Company W. L. Hartman Estate — Lease & Well No. Panning #10

Elevation ---- — Formation Kansas City — Effective Pay - Ft. — Ticket No. 12645

Date 10/25/81 — Sec. 35 — Twp. 19S — Range 12W — County Barton — State Kansas

Test Approved by R. L. Schmidlapp — Western Representative Vernon Wondra

Formation Test No. 1 — Interval Tested from 2855 ft. to 2915 ft. — Total Depth 2915 ft.

Packer Depth 2850 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 2855 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2868 ft. — Recorder Number 13403 — Cap. 4050

Bottom Recorder Depth (Outside) 2871 ft. — Recorder Number 6074 — Cap. 5100

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

Drilling Contractor Woodman - Iannitti Drlg. Rig #3 — Drill Collar Length - — I. D. - in.

Mud Type salt-gel=starch — Viscosity 42 — Weight Pipe Length 286 — I. D. 2.7 in.

Weight 9.7 — Water Loss 9.8 cc. — Drill Pipe Length 2548 — I. D. 3.8 in.

Chlorides 60,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½OD in.

Jars: Make - — Serial Number - — Anchor Length 60 ft. — Size 5½OD in.

Did Well Flow? Yes — Reversed Out - — 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: Gas to surface in five minutes. See attached sheet for gas measurements.

Recovered 240 ft. of gas cut and slightly oil cut mud

Recovered 180 ft. of oil and gas cut mud

Recovered 730 ft. of gas cut and oil cut water Chlorides 131,000 ppm

Recovered ft. of

Recovered ft. of

Remarks: Read bottom chart

Time Set Packer(s) 2:35 ~~A.M.~~ P.M. — Time Started Off Bottom 4:35 ~~A.M.~~ P.M. — Maximum Temperature 96°

Initial Hydrostatic Pressure			(A) 1459	P.S.I.		
Initial Flow Period	Minutes 90	(B) 170	P.S.I. to	(C) 430	P.S.I.	
Initial Closed In Period	Minutes 33	(D) 667	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) 1459	P.S.I.		

GAS FLOW REPORT

Date 10/25/81 Ticket 12645 Company W. L. Hartman Estate

Well Name and No. Panning #10 Dst No. 1 Interval Tested 2855'-2915'

County Barton State Kansas Sec. 35 Twp. 19S Rg. 12W

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
PRE FLOW						
	10 min.	24" of water			1/2" orifice	30,700 CFPD
	20 min.	12" of water			1/2" orifice	21,900 CFPD
	30 min.	7" of water			1/2" orifice	16,700 CFPD
	40 min.	3" of water			1/2" orifice	10,900 CFPD
	50 min.	10" of water			1/4" orifice	5,320 CFPD
	60 min.	Too small amount to measure				
	70 min.	Too small amount to measure				
	80 min.	Too small amount to measure				
	85 min.	Too small amount to measure				
SECOND FLOW						

GAS BOTTLE

Serial No. ---- Date Bottle Filled ---- Date to be Invoiced 10/25/81

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 1% per month, equal to 12% 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 W. L. Hartman Estate

Authorized by R. L. Schmidlapp

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 10/25/81 Test Ticket No. 12645

Recorder No. 6074 Capacity 5100 Location 2871 Ft.

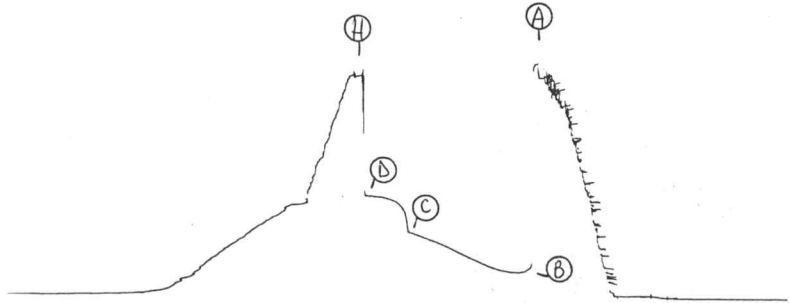
Clock No. - Elevation --- Well Temperature 96° °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1459 P.S.I.	Open Tool	2:35P M	
B First Initial Flow Pressure	170 P.S.I.	First Flow Pressure	90 Mins.	90 Mins.
C First Final Flow Pressure	430 P.S.I.	Initial Closed-in Pressure	30 Mins.	33 Mins.
D Initial Closed-in Pressure	667 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	1459 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 18 Inc.		Breakdown: 11 Inc.		Breakdown: 0 Inc.		Breakdown: 0 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	170	0	430				
P 2 5	170	3	558				
P 3 10	170	6	598				
P 4 15	170	9	624				
P 5 20	178	12	637				
P 6 25	187	15	647				
P 7 30	202	18	655				
P 8 35	220	21	661				
P 9 40	240	24	664				
P10 45	261	27	667				
P11 50	281	30	667				
P12 55	302	33	667				
P13 60	325						
P14 65	345						
P15 70	363						
P16 75	379						
P17 80	396						
P18 85	414						
P19 90	430						
P20							

TKT # 12645



Company W. L. Hartman Estate — Lease & Well No. Panning #10

Elevation - Formation Kansas City — Effective Pay - Ft. — Ticket No. 12646

Date 10/26/81 Sec. 35 Twp. 19S Range 12W — County Barton — State Kansas

Test Approved by R L Schmidlapp — Western Representative Vernon Wondra

Formation Test No. 2 — Interval Tested from 3090 ft. to 3125 ft. — Total Depth 3125 ft.

Packer Depth 3090 ft. Size 6 5/8 in. — Packer Depth - ft. Size - in.

Packer Depth 3095 ft. Size 6 5/8 in. — Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3115 ft. — Recorder Number 13403 Cap. 4050

Bottom Recorder Depth (Outside) 3118 ft. — Recorder Number 6074 Cap. 5100

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

Drilling Contractor Woodman-Iannitti Rig #3 — Drill Collar Length - I. D. - in.

Mud Type Salt-Gel-Starch Viscosity 40 — Weight Pipe Length 318 I. D. 2.7 in.

Weight 9.5 Water Loss 10.2 cc. — Drill Pipe Length 2751 I. D. 3.8 in.

Chlorides 60,000 P.P.M. — Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - — Anchor Length 35 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: Gas to surface in 22 minutes. See attached sheet for gas measurements.

Recovered 180 ft. of gas cut & slightly oil cut mud

Recovered 500 ft. of gas cut water - trace of oil Chlorides 125,000 PPM

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:25 ~~A.M.~~ P.M. — Time Started Off Bottom 4:25 ~~A.M.~~ P.M. — Maximum Temperature 99

Initial Hydrostatic Pressure			(A) 1694	P.S.I.		
Initial Flow Period	Minutes 90	(B) 153	P.S.I. to	(C) 323	P.S.I.	
Initial Closed In Period	Minutes 30	(D) 537	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) 1593	P.S.I.		

GAS FLOW REPORT

Date 10/26/81 Ticket 12646 Company W. L. Hartman Estate

Well Name and No. Panning #10 Dst No. 2 Interval Tested 3095-3125

County Barton State Kansas Sec. 35 Twp. 19S Rg. 12W

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
			PRE FLOW			
	10 Min	5" Water	¼" Orifice			3,710 C.F.P.D.
	20 Min	3" Water	¼" Orifice			2,920 C.F.P.D.
	30 Min	3" Water	¼" Orifice			2,920 C.F.P.D.
	40 Min	Too Small	Amount To Measure			
	50 Min	Too Small	Amount To Measure			
	60 Min	Too Small	Amount To Measure			
	68 Min	Too Small	Amount To Measure	**SECOND FLOW**		

GAS BOTTLE

Serial No. - Date Bottle Filled - Date to be Invoiced 10/26/81

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 1% per month, equal to 12% 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 W. L. Hartman Estate

Authorized by R L Schmidlapp

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 10/26/81 Test Ticket No. 12646

Recorder No. 13403 Capacity 4050 Location 3115 Ft.

Clock No. - Elevation - Well Temperature 99 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1694 P.S.I.	Open Tool	2:25P M	
B	First Initial Flow Pressure	153 P.S.I.	First Flow Pressure	90 Mins.	90 Mins.
C	First Final Flow Pressure	323 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	537 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	1593 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 18 Inc.		Breakdown: 10 Inc.		Breakdown: 0 Inc.		Breakdown: 0 Inc.	
of 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	153	0	323				
P 2 5	153	3	386				
P 3 10	153	6	437				
P 4 15	155	9	469				
P 5 20	165	12	487				
P 6 25	182	15	500				
P 7 30	194	18	511				
P 8 35	210	21	521				
P 9 40	224	24	529				
P10 45	239	27	533				
P11 50	251	30	537				
P12 55	263						
P13 60	273						
P14 65	283						
P15 70	293						
P16 75	303						
P17 80	312						
P18 85	320						
P19 90	323						
P20							

TK# 12646

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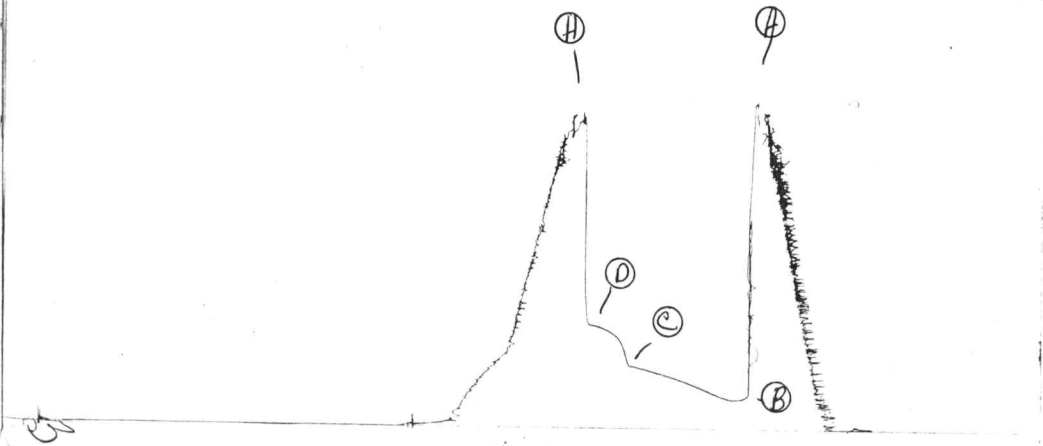

Company W. L. Hartman Estate — Lease & Well No. Panning #10

Elevation - Formation Kansas City — Effective Pay - Ft. Ticket No. 12647

Date 10/27/81 Sec. 35 Twp. 19S Range 12W County Barton State Kansas

Test Approved by R L Schmidlapp — Western Representative Vernon Wondra

Formation Test No. 3 Interval Tested from 3130 ft. to 3170 ft. Total Depth 3170 ft.

Packer Depth 3125 ft. Size 6 5/8 in. — Packer Depth - ft. Size - in.

Packer Depth 3130 ft. Size 6 5/8 in. — Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3160 ft. — Recorder Number 13403 Cap. 4050

Bottom Recorder Depth (Outside) 3163 ft. — Recorder Number 6074 Cap. 5100

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

Drilling Contractor Woodman-Iannitti Rig #3 — Drill Collar Length - I. D. - in.

Mud Type Salt-Gel-Starch Viscosity 44 — Weight Pipe Length 318 I. D. 2.7 in.

Weight 9.7 Water Loss 6.0 cc. — Drill Pipe Length 2791 I. D. 3.8 in.

Chlorides 58,000 P.P.M. — Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - — Anchor Length 40 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: Initial flow period very weak blow died in 5 minutes. Flushed tool - very weak blow died in 10 minutes.

Recovered 90 ft. of mud with few spots of oil

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Picked up fluid on flush.

Time Set Packer(s) 7:10 A.M. ~~P.M.~~ Time Started Off Bottom 8:25 A.M. ~~P.M.~~ Maximum Temperature 100

Initial Hydrostatic Pressure (A) 1643 P.S.I.

Initial Flow Period Minutes 55 (B) 61 P.S.I. to (C) 80 P.S.I.

Initial Closed In Period Minutes 18 (D) 99 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) 1602 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10/27/81 Test Ticket No. 12647

Recorder No. 13403 Capacity 4050 Location 3160 Ft.

Clock No. - Elevation - Well Temperature 100 °F

Point	Pressure		Time Given		Time Computed	
A Initial Hydrostatic Mud	1643 P.S.I.	Open Tool	7:10A	M		
B First Initial Flow Pressure	61 P.S.I.	First Flow Pressure	60	Mins.	55	Mins.
C First Final Flow Pressure	80 P.S.I.	Initial Closed-in Pressure	30	Mins.	18	Mins.
D Initial Closed-in Pressure	99 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	1602 P.S.I.					

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 11 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	61
P 2 5	61
P 3 10	61
P 4 15	61
P 5 20	61
P 6 25	59
P 7 30	Flushed Tool
P 8 35	116
P 9 40	96
P10 45	88
P11 50	83
P12 55	80
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 6 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	80
3	80
6	82
9	87
12	92
15	97
18	99

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

Point Minutes	Press.

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

Point Minutes	Press.

WTC - 4

Pkt # 12647

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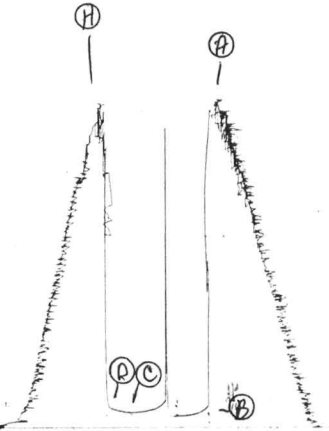

Company W. L. Hartman Estate — Lease & Well No. Panning #10

Elevation - Formation Kansas City — Effective Pay - Ft. — Ticket No. 12648

Date 10/28/81 — Sec. 35 — Twp. 19S — Range 12W — County Barton — State Kansas

Test Approved by R L Schmidlapp — Western Representative Vernon Wondra

Formation Test No. 4 — Interval Tested from 3216 ft. to 3280 ft. — Total Depth 3280 ft.

Packer Depth 3211 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 3216 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3232 ft. — Recorder Number 13403 — Cap. 4050

Bottom Recorder Depth (Outside) 3235 ft. — Recorder Number 6074 — Cap. 5100

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

Drilling Contractor Woodman-Iannitti Rig #3 — Drill Collar Length - — I. D. - in.

Mud Type Salt-Gel-Starch — Viscosity 46 — Weight Pipe Length 286 — I. D. 2.7 in.

Weight 9.7 — Water Loss 6.0 cc. — Drill Pipe Length 2909 — I. D. 3.8 in.

Chlorides 58,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½OD in.

Jars: Make - — Serial Number - — Anchor Length 64 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: Strong blow throughout test.

Recovered 500 ft. of gas

Recovered 90 ft. of gas cut & slightly oil cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 1:25 ~~A.M.~~ ~~P.M.~~ — Time Started Off Bottom 4:25 ~~A.M.~~ ~~P.M.~~ — Maximum Temperature 102

Initial Hydrostatic Pressure			(A) 1663	P.S.I.		
Initial Flow Period	Minutes 30	(B) 53	P.S.I. to	(C) 53	P.S.I.	
Initial Closed In Period	Minutes 27	(D) 149	P.S.I.			
Final Flow Period	Minutes 85	(E) 57	P.S.I. to	(F) 61	P.S.I.	
Final Closed In Period	Minutes 30	(G) 127	P.S.I.			
Final Hydrostatic Pressure			(H) 1633	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 10/28/81

Recorder No. 13403 Capacity 4050 Test Ticket No. 12648

Clock No. - Elevation - Location 3232 Ft.

Well Temperature 102 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1663 P.S.I.		Open Tool	1:25A M	
B	First Initial Flow Pressure	53 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	53 P.S.I.		Initial Closed-in Pressure	30 Mins.	27 Mins.
D	Initial Closed-in Pressure	149 P.S.I.		Second Flow Pressure	90 Mins.	85 Mins.
E	Second Initial Flow Pressure	57 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	61 P.S.I.				
G	Final Closed-in Pressure	127 P.S.I.				
H	Final Hydrostatic Mud	1633 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	53
P 2 5	53
P 3 10	53
P 4 15	53
P 5 20	53
P 6 25	53
P 7 30	53
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In

Breakdown: 9 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	53
3	59
6	67
9	80
12	92
15	103
18	115
21	126
24	139
27	149

Second Flow Pressure

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

Point Minutes	Press.
0	57
5	57
10	57
15	57
20	57
25	57
30	57
35	57
40	57
45	57
50	58
55	58
60	59
65	59
70	60
75	60
80	61
85	61

Final Shut-In

Breakdown: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	61
3	65
6	69
9	78
12	84
15	92
18	98
21	104
24	112
27	120
30	127

TKT # 12648

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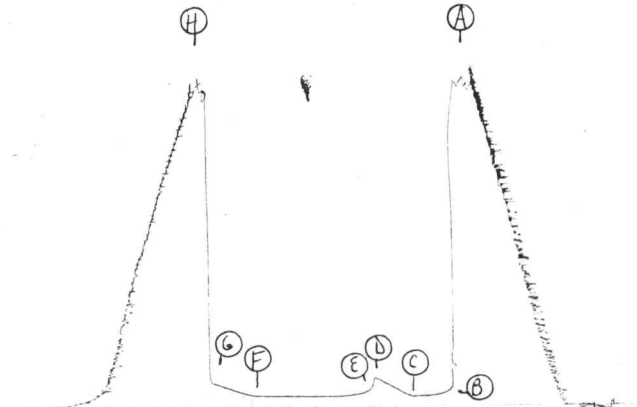

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Company W. L. Hartman Estate — Lease & Well No. Panning #10

Elevation - — Formation Kansas City — Effective Pay - Ft. — Ticket No. 12649

Date 10/28/81 — Sec. 35 — Twp. 19S — Range 12W — County Barton — State Kansas

Test Approved by R L Schmidlapp — Western Representative Vernon Wondra

Formation Test No. 5 — Interval Tested from 3276 ft. to 3330 ft. — Total Depth 3330 ft.

Packer Depth 3271 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 3276 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3282 ft. — Recorder Number 13403 — Cap. 4050

Bottom Recorder Depth (Outside) 3285 ft. — Recorder Number 6074 — Cap. 5100

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

Drilling Contractor Woodman-Iannitti Rig #3 — Drill Collar Length - — I. D. - in.

Mud Type Salt-Gel-Starch — Viscosity 44 — Weight Pipe Length 254 — I. D. 2.7 in.

Weight 9.6 — Water Loss 4.4 cc. — Drill Pipe Length 3001 — I. D. 3.8 in.

Chlorides 58,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½ OD in.

Jars: Make - — Serial Number - — Anchor Length 54 ft. — Size 5½ 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 4½ FH in.

Blow: Very weak blow throughout test.

Recovered 120 ft. of gas

Recovered 30 ft. of slightly oil & gas cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 6:25 A.M. P.M. — Time Started Off Bottom 8:25 ~~A.M.~~ P.M. — Maximum Temperature 102

Initial Hydrostatic Pressure			(A) 1683	P.S.I.		
Initial Flow Period	Minutes 90	(B) 35	P.S.I. to	(C) 37	P.S.I.	
Initial Closed In Period	Minutes 30	(D) 48	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) 1663	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 10/28/81 Test Ticket No. 12649

Recorder No. 13403 Capacity 4050 Location 3282 Ft.

Clock No. - Elevation - Well Temperature 102 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1683 P.S.I.	Open Tool	6:25 M	
B First Initial Flow Pressure	35 P.S.I.	First Flow Pressure	90 Mins.	90 Mins.
C First Final Flow Pressure	37 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	48 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	1663 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	35
P 2 5	35
P 3 10	35
P 4 15	35
P 5 20	35
P 6 25	35
P 7 30	35
P 8 35	35
P 9 40	35
P10 45	35
P11 50	35
P12 55	35
P13 60	35
P14 65	35
P15 70	35
P16 75	35
P17 80	36
P18 85	37
P19 90	37
P20	

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

Point Minutes	Press.
0	37
3	38
6	38
9	39
12	41
15	43
18	44
21	45
24	46
27	47
30	48

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

Point Minutes	Press.

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

Point Minutes	Press.

Kt # 12649

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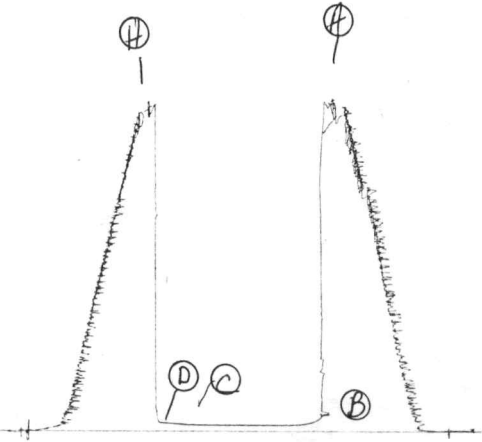

Company W. L. Hartman Estate — Lease & Well No. Panning #10

Elevation - Formation Kansas City — Effective Pay - Ft. — Ticket No. 12650

Date 10/29/81 Sec. 35 Twp. 19S Range 12W — County Barton State Kansas

Test Approved by R L Schmidlapp — Western Representative Vernon Wondra

Formation Test No. 6 — Interval Tested from 3326 ft. to 3376 ft. — Total Depth 3376 ft.

Packer Depth 3321 ft. Size 6 5/8 in. — Packer Depth - ft. Size - in.

Packer Depth 3326 ft. Size 6 5/8 in. — Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3329 ft. — Recorder Number 14303 Cap. 4050

Bottom Recorder Depth (Outside) 3332 ft. — Recorder Number 6074 Cap. 5100

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

Drilling Contractor Woodman-Iannitti Rig #3 — Drill Collar Length - I. D. - in.

Mud Type Salt-Gel-Starch Viscosity 46 — Weight Pipe Length 254 I. D. 2.7 in.

Weight 9.7 Water Loss 4.0 cc. — Drill Pipe Length 3051 I. D. 3.8 in.

Chlorides 58,000 P.P.M. — Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - — Anchor Length 50 ft. Size 5½OD in.

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

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

Blow: Strong blow throughout test

Recovered 1850 ft. of water Chlorides 23,000 PPM

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 4:15 A.M. P.M. Time Started Off Bottom 6:15 A.M. P.M. Maximum Temperature 101

Initial Hydrostatic Pressure (A) 1743 P.S.I.

Initial Flow Period Minutes 85 (B) 142 P.S.I. to (C) 826 P.S.I.

Initial Closed In Period Minutes 30 (D) 1026 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) 1673 P.S.I.

WTC-1

WESTERN TESTING CO., INC.
Pressure Data

Date 10/29/81 Test Ticket No. 12650

Recorder No. 13403 Capacity 4050 Location 3329 Ft.

Clock No. - Elevation - Well Temperature 101 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1743 P.S.I.	Open Tool	4:15P M	
B First Initial Flow Pressure	142 P.S.I.	First Flow Pressure	90 Mins.	85 Mins.
C First Final Flow Pressure	826 P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D Initial Closed-in Pressure	1026 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	1673 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	142
P 2 5	243
P 3 10	269
P 4 15	318
P 5 20	376
P 6 25	427
P 7 30	478
P 8 35	523
P 9 40	564
P10 45	603
P11 50	644
P12 55	675
P13 60	704
P14 65	735
P15 70	759
P16 75	783
P17 80	807
P18 85	826
P19	
P20	

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

Point Minutes	Press.
0	826
3	959
6	988
9	1002
12	1010
15	1016
18	1020
21	1024
24	1026
27	1026
30	1026

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

Point Minutes	Press.

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

Point Minutes	Press.

WTC - 4

TKT # 12650

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