

Company Petroleum Energy, Inc. Lease & Well No. Wiggins #1
 Elevation ----- Formation Kansas City Effective Pay - Ft. Ticket No. 12277
 Date 8/7/81 Sec. 10 Twp. 19S Range 9W County Rice State Kansas
 Test Approved by Jim Musgrove Western Representative Dan Delaney-Jim Schulz

Formation Test No. 1 Interval Tested from 2900 ft. to 2960 ft. Total Depth 2960 ft.
 Packer Depth 2895 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 2900 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2916 ft. Recorder Number 6234 Cap. 4500
 Bottom Recorder Depth (Outside) 2919 ft. Recorder Number 6077 Cap. 4700
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #3 Drill Collar Length 120 I. D. 2.2 in.
 Mud Type starch-salt-clay Viscosity 41 Weight Pipe Length - I. D. - in.
 Weight 9.9 Water Loss 10.6 cc. Drill Pipe Length 2759 I. D. 3.8 in.
 Chlorides 86,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 1/2 in.
 Jars: Make - Serial Number - Anchor Length 60 ft. Size 5 1/2 in.
 Did Well Flow? NO Reversed Out NO Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Initial flow weak blow throughout the period. Final flow period weak blow; died in seven minutes. Flushed tool - no help.

Recovered 65 ft. of mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 6:05 ~~A.M.~~ P.M. Time Started Off Bottom 8:35 ~~A.M.~~ P.M. Maximum Temperature 99°
 Initial Hydrostatic Pressure (A) 1548 P.S.I.
 Initial Flow Period Minutes 45 (B) 66 P.S.I. to (C) 67 P.S.I.
 Initial Closed In Period Minutes 42 (D) 177 P.S.I.
 Final Flow Period Minutes 30 (E) 80 P.S.I. to (F) 86 P.S.I.
 Final Closed In Period Minutes 30 (G) 172 P.S.I.
 Final Hydrostatic Pressure (H) 1548 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 8/7/81

Recorder No. 6234

Capacity 4500

Test Ticket No. 12277
2916

Clock No. --- Elevation --- Location 99 Ft. Well Temperature --- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1548	P.S.I.	6:05P	
B First Initial Flow Pressure	66	P.S.I.	45	45
C First Final Flow Pressure	67	P.S.I.	45	42
D Initial Closed-in Pressure	177	P.S.I.	30	30
E Second Initial Flow Pressure	80	P.S.I.	30	30
F Second Final Flow Pressure	86	P.S.I.		
G Final Closed-in Pressure	172	P.S.I.		
H Final Hydrostatic Mud	1548	P.S.I.		

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 14 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

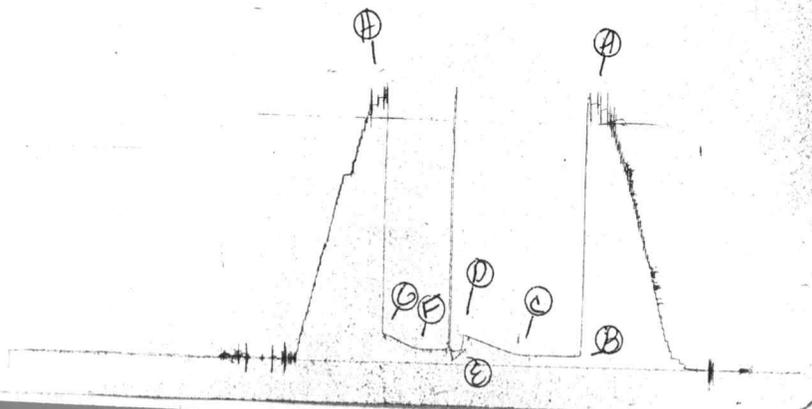
Final Shut-In
Breakdown: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	66	0	67	0	80	0	86
P 2 5	66	3	71	5	80	3	88
P 3 10	66	6	80	10	87	6	94
P 4 15	66	9	87	15	87	9	103
P 5 20	66	12	94	20	86	12	115
P 6 25	66	15	103	25	86	15	124
P 7 30	66	18	112	30	86	18	135
P 8 35	66	21	122			21	147
P 9 40	66	24	131			24	158
P10 45	67	27	140			27	167
P11		30	147			30	172
P12		33	156				
P13		36	163				
P14		39	174				
P15		42	177				
P16							
P17							
P18							
P19							
P20							

FLUSHED TOOL

TK# 12277
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6234



Company Petroleum Energy, Inc. Lease & Well No. Wiggins #1
 Elevation ----- Formation Simpson Sand Effective Pay - Ft. Ticket No. 12278
 Date 8/ 11/81 Sec. 10 Twp. 19S Range 9W County Rice State Kansas
 Test Approved by Jim Musgrove Western Representative Dan Delaney-Jim Schulz

Formation Test No. 2 Interval Tested from 3182 ft. to 3212 ft. Total Depth 3212 ft.
 Packer Depth 3177 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 3182 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3198 ft. Recorder Number 6234 Cap. 4500
 Bottom Recorder Depth (Outside) 3201 ft. Recorder Number 6077 Cap. 4700
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

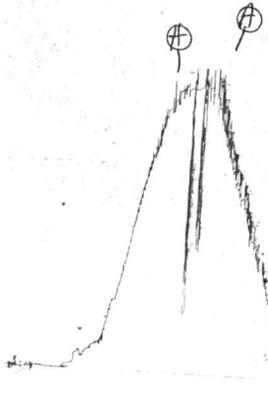
Drilling Contractor Duke Drilling Rig #3 Drill Collar Length 120 I. D. 2.2 in.
 Mud Type starch-salt-clay Viscosity 41 Weight Pipe Length - I. D. - in.
 Weight 10.0 Water Loss 14.0 cc. Drill Pipe Length 3041 I. D. 3.8 in.
 Chlorides 73,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 1/2 in.
 Jars: Make - Serial Number - Anchor Length - ft. Size 5 1/2 in.
 Did Well Flow? NO Reversed Out NO Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: MISRUN
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of PACKER FAILURE MISRUN
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Remarks: _____

Time Set Packer(s) _____ A.M. P.M. Time Started Off Bottom _____ A.M. P.M. Maximum Temperature _____
 Initial Hydrostatic Pressure (A) 1701 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) 1690 P.S.I.

PKT #12278
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47259



Company Petroleum Energy, Inc. Lease & Well No. Wiggins #1
 Elevation ----- Formation Simpson Sand Effective Pay - Ft. Ticket No. 12279
 Date 8/ 11/81 Sec. 10 Twp. 19S Range 9W County Rice State Kansas
 Test Approved by Jim Musgrove Western Representative Dan Delaney-Jim Schulz

Formation Test No. 3 Interval Tested from 3172 ft. to 3212 ft. Total Depth 3212 ft.
 Packer Depth 3167 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 3172 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3188 ft. Recorder Number 6234 Cap. 4500
 Bottom Recorder Depth (Outside) 3191 ft. Recorder Number 6077 Cap. 4700
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #3 Drill Collar Length 120 I. D. 2.2 in.
 Mud Type starch-salt-clay Viscosity 41 Weight Pipe Length - I. D. - in.
 Weight 10.0 Water Loss 14.0 cc. Drill Pipe Length 3031 I. D. 3.8 in.
 Chlorides 73,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 1/2 in.
 Jars: Make - Serial Number - Anchor Length - ft. Size 5 1/2 in.
 Did Well Flow? NO Reversed Out NO Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Weak blow building to a strong blow on initial flow period. Strong blow throughout final flow period.

Recovered 120 ft. of gas in pipe
 Recovered 780 ft. of heavy oil cut mud
 Recovered 660 ft. of oil cut muddy water (40% oil;20% mud;40% water)
 Recovered 60 ft. of slightly oil cut water (20% oil;80% water)
 Recovered 10 ft. of oil cut mud

Remarks: Chlorides 95,000 ppm

Time Set Packer(s) 2:30 ~~A.M.~~ P.M. Time Started Off Bottom 4:30 ~~A.M.~~ P.M. Maximum Temperature 103°
 Initial Hydrostatic Pressure (A) 1701 P.S.I.
 Initial Flow Period Minutes 30 (B) PLUGGED P.S.I. to (C) 392 P.S.I.
 Initial Closed In Period Minutes 30 (D) 1000 P.S.I.
 Final Flow Period Minutes 30 (E) 422 P.S.I. to (F) 588 P.S.I.
 Final Closed In Period Minutes 30 (G) 980 P.S.I.
 Final Hydrostatic Pressure (H) 1690 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 8/11/81 Recorder No. 6234 Capacity 4500 Test Ticket No. 12279
 Location 3188 Ft. Elevation 103 Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1701	P.S.I.	2:30P	M
B First Initial Flow Pressure	PLUGGED	P.S.I.	30	30
C First Final Flow Pressure	392	P.S.I.	30	30
D Initial Closed-in Pressure	1000	P.S.I.	30	30
E Second Initial Flow Pressure	422	P.S.I.	30	30
F Second Final Flow Pressure	588	P.S.I.		
G Final Closed-in Pressure	980	P.S.I.		
H Final Hydrostatic Mud	1690	P.S.I.		

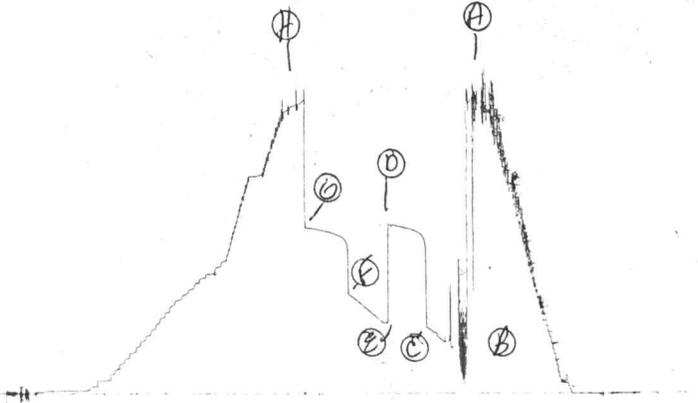
PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
	Point Minutes	Point Minutes	Point Minutes	Point Minutes
P 1	0	0	0	0
P 2	5	3	5	3
P 3	10	6	10	6
P 4	15	9	15	9
P 5	20	12	20	12
P 6	25	15	25	15
P 7	30	18	30	18
P 8		21		21
P 9		24		24
P 10		27		27
P 11		30		30
P 12				
P 13				
P 14				
P 15				
P 16				
P 17				
P 18				
P 19				
P 20				

TK#12279

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6234



Company Petroleum Energy, Inc. Lease & Well No. Wiggins #1
 Elevation ----- Formation Arbuckle Effective Pay - Ft. Ticket No. 12280
 Date 8/ 12/81 Sec. 10 Twp. 19S Range 9W County Rice State Kansas
 Test Approved by Jim Musgrove Western Representative Dan Delaney-Jim Schulz
 Formation Test No. 4 Interval Tested from 3212 ft. to 3218 ft. Total Depth 3218 ft.
 Packer Depth 3207 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 3212 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3200 ft. Recorder Number 6234 Cap. 4500
 Bottom Recorder Depth (Outside) 3215 ft. Recorder Number 6077 Cap. 4700
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Duke Drilling Rig #3 Drill Collar Length 120 I. D. 2.2 in.
 Mud Type starch-salt-clay Viscosity - Weight Pipe Length - I. D. - in.
 Weight - Water Loss - cc. Drill Pipe Length 3066 I. D. 3.8 in.
 Chlorides 73,000 P.P.M. Test Tool Length 26 ft. Tool Size 4 1/2 in.
 Jars: Make - Serial Number - Anchor Length - ft. Size 5 1/2 in.
 Did Well Flow? NO Reversed Out NO Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Initial flow period fair blow building to strong blow decreasing to a fair blow. Fair blow on final flow period.

Recovered 190 ft. of muddy gassy oil (1% water; 2% mud; 97% oil) 300 Gas in pipe
 Recovered 300 ft. of oil cut muddy water (14% oil; 10% mud; 76% water)
 Recovered 600 ft. of oil cut water (8% oil; 92% water)
 Recovered 300 ft. of oil cut water (3% oil; 97% water)
 Recovered 720 ft. of water

Remarks: Geologist wanted forty-five minutes initial flow; rig broke down and we could not turn tool to shut-in.

Chlorides 45,000 ppm

Time Set Packer(s) 11:35 ~~A.M.~~ P.M. Time Started Off Bottom 4:10 ~~A.M.~~ P.M. Maximum Temperature 114°
 Initial Hydrostatic Pressure (A) 1667 P.S.I.
 Initial Flow Period Minutes 180 (B) 110 P.S.I. to (C) 953 P.S.I.
 Initial Closed In Period Minutes 42 (D) 1009 P.S.I.
 Final Flow Period Minutes 5 (E) 977 P.S.I. to (F) 977 P.S.I.
 Final Closed In Period Minutes 45 (G) 1034 P.S.I.
 Final Hydrostatic Pressure (H) 1656 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 8/12/81 Recorder No. 6234 Capacity 4500 Test Ticket No. 12280
 Clock No. - Elevation ---- Location 3200 Ft. Well Temperature 114 °F

Point	Pressure			Time Given	Time Computed
A Initial Hydrostatic Mud	1667	P.S.I.	Open Tool	11:35P	M
B First Initial Flow Pressure	110	P.S.I.	First Flow Pressure	180	Mins. 180 Mins.
C First Final Flow Pressure	953	P.S.I.	Initial Closed-in Pressure	45	Mins. 42 Mins.
D Initial Closed-in Pressure	1009	P.S.I.	Second Flow Pressure	5	Mins. 5 Mins.
E Second Initial Flow Pressure	977	P.S.I.	Final Closed-in Pressure	45	Mins. 45 Mins.
F Second Final Flow Pressure	977	P.S.I.			
G Final Closed-in Pressure	1034	P.S.I.			
H Final Hydrostatic Mud	1656	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 36 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 14 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 1 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 15 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	110	0	953	0	977	0	977
P 2 5	151	3	971	5	977	3	1005
P 3 10	218	6	977			6	1011
P 4 15	278	9	983			9	1018
P 5 20	342	12	986			12	1020
P 6 25	399	15	991			15	1023
P 7 30	447	18	993			18	1024
P 8 35	507	21	995			21	1025
P 9 40	538	24	997			24	1026
P10 45	574	27	999			27	1026
P11 50	606	30	1002			30	1027
P12 55	640	33	1004			33	1029
P13 60	664	36	1006			36	1031
P14 65	691	39	1008			39	1032
P15 70	718	42	1009			42	1033
P16 75	743					45	1034
P17 80	759						
P18 85	775						
P19 90	791						
P20 95	809						
	822						

WTCL00

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WESTERN TESTING CO., INC.
Pressure Data

Date 8/12/81 Recorder No. 6234 Capacity 4500 Test Ticket No. 12280
 Clock No. - Elevation ---- Location 3200 Ft. Well Temperature 114 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1667</u> P.S.I.	Open Tool	<u>11:35P</u>	<u>M</u>
B First Initial Flow Pressure	<u>110</u> P.S.I.	First Flow Pressure	<u>180</u> Mins.	<u>180</u> Mins.
C First Final Flow Pressure	<u>953</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>42</u> Mins.
D Initial Closed-in Pressure	<u>1009</u> P.S.I.	Second Flow Pressure	<u>5</u> Mins.	<u>5</u> Mins.
E Second Initial Flow Pressure	<u>977</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>977</u> P.S.I.			
G Final Closed-in Pressure	<u>1034</u> P.S.I.			
H Final Hydrostatic Mud	<u>1656</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 36 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 14 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 1 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 15 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	<u>838</u>						
P 2	<u>110</u>						
P 3	<u>115</u>						
P 4	<u>120</u>						
P 5	<u>125</u>						
P 6	<u>130</u>						
P 7	<u>135</u>						
P 8	<u>140</u>						
P 9	<u>145</u>						
P10	<u>150</u>						
P11	<u>155</u>						
P12	<u>160</u>						
P13	<u>165</u>						
P14	<u>170</u>						
P15	<u>175</u>						
P16	<u>180</u>						
P17							
P18							
P19							
P20							

TRT # 12280
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