



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 8484

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1724 GL Formation Douglas Sand Eff. Pay Ft.

District Pan Date 11-30-80 Customer Order No. 1408 Douglas Bldg
COMPANY NAME Pan-Western Petroleum Co. Inc.
ADDRESS 104 South Broadway Wichita, Kansas 67202
LEASE AND WELL NO. "99 Springs #1" COUNTY Baer STATE KANSAS Sec. 25 Twp. 30S Rge. 12W
Mail Invoice To Same No. Copies Requested Reg
Co. Name Same Address one copy to Tony Elster No. Copies Requested Reg
Mail Charts To Same Address one copy to Tony Elster No. Copies Requested Reg

Formation Test No. 1 Interval Tested from 3647 ft. to 3700 ft. Total Depth 3700 ft.
Packer Depth 3642 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.
Packer Depth 3647 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.
Depth of Selective Zone Set —
Top Recorder Depth (Inside) 3647 ft. Recorder Number 2606 Cap. 4150
Bottom Recorder Depth (Outside) 3652 ft. Recorder Number 4332 Cap. 4200
Below Straddle Recorder Depth — ft. Recorder Number — Cap. —
Drilling Contractor Gabbert & Jones Rig 6 Drill Collar Length 442 I. D. 2 7/8 in.
Mud Type Premix Starch Viscosity 44 Weight Pipe Length — I. D. — in.
Weight 9.4 Water Loss 15.0 cc. Drill Pipe Length 3214 I. D. 3.8 in.
Chlorides 32,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.
Jars: Make NO Serial Number — Anchor Length 29 + 24 ft. Size 1 1/2" + 5 1/2"
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 4 1/2 + H in.

Blow: Strong blow through out test no gas to surface

Recovered 3030 ft. of muddy water Chlorides 86,000 P.P.M.
Recovered — ft. of —
Recovered — ft. of —
Recovered — ft. of —
Recovered — ft. of —
Remarks: —

Time On Location 12:00 M.A.M. Time Pick Up Tool 8:00 A.M.
Time Set Packer(s) 9:50 A.M. Time Started Off Bottom 1:50 A.M.
Initial Hydrostatic Pressure — (A) 1873 P.S.I. Maximum Temperature 113°F
Initial Flow Period 60 Minutes (B) 416 P.S.I. to (C) 1142 P.S.I.
Initial Closed In Period 60 Minutes (D) 1381 P.S.I.
Final Flow Period 60 Minutes (E) 1244 P.S.I. to (F) 1357 P.S.I.
Final Closed In Period 60 Minutes (G) 1381 P.S.I.
Final Hydrostatic Pressure — (H) 1821 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 Tony Elster
Signature of Customer or his authorized representative

Western Representative Rod Tri H

FIELD INVOICE

Open Hole Test \$ 550.00
Misrun \$ —
Straddle Test \$ —
Jars \$ —
Selective Zone \$ —
Safety Joint \$ —
Standby 3 1/2 \$ 6.00 108
Evaluation \$ —
Extra Packer \$ —
Circ. Sub. OK \$ 30.00
Mileage \$ 25 mi 18.75
Fluid Sampler \$ —
Extra Charts \$ —
Insurance \$ —
TOTAL \$ 67

WESTERN TESTING CO., INC.

Pressure Data

Date 11-30 Test Ticket No. 8484
 Recorder No. 2606 Capacity 4150 Location 3649 Ft.
 Clock No. Elevation 1724 24 Well Temperature 113 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1886</u> P.S.I.		<u>9:50</u> A.M.	
B First Initial Flow Pressure	<u>410</u> * P.S.I.	First Flow Pressure	<u>60</u> Mins.	<u>50</u> Mins.
C First Final Flow Pressure	<u>1167</u> * P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D Initial Closed-in Pressure	<u>1383</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>1246</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>1366</u> P.S.I.	* Pressures questionable due to plugging action.		
G Final Closed-in Pressure	<u>1384</u> P.S.I.			
H Final Hydrostatic Mud	<u>1811</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 10 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: 20 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

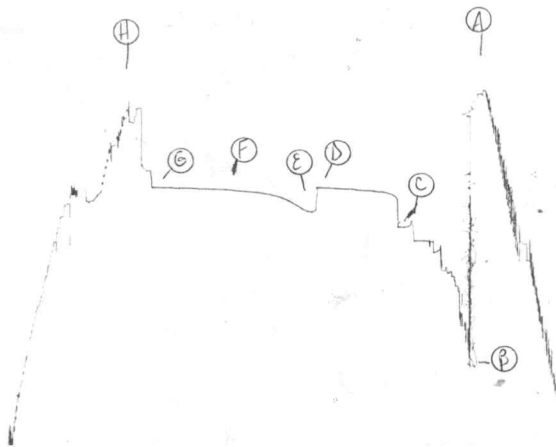
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>410</u> *	0	<u>1167</u> *	0	<u>1246</u>	0	<u>1366</u>
P 2 5	<u>624</u> *	3	<u>1334</u>	5	<u>1250</u>	3	<u>1368</u>
P 3 10	<u>846</u> *	6	<u>1346</u>	10	<u>1263</u>	6	<u>1370</u>
P 4 15	<u>921</u> *	9	<u>1352</u>	15	<u>1288</u>	9	<u>1372</u>
P 5 20	<u>929</u> *	12	<u>1358</u>	20	<u>1309</u>	12	<u>1374</u>
P 6 25	<u>1031</u> *	15	<u>1359</u>	25	<u>1325</u>	15	<u>1375</u>
P 7 30	<u>1087</u> *	18	<u>1361</u>	30	<u>1338</u>	18	<u>1376</u>
P 8 35	<u>1091</u> *	21	<u>1363</u>	35	<u>1346</u>	21	<u>1377</u>
P 9 40	<u>1092</u> *	24	<u>1365</u>	40	<u>1352</u>	24	<u>1378</u>
P10 45	<u>1170</u> *	27	<u>1367</u>	45	<u>1358</u>	27	<u>1379</u>
P11 50	<u>1167</u> *	30	<u>1369</u>	50	<u>1361</u>	30	<u>1380</u>
P12 55	 	33	<u>1371</u>	55	<u>1363</u>	33	<u>1381</u>
P13 60	 	36	<u>1373</u>	60	<u>1366</u>	36	<u>1382</u>
P14		39	<u>1375</u>	65		39	<u>1383</u>
P15		42	<u>1377</u>	70		42	<u>1384</u>
P16		45	<u>1379</u>	75		45	<u>1384</u>
P17		48	<u>1379</u>	80		48	
P18		51	<u>1380</u>	85		51	
P19		54	<u>1381</u>	90		54	
P20		57	<u>1382</u>			57	
		60	<u>1383</u>			60	<u>1384</u>

2606

DIST #1

TKT #8484

I



Company Pan-Western Petroleum, Inc. Lease & Well No. "99" Springs #1
Elevation 1724 Ground Level Formation Douglas Sand Effective Pay - Ft. Ticket No. 8484
Date 11-30-80 Sec. 25 Twp. 30S Range 12W County Barber State Kansas
Test Approved by Toby Elster Western Representative Rod Tritt

Formation Test No. 1 Interval Tested from 3647 ft. to 3700 ft. Total Depth 3700 ft.
Packer Depth 3642 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 3647 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 3649 ft. Recorder Number 2606 Cap. 4150
Bottom Recorder Depth (Outside) 3652 ft. Recorder Number 4332 Cap. 4200
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Gabbert & Jones Rig #6 Drill Collar Length 442 I. D. 2 1/4 in.
Mud Type Premix Starch Viscosity 44 Weight Pipe Length - I. D. - in.
Weight 9.4 Water Loss 15.0 cc. Drill Pipe Length 3214 I. D. 3.8 in.
Chlorides 32,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.
Jars: Make No Serial Number - Anchor Length 29 + 24 ft. Size DC6 + 5 1/2 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 4 1/2 FH in.

Blow: Strong blow throughout test. No gas to surface

Recovered 3030 ft. of muddy water Chlorides 86,000 PPM
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks:

Time Set Packer(s) 9:50 ~~A.M.~~ P.M. Time Started Off Bottom 1:50 ~~A.M.~~ P.M. Maximum Temperature 113
Initial Hydrostatic Pressure (A) 1886 P.S.I.
Initial Flow Period Minutes 50 (B) 410 * P.S.I. to (C) 1167 * P.S.I.
Initial Closed In Period Minutes 60 (D) 1383 P.S.I.
Final Flow Period Minutes 60 (E) 1246 P.S.I. to (F) 1366 P.S.I.
Final Closed In Period Minutes 60 (G) 1384 P.S.I.
Final Hydrostatic Pressure (H) 1811 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 11/30/80 Test Ticket No. 8484
 Recorder No. 2606 Capacity 4150 Location 3649 Ft.
 Clock No. ---- Elevation 1724 Ground Level Well Temperature 113 °F

Point	Pressure		Time Given 9:50A	Time Computed
A Initial Hydrostatic Mud	1886	P.S.I.		
B First Initial Flow Pressure	410 *	P.S.I.	60	50
C First Final Flow Pressure	1167 *	P.S.I.	60	60
D Initial Closed-in Pressure	1383	P.S.I.	60	60
E Second Initial Flow Pressure	1246	P.S.I.	60	60
F Second Final Flow Pressure	1366	P.S.I.		
G Final Closed-in Pressure	1384	P.S.I.		
H Final Hydrostatic Mud	1811	P.S.I.		

* Pressures questionable due to plugging action.

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>10</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: <u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	410 *	0	1167 *	0	1246	0	1366
P 2 5	624 *	3	1334	5	1250	3	1368
P 3 10	846 *	6	1346	10	1263	6	1370
P 4 15	921 *	9	1352	15	1288	9	1372
P 5 20	929 *	12	1358	20	1309	12	1374
P 6 25	1031 *	15	1359	25	1325	15	1375
P 7 30	1087 *	18	1361	30	1338	18	1376
P 8 35	1091 *	21	1363	35	1346	21	1377
P 9 40	1092 *	24	1365	40	1352	24	1378
P10 45	1170 *	27	1367	45	1358	27	1379
P11 50	1167 *	30	1369	50	1361	30	1380
P12 55		33	1371	55	1363	33	1381
P13 60		36	1373	60	1366	36	1382
P14		39	1375			39	1383
P15		42	1377			42	1384
P16		45	1379			45	1384
P17		48	1379			48	1384
P18		51	1380			51	1384
P19		54	1381			54	1384
P20		57	1382			57	1384
WTC - 4		60	1383			60	1384



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 8721

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1729 RB Formation Lansing Eff. Pay Ft.

District Great Bend Date 12-1-80 Customer Order No.

COMPANY NAME Pan-Western Petroleum Inc.

ADDRESS 1408 Douglas Bldg., 104 S. Broadway, Wichita, Kansas 67202

LEASE AND WELL NO. "99" Springs #1 COUNTY Barber STATE Kansas Sec. 25 Twp. 30 Rge. 12

Mail Invoice To Same as above No. Copies Requested 5

Co. Name Same as above Address Copy to Jody Elster No. Copies Requested 5

Mail Charts To Same as above Address Copy to Jody Elster

Formation Test No. 2 Interval Tested from 3771 ft. to 3780 ft. Total Depth 3780 ft.

Packer Depth 3766 ft. Size 6 3/8 in. Packer Depth ft. Size in.

Packer Depth 3771 ft. Size 6 3/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3772 ft. Recorder Number 6074 Cap. 5100

Bottom Recorder Depth (Outside) 3775 ft. Recorder Number 10979 Cap. 4100

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Gabbert-Jones Drilling Co. Rig # Drill Collar Length 30 I. D. 2 1/4 in.

Mud Type starch Viscosity 44 Weight Pipe Length I. D. in.

Weight 9.4 Water Loss 15 cc. Drill Pipe Length 3720 I. D. 3.8 in.

Chlorides 32,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.

Jars: Make Serial Number Anchor Length 9 ft. Size 5 1/2 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 4 1/2 FH in.

Blow: Weak blow increased to strong blow during both flow periods.

Recovered 1510 ft. of Water

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Tight Hole

Time On Location A.M. Time Pick Up Tool A.M.

Time Set Packer(s) 5:10 P.M. Time Started Off Bottom 9:10 P.M. Maximum Temperature 122°

Initial Hydrostatic Pressure (A) 1877 P.S.I.

Initial Flow Period 60 Minutes (B) 115 P.S.I. to (C) 511 P.S.I.

Initial Closed In Period 60 Minutes (D) 1303 P.S.I.

Final Flow Period 60 Minutes (E) 537 P.S.I. to (F) 792 P.S.I.

Final Closed In Period 60 Minutes (G) 1303 P.S.I.

Final Hydrostatic Pressure (H) 1864 P.S.I.

COMPANY TERMS

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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 Jody Elster
Signature of Customer or his authorized representative

Western Representative Vernon Wondra
Thank You

FIELD INVOICE

Open Hole Test \$ 550.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. Don't \$ 30.00
Mileage 24 mi \$ 28.00
Fluid Sampler \$
Extra Charts \$
Insurance \$
TOTAL \$ 598.00

WESTERN TESTING CO., INC.

Pressure Data

Date 12-1 Test Ticket No. 8721
 Recorder No. 6074 Capacity 5100 Location 3772 Ft.
 Clock No. 1729 Elevation KB Well Temperature 122 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1885</u> P.S.I.	<u>5:10</u> A	<u>M</u>
B First Initial Flow Pressure	<u>124</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
C First Final Flow Pressure	<u>514</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
D Initial Closed-in Pressure	<u>1316</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>537</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>794</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
G Final Closed-in Pressure	<u>1313</u> P.S.I.		
H Final Hydrostatic Mud	<u>1875</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 12 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: 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	124	0	514	0	537	0	794
P 2 5	136	3	1240	5	554	3	1262
P 3 10	183	6	1267	10	581	6	1283
P 4 15	225	9	1282	15	606	9	1291
P 5 20	266	12	1292	20	631	12	1296
P 6 25	304	15	1297	25	657	15	1300
P 7 30	343	18	1300	30	678	18	1302
P 8 35	378	21	1303	35	700	21	1303
P 9 40	409	24	1305	40	721	24	1304
P10 45	445	27	1307	45	741	27	1305
P11 50	475	30	1310	50	764	30	1306
P12 55	503	33	1310	55	782	33	1306
P13 60	514	36	1311	60	794	36	1307
P14		39	1311	65		39	1308
P15		42	1312	70		42	1308
P16		45	1313	75		45	1309
P17		48	1313	80		48	1309
P18		51	1314	85		51	1310
P19		54	1315	90		54	1311
P20		57	1315			57	1312
		60	1316			60	1313

TK# 8721

I

(H)

(A)

(G)

(D)

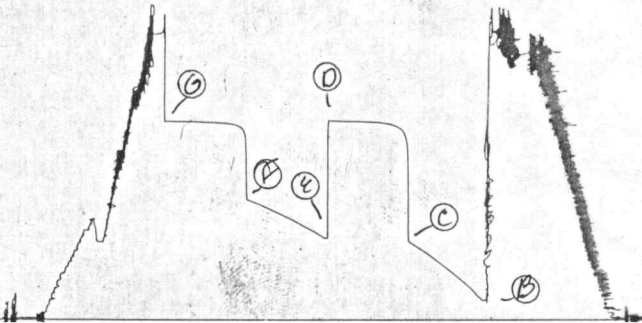
(F)

(E)

(C)

(B)

04



Company Pan-Western Petroleum, Inc. Lease & Well No. "99" Springs #1
 Elevation 1729 Kelly Bushing Lansing Formation --- Effective Pay --- Ft. Ticket No. 8721
 Date 12/1/90 Sec. 25 Twp. 30S Range 12W County Barber State Kansas
 Test Approved by Toby Elster Western Representative Vernon Wondra
 Formation Test No. 2 Interval Tested from 3771 ft. to 3780 ft. Total Depth 3780 ft.
 Packer Depth 3766 ft. Size 6 5/8 in. Packer Depth --- ft. Size --- in.
 Packer Depth 3771 ft. Size 6 5/8 in. Packer Depth --- ft. Size --- in.
 Depth of Selective Zone Set ---
 Top Recorder Depth (Inside) 3772 ft. Recorder Number 6074 Cap. 5100
 Bottom Recorder Depth (Outside) 3775 ft. Recorder Number 10979 Cap. 4100
 Below Straddle Recorder Depth --- ft. Recorder Number --- Cap. ---
 Drilling Contractor Gabbert-Jones Drlg. Rig #6 Drill Collar Length 30 I. D. 2 1/4 in.
 Mud Type starch Viscosity 44 Weight Pipe Length --- I. D. --- in.
 Weight 9.4 Water Loss 15 cc. Drill Pipe Length 3720 I. D. 3.8 in.
 Chlorides 32,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
 Jars: Make --- Serial Number --- Anchor Length 9 ft. Size 5 1/2 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 4 1/2 FH in.

Blow: Weak blow increased to strong blow during both flow periods.

Recovered 1510 ft. of water

Recovered --- ft. of ---

Recovered --- ft. of ---

Recovered --- ft. of ---

Recovered --- ft. of ---

Remarks: TIGHT HOLE

Time Set Packer(s) 5:10 A.M. ~~P.M.~~ Time Started Off Bottom 9:10 A.M. ~~P.M.~~ Maximum Temperature 122°
 Initial Hydrostatic Pressure --- (A) 1885 P.S.I.
 Initial Flow Period --- Minutes 60 (B) 124 P.S.I. to (C) 514 P.S.I.
 Initial Closed In Period --- Minutes 60 (D) 1316 P.S.I.
 Final Flow Period --- Minutes 60 (E) 537 P.S.I. to (F) 794 P.S.I.
 Final Closed In Period --- Minutes 60 (G) 1313 P.S.I.
 Final Hydrostatic Pressure --- (H) 1875 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 12/1/80 Test Ticket No. 8721
 Recorder No. 6074 Capacity 5100 Location 3772 Ft.
 Clock No. -- Elevation 1729 Kelly Bushing Well Temperature 122 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	1885 P.S.I.	5:10A	M
B First Initial Flow Pressure	1244 P.S.I.	60 Mins.	60 Mins.
C First Final Flow Pressure	514 P.S.I.	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1316 P.S.I.	60 Mins.	60 Mins.
E Second Initial Flow Pressure	537 P.S.I.	60 Mins.	60 Mins.
F Second Final Flow Pressure	794 P.S.I.		
G Final Closed-in Pressure	1313 P.S.I.		
H Final Hydrostatic Mud	1875 P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>12</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>20</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	124	0	514	0	537	0	794
P 2 5	136	3	1240	5	554	3	1262
P 3 10	182	6	1267	10	581	6	1283
P 4 15	225	9	1282	15	606	9	1291
P 5 20	266	12	1292	20	631	12	1296
P 6 25	304	15	1297	25	657	15	1300
P 7 30	343	18	1300	30	678	18	1302
P 8 35	378	21	1303	35	700	21	1303
P 9 40	409	24	1305	40	721	24	1304
P10 45	445	27	1307	45	741	27	1305
P11 50	475	30	1310	50	764	30	1306
P12 55	503	33	1310	55	782	33	1306
P13 60	514	36	1311	60	794	36	1307
P14		39	1311			39	1308
P15		42	1312			42	1308
P16		45	1313			45	1309
P17		48	1313			48	1309
P18		51	1314			51	1310
P19		54	1315			54	1311
P20		57	1315			57	1312
WTC - 4		60	1316			60	1313



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N^o 8571

P. O. BOX 1599 PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation

Formation

MISS

Eff. Pay Ft.

District

Date

Customer Order No.

COMPANY NAME

ADDRESS

LEASE AND WELL NO

Mail Invoice To

Co. Name

Mail Charts To

Address

Address

No. Copies Requested

No. Copies Requested

Formation Test No.

Interval Tested from

ft. to

Total Depth ft.

Packer Depth

ft.

Size

Packer Depth

ft.

Size in.

Packer Depth

ft.

Size

Packer Depth

ft.

Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside)

Bottom Recorder Depth (Outside)

Below Straddle Recorder Depth

Recorder Number

Cap.

Recorder Number

Cap.

Recorder Number

Cap.

Drilling Contractor

Mud Type

Viscosity

Weight

Water Loss

P.P.M.

Jars: Make

Serial Number

Did Well Flow?

Reversed Out

Drill Collar Length

I. D.

Weight Pipe Length

I. D.

Drill Pipe Length

I. D.

Test Tool Length

ft.

Tool Size

Anchor Length

ft.

Size

Surface Choke Size

in.

Bottom Choke Size

Main Hole Size

in.

Tool Joint Size

Blow:

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time On Location

A.M.

P.M.

Time Pick Up Tool

A.M.

P.M.

Time Off Location

A.M.

P.M.

Time Set Packer(s)

A.M.

P.M.

Time Started Off Bottom

A.M.

P.M.

Maximum Temperature

Initial Hydrostatic Pressure

Initial Flow Period

Minutes

Initial Closed In Period

Minutes

Final Flow Period

Minutes

Final Closed In Period

Minutes

Final Hydrostatic Pressure

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 of Customer or his authorized representative

Western Representative

FIELD INVOICE

Open Hole Test

Misrun

Straddle Test

Jars

Selective Zone

Safety Joint

Standby

Evaluation

Extra Packer

Circ. Sub.

Mileage

Fluid Sampler

Extra Charts

Insurance

TOTAL

RECEIVED
DEC 8 - 1980



No 2353

GAS FLOW REPORT

Date 12-3-80 Ticket 8571 Company Pan-Western
 Well Name and No. 99 Springs #1 Dst No. 3 Interval Tested 4329-4360
 County BARBER State KS. Sec. 25 Twp. 30S Rg. 12W

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
--------------------------	---	--------------------	------------------------------	------------------------------------	---------------------

PRE FLOW

SECOND FLOW

10	4.0	1/4" orifice	18.500	KAC FPD
20	2.0	1/4"	12.700	
30	1.0	1/4"	8.950	
40	1.0	1/4"	8.950	
50	1.0	1/4"	8.950	
60	1.0	1/4"	8.950	
70	1.0	1/4"	8.950	
80	1.0	1/4"	8.950	
90	1.0	1/4"	8.950	

GAS BOTTLE

Serial No. 102 Date Bottle Filled 12-3-80 Date to be Invoiced 1-3-80

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 11½% 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

WESTERN TESTING CO., INC.

Pressure Data

Date 12-3 Recorder No. 11018 Capacity 4425 Test Ticket No. 8571 Location 4334 Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2189</u>	P.S.I.	<u>10:30</u>	M
B First Initial Flow Pressure	<u>89</u>	P.S.I.	<u>60</u>	Mins. <u>55</u> Mins.
C First Final Flow Pressure	<u>50</u>	P.S.I.	<u>60</u>	Mins. <u>63</u> Mins.
D Initial Closed-in Pressure	<u>805</u>	P.S.I.	<u>90</u>	Mins. <u>95</u> Mins.
E Second Initial Flow Pressure	<u>62</u>	P.S.I.	<u>60</u>	Mins. <u>63</u> Mins.
F Second Final Flow Pressure	<u>48</u>	P.S.I.		
G Final Closed-in Pressure	<u>978</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2189</u>	P.S.I.		

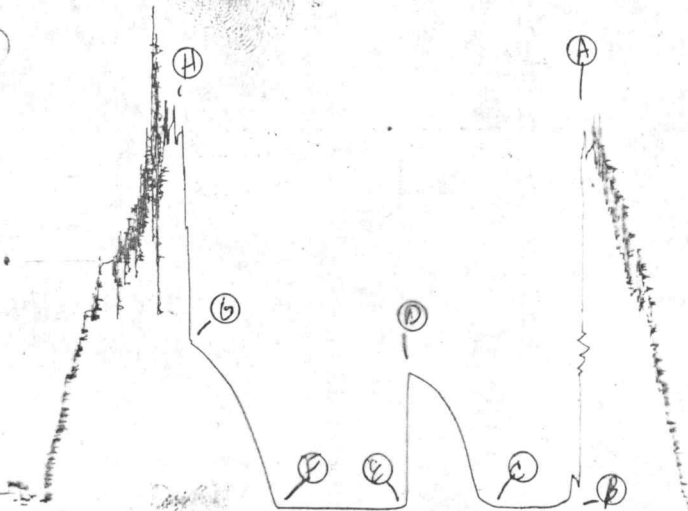
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>11</u> Inc.		Breakdown: <u>21</u> Inc.		Breakdown: <u>19</u> Inc.		Breakdown: <u>21</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>0</u>	<u>0</u>	<u>50</u>	<u>0</u>	<u>62</u>	<u>0</u>	<u>48</u>
P 2	<u>5</u>	<u>3</u>	<u>60</u>	<u>5</u>	<u>47</u>	<u>3</u>	<u>100</u>
P 3	<u>10</u>	<u>6</u>	<u>69</u>	<u>10</u>	<u>42</u>	<u>6</u>	<u>173</u>
P 4	<u>15</u>	<u>9</u>	<u>84</u>	<u>15</u>	<u>40</u>	<u>9</u>	<u>251</u>
P 5	<u>20</u>	<u>12</u>	<u>104</u>	<u>20</u>	<u>40</u>	<u>12</u>	<u>329</u>
P 6	<u>25</u>	<u>15</u>	<u>176</u>	<u>25</u>	<u>40</u>	<u>15</u>	<u>382</u>
P 7	<u>30</u>	<u>18</u>	<u>273</u>	<u>30</u>	<u>42</u>	<u>18</u>	<u>449</u>
P 8	<u>35</u>	<u>21</u>	<u>362</u>	<u>35</u>	<u>42</u>	<u>21</u>	<u>504</u>
P 9	<u>40</u>	<u>24</u>	<u>438</u>	<u>40</u>	<u>43</u>	<u>24</u>	<u>569</u>
P10	<u>45</u>	<u>27</u>	<u>502</u>	<u>45</u>	<u>43</u>	<u>27</u>	<u>626</u>
P11	<u>50</u>	<u>30</u>	<u>551</u>	<u>50</u>	<u>44</u>	<u>30</u>	<u>670</u>
P12	<u>55</u>	<u>33</u>	<u>595</u>	<u>55</u>	<u>45</u>	<u>33</u>	<u>712</u>
P13	<u>60</u>	<u>36</u>	<u>633</u>	<u>60</u>	<u>46</u>	<u>36</u>	<u>750</u>
P14		<u>39</u>	<u>668</u>	<u>65</u>	<u>46</u>	<u>39</u>	<u>781</u>
P15		<u>42</u>	<u>701</u>	<u>70</u>	<u>47</u>	<u>42</u>	<u>810</u>
P16		<u>45</u>	<u>721</u>	<u>75</u>	<u>48</u>	<u>45</u>	<u>839</u>
P17		<u>48</u>	<u>741</u>	<u>80</u>	<u>48</u>	<u>48</u>	<u>869</u>
P18		<u>51</u>	<u>759</u>	<u>85</u>	<u>48</u>	<u>51</u>	<u>894</u>
P19		<u>54</u>	<u>774</u>	<u>90</u>	<u>48</u>	<u>54</u>	<u>920</u>
P20		<u>57</u>	<u>785</u>	<u>95</u>	<u>48</u>	<u>57</u>	<u>940</u>
		<u>60</u>	<u>799</u>			<u>60</u>	<u>960</u>
		<u>63</u>	<u>805</u>			<u>63</u>	<u>978</u>

11-07-11

TX # 8571

I



Company Pan Western Petroleum, Inc. Lease & Well No. "99" Springs #1
Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 8571
Date 12-3-80 Sec. 25 Twp. 30S Range 12W County Barber State Kansas
Test Approved by Toby Elster Western Representative Stuart Stover

Formation Test No. 3 Interval Tested from 4329 ft. to 4360 ft. Total Depth 4360 ft.
Packer Depth 4324 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4329 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4334 ft. Recorder Number 11018 Cap. 4425
Bottom Recorder Depth (Outside) 4337 ft. Recorder Number 11019 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Gabbert & Jones Rig #6 Drill Collar Length 150 I. D. 2 1/4 in.
Mud Type Starch-gel Viscosity 45 Weight Pipe Length - I. D. - in.
Weight 9.7 Water Loss 12.8 cc. Drill Pipe Length 4158 I. D. 4.0 in.
Chlorides 35,000 P.P.M. Test Tool Length 21 ft. Tool Size 3 1/2 in.
Jars: Make - Serial Number - Anchor Length 31 ft. Size 4 1/2 in.
Did Well Flow? - Reversed Out - Surface Choke Size 1 1/2 in. Bottom Choke Size 1 1/2 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Strong gas to surface at beginning of final flow period. See attached sheet for gas measurements.

Recovered 200 ft. of drilling mud - gassy Chlorides 45,000 PPM
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -

Remarks: -

Time Set Packer(s) 10:30 A.M. P.M. Time Started Off Bottom 3:00 A.M. P.M. Maximum Temperature -
Initial Hydrostatic Pressure - (A) 2189 P.S.I.
Initial Flow Period - Minutes 55 (B) 89 P.S.I. to (C) 50 P.S.I.
Initial Closed In Period - Minutes 63 (D) 805 P.S.I.
Final Flow Period - Minutes 95 (E) 62 P.S.I. to (F) 48 P.S.I.
Final Closed In Period - Minutes 63 (G) 978 P.S.I.
Final Hydrostatic Pressure - (H) 2189 P.S.I.

GAS FLOW REPORT

Date 12-3-80 Ticket 8571 Company Pan Western Petroleum, Inc.
 Well Name and No. "99" Springs #1 Dst No. 3 Interval Tested 4329-4360
 County Barber State Kansas Sec. 25 Twp. 30S 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						

Gas to Surface at opening.				SECOND FLOW		
10 Min.	4.0 PSIG	¼" Orifice				18,500 C.F.P.D.
20 Min.	2.0 PSIG	¼" Orifice				12,700 C.F.P.D.
30 Min.	1.0 PSIG	¼" Orifice				8,950 C.F.P.D.
40 Min.	1.0 PSIG	¼" Orifice				8,950 C.F.P.D.
50 Min.	1.0 PSIG	¼" Orifice				8,950 C.F.P.D.
60 Min.	1.0 PSIG	¼" Orifice				8,950 C.F.P.D.
70 Min.	1.0 PSIG	¼" Orifice				8,950 C.F.P.D.
80 Min.	1.0 PSIG	¼" Orifice				8,950 C.F.P.D.
90 Min.	1.0 PSIG	½" Orifice				8,950 C.F.P.D.

GAS BOTTLE

Serial No. 102 Date Bottle Filled 12-3-80 Date to be Invoiced 12-3-80

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 Pan Western Petroleum Inc.
 Authorized by Toby Elster

WESTERN TESTING CO., INC.

Pressure Data

Date 12-3-80 Test Ticket No. 8571
 Recorder No. 11018 Capacity 4425 Location 4334 Ft.
 Clock No. ----- Elevation ----- Well Temperature ----- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2189</u> P.S.I.	Open Tool	<u>10:30</u> M	
B First Initial Flow Pressure	<u>89</u> P.S.I.	First Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
C First Final Flow Pressure	<u>50</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
D Initial Closed-in Pressure	<u>805</u> P.S.I.	Second Flow Pressure	<u>90</u> Mins.	<u>95</u> Mins.
E Second Initial Flow Pressure	<u>62</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
F Second Final Flow Pressure	<u>48</u> P.S.I.			
G Final Closed-in Pressure	<u>978</u> P.S.I.			
H Final Hydrostatic Mud	<u>2189</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>11</u> Inc.		Breakdown: <u>21</u> Inc.		Breakdown: <u>19</u> Inc.		Breakdown: <u>21</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>89</u>	<u>0</u>	<u>50</u>	<u>0</u>	<u>62</u>	<u>0</u>	<u>48</u>
P 2 <u>5</u>	<u>78</u>	<u>3</u>	<u>60</u>	<u>5</u>	<u>47</u>	<u>3</u>	<u>100</u>
P 3 <u>10</u>	<u>56</u>	<u>6</u>	<u>69</u>	<u>10</u>	<u>42</u>	<u>6</u>	<u>173</u>
P 4 <u>15</u>	<u>49</u>	<u>9</u>	<u>84</u>	<u>15</u>	<u>40</u>	<u>9</u>	<u>251</u>
P 5 <u>20</u>	<u>49</u>	<u>12</u>	<u>104</u>	<u>20</u>	<u>40</u>	<u>12</u>	<u>329</u>
P 6 <u>25</u>	<u>49</u>	<u>15</u>	<u>176</u>	<u>25</u>	<u>40</u>	<u>15</u>	<u>382</u>
P 7 <u>30</u>	<u>49</u>	<u>18</u>	<u>273</u>	<u>30</u>	<u>42</u>	<u>18</u>	<u>449</u>
P 8 <u>35</u>	<u>47</u>	<u>21</u>	<u>362</u>	<u>35</u>	<u>42</u>	<u>21</u>	<u>504</u>
P 9 <u>40</u>	<u>47</u>	<u>24</u>	<u>438</u>	<u>40</u>	<u>43</u>	<u>24</u>	<u>569</u>
P10 <u>45</u>	<u>47</u>	<u>27</u>	<u>502</u>	<u>45</u>	<u>43</u>	<u>27</u>	<u>626</u>
P11 <u>50</u>	<u>48</u>	<u>30</u>	<u>551</u>	<u>50</u>	<u>44</u>	<u>30</u>	<u>670</u>
P12 <u>55</u>	<u>50</u>	<u>33</u>	<u>595</u>	<u>55</u>	<u>45</u>	<u>33</u>	<u>712</u>
P13		<u>36</u>	<u>633</u>	<u>60</u>	<u>46</u>	<u>36</u>	<u>750</u>
P14		<u>39</u>	<u>668</u>	<u>65</u>	<u>46</u>	<u>39</u>	<u>781</u>
P15		<u>42</u>	<u>701</u>	<u>70</u>	<u>47</u>	<u>42</u>	<u>810</u>
P16		<u>45</u>	<u>721</u>	<u>75</u>	<u>48</u>	<u>45</u>	<u>839</u>
P17		<u>48</u>	<u>741</u>	<u>80</u>	<u>48</u>	<u>48</u>	<u>869</u>
P18		<u>51</u>	<u>759</u>	<u>85</u>	<u>48</u>	<u>51</u>	<u>894</u>
P19		<u>54</u>	<u>774</u>	<u>90</u>	<u>48</u>	<u>54</u>	<u>920</u>
P20		<u>57</u>	<u>785</u>	<u>95</u>	<u>48</u>	<u>57</u>	<u>940</u>
		<u>60</u>	<u>799</u>			<u>60</u>	<u>960</u>
		<u>63</u>	<u>805</u>			<u>63</u>	<u>978</u>



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 8572

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation _____ Formation MISS Eff. Pay _____ Ft.

District Platt Date 4-80 Customer Order No. _____

COMPANY NAME

ADDRESS 1408 Douglas Bldg, 1045 Broadway Wichita KS

LEASE AND WELL NO. 99 Springs #1 COUNTY Barber STATE KS Sec 25 Twp 30S Rge 12W

Mail Invoice To _____ No. Copies Requested 1 Reg

Co. Name _____ Address _____ No. Copies Requested Reg

Mail Charts To _____ Address _____

Formation Test No. 4 Interval Tested from 4337 ft. to 4387 ft. Total Depth 4387 ft.

Packer Depth 4332 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 4337 ft. Size 6 1/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4342 ft. Recorder Number 11018 Cap. 4425

Bottom Recorder Depth (Outside) 4345 ft. Recorder Number 11019 Cap. 4500

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

Drilling Contractor G. B. H. - JONES #16 Drill Collar Length 240 I. D. 2 1/4 in.

Mud Type Slick-gel Viscosity 45 Weight Pipe Length _____ I. D. _____ in.

Weight 9.20 Water Loss 12.8 cc. Drill Pipe Length 3870 I. D. 4.0 in.

Chlorides 35,000 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2 in.

Jars: Make WTC Serial Number 36600 Anchor Length 50 ft. Size 4 1/2 in.

Did Well Flow? _____ Reversed Out _____ Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 FH in.

Blow: GOOD OFF BOTTOM OF BUCKET THRU OUT TEST

Recovered 120 ft. of GAS IN PIPE

Recovered 120 ft. of GASSY DRUG MUD

Recovered 180 ft. of MUDDY GASSY WATER

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

RECEIVED
DEC 8 - 1980

Time On Location 3:00 A.M. Time Pick Up Tool 4:00 A.M. Time Off Location _____ A.M.

Time Set Packer(s) 5:30 A.M. Time Started Off Bottom 9:30 A.M. Maximum Temperature _____ P.M.

Initial Hydrostatic Pressure _____ (A) 2233 P.S.I.

Initial Flow Period _____ Minutes 60 (B) 88 P.S.I. to (C) 111 P.S.I.

Initial Closed In Period _____ Minutes 60 (D) 1482 P.S.I.

Final Flow Period _____ Minutes 60 (E) 133 P.S.I. to (F) 155 P.S.I.

Final Closed In Period _____ Minutes 60 (G) 1383 P.S.I.

Final Hydrostatic Pressure _____ (H) 2211 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 Stuart Stover
Signature of Customer or his authorized representative

Western Representative Stuart Stover

FIELD INVOICE

Open Hole Test \$ 600.00
Misrun \$ _____
Straddle Test \$ _____
Jars \$ 300.00
Selective Zone \$ 50.00
Safety Joint 40 \$ _____
Standby \$ _____
Evaluation \$ _____
Extra Packer \$ _____
Circ. Sub. \$ _____
Mileage \$ _____
Fluid Sampler \$ _____
Extra Charts \$ _____
Insurance \$ _____
TOTAL \$ 950.00

WESTERN TESTING CO., INC.

Pressure Data

Date 12-4 Test Ticket No. 8572
 Recorder No. 11018 Capacity 4425 Location 4342 Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2224</u> P.S.I.		<u>5:30</u>	M
B First Initial Flow Pressure	<u>100</u> P.S.I.	First Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
C First Final Flow Pressure	<u>120</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>69</u> Mins.
D Initial Closed-in Pressure	<u>1480</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>133</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>66</u> Mins.
F Second Final Flow Pressure	<u>159</u> P.S.I.			
G Final Closed-in Pressure	<u>1396</u> P.S.I.			
H Final Hydrostatic Mud	<u>2211</u> P.S.I.			

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 23 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.

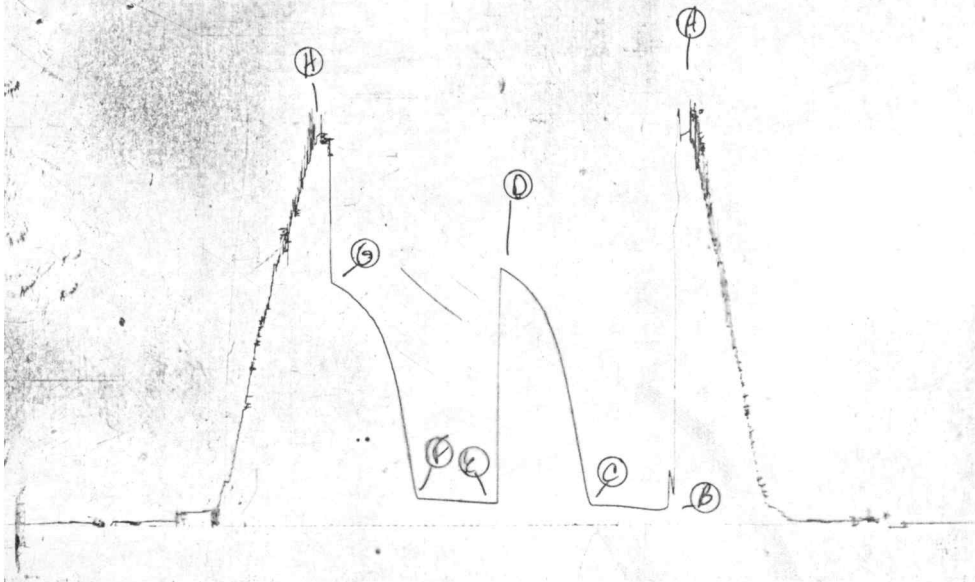
Final Shut-In
 Breakdown: 22 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	100	0	120	0	133	0	159
P 2 5	96	3	178	5	133	3	251
P 3 10	96	6	300	10	136	6	373
P 4 15	98	9	424	15	138	9	518
P 5 20	102	12	558	20	142	12	633
P 6 25	107	15	686	25	146	15	763
P 7 30	111	18	808	30	148	18	858
P 8 35	116	21	918	35	150	21	936
P 9 40	118	24	1007	40	152	24	1004
P10 45	119	27	1073	45	153	27	1068
P11 50	120	30	1130	50	155	30	1126
P12 55	120	33	1187	55	157	33	1167
P13 60		36	1240	60	159	36	1203
P14		39	1278	65		39	1233
P15		42	1308	70		42	1256
P16		45	1337	75		45	1282
P17		48	1363	80		48	1304
P18		51	1388	85		51	1328
P19		54	1410	90		54	1348
P20		57	1427			57	1363
		60	1443			60	1379
		63	1460			63	1390
		66	1471			66	1396

11018-8572

FL #8572

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Company Pan Western Petroleum, Inc. Lease & Well No. "99" Springs #1
Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 8572
Date 12-4-80 Sec. 25 Twp. 30S Range 12W County Barber State Kansas
Test Approved by Toby Elster Western Representative Stuart Stover
Formation Test No. 4 Interval Tested from 4337 ft. to 4387 ft. Total Depth 4387 ft.
Packer Depth 4332 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4337 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4342 ft. Recorder Number 11018 Cap. 4425
Bottom Recorder Depth (Outside) 4345 ft. Recorder Number 11019 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Gabbert-Jones Rig #6 Drill Collar Length 240 I. D. 2 3/4 in.
Mud Type Starch-gel Viscosity 45 Weight Pipe Length - I. D. - in.
Weight 9.7 Water Loss 12.8 cc. Drill Pipe Length 3870 I. D. 4.0 in.
Chlorides 35,000 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2 in.
Jars: Make WTC Serial Number 3660 Anchor Length 50 ft. Size 4 1/2 in.
Did Well Flow? - Reversed Out - 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 FH in.

Blow: Good off bottom of bucket throughout test.

Recovered 120 ft. of gas in pipe
Recovered 120 ft. of gassy drilling mud
Recovered 180 ft. of muddy gassy water
Recovered ft. of
Recovered ft. of

Remarks:

Time Set Packer(s) 5:30 A.M. Time Started Off Bottom 9:30 A.M. Maximum Temperature -
Initial Hydrostatic Pressure 2224 P.S.I.
Initial Flow Period 55 Minutes (B) 100 P.S.I. to (C) 120 P.S.I.
Initial Closed In Period 69 Minutes (D) 1480 P.S.I.
Final Flow Period 60 Minutes (E) 133 P.S.I. to (F) 159 P.S.I.
Final Closed In Period 66 Minutes (G) 1396 P.S.I.
Final Hydrostatic Pressure 2211 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 12-4-80 Test Ticket No. 8572
 Recorder No. 11018 Capacity 4425 Location 4342 Ft.
 Clock No. ----- Elevation ----- Well Temperature ----- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2224</u> P.S.I.	Open Tool	<u>5:30</u> M	
B First Initial Flow Pressure	<u>100</u> P.S.I.	First Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
C First Final Flow Pressure	<u>120</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>69</u> Mins.
D Initial Closed-in Pressure	<u>1480</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>133</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>66</u> Mins.
F Second Final Flow Pressure	<u>159</u> P.S.I.			
G Final Closed-in Pressure	<u>1396</u> P.S.I.			
H Final Hydrostatic Mud	<u>2211</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>11</u> Inc.		Breakdown: <u>23</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>22</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>100</u>	<u>0</u>	<u>120</u>	<u>0</u>	<u>133</u>	<u>0</u>	<u>159</u>
P 2 <u>5</u>	<u>96</u>	<u>3</u>	<u>178</u>	<u>5</u>	<u>133</u>	<u>3</u>	<u>251</u>
P 3 <u>10</u>	<u>96</u>	<u>6</u>	<u>300</u>	<u>10</u>	<u>136</u>	<u>6</u>	<u>373</u>
P 4 <u>15</u>	<u>98</u>	<u>9</u>	<u>424</u>	<u>15</u>	<u>138</u>	<u>9</u>	<u>518</u>
P 5 <u>20</u>	<u>102</u>	<u>12</u>	<u>558</u>	<u>20</u>	<u>142</u>	<u>12</u>	<u>633</u>
P 6 <u>25</u>	<u>107</u>	<u>15</u>	<u>686</u>	<u>25</u>	<u>146</u>	<u>15</u>	<u>763</u>
P 7 <u>30</u>	<u>111</u>	<u>18</u>	<u>808</u>	<u>30</u>	<u>148</u>	<u>18</u>	<u>858</u>
P 8 <u>35</u>	<u>116</u>	<u>21</u>	<u>918</u>	<u>35</u>	<u>150</u>	<u>21</u>	<u>936</u>
P 9 <u>40</u>	<u>118</u>	<u>24</u>	<u>1007</u>	<u>40</u>	<u>152</u>	<u>24</u>	<u>1004</u>
P10 <u>45</u>	<u>119</u>	<u>27</u>	<u>1073</u>	<u>45</u>	<u>153</u>	<u>27</u>	<u>1068</u>
P11 <u>50</u>	<u>120</u>	<u>30</u>	<u>1130</u>	<u>50</u>	<u>155</u>	<u>30</u>	<u>1126</u>
P12 <u>55</u>	<u>120</u>	<u>33</u>	<u>1187</u>	<u>55</u>	<u>157</u>	<u>33</u>	<u>1167</u>
P13		<u>36</u>	<u>1240</u>	<u>60</u>	<u>159</u>	<u>36</u>	<u>1203</u>
P14		<u>39</u>	<u>1278</u>			<u>39</u>	<u>1233</u>
P15		<u>42</u>	<u>1308</u>			<u>42</u>	<u>1256</u>
P16		<u>45</u>	<u>1337</u>			<u>45</u>	<u>1282</u>
P17		<u>48</u>	<u>1363</u>			<u>48</u>	<u>1304</u>
P18		<u>51</u>	<u>1388</u>			<u>51</u>	<u>1328</u>
P19		<u>54</u>	<u>1410</u>			<u>54</u>	<u>1348</u>
P20		<u>57</u>	<u>1427</u>			<u>57</u>	<u>1363</u>
		<u>60</u>	<u>1443</u>			<u>60</u>	<u>1379</u>
		<u>63</u>	<u>1460</u>			<u>63</u>	<u>1390</u>
		<u>66</u>	<u>1471</u>			<u>66</u>	<u>1396</u>