Company Olympic Petroleum Company — Lease & Well No. Dora Holtje #1

Elevation 1480 Kelly Bushing — Formation Mississippi — Effective Pay - Ft. — Ticket No. 7303

Date 9-11-80 — Sec. 16 — Twp. 26S — Range 4W — County Reno — State Kansas

Test Approved by James F Dilts — Western Representative Dan Delaney

Formation Test No. 1 — Interval Tested from 3638 ft. to 3650 ft. — Total Depth 3650 ft.

Packer Depth 3638 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 3633 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3641 ft. — Recorder Number 6234 — Cap. 4500

Bottom Recorder Depth (Outside) 3644 ft. — Recorder Number 4339 — Cap. 4300

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

Drilling Contractor Red Tiger #3 — Drill Collar Length - — I. D. - in.

Mud Type Salt Gel-Starch — Viscosity 36 — Weight Pipe Length 1230 — I. D. 2.7 in.

Weight 10.0 — Water Loss 16.2 cc. — Drill Pipe Length 2388 — I. D. 3.8 in.

Chlorides 89,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 4½ in.

Jars: Make - — Serial Number - — Anchor Length 12 ft. — Size 5½ in.

Did Well Flow? No — Reversed Out No — Surface Choke Size ½ in. — Bottom Choke Size ½ in.

Main Hole Size 7 7/8 in. — Tool Joint Size 4½ X in.

Blow: Weak Blow on initial flow period. Strong blow on final flow period

Recovered 60 ft. of mud

Recovered 60 ft. of muddy water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 5:20 ~~P.M.~~ A.M. — Time Started Off Bottom 8:20 ~~P.M.~~ A.M. — Maximum Temperature 110

Initial Hydrostatic Pressure ..... (A) 1930 P.S.I.

Initial Flow Period ..... Minutes 30 (B) Plugging Action P.S.I. to (C) 842* P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 1234 P.S.I.

Final Flow Period ..... Minutes 30 (E) 55* P.S.I. to (F) 62 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 1174 P.S.I.

Final Hydrostatic Pressure ..... (H) 1912 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 9-11-80 Test Ticket No. 7303

Recorder No. 6234 Capacity 4500 Location 3641 Ft.

Clock No. ---------- Elevation 1480 Kelly Bushing Well Temperature 110 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1930	P.S.I.
B	First Initial Flow Pressure	Plugging Action	P.S.I.
C	First Final Flow Pressure	842*	P.S.I.
D	Initial Closed-in Pressure	1234	P.S.I.
E	Second Initial Flow Pressure	55*	P.S.I.
F	Second Final Flow Pressure	62	P.S.I.
G	Final Closed-in Pressure	1174	P.S.I.
H	Final Hydrostatic Mud	1912	P.S.I.

	Time Given	Time Computed
Open Tool	5:20 M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	60 Mins.	60 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	60 Mins.	60 Mins.

* Pressures Questionable

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

Final Shut-In
Breakdown: 20 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	Plugging Action	0	842*	0	55*	0	62
P 2 5	Plugging Action	3	982*	5	50	3	356
P 3 10	516*	6	854	10	50	6	552
P 4 15	723*	9	962	15	53	9	718
P 5 20	779*	12	1072	20	57	12	820
P 6 25	801*	15	1147	25	60	15	892
P 7 30	842*	18	1179	30	62	18	944
P 8		21	1199			21	991
P 9		24	1213			24	1027
P10		27	1222			27	1054
P11		30	1226			30	1075
P12		33	1228			33	1093
P13		36	1229			36	1109
P14		39	1230			39	1122
P15		42	1231			42	1133
P16		45	1232			45	1153
P17		48	1232			48	1149
P18		51	1233			51	1156
P19		54	1233			54	1162
P20		57	1234			57	1167
		60	1234			60	1174

6234

JRH # 7303

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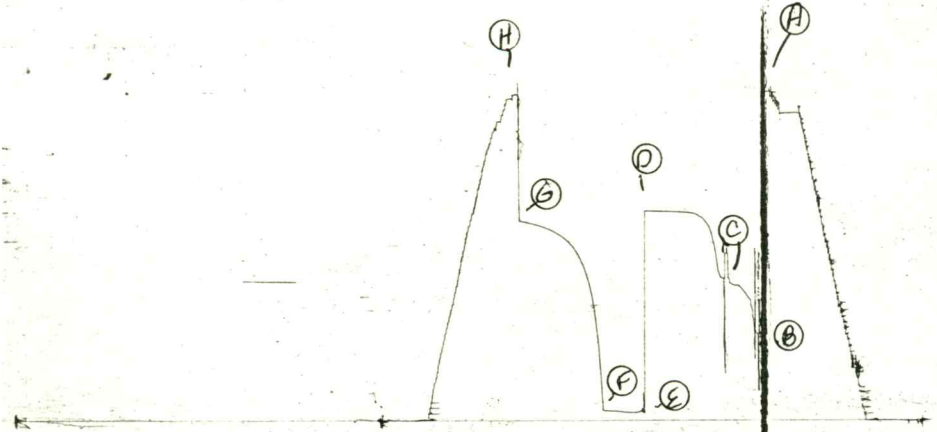

Company Olympic Petroleum Company — Lease & Well No. Holtje #1

Elevation 1500 Kelly Bushing — Formation Misener — Effective Pay - Ft. — Ticket No. 6857

Date 9-13-80 — Sec. 16 — Twp. 26S — Range 4W — County Reno — State Kansas

Test Approved by James Dilts — Western Representative Rod Tritt

Formation Test No. 2 — Interval Tested from 3998 ft. to 4028 ft. — Total Depth 4028 ft.

Packer Depth 3993 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 3998 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4002 ft. — Recorder Number 2606 — Cap. 4150

Bottom Recorder Depth (Outside) 4005 ft. — Recorder Number 4332 — Cap. 4200

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

Drilling Contractor Red Tiger Rig #3 — Drill Collar Length - — I. D. - in.

Mud Type Starch — Viscosity 45 — Weight Pipe Length 250 — I. D. 2½ in.

Weight 9.9 — Water Loss 18.6 cc. — Drill Pipe Length 3726 — I. D. 3.8 in.

Chlorides 40,000 P.P.M. — Test Tool Length 22 ft. — Tool Size 5½ OD in.

Jars: Make NO — Serial Number - — Anchor Length 30 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 for 15 minutes throughout blow. Died on initial flow period. No blow on final flow period.

Recovered 10 ft. of Drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 5:00 A.M. ~~P.M.~~ — Time Started Off Bottom 6:50 A.M. ~~P.M.~~ — Maximum Temperature 123

Initial Hydrostatic Pressure ..... (A) 2173 P.S.I.

Initial Flow Period ..... Minutes 20 (B) 12 P.S.I. to (C) 10 P.S.I.

Initial Closed In Period ..... Minutes 36 (D) 17 P.S.I.

Final Flow Period ..... Minutes 15 (E) 16 P.S.I. to (F) 12 P.S.I.

Final Closed In Period ..... Minutes 33 (G) 10 P.S.I.

Final Hydrostatic Pressure ..... (H) 2094 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 9-13-80 Test Ticket No. 6857

Recorder No. 2606 Capacity 4150 Location 4002 Ft.

Clock No. ---------- Elevation 1500 Kelly Bushing Well Temperature 123 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2173 P.S.I.		Open Tool	5:00 AM	
B	First Initial Flow Pressure	12 P.S.I.		First Flow Pressure	20 Mins.	20 Mins.
C	First Final Flow Pressure	10 P.S.I.		Initial Closed-in Pressure	45 Mins.	36 Mins.
D	Initial Closed-in Pressure	17 P.S.I.		Second Flow Pressure	15 Mins.	15 Mins.
E	Second Initial Flow Pressure	16 P.S.I.		Final Closed-in Pressure	30 Mins.	33 Mins.
F	Second Final Flow Pressure	12 P.S.I.				
G	Final Closed-in Pressure	10 P.S.I.				
H	Final Hydrostatic Mud	2094 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 4 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1 0	12
P 2 5	12
P 3 10	12
P 4 15	10
P 5 20	10
P 6	
P 7	
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 12 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	10
3	10
6	10
9	10
12	10
15	10
18	10
21	11
24	12
27	13
30	14
33	16
36	17

Second Flow Pressure
Breakdown: 3 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	16
5	14
10	12
15	12

Final Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	12
3	10
6	10
9	10
12	10
15	10
18	10
21	10
24	10
27	10
30	10
33	10

2606 DST #2

JK #6857

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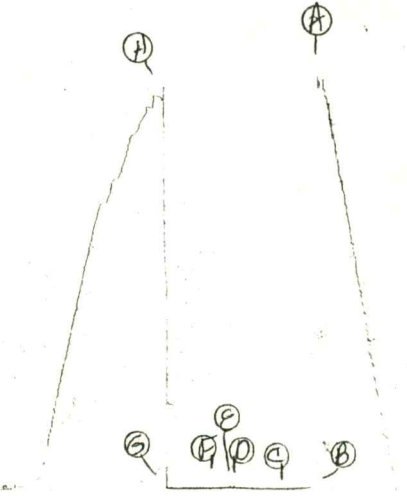

Company Olympic Petroleum Company — Lease & Well No. Holtje #1

Elevation 1500 Kelly Bushing — Formation Viola — Effective Pay - Ft. — Ticket No. 6858

Date 9-13-80 — Sec. 16 — Twp. 26S — Range 4W — County Reno — State Kansas

Test Approved by James Dilts — Western Representative Rod Tritt

Formation Test No. 3 — Interval Tested from 4044 ft. to 4056 ft. — Total Depth 4056 ft.

Packer Depth 4039 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 4044 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4048 ft. — Recorder Number 2606 — Cap. 4150

Bottom Recorder Depth (Outside) 4051 ft. — Recorder Number 4332 — Cap. 4200

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

Drilling Contractor Red Tiger Rig #3 — Drill Collar Length - — I. D. - in.

Mud Type Starch Salt Clay — Viscosity 49 — Weight Pipe Length 250 — I. D. 2½ in.

Weight 9.8 — Water Loss 14.8 cc. — Drill Pipe Length 3772 — I. D. 3.8 in.

Chlorides 42,000 P.P.M. — Test Tool Length 22 ft. — Tool Size 5½ OD in.

Jars: Make NO — Serial Number - — Anchor Length 12 ft. — Size 5½ OD 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 4½ FH in.

Blow: Strong blow on both the initial and final flow periods. No gas to surface.

Recovered 2702 ft. of water Chlorides 52,000 P.P.M.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:30 ~~A.M.~~ P.M. — Time Started Off Bottom 3:15 ~~A.M.~~ ~~P.M.~~ — Maximum Temperature 133

Initial Hydrostatic Pressure			(A) 2178	P.S.I.		
Initial Flow Period	Minutes 10	(B) 119	P.S.I. to	(C) 374	P.S.I.	
Initial Closed In Period	Minutes 30	(D) 1427	P.S.I.			
Final Flow Period	Minutes 60	(E) 529	P.S.I. to	(F) 1126	P.S.I.	
Final Closed In Period	Minutes 120	(G) 1431	P.S.I.			
Final Hydrostatic Pressure			(H) 2137	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 9-13-80 Test Ticket No. 6858

Recorder No. 2606 Capacity 4150 Location 4048 Ft.

Clock No. ---------- Elevation 1500 Kelly Bushing Well Temperature 133 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2178	P.S.I.	Open Tool	11:30 PM	
B	First Initial Flow Pressure	119	P.S.I.	First Flow Pressure	15 Mins.	10 Mins.
C	First Final Flow Pressure	374	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1427	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	529	P.S.I.	Final Closed-in Pressure	120 Mins.	120 Mins.
F	Second Final Flow Pressure	1126	P.S.I.			
G	Final Closed-in Pressure	1431	P.S.I.			
H	Final Hydrostatic Mud	2137	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 2 Inc. of 5 mins. and a final inc. of 0 Min.

Point Mins.	Press.
P 1 0	119
P 2 5	306
P 3 10	374
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: 10 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	374
3	1384
6	1394
9	1404
12	1411
15	1417
18	1419
21	1421
24	1423
27	1425
30	1427

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

Point Minutes	Press.
0	529
5	543
10	610
15	674
20	736
25	798
30	850
35	900
40	952
45	998
50	1041
55	1081
60	1126

Final Shut-In
Breakdown: 40 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	1126
3	1388
6	1400
9	1411
12	1417
15	1419
18	1421
21	1421
24	1425
27	1427
30	1429
33	1429
36	1429
39	1429
42	1429
45	1429
48	1429
51	1430
54	1430
57	1431
60	1431
CON'T	

WESTERN TESTING CO., INC.
Pressure Data

Date 9-13-80 Test Ticket No. 6858

Recorder No. 2606 Capacity 4150 Location 4048 Ft.

Clock No. ---------- Elevation 1500 Kelly Bushing Well Temperature 133 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2178	P.S.I.	Open Tool	11:30 PM	
B	First Initial Flow Pressure	119	P.S.I.	First Flow Pressure	15 Mins.	10 Mins.
C	First Final Flow Pressure	374	P.S.I.	Initial Closed-in Pressure	30 Mins.	30 Mins.
D	Initial Closed-in Pressure	1427	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	529	P.S.I.	Final Closed-in Pressure	120 Mins.	120 Mins.
F	Second Final Flow Pressure	1126	P.S.I.			
G	Final Closed-in Pressure	1431	P.S.I.			
H	Final Hydrostatic Mud	2137	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 2 Inc.
of 5 mins. and a
final inc. of 0 Min.

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

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

Final Shut-In
Breakdown: 40 Inc.
of 3 mins. and a
final inc. of 0 Min.

oint ins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1						63	1431
2						66	1431
3						69	1431
4						72	1431
5						75	1431
6						78	1431
7						81	1431
8						84	1431
9						87	1431
0						90	1431
1						93	1431
2						96	1431
3						99	1431
4						102	1431
5						105	1431
6						108	1431
7						111	1431
8						114	1431
9						117	1431
0						120	1431

Dk # 6858

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