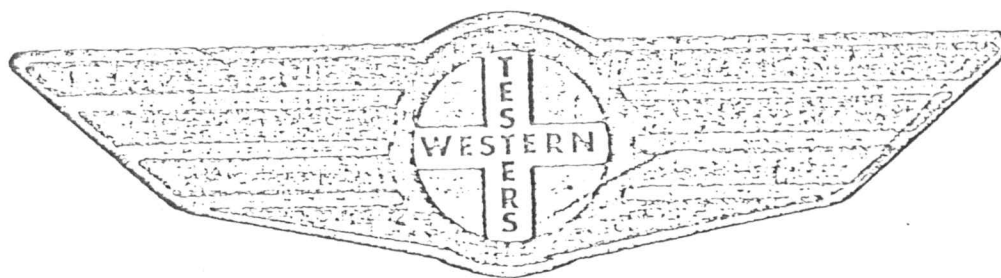


FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company HUMMON CORPORATION Lease and Well No. #1 MARK

Sec. 1 Twp. 32S Rge. 11W Test No. 1 Date 11/1/64

WESTERN TESTING COMPANY INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 6/21/84  
CUSTOMER: HUMMON CORPORATION  
WELL: 1 TEST: 1  
ELEVATION (KB): 0 FORMATION: DOUGLAS  
SECTION: 1 TOWNSHIP: 32S  
RANGE: 11W COUNTY: BARBER STATE: KANSAS  
GAUGE SN #13552 RANGE: 4050 CLOCK: 12

INTERVAL TEST FROM: 3645 FT TO: 3670 FT TOTAL DEPTH: 3670 FT  
DEPTH OF SELECTIVE ZONE: FT  
PACKER DEPTH: 3640 FT SIZE: 6 5/8 IN PACKER DEPTH: 3645 FT SIZE: 6 5/8 IN  
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: BIG H  
MUD TYPE: PREMIX VISCOSITY: 42  
WEIGHT: 9.3 WATER LOSS (CC): 11.6  
CHLORIDES (P.P.M.): 12000  
JARS - MAKE: SERIAL NUMBER:  
DID WELL FLOW? NO REVERSED OUT? NO  
DRILL COLLAR LENGTH: 437 FT I.D.: 2.25 IN  
WEIGHT PIPE LENGTH: FT I.D.: IN  
DRILL PIPE LENGTH: 3187 FT I.D.: 3.8 IN  
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 O.D. IN  
ANCHOR LENGTH: 25 FT SIZE: 3 1/2 I.F. 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 F.H. IN

BLOW: STRONG BLOW THROUGHOUT TEST.

RECOVERED: 510 FT OF: OIL & GAS CUT MUD: 10% OIL  
RECOVERED: 120 FT OF: HEAVY OIL & GAS CUT MUD: 25% OIL  
RECOVERED: 120 FT OF: OIL CUT WATERY MUD: 10% OIL: 20% WATER  
RECOVERED: FT OF:  
RECOVERED: FT OF:  
RECOVERED: FT OF:  
RECOVERED: FT OF:  
RECOVERED: FT OF:  
RECOVERED: FT OF:  
RECOVERED: FT OF:

REMARKS: READ OUTSIDE CHART.

TIME SET PACKER(S): 1:55 P.M. TIME STARTED OFF BOTTOM: 6:10 P.M.  
WELL TEMPERATURE: 115 °F  
INITIAL HYDROSTATIC PRESSURE: (A) 1850 PSI  
INITIAL FLOW PERIOD MIN: 40 (B) 305 PSI TO (C) 363 PSI  
INITIAL CLOSED IN PERIOD MIN: 60 (D) 1281 PSI  
FINAL FLOW PERIOD MIN: 60 (E) 376 PSI TO (F) 382 PSI  
FINAL CLOSED IN PERIOD MIN: 90 (G) 1250 PSI  
FINAL HYDROSTATIC PRESSURE (H) 1835 PSI

WESTERN TESTING COMPANY INC.  
PRESSURE DATA

DATE: 6/21/84

CUSTOMER: HUMMON CORPORATION

TEST: 1

ELEVATION (KB): 0

FORMATION: DOUGLAS

COUNTY: BARBER

RANGE: 4050

TICKET #4677

LEASE: MARK

GEOLOGIST: PREIRE

DOUGLAS

TOWNSHIP: 32S

STATE: KANSAS

CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE: 1850 PSI

(B) FIRST INITIAL FLOW PRESSURE: 305 PSI

(C) FIRST FINAL FLOW PRESSURE: 363 PSI

(D) INITIAL CLOSED-IN PRESSURE: 1281 PSI

(E) SECOND INITIAL FLOW PRESSURE: 376 PSI

(F) SECOND FINAL FLOW PRESSURE: 382 PSI

(G) FINAL CLOSED-IN PRESSURE: 1250 PSI

(H) FINAL HYDROSTATIC PRESSURE: 1835 PSI

WELL TEMPERATURE: 115 'F

OPEN TOOL: 1:55 P.M.

|                      | TIME - GIVEN | TIME - ACTUAL |
|----------------------|--------------|---------------|
| FIRST FLOW PRESSURE: | 45 MIN       | 40 MIN        |

INITIAL CLOSED-IN PRESSURE: 60 MIN 60 MIN

SECOND FLOW PRESSURE: 60 MIN 60 MIN

FINAL CLOSED-IN PRESSURE: 90 MIN 90 MIN

### PRESSURE BREAKDOWN

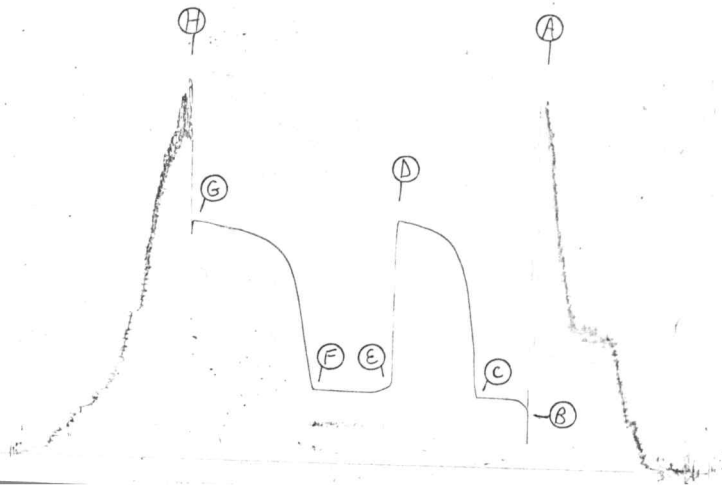
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PRESSURE BREAKDOWN - CONT.      TICKET #4677

| PT | FIRST FLOW |          | INITIAL SHUT-IN |          | SECOND FLOW |          | FINAL SHUT-IN |          |
|----|------------|----------|-----------------|----------|-------------|----------|---------------|----------|
|    | MIN        | PRESSURE | MIN             | PRESSURE | MIN         | PRESSURE | MIN           | PRESSURE |
| 31 |            |          |                 |          |             |          | 90            | 1250     |
| 32 |            |          |                 |          |             |          |               |          |
| 33 |            |          |                 |          |             |          |               |          |
| 34 |            |          |                 |          |             |          |               |          |
| 35 |            |          |                 |          |             |          |               |          |
| 36 |            |          |                 |          |             |          |               |          |
| 37 |            |          |                 |          |             |          |               |          |
| 38 |            |          |                 |          |             |          |               |          |
| 39 |            |          |                 |          |             |          |               |          |
| 40 |            |          |                 |          |             |          |               |          |
| 41 |            |          |                 |          |             |          |               |          |
| 42 |            |          |                 |          |             |          |               |          |
| 43 |            |          |                 |          |             |          |               |          |
| 44 |            |          |                 |          |             |          |               |          |
| 45 |            |          |                 |          |             |          |               |          |
| 46 |            |          |                 |          |             |          |               |          |
| 47 |            |          |                 |          |             |          |               |          |
| 48 |            |          |                 |          |             |          |               |          |
| 49 |            |          |                 |          |             |          |               |          |
| 50 |            |          |                 |          |             |          |               |          |
| 51 |            |          |                 |          |             |          |               |          |
| 52 |            |          |                 |          |             |          |               |          |
| 53 |            |          |                 |          |             |          |               |          |
| 54 |            |          |                 |          |             |          |               |          |
| 55 |            |          |                 |          |             |          |               |          |
| 56 |            |          |                 |          |             |          |               |          |
| 57 |            |          |                 |          |             |          |               |          |
| 58 |            |          |                 |          |             |          |               |          |
| 59 |            |          |                 |          |             |          |               |          |
| 60 |            |          |                 |          |             |          |               |          |
| 61 |            |          |                 |          |             |          |               |          |
| 62 |            |          |                 |          |             |          |               |          |
| 63 |            |          |                 |          |             |          |               |          |
| 64 |            |          |                 |          |             |          |               |          |
| 65 |            |          |                 |          |             |          |               |          |
| 66 |            |          |                 |          |             |          |               |          |
| 67 |            |          |                 |          |             |          |               |          |
| 68 |            |          |                 |          |             |          |               |          |
| 69 |            |          |                 |          |             |          |               |          |
| 70 |            |          |                 |          |             |          |               |          |
| 71 |            |          |                 |          |             |          |               |          |
| 72 |            |          |                 |          |             |          |               |          |
| 73 |            |          |                 |          |             |          |               |          |
| 74 |            |          |                 |          |             |          |               |          |
| 75 |            |          |                 |          |             |          |               |          |
| 76 |            |          |                 |          |             |          |               |          |
| 77 |            |          |                 |          |             |          |               |          |
| 78 |            |          |                 |          |             |          |               |          |
| 79 |            |          |                 |          |             |          |               |          |
| 80 |            |          |                 |          |             |          |               |          |
| 81 |            |          |                 |          |             |          |               |          |
| 82 |            |          |                 |          |             |          |               |          |
| 83 |            |          |                 |          |             |          |               |          |
| 84 |            |          |                 |          |             |          |               |          |
| 85 |            |          |                 |          |             |          |               |          |
| 86 |            |          |                 |          |             |          |               |          |
| 87 |            |          |                 |          |             |          |               |          |
| 88 |            |          |                 |          |             |          |               |          |
| 89 |            |          |                 |          |             |          |               |          |

TKT # 4677

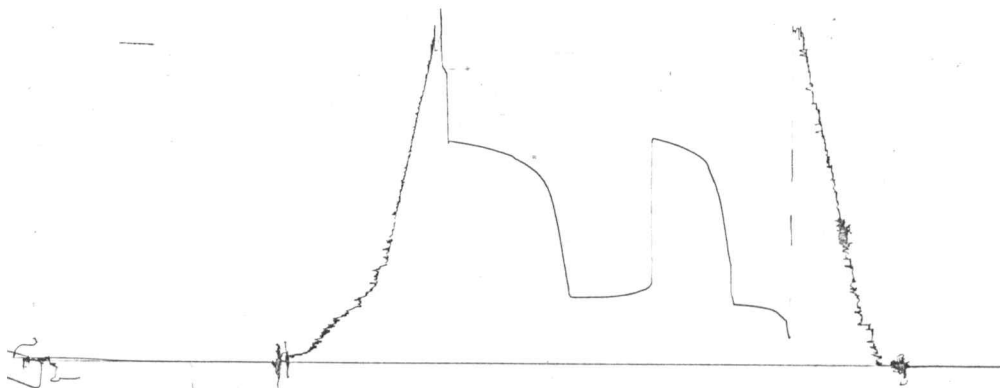
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TKT # 4677

I





WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET NO. 4677

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

Elevation \_\_\_\_\_ Formation Douglas Eff. Pay \_\_\_\_\_ Ft.

District Pratt

Date 6/21/84

Customer Order No. -

COMPANY NAME Hummon Corp.

ADDRESS 400 One Main Place Wichita, Ks 67202

LEASE AND WELL NO. Mark #1 COUNTY Barber STATE Ks Sec. 1 Twp. 32 Rge. 1W

Mail Invoice To Same #1 Mark

Co. Name

Address

No. Copies Requested 5

Mail Charts To Same

Address

No. Copies Requested 5

Formation Test No. 1 Interval Tested From 3645 ft. to 3670 ft. Total Depth 3670 ft.

Packer Depth 3640 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 3645 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3659 ft.

Recorder Number 13547 Cap. 4225

Bottom Recorder Depth (Outside) 3662 ft.

Recorder Number 13552 Cap. 4050

Below Straddle Recorder Depth - ft.

Recorder Number - Cap. -

Drilling Contractor Big H Rig #1

Drill Collar Length 437 I. D. 2 1/4 in.

Mud Type Premix Viscosity 42

Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 11.6 cc.

Drill Pipe Length 3187 I. D. 3.8 in.

Chlorides 12,000 P.P.M.

Test Tool Length 21 ft. Tool Size 5 1/2 00 in.

Jars: Make No Serial Number No

Anchor Length 25 ft. Size 3 1/2 I.F. in.

Did Well Flow? No Reversed Out No

Surface Choke Size 3 1/4 in. Bottom Choke Size 3 1/4 in.

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

Blow: Strong blow throughout flow periods

Recovered 510 ft. of Oil & Gas Cut Mud (10% oil)  
Recovered 120 ft. of Heavy Oil & Gas Cut Mud (25% oil)  
Recovered 120 ft. of Oil Cut Wty Mud (10% oil) (20% water)

Recovered - ft. of -

Recovered - ft. of -

Chlorides - P.P.M. Sample Jars used - Remarks: -

Read bottom chart

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

Time Set Packer(s) 1:55 A.M. Time Started Off Bottom 6:10 P.M. Maximum Temperature 115°

Initial Hydrostatic Pressure 1822 P.S.I.

Initial Flow Period 45 Minutes (B) 355 P.S.I. to (C) 355 P.S.I.

Initial Closed In Period 60 Minutes (D) 1277 P.S.I.

Final Flow Period 60 Minutes (E) 386 P.S.I. to (F) 386 P.S.I.

Final Closed In Period 90 Minutes (G) 1246 P.S.I.

Final Hydrostatic Pressure 1802 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 Tim Price  
Signature of Customer or his authorized representative 23716

Western Representative Jim Wondra Thank You

FIELD INVOICE

Open Hole Test \$ 550-  
Misrun \$ -  
Straddle Test \$ -  
Jars \$ -  
Selective Zone \$ -  
Safety Joint \$ -  
Standby \$ -  
Evaluation \$ -  
Extra Packer \$ -  
Circ. Sub. \$ -  
Mileage \$ -  
Fluid Sampler \$ -  
Extra Charts \$ -  
Insurance \$ -  
Telecopier \$ -  
TOTAL \$ -

# WESTERN TESTING CO., INC.

## Pressure Data

Date 6-21 Test Ticket No. 4677  
 Recorder No. 13552 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft.  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

| Point                          | Pressure           | Time Given      | Time Computed   |
|--------------------------------|--------------------|-----------------|-----------------|
| A Initial Hydrostatic Mud      | <u>1850</u> P.S.I. |                 |                 |
| B First Initial Flow Pressure  | <u>305</u> P.S.I.  | <u>45</u> Mins. | <u>40</u> Mins. |
| C First Final Flow Pressure    | <u>363</u> P.S.I.  | <u>60</u> Mins. | <u>60</u> Mins. |
| D Initial Closed-in Pressure   | <u>1281</u> P.S.I. | <u>60</u> Mins. | <u>60</u> Mins. |
| E Second Initial Flow Pressure | <u>376</u> P.S.I.  | <u>90</u> Mins. | <u>90</u> Mins. |
| F Second Final Flow Pressure   | <u>382</u> P.S.I.  |                 |                 |
| G Final Closed-in Pressure     | <u>1250</u> P.S.I. |                 |                 |
| H Final Hydrostatic Mud        | <u>1835</u> P.S.I. |                 |                 |

Read Outside Chart!

## PRESSURE BREAKDOWN

| First Flow Pressure         |            | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |             |
|-----------------------------|------------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|-------------|
| Breakdown: <u>9</u> Inc.    |            | Breakdown: <u>21</u> Inc.   |             | Breakdown: <u>13</u> Inc.   |            | Breakdown: <u>31</u> Inc.   |             |
| of <u>5</u> mins. and a     |            | of <u>3</u> mins. and a     |             | of <u>5</u> mins. and a     |            | of <u>3</u> mins. and a     |             |
| final inc. of <u>0</u> Min. |            | final inc. of <u>0</u> Min. |             | final inc. of <u>0</u> Min. |            | final inc. of <u>0</u> Min. |             |
| Point Mins.                 | Press.     | Point Minutes               | Press.      | Point Minutes               | Press.     | Point Minutes               | Press.      |
| P 1 0                       | <u>305</u> | 0                           | <u>363</u>  | 0                           | <u>376</u> | 0                           | <u>382</u>  |
| P 2 5                       | <u>342</u> | 3                           | <u>682</u>  | 5                           |            | 3                           | <u>510</u>  |
| P 3 10                      | <u>356</u> | 6                           | <u>834</u>  | 10                          |            | 6                           | <u>632</u>  |
| P 4 15                      | <u>360</u> | 9                           | <u>962</u>  | 15                          |            | 9                           | <u>745</u>  |
| P 5 20                      | <u>361</u> | 12                          | <u>1036</u> | 20                          |            | 12                          | <u>864</u>  |
| P 6 25                      | <u>362</u> | 15                          | <u>1090</u> | 25                          |            | 15                          | <u>949</u>  |
| P 7 30                      | <u>363</u> | 18                          | <u>1136</u> | 30                          | <u>376</u> | 18                          | <u>1016</u> |
| P 8 35                      | <u>363</u> | 21                          | <u>1165</u> | 35                          | <u>377</u> | 21                          | <u>1057</u> |
| P 9 40                      | <u>363</u> | 24                          | <u>1188</u> | 40                          | <u>378</u> | 24                          | <u>1089</u> |
| P10 45                      |            | 27                          | <u>1205</u> | 45                          | <u>379</u> | 27                          | <u>1111</u> |
| P11 50                      |            | 30                          | <u>1219</u> | 50                          | <u>380</u> | 30                          | <u>1130</u> |
| P12 55                      |            | 33                          | <u>1230</u> | 55                          | <u>381</u> | 33                          | <u>1144</u> |
| P13 60                      |            | 36                          | <u>1239</u> | 60                          | <u>382</u> | 36                          | <u>1158</u> |
| P14                         |            | 39                          | <u>1246</u> | 65                          |            | 39                          | <u>1169</u> |
| P15                         |            | 42                          | <u>1252</u> | 70                          |            | 42                          | <u>1178</u> |
| P16                         |            | 45                          | <u>1258</u> | 75                          |            | 45                          | <u>1187</u> |
| P17                         |            | 48                          | <u>1263</u> | 80                          |            | 48                          | <u>1193</u> |
| P18                         |            | 51                          | <u>1268</u> | 85                          |            | 51                          | <u>1199</u> |
| P19                         |            | 54                          | <u>1273</u> | 90                          |            | 54                          | <u>1204</u> |
| P20                         |            | 57                          | <u>1277</u> |                             |            | 57                          | <u>1209</u> |
|                             |            | 60                          | <u>1281</u> |                             |            | 60                          | <u>1214</u> |



**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date: \_\_\_\_\_

Test Ticket No. 4677

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 <u>5</u> mins. and a     |        | of <u>3</u> mins. and a     |        | of <u>5</u> mins. and a     |        | of <u>3</u> mins. and a     |             |
| final inc. of <u>0</u> Min. |        | final inc. of <u>0</u> Min. |        | final inc. of <u>0</u> Min. |        | final inc. of <u>0</u> Min. |             |
| Point Mins.                 | Press. | Point Minutes               | Press. | Point Minutes               | Press. | Point Minutes               | Press.      |
| P 1 _____                   | _____  | 63 _____                    | _____  | _____                       | _____  | 63 _____                    | <u>1219</u> |
| P 2 _____                   | _____  | 66 _____                    | _____  | _____                       | _____  | 66 _____                    | <u>1224</u> |
| P 3 _____                   | _____  | 69 _____                    | _____  | _____                       | _____  | 69 _____                    | <u>1228</u> |
| P 4 _____                   | _____  | 72 _____                    | _____  | _____                       | _____  | 72 _____                    | <u>1232</u> |
| P 5 _____                   | _____  | 75 _____                    | _____  | _____                       | _____  | 75 _____                    | <u>1236</u> |
| P 6 _____                   | _____  | 78 _____                    | _____  | _____                       | _____  | 78 _____                    | <u>1239</u> |
| P 7 _____                   | _____  | 81 _____                    | _____  | _____                       | _____  | 81 _____                    | <u>1242</u> |
| P 8 _____                   | _____  | 84 _____                    | _____  | _____                       | _____  | 84 _____                    | <u>1245</u> |
| P 9 _____                   | _____  | 87 _____                    | _____  | _____                       | _____  | 87 _____                    | <u>1248</u> |
| P10 _____                   | _____  | 90 _____                    | _____  | _____                       | _____  | 90 _____                    | <u>1250</u> |
| 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 _____                   | _____       |