WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No. 15194

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

Elevation 1598 KB Formation Massey Eff. Pay Ft.

District Pratt Date 3-5-82 Customer Order No.

COMPANY NAME Associated Petroleum Consultants

ADDRESS Suite 600 One Main Place Wich. Ks. 67202

LEASE AND WELL NO. Packard #2 COUNTY Barber STATE Ks. Sec. 24 Twp 31S Rge 13W

Mail Invoice To PACKARD #2 (Co. Name) Address No. Copies Requested —

Mail Charts To Address No. Copies Requested —

Formation Test No. 1 Interval Tested from 4184 ft. to 4202 ft. Total Depth 4202 ft.

Packer Depth 4179 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Packer Depth 4184 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4187 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 4191 ft. Recorder Number 3086 Cap. 4500

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

Drilling Contractor Trans-pac Rig 1

Mud Type Chemical Viscosity 37

Weight 9.6 Water Loss 24.8 cc.

Chlorides 12,000 P.P.M.

Jars: Make — Serial Number —

Did Well Flow? no Reversed Out no

Drill Collar Length 467' I. D. 2.2 in.

Weight Pipe Length — I. D. — in.

Drill Pipe Length 3693' I. D. 3.8 in.

Test Tool Length 24 ft. Tool Size 5 1/2 in.

Anchor Length 18 ft. Size 5 1/2 in. 3/4

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 in.

Blow: Fair Building to Strong F.F.P. STRONG Throughout F.F.P.

Recovered 30' ft. of Drlg. mud.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

RECEIVED
MAR 09 1982

Time On Location 10:00 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) 2:30 A.M. P.M. Time Started Off Bottom 6:00 A.M. P.M. Maximum Temperature 118°

Initial Hydrostatic Pressure			(A)	2156	P.S.I.	
Initial Flow Period	Minutes 30	(B)	25	P.S.I. to (C)	54	P.S.I.
Initial Closed In Period	Minutes 60	(D)	551	P.S.I.		
Final Flow Period	Minutes 60	(E)	64	P.S.I. to (F)	64	P.S.I.
Final Closed In Period	Minutes 60	(G)	701	P.S.I.		
Final Hydrostatic Pressure		(H)	2125	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 Philip J. Packard

Signature of Customer or his authorized representative Philip J. Packard

Western Representative Mike Rogers Thank You!

FIELD INVOICE

Open Hole Test	$ 700.00
Misrun	$ —
Straddle Test	$ —
Jars	$ —
Selective Zone	$ 65.00
Safety Joint	$ —
Standby	$ —
Evaluation	$ —
Extra Packer	$ —
Circ. Sub.	$ —
Mileage	$ —
Fluid Sampler	$ —
Extra Charts	$ —
Insurance	$ 50.00
TOTAL	$ 815.00

WESTERN TESTING CO., INC.
Pressure Data

Date 3-5-82 Test Ticket No. 15194

Recorder No. 1566 Capacity 4300 Location 4187 Ft

Clock No. — — — — Elevation 1598 KB Well Temperature 118 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2158	P.S.I.	Open Tool	2:30 PM	
B	First Initial Flow Pressure	56	P.S.I.	First Flow Pressure	30 Mins.	30 Mins
C	First Final Flow Pressure	59	P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins
D	Initial Closed-in Pressure	572	P.S.I.	Second Flow Pressure	60 Mins.	60 Mins
E	Second Initial Flow Pressure	70	P.S.I.	Final Closed-in Pressure	60 Mins.	66 Mins
F	Second Final Flow Pressure	72	P.S.I.			
G	Final Closed-in Pressure	707	P.S.I.			
H	Final Hydrostatic Mud	2117	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	56
P 2	5	|
P 3	10	|
P 4	15	
P 5	20	56
P 6	25	59
P 7	30	59
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	59
3	71
6	89
9	117
12	149
15	181
18	211
21	239
24	264
27	292
30	318
33	344
36	368
39	396
42	420
45	446
48	470
51	490
54	510
57	536
60	564
63	572

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

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

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

Point Minutes	Press.
0	72
3	86
6	108
9	146
12	186
15	220
18	255
21	281
24	320
27	351
30	384
33	415
36	447
39	480
42	503
45	532
48	562
51	590
54	618
57	646
60	669
63	697
66	707

WTC - 4

1566

Sht # 15194

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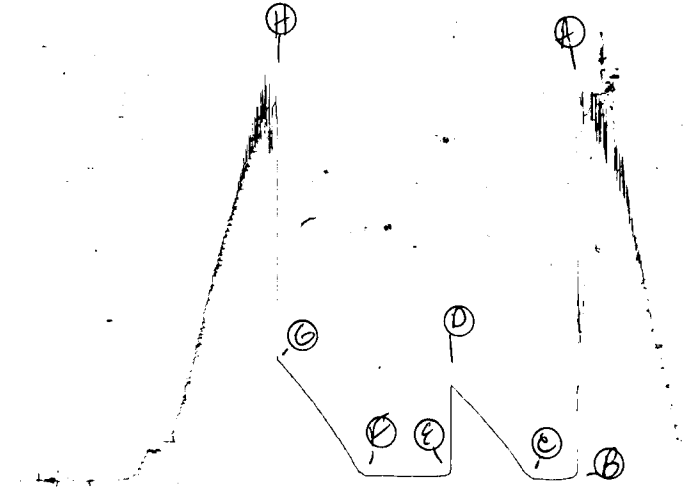

Company Associated Petroleum Consultants — Lease & Well No. Packard #2

Elevation 1598 Kelly Bushing — Formation Massey Zone — Effective Pay - Ft. — Ticket No. 15194

Date 3/5/82 — Sec. 24 — Twp. 31S — Range 13W — County Barber — State Kansas

Test Approved by Philip J. Pasching — Western Representative Mike Rogers

Formation Test No. 1 — Interval Tested from 4184 ft. to 4202 ft. — Total Depth 4202 ft.

Packer Depth 4179 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Packer Depth 4184 ft. — Size 6 5/8 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4187 ft. — Recorder Number 1566 — Cap. 4300

Bottom Recorder Depth (Outside) 4191 ft. — Recorder Number 3086 — Cap. 4500

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

Drilling Contractor Transpac Drlg. Rig #1 — Drill Collar Length 467 — I. D. 2.2 in.

Mud Type chemical — Viscosity 37 — Weight Pipe Length - — I. D. - in.

Weight 9.6 — Water Loss 24.8 cc. — Drill Pipe Length 3693 — I. D. 3.8 in.

Chlorides 12,000 P.P.M. — Test Tool Length 24 ft. — Tool Size 5½ in.

Jars: Make - — Serial Number - — Anchor Length 18 ft. — Size 5½ in.

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

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

Blow: Fair building to strong on initial flow period. Strong throughout final 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) 2:30 ~~A.M.~~ P.M. — Time Started Off Bottom 6:00 ~~A.M.~~ P.M. — Maximum Temperature 118°

Initial Hydrostatic Pressure			(A) 2158 P.S.I.			
Initial Flow Period	Minutes 30	(B) 56 P.S.I.	to	(C) 59 P.S.I.		
Initial Closed In Period	Minutes 63	(D) 572 P.S.I.				
Final Flow Period	Minutes 60	(E) 70 P.S.I.	to	(F) 72 P.S.I.		
Final Closed In Period	Minutes 66	(G) 707 P.S.I.				
Final Hydrostatic Pressure			(H) 2117 P.S.I.			

WESTERN TESTING CO., INC.
Pressure Data

Date 3/5/82 Test Ticket No. 15194

Recorder No. 1566 Capacity 4300 Location 4187 Ft.

Clock No. -- Elevation 1598 Kelly Bushing Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2158 P.S.I.	Open Tool	2:30P M	
B First Initial Flow Pressure	56 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	59 P.S.I.	Initial Closed-in Pressure	60 Mins.	63 Mins.
D Initial Closed-in Pressure	572 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	70 P.S.I.	Final Closed-in Pressure	60 Mins.	66 Mins.
F Second Final Flow Pressure	72 P.S.I.			
G Final Closed-in Pressure	707 P.S.I.			
H Final Hydrostatic Mud	2117 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	56
P 2 5	56
P 3 10	56
P 4 15	56
P 5 20	56
P 6 25	59
P 7 30	59
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	59
3	71
6	89
9	117
12	149
15	181
18	211
21	239
24	264
27	292
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33	344
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39	396
42	420
45	446
48	470
51	490
54	510
57	536
60	564
63	572

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

Point Minutes	Press.
0	70
5	70
10	70
15	70
20	70
25	70
30	70
35	70
40	70
45	72
50	72
55	72
60	72

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

Point Minutes	Press.
0	72
3	86
6	108
9	146
12	186
15	220
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