



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No 12872

P. O. BOX 1599

PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation

N/A

Formation

MISS.

Eff. Pay

Ft.

District

PRATT

Date 10-6-81

Customer Order No.

COMPANY NAME

GRAHAM & Michaelis Corporation

ADDRESS

2112 Blum, P.O. Box 247 Wichita Ks 67202-33 305

LEASE AND WELL NO.

Burkhall 1-33-4

COUNTY

Kiowa

STATE

KS

Sec.

30

Twp

335

Rge

18W

Mail Invoice To

Co. Name

SAME

No. Copies Requested

REQ

Mail Charts To

SAME

No. Copies Requested

REQ

Formation Test No.

1

Interval Tested from

4976

ft. to

5025

ft.

Total Depth

5025

ft.

Packer Depth

4971

ft.

Size

6 3/4

in.

Packer Depth

—

ft.

Size

—

in.

Packer Depth

4976

ft.

Size

6 3/4

in.

Packer Depth

—

ft.

Size

—

in.

Depth of Selective Zone Set

Top Recorder Depth (Inside)

4984

ft.

Recorder Number

13267

Cap.

4050

Bottom Recorder Depth (Outside)

4987

ft.

Recorder Number

1051

Cap.

4250

Below Straddle Recorder Depth

—

ft.

Recorder Number

—

Cap.

—

Drilling Contractor

Slawson #2

Drill Collar Length

359

I. D.

2.26

in.

Mud Type

Chemical

Viscosity

44

Weight Pipe Length

126

I. D.

2.8

in.

Weight

9.5

Water Loss

17.6

cc.

Drill Pipe Length

4504

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

409

Anchor Length

49

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

7/8

in.

Tool Joint Size

4 1/2 F-Hole

in.

Blow: IEP- FAIR DIED TO VERYWEAK

FEP- VERY WEAK (ON SURFACE OF WATER) DIED in 5 min.

Recovered 246 ft. of Drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: HIT BRIDGE 10' off Bottom- Slid 4' to Bottom-

Time On Location

4:00

A.M.

Time Pick Up Tool

9:00

A.M.

Time Off Location

A.M.

Time Set Packer(s)

11:30

A.M.

Time Started Off Bottom

3:00

A.M.

Maximum Temperature

120 °F.

Initial Hydrostatic Pressure

(A) 2327

P.S.I.

Initial Flow Period

Minutes 60

(B) 80

P.S.I. to (C)

101

P.S.I.

Initial Closed In Period

Minutes 45

(D) 556

P.S.I.

Final Flow Period

Minutes 60

(E) 91

P.S.I. to (F)

101

P.S.I.

Final Closed In Period

Minutes 45

(G) 435

P.S.I.

Final Hydrostatic Pressure

(H) 2266

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 of Customer or his authorized representative

Western Representative

Karl Hottel Jr. Thank you

FIELD INVOICE

Open Hole Test	\$	400.00
Misrun	\$	400.00
Straddle Test	\$	300.00
Jars	\$	65.00
Selective Zone	\$	39.00
Safety Joint	\$	
Standby 5 HRS.	\$	
Evaluation	\$	
Extra Packer	\$	
Circ. Sub.	\$	
Mileage 52	\$	
Fluid Sampler	\$	
Extra Charts	\$	
Insurance	\$	
TOTAL	\$	804.00

WESTERN TESTING CO., INC.

Pressure Data

Date 10-6 Test Ticket No. 12872
 Recorder No. 13267 Capacity 4050 Location 4984 Ft.
 Clock No. Elevation Well Temperature 120 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud <u>2333</u>	P.S.I.	<u>11:30 A</u>	<u>M</u>
B First Initial Flow Pressure <u>Plugged</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
C First Final Flow Pressure <u>109</u>	P.S.I.	<u>45</u> Mins.	<u>42</u> Mins.
D Initial Closed-in Pressure <u>564</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure <u>61</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure <u>108</u>	P.S.I.	<i>All pressures questionable</i>	
G Final Closed-in Pressure <u>443</u>	P.S.I.		
H Final Hydrostatic Mud <u>2266</u>	P.S.I.		

PRESSURE BREAKDOWN.

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>12</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>15</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 <u>0</u>	<u>Plugged</u>	0	<u>109</u>	0	<u>61</u>	0	<u>108</u>
P 2 <u>5</u>	<u>93</u>	3	<u>245</u>	5	<u>101</u>	3	<u>287</u>
P 3 <u>10</u>	<u>/</u>	6	<u>389</u>	10	<u>102</u>	6	<u>279</u>
P 4 <u>15</u>		9	<u>411</u>	15	<u>103</u>	9	<u>283</u>
P 5 <u>20</u>		12	<u>429</u>	20	<u>103</u>	12	<u>292</u>
P 6 <u>25</u>		15	<u>447</u>	25	<u>103</u>	15	<u>306</u>
P 7 <u>30</u>		18	<u>464</u>	30	<u>146</u>	18	<u>320</u>
P 8 <u>35</u>	<u>/</u>	21	<u>478</u>	35	<u>108</u>	21	<u>338</u>
P 9 <u>40</u>		24	<u>492</u>	40	<u>/</u>	24	<u>356</u>
P10 <u>45</u>		27	<u>502</u>	45	<u>/</u>	27	<u>374</u>
P11 <u>50</u>		30	<u>518</u>	50	<u>108</u>	30	<u>387</u>
P12 <u>55</u>		33	<u>533</u>	55	<u>110</u>	33	<u>401</u>
P13 <u>60</u>	<u>Plugged</u>	36	<u>543</u>	60	<u>108</u>	36	<u>417</u>
P14	<u>109</u>	39	<u>557</u>	65		39	<u>429</u>
P15		42	<u>564</u>	70		42	<u>439</u>
P16		45		75		45	<u>443</u>
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P20		57				57	
		60				60	

Company Graham - Michaelis Corporation Lease & Well No. Burkhall "A" #1-33
Elevation N/A Formation Mississippi Effective Pay - Ft. Ticket No. 12872
Date 10/ 6 /81 Sec. 33 Twp. 30S Range 18W County Kiowa State Kansas
Test Approved by Jack L. Yinger Western Representative Karl L. West, Jr.
Formation Test No. 1 Interval Tested from 4976 ft. to 5025 ft. Total Depth 5025 ft.
Packer Depth 4971 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4976 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4984 ft. Recorder Number 13267 Cap. 4050
Bottom Recorder Depth (Outside) 4987 ft. Recorder Number 1051 Cap. 4250
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Slawson Drlg. Rig #2 Drill Collar Length 359 I. D. 2.26 in.
Mud Type chemical Viscosity 44 Weight Pipe Length 126 I. D. 2.8 in.
Weight 9.5 Water Loss 17.6 cc. Drill Pipe Length 4504 I. D. 3.8 in.
Chlorides 13,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 OD in.
Jars: Make WTC Serial Number 409 Anchor Length 49 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: Initial flow period fair; died to very weak. Final flow period very weak (on surface of water) died in five minutes.

Recovered 240 ft. of drilling mud
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks: Hit bridge ten feet off bottom; slid four feet to bottom.

Time Set Packer(s) 11:30 A.M. Time Started Off Bottom 3:00 A.M. Maximum Temperature 120°
Initial Hydrostatic Pressure 2333 P.S.I.
Initial Flow Period 60 Minutes (B) PLUGGED P.S.I. to (C) 109 P.S.I.
Initial Closed In Period 42 Minutes (D) 564 P.S.I.
Final Flow Period 60 Minutes (E) 61 P.S.I. to (F) 108 P.S.I.
Final Closed In Period 45 Minutes (G) 443 P.S.I.
Final Hydrostatic Pressure 2266 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 10/6/81

Test Ticket No. 12872

Recorder No. 13267

Capacity 4050

Location 4984 Ft.

Clock No. - Elevation ---

Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2333 P.S.I.	Open Tool	11:30A	M
B First Initial Flow Pressure	PLUGGED P.S.I.	First Flow Pressure	60 Mins	60 Mins.
C First Final Flow Pressure	109 P.S.I.	Initial Closed-in Pressure	45 Mins	42 Mins.
D Initial Closed-in Pressure	564 P.S.I.	Second Flow Pressure	60 Mins	60 Mins.
E Second Initial Flow Pressure	61 P.S.I.	Final Closed-in Pressure	45 Mins	45 Mins.
F Second Final Flow Pressure	108 P.S.I.			
G Final Closed-in Pressure	443 P.S.I.			
H Final Hydrostatic Mud	2266 P.S.I.			

* ALL PRESSURES QUESTIONABLE.

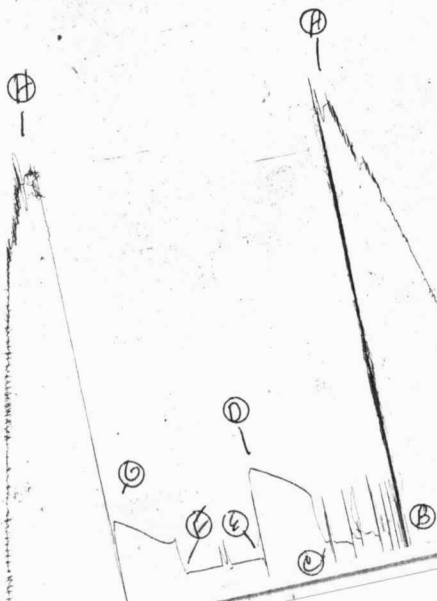
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>12</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>15</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 <u>0</u>	PLUGGED	<u>0</u>	109	<u>0</u>	61	<u>0</u>	108
P 2 <u>5</u>	93	<u>3</u>	245	<u>5</u>	101	<u>3</u>	297
P 3 <u>10</u>	93	<u>6</u>	389	<u>10</u>	102	<u>6</u>	279
P 4 <u>15</u>	93	<u>9</u>	411	<u>15</u>	103	<u>9</u>	283
P 5 <u>20</u>	93	<u>12</u>	429	<u>20</u>	103	<u>12</u>	292
P 6 <u>25</u>	93	<u>15</u>	447	<u>25</u>	103	<u>15</u>	306
P 7 <u>30</u>	93	<u>18</u>	464	<u>30</u>	146	<u>18</u>	320
P 8 <u>35</u>	93	<u>21</u>	478	<u>35</u>	108	<u>21</u>	338
P 9 <u>40</u>	93	<u>24</u>	492	<u>40</u>	108	<u>24</u>	356
P10 <u>45</u>	93	<u>27</u>	502	<u>45</u>	108	<u>27</u>	374
P11 <u>50</u>	97	<u>30</u>	518	<u>50</u>	108	<u>30</u>	387
P12 <u>55</u>	PLUGGED	<u>33</u>	533	<u>55</u>	110	<u>33</u>	401
P13 <u>60</u>	109	<u>36</u>	543	<u>60</u>	108	<u>36</u>	417
P14		<u>38</u>	557			<u>39</u>	429
P15		<u>42</u>	564			<u>42</u>	439
P16						<u>45</u>	443
P17							
P18							
P19							
P20							

13267

TK # 12892

I





WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

No 12874

P. O. BOX 1599

PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation

N/A

Formation

MISS.

Eff. Pay Ft.

District Pratt

Date 10-7-81

Customer Order No.

COMPANY NAME

GRAHAM & Michaglis Corporation

ADDRESS

211 N. Blue P. O. Box 247 Wichita Ks 67202-3330

LEASE AND WELL NO.

Burkhal #1-33-A

COUNTY

Kiowa

STATE KS

Sec.

30

Twp

35S Rge 18W

Mail Invoice To

Co. Name

Sama

Address

No. Copies Requested

Rag

Mail Charts To

Sama

Address

No. Copies Requested

Rag

Formation Test No.

2

Interval Tested from

5009

ft. to 5065

ft.

Total Depth

5065

ft.

Packer Depth

5004

ft.

Size 6 3/4

in.

Packer Depth

ft.

Size

in.

Packer Depth

5009

ft.

Size 6 3/4

in.

Packer Depth

ft.

Size

in.

Depth of Selective Zone Set

Top Recorder Depth (Inside)

5025

ft.

Recorder Number

13267

Cap.

4050

Bottom Recorder Depth (Outside)

5028

ft.

Recorder Number

1051

Cap.

4250

Below Straddle Recorder Depth

ft.

Recorder Number

Cap.

Drilling Contractor

Slawson #2

Drill Collar Length

359

I. D.

2.26

in.

Mud Type

Chemical

Viscosity

50

Weight Pipe Length

126

I. D.

2.8

in.

Weight

9.0

Water Loss

9.2

cc.

Drill Pipe Length

4504

I. D.

3.8

in.

Chlorides

9,000

P.P.M.

Test Tool Length

30

ft.

Tool Size 5 1/2 O.D.

in.

Jars: Make

WTC

Serial Number

409

Anchor Length

56

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 F-Hole in.

Blow: IFP - Fair to Strong Gas to Surface in 60 min.

FFP - WEAK Blow - DEAD in 10 min - flushed tool twice - NO Blow -

Recovered

62

ft. of

H. GAS & oil cut mud 4% gas 66% oil 30% mud

Recovered

62

ft. of

GAS & oil cut muddy water 5% gas 7% oil 36% water 52% mud

Recovered

124

ft. of

GAS & oil cut muddy water 5% gas 6% oil 44% water 45% mud

Recovered

124

ft. of

" " " " " " " " " " " "

Recovered

2

ft. of

Remarks: Slid 24' to bottom - 360' Total Fluid - No Flow Sheet

WATER HAS 56,000 ppm. Chlorides

Time On Location

12:00

A.M.

Time Pick Up Tool

2:40

A.M.

Time Off Location

12:45

A.M.

Time Set Packer(s)

5:15

P.M.

Time Started Off Bottom

8:15

P.M.

Maximum Temperature

122° F

Initial Hydrostatic Pressure

(A)

2412

P.S.I.

Initial Flow Period

Minutes

60

(B)

86

P.S.I. to (C)

96

P.S.I.

Initial Closed In Period

Minutes

45

(D)

1324

P.S.I.

Final Flow Period

Minutes

30

(E)

150

P.S.I. to (F)

172

P.S.I.

Final Closed In Period

Minutes

45

(G)

1292

P.S.I.

Final Hydrostatic Pressure

(H)

2369

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 of Customer or his authorized representative

Western Representative

Karl Rottler Thanks again

FIELD INVOICE

Open Hole Test

\$

✓ 775.00

Misrun

\$

Straddle Test

\$

Jars

\$

Selective Zone

\$

Safety Joint

\$

Standby

\$

Evaluation

\$

Extra Packer

\$

Circ. Sub.

\$

Mileage 52

\$

Fluid Sampler

\$

Extra Charts

\$

Insurance

\$

TOTAL

\$

✓ 39.00

✓ 65.00

✓ 1179.00

WESTERN TESTING CO., INC.

Pressure Data

Date 10-7 Test Ticket No. 12874
 Recorder No. 13267 Capacity 4050 Location 5025 Ft.
 Clock No. --- Elevation --- Well Temperature 122 °F

Point Pressure
 A Initial Hydrostatic Mud 2368 P.S.I.
 B First Initial Flow Pressure 18 P.S.I.
 C First Final Flow Pressure 65 P.S.I.
 D Initial Closed-in Pressure 1313 P.S.I.
 E Second Initial Flow Pressure 89 P.S.I.
 F Second Final Flow Pressure 135 P.S.I.
 G Final Closed-in Pressure 1280 P.S.I.
 H Final Hydrostatic Mud 2327 P.S.I.

Time Given Time Computed
 5:15 A M
 60 Mins. 55 Mins.
 45 Mins. 45 Mins.
 30 Mins. 30 Mins.
 45 Mins. 42 Mins.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>11</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>14</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>18</u>	0	<u>65</u>	0	<u>89</u>	0	<u>135</u>
P 2 5	<u>18</u>	3	<u>182</u>	5	<u>89</u>	3	<u>287</u>
P 3 10	<u>18</u>	6	<u>350</u>	10	<u>89</u>	6	<u>506</u>
P 4 15	<u>22</u>	9	<u>616</u>	15	<u>91</u>	9	<u>722</u>
P 5 20	<u>28</u>	12	<u>829</u>	20	<u>Flushed Tool</u>	12	<u>888</u>
P 6 25	<u>32</u>	15	<u>951</u>	25	<u>138</u>	15	<u>986</u>
P 7 30	<u>38</u>	18	<u>1045</u>	30	<u>135</u>	18	<u>1059</u>
P 8 35	<u>44</u>	21	<u>1106</u>	35		21	<u>1108</u>
P 9 40	<u>51</u>	24	<u>1154</u>	40		24	<u>1150</u>
P10 45	<u>55</u>	27	<u>1191</u>	45		27	<u>1183</u>
P11 50	<u>61</u>	30	<u>1222</u>	50		30	<u>1209</u>
P12 55	<u>65</u>	33	<u>1246</u>	55		33	<u>1232</u>
P13 60		36	<u>1268</u>	60		36	<u>1250</u>
P14		39	<u>1289</u>	65		39	<u>1266</u>
P15		42	<u>1305</u>	70		42	<u>1280</u>
P16		45	<u>1313</u>	75		45	
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P20		57				57	
		60				60	

Time	Set	Packer(s)	5:15	A.M. P.M.	Time	Started	Off	Bottom	8:15	A.M. P.M.	Maximum	Temperature	122
Initial	Hydrostatic	Pressure			(A)				2368	P.S.I.			
Initial	Flow	Period		Minutes	55	(B)			18	P.S.I.	to (C)	65	P.S.I.
Initial	Closed	In	Period	Minutes	45	(D)			1313	P.S.I.			
Final	Flow	Period		Minutes	30	(E)			89	P.S.I.	to (F)	135	P.S.I.
Final	Closed	In	Period	Minutes	42	(G)			1280	P.S.I.			
Final	Hydrostatic	Pressure			(H)				2327	P.S.I.			

WESTERN TESTING CO., INC.

Pressure Data

Date 10/7/81 Test Ticket No. 12874
 Recorder No. 13267 Capacity 4050 Location 5025 Ft.
 Clock No. - Elevation -- Well Temperature 122 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2368	P.S.I.	5:15A	M
B First Initial Flow Pressure	18	P.S.I.	60	55 Mins.
C First Final Flow Pressure	65	P.S.I.	45	45 Mins.
D Initial Closed-in Pressure	1313	P.S.I.	30	30 Mins.
E Second Initial Flow Pressure	89	P.S.I.	45	42 Mins.
F Second Final Flow Pressure	135	P.S.I.		
G Final Closed-in Pressure	1280	P.S.I.		
H Final Hydrostatic Mud	2327	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>11</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>14</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	18	0	65	0	89	0	135
P 2 5	18	3	182	5	89	3	287
P 3 10	22	6	350	10	89	6	506
P 4 15	28	9	616	15	91	9	722
P 5 20	32	12	829	20	FLUSHED TOOL	12	888
P 6 25	38	15	951	25	138	15	986
P 7 30	44	18	1045	30	135	18	1059
P 8 35	51	21	1106			21	1108
P 9 40	55	24	1154			24	1150
P10 45	61	27	1191			27	1183
P11 50	65	30	1222			30	1209
P12 55		33	1246			33	1232
P13		36	1268			36	1250
P14		39	1289			38	1266
P15		42	1305			42	1280
P16		45	1313				
P17							
P18							
P19							
P20							

13267

TKT # 12874

I

