WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 13739

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

Elevation 1451 K.B Formation Indian Cave Eff. Pay — Ft.

District Pratt Date 11/26/81 Customer Order No. —

COMPANY NAME Petro Dynamics, Ltd Rig 1

ADDRESS Suite 207 555 North Woodlawn Wichita, Ks 67208

LEASE AND WELL NO. Kaliuoda #1 COUNTY Kingman STATE KS Sec. 19 Twp. 30 Rge. 6

Mail Invoice To Same Co. Name Address No. Copies Requested 5

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested from 1993 ft. to 2090 ft. Total Depth 2090 ft.

Packer Depth 1988 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 1993 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 2017 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 2020 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Beredco Rig #2 Drill Collar Length 124 I. D. 2 1/4 in.

Mud Type Premix Viscosity 35 Weight Pipe Length — I. D. — in.

Weight 8.9 Water Loss N.C. cc. Drill Pipe Length 1840 I. D. 3.8 in.

Chlorides 30,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number #10 Anchor Length 97 ft. Size 5 1/2 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 4 1/2 FH in.

Blow: Strong blow throughout flow periods

Recovered 180 ft. of Muddy Water

Recovered 360 ft. of Salt Water (96,000 p.p.m)

Recovered — ft. of —

Recovered — ft. of —

Recovered — ft. of —

Remarks: —

RECEIVED
NOV 30 1981

Time On Location 12:00 A.M. P.M. Time Pick Up Tool 12:30 A.M. P.M. Time Off Location 9:00 A.M. P.M.

Time Set Packer(s) 2:00 A.M. P.M. Time Started Off Bottom 5:45 A.M. P.M. Maximum Temperature 98°

Initial Hydrostatic Pressure			(A)	956	P.S.I.	
Initial Flow Period	Minutes 30		(B)	116	P.S.I. to (C)	169 P.S.I.
Initial Closed In Period	Minutes 60		(D)	841	P.S.I.	
Final Flow Period	Minutes 45		(E)	275	P.S.I. to (F)	285 P.S.I.
Final Closed In Period	Minutes 90		(G)	841	P.S.I.	
Final Hydrostatic Pressure			(H)	935	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 [signature]
Signature of Customer or his authorized representative

Western Representative Jim Wonder Thank You

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$ —
Straddle Test	$ —
Jars	$ 200.00
Selective Zone	$ —
Safety Joint	$ 65.00
Standby	$ —
Evaluation	$ —
Extra Packer	$ —
Circ. Sub.	$ —
Mileage 47 mi	$ 35.25
Fluid Sampler	$ —
Extra Charts	$ —
Insurance	$ 50.00
TOTAL	$ 1075.25

WESTERN TESTING CO., INC.
Pressure Data

Date 11-26 Test Ticket No. 13739

Recorder No. 2607 Capacity 4150 Location 2017 Pt.

Clock No. — — — — Elevation 1451 KB Well Temperature 98 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	972	P.S.I.	Open Tool	2:00 PM	
B	First Initial Flow Pressure	133	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	176	P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	857	P.S.I.	Second Flow Pressure	45 Mins.	40 Mins.
E	Second Initial Flow Pressure	284	P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	292	P.S.I.			
G	Final Closed-in Pressure	866	P.S.I.			
H	Final Hydrostatic Mud	968	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	133
P 2 5	133
P 3 10	133
P 4 15	135
P 5 20	147
P 6 25	163
P 7 30	176
P 8 35	
P 9 40	
P10 45	
P11 50	
P12 55	
P13 60	
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	176
3	702
6	736
9	758
12	775
15	789
18	802
21	810
24	817
27	823
30	831
33	835
36	838
39	842
42	846
45	849
48	851
51	853
54	855
57	856
60	857

Second Flow Pressure
Breakdown: 8 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	284
5	284
10	284
15	284
20	285
25	286
30	288
35	290
40	292
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	292
3	706
6	737
9	756
12	775
15	787
18	797
21	806
24	811
27	817
30	822
33	828
36	831
39	836
42	839
45	842
48	845
51	848
54	851
57	854
60	857

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WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 13739

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins
D Initial Closed-in Pressure	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	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: ____ Inc.		Breakdown: ____ Inc.		Breakdown: ____ Inc.		Breakdown: ____ 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		63				63	859
P 2		66				66	860
P 3		69				69	861
P 4		72				72	862
P 5		75				75	863
P 6		78				78	864
P 7		81				81	865
P 8		84				84	866
P 9		87				87	866
P10		90				90	866
P11		93				93	
P12		96				96	
P13		99				99	
P14		102				102	
P15		105				105	
P16		108				108	
P17		111				111	
P18		114				114	
P19		117				117	
P20		120				120	

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Tkt #13739

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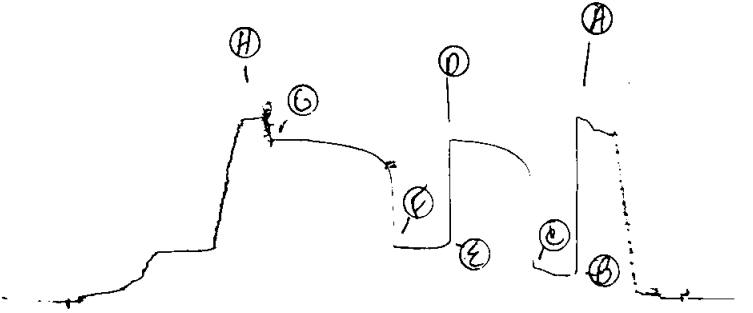


Company Petro Dynamics, Ltd Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Indian Cave Effective Pay - Ft. Ticket No. 13739

Date 11/26/81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by R M Stuckey Western Representative Jim Wondra

Formation Test No. 1 Interval Tested from 1993 ft. to 2090 ft. Total Depth 2090 ft.

Packer Depth 1988 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 1993 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2017 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 2020 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Beredco Rig #2 Drill Collar Length 124 I. D. 2¼ in.

Mud Type Premix Viscosity 35 Weight Pipe Length - I. D. - in.

Weight 8.9 Water Loss N/C cc. Drill Pipe Length 1840 I. D. 3.8 in.

Chlorides 30,000 P.P.M. Test Tool Length 29 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 410 Anchor Length 97 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 180 ft. of muddy water

Recovered 360 ft. of salt water Chlorides 96,000 PPM

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:00 ~~A.M.~~ P.M. Time Started Off Bottom 5:45 ~~A.M.~~ P.M. Maximum Temperature 98

Initial Hydrostatic Pressure			(A)	972	P.S.I.	
Initial Flow Period	Minutes	30	(B)	133	P.S.I. to (C)	176 P.S.I.
Initial Closed In Period	Minutes	60	(D)	857	P.S.I.	
Final Flow Period	Minutes	40	(E)	284	P.S.I. to (F)	292 P.S.I.
Final Closed In Period	Minutes	90	(G)	866	P.S.I.	
Final Hydrostatic Pressure			(H)	968	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 11/26/81 Test Ticket No. 13739

Recorder No. 2607 Capacity 4150 Location 2017 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 98 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	972 P.S.I.	Open Tool	2:00P M	
B First Initial Flow Pressure	133 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	176 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	857 P.S.I.	Second Flow Pressure	45 Mins.	40 Mins.
E Second Initial Flow Pressure	284 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	292 P.S.I.			
G Final Closed-in Pressure	866 P.S.I.			
H Final Hydrostatic Mud	968 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	133
P 2 5	133
P 3 10	133
P 4 15	135
P 5 20	147
P 6 25	163
P 7 30	176
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	176
3	702
6	736
9	758
12	775
15	789
18	802
21	810
24	817
27	823
30	831
33	835
36	838
39	842
42	846
45	849
48	851
51	853
54	855
57	856
60	857

Second Flow Pressure
Breakdown: 8 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	284
5	284
10	284
15	284
20	285
25	286
30	288
35	290
40	292

Final Shut-In
Breakdown: 30 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	292
3	706
6	737
9	756
12	775
15	787
18	797
21	806
24	811
27	817
30	822
33	828
36	831
39	836
42	839
45	842
48	845
51	848
54	851
57	854
60	857

CONT'D NEXT PAGE

WESTERN TESTING CO., INC.
Pressure Data

Date 11/26/81 Test Ticket No. 13739

Recorder No. 2607 Capacity 4150 Location 2017 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 98 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	972 P.S.I.		Open Tool	2:00P M	
B	First Initial Flow Pressure	133 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	176 P.S.I.		Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	857 P.S.I.		Second Flow Pressure	45 Mins.	40 Mins.
E	Second Initial Flow Pressure	284 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	292 P.S.I.				
G	Final Closed-in Pressure	866 P.S.I.				
H	Final Hydrostatic Mud	968 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: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Second Flow Pressure
Breakdown: 8 Inc. of 5 mins. and a final inc. of 0 Min.

Final Shut-In
Breakdown: 30 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	859
P 2						66	860
P 3						69	861
P 4						72	862
P 5						75	863
P 6						78	864
P 7						81	865
P 8						84	866
P 9						87	866
P10						90	866
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 14262

Elevation 1451 KB Formation Lansing Eff. Pay Ft.

District PRATT Date 11-29-81 Customer Order No.

COMPANY NAME Petro Dynamics, Ltd.

ADDRESS 555 N. Woodlawn Building #1 Suite 207 Wichita, Ks. 67208

LEASE AND WELL NO. Kalivoda #1 COUNTY Kingman STATE KS Sec. 19 Twp. 30S Rge. 6W

Mail Invoice To Sama (Co. Name) Address No. Copies Requested Reg

Mail Charts To Sama Address No. Copies Requested Reg

Formation Test No. 2 Interval Tested from 3677 ft. to 3695 ft. Total Depth 3695 ft.

Packer Depth 3672 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 3677 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3683 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 3686 ft. Recorder Number 15640 Cap. 6600

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Basadco 2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type CHEM Viscosity 48 Weight Pipe Length I. D. in.

Weight 9.2 Water Loss 12.0 cc. Drill Pipe Length 3452 I. D. 3.8 in.

Chlorides 10,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 O.D. in.

Jars: Make WTC Serial Number 406 Anchor Length 18 ft. Size 5 1/2 O.D. 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 4 1/2 X-H in.

Blow: I.F.P.- V. WEAK building to Fair
F.F.P.- V. WEAK building to WEAK

Recovered 115 ft. of CLEAN SALT WATER 61,000 p.p.m. Chlorides

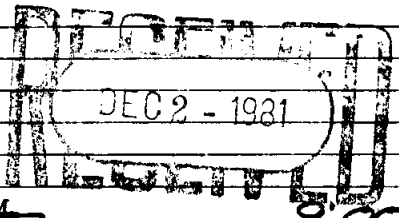
Recovered 95 ft. of Muddy S. WATER

Recovered 10 ft. of HEAVY mud

Recovered ft. of

Recovered ft. of

Remarks:



Time On Location 11:00 A.M. / P.M. Time Pick Up Tool 12:00 A.M. / P.M. Time Off Location 9:00 A.M. / P.M.

Time Set Packer(s) 1:35 A.M. / P.M. Time Started Off Bottom 5:20 A.M. / P.M. Maximum Temperature 137°F

Initial Hydrostatic Pressure		(A)	1771	P.S.I.		
Initial Flow Period	Minutes 30	(B)	86	P.S.I. to (C)	86	P.S.I.
Initial Closed In Period	Minutes 60	(D)	899	P.S.I.		
Final Flow Period	Minutes 45	(E)	129	P.S.I. to (F)	129	P.S.I.
Final Closed In Period	Minutes 90	(G)	654	P.S.I.		
Final Hydrostatic Pressure		(H)	1717	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 Ron M. Stucky
Signature of Customer or his authorized representative

Western Representative Karl Kohlert Jr. Thank you

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$
Straddle Test	$
Jars	$ 300.00
Selective Zone	$
Safety Joint	$ 65.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage 63	$ 47.25
Fluid Sampler	$
Extra Charts	$
Insurance	$
TOTAL	$ 1037.25

WESTERN TESTING CO., INC.
Pressure Data

Date 11-29-81 Test Ticket No. 14262

Recorder No. 1051 Capacity 4250 Location 3683

Clock No. — — — — Elevation 1451 K.B. Well Temperature 137

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1771 P.S.I.		Open Tool	1:35 PM	
B	First Initial Flow Pressure	86 P.S.I.		First Flow Pressure	30 Mins.	30 Min
C	First Final Flow Pressure	84 P.S.I.		Initial Closed-in Pressure	60 Mins.	63 Min
D	Initial Closed-in Pressure	905 P.S.I.		Second Flow Pressure	45 Mins.	45 Min
E	Second Initial Flow Pressure	135 P.S.I.		Final Closed-in Pressure	90 Mins.	93 Min
F	Second Final Flow Pressure	135 P.S.I.				
G	Final Closed-in Pressure	655 P.S.I.				
H	Final Hydrostatic Mud	~~1771~~ 1771 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	86
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	86
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	84
3	127
6	352
9	600
12	738
15	788
18	820
21	842
24	858
27	871
30	878
33	887
36	895
39	900
42	904
45	905
48	
51	
54	
57	
60	905
63	905

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

Point Minutes	Press.
0	135
5	
10	
15	135
20	
25	
30	
35	
40	
45	135
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 31 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	135
3	286
6	422
9	536
12	581
15	600
18	616
21	624
24	631
27	639
30	645
33	653
36	655
39	656
42	662
45	666
48	667
51	666
54	665
57	663
60	662

WTC - 4

WESTERN TESTING CO., INC.
Pressure Data

Date. _____ Test Ticket No. 14262

Recorder No. _____ Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °I

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Mins
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Mins
D Initial Closed-in Pressure	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	P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1	
P 2	
P 3	
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: _____ Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
63	
66	
69	
72	
75	
78	
81	
84	
87	
90	
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

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

Point Minutes	Press.

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

Point Minutes	Press.
63	661
66	660
69	659
72	658
75	658
78	657
81	657
84	656
87	656
90	655
93	655
96	
99	
102	
105	
108	
111	
114	
117	
120	

WTC - 4

TKT #14262

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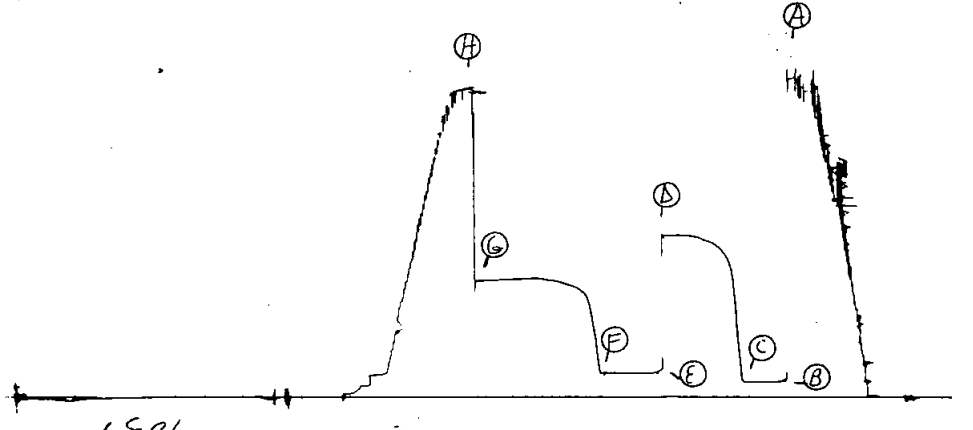


Company Petro-Dynamics, Ltd. Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Lansing Effective Pay - Ft. Ticket No. 14262

Date 11/ 29/81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by Ron M. Stucky Western Representative Karl L.West, Jr.

Formation Test No. 2 Interval Tested from 3677 ft. to 3695 ft. Total Depth 3695 ft.

Packer Depth 3672 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3677 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3683 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 3686 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baradco Drlg. Rig #2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type chemical Viscosity 48 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 12.0 cc. Drill Pipe Length 3452 I. D. 3.8 in.

Chlorides 10,000 P.P.M. Test Tool Length 30 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 406 Anchor Length 18 ft. Size 5½OD

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 in.

Blow: Initial flow period very weak building to fair. Final flow period very weak building to weak.

Recovered 115 ft. of clean salt water Chlorides 61,000 ppm

Recovered 95 ft. of muddy salt water

Recovered 10 ft. of heavy mud

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 1:35 ~~A.M.~~ P.M. Time Started Off Bottom 5:20 ~~A.M.~~ P.M. Maximum Temperature 137°

Initial Hydrostatic Pressure			(A) 1771 P.S.I.			
Initial Flow Period	Minutes 30	(B) 86 P.S.I.	to	(C) 86 P.S.I.		
Initial Closed In Period	Minutes 63	(D) 905 P.S.I.				
Final Flow Period	Minutes 45	(E) 135 P.S.I.	to	(F) 135 P.S.I.		
Final Closed In Period	Minutes 93	(G) 655 P.S.I.				
Final Hydrostatic Pressure			(H) 1717 P.S.I.			

WESTERN TESTING CO., INC.
Pressure Data

Date 11/29/81 Test Ticket No. 14262

Recorder No. 1051 Capacity 4250 Location 3683 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 137 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	1771	P.S.I.	Open Tool	1:35P	M		
B	First Initial Flow Pressure	86	P.S.I.	First Flow Pressure	30	Mins.	30	Mins.
C	First Final Flow Pressure	86	P.S.I.	Initial Closed-in Pressure	60	Mins.	63	Mins.
D	Initial Closed-in Pressure	905	P.S.I.	Second Flow Pressure	45	Mins.	45	Mins.
E	Second Initial Flow Pressure	135	P.S.I.	Final Closed-in Pressure	90	Mins.	93	Mins.
F	Second Final Flow Pressure	135	P.S.I.					
G	Final Closed-in Pressure	655	P.S.I.					
H	Final Hydrostatic Mud	1717	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	86
P 2 5	86
P 3 10	86
P 4 15	86
P 5 20	86
P 6 25	86
P 7 30	86
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 21 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	86
3	127
6	352
9	600
12	738
15	788
18	820
21	842
24	858
27	871
30	878
33	887
36	895
39	900
42	904
45	905
48	905
51	905
54	905
57	905
60	905
63	905

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

Point Minutes	Press.
0	135
5	135
10	135
15	135
20	135
25	135
30	135
35	135
40	135
45	135

Final Shut-In
Breakdown: 31 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	135
3	286
6	422
9	536
12	581
15	600
18	616
21	624
24	631
27	639
30	645
33	653
36	655
39	656
42	662
45	666
48	667
51	666
54	665
57	663
60	662

continued next page

WESTERN TESTING CO., INC.
Pressure Data

Date 11/29/81 Test Ticket No. 14262

Recorder No. 1051 Capacity 4250 Location 3683 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 137 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1771 P.S.I.	Open Tool	1:35P M.	
B First Initial Flow Pressure	86 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	86 P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins.
D Initial Closed-in Pressure	905 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E Second Initial Flow Pressure	135 P.S.I.	Final Closed-in Pressure	90 Mins.	93 Mins.
F Second Final Flow Pressure	135 P.S.I.			
G Final Closed-in Pressure	655 P.S.I.			
H Final Hydrostatic Mud	1717 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: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

Final Shut-In
Breakdown: 31 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	661
P 2						66	660
P 3						69	659
P 4						72	658
P 5						75	658
P 6						78	657
P 7						81	657
P 8						84	656
P 9						87	656
P10						90	655
P11						93	655
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 14263

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

Elevation 1451 KB Formation Lansing Eff. Pay Ft.

District PRATT Date 11-30-81 Customer Order No.

COMPANY NAME Petro Dynamics, Ltd.

ADDRESS 555 N. Woodlawn Building #1 Suite 207 Wichita, Ks. 67208

LEASE AND WELL NO. Kalivoda #1 COUNTY Kingman STATE Ks Sec. 19 Twp. 30S Rge. 6W

Mail Invoice To Same Co. Name Address No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 3 Interval Tested from 3699 ft. to 3730 ft. Total Depth 3730 ft.

Packer Depth 3694 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 3699 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3705 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 3708 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baracco 2

Mud Type CHEM- Viscosity 48

Weight 9.1 Water Loss 9.2 cc.

Chlorides 10,000 P.P.M.

Jars: Make WTC Serial Number 406

Did Well Flow? NO Reversed Out NO

Drill Collar Length 220 I. D. 2.26 in.

Weight Pipe Length — I. D. — in.

Drill Pipe Length 3521 I. D. 3.8 in.

Test Tool Length 30 ft. Tool Size 5 1/2 O.D. in.

Anchor Length 31 ft. Size 5 1/2 O.D. in.

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 X-Hole in.

Blow: I.F.P.- WEAK building to STRONG

F.F.P.- WEAK building to STRONG -NO GAS to Surface-

Recovered 650 ft. of GAS IN PIPE

Recovered 60 ft. of GAS & oil cut mud

Recovered 30 ft. of CLEAN OIL

Recovered 150 ft. of GAS & OIL cut SALT WATER 62,000 ppm. chlorides

Recovered ft. of

Remarks:

Time On Location Continuous A.M. P.M. Time Pick Up Tool 4:15 A.M. P.M. Time Off Location Continuous A.M. P.M.

Time Set Packer(s) 5:55 A.M. P.M. Time Started Off Bottom 9:40 A.M. P.M. Maximum Temperature 136°F

Initial Hydrostatic Pressure		(A)	1781	P.S.I.		
Initial Flow Period	Minutes 30	(B)	96	P.S.I. to (C)	96	P.S.I.
Initial Closed In Period	Minutes 60	(D)	1366	P.S.I.		
Final Flow Period	Minutes 45	(E)	150	P.S.I. to (F)	139	P.S.I.
Final Closed In Period	Minutes 90	(G)	1281	P.S.I.		
Final Hydrostatic Pressure		(H)	1749	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 Ron M. Stucky
Signature of Customer or his authorized representative

DEC 2 - 1981

Western Representative Karl A. Kloefkorn Thanks Again

FIELD INVOICE

Open Hole Test	$ 625.00
Misrun	$ —
Straddle Test	$ —
Jars	$ 300.00
Selective Zone	$ —
Safety Joint	$ 65.00
Standby	$ —
Evaluation	$ —
Extra Packer	$ —
Circ. Sub	$ —
Mileage	$ [illegible]
Fluid Sampler	$ —
Extra Charts	$ —
Insurance	$ 990.00
TOTAL	$

WESTERN TESTING CO., INC.
Pressure Data

Date 11-30-81 | Test Ticket No. 14263

Recorder No. 1051 | Capacity 4250 | Location 3705 Ft

Clock No. — — — — | Elevation 1451 K.B. | Well Temperature 136 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1773	P.S.I.		
B First Initial Flow Pressure	91	P.S.I.	Open Tool 5:55 AM	
C First Final Flow Pressure	91	P.S.I.	First Flow Pressure 30 Mins.	30 Mins
D Initial Closed-in Pressure	1379	P.S.I.	Initial Closed-in Pressure 60 Mins.	54 Mins
E Second Initial Flow Pressure	155	P.S.I.	Second Flow Pressure 45 Mins.	45 Mins
F Second Final Flow Pressure	155	P.S.I.	Final Closed-in Pressure 90 Mins.	96 Mins
G Final Closed-in Pressure	1285	P.S.I.		
H Final Hydrostatic Mud	1747	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	91
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	91
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 18 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	91
3	278
6	793
9	1062
12	1171
15	1233
18	1273
21	1296
24	1313
27	1328
30	1340
33	1346
36	1356
39	1364
42	1370
45	1374
48	1376
51	1378
54	1379
57	
60	

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

Point Minutes	Press.
0	155
5	
10	
15	
20	
25	
30	
35	
40	
45	155
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	155
3	156
6	420
9	785
12	994
15	1095
18	1155
21	1187
24	1206
27	1224
30	1232
33	1239
36	1243
39	1249
42	1254
45	1260
48	1265
51	1270
54	1274
57	1277
60	1278

cont

WTC - 4

WESTERN TESTING CO., INC.
Pressure Data

Date. _____ Test Ticket No. 14263

Recorder No. _____ Capacity _____ Location _____ F

Clock No. _____ Elevation _____ Well Temperature _____ °

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Min
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Min
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Min
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Min
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

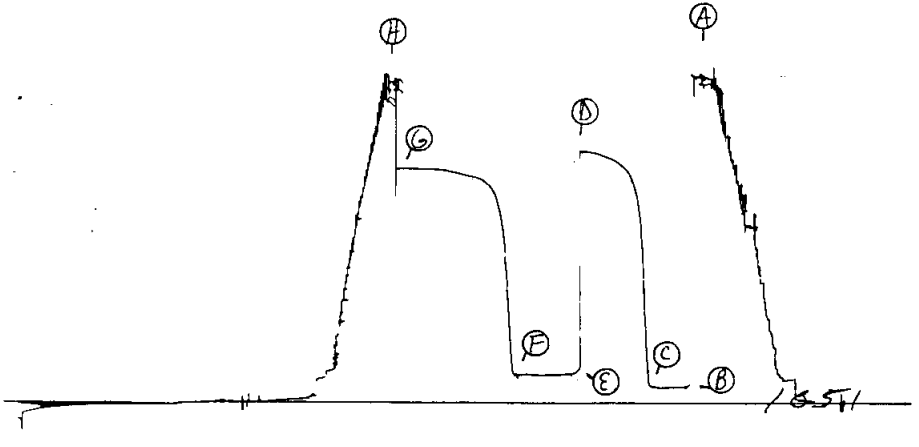
PRESSURE BREAKDOWN

First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: ____ Inc.	Breakdown: ____ Inc.	Breakdown: ____ Inc.	Breakdown: ____ 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		63				63	1279
P 2		66				66	1280
P 3		69				69	1281
P 4		72				72	1282
P 5		75				75	1282
P 6		78				78	1283
P 7		81				81	1284
P 8		84				84	1284
P 9		87				87	1285
P10		90				90	1285
P11		93				93	
P12		96				96	
P13		99				99	
P14		102				102	
P15		105				105	
P16		108				108	
P17		111				111	
P18		114				114	
P19		117				117	
P20		120				120	

TKT # 14263

1



Company Petro-Dynamics, Ltd. Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Lansing Effective Pay - Ft. Ticket No. 1426

Date 11/30 /81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by Ron M. Stucky Western Representative Karl L.West, Jr.

Formation Test No. 3 Interval Tested from 3699 ft. to 3730 ft. Total Depth 3730 ft.

Packer Depth 3694 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3699 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3705 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 3708 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baradco Drlg. Rig #2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type chemical Viscosity 48 Weight Pipe Length - I. D. - in.

Weight 9.1 Water Loss 9.2 cc. Drill Pipe Length 3521 I. D. 3.8 in.

Chlorides 10,000 P.P.M. Test Tool Length 30 ft. Tool Size 5½ OD in.

Jars: Make WTC Serial Number 406 Anchor Length 31 ft. Size 5½ OD

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 XH in.

Blow: Initial flow period weak building to strong. Final flow period weak building to strong-
no gas to surface.

Recovered 650 ft. of gas in pipe

Recovered 60 ft. of gas and oil cut mud

Recovered 30 ft. of clean oil

Recovered 150 ft. of gas and oil cut salt water Chlorides 62,000 ppm

Recovered ft. of

Remarks:

Time Set Packer(s) 5:55 A.M. ~~P.M.~~ Time Started Off Bottom 9:40 A.M. ~~P.M.~~ Maximum Temperature 136°

Initial Hydrostatic Pressure			(A)	1773	P.S.I.	
Initial Flow Period	Minutes	30	(B)	91	P.S.I. to (C)	91 P.S.I.
Initial Closed In Period	Minutes	54	(D)	1379	P.S.I.	
Final Flow Period	Minutes	45	(E)	155	P.S.I. to (F)	155 P.S.I.
Final Closed In Period	Minutes	90	(G)	1285	P.S.I.	
Final Hydrostatic Pressure			(H)	1747	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 11/30/81 Test Ticket No. 14263

Recorder No. 1051 Capacity 4250 Location 3705 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 136 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1773 P.S.I.		Open Tool	5:55A M	
B	First Initial Flow Pressure	91 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	91 P.S.I.		Initial Closed-in Pressure	60 Mins.	54 Mins.
D	Initial Closed-in Pressure	1379 P.S.I.		Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	155 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	155 P.S.I.				
G	Final Closed-in Pressure	1285 P.S.I.				
H	Final Hydrostatic Mud	1747 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	91
P 2 5	91
P 3 10	91
P 4 15	91
P 5 20	91
P 6 25	91
P 7 30	91
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 18 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	91
3	278
6	793
9	1062
12	1171
15	1233
18	1273
21	1296
24	1313
27	1328
30	1340
33	1346
36	1356
39	1364
42	1370
45	1374
48	1376
51	1378
54	1379

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

Point Minutes	Press.
0	155
5	155
10	155
15	155
20	155
25	155
30	155
35	155
40	155
45	155

Final Shut-In
Breakdown: 30 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	155
3	156
6	420
9	785
12	994
15	1095
18	1155
21	1187
24	1206
27	1224
30	1233
33	1239
36	1243
39	1249
42	1254
45	1260
48	1265
51	1270
54	1274
57	1277
60	1278

continued next page

WESTERN TESTING CO., INC.

Pressure Data

Date 11/30/81 Test Ticket No. 14263

Recorder No. 1051 Capacity 4250 Location 3705 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 136 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1773	P.S.I.
B	First Initial Flow Pressure	91	P.S.I.
C	First Final Flow Pressure	91	P.S.I.
D	Initial Closed-in Pressure	1379	P.S.I.
E	Second Initial Flow Pressure	155	P.S.I.
F	Second Final Flow Pressure	155	P.S.I.
G	Final Closed-in Pressure	1285	P.S.I.
H	Final Hydrostatic Mud	1747	P.S.I.

	Time Given	Time Computed
Open Tool	5:55A M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	60 Mins.	54 Mins.
Second Flow Pressure	45 Mins.	45 Mins.
Final Closed-in Pressure	90 Mins.	90 Mins.

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 18 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

Final Shut-In
Breakdown: 30 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	1279
P 2						66	1280
P 3						69	1281
P 4						72	1282
P 5						75	1282
P 6						78	1283
P 7						81	1284
P 8						84	1284
P 9						87	1285
P10						90	1285
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 14264

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

Elevation 1451 KB Formation Mississippian Eff. Pay Ft.

District Pratt Date 12-1-81 Customer Order No.

COMPANY NAME Petro Dynamics, Ltd.

ADDRESS 555 n. Woodlawn Building 1 Suite 207 Wichita, Ks. 67208

LEASE AND WELL NO. Kalivoda #1 COUNTY Kingman STATE KS Sec. 3 19 Twp. 30S Rge 6W

Mail Invoice To Sama Co. Name Address No. Copies Requested Rag

Mail Charts To Sama Address No. Copies Requested Rag

Formation Test No. 4 Interval Tested from 4107 ft. to 4120 ft. Total Depth 4120 ft.

Packer Depth 4102 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4107 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4113 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4116 ft. Recorder Number 15640 Cap. 16600

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Baradco 2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type CHEM- Viscosity 45 Weight Pipe Length I. D. in.

Weight 9.1 Water Loss 11.0 cc. Drill Pipe Length 3916 I. D. 3.8 in.

Chlorides 8,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 O.D. in.

Jars: Make WTC Serial Number 406 Anchor Length 13 ft. Size 5 1/2 O.D 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 4 1/2 X-Hole in.

Blow: IFP- WEAK (1/2" under water) DECREASED to V. WEAK (Surface of water)
FFP- V. WEAK (Surface of water) DEAD in 7 min. (flushed Twice - few Bubbles on each

Recovered 15 ft. of Drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Hit Bridge @ 3789 Slid 6' to Bottom

→ PLUGGED ANCHOR ←

RECEIVED
DEC 4 - 1981

Time On Location 3:30 A.M. P.M. Time Pick Up Tool 4:15 A.M. P.M. Time Off Location Continuous A.M. P.M.

Time Set Packer(s) 5:40 A.M. P.M. Time Started Off Bottom 7:40 A.M. P.M. Maximum Temperature 138°F

Initial Hydrostatic Pressure			(A)	2048	P.S.I.	
Initial Flow Period	Minutes 30		(B)	21	P.S.I. to (C)	32 P.S.I.
Initial Closed In Period	Minutes 30		(D)	43	P.S.I.	
Final Flow Period	Minutes 30		(E)	53	P.S.I. to (F)	64 P.S.I.
Final Closed In Period	Minutes 30		(G)	1302	P.S.I.	
Final Hydrostatic Pressure			(H)	1931	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.

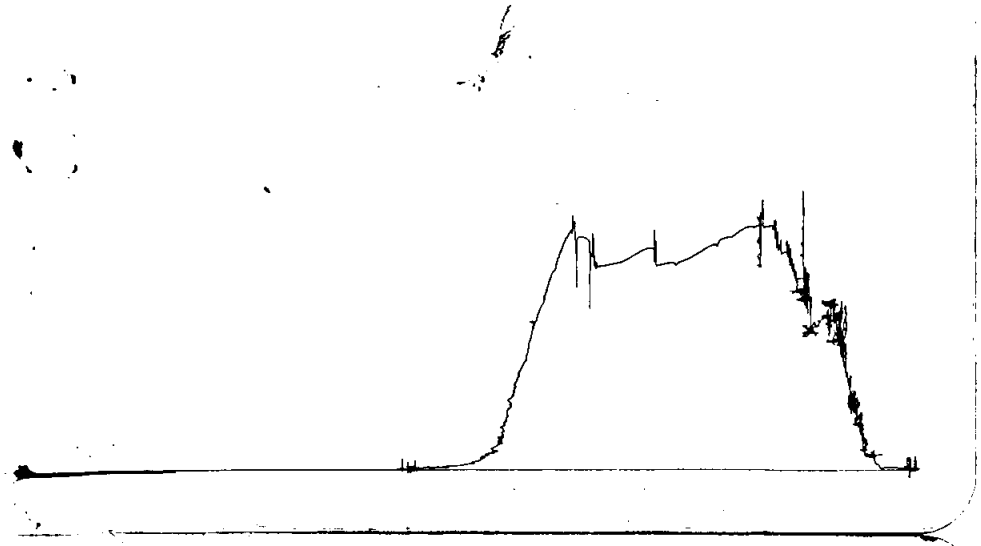
Test Approved By Ron M. Stucky
Signature of Customer or his authorized representative

Western Representative Kurt Kotter Thanks again

FIELD INVOICE

Open Hole Test	$
Misrun	$ 400.00
Straddle Test	$
Jars	$ 200.00
Selective Zone	$
Safety Joint	$ 65.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage 63	$ 47.25
Fluid Sampler	$
Extra Charts	$
Insurance	$
TOTAL	$ 812.25

Pkt # 14264
O



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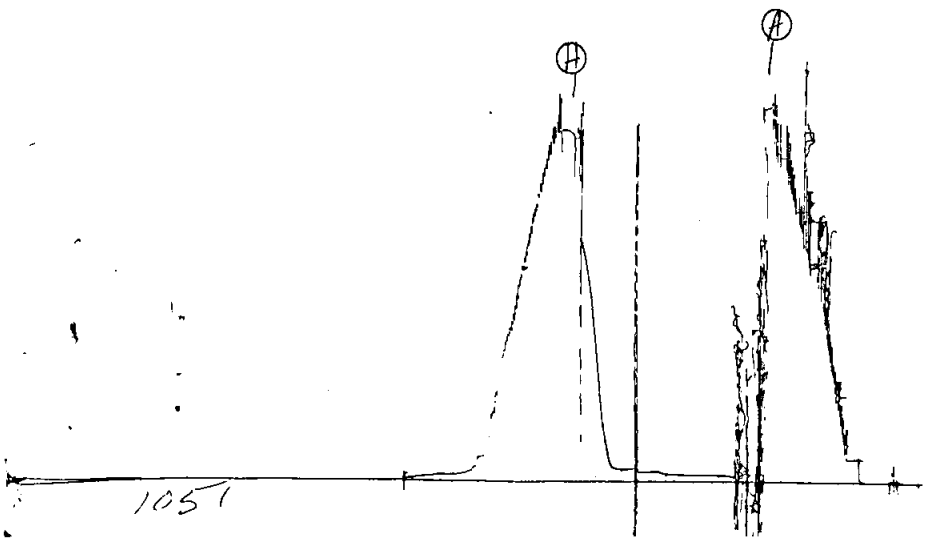


Company Petro-Dynamics, Ltd. Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 14264

Date 12/ 1 /81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by R. M. Stucky Western Representative Karl L. West, Jr.

Formation Test No. 4 Interval Tested from 4107 ft. to 4120 ft. Total Depth 4120 ft.

Packer Depth 4102 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4107 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4113 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4116 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baradco Drlg. Rig #2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type chemical- Viscosity 45 Weight Pipe Length - I. D. - in.

Weight 9.1 Water Loss 11.0cc. Drill Pipe Length 3916 I. D. 3.8 in.

Chlorides 8,000 P.P.M. Test Tool Length 30 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 406 Anchor Length 13 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 4½XH in.

Blow: Initial flow period weak (one half inch under water) decreased to very weak (surface of water) Final flow period very weak (surface of water) dead in seven minutes. (Flushed twice- few bubbles on each)

Recovered ft. of

Recovered 15 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Hit bridge @ 3789'; slid six feet to bottom.

PLUGGED ANCHOR MISRUN

Time Set Packer(s) 5:40 ~~A.M.~~ P.M. Time Started Off Bottom 7:40 ~~A.M.~~ P.M. Maximum Temperature 138°

Initial Hydrostatic Pressure (A) 2051 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) 1940 P.S.I.

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 14265

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

Elevation 1451 KB Formation Mississipian Eff. Pay ____ Ft.

District Pratt Date 12-2-81 Customer Order No. ____

COMPANY NAME Petro Dynamics, Ltd.

ADDRESS 555 N. Woodlawn Building I Suite 207 Wichita, KS. 67208

LEASE AND WELL NO. Kalivoda #1 COUNTY Kingman STATE Ks Sec. 5 Twp. 30 S Rge. 6 W

Mail Invoice To Same Co. Name Address No. Copies Requested Reg

Mail Charts To Same Address No. Copies Requested Reg

Formation Test No. 5 Interval Tested from 4107 ft. to 4120 ft. Total Depth 4120 ft.

Packer Depth 4102 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Packer Depth 4107 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4113 ft. Recorder Number 1031 Cap. 4250

Bottom Recorder Depth (Outside) 4116 ft. Recorder Number 13640 Cap. 6600

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

Drilling Contractor Baradco 2

Mud Type Chem-Drispac Viscosity 50

Weight 9.4 Water Loss 11.0 cc.

Chlorides 8,000 P.P.M.

Jars: Make WTC Serial Number 406

Did Well Flow? NO Reversed Out NO

Drill Collar Length 220 I. D. 2.26 in.

Weight Pipe Length ____ I. D. ____ in.

Drill Pipe Length 3916 I. D. 3.8 in.

Test Tool Length 30 ft. Tool Size 5 1/2 O.D. in.

Anchor Length 13 ft. Size 5 1/2 O.D. in.

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 X-Hole in.

Blow: I.F.P. - Gas to Surface in 8 min. @ 101,000 C.F./Day built to 179,000 C.F./Day
F.F.P. - Gas @ 195,000 C.F./Day built to 319,000 C.F./Day See attached sheet for gas measurements

Recovered 210 ft. of Watery Mud 27,000 ppm. Chlorides

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Remarks: Slid 6' to bottom

RECEIVED
DEC 4 - 1981

Time On Location Continuous A.M. P.M. Time Pick Up Tool 3[illegible]:30 A.M. P.M. Time Off Location 12:00 A.M. P.M.

Time Set Packer(s) 5:00 A.M. P.M. Time Started Off Bottom 8:45 A.M. P.M. Maximum Temperature 138°F

Initial Hydrostatic Pressure			(A)	1985	P.S.I.	
Initial Flow Period	Minutes 30		(B)	129	P.S.I. to (C)	118 P.S.I.
Initial Closed In Period	Minutes 60		(D)	1345	P.S.I.	
Final Flow Period	Minutes 45		(E)	139	P.S.I. to (F)	129 P.S.I.
Final Closed In Period	Minutes 90		(G)	1345	P.S.I.	
Final Hydrostatic Pressure			(H)	1963	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 Ron M. Stuckey
Signature of Customer or his authorized representative

Western Representative Karl Stockstill Thanks again

FIELD INVOICE

Open Hole Test	$ 700.00
Misrun	$ ____
Straddle Test	$ ____
Jars	$ 300.00
Selective Zone	$ ____
Safety Joint	$ 65.00
Standby	$ ____
Evaluation	$ ____
Extra Packer	$ ____
Circ. Sub.	$ ____
Mileage	$ ____
Fluid Sampler	$ ____
Extra Charts	$ ____
Insurance	$ ____
TOTAL	$ 1065.00

Phone 316 262-5861

P. O. Box 1599
WICHITA, KANSAS 67201

GAS FLOW REPORT

Nº 3410

Date 12-2-81 Ticket 14265 Company Petro Dynamics

Well Name and No. Kalivoda 1 Dst No. 5 Interval Tested 4107-4120

County Kingman State KS. Sec. 5 19 Twp. 30 S Rg. 6 W

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					
					Gas to Surface 8 min @ 101,000 C.F./Day
10	8.5	1/2			105,000 C.F./Day
20	14	1/2			141,000 C.F./Day o.c.
30	20	1/2			177,000 C.F./Day o.c.
SECOND FLOW					
10	4.5	1			301,000 C.F./Day o.c.
20	5	1			319,000 o.c.
30	5	1			319,000
40	5	1			319,000
45	5	1			319,000

GAS BOTTLE

Serial No. 84 Date Bottle Filled 12-2-81 Date to be Invoiced

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 Petro Dynamics

Authorized by Kenneth M Stanley

FORM WTC 9

WESTERN TESTING CO., INC.
Pressure Data

Date 12-2-81 Test Ticket No. 14265

Recorder No. 1051 Capacity 4250 Location 4112 Ft.

Clock No. — — — — Elevation 1451 K.B. Well Temperature 138 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1991	P.S.I.	Open Tool	5:00 AM	
B	First Initial Flow Pressure	139	P.S.I.	First Flow Pressure	30 Mins.	30 Mins
C	First Final Flow Pressure	118	P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins
D	Initial Closed-in Pressure	1359	P.S.I.	Second Flow Pressure	45 Mins.	45 Mins
E	Second Initial Flow Pressure	142	P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins
F	Second Final Flow Pressure	142	P.S.I.			
G	Final Closed-in Pressure	1362	P.S.I.			
H	Final Hydrostatic Mud	1974	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	139
P 2	5	139
P 3	10	120
P 4	15	118
P 5	20	1
P 6	25	
P 7	30	118
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

Point Minutes	Press.
0	118
3	766
6	1146
9	1235
12	1277
15	1301
18	1320
21	1330
24	1339
27	1345
30	1351
33	1354
36	~~1356~~ 1355
39	1356
42	1357
45	1358
48	1359
51	1
54	
57	1355
60	

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

Point Minutes	Press.
0	142
5	
10	
15	
20	
25	
30	
35	
40	
45	142
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	142
3	921
6	1133
9	1216
12	1254
15	1280
18	1299
21	1313
24	1321
27	1328
30	1334
33	1338
36	1342
39	1345
42	1347
45	1349
48	1351
51	1353
54	1355
57	1357
60	1359

Cont

WTC - 4

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 14265

Recorder No. _____ Capacity _____ Location _____ F

Clock No. _____ Elevation _____ Well Temperature _____ °

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Min
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Min
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Min
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Min
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

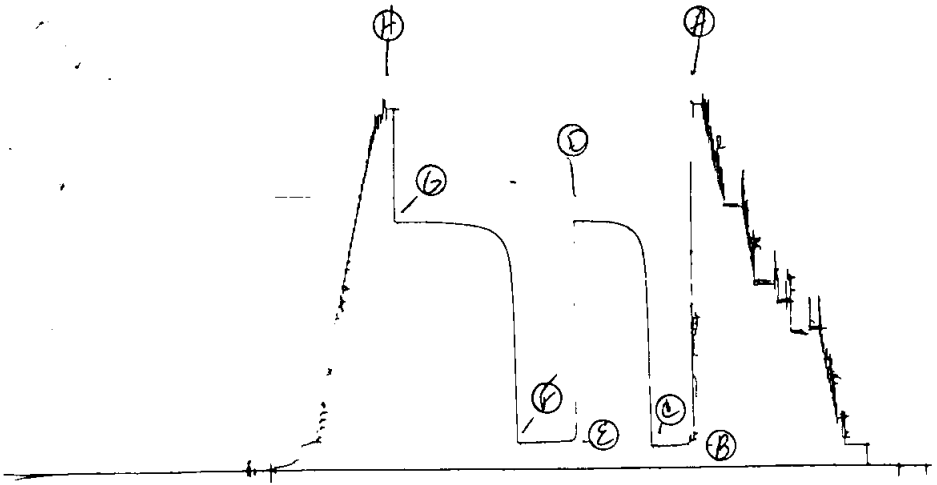
First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: _____ Inc.	Breakdown: _____ Inc.	Breakdown: _____ Inc.	Breakdown: _____ Inc.
of 5 mins. and a	of 3 mins. and a	of 5 mins. and a	of 3 mins. and a
final inc. of 0 Min.	final inc. of 0 Min.	final inc. of 0 Min.	final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1		63				63	1360
P 2		66				66	1361
P 3		69				69	1362
P 4		72				72	1362
P 5		75				75	1362
P 6		78				78	
P 7		81				81	
P 8		84				84	
P 9		87				87	
P10		90				90	1362
P11		93				93	
P12		96				96	
P13		99				99	
P14		102				102	
P15		105				105	
P16		108				108	
P17		111				111	
P18		114				114	
P19		117				117	
P20		120				120	

WTC - 4

Kt # 14265

I



Company Petro-Dynamics, Ltd. Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 14265

Date 12/ 2 /81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by R. M. Stucky Western Representative Karl L. West, Jr.

Formation Test No. 5 Interval Tested from 4107 ft. to 4120 ft. Total Depth 4120 ft.

Packer Depth 4102 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4107 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4113 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4116 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baradco Drlg. Rig #2 Drill Collar Length 220 I. D. 2.26 in.

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

Weight 9.4 Water Loss 11.0 cc. Drill Pipe Length 3916 I. D. 3.8 in.

Chlorides 8,000 P.P.M. Test Tool Length 30 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 406 Anchor Length 13 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 4½XH in.

Blow: Initial flow period gas to surface in eight minutes. See attached sheet for gas measurements.

Recovered 210 ft. of watery mud Chlorides 27,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Slid six feet to bottom.

Time Set Packer(s) 5:00 ~~A.M.~~ ~~P.M.~~ Time Started Off Bottom 8:45 ~~A.M.~~ ~~P.M.~~ Maximum Temperature 138°

Initial Hydrostatic Pressure			(A) 1991	P.S.I.		
Initial Flow Period	Minutes 30	(B) 139	P.S.I. to	(C) 118	P.S.I.	
Initial Closed In Period	Minutes 57	(D) 1359	P.S.I.			
Final Flow Period	Minutes 45	(E) 142	P.S.I. to	(F) 142	P.S.I.	
Final Closed In Period	Minutes 90	(G) 1362	P.S.I.			
Final Hydrostatic Pressure			(H) 1974	P.S.I.		

GAS FLOW REPORT

Date 12/2/81 Ticket 14265 Company Petro=Dynamics, Ltd.

Well Name and No. Kalivoda #1 Dst No. 5 Interval Tested 4107'-4120'

County Kingman State Kansas Sec. 19 Twp. 30S Rg. 6W

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
Gas to surface in eight minutes.@ 101,000			**PRE FLOW**			CFPD
	10 min.	8.5 PSIG	1/2" orifice			105,000 CFPD
	20 min.	14.0 PSIG	1/2" orifice			141,000 CFPD
	30 min.	20.0 PSIG	1/2" orifice			177,000 CFPD
			SECOND FLOW			
	10 min.	4.5 PSIG	1" orifice			301,000 CFPD
	20 min.	5.0 PSIG	1" orifice			319,000 CFPD
	30 min.	5.0 PSIG	1" orifice			319,000 CFPD
	40 min.	5.0 PSIG	1" orifice			319,000 CFPD
	45 min.	5.0 PSIG	1" orifice			319,000 CFPD

GAS BOTTLE

Serial No. 84 Date Bottle Filled 12/2/81 Date to be Invoiced 12/2/81

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 Petro-Dynamics, Ltd.

Authorized by R. M. Stucky

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 12/2/81 Test Ticket No. 14265

Recorder No. 1051 Capacity 4250 Location 4113 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 138 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1991 P.S.I.	Open Tool	5:00A M	
B First Initial Flow Pressure	139 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	118 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D Initial Closed-in Pressure	1359 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E Second Initial Flow Pressure	142 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	142 P.S.I.			
G Final Closed-in Pressure	1362 P.S.I.			
H Final Hydrostatic Mud	1974 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	139
P 2 5	139
P 3 10	120
P 4 15	118
P 5 20	118
P 6 25	118
P 7 30	118
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	118
3	766
6	1146
9	1235
12	1277
15	1301
18	1320
21	1330
24	1339
27	1345
30	1351
33	1354
36	1355
39	1356
42	1357
45	1358
48	1359
51	1359
54	1359
57	1359

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

Point Minutes	Press.
0	142
5	142
10	142
15	142
20	142
25	142
30	142
35	142
40	142
45	142

Final Shut-In
Breakdown: 30 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	142
3	921
6	1133
9	1216
12	1254
15	1280
18	1299
21	1313
24	1321
27	1328
30	1334
33	1338
36	1342
39	1345
42	1347
45	1349
48	1351
51	1353
54	1355
57	1357
60	1359

CONT'D NEXT PAGE

WESTERN TESTING CO., INC.

Pressure Data

Date 12/2/81 Test Ticket No. 14265

Recorder No. 1051 Capacity 4250 Location 4113 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 138 °F

Point		Pressure		Time Given		Time Computed	
A	Initial Hydrostatic Mud	1991 P.S.I.	Open Tool	5:00A	M		
B	First Initial Flow Pressure	139 P.S.I.	First Flow Pressure	30	Mins.	30	Mins.
C	First Final Flow Pressure	118 P.S.I.	Initial Closed-in Pressure	60	Mins.	57	Mins.
D	Initial Closed-in Pressure	1359 P.S.I.	Second Flow Pressure	45	Mins.	45	Mins.
E	Second Initial Flow Pressure	142 P.S.I.	Final Closed-in Pressure	90	Mins.	90	Mins.
F	Second Final Flow Pressure	142 P.S.I.					
G	Final Closed-in Pressure	1362 P.S.I.					
H	Final Hydrostatic Mud	1974 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: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

Final Shut-In
Breakdown: 30 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	1360
P 2						66	1361
P 3						69	1362
P 4						72	1362
P 5						75	1362
P 6						78	1362
P 7						81	1362
P 8						84	1362
P 9						87	1362
P10						90	
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

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

WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET No. 14266

Elevation 1451 KB Formation Viola Eff. Pay Ft.

District Pratt Date 12-3-81 Customer Order No.

COMPANY NAME Petro Dynamics

ADDRESS 555 n. Woodlawn Suite 207 Wichita, Ks. 67208

LEASE AND WELL NO. Kalivoda 1 COUNTY Kingman STATE Ks. Sec. 19 Twp. 30S Rge. 6W

Mail Invoice To Sama (Co. Name) Address No. Copies Requested Rag

Mail Charts To Sama Address No. Copies Requested Rag

Formation Test No. 1 Interval Tested from 4493 ft. to 4510 ft. Total Depth 4510 ft.

Packer Depth 4488 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4493 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4499 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4502 ft. Recorder Number 15640 Cap. 6600

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Baradco 2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type CHEM-Drispac Viscosity 48 Weight Pipe Length I. D. in.

Weight 9.1 Water Loss 11.2 cc. Drill Pipe Length 4316 I. D. 3.8 in.

Chlorides 13,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 O.D. in.

Jars: Make WTC Serial Number 406 Anchor Length 17 ft. Size 5 1/2 O.D. 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 4 1/2 X-Hole in.

Blow: IFP- Strong blow Held Steady throughout Test

FFP- Strong Held Steady

Recovered 3365 ft. of Gas in pipe

Recovered 5 ft. of Gas cut Heavy mud

Recovered 90 ft. of Gas & oil cut Heavy mud 39% GAS 17% oil 54% mud

Recovered 180 ft. of Gas & oil cut watery mud 37% GAS 11% oil 9% water 43% mud

Recovered ft. of 36,000 p.p.m. Chlorides

Remarks: → SLID 10' to Bottom ←

Time On Location 8:45 A.M. P.M. Time Pick Up Tool 10:00 A.M. P.M. Time Off Location 7:00 A.M. P.M.

Time Set Packer(s) 11:55 A.M. P.M. Time Started Off Bottom 3:40 A.M. P.M. Maximum Temperature 139°F

Initial Hydrostatic Pressure			(A) 2198	P.S.I.		
Initial Flow Period	Minutes 30		(B) 96	P.S.I. to	(C) 816	P.S.I.
Initial Closed In Period	Minutes 60		(D) 1632	P.S.I.		
Final Flow Period	Minutes 45		(E) 129	P.S.I. to	(F) 129	P.S.I.
Final Closed In Period	Minutes 90		(G) 1632	P.S.I.		
Final Hydrostatic Pressure			(H) 2176	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 [signature] No Extra Hands
Signature of Customer or his authorized representative

Western Representative Karl Leo West, Jr. Thanks again

FIELD INVOICE

Open Hole Test	$ 900.00
Misrun	$
Straddle Test	$ 300.00
Jars	$ 200.00
Selective Zone	$ 65.00
Safety Joint	$
Standby	$
Formation	$
Extra Packer	$
Circ. Sub.	$
Mileage 63	$ 47.25
Fluid Sampler	$
Extra Charts	$
Insurance	$
TOTAL	$ 1112.25

WESTERN TESTING CO., INC.
Pressure Data

Date 12-3 | Test Ticket No. 14266

Recorder No. 1051 | Capacity 4250 | Location 4499 Ft.

Clock No. — — — — | Elevation 1451 KB | Well Temperature 139 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2198	P.S.I.		
B First Initial Flow Pressure	96	P.S.I.	Open Tool 11:55 AM	
C First Final Flow Pressure	99	P.S.I.	First Flow Pressure 30 Mins.	45 Mins
D Initial Closed-in Pressure	1634	P.S.I.	Initial Closed-in Pressure 60 Mins.	57 Mins
E Second Initial Flow Pressure	118	P.S.I.	Second Flow Pressure 45 Mins.	45 Mins
F Second Final Flow Pressure	118	P.S.I.	Final Closed-in Pressure 90 Mins.	87 Mins
G Final Closed-in Pressure	1635	P.S.I.		
H Final Hydrostatic Mud	2181	P.S.I.		

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	96
P 2	5	108
P 3	10	114
P 4	15	Plugged
P 5	20	Plugged
P 6	25	114
P 7	30	99
P 8	35	99
P 9	40	99
P10	45	99
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

Point Minutes	Press.
0	99
3	442
6	951
9	1415
12	1526
15	1568
18	1589
21	1602
24	1609
27	1617
30	1621
33	1623
36	1625
39	1627
42	1629
45	1631
48	1632
51	1633
54	1634
57	1634
~~60~~	

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

Point Minutes	Press.
0	118
5	
10	
15	
20	
25	
30	
35	
40	
45	118
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 29 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	118
3	487
6	938
9	1320
12	1489
15	1544
18	1571
21	1589
24	1601
27	1609
30	1615
33	1619
36	1621
39	1623
42	1625
45	1627
48	1629
51	1630
54	1631
57	1632
60	1633

cont

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 14266

Recorder No. _____ Capacity _____ Location _____ F

Clock No. _____ Elevation _____ Well Temperature _____ °

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Min
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Min
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Min
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Min
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: ____ Inc.	Breakdown: ____ Inc.	Breakdown: ____ Inc.	Breakdown: ____ 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		63				63	1634
P 2		66				66	1635
P 3		69				69	"
P 4		72				72	
P 5		75				75	1635
P 6		78				78	"
P 7		81				81	"
P 8		84				84	
P 9		87				87	1635
P10		90				90	[illegible]
P11		93				93	
P12		96				96	
P13		99				99	
P14		102				102	
P15		105				105	
P16		108				108	
P17		111				111	
P18		114				114	
P19		117				117	
P20		120				120	

WTC - 4

1951

TH #14266

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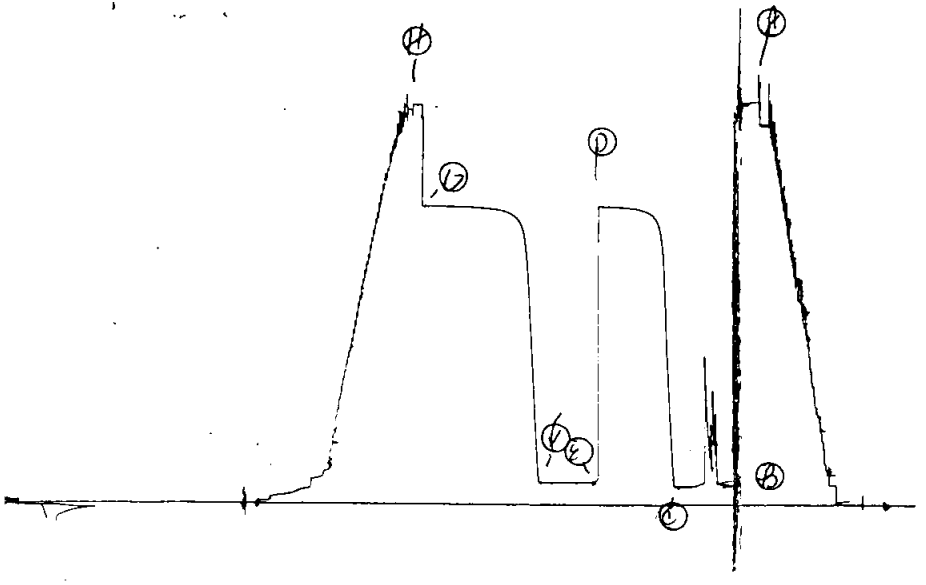

Company Petro-Dynamics, Ltd. Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Viola Effective Pay - Ft. Ticket No. 14266

Date 12/ 3 /81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by R. M. Stucky Western Representative Karl L. West, Jr.

Formation Test No. 6 Interval Tested from 4493 ft. to 4510 ft. Total Depth 4510 ft.

Packer Depth 4488 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4493 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4499 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4502 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baradco Drlg. Rig #2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type chemical- drispac Viscosity 48 Weight Pipe Length - I. D. - in.

Weight 9.1 Water Loss 11.2 cc. Drill Pipe Length 4316 I. D. 3.8 in.

Chlorides 13,000 P.P.M. Test Tool Length 30 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 406 Anchor Length 17 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 4½XH in.

Blow: Initial flo w period strong blow held steady throughout test.

Recovered 3365 ft. of gas in pipe

Recovered 5 ft. of gas cut heavy mud

Recovered 90 ft. of gas and oil cut heavy mud 39% gas;17% oil;54% mud

Recovered 180 ft. of gas and oil cut watery mud 37% gas;11% oil;9% water;43% mud

Recovered ft. of Chlorides 36,000 ppm

Remarks: Slid ten feet to bottom.

Time Set Packer(s) 11:55 A.M. ~~P.M.~~ Time Started Off Bottom 3:40 ~~A.M.~~ P.M. Maximum Temperature 139°

Initial Hydrostatic Pressure			(A)	2198	P.S.I.	
Initial Flow Period	Minutes 45	(B)	96	P.S.I. to (C)	99	P.S.I.
Initial Closed In Period	Minutes 57	(D)	1634	P.S.I.		
Final Flow Period	Minutes 45	(E)	118	P.S.I. to (F)	118	P.S.I.
Final Closed In Period	Minutes 87	(G)	1635	P.S.I.		
Final Hydrostatic Pressure		(H)	2181	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 12/3/81 Test Ticket No. 14266

Recorder No. 1051 Capacity 4250 Location 4499 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 139 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2198 P.S.I.		Open Tool	11:55A M	
B	First Initial Flow Pressure	96 P.S.I.		First Flow Pressure	30 Mins.	45 Mins.
C	First Final Flow Pressure	99 P.S.I.		Initial Closed-in Pressure	60 Mins.	57 Mins.
D	Initial Closed-in Pressure	1634 P.S.I.		Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	118 P.S.I.		Final Closed-in Pressure	90 Mins.	87 Mins.
F	Second Final Flow Pressure	118 P.S.I.				
G	Final Closed-in Pressure	1635 P.S.I.				
H	Final Hydrostatic Mud	2181 P.S.I.				

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	96
P 2 5	108
P 3 10	114
P 4 15	PLUGGED
P 5 20	PLUGGED
P 6 25	114
P 7 30	99
P 8 35	99
P 9 40	99
P10 45	99
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	99
3	442
6	951
9	1415
12	1526
15	1568
18	1589
21	1602
24	1609
27	1617
30	1621
33	1623
36	1625
39	1627
42	1629
45	1631
48	1632
51	1633
54	1634
57	1634

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

Point Minutes	Press.
0	118
5	118
10	118
15	118
20	118
25	118
30	118
35	118
40	118
45	118

Final Shut-In
Breakdown: 29 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	118
3	487
6	938
9	1320
12	1489
15	1544
18	1571
21	1589
24	1601
27	1609
30	1615
33	1619
36	1621
39	1623
42	1625
45	1627
48	1629
51	1630
54	1631
57	1632
60	1633

continued next page

WESTERN TESTING CO., INC.
Pressure Data

Date 12/3/81 Test Ticket No. 14266

Recorder No. 1051 Capacity 4250 Location 4499 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 139 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2198 P.S.I.	Open Tool	11:55A M	
B	First Initial Flow Pressure	96 P.S.I.	First Flow Pressure	30 Mins.	45 Mins.
C	First Final Flow Pressure	99 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D	Initial Closed-in Pressure	1634 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	118 P.S.I.	Final Closed-in Pressure	90 Mins.	87 Mins.
F	Second Final Flow Pressure	118 P.S.I.			
G	Final Closed-in Pressure	1635 P.S.I.			
H	Final Hydrostatic Mud	2181 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1	
P 2	
P 3	
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: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

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

Point Minutes	Press.

Final Shut-In
Breakdown: 29 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
63	1634
66	1635
69	1635
72	1635
75	1635
78	1635
81	1635
84	1635
87	1635

WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET No. 14267

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

Elevation 1451 KB Formation Simpson Eff. Pay Ft.

District Pratt Date 12-4-81 Customer Order No.

COMPANY NAME Petro Dynamics, Ltd. Bldg #1

ADDRESS 555 N. Woodlawn Suite 207 Wichita, KS. 67208

LEASE AND WELL NO. Kalivoda #1 COUNTY Kingman STATE KS Sec. 19 Twp. 30S Rge. 6W

Mail Invoice To Sama (Co. Name) Address No. Copies Requested Reg 10

Mail Charts To Sama Address No. Copies Requested Reg 10

Formation Test No. 1 Interval Tested from 4510 ft. to 4538 ft. Total Depth 4538 ft.

Packer Depth 4505 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4510 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4516 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4519 ft. Recorder Number 15640 Cap. 6600

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Beredco 2

Mud Type Chem-Drispac Viscosity 41

Weight 9.4 Water Loss 11.5 cc.

Chlorides 10,000 P.P.M.

Jars: Make WTC Serial Number 406

Did Well Flow? NO Reversed Out

Drill Collar Length 220 I. D. 2.26 in.

Weight Pipe Length I. D. in.

Drill Pipe Length 4347 I. D. 3.8 in.

Test Tool Length 30 ft. Tool Size 5 1/2 O.D. in.

Anchor Length 28 ft. Size 5 1/2 O.D. in. 3/4

Surface Choke Size 3/4 in. Bottom Choke Size in.

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

Blow: -Packers would NOT Hold-
Tried 4 times & Came out

Recovered 650 ft. of Drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

RECEIVED
DEC 8 - 1981

Time On Location 12:00 A.M. P.M. Time Pick Up Tool 2:40 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 4:35 A.M. P.M. Time Started Off Bottom 4:45 A.M. P.M. Maximum Temperature 138°F

Initial Hydrostatic Pressure (A) X 2155 2166 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) X 2048 2102 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 R. M. Stucky
Signature of Customer or his authorized representative

Western Representative Kent Stockstill Thanks again

FIELD INVOICE

Open Hole Test	$
Misrun	$ 400.00
Straddle Test	$
Jars	$ 300.00
Selective Zone	$
Safety Joint	$ 65.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage 63	$ 47.25
Fluid Sampler	$
5 Extra Charts	$ 25.00
Insurance	$
TOTAL	$ ~~812.25~~ 837.25

1051

TKT # 14267

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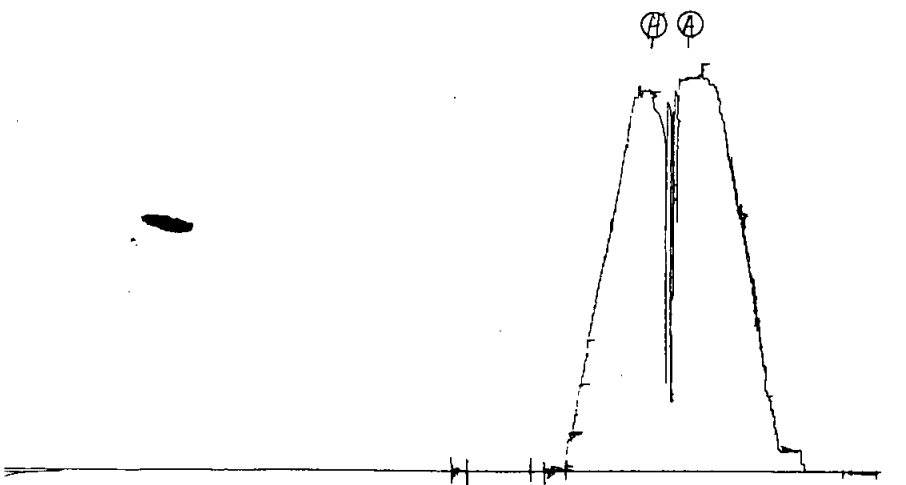

Company Petro-Dynamics, Ltd. Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Simpson Effective Pay - Ft. Ticket No. 14267

Date 12/ 4 /81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by R. M. Stucky Western Representative Karl L. West, Jr.

Formation Test No. 7 Interval Tested from 4510 ft. to 4538 ft. Total Depth 4538 ft.

Packer Depth 4505 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4510 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4516 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4519 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baradco Drlg. Rig #2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type chem-drispac Viscosity 41 Weight Pipe Length - I. D. - in.

Weight 9.4 Water Loss 11.5 cc. Drill Pipe Length 4347 I. D. 3.8 in.

Chlorides 10,000 P.P.M. Test Tool Length 30 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 406 Anchor Length 28 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 7/8in. Tool Joint Size 4½XH in.

Blow: PACKERS WOULD NOT HOLD TRIED FOUR TIMES & CAME OUT.

Misrun

Recovered 650 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 4:35 A.M. ~~P.M.~~ Time Started Off Bottom 4:45 A.M. ~~P.M.~~ Maximum Temperature 138°

Initial Hydrostatic Pressure (A) 2166 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) 2102 P.S.I.

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 14268

OK

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

Elevation 1451 KB Formation Viola/Simpson Eff. Pay Ft.

District Pratt Date 12-4-81 Customer Order No.

COMPANY NAME Petro Dynamics Ltd. Bldy #1

ADDRESS 555 n. Woodlawn Suite 207 Wichita, KS. 67208

LEASE AND WELL NO. Kalivoda #1 COUNTY Kingman STATE KS Sec. 4 Twp. 30S Rge. 6W

Mail Invoice To Same Co. Name Address No. Copies Requested ~~Req~~ 10

Mail Charts To Same Address No. Copies Requested ~~Req~~ 10

Formation Test No. 8 Interval Tested from 4493 ft. to 4538 ft. Total Depth 4538 ft.

Packer Depth 4488 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4493 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4500 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4506 ft. Recorder Number 15640 Cap. 6600

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Barnaco 2 Drill Collar Length 220 I. D. 2.24 in.

Mud Type CHEM-Drisp2c Viscosity 41 Weight Pipe Length I. D. in.

Weight 9.4 Water Loss 11.5 cc. Drill Pipe Length 4347 I. D. 3.8 in.

Chlorides 10,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 O.D. in.

Jars: Make WTC Serial Number 406 Anchor Length 45 ft. Size 5 1/2 O.D. 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 4 1/2 X-Hole in.

Blow: ~~IFP~~ Strong blow Held Steady throughout test

~~FFP~~ Strong Held Steady

Recovered 2670 ft. of GAS IN PIPE

Recovered 180 ft. of HEAVY GAS cut MUD

Recovered 970 ft. of HEAVY Gas cut Salt water w/oil Stain

Recovered ft. of

Recovered ft. of

Remarks: SLID 4' to Bottom

SLOW LOSS of Fluids throughout Test

NEED 10 final Reports on TESTS 2,3,4,5,6,7,8

RECEIVED
DEC 8 - 1981

Time On Location Continuous A.M. P.M. Time Pick Up Tool 7:15 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 9:10 A.M. P.M. Time Started Off Bottom 12:55 P.M. Maximum Temperature 138°F

Initial Hydrostatic Pressure			(A)	2176	P.S.I.	
Initial Flow Period	Minutes	30	(B)	387	P.S.I. to (C)	420 P.S.I.
Initial Closed In Period	Minutes	60	(D)	1664	P.S.I.	
Final Flow Period	Minutes	45	(E)	953	P.S.I. to (F)	899 P.S.I.
Final Closed In Period	Minutes	90	(G)	1674	P.S.I.	
Final Hydrostatic Pressure			(H)	2102	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 R. M. Stucky
Signature of Customer or his authorized representative

Western Representative Karl Stotler Jr. Thanks again

FIELD INVOICE

Open Hole Test	$ 700.00
Misrun	$
Straddle Test	$
Jars	$ 300.00
Selective Zone	$
Safety Joint	$ 65.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
5 Extra Charts	$ 25.00
Insurance	$
TOTAL	$ ~~1065.00~~ 1090.00

WESTERN TESTING CO., INC.
Pressure Data

Date 12-4 Test Ticket No. 14268

Recorder No. 1051 Capacity 4250 Location 4500 Ft

Clock No. — — — — Elevation 1451 KB Well Temperature 138 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2176	P.S.I.
B	First Initial Flow Pressure	388	P.S.I.
C	First Final Flow Pressure	440	P.S.I.
D	Initial Closed-in Pressure	1672	P.S.I.
E	Second Initial Flow Pressure	698	P.S.I.
F	Second Final Flow Pressure	906	P.S.I.
G	Final Closed-in Pressure	1643	P.S.I.
H	Final Hydrostatic Mud	2109	P.S.I.

	Time Given	Time Computed
Open Tool	9:10 A M	
First Flow Pressure	30 Mins.	35 Mins
Initial Closed-in Pressure	60 Mins.	57 Mins
Second Flow Pressure	45 Mins.	45 Mins
Final Closed-in Pressure	90 Mins.	84 Mins

PRESSURE BREAKDOWN

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

Point Mins.		Press.
P 1	0	388
P 2	5	(
P 3	10	
P 4	15	388
P 5	20	402
P 6	25	410
P 7	30	423
P 8	35	440
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

Point Minutes	Press.
0	440
3	889
6	1070
9	1197
12	1282
15	1349
18	1405
21	1451
24	1489
27	1523
30	1549
33	1572
36	1592
39	1611
42	1625
45	1638
48	1649
51	1660
54	1667
57	1672
~~60~~	

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

Point Minutes	Press.
0	698
5	1001
10	928
15	887
20	942
25	972
30	966
35	953
40	934
45	906
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 28 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	906
3	1078
6	1178
9	1246
12	1299
15	1343
18	1379
21	1405
24	1434
27	1455
30	1475
33	1494
36	1509
39	1523
42	1538
45	1548
48	1562
51	1572
54	1580
57	1588
60	1595

WTC - 4

cont'd

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 14268

Recorder No. _____ Capacity _____ Location _____ F

Clock No. _____ Elevation _____ Well Temperature _____ °

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Min
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Min
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Min
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Min
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: ____ Inc.		Breakdown: ____ Inc.		Breakdown: ____ Inc.		Breakdown: ____ 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		63				63	1604
P 2		66				66	1611
P 3		69				69	1617
P 4		72				72	1625
P 5		75				75	1631
P 6		78				78	1634
P 7		81				81	1637
P 8		84				84	1643
P 9		87				87	
P10		90				90	
P11		93				93	
P12		96				96	
P13		99				99	
P14		102				102	
P15		105				105	
P16		108				108	
P17		111				111	
P18		114				114	
P19		117				117	
P20		120				120	

WTC - 4

10

TKT # 14268

1051

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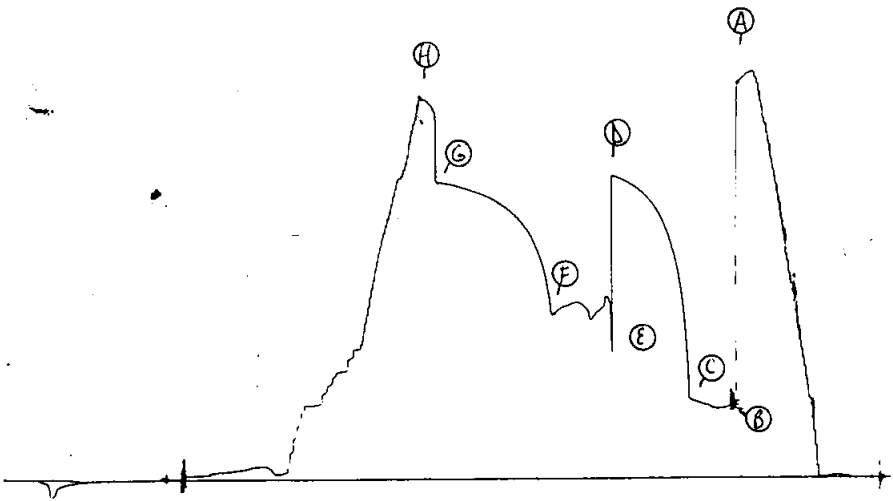

Company Petro-Dynamics, Ltd. Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Viola/Simpson Effective Pay - Ft. Ticket No. 14268

Date 12/ 4 /81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by R. M. Stucky Western Representative Karl L. West, Jr.

Formation Test No. 8 Interval Tested from 4493 ft. to 4538 ft. Total Depth 4538 ft.

Packer Depth 4488 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4493 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4500 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4506 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baradco Drlg. Rig #2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type chem-drispac Viscosity 41 Weight Pipe Length - I. D. - in.

Weight 9.4 Water Loss 11.5 cc. Drill Pipe Length 4347 I. D. 3.8 in.

Chlorides 10,000 P.P.M. Test Tool Length 30 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 406 Anchor Length 45 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 7/8in. Tool Joint Size 4½XH in.

Blow: Strong blow held steady throughout test.

Recovered 2670 ft. of gas in pipe

Recovered 380 ft. of heavy gas cut mud

Recovered 970 ft. of heavy gas cut salt water with oil stain

Recovered ft. of

Recovered ft. of

Remarks: Slid four feet to bottom. Slow loss of fluids throughout test.

Time Set Packer(s) 9:10 A.M. ~~P.M.~~ Time Started Off Bottom 12:55 ~~A.M.~~ P.M. Maximum Temperature 138°

Initial Hydrostatic Pressure			(A) 2176	P.S.I.		
Initial Flow Period	Minutes 35	(B) 388	P.S.I. to	(C) 440	P.S.I.	
Initial Closed In Period	Minutes 57	(D) 1672	P.S.I.			
Final Flow Period	Minutes 45	(E) 698	P.S.I. to	(F) 906	P.S.I.	
Final Closed In Period	Minutes 84	(G) 1643	P.S.I.			
Final Hydrostatic Pressure			(H) 2109	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 12/4/81 Test Ticket No. 14268

Recorder No. 1051 Capacity 4250 Location 4500 Ft.

Clock No. - Elevation 1451 Kelly Bushing Well Temperature 138 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2176	P.S.I.
B	First Initial Flow Pressure	388	P.S.I.
C	First Final Flow Pressure	440	P.S.I.
D	Initial Closed-in Pressure	1672	P.S.I.
E	Second Initial Flow Pressure	698	P.S.I.
F	Second Final Flow Pressure	906	P.S.I.
G	Final Closed-in Pressure	1643	P.S.I.
H	Final Hydrostatic Mud	2109	P.S.I.

	Time Given		Time Computed	
Open Tool	9:10A	M		
First Flow Pressure	30	Mins.	35	Mins.
Initial Closed-in Pressure	60	Mins.	57	Mins.
Second Flow Pressure	45	Mins.	45	Mins.
Final Closed-in Pressure	90	Mins.	84	Mins.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	388
P 2 5	388
P 3 10	388
P 4 15	388
P 5 20	402
P 6 25	410
P 7 30	423
P 8 35	440
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
0	440
3	889
6	1070
9	1197
12	1282
15	1349
18	1405
21	1451
24	1489
27	1523
30	1549
33	1572
36	1592
39	1611
42	1625
45	1638
48	1649
51	1660
54	1667
57	1672

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

Point Minutes	Press.
0	698
5	1001
10	928
15	887
20	942
25	972
30	966
35	953
40	934
45	906

Final Shut-In
Breakdown: 28 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	906
3	1078
6	1178
9	1246
12	1299
15	1343
18	1379
21	1405
24	1434
27	1455
30	1475
33	1494
36	1509
39	1523
42	1538
45	1548
48	1562
51	1672
54	1580
57	1588
60	1595

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WESTERN TESTING CO., INC.
Pressure Data

Date 12/4/81 — Test Ticket No. 14268

Recorder No. 1051 — Capacity 4250 — Location 4500 Ft.

Clock No. - — Elevation 1451 Kelly Bushing — Well Temperature 138 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2176 P.S.I.	Open Tool	9:10A M	
B	First Initial Flow Pressure	388 P.S.I.	First Flow Pressure	30 Mins.	35 Mins.
C	First Final Flow Pressure	440 P.S.I.	Initial Closed-in Pressure	60 Mins.	57 Mins.
D	Initial Closed-in Pressure	1672 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	698 P.S.I.	Final Closed-in Pressure	90 Mins.	84 Mins.
F	Second Final Flow Pressure	906 P.S.I.			
G	Final Closed-in Pressure	1643 P.S.I.			
H	Final Hydrostatic Mud	2109 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1	
P 2	
P 3	
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: 19 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.

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

Point Minutes	Press.

Final Shut-In
Breakdown: 28 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
63	1604
66	1611
69	1617
72	1625
75	1631
78	1634
81	1637
84	1643

WTC - 4

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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 14269

Elevation 1451 KB Formation ARBUCKLE Eff. Pay ____ Ft.

District PRATT Date 12-5-81 Customer Order No. ____

COMPANY NAME Patro Dynamics Ltd.
ADDRESS 555 N. Woodlawn Building / Suite 207 Wichita, KS. 67208
LEASE AND WELL NO. Kaliweda #1 COUNTY Kingman STATE KS Sec. 5 Twp. 30S Rge. 6W
Mail Invoice To Same (Co. Name) (Address) No. Copies Requested 10
Mail Charts To Same (Address) No. Copies Requested 10

Formation Test No. 9 Interval Tested from 4624 ft. to 4645 ft. Total Depth 4645 ft.
Packer Depth 4619 ft. Size 6 3/4 in. Packer Depth —— ft. Size —— in.
Packer Depth 4624 ft. Size 6 3/4 in. Packer Depth —— ft. Size —— in.
Depth of Selective Zone Set ——

Top Recorder Depth (Inside) 4630 ft. Recorder Number 1051 Cap. 4250
Bottom Recorder Depth (Outside) 4633 ft. Recorder Number 15640 Cap. 6600
Below Straddle Recorder Depth —— ft. Recorder Number —— Cap. ——

Drilling Contractor BEREDCO 2 Drill Collar Length 220 I. D. 2.26 in.
Mud Type Chem-Dispac Viscosity 60. Weight Pipe Length —— I. D. —— in.
Weight 9.1 Water Loss 30.0 cc. Drill Pipe Length 4439 I. D. 3.8 in.
Chlorides 35,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 O.D. in.
Jars: Make WTC Serial Number 406 Anchor Length 21 ft. Size 5 1/2 O.D. 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 4 1/2 X-Hole in.

Blow: ~~I.F.P. - V. WEAK~~ blow Building to WEAK 0" Holding Steady throughout test
~~F.F.P. - V. WEAK Building to WEAK Holding Steady~~

Recovered 105 ft. of watery mud 27,000 ppm chlorides
Recovered 90 ft. of watery mud 45,000 ppm chlorides
Recovered ____ ft. of
Recovered ____ ft. of
Recovered ____ ft. of
Remarks: BRIDGE @ 4535

RECEIVED DEC 8 - 1981

Time On Location 7:20 A.M. Time Pick Up Tool 8:00 A.M. Time Off Location 5:30 P.M.
Time Set Packer(s) 9:40 A.M. Time Started Off Bottom 1:25 P.M. Maximum Temperature 139°F

Initial Hydrostatic Pressure		(A) 2198 P.S.I.			
Initial Flow Period	Minutes 30	(B) 86 P.S.I.	to	(C) 75 P.S.I.
Initial Closed In Period	Minutes 60	(D) 1824 P.S.I.		
Final Flow Period	Minutes 45	(E) 129 P.S.I.	to	(F) 107 P.S.I.
Final Closed In Period	Minutes 90	(G) 1824 P.S.I.		
Final Hydrostatic Pressure		(H) 2155 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 [signature] K. M. Stucky
Signature of Customer or his authorized representative

Western Representative [signature]

FIELD INVOICE

Open Hole Test	$ 700.00
Misrun	$
Straddle Test	$ .00
Jars	$ 200.00
Selective Zone	$ .00
Safety Joint	$ 65.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage 63	$ 47.25
Fluid Sampler	$
5 Extra Charts	$ 25.00
Insurance	$
TOTAL	$ ~~1012.25~~ 1037.25

WESTERN TESTING CO., INC.
Pressure Data

Date 12-5 | Test Ticket No. 14269

Recorder No. 1051 | Capacity 4250 | Location 4630 Ft

Clock No. — — — — | Elevation 1451 KB | Well Temperature 139 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2262	P.S.I.
B	First Initial Flow Pressure	67	P.S.I.
C	First Final Flow Pressure	67	P.S.I.
D	Initial Closed-in Pressure	1834	P.S.I.
E	Second Initial Flow Pressure	113	P.S.I.
F	Second Final Flow Pressure	113	P.S.I.
G	Final Closed-in Pressure	1835	P.S.I.
H	Final Hydrostatic Mud	2155	P.S.I.

	Time Given	Time Computed
Open Tool	9:40 AM	
First Flow Pressure	30 Mins.	30 Mins
Initial Closed-in Pressure	60 Mins.	60 Mins
Second Flow Pressure	45 Mins.	45 Mins
Final Closed-in Pressure	90 Mins.	84 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	67
P 2 5	
P 3 10	
P 4 15	
P 5 20	
P 6 25	
P 7 30	67
P 8 35	
P 9 40	
P10 45	
P11 50	
P12 55	
P13 60	
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	67
3	1320
6	1666
9	1726
12	1754
15	1773
18	1786
21	1797
24	1805
27	1812
30	1816
33	1821
36	1824
39	1827
42	1829
45	1831
48	1832
51	1833
54	1834
57	1834
60	1834

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

Point Minutes	Press.
0	113
5	
10	
15	
20	
25	
30	
35	
40	
45	113
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 28 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	113
3	1065
6	1630
9	1709
12	1743
15	1762
18	1775
21	1785
24	1795
27	1799
30	1805
33	1810
36	1813
39	1816
42	1818
45	1820
48	1822
51	1824
54	1826
57	1828
60	1830

WESTERN TESTING CO., INC.

Pressure Data

Date _____ Test Ticket No. 14269

Recorder No. _____ Capacity _____ Location _____ F

Clock No. _____ Elevation _____ Well Temperature _____ °

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Min
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Min
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Min
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Min
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: _____ Inc.	Breakdown: _____ Inc.	Breakdown: _____ Inc.	Breakdown: _____ 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		63				63	1831
P 2		66				66	1832
P 3		69				69	1833
P 4		72				72	1834
P 5		75				75	1835
P 6		78				78	⌇
P 7		81				81	1835
P 8		84				84	
P 9		87				87	
P10		90				90	
P11		93				93	
P12		96				96	
P13		99				99	
P14		102				102	
P15		105				105	
P16		108				108	
P17		111				111	
P18		114				114	
P19		117				117	
P20		120				120	

WTC - 4

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IKT. # 14269

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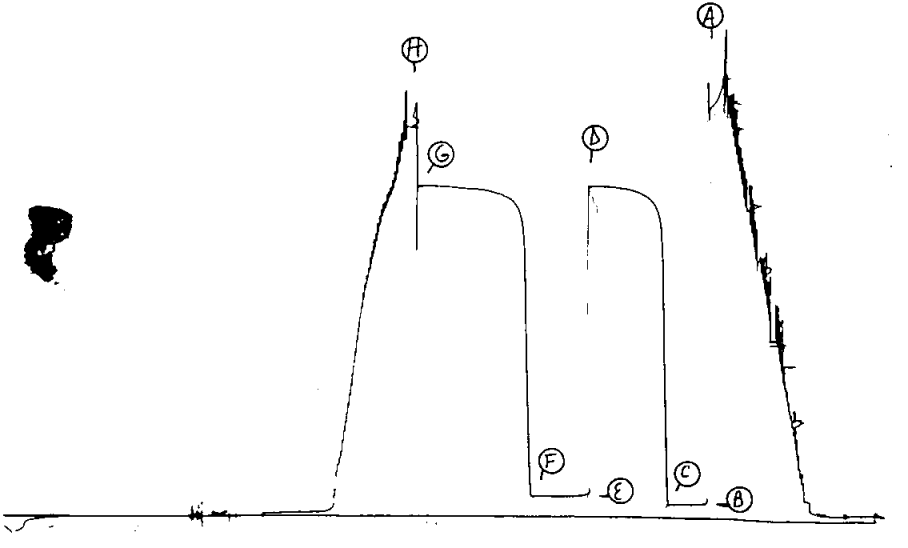

Company Petro-Dynamics, Ltd. Lease & Well No. Kalivoda #1

Elevation 1451 Kelly Bushing Formation Arbuckle Effective Pay - Ft. Ticket No. 14269

Date 12/ 5 /81 Sec. 19 Twp. 30S Range 6W County Kingman State Kansas

Test Approved by R. M. Stucky Western Representative Karl L. West, Jr.

Formation Test No. 9 Interval Tested from 4624 ft. to 4645 ft. Total Depth 4645 ft.

Packer Depth 4619 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4624 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4630 ft. Recorder Number 1051 Cap. 4250

Bottom Recorder Depth (Outside) 4633 ft. Recorder Number 15640 Cap. 6600

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

Drilling Contractor Baradco Drlg. Rig #2 Drill Collar Length 220 I. D. 2.26 in.

Mud Type chem-drispac Viscosity 60 Weight Pipe Length - I. D. - in.

Weight 9.1 Water Loss 30.0 cc. Drill Pipe Length 4439 I. D. 3.8 in.

Chlorides 35,000 P.P.M. Test Tool Length 30 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 406 Anchor Length 21 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 in. Tool Joint Size 4½XH in.

Blow: Very weak blow building to weak and holding steady throughout test.

Recovered 105 ft. of watery mud Chlorides 27,000 ppm

Recovered 90 ft. of watery mud Chlorides 45,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 9:40 ~~P.M.~~ A.M. Time Started Off Bottom 1:25 A.M. P.M. Maximum Temperature 139°

Initial Hydrostatic Pressure			(A)	2262	P.S.I.	
Initial Flow Period	Minutes	30	(B)	67	P.S.I. to (C)	67 P.S.I.
Initial Closed In Period	Minutes	60	(D)	1834	P.S.I.	
Final Flow Period	Minutes	45	(E)	113	P.S.I. to (F)	113 P.S.I.
Final Closed In Period	Minutes	84	(G)	1835	P.S.I.	
Final Hydrostatic Pressure			(H)	2155	P.S.I.	

WESTERN TESTING CO., INC.
Pressure Data

Date 12/5/81 — 14269 Test Ticket No. 4630

Recorder No. 1051 — Capacity 4250 — Location 1451 Kelly Bushing — 139 Ft.

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

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2262 P.S.I.		Open Tool	9:40A M	
B	First Initial Flow Pressure	67 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	67 P.S.I.		Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	1834 P.S.I.		Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	113 P.S.I.		Final Closed-in Pressure	90 Mins.	84 Mins.
F	Second Final Flow Pressure	113 P.S.I.				
G	Final Closed-in Pressure	1835 P.S.I.				
H	Final Hydrostatic Mud	2155 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	67
P 2 5	67
P 3 10	67
P 4 15	67
P 5 20	67
P 6 25	67
P 7 30	67
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	67
3	1320
6	1666
9	1726
12	1754
15	1773
18	1786
21	1797
24	1805
27	1812
30	1816
33	1821
36	1824
39	1827
42	1829
45	1831
48	1832
51	1833
54	1834
57	1834
60	1834

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

Point Minutes	Press.
0	113
5	113
10	113
15	113
20	113
25	113
30	113
35	113
40	113
45	113

Final Shut-In
Breakdown: 28 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	113
3	1065
6	1630
9	1709
12	1743
15	1762
18	1775
21	1785
24	1795
27	1799
30	1805
33	1810
36	1813
39	1816
42	1818
45	1820
48	1822
51	1824
54	1826
57	1828
60	1830

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WESTERN TESTING CO., INC.
Pressure Data

Date 12/5/81 — Test Ticket No. 14269

Recorder No. 1051 — Capacity 4250 — Location 4630 Ft.

Clock No. - — Elevation 1451 Kelly Bushing — Well Temperature 139 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2262 P.S.I.	Open Tool	9:40A M	
B	First Initial Flow Pressure	67 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	67 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D	Initial Closed-in Pressure	1834 P.S.I.	Second Flow Pressure	45 Mins.	45 Mins.
E	Second Initial Flow Pressure	113 P.S.I.	Final Closed-in Pressure	90 Mins.	84 Mins.
F	Second Final Flow Pressure	113 P.S.I.			
G	Final Closed-in Pressure	1835 P.S.I.			
H	Final Hydrostatic Mud	2155 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: 20 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

Final Shut-In
Breakdown: 28 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	1831
P 2						66	1832
P 3						69	1833
P 4						72	1834
P 5						75	1835
P 6						78	1835
P 7						81	1835
P 8						84	1835
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							