WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 3989

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation _____ Formation _____ Eff. Pay _____ Ft.

District Pratt Date 10/17/79 Customer Order No. —

COMPANY NAME The National Oil Co
ADDRESS 200 West Douglas Suite 550 Wichita, Ks 67202
LEASE AND WELL NO. Stump-Smith #1 COUNTY Barber STATE Ks Sec. 24 Twp. 30S Rge. 13W
Mail Invoice To Same No. Copies Requested 5
Co. Name Address
Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 1 Interval Tested from 4194 ft. to 4220 ft. Total Depth 4220 ft.
Packer Depth 4194 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.
Packer Depth 4199 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.
Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4210 ft. Recorder Number 2607 Cap. 4150
Bottom Recorder Depth (Outside) 4213 ft. Recorder Number 3301 Cap. 4000
Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Dumas Drlg Rig #1
Mud Type Starch Viscosity 36
Weight 9.1 Water Loss 14.8 cc.
Chlorides 38,000 P.P.M.
Jars: Make WTC Serial Number 410
Did Well Flow? No Reversed Out No

Drill Collar Length — I. D. — in.
Weight Pipe Length — I. D. — in.
Drill Pipe Length 4166 I. D. 3.8 in.
Test Tool Length 29 ft. Tool Size 5 5/20 in.
Anchor Length 26 ft. Size 5 5/20 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 FH in.

Blow: Very Weak blow throughout first flow period
No blow on second flow period

Recovered 20 ft. of Drlg Mud
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Remarks:

Time Set Packer(s) 5:00 A.M. ~~P.M.~~ Time Started Off Bottom 7:30 A.M. ~~P.M.~~ Maximum Temperature 130°

Initial Hydrostatic Pressure		(A) 2331	P.S.I.	
Initial Flow Period	Minutes 45	(B) 63	P.S.I. to (C) 52	P.S.I.
Initial Closed In Period	Minutes 45	(D) 52	P.S.I.	
Final Flow Period	Minutes 30	(E) 52	P.S.I. to (F) 52	P.S.I.
Final Closed In Period	Minutes 30	(G) 52	P.S.I.	
Final Hydrostatic Pressure		(H) 2310	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 by R W Gerach R D Gerach
Signature of Customer or his authorized representative

Western Representative Jim Wondra Thank You

FIELD INVOICE

Open Hole Test	$ 550.00
Misrun	$
Straddle Test	$ 275.00
Jars	$
Selective Zone	$
Safety Joint	$ 35.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$
TOTAL	$ 860.00

WESTERN TESTING CO., INC.
Pressure Data

Date 10-17-79 Test Ticket No. 3989

Recorder No. 2609 Capacity 4150 Location 4210 Ft.

Clock No. — Elevation — Well Temperature 130 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2230	P.S.I.	Open Tool	5:00 AM			
B	First Initial Flow Pressure	63	P.S.I.	First Flow Pressure	45	Mins.	45	Mins.
C	First Final Flow Pressure	48	P.S.I.	Initial Closed-in Pressure	45	Mins.	45	Mins.
D	Initial Closed-in Pressure	44	P.S.I.	Second Flow Pressure	30	Mins.	30	Mins.
E	Second Initial Flow Pressure	44	P.S.I.	Final Closed-in Pressure	30	Mins.	30	Mins.
F	Second Final Flow Pressure	44	P.S.I.					
G	Final Closed-in Pressure	44	P.S.I.					
H	Final Hydrostatic Mud	2169	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	63
P 2	5	61
P 3	10	57
P 4	15	54
P 5	20	53
P 6	25	52
P 7	30	51
P 8	35	50
P 9	40	49
P10	45	48
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	48
	3	
	6	
	9	
	12	
	15	
	18	48
	21	47
	24	46
	27	45
	30	44
	33	
	36	
	39	
	42	
	45	44
	48	
	51	
	54	
	57	
	60	

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

Point	Minutes	Press.
	0	44
	5	
	10	
	15	
	20	
	25	
	30	44
	35	
	40	
	45	
	50	
	55	
	60	
	65	
	70	
	75	
	80	
	85	
	90	

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

Point	Minutes	Press.
	0	44
	3	
	6	
	9	
	12	
	15	
	18	
	21	
	24	
	27	
	30	44
	33	
	36	
	39	
	42	
	45	
	48	
	51	
	54	
	57	
	60	

WTC - 4

Company: The National Oil Company
Lease & Well No.: Stump-Smith #1
Elevation: ---
Formation: ---
Effective Pay: --- Ft.
Ticket No.: 3989
Date: 10/17/79
Sec.: 24
Twp.: 30S
Range: 13W
County: Barber
State: Kansas
Test Approved by: R. D. Gensch
Western Representative: Jim Wondra

Formation Test No.: 1
Interval Tested from: 4194 ft. to: 4220 ft.
Total Depth: 4220 ft.

Packer Depth: 4189 ft. Size: 6 3/4 in.
Packer Depth: 4194 ft. Size: 6 3/4 in.
Packer Depth: - ft. Size: - in.
Packer Depth: - ft. Size: - in.

Depth of Selective Zone Set: -

Top Recorder Depth (Inside): 4210 ft. Recorder Number: 2607 Cap.: 4150
Bottom Recorder Depth (Outside): 4213 ft. Recorder Number: 3351 Cap.: 4000
Below Straddle Recorder Depth: - ft. Recorder Number: - Cap.: -

Drilling Contractor: Damac Drilling Rig #1
Drill Collar Length: -- I. D.: -- in.
Mud Type: starch Viscosity: 36
Weight Pipe Length: -- I. D.: -- in.
Weight: 9.7 Water Loss: 14.8 cc.
Drill Pipe Length: 4166 I. D.: 3.8 in.
Chlorides: 38,000 P.P.M.
Test Tool Length: 29 ft. Tool Size: 5½OD in.
Jars: Make: WTC Serial Number: 410
Anchor Length: 26 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: Very weak blow throughout first flow period. No blow on second flow period.

Recovered: 20 ft. of: drilling mud
Recovered: ft. of:
Recovered: ft. of:
Recovered: ft. of:
Recovered: ft. of:

Remarks:

Time Set Packer(s): 5:00 A.M. ~~P.M.~~ Time Started Off Bottom: 7:30 A.M. ~~P.M.~~ Maximum Temperature: 130°

Initial Hydrostatic Pressure ..... (A) 2230 P.S.I.
Initial Flow Period ..... Minutes 45 (B) 63 P.S.I. to (C) 48 P.S.I.
Initial Closed In Period ..... Minutes 45 (D) 44 P.S.I.
Final Flow Period ..... Minutes 30 (E) 44 P.S.I. to (F) 44 P.S.I.
Final Closed In Period ..... Minutes 30 (G) 44 P.S.I.
Final Hydrostatic Pressure ..... (H) 2169 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10/17/79 Test Ticket No. 3989

Recorder No. 2607 Capacity 4150 Location 4210 Ft.

Clock No. -- Elevation --- Well Temperature 130 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2230	P.S.I.
B	First Initial Flow Pressure	63	P.S.I.
C	First Final Flow Pressure	48	P.S.I.
D	Initial Closed-in Pressure	44	P.S.I.
E	Second Initial Flow Pressure	44	P.S.I.
F	Second Final Flow Pressure	44	P.S.I.
G	Final Closed-in Pressure	44	P.S.I.
H	Final Hydrostatic Mud	2169	P.S.I.

	Time Given	Time Computed
Open Tool	5:00A M	
First Flow Pressure	45 Mins.	45 Mins.
Initial Closed-in Pressure	45 Mins.	45 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	30 Mins.	30 Mins.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	63
P 2 5	61
P 3 10	57
P 4 15	54
P 5 20	53
P 6 25	52
P 7 30	51
P 8 35	50
P 9 40	49
P10 45	48
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	48
3	48
6	48
9	48
12	48
15	48
18	48
21	47
24	46
27	45
30	44
33	44
36	44
39	44
42	44
45	44

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

Point Minutes	Press.
0	44
5	44
10	44
15	44
20	44
25	44
30	44

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

Point Minutes	Press.
0	44
3	44
6	44
9	44
12	44
15	44
18	44
21	44
24	44
27	44
30	44

TKt #3989
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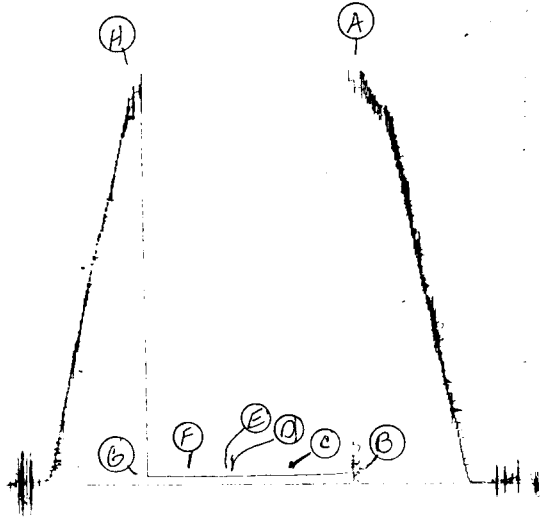

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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 3990

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation ____ Formation Miss Eff. Pay — Ft.

District Pratt Date 10/17/79 Customer Order No. —

COMPANY NAME Dre National Oil Co
ADDRESS 200 West Douglas Suite 550 Wichita, Ks 67202
LEASE AND WELL NO. Stump-Smith #1 COUNTY Barber STATE Ks Sec. 24 Twp 30S Rge 13W

Mail Invoice To Same (Co. Name) Address ____ No. Copies Requested 5
Mail Charts To Same Address ____ No. Copies Requested 5

Formation Test No. 2 Interval Tested from 4223 ft. to 4255 ft. Total Depth 4255 ft.
Packer Depth 4218 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.
Packer Depth 4223 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.
Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4245 ft. Recorder Number 2607 Cap. 4150
Bottom Recorder Depth (Outside) 4248 ft. Recorder Number 3351 Cap. 4000
Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor Damac Drlg Rig #1
Mud Type Starch Viscosity 43
Weight 9.4 Water Loss 9.6 cc.
Chlorides 31,000 P.P.M.
Jars: Make WTC Serial Number 470
Did Well Flow? No Reversed Out No

Drill Collar Length — I. D. — in.
Weight Pipe Length — I. D. — in.
Drill Pipe Length 4194 I. D. 3.8 in.
Test Tool Length 29 ft. Tool Size 5 1/2 OD in.
Anchor Length 32 ft. Size 5 1/2 OD 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 FH in.

Blow: Weak increasing to Fair blow on first flow period
Fair blow throughout second flow period

Recovered 30 ft. of Drlg Mud
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Remarks: ____

Time Set Packer(s) 7:30 ~~A.M.~~ P.M. Time Started Off Bottom 11:30 ~~A.M.~~ P.M. Maximum Temperature 132°

Initial Hydrostatic Pressure		(A) 2341 P.S.I.			
Initial Flow Period	Minutes 45	(B) 95 P.S.I.	to	(C) 84 P.S.I.	
Initial Closed In Period	Minutes 45	(D) 116 P.S.I.			
Final Flow Period	Minutes 60	(E) 84 P.S.I.	to	(F) 84 P.S.I.	
Final Closed In Period	Minutes 90	(G) 148 P.S.I.			
Final Hydrostatic Pressure		(H) 2320 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.

National Oil Co. by R. A. Benach

Test Approved By ____
Signature of Customer or his authorized representative

Western Representative Jim Wondra Thank You

FIELD INVOICE

Open Hole Test	$ 550.00
Misrun	$ —
Straddle Test	$ 275.00
Jars	$ —
Selective Zone	$ —
Safety Joint	$ 35.00
Standby	$ —
Evaluation	$ —
Extra Packer	$ —
Circ. Sub.	$ —
Mileage	$ —
Fluid Sampler	$ —
Extra Charts	$ —
TOTAL	$ 860.00

WESTERN TESTING CO., INC.
Pressure Data

Date 10-27-79 Test Ticket No. 3990

Recorder No. 2607 Capacity 4150 Location 4245 Ft.

Clock No. — Elevation — Well Temperature 132 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2247 P.S.I.		Open Tool	7:30 PM	
B	First Initial Flow Pressure	95 P.S.I.		First Flow Pressure	45 Mins.	45 Mins.
C	First Final Flow Pressure	74 P.S.I.		Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	114 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	84 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	72 P.S.I.				
G	Final Closed-in Pressure	150 P.S.I.				
H	Final Hydrostatic Mud	2209 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	95
P 2	5	89
P 3	10	83
P 4	15	82
P 5	20	79
P 6	25	77
P 7	30	76
P 8	35	75
P 9	40	74
P10	45	74
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	74
3	76
6	78
9	79
12	80
15	86
18	89
21	94
24	94
27	94
30	95
33	99
36	104
39	106
42	109
45	114
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	84
5	80
10	75
15	74
20	
25	
30	
35	
40	
45	74
50	72
55	72
60	72
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	72
3	
6	
9	
12	72
15	74
18	78
21	82
24	87
27	90
30	93
33	94
36	95
39	96
42	96
45	96
48	99
51	101
54	104
57	108
60	111

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(cont)

WESTERN TESTING CO., INC.
Pressure Data

Test Ticket No. 3990

rder No. _____ Capacity _____ Location _____ Pr

k No. _____ Elevation _____ Well Temperature _____ °I

nt	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Min
First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Min
Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Min
Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Min
Second Final Flow Pressure	P.S.I.			
Final Closed-in Pressure	P.S.I.			
Final Hydrostatic Mud	P.S.I.			

PRESSURE BREAKDOWN

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

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

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

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

int ns.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
1		63				63	116
2		66				66	118
3		69				69	123
4		72				72	128
5		75				75	132
6		78				78	138
7		81				81	140
8		84				84	143
9		87				87	146
0		90				90	150
1		93				93	
2		96				96	
3		99				99	
4		102				102	
5		105				105	
6		108				108	
7		111				111	
8		114				114	
9		117				117	
20		120				120	

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Company: The National Oil Company
Lease & Well No.: Stump-Smith #1

Elevation: --- Formation: Mississippi Effective Pay: ---- Ft. Ticket No. 3990

Date: 10/17/79 Sec. 24 Twp. 30S Range 13W County: Barber State: Kansas

Test Approved by: R. D. Gensch Western Representative: Jim Wondra

Formation Test No. 2 Interval Tested from 4223 ft. to 4255 ft. Total Depth 4255 ft.

Packer Depth 4218 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4223 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4245 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4248 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor: Damac Drilling Rig #1 Drill Collar Length - I. D. -- in.

Mud Type: starch Viscosity: 43 Weight Pipe Length -- I. D. -- in.

Weight: 9.4 Water Loss: 9.6 cc. Drill Pipe Length 4194 I. D. 3.8 in.

Chlorides: 31,000 P.P.M. Test Tool Length 29 ft. Tool Size 5½OD in.

Jars: Make: WTC Serial Number: 410 Anchor Length 32 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: Weak increased to fair blow on first flow period. Fair blow throughout second flow period.

Recovered 30 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 7:30 ~~A.M.~~ P.M. Time Started Off Bottom 11:30 ~~A.M.~~ P.M. Maximum Temperature 132

Initial Hydrostatic Pressure ..... (A) 2247 P.S.I.

Initial Flow Period ..... Minutes 45 (B) 95 P.S.I. to (C) 74 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 114 P.S.I.

Final Flow Period ..... Minutes 60 (E) 84 P.S.I. to (F) 72 P.S.I.

Final Closed In Period ..... Minutes 90 (G) 150 P.S.I.

Final Hydrostatic Pressure ..... (H) 2209 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10/17/79 Test Ticket No. 3990

Recorder No. 2607 Capacity 4150 Location 4245 Ft.

Clock No. -- Elevation ---- Well Temperature 132 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2247	P.S.I.
B	First Initial Flow Pressure	95	P.S.I.
C	First Final Flow Pressure	74	P.S.I.
D	Initial Closed-in Pressure	114	P.S.I.
E	Second Initial Flow Pressure	84	P.S.I.
F	Second Final Flow Pressure	72	P.S.I.
G	Final Closed-in Pressure	150	P.S.I.
H	Final Hydrostatic Mud	2209	P.S.I.

	Time Given	Time Computed
Open Tool	7:30P M	
First Flow Pressure	45 Mins.	45 Mins.
Initial Closed-in Pressure	45 Mins.	45 Mins.
Second Flow Pressure	60 Mins.	60 Mins.
Final Closed-in Pressure	90 Mins.	90 Mins.

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

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

Final Shut-In
Breakdown: 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 0	85	0	74	0	84	0	72
P 2 5	89	3	76	5	80	3	72
P 3 10	83	6	78	10	75	6	72
P 4 15	82	9	79	15	74	9	72
P 5 20	79	12	80	20	74	12	72
P 6 25	77	15	86	25	74	15	74
P 7 30	76	18	89	30	74	18	78
P 8 35	76	21	94	35	74	21	82
P 9 40	74	24	94	40	74	24	87
P10 45	74	27	94	45	74	27	90
P11		30	95	50	72	30	93
P12		33	99	55	72	33	94
P13		36	104	60	72	36	95
P14		39	106			39	96
P15		42	109			42	96
P16		45	114			45	96
P17						48	99
P18						51	101
P19						54	104
P20						57	108
						60	111

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continued next page

WESTERN TESTING CO., INC.
Pressure Data

Date 10/17/79 Test Ticket No. 3990

Recorder No. 2607 Capacity 4150 Location 4245 Ft.

Clock No. -- Elevation ---- Well Temperature 132 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2247	P.S.I.	Open Tool	7:30P	M		
B	First Initial Flow Pressure	95	P.S.I.	First Flow Pressure	45	Mins.	45	Mins.
C	First Final Flow Pressure	74	P.S.I.	Initial Closed-in Pressure	45	Mins.	45	Mins.
D	Initial Closed-in Pressure	114	P.S.I.	Second Flow Pressure	60	Mins.	60	Mins.
E	Second Initial Flow Pressure	84	P.S.I.	Final Closed-in Pressure	90	Mins.	90	Mins.
F	Second Final Flow Pressure	72	P.S.I.					
G	Final Closed-in Pressure	150	P.S.I.					
H	Final Hydrostatic Mud	2209	P.S.I.					

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 9 Inc.		Breakdown: 15 Inc.		Breakdown: 12 Inc.		Breakdown: 30 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	116
P 2						66	118
P 3						69	123
P 4						72	128
P 5						75	132
P 6						78	138
P 7						81	140
P 8						84	141
P 9						87	146
P10						90	150
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TK #3990
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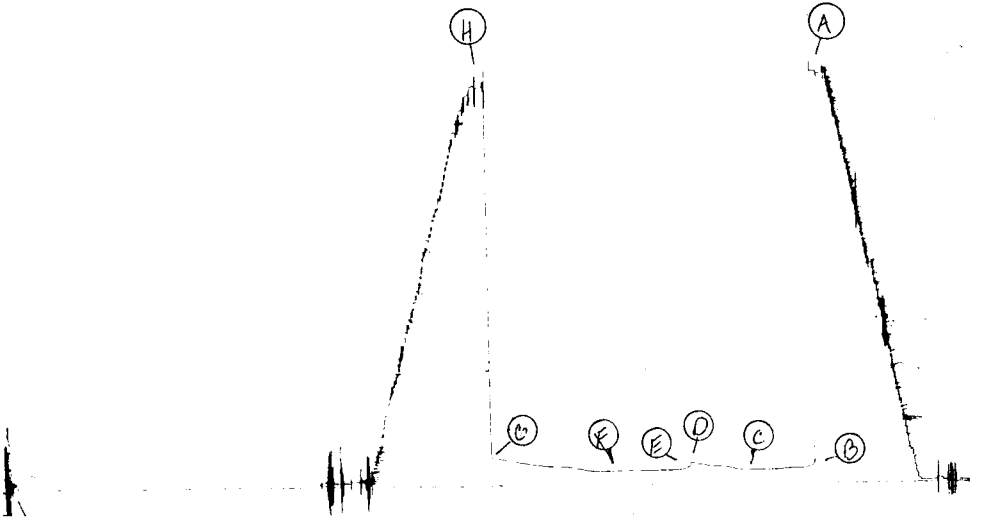

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 3991

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation _____ Formation Kindernook Eff. Pay — Ft.

District Pratt Date 10/18/79 Customer Order No. —

COMPANY NAME The National Oil Co

ADDRESS 200 West Douglas Suite 550 Wichita Ks 67202

LEASE AND WELL NO. Stump Sm. #1 COUNTY Barber STATE Ks Sec. 24 Twp. 30S Rge. 13W

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

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 3 Interval Tested from 4318 ft. to 4380 ft. Total Depth 4380 ft.

Packer Depth 4313 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 4318 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4340 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4343 ft. Recorder Number 3351 Cap. 4500

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

Drilling Contractor Damac Drlg Rig #1 Drill Collar Length 30 I. D. 2 1/4 in.

Mud Type Starch Viscosity 40 Weight Pipe Length — I. D. — in.

Weight 9.6 Water Loss 13.6 cc. Drill Pipe Length 4259 I. D. 3.8 in.

Chlorides 41,500 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 410 Anchor Length 62 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: Very Weak blow died in 38 min on first flow period
No blow on second flow period

Recovered 15 ft. of Drlg Mud

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Remarks:

Time Set Packer(s) 8:30 ~~A.M.~~ P.M. Time Started Off Bottom 11:00 ~~A.M.~~ P.M. Maximum Temperature 135°

Initial Hydrostatic Pressure		(A) 2257 P.S.I.		
Initial Flow Period	Minutes 45	(B) 105 P.S.I.	to (C) 84	P.S.I.
Initial Closed In Period	Minutes 45	(D) 95 P.S.I.		
Final Flow Period	Minutes 30	(E) 94 P.S.I.	to (F) 84	P.S.I.
Final Closed In Period	Minutes 30	(G) 84 P.S.I.		
Final Hydrostatic Pressure		(H) 2236 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. D. Gensch
Signature of Customer or his authorized representative

Western Representative Jim Wonda Thank You

FIELD INVOICE

Open Hole Test	$ 550.00
Misrun	$
Straddle Test	$
Jars	$ 275.00
Selective Zone	$
Safety Joint	$ 35.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$
TOTAL	$ 860.00

WESTERN TESTING CO., INC.
Pressure Data

Date 10-18-79 | Test Ticket No. 3991

Recorder No. 2607 | Capacity 4150 | Location 4340 Ft.

Clock No. | Elevation | Well Temperature 135 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2272 P.S.I.		Open Tool	8:30 PM	
B	First Initial Flow Pressure	96 P.S.I.		First Flow Pressure	45 Mins.	45 Mins.
C	First Final Flow Pressure	82 P.S.I.		Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	82 P.S.I.		Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	82 P.S.I.		Final Closed-in Pressure	30 Mins.	30 Mins.
F	Second Final Flow Pressure	82 P.S.I.				
G	Final Closed-in Pressure	82 P.S.I.				
H	Final Hydrostatic Mud	2230 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	93
P 3	10	87
P 4	15	84
P 5	20	
P 6	25	
P 7	30	84
P 8	35	82
P 9	40	82
P10	45	82
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	82
3	
6	
9	
12	
15	
18	
21	
24	
27	
30	
33	
36	
39	
42	
45	82
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	82
5	
10	
15	
20	
25	
30	82
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

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

Point Minutes	Press.
0	82
3	
6	
9	
12	
15	
18	
21	
24	
27	
30	82
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

WTC - 4

Company: The National Oil Company
Lease & Well No.: Stump-Smith #1
Elevation: --
Formation: Kinderhook
Effective Pay: ---
Ft.
Ticket No.: 3991
Date: 10/18/79
Sec.: 24
Twp.: 30S
Range: 13W
County: Barber
State: Kansas
Test Approved by: R. D. Gensch
Western Representative: Jim Wondra

Formation Test No. 3 Interval Tested from 4318 ft. to 4380 ft. Total Depth 4380 ft.

Packer Depth 4313 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4318 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4340 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4343 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Damac Drilling Rig #1 Drill Collar Length 30 I. D. 2¼ in.

Mud Type Starch Viscosity 40 Weight Pipe Length - I. D. - in.

Weight 9.6 Water Loss 13.6 cc. Drill Pipe Length 4259 I. D. 3.8 in.

Chlorides 41,000 P.P.M. Test Tool Length 29 ft. Tool Size 5½OD in.

Jars: Make WTC Serial Number 410 Anchor Length 62 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: Very weak blow;died in thirty-eight minutes on first flow period. No blow on second flow period.

Recovered 15 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 8:30 ~~A.M.~~ P.M. Time Started Off Bottom 11:00 ~~A.M.~~ P.M. Maximum Temperature 135°

Initial Hydrostatic Pressure ..... (A) 2272 P.S.I.

Initial Flow Period ..... Minutes 45 (B) 96 P.S.I. to (C) 82 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 82 P.S.I.

Final Flow Period ..... Minutes 30 (E) 82 P.S.I. to (F) 82 P.S.I.

Final Closed In Period ..... Minutes 30 (G) 82 P.S.I.

Final Hydrostatic Pressure ..... (H) 2230 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10-18-79 Test Ticket No. 3991

Recorder No. 2607 Capacity 4150 Location 4340 Ft.

Clock No. - Elevation - Well Temperature 135 °F

Point		Pressure			Time Given		Time Computed	
A	Initial Hydrostatic Mud	2272	P.S.I.	Open Tool	8:30P.	M		
B	First Initial Flow Pressure	96	P.S.I.	First Flow Pressure	45	Mins.	45	Mins.
C	First Final Flow Pressure	82	P.S.I.	Initial Closed-in Pressure	45	Mins.	45	Mins.
D	Initial Closed-in Pressure	82	P.S.I.	Second Flow Pressure	30	Mins.	30	Mins.
E	Second Initial Flow Pressure	82	P.S.I.	Final Closed-in Pressure	30	Mins.	30	Mins.
F	Second Final Flow Pressure	82	P.S.I.					
G	Final Closed-in Pressure	82	P.S.I.					
H	Final Hydrostatic Mud	2230	P.S.I.					

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 9 Inc.		Breakdown: 15 Inc.		Breakdown: 6 Inc.		Breakdown: 10 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 0	96	0	82	0	82	0	82
P 2 5	93	3	82	5	82	3	82
P 3 10	87	6	82	10	82	6	82
P 4 15	84	9	82	15	82	9	82
P 5 20	84	12	82	20	82	12	82
P 6 25	84	15	82	25	82	15	82
P 7 30	84	18	82	30	82	18	82
P 8 35	82	21	82			21	82
P 9 40	82	24	82			24	82
P10 45	82	27	82			27	82
P11		30	82			30	82
P12		33	82				
P13		36	82				
P14		39	82				
P15		42	82				
P16		45	82				
P17							
P18							
P19							
P20							

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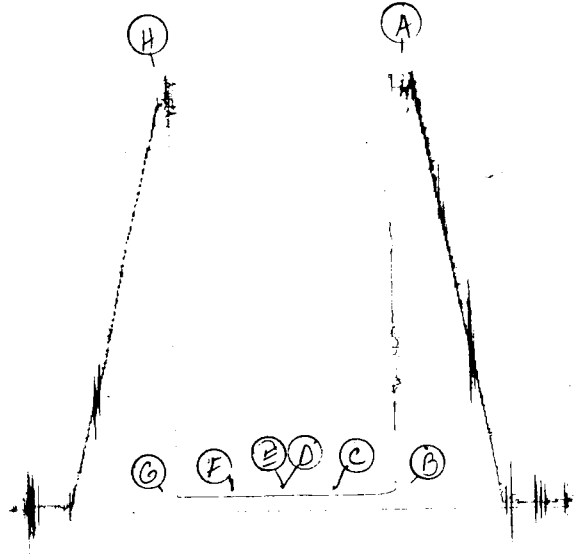

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 3992

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation _____ Formation Viola Eff. Pay — Ft.

District Pratt Date 10/19/79 Customer Order No. —

COMPANY NAME The National Oil Co

ADDRESS 200 West Douglas Suite 550 Wichita, Ks 67202

LEASE AND WELL NO. Stump Smith #4 COUNTY Barber STATE Ks Sec. 24 Twp 30S Rge 13W

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

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 4 Interval Tested from 4394 ft. to 4410 ft. Total Depth 4410 ft.

Packer Depth 4389 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 4394 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4400 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4403 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Damac Drlg Rig #1 Drill Collar Length — I. D. — in.

Mud Type Starch Viscosity 41 Weight Pipe Length — I. D. — in.

Weight 9.7 Water Loss 10.8 cc. Drill Pipe Length 4365 I. D. 3.8 in.

Chlorides 50,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 410 Anchor Length 16 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 50 ft. of Drlg Mud
Recovered ____ ft. of
Recovered ____ ft. of
Recovered ____ ft. of
Recovered ____ ft. of

Remarks:

Time Set Packer(s) 11:40 A.M. ~~P.M.~~ Time Started Off Bottom 2:05 ~~A.M.~~ P.M. Maximum Temperature 135°

Initial Hydrostatic Pressure		(A) 2289 P.S.I.				
Initial Flow Period	Minutes 30	(B) 73 P.S.I.	to	(C) 63 P.S.I.		
Initial Closed In Period	Minutes 45	(D) 169 P.S.I.				
Final Flow Period	Minutes 30	(E) 95 P.S.I.	to	(F) 84 P.S.I.		
Final Closed In Period	Minutes 45	(G) 148 P.S.I.				
Final Hydrostatic Pressure		(H) 2267 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 National Oil Co R. D. Gansel
Signature of Customer or his authorized representative

Western Representative Jim Wondra Thank You

FIELD INVOICE

Open Hole Test	$ 550.00
Misrun	$
Straddle Test	$
Jars	$ 275.00
Selective Zone	$
Safety Joint	$ 35.00
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$
TOTAL	$ 860.00

WESTERN TESTING CO., INC.
Pressure Data

Date 10-19-79 Test Ticket No. 3992

Recorder No. 2607 Capacity 4150 Location 4460 Ft.

Clock No. — Elevation — Well Temperature 135 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2308	P.S.I.	Open Tool	11:40 AM	
B	First Initial Flow Pressure	72	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	64	P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	167	P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	91	P.S.I.	Final Closed-in Pressure	45 Mins.	45 Mins.
F	Second Final Flow Pressure	70	P.S.I.			
G	Final Closed-in Pressure	138	P.S.I.			
H	Final Hydrostatic Mud	2264	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	72
P 2	5	70
P 3	10	68
P 4	15	65
P 5	20	65
P 6	25	65
P 7	30	64
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: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	64
	3	72
	6	77
	9	82
	12	88
	15	96
	18	104
	21	112
	24	123
	27	131
	30	140
	33	146
	36	152
	39	156
	42	162
	45	167
	48	
	51	
	54	
	57	
	60	

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

Point	Minutes	Press.
	0	91
	5	78
	10	75
	15	73
	20	72
	25	71
	30	70
	35	
	40	
	45	
	50	
	55	
	60	
	65	
	70	
	75	
	80	
	85	
	90	

Final Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	70
	3	70
	6	73
	9	76
	12	81
	15	89
	18	97
	21	99
	24	104
	27	107
	30	112
	33	118
	36	123
	39	129
	42	133
	45	138
	48	
	51	
	54	
	57	
	60	

WTC - 4

Company: The National Oil Company
Lease & Well No.: Stump-Smith #1
Elevation: ----
Formation: Viola
Effective Pay: --- Ft.
Ticket No.: 3992
Date: 10/19/79
Sec.: 24
Twp.: 30S
Range: 13W
County: Barber
State: Kansas
Test Approved by: R. D. Gensch
Western Representative: Jim Wondra

Formation Test No.: 4
Interval Tested from: 4394 ft. to: 4410 ft.
Total Depth: 4410 ft.

Packer Depth: 4389 ft. Size: 6 3/4 in.
Packer Depth: - ft. Size: - in.
Packer Depth: 4394 ft. Size: 6 3/4 in.
Packer Depth: - ft. Size: - in.

Depth of Selective Zone Set: -

Top Recorder Depth (Inside): 4400 ft.
Recorder Number: 2607 Cap.: 4150
Bottom Recorder Depth (Outside): 4403 ft.
Recorder Number: 3351 Cap.: 4000
Below Straddle Recorder Depth: - ft.
Recorder Number: - Cap.: -

Drilling Contractor: Damac Drilling Rig #1
Drill Collar Length: - I. D.: - in.
Mud Type: starch
Viscosity: 41
Weight Pipe Length: - I. D.: - in.
Weight: 9.7
Water Loss: 10.8 cc.
Drill Pipe Length: 4365 I. D.: 3.8 in.
Chlorides: 50,000 P.P.M.
Test Tool Length: 29 ft. Tool Size: 5½OD in.
Jars: Make: WTC
Serial Number: 410
Anchor Length: 16 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 flow periods.

Recovered: 50 ft. of: drilling mud
Recovered: ft. of:
Recovered: ft. of:
Recovered: ft. of:
Recovered: ft. of:
Remarks:

Time Set Packer(s): 11:40 A.M. ~~P.M.~~
Time Started Off Bottom: 2:05 ~~A.M.~~ P.M.
Maximum Temperature: 135°

Initial Hydrostatic Pressure ..... (A) 2308 P.S.I.
Initial Flow Period ..... Minutes 30 (B) 72 P.S.I. to (C) 64 P.S.I.
Initial Closed In Period ..... Minutes 45 (D) 167 P.S.I.
Final Flow Period ..... Minutes 30 (E) 91 P.S.I. to (F) 70 P.S.I.
Final Closed In Period ..... Minutes 45 (G) 138 P.S.I.
Final Hydrostatic Pressure ..... (H) 2264 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10-19-79 Test Ticket No. 3992

Recorder No. 2607 Capacity 4150 Location 4400 Ft.

Clock No. - Elevation - Well Temperature 135 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2308	P.S.I.
B	First Initial Flow Pressure	72	P.S.I.
C	First Final Flow Pressure	64	P.S.I.
D	Initial Closed-in Pressure	167	P.S.I.
E	Second Initial Flow Pressure	91	P.S.I.
F	Second Final Flow Pressure	70	P.S.I.
G	Final Closed-in Pressure	138	P.S.I.
H	Final Hydrostatic Mud	2264	P.S.I.

	Time Given	Time Computed
Open Tool	11:40A. M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	45 Mins.	45 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	45 Mins.	45 Mins.

PRESSURE BREAKDOWN

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

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

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

Final Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	72	0	64	0	91	0	70
P 2 5	70	3	72	5	78	3	70
P 3 10	68	6	77	10	75	6	73
P 4 15	65	9	82	15	73	9	76
P 5 20	65	12	88	20	72	12	81
P 6 25	65	15	96	25	71	15	89
P 7 30	64	18	104	30	70	18	97
P 8		21	112			21	99
P 9		24	123			24	104
P10		27	131			27	107
P11		30	140			30	112
P12		33	146			33	118
P13		36	152			36	123
P14		39	156			39	129
P15		42	162			42	133
P16		45	167			45	138
P17							
P18							
P19							
P20							