WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 6552

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

Elevation ____ Formation Arbuckle Eff. Pay — Ft.

District Great Bend Date 10-7-80 Customer Order No. —

COMPANY NAME Petroleum Energy, Inc.

ADDRESS Suite 710 One Twenty Bldg Wichita KS 67202

LEASE AND WELL NO #1 Coldwater "C" COUNTY Rice STATE KS Sec. 17 Twp. 20 S Rge. 9 W

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 3276 ft. to 3293 ft. Total Depth 3293 ft.

Packer Depth 3271 ft.	Size 6 3/4 in.	Packer Depth 3276 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)	3285 ft.	Recorder Number 4077	Cap. 4700
Bottom Recorder Depth (Outside)	3288 ft.	Recorder Number 1051	Cap. 4250
Below Straddle Recorder Depth	— ft.	Recorder Number —	Cap. —

Drilling Contractor White & Ellis Rig # 2		Drill Collar Length 257	I. D. 2 1/4 in.
Mud Type Starch	Viscosity 42	Weight Pipe Length —	I. D. — in.
Weight 10.0	Water Loss 11.0 cc.	Drill Pipe Length 2998	I. D. 3.8 in.
Chlorides 82,000	P.P.M.	Test Tool Length 21 ft.	Tool Size 4 3/4 in.
Jars: Make —	Serial Number —	Anchor Length 17 ft.	Size 5 1/2 in.
Did Well Flow? —	Reversed Out —	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 thru FIRST opening to Initial Flow
No Blow second opening - Flush Tool - very weak Blow for 7 min Died
Final Flow

Recovered 8 ft. of MUD Chlorides 79,000 P.P.M.
Recovered ____ ft. of
Recovered ____ ft. of
Recovered ____ ft. of
Recovered ____ ft. of

Remarks:

On Loc @ 12:00 Noon Pick up Tool @ 12:45 PM Leave @ 4:45 PM,

Time Set Packer(s) 1:47 P.M. Time Started Off Bottom 2:55 P.M. Maximum Temperature 100

Initial Hydrostatic Pressure		(A) 1820	P.S.I.	
Initial Flow Period	Minutes 20	(B) 49	P.S.I. to (C) 49	P.S.I.
Initial Closed In Period	Minutes 20	(D) 98	P.S.I.	
Final Flow Period	Minutes 15	(E) 49	P.S.I. to (F) 49	P.S.I.
Final Closed In Period	Minutes 10	(G) 220	P.S.I.	
Final Hydrostatic Pressure		(H) 1808	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 Neal Major
Signature of Customer or his authorized representative

Western Representative Roger Lisenby Thank you

RECEIVED OCT 8 - 1980

FIELD INVOICE

Open Hole Test ✓	$ 550 00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$ 25
27 Mileage	$ 20
Fluid Sampler	$
Extra Charts	$ 25
TOTAL	$ 570

WESTERN TESTING CO., INC.
Pressure Data

Date 10-7-80 Test Ticket No. 6552

Recorder No. 6077 Capacity 4700 Location 3285 Ft.

Clock No. ——— Elevation ——— Well Temperature 100 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1822 P.S.I.	Open Tool	1:47 PM	
B First Initial Flow Pressure	50 P.S.I.	First Flow Pressure	20 Mins.	20 Mins.
C First Final Flow Pressure	44 P.S.I.	Initial Closed-in Pressure	20 Mins.	15 Mins.
D Initial Closed-in Pressure	88 P.S.I.	Second Flow Pressure	15 Mins.	15 Mins.
E Second Initial Flow Pressure	60 P.S.I.	Final Closed-in Pressure	10 Mins.	9 Mins.
F Second Final Flow Pressure	58 P.S.I.			
G Final Closed-in Pressure	205 P.S.I.			
H Final Hydrostatic Mud	1817 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 4 Inc. of 5 mins. and a final inc. of 0 Min.

Point Mins.	Press.
P 1 0	50
P 2 5	44
P 3 10	
P 4 15	
P 5 20	44
P 6 25	
P 7 30	
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: 5 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	44
3	48
6	55
9	60
12	70
15	88
18	
21	
24	
27	
30	
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

Second Flow Pressure
Breakdown: 3 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	60
5	Flushed tool 66
10	55
15	58
20	
25	
30	
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

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

Point Minutes	Press.
0	58
3	68
6	93
9	205
12	
15	
18	
21	
24	
27	
30	
33	
36	
39	
42	
45	
48	
51	
54	
57	
60	

WTC - 4

JKI #6552

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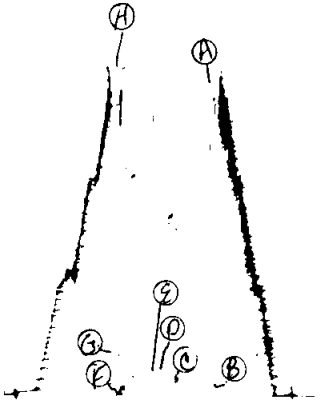

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Company Petroleum Energy, Inc. Lease & Well No. Coldwater "C"#1

Elevation ----- Formation Arbuckle Effective Pay --- Ft. Ticket No. 6552

Date 10/7/80 Sec. 17 Twp. 20S Range 9W County Rice State Kansas

Test Approved by Dan A. Nixon Western Representative Roger Lisenby

Formation Test No. 1 Interval Tested from 3276 ft. to 3293 ft. Total Depth 3293 ft.

Packer Depth 3271 ft. Size 6 3/4 in. Packer Depth 3276 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) 3285 ft. Recorder Number 6077 Cap. 4700

Bottom Recorder Depth (Outside) 3288 ft. Recorder Number 1051 Cap. 4250

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

Drilling Contractor White &Ellis Drlg. Rig #2 Drill Collar Length 257 I. D. 2¼ in.

Mud Type starch Viscosity 42 Weight Pipe Length - I. D. - in.

Weight 10.0 Water Loss 11.0 cc. Drill Pipe Length 2998 I. D. 3.8 in.

Chlorides 82,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make - Serial Number - Anchor Length 17 ft. Size 5½ in.

Did Well Flow? - Reversed Out - 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 thorugh initial flow period. No blow final flow;flushed tool, very weak blow for seven minutes and died.

Recovered 8 ft. of mud Chlorides 79,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 1:47 ~~A.M.~~ P.M. Time Started Off Bottom 2:55 ~~A.M.~~ P.M. Maximum Temperature 100°

Initial Hydrostatic Pressure ..... (A) 1822 P.S.I.

Initial Flow Period ..... Minutes 20 (B) 50 P.S.I. to (C) 44 P.S.I.

Initial Closed In Period ..... Minutes 15 (D) 88 P.S.I.

Final Flow Period ..... Minutes 15 (E) 60 P.S.I. to (F) 58 P.S.I.

Final Closed In Period ..... Minutes 9 (G) 205 P.S.I.

Final Hydrostatic Pressure ..... (H) 1817 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 10/7/80 Test Ticket No. 6552

Recorder No. 6077 Capacity 4700 Location 3285 Ft.

Clock No. -- Elevation - Well Temperature 100 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1822 P.S.I.	Open Tool	1:47P M	
B	First Initial Flow Pressure	50 P.S.I.	First Flow Pressure	20 Mins.	20 Mins.
C	First Final Flow Pressure	44 P.S.I.	Initial Closed-in Pressure	20 Mins.	15 Mins.
D	Initial Closed-in Pressure	88 P.S.I.	Second Flow Pressure	15 Mins.	15 Mins.
E	Second Initial Flow Pressure	60 P.S.I.	Final Closed-in Pressure	10 Mins.	9 Mins.
F	Second Final Flow Pressure	58 P.S.I.			
G	Final Closed-in Pressure	205 P.S.I.			
H	Final Hydrostatic Mud	1817 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 4 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	50
P 2	5	44
P 3	10	44
P 4	15	44
P 5	20	44
P 6		
P 7		
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 5 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
P 1	0	44
P 2	3	48
P 3	6	55
P 4	9	60
P 5	12	70
P 6	15	88
P 7		
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Second Flow Pressure
Breakdown: 3 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
P 1	0	60
P 2	5	Flushed tool 66
P 3	10	55
P 4	15	58
P 5		
P 6		
P 7		
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

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

Point	Minutes	Press.
P 1	0	58
P 2	3	68
P 3	6	93
P 4	9	205
P 5		
P 6		
P 7		
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

5 < 8/14 OK

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

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 6553

Elevation 1765 Formation Arbuckle Eff. Pay — Ft.

District Great Bend Date 10-7-80 Customer Order No. —

COMPANY NAME Petroleum Energy, Inc

ADDRESS Suite 710 One Twenty Bldg Wichita KS 67202

LEASE AND WELL NO. #1 Coldwater "C" COUNTY Rice STATE KS Sec. 17 Twp. 20S Rge. 9W

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

Mail Charts To Same (Address) No. Copies Requested 57

Formation Test No. 2 Interval Tested from 3273 ft. to 3299 ft. Total Depth 3299 ft.

Packer Depth 3268 ft. Size 6 3/4 in. Packer Depth 3273 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) 3292 ft. Recorder Number 4077 Cap. 4700

Bottom Recorder Depth (Outside) 3295 ft. Recorder Number 1051 Cap. 4250

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

Drilling Contractor White & Ellis Rig #2 Drill Collar Length 257 I. D. 2 1/4 in.

Mud Type Starch Viscosity 42 Weight Pipe Length — I. D. — in.

Weight 10.0 Water Loss 11.0 cc. Drill Pipe Length 2995 I. D. 3.8 in.

Chlorides 82,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make — Serial Number — Anchor Length 26 ft. Size 5 1/2 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: Good blow increasing to bottom of bucket in 15 min ~~first opening~~ Initial Flow
Weak blow slowly increasing to bottom of bucket in 10 min – ~~Second Opening~~ Final Flow

Recovered 60 ft. of Gas in pipe

Recovered 60 ft. of Heavy oil & gas cut mud 50% mud 50% oil

Recovered 420 ft. of Heavy mud & gas cut oil 35 mud – 65% oil

Recovered 180 ft. of Slightly mud cut heavy gas cut oil - 25% mud 75% oil

Recovered ~~660 ft. of TOTAL~~

Remarks: Chlorides 84,000 PPM

On loc @ 10:15 P.M. Pick up tool @ 10:30 P.M. Leave @ 6:30 AM

Time Set Packer(s) 11:54 P.M. Time Started Off Bottom 2:55 A.M. Maximum Temperature 107

Initial Hydrostatic Pressure		(A) 1796 P.S.I.			
Initial Flow Period	Minutes 45	(B) 85 P.S.I.	to	(C) 183 P.S.I.
Initial Closed In Period	Minutes 45	(D) 1116 P.S.I.		
Final Flow Period	Minutes 45	(E) 208 P.S.I.	to	(F) 306 P.S.I.
Final Closed In Period	Minutes 45	(G) 1104 P.S.I.		
Final Hydrostatic Pressure		(H) 1772 P.S.I.		

COMPANY TERMS

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All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

RECEIVED 1980

Test Approved By [signature]
Signature of Customer or his authorized representative

Western Representative Roger Lisenby

Thank you

FIELD INVOICE

Open Hole Test ✓	$ 550.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
27 Mileage ✓	$ 20.25
Fluid Sampler	$
Extra Charts	$
TOTAL	$ 570.25

WESTERN TESTING CO., INC.
Pressure Data

Date 10-7-80 Test Ticket No. 6553

Recorder No. 6077 Capacity 4700 Location 3292 Ft.

Clock No. ——— Elevation 1765 KB Well Temperature 107 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1803	P.S.I.		
B First Initial Flow Pressure	87	P.S.I.	Open Tool 11:54 PM	
C First Final Flow Pressure	195*	P.S.I.	First Flow Pressure 45 Mins.	45 Mins.
D Initial Closed-in Pressure	1142*	P.S.I.	Initial Closed-in Pressure 45 Mins.	42 Mins.
E Second Initial Flow Pressure	220*	P.S.I.	Second Flow Pressure 45 Mins.	45 Mins.
F Second Final Flow Pressure	316*	P.S.I.	Final Closed-in Pressure 45 Mins.	45 Mins.
G Final Closed-in Pressure	1123	P.S.I.		
H Final Hydrostatic Mud	1785	P.S.I.		

* Pressures questionable due to tool movement.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	87
P 2 5	91*
P 3 10	109*
P 4 15	133*
P 5 20	133*
P 6 25	196*
P 7 30	175*
P 8 35	220*
P 9 40	198*
P10 45	195*
P11 50	
P12 55	
P13 60	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 14 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	195*
3	915*
6	1023*
9	1062*
12	1079*
15	1091*
18	1150*
21	1143*
24	1142*
27	
30	
33	
36	
39	
42	1142*
45	
48	
51	
54	
57	
60	

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

Point Minutes	Press.
0	220*
5	253*
10	250*
15	250*
20	253*
25	316*
30	
35	
40	
45	316*
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	316
3	903
6	1000
9	1046
12	1072
15	1086
18	1094
21	1101
24	1106
27	1109
30	1114
33	1116
36	1118
39	1120
42	1122
45	1123
48	
51	
54	
57	
60	

IKT #6553

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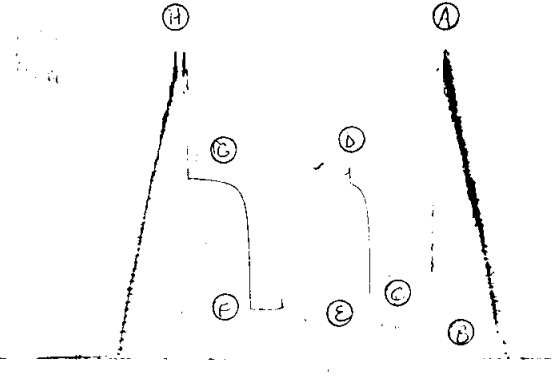

Company Petroleum Energy, Inc. Lease & Well No. Coldwater "C"#1

Elevation 1765 Formation Arbuvkle Effective Pay --- Ft. Ticket No. 6553

Date 10/7/80 Sec. 17 Twp. 20S Range 9W County Rice State Kansas

Test Approved by Dan A. Nixon Western Representative Roger Lisenby

Formation Test No. 2 Interval Tested from 3273 ft. to 3299 ft. Total Depth 3299 ft.

Packer Depth 3268 ft. Size 6 3/4 in. Packer Depth 3273 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) 3292 ft. Recorder Number 6077 Cap. 4700

Bottom Recorder Depth (Outside) 3295 ft. Recorder Number 1051 Cap. 4250

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

Drilling Contractor White & Ellis Drilling Rig #2 Drill Collar Length 257 I. D. 2¼ in.

Mud Type starch Viscosity 42 Weight Pipe Length - I. D. - in.

Weight 10.0 Water Loss 11.0 cc. Drill Pipe Length 2995 I. D. 3.8 in.

Chlorides 82,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make - Serial Number - Anchor Length 26 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 4½FH in.

Blow: Good blow increasing tobottom of bucket in fifteen minutes initial flow. Weak blow slowly increasing to bottom of bucket in ten minutes on final flow.

Recovered 60 ft. of gas in pipe

Recovered 60 ft. of heavy oil and gas cut mud (50% mud;50% oil)

Recovered 420 ft. of heavy mud and gas cut oil (35% mud;65% oil)

Recovered 180 ft. of slightly mud cut heavy gas cut oil (25% mud;75% oil)

Recovered ft. of Chlorides 84,000 ppm

Remarks:

Time Set Packer(s) 11:54 ~~A.M.~~ P.M. Time Started Off Bottom 2:55 A.M. ~~P.M.~~ Maximum Temperature 107°

Initial Hydrostatic Pressure			(A) 1803	P.S.I.		
Initial Flow Period	Minutes 45	(B) 87	P.S.I. to	(C) 195 *	P.S.I.	
Initial Closed In Period	Minutes 42	(D) 1142 *	P.S.I.			
Final Flow Period	Minutes 45	(E) 220 *	P.S.I. to	(F) 316 *	P.S.I.	
Final Closed In Period	Minutes 45	(G) 1123	P.S.I.			
Final Hydrostatic Pressure			(H) 1785	P.S.I.		

WESTERN TESTING CO., INC.
Pressure Data

Date 10/7/80 Test Ticket No. 6553

Recorder No. 6077 Capacity 4700 Location 3292 Ft.

Clock No. -- Elevation 1765 Kelly Bushing Well Temperature 107 °F

Point		Pressure		Time Given		Time Computed	
A	Initial Hydrostatic Mud	1803 P.S.I.	Open Tool	11:54P	M		
B	First Initial Flow Pressure	87 P.S.I.	First Flow Pressure	45	Mins.	45	Mins.
C	First Final Flow Pressure	195 * P.S.I.	Initial Closed-in Pressure	45	Mins.	42	Mins.
D	Initial Closed-in Pressure	1142 * P.S.I.	Second Flow Pressure	45	Mins.	45	Mins.
E	Second Initial Flow Pressure	220 * P.S.I.	Final Closed-in Pressure	45	Mins.	45	Mins.
F	Second Final Flow Pressure	316 * P.S.I.					
G	Final Closed-in Pressure	1123 P.S.I.					
H	Final Hydrostatic Mud	1785 P.S.I.					

* Pressures questionable due to tool movement.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 9 Inc.		Breakdown: 14 Inc.		Breakdown: 9 Inc.		Breakdown: 15 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	87	0	195 *	0	220 *	0	316
P 2 5	91 *	3	915 *	5	253 *	3	903
P 3 10	109 *	6	1023 *	10	250 *	6	1000
P 4 15	133 *	9	1062 *	15	250 *	9	1046
P 5 20	133 *	12	1079 *	20	293 *	12	1072
P 6 25	196 *	15	1091 *	25	316 *	15	1086
P 7 30	175 *	18	1150 *	30	316 *	18	1094
P 8 35	220 *	21	1143 *	35	316 *	21	1101
P 9 40	198 *	24	1142 *	40	316 *	24	1106
P10 45	195 *	27	1142 *	45	316 *	27	1109
P11		30	1142 *			30	1114
P12		33	1142 *			33	1116
P13		36	1142 *			36	1118
P14		39	1142 *			39	1120
P15		42	1142 *			42	1122
P16						45	1123
P17							
P18							
P19							
P20							