OK

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 18307

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

Elevation 1441 KB Formation Kansas City Eff. Pay ____ Ft.

District Pratt Date 11-10-82 Customer Order No. ____

COMPANY NAME Pickrell Drill Co Litwin Bldg Suite #205
ADDRESS 110 North Market Wichita Kansas 67202
LEASE AND WELL NO. 1 Kopf D COUNTY Kingman STATE Kans Sec. 13 Twp 30S Rge 7W
Mail Invoice To #1 "D" KOPF (Co. Name) Same (Address) No. Copies Requested Reg
Mail Charts To Same (Address) No. Copies Requested Reg

Formation Test No. 1 Interval Tested From 3748 ft. to 3772 ft. Total Depth 3772 ft.
Packer Depth 3743 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.
Packer Depth 3748 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.
Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3752 ft. Recorder Number 2606 Cap. 4150
Bottom Recorder Depth (Outside) 3755 ft. Recorder Number 4332 Cap. 4200
Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Co tools Reg 10 Drill Collar Length 249 I. D. 2 1/4 in.
Mud Type Premix Viscosity 46 Weight Pipe Length — I. D. — in.
Weight 9.4 Water Loss 12.0 cc. Drill Pipe Length 3479 I. D. 3.8 in.
Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.
Jars: Make NO Serial Number — Anchor Length 24 ft. Size 5 1/2 OD 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 1/2 FH in.

Blow:

Recovered ____ ft. of
Recovered ____ ft. of Misrun
Recovered ____ ft. of Packer Seat failed to hold
Recovered ____ ft. of
Recovered 1100 ft. of Drilling mud.
Remarks:

RECEIVED NOV 12 1982

Time On Location 11:00 A.M. P.M. Time Pick Up Tool 11:30 A.M. P.M. Time Off Location — A.M. P.M.
Time Set Packer(s) 1:30 A.M. P.M. Time Started Off Bottom 1:50 A.M. P.M. Maximum Temperature —

Initial Hydrostatic Pressure ..... (A) X 1948 P.S.I.
Initial Flow Period ..... Minutes 10 (B) ____ P.S.I. to (C) ____ P.S.I.
Initial Closed In Period ..... Minutes 10 (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) X 1905 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 Bill Klever
Signature of Customer or his authorized representative

Western Representative Rod Tritt Thank you

FIELD INVOICE

Open Hole Test	$
Misrun	$ 400.00
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$
Insurance	$
Telecopier	$
TOTAL	$ 400.00

TKT # 18307

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2606 DST#1

TKT # 18307

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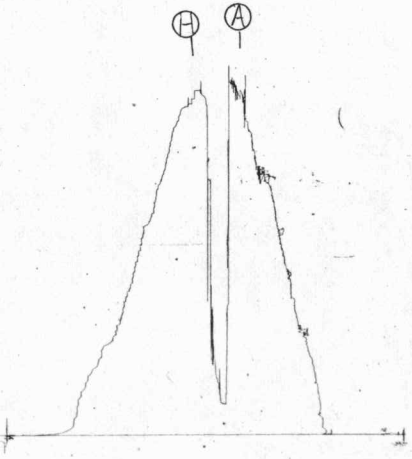

Company Pickrell Drilling Company — Lease & Well No. #1 "D" Kopf

Elevation 1441 Kelly Bushing — Formation Kansas City — Effective Pay ---- Ft. — Ticket No. 18307

Date 11/ 10/82 — Sec. 13 — Twp. 30S — Range 7W — County Kingman — State Kansas

Test Approved by Bill Klaver — Western Representative Rod TRitt

Formation Test No. 1 — Interval Tested from 3748 ft. to 3772 ft. — Total Depth 3772 ft.

Packer Depth 3743 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 3748 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3752 ft. — Recorder Number 2606 — Cap. 4150

Bottom Recorder Depth (Outside) 3755 ft. — Recorder Number 4332 — Cap. 4200

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

Drilling Contractor Pickrell Drilling Rig #10 — Drill Collar Length 249 — I. D. 2¼ in.

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

Weight 9.4 — Water Loss 12.0 cc. — Drill Pipe Length 3479 — I. D. 3.8 in.

Chlorides 14,000 P.P.M. — Test Tool Length 20 ft. — Tool Size 5½OD in.

Jars: Make - — Serial Number - — Anchor Length 24 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 4½FH in.

Blow: MISRUN

Recovered ft. of

Recovered ft. of

Recovered 1100 ft. of drilling mud

Recovered ft. of MISRUN

Recovered ft. of

Remarks: PACKER SEAT FAILED TO HOLD

Time Set Packer(s) 1:30 ~~A.M.~~ P.M. — Time Started Off Bottom 1:50 ~~A.M.~~ P.M. — Maximum Temperature ---

Initial Hydrostatic Pressure ..... (A) 1948 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) 1905 P.S.I.

WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET Nº 18308

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

Elevation 1441 KB Formation Kansas City Eff. Pay Ft.

District PRATT Date 11-10-82 Customer Order No.

COMPANY NAME Pickrell Drilling Co. Litwin Bldg Suite 205

ADDRESS 110 North Market Wichita Kansas 67202

LEASE AND WELL NO. 1 Kopf D COUNTY Kingman STATE Kansas Sec 13 Twp 30S Rge. 7W

Mail Invoice To #1 "D" KOPF Same No. Copies Requested Reg
Co. Name Address

Mail Charts To Same No. Copies Requested Reg
Address

Formation Test No. 2 Interval Tested From 3742 ft. to 3772 ft. Total Depth 3772 ft.

Packer Depth 3737 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 3742 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3745 ft. Recorder Number 2606 Cap. 4150

Bottom Recorder Depth (Outside) 3748 ft. Recorder Number 4332 Cap. 4200

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

Drilling Contractor Co tools Rig 10 Drill Collar Length 249 I. D. 2 1/4 in.

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

Weight 9.4 Water Loss 12.0 cc. Drill Pipe Length 3473 I. D. 3.8 in.

Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make NO Serial Number — Anchor Length 30 ft. Size 5 1/2 OD 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 1/2 FH in.

Blow:

Recovered 670 ft. of Drilling mud

Recovered ft. of

Recovered ft. of Misrun Packer seat on fractured formation

Recovered ft. of

Recovered ft. of

Remarks:

RECEIVED
NOV 12 1982

Time On Location 4:00 A.M. (P.M.) Time Pick Up Tool 4:15 A.M. (P.M.) Time Off Location 8:00 A.M. (P.M.)

Time Set Packer(s) 5:40 A.M. (P.M.) Time Started Off Bottom 5:50 A.M. (P.M.) Maximum Temperature

Initial Hydrostatic Pressure		(A) X 1931	P.S.I.		
Initial Flow Period	Minutes	(B) Misrun	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) X 1913	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 Bill Klaver
Signature of Customer or his authorized representative

Western Representative Rod Tritt Thank you

FIELD INVOICE

Open Hole Test	$ 400.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$
Insurance	$
Telecopier	$
TOTAL	$ 400.00

TKT # 18308

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TKT # 18308

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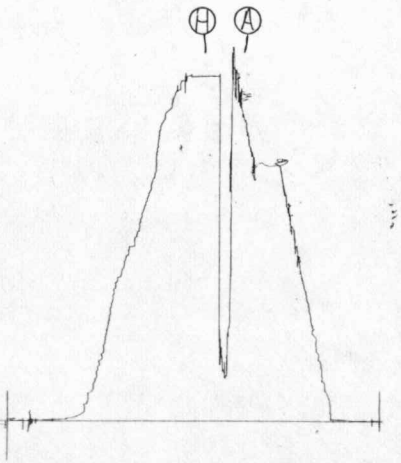

Company Pickrell Drilling Company — Lease & Well No. #1 "D" Kopf

Elevation 1441 Kelly Bushing — Formation Kansas City — Effective Pay ---- Ft. — Ticket No. 18308

Date 11/10 /82 — Sec. 13 — Twp. 30S — Range 7W — County Kingman — State Kansas

Test Approved by Bill Klaver — Western Representative Rod Tritt

Formation Test No. 2 — Interval Tested from 3742 ft. to 3772 ft. — Total Depth 3772 ft.

Packer Depth 3737 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 3742 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3745 ft. — Recorder Number 2606 — Cap. 4150

Bottom Recorder Depth (Outside) 3748 ft. — Recorder Number 4332 — Cap. 4200

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

Drilling Contractor Pickrell Drilling Rig #10 — Drill Collar Length 249 — I. D. 2¼ in.

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

Weight 9.4 — Water Loss 12.0 cc. — Drill Pipe Length 3743 — I. D. 3.8 in.

Chlorides 14,000 P.P.M. — Test Tool Length 20 ft. — Tool Size 5½OD in.

Jars: Make - — Serial Number - — Anchor Length 30 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 4½FH in.

Blow: MISRUN

Recovered 670 ft. of drilling mud

Recovered ____ ft. of

Recovered ____ ft. of

Recovered ____ ft. of

Recovered ____ ft. of

Remarks: MISRUN PACKER SEAT OR FRACTURED FORMATION.

Time Set Packer(s) 5:40 ~~A.M.~~ P.M. — Time Started Off Bottom 5:50 ~~A.M.~~ P.M. — Maximum Temperature --

Initial Hydrostatic Pressure ..... (A) 1931 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) 1913 P.S.I.

OK

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 18238

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

Elevation 1441 KB Formation Kansas City Eff. Pay ____ Ft.

District Pratt Date 10-11-82 Customer Order No. ____

COMPANY NAME Pickrell Drlg. Co. Lutenin Bldg Suite 205

ADDRESS 110 N. Market Wichita, Ks 67202

LEASE AND WELL NO. Kopf D-1 COUNTY Kingman STATE Ks. Sec. 13 Twp. 30 Rge. 7W

Mail Invoice To #1 "D" KOPF (Co. Name) (Address) No. Copies Requested ____

Mail Charts To ____ (Address) No. Copies Requested ____

Formation Test No. 3 Interval Tested From 3765 ft. to 3772' ft. Total Depth 3772' ft.

Packer Depth 3760 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 3765 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3766 ft. Recorder Number 1566' Cap. 4300

Bottom Recorder Depth (Outside) 3769 ft. Recorder Number 3086' Cap. 4500

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

Drilling Contractor Co Tools Rig 10 Drill Collar Length 250' I. D. 2.2 in.

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

Weight 9.4 Water Loss 12.0 cc. Drill Pipe Length 3494' I. D. 3.8 in.

Chlorides 14,000 P.P.M. Test Tool Length 21' ft. Tool Size 5 1/2 in.

Jars: Make — Serial Number — Anchor Length 7' ft. Size 5 1/2 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 1/2 in.

Blow: WK Building to 3 inches I.F.P. Very WK Throughout F.F.P.

Recovered 375 ft. of muddy Salt Water w/ 108,000 Clorides

Recovered ____ ft. of 25% mud 75% wtr.

Recovered ____ ft. of

Recovered ____ ft. of

Recovered ____ ft. of

Remarks: Tool Slid 3'-5' To Bottom!

RECEIVED NOV 12 1982

Time On Location 8:30 ~~A.M.~~ P.M. Time Pick Up Tool 2:30 A.M. ~~P.M.~~ Time Off Location 11:45 A.M. ~~P.M.~~

Time Set Packer(s) 4:00 A.M. ~~P.M.~~ Time Started Off Bottom 8:30 A.M. ~~P.M.~~ Maximum Temperature 118°

Initial Hydrostatic Pressure			(A)	1884 P.S.I.		
Initial Flow Period	Minutes	30	(B)	64 P.S.I.	to (C)	108 P.S.I.
Initial Closed In Period	Minutes	60	(D)	1463 P.S.I.		
Final Flow Period	Minutes	90	(E)	183 P.S.I.	to (F)	194 P.S.I.
Final Closed In Period	Minutes	90	(G)	1463 P.S.I.		
Final Hydrostatic Pressure			(H)	1884 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 Bill Klewen
Signature of Customer or his authorized representative

Western Representative Mike Rogers Thank You

FIELD INVOICE

Open Hole Test	$ 600
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage 55	$ —
Fluid Sampler	$
Extra Charts	$
Insurance	$
Telecopier	$
TOTAL	$ 600.00

WESTERN TESTING CO., INC.
Pressure Data

Date 10-11 | Test Ticket No. 18238

Recorder No. 1566 | Capacity 4300 | Location 3766 Ft

Clock No. — — — — | Elevation 1441 KB | Well Temperature 118 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1892	P.S.I.	Open Tool	4:00 AM	
B	First Initial Flow Pressure	60	P.S.I.	First Flow Pressure	30 Mins.	30 Mins
C	First Final Flow Pressure	108	P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins
D	Initial Closed-in Pressure	1462	P.S.I.	Second Flow Pressure	90 Mins.	85 Mins
E	Second Initial Flow Pressure	156	P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins
F	Second Final Flow Pressure	204	P.S.I.			
G	Final Closed-in Pressure	1465	P.S.I.			
H	Final Hydrostatic Mud	1892	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	60
P 2	5	60
P 3	10	65
P 4	15	77
P 5	20	89
P 6	25	102
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: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	108
3	1365
6	1396
9	1416
12	1428
15	1437
18	1441
21	1445
24	1449
27	1453
30	1456
33	1457
36	1458
39	1459
42	1460
45	1461
48	1462
51	⌇
54	⌇
57	
60	1462

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

Point Minutes	Press.
0	156
5	⌇
10	⌇
15	156
20	157
25	161
30	165
35	169
40	173
45	177
50	181
55	184
60	186
65	190
70	194
75	198
80	202
85	204
~~90~~	

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

Point Minutes	Press.
0	204
3	1317
6	1388
9	1412
12	1426
15	1433
18	1437
21	1441
24	1445
27	1449
30	1452
33	1454
36	1456
39	1457
42	1458
45	1459
48	1460
51	1461
54	1462
57	1463
60	1464

cont

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 18238

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	1465
66	
69	
72	
75	1465
78	
81	
84	
87	
90	1465
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

Company Pickrell Drilling Company — Lease & Well No. #1 "D" Kopf

Elevation 1441 Kelly Bushing — Formation Kansas City — Effective Pay ---- Ft. — Ticket No. 18238

Date 11/ /82 — Sec. 13 — Twp. 30S — Range 7W — County Kingman — State Kansas

Test Approved by Bill Klaver — Western Representative Mike Rogers

Formation Test No. 3 — Interval Tested from 3765 ft. to 3772 ft. — Total Depth 3772 ft.

Packer Depth 3760 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 3765 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3766 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 3769 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Pickrell Drilling Rig #10 — Drill Collar Length 250 — I. D. 2.2 in.

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

Weight 9.4 — Water Loss 12.0 cc. — Drill Pipe Length 3494 — I. D. 3.8 in.

Chlorides 14,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½OD in.

Jars: Make - — Serial Number - — Anchor Length 7 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 4½FH in.

Blow: Weak building to three inch blow on initial flow period. VEry weak throughout final flow period.

Recovered 375 ft. of muddy salt water with 108,000 ppm chlorides

Recovered ft. of 25% mud;75% water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Tool slid three to five feet to bottom.

Time Set Packer(s) 4:00 A.M. P.M. — Time Started Off Bottom 8:30 A.M. P.M. — Maximum Temperature 118°

Initial Hydrostatic Pressure		(A) 1892 P.S.I.		
Initial Flow Period	Minutes 30	(B) 60 P.S.I.	to (C) 108 P.S.I.	
Initial Closed In Period	Minutes 60	(D) 1462 P.S.I.		
Final Flow Period	Minutes 85	(E) 156 P.S.I.	to (F) 204 P.S.I.	
Final Closed In Period	Minutes 90	(G) 1465 P.S.I.		
Final Hydrostatic Pressure		(H) 1892 P.S.I.		

WTC-

WESTERN TESTING CO., INC.
Pressure Data

Date 11/11/82 Test Ticket No. 18238

Recorder No. 1566 Capacity 4300 Location 3766 Ft.

Clock No. - Elevation 1441 Kelly Bushing Well Temperature 118 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1892 P.S.I.	Open Tool		4:00A M	
B	First Initial Flow Pressure	60 P.S.I.	First Flow Pressure		30 Mins.	30 Mins.
C	First Final Flow Pressure	108 P.S.I.	Initial Closed-in Pressure		60 Mins.	60 Mins.
D	Initial Closed-in Pressure	1462 P.S.I.	Second Flow Pressure		90 Mins.	85 Mins.
E	Second Initial Flow Pressure	156 P.S.I.	Final Closed-in Pressure		90 Mins.	90 Mins.
F	Second Final Flow Pressure	204 P.S.I.				
G	Final Closed-in Pressure	1465 P.S.I.				
H	Final Hydrostatic Mud	1892 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	60
P 2 5	60
P 3 10	65
P 4 15	77
P 5 20	89
P 6 25	102
P 7 30	108
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	108
3	1365
6	1396
9	1416
12	1428
15	1437
18	1441
21	1445
24	1449
27	1453
30	1456
33	1457
36	1458
39	1459
42	1460
45	1461
48	1462
51	1462
54	1462
57	1462
60	1462

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

Point Minutes	Press.
0	156
5	156
10	156
15	156
20	157
25	161
30	165
35	169
40	173
45	177
50	181
55	184
60	186
65	190
70	194
75	198
80	202
85	204

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

Point Minutes	Press.
0	204
3	1317
6	1388
9	1412
12	1426
15	1433
18	1437
21	1441
24	1445
27	1449
30	1452
33	1454
36	1456
39	1457
42	1458
45	1459
48	1460
51	1461
54	1462
57	1463
60	1464

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CONTINUED NEXT PAGE

WESTERN TESTING CO., INC.
Pressure Data

Date 11/11/82 Test Ticket No. 18238

Recorder No. 1566 Capacity 4300 Location 3766 Ft.

Clock No. - Elevation 1441 Kelly Bushing Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1892 P.S.I.	Open Tool	4:00A M	
B First Initial Flow Pressure	60 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	108 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1462 P.S.I.	Second Flow Pressure	90 Mins.	85 Mins.
E Second Initial Flow Pressure	156 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	204 P.S.I.			
G Final Closed-in Pressure	1465 P.S.I.			
H Final Hydrostatic Mud	1892 P.S.I.			

PRESSURE BREAKDOWN

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

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

Second Flow Pressure
Breakdown: 17 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	1465
P 2						66	1465
P 3						69	1465
P 4						72	1465
P 5						75	1465
P 6						78	1465
P 7						81	1465
P 8						84	1465
P 9						87	1465
P10						90	1465
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

1566

IKT # 18238

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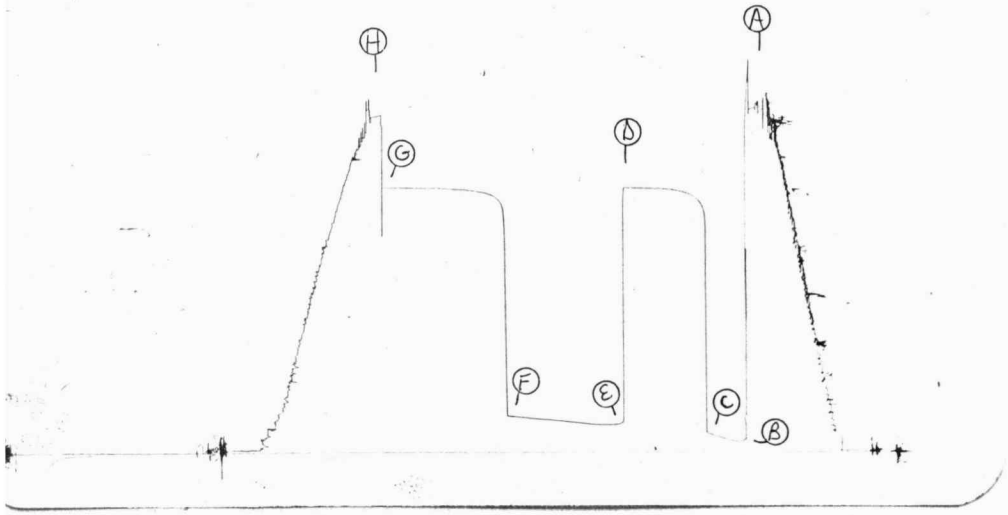

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 18326

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

Elevation _____ Formation Miss. Eff. Pay _____ Ft.

District Pratt Date 11/13/82 Customer Order No. _____

COMPANY NAME Pickrell Drlg. Co Litwin Bldg Suite 205

ADDRESS Wichita, KS 67202

LEASE AND WELL NO. Kopf #1-D COUNTY Kingman STATE KS Sec. 13 Twp. 30S Rge. 7W

Mail Invoice To Same #1 "D" Kopf No. Copies Requested Reg
Co. Name Address

Mail Charts To Same No. Copies Requested Reg
Address

Formation Test No. 4 Interval Tested From 4130 ft. to 4136 ft. Total Depth 4136 ft.

Packer Depth 4125 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 4130 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4117 ft. Recorder Number 1565 Cap. 4900

Bottom Recorder Depth (Outside) 4134 ft. Recorder Number 1560 Cap. 4500

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

Drilling Contractor Co Tools #10 Drill Collar Length 240 I. D. 2.2 in.

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

Weight 9.4 Water Loss 20.2 cc. Drill Pipe Length 3864 I. D. 3.8 in.

Chlorides 15,000 P.P.M. Test Tool Length 26 ft. Tool Size 5 1/2 OD in.

Jars: Make — Serial Number — Anchor Length 6 ft. Size 5 1/2 OD 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 1/2 XH in.

Blow: Fair thru IF Fair Building to Strong FF

Recovered 90 ft. of Gas Cut Mud

Recovered 30 ft. of Slightly oil cut mud 60% Mud 3% Water 3% Oil 34% Gas

Recovered _____ ft. of

Recovered _____ ft. of

Recovered _____ ft. of

Remarks: Slid tool 4 ft to Bottom - Anchor Plugged thru First half of Test

1 Jar

Time On Location 11:30 A.M. / (P.M.) Time Pick Up Tool 12:30 (A.M.) / P.M. Time Off Location 10:00 (A.M.) / P.M.

Time Set Packer(s) 2:30 (A.M.) / P.M. Time Started Off Bottom 7:00 (A.M.) / P.M. Maximum Temperature 118°

Initial Hydrostatic Pressure		(A)	2061	P.S.I.	
Initial Flow Period	Minutes 30	(B)	49	P.S.I. to (C)	61 P.S.I.
Initial Closed In Period	Minutes 60	(D)	532	P.S.I.	
Final Flow Period	Minutes 90	(E)	61	P.S.I. to (F)	61 P.S.I.
Final Closed In Period	Minutes 90	(G)	804	P.S.I.	
Final Hydrostatic Pressure		(H)	2000	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 Bill Mann
Signature of Customer or his authorized representative

Western Representative Jeff Piotrowski

Thank you

RECEIVED NOV 16 1982

FIELD INVOICE

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

WESTERN TESTING CO., INC.
Pressure Data

Date 11-15-82 Test Ticket No. 18326

Recorder No. 1565 Capacity 4900 Location 4117 Ft

Clock No. — — — — Elevation — Well Temperature 118 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2025 P.S.I.	Open Tool	2:30 AM	
B	First Initial Flow Pressure	41 P.S.I.	First Flow Pressure	30 Mins.	30 Mins
C	First Final Flow Pressure	71 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins
D	Initial Closed-in Pressure	536 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins
E	Second Initial Flow Pressure	63 P.S.I.	Final Closed-in Pressure	90 Mins.	105 Mins
F	Second Final Flow Pressure	69 P.S.I.			
G	Final Closed-in Pressure	799 P.S.I.			
H	Final Hydrostatic Mud	2005 P.S.I.			

* Pressures questionable due to plugging.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 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: 18 Inc. of 5 mins. and a final inc. of 0 Min.

Final Shut-In
Breakdown: 35 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	41		0	71		0	63		0	69
P 2	5	45		3	71		5			3	101
P 3	10	77		6	71		10			6	149
P 4	15	122 *		9	71		15			9	191
P 5	20	108 *		12	78		20			12	227
P 6	25	133 *		15	97		25			15	261
P 7	30	71		18	113		30	63		18	291
P 8	35			21	130		35			21	322
P 9	40			24	146		40			24	351
P10	45			27	172		45	63		27	379
P11	50			30	197		50			30	405
P12	55			33	222		55			33	430
P13	60			36	243		60	63		36	452
P14				39	265		65	63		39	474
P15				42	304		70	66		42	494
P16				45	350		75	66		45	514
P17				48	389		80	67		48	530
P18				51	433		85	68		51	552
P19				54	477		90	69		54	571
P20				57	536					57	587
				60	X					60	603

Cont'd

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 18326

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

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

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: ____ Inc.		Breakdown: ____ Inc.		Breakdown: ____ Inc.		Breakdown: ____ Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1		63				63	618
P 2		66				66	635
P 3		69				69	650
P 4		72				72	668
P 5		75				75	683
P 6		78				78	699
P 7		81				81	713
P 8		84				84	729
P 9		87				87	743
P10		90				90	754
P11		93				93	765
P12		96				96	775
P13		99				99	786
P14		102				102	796
P15		105				105	799
P16		108				108	
P17		111				111	
P18		114				114	
P19		117				117	
P20		120				120	

WTC - 4

Company Pickrell Drilling Company | Lease & Well No. #1 "D" Kopf

Elevation ---- | Formation Mississippi | Effective Pay --- Ft. | Ticket No. 18326

Date 11/13/82 | Sec. 13 | Twp. 30S | Range 7W | County Kingman | State Kansas

Test Approved by Bill Klaver | Western Representative Jeff Piotrowski

Formation Test No. 4 | Interval Tested from 4130 ft. to 4136 ft. | Total Depth 4136 ft.

Packer Depth 4125 ft. | Size 6 3/4 in. | Packer Depth - ft. | Size - in.

Packer Depth 4130 ft. | Size 6 3/4 in. | Packer Depth - ft. | Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4117 ft. | Recorder Number 1565 | Cap. 4900

Bottom Recorder Depth (Outside) 4134 ft. | Recorder Number 1560 | Cap. 4500

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

Drilling Contractor Pickrell Drilling Rig #10 | Drill Collar Length 240 | I. D. 2.2 in.

Mud Type cellex | Viscosity 46 | Weight Pipe Length - | I. D. - in.

Weight 9.4 | Water Loss 20.2 cc. | Drill Pipe Length 3864 | I. D. 3.8 in.

Chlorides 15,000 P.P.M. | Test Tool Length 26 ft. | Tool Size 5½OD in.

Jars: Make - | Serial Number - | Anchor Length 6 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: Fair throughout initial flow period. Fair building to strong on final flow period.

Recovered 90 ft. of gas cut mud

Recovered 30 ft. of slightly oil cut mud 60% mud;3% water;3% oil;34% gas

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Slid tool four feet to bottom; anchor plugged through first half of test.

Time Set Packer(s) 2:30 A.M. ~~P.M.~~ | Time Started Off Bottom 7:00 A.M. ~~P.M.~~ | Maximum Temperature 118°

Initial Hydrostatic Pressure			(A) 2075	P.S.I.		
Initial Flow Period	Minutes 30	(B) 41	P.S.I. to	(C) 71	P.S.I.	
Initial Closed In Period	Minutes 57	(D) 536	P.S.I.			
Final Flow Period	Minutes 90	(E) 63	P.S.I. to	(F) 69	P.S.I.	
Final Closed In Period	Minutes 105	(G) 799	P.S.I.			
Final Hydrostatic Pressure			(H) 2005	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 11/15/82 Test Ticket No. 18326

Recorder No. 1565 Capacity 4900 Location 4117 Ft.

Clock No. - Elevation --- Well Temperature 118 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2075	P.S.I.	Open Tool	2:30A	M		
B	First Initial Flow Pressure	41	P.S.I.	First Flow Pressure	30	Mins.	30	Mins.
C	First Final Flow Pressure	71	P.S.I.	Initial Closed-in Pressure	60	Mins.	57	Mins.
D	Initial Closed-in Pressure	536	P.S.I.	Second Flow Pressure	90	Mins.	90	Mins.
E	Second Initial Flow Pressure	63	P.S.I.	Final Closed-in Pressure	90	Mins.	105	Mins.
F	Second Final Flow Pressure	69	P.S.I.	* PRESSURES QUESTIONABLE DUE TO PLUGGING.				
G	Final Closed-in Pressure	799	P.S.I.					
H	Final Hydrostatic Mud	2005	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: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

Final Shut-In
Breakdown: 35 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	41		0	71		0	63		0	69
P 2	5	45		3	71		5	63		3	101
P 3	10	77		6	71		10	63		6	149
P 4	1	122 *		9	71		15	63		9	191
P 5	20	108 *		12	78		20	63		12	227
P 6	25	133 *		15	97		25	63		15	261
P 7	30	71		18	113		30	63		18	291
P 8				21	130		35	63		21	322
P 9				24	146		40	63		24	351
P10				27	172		45	63		27	379
P11				30	197		50	63		30	405
P12				33	222		55	63		33	430
P13				36	243		60	63		36	452
P14				39	265		65	63		39	474
P15				42	304		70	66		42	494
P16				45	350		75	66		45	514
P17				48	389		80	67		48	530
P18				51	433		85	68		51	552
P19				54	477		90	69		54	571
P20				57	536					57	587
										60	603

WTC - 4

CONTINUED NEXT PAGE

WESTERN TESTING CO., INC.
Pressure Data

Date 11/15/82 Test Ticket No. 18326

Recorder No. 1565 Capacity 4900 Location 4117 Ft

Clock No. - Elevation --- Well Temperature 118 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2075	P.S.I.	Open Tool	2:30A	M		
B	First Initial Flow Pressure	41	P.S.I.	First Flow Pressure	30	Mins.	30	Mins
C	First Final Flow Pressure	71	P.S.I.	Initial Closed-in Pressure	60	Mins.	57	Mins
D	Initial Closed-in Pressure	536	P.S.I.	Second Flow Pressure	90	Mins.	90	Mins
E	Second Initial Flow Pressure	63	P.S.I.	Final Closed-in Pressure	90	Mins.	105	Mins
F	Second Final Flow Pressure	69	P.S.I.	* PRESSURES QUESTIONABLE DUE TO PLUGGING.				
G	Final Closed-in Pressure	799	P.S.I.					
H	Final Hydrostatic Mud	2005	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: 19 Inc. of 3 mins. and a final inc. of 0 Min.

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

Final Shut-In
Breakdown: 35 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	618
P 2						66	635
P 3						69	650
P 4						72	668
P 5						75	683
P 6						78	699
P 7						81	713
P 8						84	729
P 9						87	743
P10						90	754
P11						93	765
P12						96	775
P13						99	786
P14						102	796
P15						105	799
P16							
P17							
P18							
P19							
P20							

1565
DST #4

IKT 18326

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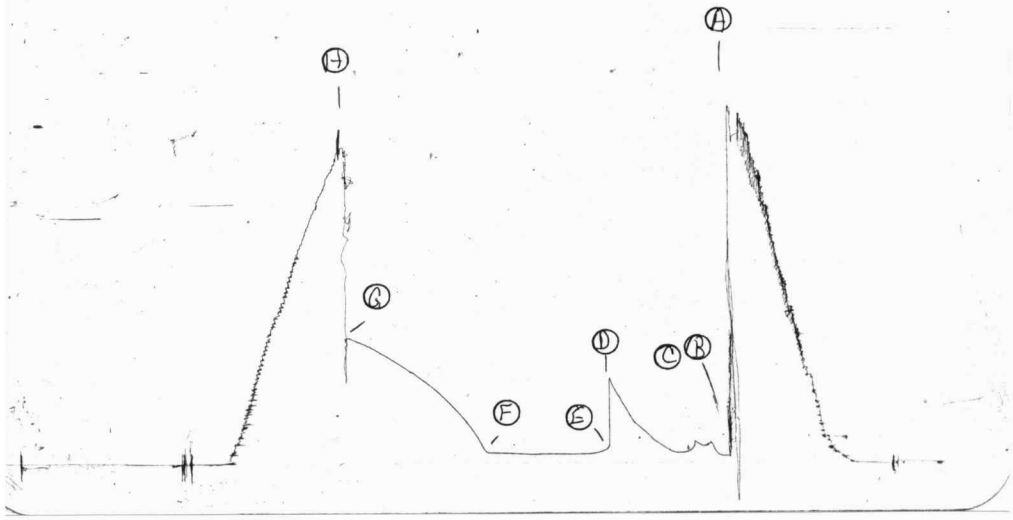

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 18327

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

Elevation _____ Formation Miss. Eff. Pay _____ Ft.

District Pratt Date 11-13-82 Customer Order No. _____

COMPANY NAME Pickrell Drlg. Co Litwin Bldg Suite 205

ADDRESS Wichita KS 67202

LEASE AND WELL NO. Kopf #1-D COUNTY Kingman STATE KS Sec. 13 Twp. 30s Rge. 7w

Mail Invoice To Same #1 "D" Kopf No. Copies Requested Reg
Co. Name Address

Mail Charts To Same No. Copies Requested Reg
Address

Formation Test No. 5 Interval Tested From 4132 ft. to 4146 ft. Total Depth 4146 ft.

Packer Depth 4127 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 4132 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4135 ft. Recorder Number 1565 Cap. 4900

Bottom Recorder Depth (Outside) 4138 ft. Recorder Number 1560 Cap. 4500

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

Drilling Contractor Co Tools #10 Drill Collar Length 240 I. D. 2.2 in.

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

Weight 9.4 Water Loss 20.2 cc. Drill Pipe Length 3872 I. D. 3.8 in.

Chlorides 15,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make — Serial Number — Anchor Length 14 ft. Size 5 1/2 OD 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 1/2 XH in.

Blow: Strong - GTS 7 min - See ~~Gas Flow Report~~ attached sheet for gas measurements.

Recovered 390 ft. of Clean Oil

Recovered 210 ft. of Gassy Heavy Oil Cut Mud

Recovered 30 ft. of Oil Cut Water Chlorides 68,000 ppm.

Recovered _____ ft. of

Recovered _____ ft. of

Remarks: 2 Fars

RECEIVED
NOV 16 1982

Time On Location 4:30 A.M. (P.M.) Time Pick Up Tool 6:00 A.M. (P.M.) Time Off Location 5:00 (A.M.) P.M.

Time Set Packer(s) 8:15 (A.M.) P.M. Time Started Off Bottom 12:45 A.M. (P.M.) Maximum Temperature 128°

Initial Hydrostatic Pressure			(A)	2147	P.S.I.	
Initial Flow Period	Minutes	30	(B)	111	P.S.I. to (C)	148 P.S.I.
Initial Closed In Period	Minutes	60	(D)	1248	P.S.I.	
Final Flow Period	Minutes	90	(E)	123	P.S.I. to (F)	235 P.S.I.
Final Closed In Period	Minutes	90	(G)	1248	P.S.I.	
Final Hydrostatic Pressure			(H)	2036	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 Bill Mayer
Signature of Customer or his authorized representative

Western Representative M Piotrowski

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	$ _____
Extra Charts	$ _____
Insurance	$ _____
Telecopier	$ _____
TOTAL	$ 675.00

Phone 316 262-5861

P. O. Box 1599
WICHITA, KANSAS 67201

No. 4086

GAS FLOW REPORT

Date 11/13/82 Ticket 18327 Company Pickrell Drlg Co.

Well Name and No. Kopf #1-D Dst No. 5 Interval Tested 4132-46

County Kingman State KS Sec. 13 Twp. 30s Rg. 7w

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
					PRE FLOW GTS. 7 min
10	10	½			116,000 cfpd
20	13	½			134,000
				OK	
					SECOND FLOW
10	15	½		OK	147,000 cfpd
20	17				159,000
30					
40					
50				OK	
60					
70					
80					159,000
90	17	½			

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____

Authorized by _____

FORM WTC 9

WESTERN TESTING CO., INC.
Pressure Data

Date 11-13-82 Test Ticket No. 18327

Recorder No. 1565 Capacity 4900 Location 4135 Ft

Clock No. — — — — Elevation — Well Temperature 128 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2137	P.S.I.	Open Tool	8:15 M	
B	First Initial Flow Pressure	115	P.S.I.	First Flow Pressure	30 Mins.	30 Mins
C	First Final Flow Pressure	144	P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins
D	Initial Closed-in Pressure	1261	P.S.I.	Second Flow Pressure	90 Mins.	90 Mins
E	Second Initial Flow Pressure	113	P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins
F	Second Final Flow Pressure	225	P.S.I.			
G	Final Closed-in Pressure	1249	P.S.I.			
H	Final Hydrostatic Mud	2038	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	115
P 2	5	119
P 3	10	124
P 4	15	131
P 5	20	136
P 6	25	143
P 7	30	144
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: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	144
	3	960
	6	1185
	9	1216
	12	1233
	15	1240
	18	1246
	21	1251
	24	1255
	27	1256
	30	1256
	33	
	36	
	39	
	42	
	45	1256
	48	1257
	51	1258
	54	1259
	57	1260
	60	1261
	63	1261

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

Point	Minutes	Press.
	0	113
	5	113
	10	115
	15	120
	20	130
	25	139
	30	148
	35	152
	40	161
	45	168
	50	176
	55	183
	60	191
	65	198
	70	205
	75	213
	80	218
	85	224
	90	225

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

Point	Minutes	Press.
	0	225
	3	941
	6	1159
	9	1194
	12	1208
	15	1217
	18	1224
	21	1231
	24	1234
	27	1236
	30	1239
	33	1240
	36	1241
	39	1242
	42	1243
	45	1244
	48	1245
	51	1246
	54	1247
	57	1248
	60	1249

Cont'd

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 1827

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

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

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: ____ Inc.		Breakdown: ____ Inc.		Breakdown: ____ Inc.		Breakdown: ____ Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1		63				63	1249
P 2		66				66	
P 3		69				69	
P 4		72				72	
P 5		75				75	1249
P 6		78				78	
P 7		81				81	
P 8		84				84	
P 9		87				87	
P10		90				90	1249
P11		93				93	
P12		96				96	
P13		99				99	
P14		102				102	
P15		105				105	
P16		108				108	
P17		111				111	
P18		114				114	
P19		117				117	
P20		120				120	

WTC - 4

Company Pickrell Drilling Company — Lease & Well No. #1 "D" Kopf

Elevation ---- — Formation Mississippi — Effective Pay --- Ft. — Ticket No. 18327

Date 11/13/82 — Sec. 13 — Twp. 30S — Range 7W — County Kingman — State Kansas

Test Approved by Bill Klaver — Western Representative Jeff Piotrowski

Formation Test No. 5 — Interval Tested from 4132 ft. to 4146 ft. — Total Depth 4146 ft.

Packer Depth 4127 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4132 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4135 ft. — Recorder Number 1565 — Cap. 4900

Bottom Recorder Depth (Outside) 4138 ft. — Recorder Number 1560 — Cap. 4500

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

Drilling Contractor Pickrell Drilling Rig #10 — Drill Collar Length 240 — I. D. 2.2 in.

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

Weight 9.4 — Water Loss 20.2 cc. — Drill Pipe Length 3872 — I. D. 3.8 in.

Chlorides 15,000 P.P.M. — Test Tool Length 20 ft. — Tool Size 5½OD in.

Jars: Make - — Serial Number - — Anchor Length 14 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: Strong blow. Gas to surface in seven minutes . See attached sheet for gas measurements.

Recovered 390 ft. of clean oil

Recovered 210 ft. of gassy heavy oil cut mud

Recovered 30 ft. of oil cut water Chlorides 68,000 ppm

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 8:15 ~~A.M.~~ P.M. — Time Started Off Bottom 12:45 ~~A.M.~~ ~~P.M.~~ — Maximum Temperature 128°

Initial Hydrostatic Pressure			(A)	2137	P.S.I.	
Initial Flow Period	Minutes 30	(B)	115	P.S.I. to (C)	144	P.S.I.
Initial Closed In Period	Minutes 63	(D)	1261	P.S.I.		
Final Flow Period	Minutes 90	(E)	113	P.S.I. to (F)	225	P.S.I.
Final Closed In Period	Minutes 90	(G)	1249	P.S.I.		
Final Hydrostatic Pressure		(H)	2038	P.S.I.		

GAS FLOW REPORT

Date 11/13/82 Ticket 18327 Company Pickrell Drilling Company

Well Name and No. #1 "D" Kopf Dst No. 5 Interval Tested 4132'-4146'

County Kingman State Kansas Sec. 13 Twp. 30S Rg. 7W

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
Gas to surface in seven minutes. **PRE FLOW**					
10 min.	10 PSIG	1/2" orifice			116,000 CFPD
20 min.	13 PSIG	1/2" orifice			134,000 CFPD
SECOND FLOW					
10 min.	15 PSIG	1/2" orifice			147,000 CFPD
20 min.	17 PSIG	1/2" orifice			159,000 CFPD
30 min.	17 PSIG	1/2" orifice			159,000 CFPD
40 min.	17 PSIG	1/2" orifice			159,000 CFPD
50 min.	17 PSIG	1/2" orifice			159,000 CFPD
60 min.	17 PSIG	1/2" orifice			159,000 CFPD
70 min.	17 PSIG	1/2" orifice			159,000 CFPD
80 min.	17 PSIG	1/2" orifice			159,000 CFPD
90 min.	17 PSIG	1/2" orifice			159,000 CFPD

GAS BOTTLE

Serial No. --- Date Bottle Filled ---- Date to be Invoiced 11/13/82

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of $75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Pickrell Drilling Company

Authorized by Bill Klaver

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 11/13/82 Test Ticket No. 18327

Recorder No. 1565 Capacity 4900 Location 4135 Ft.

Clock No. --- Elevation ---- Well Temperature 128 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2137	P.S.I.	Open Tool	8:15P M	
B	First Initial Flow Pressure	115	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	144	P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins.
D	Initial Closed-in Pressure	1261	P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E	Second Initial Flow Pressure	113	P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	225	P.S.I.			
G	Final Closed-in Pressure	1249	P.S.I.			
H	Final Hydrostatic Mud	2038	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	115
P 2	5	119
P 3	10	124
P 4	15	131
P 5	20	136
P 6	25	143
P 7	30	144
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	144
3	960
6	1185
9	1216
12	1233
15	1240
18	1246
21	1251
24	1255
27	1256
30	1256
33	1256
36	1256
39	1256
42	1256
45	1256
48	1257
51	1258
54	1259
57	1260
60	1261
63	1261

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

Point Minutes	Press.
0	113
5	113
10	115
15	120
20	130
25	139
30	148
35	152
40	161
45	168
50	176
55	183
60	191
65	198
70	205
75	213
80	218
85	224
90	225

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

Point Minutes	Press.
0	225
3	941
6	1159
9	1194
12	1208
15	1217
18	1224
21	1231
24	1234
27	1236
30	1239
33	1240
36	1241
39	1242
42	1243
45	1244
48	1245
51	1246
54	1247
57	1248
60	1249

CONTINUED NEXT PAGE

WESTERN TESTING CO., INC.
Pressure Data

Date 11/13/82 Test Ticket No. 18327

Recorder No. 1565 Capacity 4900 Location 4135 Ft.

Clock No. --- Elevation ---- Well Temperature 128 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2137 P.S.I.	Open Tool	8:15P M	
B First Initial Flow Pressure	115 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	144 P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins.
D Initial Closed-in Pressure	1261 P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E Second Initial Flow Pressure	113 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	225 P.S.I.			
G Final Closed-in Pressure	1249 P.S.I.			
H Final Hydrostatic Mud	2038 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: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

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

Point Minutes	Press.

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

Point Minutes	Press.
63	1249
66	1249
69	1249
72	1249
75	1249
81	1249
84	1249
87	1249
90	1249

WTC - 4

1565
DST #5

IKT 18327

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