16144

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
Breakdown: _____ 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: _____ Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
63	
66	
69	
72	
75	
78	
81	
84	
87	
90	
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

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

Point Minutes	Press.

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

Point Minutes	Press.
63	475
66	497
69	515
72	533
75	553
78	571
81	586
84	603
87	620
90	631
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

WTC - 4

Company Leben Drilling Company — Lease & Well No. Betschart #1

Elevation 2081 Kelly Bushing — Formation Kinderhook — Effective Pay -- Ft. — Ticket No. 16145

Date 9/ 24/82 — Sec. 4 — Twp. 28S — Range 15W — County Pratt — State Kansas

Test Approved by Kenneth d. Spear — Western Representative Mike Rogers

Formation Test No. 5 — Interval Tested from 4606 ft. to 4620 ft. — Total Depth 4620 ft.

Packer Depth 4601 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 4606 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4609 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4613 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Leben Drilling Rig #11 — Drill Collar Length 156 — I. D. 2.2 in.

Mud Type starch — Viscosity 47 — Weight Pipe Length - — I. D. - in.

Weight 9.6 — Water Loss 12.6 cc. — Drill Pipe Length 4429 — I. D. 3.2 in.

Chlorides 26,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½ in.

Jars: Make - — Serial Number - — Anchor Length 14 ft. — Size 5½ 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 4" in.

Blow: Weak and died in ten minutes on final flow period.

Recovered 100 ft. of very slightly gas and water cut drilling mud with 5% gas;10%water;85%mud

Recovered ft. of with 42,000 ppm chlorides

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Read Outside Chart

Time Set Packer(s) 7:30 ~~A.M.~~ P.M. — Time Started Off Bottom 10:30 ~~A.M.~~ P.M. — Maximum Temperature 122°

Initial Hydrostatic Pressure		(A)	2401	P.S.I.
Initial Flow Period	Minutes 30	(B)	11 P.S.I. to (C)	11 P.S.I.
Initial Closed In Period	Minutes 63	(D)	1151	P.S.I.
Final Flow Period	Minutes 30	(E)	56 P.S.I. to (F)	56 P.S.I.
Final Closed In Period	Minutes 60	(G)	977	P.S.I.
Final Hydrostatic Pressure		(H)	2392	P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 9/24/82 Test Ticket No. 16145

Recorder No. 1566 Capacity 4300 Location 4609 Ft.

Clock No. -- Elevation 2081 Kelly Bushing Well Temperature 122 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2401	P.S.I.	Open Tool	7:30P	M		
B	First Initial Flow Pressure	11	P.S.I.	First Flow Pressure	30	Mins.	30	Mins.
C	First Final Flow Pressure	11	P.S.I.	Initial Closed-in Pressure	60	Mins.	63	Mins.
D	Initial Closed-in Pressure	1151	P.S.I.	Second Flow Pressure	30	Mins.	30	Mins.
E	Second Initial Flow Pressure	56	P.S.I.	Final Closed-in Pressure	60	Mins.	60	Mins.
F	Second Final Flow Pressure	56	P.S.I.					
G	Final Closed-in Pressure	977	P.S.I.					
H	Final Hydrostatic Mud	2392	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	11
P 2	5	11
P 3	10	11
P 4	15	11
P 5	20	11
P 6	25	11
P 7	30	11
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

Point Minutes	Press.
0	11
3	18
6	27
9	53
12	140
15	327
18	516
21	669
24	781
27	853
30	909
33	952
36	986
39	1019
42	1046
45	1065
48	1085
51	1103
54	1118
57	1134
60	1146
63	1151

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

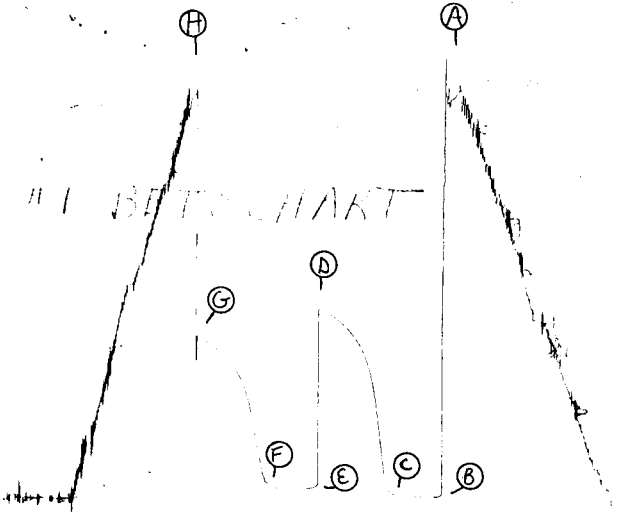
Point Minutes	Press.
0	56
5	56
10	56
15	56
20	56
25	56
30	56

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	56
3	64
6	83
9	118
12	206
15	325
18	455
21	569
24	651
27	712
30	760
33	797
36	830
39	856
42	877
45	899
48	917
51	935
54	951
57	964
60	977

10

TKT # 16145



OK

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 16145

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 2081 KB Formation Kinderhook Eff. Pay Ft.

District Pratt Date 9-24-82 Customer Order No.

COMPANY NAME Leben Dolg. Company

ADDRESS 105 S. Bdwy, Bdwy Plaza Bldg Suite 640 Wichita Ks 67202

LEASE AND WELL NO. Betschart #1 COUNTY Pratt STATE Ks. Sec. 4 Twp. 28 Rge. 15W

Mail Invoice To #1 BETSCHART No. Copies Requested
Co. Name Address

Mail Charts To No. Copies Requested 10
Address

Formation Test No. 5 Interval Tested From 4606 ft. to 4620 ft. Total Depth 4620 ft.

Packer Depth 4601 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Packer Depth 4606 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4609 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 4613 ft. Recorder Number 3086 Cap. 4500

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Rig 11

Mud Type Starch Viscosity 47

Weight 9.6 Water Loss 12.6 cc.

Chlorides 26,000 P.P.M.

Jars: Make Serial Number

Did Well Flow? no Reversed Out no

Drill Collar Length 156' I. D. 2 2 in.

Weight Pipe Length I. D. in.

Drill Pipe Length 4429' I. D. 3.2 in.

Test Tool Length 21' ft. Tool Size 5 1/2 in.

Anchor Length 14' ft. Size 5 1/2 in.

Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4" in.

Blow: Weak - Died in 10 min. F.F.P.

Recovered 100' ft. of Very Slightly gas & sandwater cut drlg. mud w/ 5% gas 10% water 85% mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Original only needed one chart needed

RECEIVED
SEP 29 1982

Time On Location 4:00 A.M. (P.M.) Time Pick Up Tool 5:00 A.M. (P.M.) Time Off Location A.M. P.M.

Time Set Packer(s) 7:30 A.M. (P.M.) Time Started Off Bottom 10:30 A.M. (P.M.) Maximum Temperature 122°

Initial Hydrostatic Pressure			(A)	2482	P.S.I.	
Initial Flow Period	Minutes	30	(B)	32	P.S.I. to (C)	43 P.S.I.
Initial Closed In Period	Minutes	60	(D)	1184	P.S.I.	
Final Flow Period	Minutes	30	(E)	75	P.S.I. to (F)	86 P.S.I.
Final Closed In Period	Minutes	60	(G)	1012	P.S.I.	
Final Hydrostatic Pressure			(H)	2482	P.S.I.	

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages 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, of 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 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Kenneth D Spear
Signature of Customer or his authorized representative

Western Representative Mike Rogers Thanks Again!

FIELD INVOICE

Open Hole Test	$ 675.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
5 Extra Charts @ 2.50	$ 12.50
Insurance	$
Telecopier	$
TOTAL	$ 687.50

WESTERN TESTING CO., INC.
Pressure Data

Date 9-24 Test Ticket No. 16145

Recorder No. 1566 Capacity 4300 Location 4609 Ft.

Clock No. — — — — Elevation 2081 KB Well Temperature 122 °F

Point	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	2401 P.S.I.	Open Tool	7:30 PM	
First Initial Flow Pressure	11 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
First Final Flow Pressure	11 P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins.
Initial Closed-in Pressure	1151 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
Second Initial Flow Pressure	56 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
Second Final Flow Pressure	56 P.S.I.			
Final Closed-in Pressure	977 P.S.I.			
Final Hydrostatic Mud	2392 P.S.I.			

PRESSURE BREAKDOWN

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

Point	Minutes	Press.
1	0	11
2	5	
3	10	
4	15	
5	20	
6	25	
7	30	11
8	35	
9	40	
10	45	
11	50	
12	55	
13	60	
14		
15		
16		
17		
18		
19		
20		

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

Point	Minutes	Press.
0		11
3		18
6		27
9		53
12		140
15		327
18		516
21		669
24		781
27		853
30		909
33		952
36		986
39		1019
42		1046
45		1065
48		1085
51		1103
54		1118
57		1134
60		1146
63		1151

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

Point	Minutes	Press.
0		56
5		
10		
15		
20		
25		
30		56
35		
40		
45		
50		
55		
60		
65		
70		
75		
80		
85		
90		

Final Shut-In
Breakdown: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
0		56
3		64
6		83
9		118
12		206
15		325
18		455
21		569
24		651
27		712
30		760
33		797
36		830
39		856
42		877
45		899
48		917
51		935
54		951
57		964
60		977