P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 6881

Elevation 1533' K.B. Kelly Bushing Formation Mississippi Eff. Pay ____ Ft.

District Pratt Date 10-26-80 Customer Order No. ____

COMPANY NAME Pickrell Drlg Co

ADDRESS Litwin Bldg - Suite 205, 110 N. Market, Wichita Kans. 67202

LEASE AND WELL NO. Hageman #3 COUNTY Kingman STATE Ks. Sec. 6 Twp 30s Rge 8W

Mail Invoice To Same Hageman #3 No. Copies Requested Reg
Co. Name Address

Mail Charts To Same No. Copies Requested Reg
Address

Formation Test No. #1 Interval Tested from 4150 ft. to 4170 ft. Total Depth 4170 ft.
Packer Depth 4145 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.
Packer Depth 4150 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.
Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4160 ft. Recorder Number 1566 Cap. 4300
Bottom Recorder Depth (Outside) 4170 ft. Recorder Number 3086 Cap. 4500
Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____

Drilling Contractor Pickrell Drlg Co Rig #10 Drill Collar Length 60 I. D. 2.2 in.
Mud Type Dris-pac Viscosity 63 Weight Pipe Length 560 I. D. 3.2 in.
Weight 9.3+ Water Loss 9.2 cc. Drill Pipe Length 3510 I. D. 3.8 in.
Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 20.0 in.
Jars: Make WTCo Serial Number 101 Anchor Length 20 ft. Size 5 1/2 20.0 in.
Did Well Flow? yes 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 F.H. in.

Blow: Initial Flow Period Good blow strong 2" 1st F.P. Gas to Surface 8" See Attached Flow sheet for gas measurements
Strong Blow 2nd F.P. final flow period

Recovered 30 ft. of SCM Gas Cut mud
Recovered 120 ft. of GCWtry mud
Recovered ____ ft. of Gas Cut Watery mud
Recovered ____ ft. of
Recovered ____ ft. of

Remarks:

RECEIVED OCT 30 1980

ON Loc @ 3:00 pm Tool up @ 6:00 pm Tool In @ 2:30 AM Off Loc @

Time Set Packer(s) 7:28 P.M. Time Started Off Bottom 11:28 P.M. Maximum Temperature 102° F

Initial Hydrostatic Pressure		(A) 2015 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) ~~335~~ 345 P.S.I.		
Final Flow Period	Minutes 60	(E) 54 P.S.I.	to	(F) 75 P.S.I.
Final Closed In Period	Minutes 90	(G) ~~343~~ 331 P.S.I.		
Final Hydrostatic Pressure		(H) 1982 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 Greg Issinghoff
Signature of Customer or his authorized representative

Western Representative [signature]

FIELD INVOICE

Open Hole Test	$ 600.00
Misrun	$
Straddle Test	$
Jars	$ 300.00
Selective Zone	$
Safety Joint	$ 50.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage 55	$ 41.25
Fluid Sampler	$
Extra Charts	$
TOTAL	$ 991.25

Phone 316 262-5861

P. O. Box 1599

WICHITA, KANSAS 67201

GAS FLOW REPORT

Nº 2207

Date 10-26-80 Ticket # 6881 Company Pickrell Drlg Co.

Well Name and No. Hugman #3 Dst No. #1 Interval Tested 4150 - 4170

County Kingman State Kans. Sec. 6 Twp. 30S Rg. 8W

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
G.T.S. 18"					**PRE FLOW**
20"	2#	1/8"			3,920 MCFPD
25"	8#	1/8"			8,300 MCFPD
30"	12#	1/8"			10,500 MCFPD
					SECOND FLOW
10"	16#	1/8"			12,500 MCFPD
20"	23#	1/8"			15,500 MCFPD
30"	23#	1/8"			15,900 MCFPD
40"	23#	1/8"			15,900 MCFPD
50"	23#	1/8"			15,900 MCFPD
60"	23"	1/8"			15,900 CFPD

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 10-26 Test Ticket No. 6881

Recorder No. 1566 Capacity 4300 Location 4160 Ft.

Clock No. — Elevation 1533 KB Well Temperature 102 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2009 P.S.I.	Open Tool	7:28 PM	
B	First Initial Flow Pressure	28 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	37 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	337 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	48 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	75 P.S.I.			
G	Final Closed-in Pressure	328 P.S.I.			
H	Final Hydrostatic Mud	1983 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	28
P 2 5	28
P 3 10	30
P 4 15	30
P 5 20	31
P 6 25	33
P 7 30	37
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	37
3	259
6	294
9	307
12	318
15	322
18	324
21	327
24	329
27	331
30	3382
33	333
36	334
39	335
42	336
45	337
48	
51	
54	
57	
60	337

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

Point Minutes	Press.
0	48
5	50
10	54
15	57
20	60
25	62
30	65
35	67
40	71
45	71
50	72
55	73
60	75
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	75
3	231
6	268
9	283
12	292
15	298
18	302
21	305
24	307
27	309
30	311
33	312
36	313
39	314
42	315
45	316
48	317
51	318
54	319
57	320
60	320

CON'T

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 6881

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	321
P 2		66				66	322
P 3		69				69	323
P 4		72				72	324
P 5		75				75	325
P 6		78				78	326
P 7		81				81	327
P 8		84				84	328
P 9		87				87	328
P10		90				90	328
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	

Company Pickrell Drilling Company — Lease & Well No. Hageman #3

Elevation 1533 Kelly Bushing — Formation Mississippi — Effective Pay - Ft. — Ticket No. 6881

Date 10-26-80 — Sec. 6 — Twp. 30S — Range 8W — County Kingman — State Kansas

Test Approved by Greg Issinghoff — Western Representative Rodger A. Mounts

Formation Test No. 1 — Interval Tested from 4150 ft. to 4170 ft. — Total Depth 4170 ft.

Packer Depth 4145 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4150 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4160 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4170 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Pickrell Drilling Co Rig #10 — Drill Collar Length 60 — I. D. 2.2 in.

Mud Type Drispac — Viscosity 63 — Weight Pipe Length 560 — I. D. 3.2 in.

Weight 9.3 — Water Loss 9.2 cc. — Drill Pipe Length 3510 — I. D. 3.8 in.

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

Jars: Make WTC — Serial Number 107 — Anchor Length 20 ft. — Size 5½OD in.

Did Well Flow? Yes — 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: Good blow strong 2 minutes initial flow period. Gas to surface in 8 minutes. Strong blow final flow period. See attached sheet for gas measurements.

Recovered 20 ft. of gas cut mud

Recovered 120 ft. of gas cut watery mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 7:20 ~~A.M.~~ P.M. — Time Started Off Bottom 11:28 ~~A.M.~~ P.M. — Maximum Temperature 102

Initial Hydrostatic Pressure			(A) 2009	P.S.I.		
Initial Flow Period	Minutes 30	(B) 28	P.S.I. to	(C) 37	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 337	P.S.I.			
Final Flow Period	Minutes 60	(E) 48	P.S.I. to	(F) 75	P.S.I.	
Final Closed In Period	Minutes 90	(G) 328	P.S.I.			
Final Hydrostatic Pressure			(H) 1983	P.S.I.		

GAS FLOW REPORT

Date 10-26-80 Ticket 6881 Company Pickrell Drilling Company

Well Name and No. Hageman #3 Dst No. 1 Interval Tested 4150-4170

County Kingman State Kansas Sec. 6 Twp. 30S Rg. 8W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
	Gas to Surface 18 minutes		**PRE FLOW**			
	20 Min	2 PSIG	1/8" Orifice			3,920 C.F.P.D.
	25 Min	8 PSIG	1/8" Orifice			8,300 C.F.P.D.
	30 Min	12 PSIG	1/8" Orifice			10,500 C.F.P.D.
			SECOND FLOW			
	10 Min	16 PSIG	1/8" Orifice			12,500 C.F.P.D.
	20 Min	22 PSIG	1/8" Orifice			15,500 C.F.P.D.
	30 Min	23 PSIG	1/8" Orifice			15,900 C.F.P.D.
	40 Min	23 PSIG	1/8" Orifice			15,900 C.F.P.D.
	50 Min	23 PSIG	1/8" Orifice			15,900 C.F.P.D.
	60 Min.	23PSIG	1/8" Orifice			15,900 C.F.P.D.

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced 10-26-80

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 Greg Issinghoff

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 10/26/80 Test Ticket No. 6881

Recorder No. 1566 Capacity 4300 Location 4160 Ft.

Clock No. - Elevation 1533 Kelly Bushing Well Temperature 102 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2009 P.S.I.		Open Tool	7:28P M.	
B	First Initial Flow Pressure	28 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	37 P.S.I.		Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	337 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	48 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	75 P.S.I.				
G	Final Closed-in Pressure	328 P.S.I.				
H	Final Hydrostatic Mud	1983 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	28
P 2 5	28
P 3 10	30
P 4 15	30
P 5 20	31
P 6 25	33
P 7 30	37
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	37
3	259
6	294
9	307
12	318
15	322
18	324
21	327
24	329
27	331
30	332
33	333
36	334
39	335
42	336
45	337
48	337
51	337
54	337
57	337
60	337

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

Point Minutes	Press.
0	48
5	50
10	54
15	57
20	60
25	62
30	65
35	67
40	71
45	71
50	72
55	73
60	75

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

Point Minutes	Press.
0	75
3	231
6	268
9	283
12	292
15	298
18	302
21	305
24	307
27	309
30	311
33	312
36	313
39	314
42	315
45	316
48	317
51	318
54	319
57	320
60	320

continued next page

WESTERN TESTING CO., INC.

Pressure Data

Date 10/26/80 Test Ticket No. 6881

Recorder No. 1566 Capacity 4300 Location 4160 Ft.

Clock No. - Elevation 1533 Kelly Bushing Well Temperature 102 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2009 P.S.I.		Open Tool	7:28P M	
B	First Initial Flow Pressure	28 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	37 P.S.I.		Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	337 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	48 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	75 P.S.I.				
G	Final Closed-in Pressure	328 P.S.I.				
H	Final Hydrostatic Mud	1983 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.

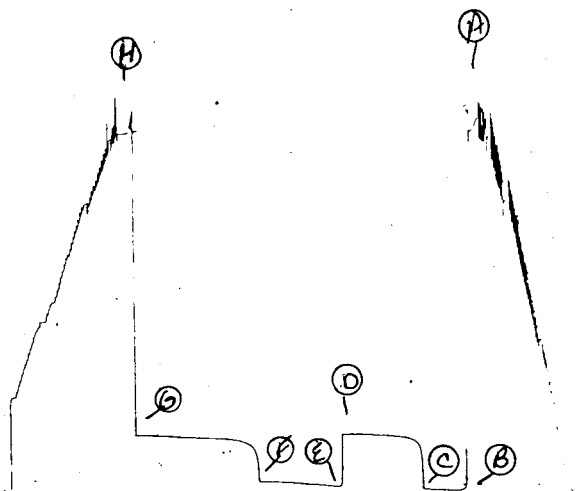
Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

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	321
P 2						66	322
P 3						69	323
P 4						72	324
P 5						75	325
P 6						78	326
P 7						81	327
P 8						84	328
P 9						87	328
P10						90	328
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

JK# #6881

I



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 6882

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation 1533' K.B. Formation Mississippi Eff. Pay ___ Ft.

District Pratt Date 10-27-80 Customer Order No. ___

COMPANY NAME Pickrell Drlg. Co.

ADDRESS Litwin Bldg, Suite 205, 110 N. Market, Wichita, Ks. 67202

LEASE AND WELL NO. Hageman #3 COUNTY Kingman STATE Ks. Sec. 6 Twp. 30s Rge. 8w

Mail Invoice To Same Hageman #3 ___ No. Copies Requested Reg
Co. Name Address

Mail Charts To Same ___ No. Copies Requested Reg
Address

Formation Test No. #2 Interval Tested from 4172 ft. to 4230 ft. Total Depth 4230 ft.

Packer Depth 4167 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 4172 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside)	4182 ft.	Recorder Number 1566	Cap. 4300
Bottom Recorder Depth (Outside)	4185 ft.	Recorder Number 3086	Cap. 4500
Below Straddle Recorder Depth	— ft.	Recorder Number —	Cap. —

Drilling Contractor Pickrell Drlg. Co. Rig #10 Drill Collar Length 0 I. D. — in.

Mud Type Drispac Viscosity 64 Weight Pipe Length 530 I. D. 3.2 in.

Weight 9.4 Water Loss 11.2 cc. Drill Pipe Length 3616 I. D. 3.8 in.

Chlorides 13,000 P.P.M. Test Tool Length 26 ft. Tool Size 5 1/2 O.D. in.

Jars: Make W.T.C. Serial Number 407 Anchor Length 58 ft. Size 5 1/2 O.D. in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Initial Flow ~~Final~~ Main Hole Size 7 7/8 ~~final flow~~ in. Tool Joint Size 4 1/2 FH in.

Blow: Weak blow w/ slow build 1st F.P. no blow 2nd F.P. Flushed tool twice good flush died in 1/2"

Recovered 180 ft. of Drlg. Fluid
Recovered ___ ft. of Drilling Fluid
Recovered ___ ft. of
Recovered ___ ft. of
Recovered ___ ft. of

RECEIVED OCT 30 1980

Remarks:

Tool up @ 12:30 pm Tool on @ 6:30 pm OFF Loc @ 7:30 pm

Time Set Packer(s) 1:35 P.M. Time Started Off Bottom 4:35 P.M. Maximum Temperature ___

Initial Hydrostatic Pressure		(A)	2047 P.S.I.		
Initial Flow Period	Minutes 30	(B)	118 P.S.I.	to (C)	118 P.S.I.
Initial Closed In Period	Minutes 60	(D)	144 P.S.I.		
Final Flow Period	Minutes 30	(E)	140 P.S.I.	to (F)	151 P.S.I.
Final Closed In Period	Minutes 60	(G)	237 P.S.I.		
Final Hydrostatic Pressure		(H)	2007 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 [signature] Greg Issinghoff
Signature of Customer or his authorized representative

Western Representative [signature]

Thank You

FIELD INVOICE

Open Hole Test	$ 600.00
Misrun	$
Straddle Test	$
Jars	$ 300.00
Selective Zone	$
Safety Joint	$ 50.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$ N.C.
Fluid Sampler	$
Extra Charts	$
TOTAL	$ 950.00

WESTERN TESTING CO., INC.
Pressure Data

Test Ticket No. 6882

Date 10-27 Capacity 4300 Location 4182 Ft.

Recorder No. 1566 Well Temperature ____ °F

Clock No. ____ Elevation 1533 KB

Point		Pressure	
A	Initial Hydrostatic Mud	2052	P.S.I.
B	First Initial Flow Pressure	~~40~~ 99	P.S.I.
C	First Final Flow Pressure	114	P.S.I.
D	Initial Closed-in Pressure	220	P.S.I.
E	Second Initial Flow Pressure	~~160~~ 151	P.S.I.
F	Second Final Flow Pressure	159	P.S.I.
G	Final Closed-in Pressure	229	P.S.I.
H	Final Hydrostatic Mud	2013	P.S.I.

	Time Given	Time Computed
	1:35 PM	
Open Tool	30 Mins.	30 Mins.
First Flow Pressure	60 Mins.	57 Mins.
Initial Closed-in Pressure	30 Mins.	30 Mins.
Second Flow Pressure	60 Mins.	57 Mins.
Final Closed-in Pressure		

PRESSURE BREAKDOWN

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

Point Mins.		Press.
P 1	0	~~40~~ 99
P 2	5	~~108~~ 99
P 3	10	99
P 4	15	99
P 5	20	104
P 6	25	108
P 7	30	114
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: 19 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	114
3	117
6	121
9	125
12	134
15	140
18	147
21	153
24	158
27	166
30	173
33	177
36	183
39	188
42	194
45	201
48	205
51	212
54	216
57	220
~~60~~	

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

Point Minutes	Press.
0	~~148~~ 151
5	~~160~~ 151
10	151
15	151
20	155
25	157
30	159
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

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

Point Minutes	Press.
0	159
3	162
6	164
9	167
12	170
15	173
18	176
21	179
24	183
27	187
30	192
33	199
36	203
39	207
42	212
45	216
48	220
51	224
54	229
57	229
~~60~~	

WTC - 4

Company Pickrell Drilling Company — Lease & Well No. Hageman #3

Elevation 1533 Kelly Bushing — Formation Mississippi — Effective Pay - Ft. — Ticket No. 6882

Date 10-27-80 — Sec. 6 — Twp. 30S — Range 8W — County Kingman — State Kansas

Test Approved by Greg Issinghoff — Western Representative Rodger A. Mounts

Formation Test No. 2 — Interval Tested from 4172 ft. to 4230 ft. — Total Depth 4230 ft.

Packer Depth 4167 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4172 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4182 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4185 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Pickrell Drilling Co. Rig #10 — Drill Collar Length - — I. D. - in.

Mud Type Drispac — Viscosity 64 — Weight Pipe Length 530 — I. D. 3.2 in.

Weight 9.4 — Water Loss 11.2 cc. — Drill Pipe Length 3616 — I. D. 3.8 in.

Chlorides 13,000 P.P.M. — Test Tool Length 26 ft. — Tool Size 5½OD in.

Jars: Make WTC — Serial Number 407 — Anchor Length 58 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 blow with very slow build initial flow period. No blow final flow period. Flushed tool twice - good flush - died in ½ inch.

Recovered 180 ft. of drilling fluid.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 1:35 ~~A.M.~~ P.M. — Time Started Off Bottom 4:35 ~~A.M.~~ P.M. — Maximum Temperature -

Initial Hydrostatic Pressure ..... (A) 2052 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 99 P.S.I. to (C) 114 P.S.I.

Initial Closed In Period ..... Minutes 57 (D) 220 P.S.I.

Final Flow Period ..... Minutes 30 (E) 151 P.S.I. to (F) 159 P.S.I.

Final Closed In Period ..... Minutes 57 (G) 229 P.S.I.

Final Hydrostatic Pressure ..... (H) 2013 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10/27/80

Test Ticket No. 6882

Recorder No. 1566 Capacity 4300 Location 4182 Ft

Clock No. -- Elevation 1533 Kelly Bushing Well Temperature - °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2052 P.S.I.	Open Tool	1:35P M	
B First Initial Flow Pressure	99 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	114 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D Initial Closed-in Pressure	220 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	151 P.S.I.	Final Closed-in Pressure	60 Mins.	57 Mins.
F Second Final Flow Pressure	159 P.S.I.			
G Final Closed-in Pressure	229 P.S.I.			
H Final Hydrostatic Mud	2013 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	99
P 2 5	99
P 3 10	99
P 4 15	99
P 5 20	104
P 6 25	108
P 7 30	114
P 8	
P 9	
P10	
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	114
3	117
6	121
9	125
12	134
15	140
18	147
21	153
24	158
27	166
30	173
33	177
36	183
39	188
42	194
45	201
48	205
51	212
54	216
57	220

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

Point Minutes	Press.
0	151
5	151
10	151
15	151
20	155
25	157
30	159

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

Point Minutes	Press.
0	159
3	162
6	164
9	167
12	170
15	173
18	176
21	179
24	183
27	187
30	192
33	199
36	203
39	207
42	212
45	216
48	220
51	224
54	229
57	229

JH #6882

I