Company Aspen Oil, Inc. Lease & Well No. Hay #2

Elevation 1278 Kelly Bushing Formation Mississippi Dolomite Effective Pay - Ft. Ticket No. 10387

Date 11/24/81 Sec. 6 Twp. 29S Range 1E County Sedgwick State Kansas

Test Approved by Wesley Hansen Western Representative Allen Edgington

Formation Test No. 1 Interval Tested from 3192 ft. to 3231 ft. Total Depth 3231 ft.

Packer Depth 3187 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3192 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) AP 3177 ft. Recorder Number 5666 Cap. 3950

Bottom Recorder Depth (Outside) AP 3181 ft. Recorder Number 3350 Cap. 4200

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

Drilling Contractor Aspen Rig #1 Drill Collar Length 171 I. D. 2¼ in.

Mud Type Chemical Viscosity 49 Weight Pipe Length - I. D. - in.

Weight 10.7 Water Loss - cc. Drill Pipe Length 2997 I. D. 3.8 in.

Chlorides 5500 P.P.M. Test Tool Length 29 ft. Tool Size 4½ in.

Jars: Make - Serial Number - Anchor Length 39 ft. Size 4½ 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 FH in.

Blow: Strong throughout test.

Recovered 710 ft. of gas in pipe

Recovered 70 ft. of oil & gas cut mud - 25% oil

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 8:15 A.M. ~~P.M.~~ Time Started Off Bottom 11:15 A.M. ~~P.M.~~ Maximum Temperature 106

Initial Hydrostatic Pressure			(A) 1745	P.S.I.		
Initial Flow Period	Minutes 30	(B) 33	P.S.I. to	(C) 37	P.S.I.	
Initial Closed In Period	Minutes 57	(D) 1279	P.S.I.			
Final Flow Period	Minutes 30	(E) 51	P.S.I. to	(F) 52	P.S.I.	
Final Closed In Period	Minutes 63	(G) 843	P.S.I.			
Final Hydrostatic Pressure			(H) 1715	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 11/24/81 Test Ticket No. 10387

Recorder No. 5666 Capacity 3950 Location 3177 Ft.

Clock No. - Elevation 1278 Kelly Bushing Well Temperature 106 °F

Point	Pressure	
A Initial Hydrostatic Mud	1745	P.S.I.
B First Initial Flow Pressure	33	P.S.I.
C First Final Flow Pressure	37	P.S.I.
D Initial Closed-in Pressure	1279	P.S.I.
E Second Initial Flow Pressure	51	P.S.I.
F Second Final Flow Pressure	52	P.S.I.
G Final Closed-in Pressure	843	P.S.I.
H Final Hydrostatic Mud	1715	P.S.I.

	Time Given	Time Computed
Open Tool	8:15A M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	60 Mins.	57 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	60 Mins.	63 Mins.

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

Final Shut-In
Breakdown: 21 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	33	0	37	0	51	0	52
P 2 5	33	3	48	5	51	3	58
P 3 10	33	6	75	10	51	6	67
P 4 15	33	9	105	15	51	9	84
P 5 20	34	12	143	20	51	12	102
P 6 25	35	15	176	25	51	15	118
P 7 30	37	18	200	30	52	18	137
P 8		21	224			21	155
P 9		24	239			24	171
P10		27	286			27	190
P11		30	353			30	210
P12		33	431			33	229
P13		36	526			36	253
P14		39	624			39	288
P15		42	743			42	337
P16		45	867			45	388
P17		48	986			48	457
P18		51	1096			51	530
P19		54	1205			54	622
P20		57	1279			57	715
						60 63	809
						63	843

TK # 10387

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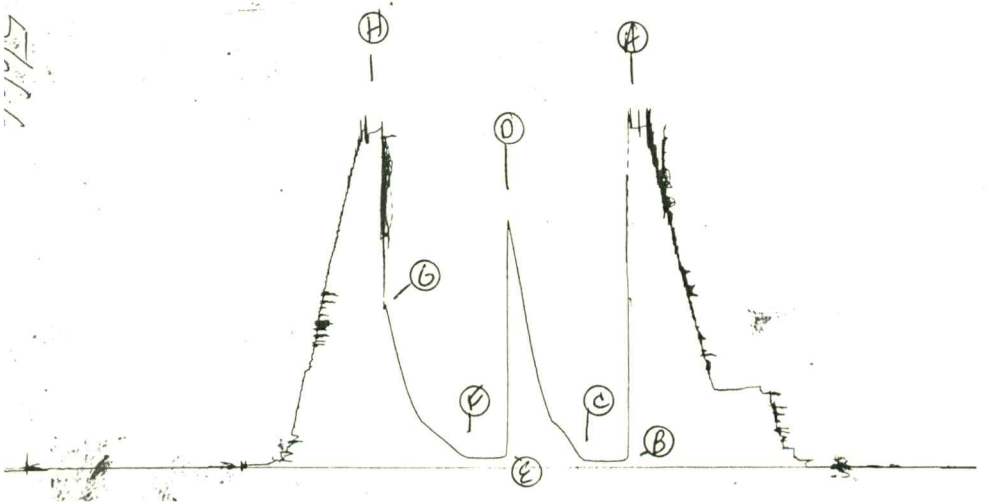


Company Aspen Oil, Inc. Lease & Well No. Hay #2

Elevation 1278 Kelly Bushing Formation Simpson Effective Pay - Ft. Ticket No. 12782

Date 11/30/81 Sec. 6 Twp. 29S Range 1E County Sedgwick State Kansas

Test Approved by Raymond Cummings Western Representative Kenny Kirkendall & Allen Edgington

Formation Test No. 2 Interval Tested from 3568 ft. to 3640 ft. Total Depth 3640 ft.

Packer Depth 3568 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3563 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3573 ft. Recorder Number 2605 Cap. 4150

Bottom Recorder Depth (Outside) 3576 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Aspen Drilling Rig #4 Drill Collar Length - I. D. - in.

Mud Type chemical Viscosity 50 Weight Pipe Length - I. D. - in.

Weight 10.3 Water Loss 34 cc. Drill Pipe Length 3562 I. D. 3.8 in.

Chlorides 28,000 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number - Anchor Length 72 ft. Size 5½ in.

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

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH +4½F

Blow: Weak throughout test. (one fourth inch in water)

Recovered 30 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 10:45 A.M. P.M. Time Started Off Bottom 2:00 ~~A.M.~~ P.M. Maximum Temperature 115°

Initial Hydrostatic Pressure (A) 2002 P.S.I.

Initial Flow Period Minutes 30 (B) 32 P.S.I. to (C) 32 P.S.I.

Initial Closed In Period Minutes 72 (D) 853 P.S.I.

Final Flow Period Minutes 35 (E) 37 P.S.I. to (F) 37 P.S.I.

Final Closed In Period Minutes 57 (G) 592 P.S.I.

Final Hydrostatic Pressure (H) 1992 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 11/30/81 Test Ticket No. 12782

Recorder No. 10979 Capacity 4100 Location 3576 Ft.

Clock No. - Elevation 1278 Kelly Bushing Well Temperature 115 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2002	P.S.I.
B	First Initial Flow Pressure	32	P.S.I.
C	First Final Flow Pressure	32	P.S.I.
D	Initial Closed-in Pressure	853	P.S.I.
E	Second Initial Flow Pressure	37	P.S.I.
F	Second Final Flow Pressure	37	P.S.I.
G	Final Closed-in Pressure	592	P.S.I.
H	Final Hydrostatic Mud	1992	P.S.I.

	Time Given	Time Computed
Open Tool	10:45A M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	70 Mins.	72 Mins.
Second Flow Pressure	35 Mins.	35 Mins.
Final Closed-in Pressure	60 Mins.	57 Mins.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	32
P 2 5	32
P 3 10	32
P 4 15	32
P 5 20	32
P 6 25	32
P 7 30	32
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 24 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	32
3	32
6	32
9	32
12	38
15	45
18	55
21	71
24	97
27	142
30	190
33	241
36	305
39	372
42	425
45	481
48	539
51	591
54	637
57	693
60	732

Second Flow Pressure
Breakdown: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	37
5	37
10	37
15	37
20	37
25	37
30	37
35	37

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

Point Minutes	Press.
0	37
3	36
6	35
9	37
12	41
15	50
18	61
21	75
24	105
27	140
30	186
33	230
36	285
39	331
42	379
45	423
48	469
51	508
54	546
57	592

WTC - 4

continued

WESTERN TESTING CO., INC.
Pressure Data

Date 11/30/81 Test Ticket No. 12782

Recorder No. 10979 Capacity 4100 Location 3576 Ft.

Clock No. - Elevation 1278 Kelly Bushing Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2002 P.S.I.	Open Tool	10:45A M	
B First Initial Flow Pressure	32 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	32 P.S.I.	Initial Closed-in Pressure	70 Mins.	72 Mins.
D Initial Closed-in Pressure	853 P.S.I.	Second Flow Pressure	35 Mins.	35 Mins.
E Second Initial Flow Pressure	37 P.S.I.	Final Closed-in Pressure	60 Mins.	57 Mins.
F Second Final Flow Pressure	37 P.S.I.			
G Final Closed-in Pressure	592 P.S.I.			
H Final Hydrostatic Mud	1992 P.S.I.			

PRESSURE BREAKDOWN

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

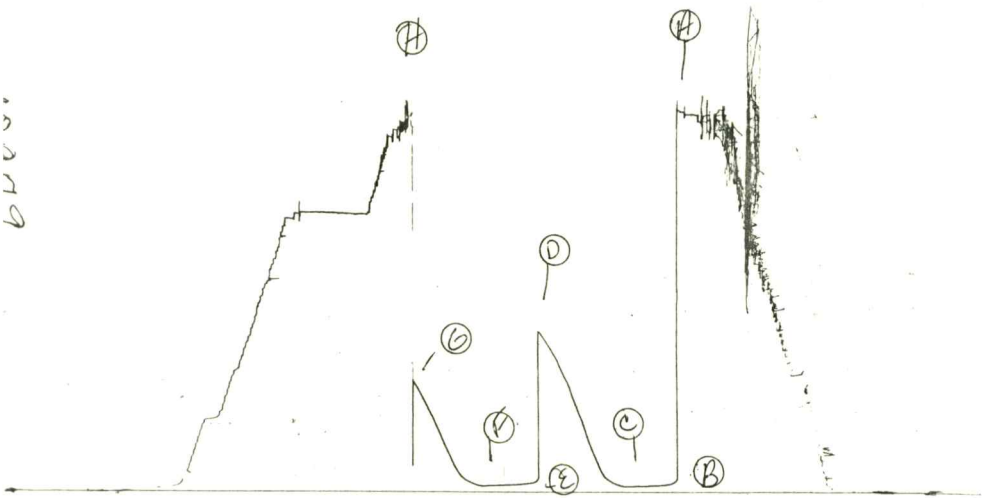
Initial Shut-In
Breakdown: 24 Inc. of 3 mins. and a final inc. of 0 Min.

Second Flow Pressure
Breakdown: 7 Inc. of 5 mins. and a final inc. of 0 Min.

Final Shut-In
Breakdown: 19 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	767				
P 2		66	802				
P 3		69	836				
P 4		72	853				
P 5							
P 6							
P 7							
P 8							
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

Tkt # 12782



Company Aspen Oil, Inc. Lease & Well No. Hay #2

Elevation 1277 Kelly Bushing Formation Simpson Effective Pay - Ft. Ticket No. 9997

Date 12/ 2 /81 Sec. 6 Twp. 29S Range 1E County Sedgwick State Kansas

Test Approved by Wesley Hansen Western Representative Norman Allen

Formation Test No. 3 Interval Tested from 3671 ft. to 3715 ft. Total Depth 3740 ft.

Packer Depth 3661 ft. Size 6 3/4 in. Packer Depth 3710 ft. Size 6 3/4 in.

Packer Depth 3666 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3361 ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 3358 ft. Recorder Number 13268 Cap. 4225

Below Straddle Recorder Depth 3730 ft. Recorder Number 10979 Cap. 4100

Drilling Contractor Aspen Drlg. Co. Rig #4 Drill Collar Length - I. D. - in.

Mud Type chemical Viscosity 52 Weight Pipe Length - I. D. - in.

Weight 10.4 Water Loss - cc. Drill Pipe Length 3651 I. D. 3.8 in.

Chlorides 20,000 P.P.M. Test Tool Length 89 ft. Tool Size 5½OD & DP in.

Jars: Make - Serial Number - Anchor Length 44 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&XH in.

Blow: Fair blow throughout test.

Recovered 175 ft. of salt water Chlorides 35,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 5:30 ~~A.M.~~ P.M. Time Started Off Bottom 8:30 ~~A.M.~~ P.M. Maximum Temperature 116°

Initial Hydrostatic Pressure			(A) 2078	P.S.I.		
Initial Flow Period	Minutes 30	(B) 35	P.S.I. to	(C) 54	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 1462	P.S.I.			
Final Flow Period	Minutes 30	(E) 82	P.S.I. to	(F) 95	P.S.I.	
Final Closed In Period	Minutes 57	(G) 1444	P.S.I.			
Final Hydrostatic Pressure			(H) 2078	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 12/2/81 Test Ticket No. 9997

Recorder No. 1559 Capacity 4200 Location 3361 Ft.

Clock No. - Elevation 1277 Kelly Bushing Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2078 P.S.I.	Open Tool	5:30P M	
B First Initial Flow Pressure	35 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	54 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1462 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	82 P.S.I.	Final Closed-in Pressure	60 Mins.	57 Mins.
F Second Final Flow Pressure	95 P.S.I.			
G Final Closed-in Pressure	1444 P.S.I.			
H Final Hydrostatic Mud	2078 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	35
P 2 5	35
P 3 10	35
P 4 15	38
P 5 20	42
P 6 25	48
P 7 30	54
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	54
3	835
6	1096
9	1232
12	1290
15	1331
18	1365
21	1386
24	1405
27	1420
30	1429
33	1438
36	1444
39	1448
42	1452
45	1454
48	1456
51	1458
54	1460
57	1461
60	1462

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

Point Minutes	Press.
0	82
5	82
10	82
15	86
20	90
25	93
30	95

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

Point Minutes	Press.
0	95
3	1082
6	1227
9	1278
12	1319
15	1351
18	1373
21	1387
24	1397
27	1403
30	1410
33	1417
36	1423
39	1430
42	1434
45	1437
48	1440
51	1442
54	1443
57	1444

TKT # 9997

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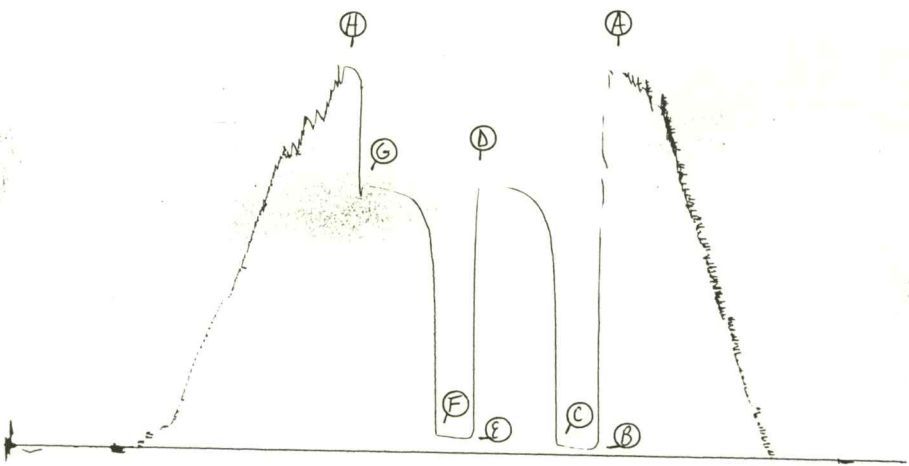

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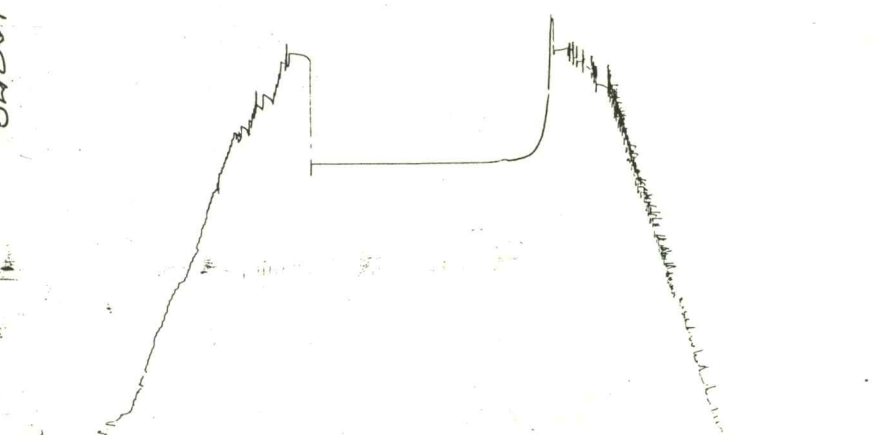
Below Straddle



Company Aspen Oil, Inc. Lease & Well No. Hay #2

Elevation 1277 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 9998

Date 12/ 3 /81 Sec. 6 Twp. 29S Range 1E County Sedgwick State Kansas

Test Approved by Wesley Hansen Western Representative Norman Allen

Formation Test No. 4 Interval Tested from 3220 ft. to 3235 ft. Total Depth 3740 ft.

Packer Depth 3215 ft. Size 6 3/4 in. Packer Depth 3235 ft. Size 6 3/4 in.

Packer Depth 3220 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3224 ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 3227 ft. Recorder Number 13268 Cap. 4225

Below Straddle Recorder Depth 3240 ft. Recorder Number 10979 Cap. 4100

Drilling Contractor Aspen Drlg. Co. Rig #4 Drill Collar Length - I. D. - in.

Mud Type chemical Viscosity 52 Weight Pipe Length - I. D. - in.

Weight 10.4 Water Loss - cc. Drill Pipe Length 3200 I. D. 3.8 in.

Chlorides 20,000 P.P.M. Test Tool Length 540 ft. Tool Size 5½OD & DP in.

Jars: Make - Serial Number - Anchor Length 15 ft. Size 5½OD in.

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

Main Hole Size 7 7/8. Tool Joint Size 4½FH&XH

Blow: MISRUN PACKER SEAT FAILED TO HOLD

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: MISRUN

Time Set Packer(s) 3:30 A.M. ~~P.M.~~ Time Started Off Bottom 4:00 A.M. ~~P.M.~~ Maximum Temperature ?

Initial Hydrostatic Pressure ..... (A) 1806 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) 1749 P.S.I.

IKI # 9998

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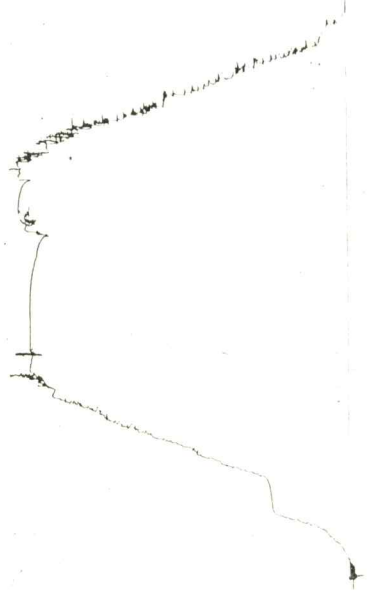

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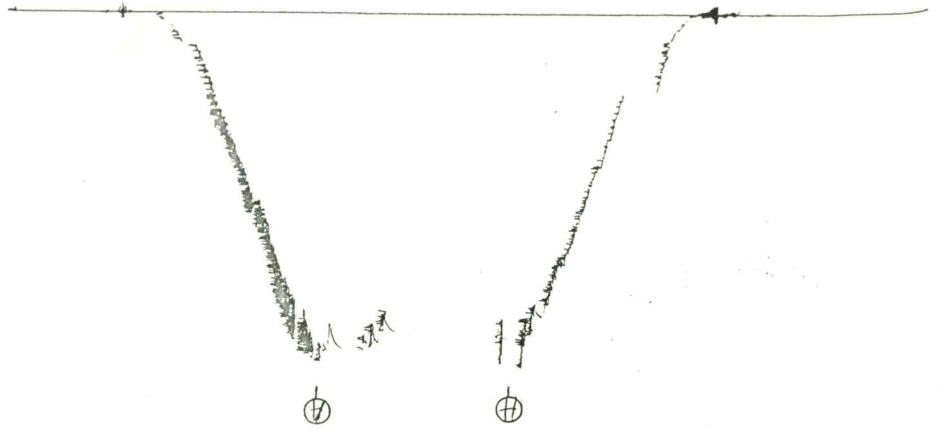
1559



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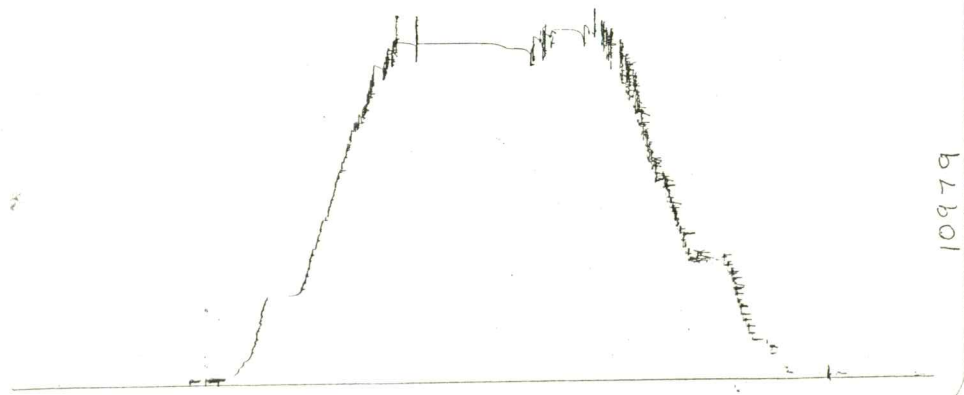
Below Straddle



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Company Aspen Oil, Inc. Lease & Well No. Hay #2

Elevation 1277 Kelly Bushing Formation Kansas City Effective Pay - Ft. Ticket No. 9999

Date 12/ 3 /81 Sec. 6 Twp. 29S Range 1E County Sedgwick State Kansas

Test Approved by Wesley Hansen Western Representative Norman Allen

Formation Test No. 5 Interval Tested from 2760 ft. to 2850 ft. Total Depth 3740 ft.

Packer Depth 2755 ft. Size 6 3/4 in. Packer Depth 2850 ft. Size 6 3/4 in.

Packer Depth 2760 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2772 ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 2775 ft. Recorder Number 13268 Cap. 4225

Below Straddle Recorder Depth 2860 ft. Recorder Number 10979 Cap. 4100

Drilling Contractor Aspen Drlg. Co. Rig #4 Drill Collar Length - I. D. - in.

Mud Type chemical Viscosity 49 Weight Pipe Length - I. D. - in.

Weight 10.4 Water Loss 34 cc. Drill Pipe Length 2740 I. D. 3.8 in.

Chlorides 34,000 P.P.M. Test Tool Length 1000 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 90 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&XH

Blow: Strong blow diminishing to fair by end of test. Gas to surface at start of final shut-in period.

Recovered 2550 ft. of gas cut slightly muddy salt water Chlorides 73,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 9:45 ~~A.M.~~ P.M. Time Started Off Bottom 12:45 ~~A.M.~~ ~~P.M.~~+ Maximum Temperature 103°

Initial Hydrostatic Pressure			(A) 1564	P.S.I.		
Initial Flow Period	Minutes 30	(B) 441	P.S.I. to	(C) 1023	P.S.I.	
Initial Closed In Period	Minutes 60	(D) 1584	P.S.I.			
Final Flow Period	Minutes 30	(E) 1147	P.S.I. to	(F) 1307	P.S.I.	
Final Closed In Period	Minutes 60	(G) 1603	P.S.I.			
Final Hydrostatic Pressure			(H) 1564	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 12/3/81 Test Ticket No. 9999

Recorder No. 1559 Capacity 4200 Location 2772 Ft.

Clock No. - Elevation 1277 Kelly Bushing Well Temperature 103 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1564	P.S.I.
B	First Initial Flow Pressure	441	P.S.I.
C	First Final Flow Pressure	1023	P.S.I.
D	Initial Closed-in Pressure	1584	P.S.I.
E	Second Initial Flow Pressure	1147	P.S.I.
F	Second Final Flow Pressure	1307	P.S.I.
G	Final Closed-in Pressure	1603	P.S.I.
H	Final Hydrostatic Mud	1564	P.S.I.

	Time Given	Time Computed
Open Tool	9:45P 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.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	441
P 2 5	477
P 3 10	610
P 4 15	733
P 5 20	852
P 6 25	942
P 7 30	1023
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	1023
3	1332
6	1381
9	1426
12	1464
15	1500
18	1520
21	1534
24	1546
27	1553
30	1558
33	1562
36	1566
39	1570
42	1572
45	1574
48	1576
51	1578
54	1580
57	1582
60	1584

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

Point Minutes	Press.
0	1147
5	1158
10	1195
15	1238
20	1276
25	1292
30	1307

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

Point Minutes	Press.
0	1307
3	1481
6	1519
9	1548
12	1558
15	1555
18	1572
21	1579
24	1582
27	1586
30	1589
33	1591
36	1593
39	1595
42	1597
45	1599
48	1600
51	1601
54	1602
57	1603
60	1603

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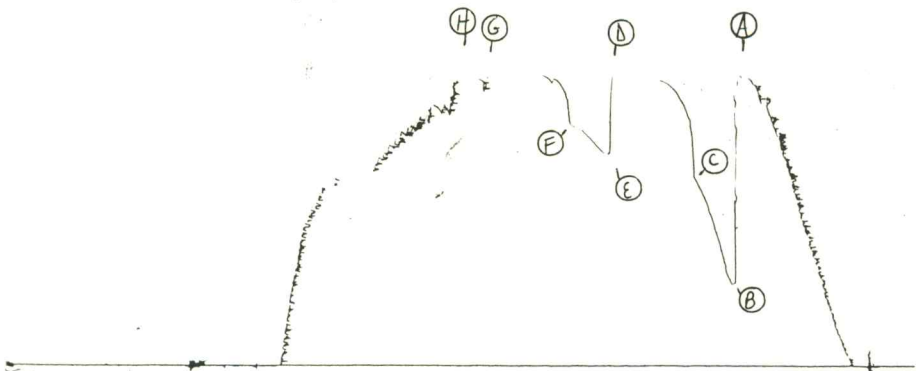

IKI " 9999

Below Straddle