



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET

No. 16382

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

Elevation 1592 K.B. Formation Miss Eff. Pay - Ft.

District Pratt Date 8/17/82 Customer Order No. -

COMPANY NAME Maraco Oil Company 66202

ADDRESS 8600 W. 63rd Suite 305 Shawnee Mission, Ks 66202

LEASE AND WELL NO. Path-Stauch #3 COUNTY Kingman STATE Ks Sec. 34 Twp. 30 Rge. 7W

Mail Invoice To Same #3 RUTH-STAUCH No. Copies Requested 5

Mail Charts To Same No. Copies Requested 5

Formation Test No. 1 Interval Tested From 4317 ft. to 4358 ft. Total Depth 4358 ft.

Packer Depth 4312 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4317 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4347 ft. Recorder Number 2607 Cap. 4150

Bottom Recorder Depth (Outside) 4350 ft. Recorder Number 3351 Cap. 4000

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

Drilling Contractor Reach Rig #2 Drill Collar Length 250 I. D. 2 1/4 in.

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

Weight 9.2 Water Loss 12.4 cc. Drill Pipe Length 4038 I. D. 3.8 in.

Chlorides 40,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 5/8 in.

Jars: Make WTC Serial Number H10 Anchor Length 47 ft. Size 5 5/8 in.

Did Well Flow? Yes 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

Gas to surface in 7 min on preflow See attached sheet

Recovered 120 ft. of Oil & Gas Cut Mud

Recovered 180 ft. of Heavy Oil & Gas Cut Mud (25% oil)

Recovered 120 ft. of Oily Water

Recovered - ft. of -

Recovered - ft. of -

Remarks: -

AUG 20 1982

Time On Location 11:30 A.M. Time Pick Up Tool 12:30 P.M. Time Off Location 10:30 P.M.

Time Set Packer(s) 2:45 P.M. Time Started Off Bottom 6:45 P.M. Maximum Temperature 121

Initial Hydrostatic Pressure (A) 2278 P.S.I.

Initial Flow Period (B) 30 Minutes (C) 158 P.S.I. to (C) 158 P.S.I.

Initial Closed In Period (D) 60 Minutes (E) 1248 P.S.I.

Final Flow Period (F) 60 Minutes (G) 179 P.S.I. to (F) 179 P.S.I.

Final Closed In Period (H) 90 Minutes (H) 1248 P.S.I.

Final Hydrostatic Pressure (H) 2257 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]
Signature of Customer or his authorized representative

Western Representative Jim Worku Thank You

FIELD INVOICE

Open Hole Test	\$ <u>675.00</u>
Misrun	\$
Straddle Test	\$
Jars	\$ <u>1300.00</u>
Selective Zone	\$
Safety Joint	\$ <u>165.00</u>
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage	\$
Fluid Sampler	\$
Extra Charts	\$
Insurance	\$
Telecopier	\$
TOTAL	\$ <u>1040.00</u>



No 3266

GAS FLOW REPORT

Date 8/17/82 Ticket 16382 Company Maraco Oil Co.
Well Name and No. Ruth-Stauch #3 Dst No. 1 Interval Tested 4317-4358
County Kingman State Ks Sec. 34 Twp. 30 Rg. 7

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
<i>Gas to surface in 7 min</i>					
10	8 H ₂ O	1"			OK. 73,100 C.F.P.D
20	5.5 "	"			OK. 60,500 "
30	12 "	"			OK. 89,800 "

SECOND FLOW

5	20 H ₂ O	1 1/2"			OK. 311,000 C.F.P.D
10	16 "	"			OK. 278,000 "
20	13 "	"			OK. 251,000 "
30	10 "	"			OK. 220,000 "
40	" "	"			OK. " "
50	9 "	"			OK. 209,000 "
60	" "	"			OK. " "

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____

Authorized by _____

WESTERN TESTING CO., INC.

Pressure Data

Date: 8-17 Test Ticket No. 16382
 Recorder No. 2607 Capacity 4150 Location 4347 Ft.
 Clock No. --- Elevation 1592 KB Well Temperature 121 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2283</u> P.S.I.		<u>2:45 P</u>	
B First Initial Flow Pressure	<u>159</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>159</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>69</u> Mins.
D Initial Closed-in Pressure	<u>1263</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>176</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>183</u> P.S.I.			
G Final Closed-in Pressure	<u>1255</u> P.S.I.			
H Final Hydrostatic Mud	<u>2233</u> P.S.I.			

PRESSURE BREAKDOWN

<p>First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Initial Shut-In Breakdown: <u>23</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Second Flow Pressure Breakdown: <u>11</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.</p>	<p>Final Shut-In Breakdown: <u>30</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.</p>
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Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>159</u>	0	<u>159</u>	0	<u>176</u>	0	<u>183</u>
P 2 5	}	3	<u>218</u>	5	}	3	<u>723</u>
P 3 10		6	<u>597</u>	10		6	<u>896</u>
P 4 15		9	<u>814</u>	15		9	<u>983</u>
P 5 20		12	<u>951</u>	20		12	<u>1039</u>
P 6 25		15	<u>1039</u>	25		15	<u>1075</u>
P 7 30	<u>159</u>	18	<u>1096</u>	30	}	18	<u>1096</u>
P 8 39	}	21	<u>1132</u>	35		21	<u>1116</u>
P 9 40		24	<u>1149</u>	40		24	<u>1135</u>
P10 45		27	<u>1167</u>	45		27	<u>1150</u>
P11 50		30	<u>1184</u>	50		30	<u>1164</u>
P12 55		33	<u>1195</u>	55	33	<u>1175</u>	
P13 60		36	<u>1206</u>	60	36	<u>1183</u>	
P14		39	<u>1216</u>	65	39	<u>1191</u>	
P15		42	<u>1224</u>	70	42	<u>1200</u>	
P16		45	<u>1230</u>	75	45	<u>1205</u>	
P17		48	<u>1236</u>	80	48	<u>1210</u>	
P18	51	<u>1242</u>	85	51	<u>1215</u>		
P19	54	<u>1247</u>	90	54	<u>1220</u>		
P20	57	<u>1252</u>		57	<u>1225</u>		
	60	<u>1255</u>		60	<u>1230</u>		

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WESTERN TESTING CO., INC.
Pressure Data

Test Ticket No. 16382

Date _____ Recorder No. _____ Capacity _____ Location _____ Ft.
Clock No. _____ Elevation _____ Well Temperature _____ °F

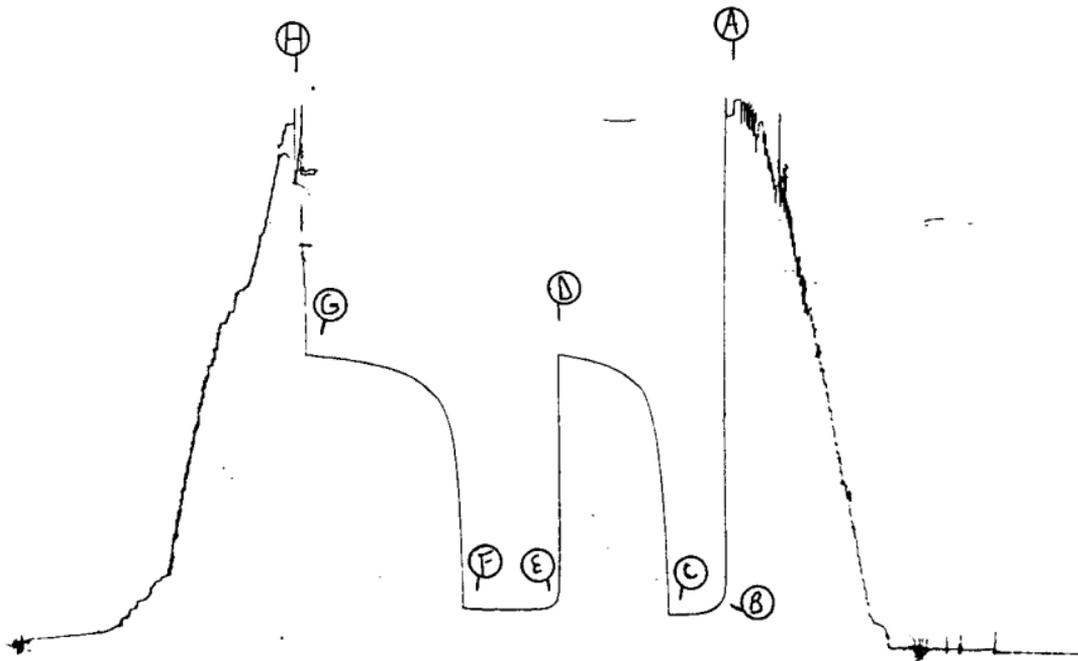
Point	Pressure	Open Tool	Time Given	Time Computed
A	Initial Hydrostatic Mud _____ P.S.I.	_____	_____ M	_____
B	First Initial Flow Pressure _____ P.S.I.	First Flow Pressure _____	_____ Mins.	_____ Mins.
C	First Final Flow Pressure _____ P.S.I.	Initial Closed-in Pressure _____	_____ Mins.	_____ Mins.
D	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

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
	Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.	Breakdown: _____ Inc. of _____ mins. and a final inc. of _____ Min.
	Press.	Point Minutes	Point Minutes	Point Minutes
P 1		63		63
P 2		66		66
P 3		69		69
P 4		72		72
P 5		75		75
P 6		78		78
P 7		81		81
P 8		84		84
P 9		87		87
P10		90		90
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

TKT. # 16382

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Company Maraco Oil Company Lease & Well No. #3 Ruth-Stauch
 Elevation 1592 Kelly Bushing Formation Mississippi Effective Pay -- Ft. Ticket No. 16382
 Date 8/17/82 Sec. 34 Twp. 30S Range 7W County Kingman State Kansas
 Test Approved by Gordon W. Keen Western Representative Jim Wondra

Formation Test No. 1 Interval Tested from 4317 ft. to 4358 ft. Total Depth 4358 ft.
 Packer Depth 4312 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4317 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4347 ft. Recorder Number 2607 Cap 4150
 Bottom Recorder Depth (Outside) 4350 ft. Recorder Number 3351 Cap 4000
 Below Straddle Recorder Depth - ft. Recorder Number - Cap -
 Drilling Contractor Reach Drilling Rig #2 Drill Collar Length 250 I. D. 2 1/4 in.
 Mud Type starch Viscosity 43 Weight Pipe Length - I. D. - in.
 Weight 9.2 Water Loss 12.4 cc. Drill Pipe Length 4038 I. D. 3.8 in.
 Chlorides 40,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.
 Jars: Make WTC Serial Number 410 Anchor Length 41 ft. Size 5 1/2 OD in.
 Did Well Flow? Yes 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. Gas to surface in seven minutes on pre-flow.
See attached sheet for gas measurements.

Recovered 120 ft. of oil and gas cut mud
 Recovered 180 ft. of heavy oil and gas cut mud (25% oil)
 Recovered 120 ft. of oily water
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 2:45 A.M. Time Started Off Bottom 6:45 P.M. Maximum Temperature 121°
 Initial Hydrostatic Pressure (A) 2283 P.S.I.
 Initial Flow Period Minutes 30 (B) 159 P.S.I. to (C) 159 P.S.I.
 Initial Closed In Period Minutes 69 (D) 1263 P.S.I.
 Final Flow Period Minutes 55 (E) 176 P.S.I. to (F) 183 P.S.I.
 Final Closed In Period Minutes 90 (G) 1255 P.S.I.
 Final Hydrostatic Pressure (H) 2233 P.S.I.

GAS FLOW REPORT

Date 8/17/82 Ticket 16382 Company Maraco Oil Company
 Well Name and No. #3 Ruth-Stauch Dst No. 1 Interval Tested 4317'-4358'
 County Kingman State Kansas Sec. 34 Twp. 30S Rg. 7W

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
Gas to surface in seven minutes. PRE FLOW					
10 min.		8" of water		1" orifice	73,100 CFPD
20 min.		5.5 " of water		1" orifice	60,500 CFPD
30 min.		12" of water		1" orifice	89,800 CFPD

SECOND FLOW					
5 min.		20" of water		1½" orifice	311,000 CFPD
10 min.		16" of water		1½" orifice	278,000 CFPD
20 min.		13" of water		1½" orifice	251,000 CFPD
30 min.		10" of water		1½" orifice	220,000 CFPD
40 min.		10" of water		1½" orifice	220,000 CFPD
50 min.		9" of water		1½" orifice	209,000 CFPD
60 min.		9" of water		1½" orifice	209,000 CFPD

GAS BOTTLE

Serial No. ---- Date Bottle Filled ---- Date to be Invoiced 8/17/82

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME Maraco Oil Company
 Authorized by Jim Wondra

WESTERN TESTING CO., INC.
Pressure Data -

Date 8/17/82 Test Ticket No. 16382
 Recorder No. 2607 Capacity 4150 Location 4347 Ft.
 Clock No. -- Elevation 1592 Kelly Bushing Well Temperature 121 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2283</u>	P.S.I.	<u>2:45P</u>	<u>M</u>
B First Initial Flow Pressure	<u>159</u>	P.S.I.	<u>30</u>	<u>Mins. 30</u>
C First Final Flow Pressure	<u>159</u>	P.S.I.	<u>60</u>	<u>Mins. 60</u>
D Initial Closed-in Pressure	<u>1263</u>	P.S.I.	<u>60</u>	<u>Mins. 55</u>
E Second Initial Flow Pressure	<u>176</u>	P.S.I.	<u>90</u>	<u>Mins. 90</u>
F Second Final Flow Pressure	<u>183</u>	P.S.I.		
G Final Closed-in Pressure	<u>1255</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2233</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Initial Shut-In Breakdown: <u>23</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Second Flow Pressure Breakdown: <u>11</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Final Shut-In Breakdown: <u>30</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
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Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>0</u>	<u>0</u>	<u>159</u>	<u>0</u>	<u>159</u>	<u>0</u>	<u>183</u>
P 2	<u>5</u>	<u>3</u>	<u>159</u>	<u>3</u>	<u>218</u>	<u>3</u>	<u>723</u>
P 3	<u>10</u>	<u>6</u>	<u>159</u>	<u>6</u>	<u>597</u>	<u>6</u>	<u>896</u>
P 4	<u>15</u>	<u>9</u>		<u>9</u>	<u>814</u>	<u>9</u>	<u>983</u>
P 5	<u>20</u>	<u>12</u>		<u>12</u>	<u>951</u>	<u>12</u>	<u>1039</u>
P 6	<u>25</u>	<u>15</u>		<u>15</u>	<u>1039</u>	<u>15</u>	<u>1075</u>
P 7	<u>30</u>	<u>18</u>		<u>18</u>	<u>1096</u>	<u>18</u>	<u>1096</u>
P 8		<u>21</u>		<u>21</u>	<u>1132</u>	<u>21</u>	<u>1116</u>
P 9		<u>24</u>		<u>24</u>	<u>1149</u>	<u>24</u>	<u>1135</u>
P10		<u>27</u>		<u>27</u>	<u>1167</u>	<u>27</u>	<u>1140</u>
P11		<u>30</u>		<u>30</u>	<u>1184</u>	<u>30</u>	<u>1164</u>
P12		<u>33</u>		<u>33</u>	<u>1195</u>	<u>33</u>	<u>1175</u>
P13		<u>36</u>		<u>36</u>	<u>1206</u>	<u>36</u>	<u>1183</u>
P14		<u>39</u>		<u>39</u>	<u>1216</u>	<u>39</u>	<u>1191</u>
P15		<u>42</u>		<u>42</u>	<u>1224</u>	<u>42</u>	<u>1200</u>
P16		<u>45</u>		<u>45</u>	<u>1230</u>	<u>45</u>	<u>1205</u>
P17		<u>48</u>		<u>48</u>	<u>1236</u>	<u>48</u>	<u>1210</u>
P18		<u>51</u>		<u>51</u>	<u>1242</u>	<u>51</u>	<u>1215</u>
P19		<u>54</u>		<u>54</u>	<u>1247</u>	<u>54</u>	<u>1220</u>
P20		<u>57</u>		<u>57</u>	<u>1252</u>	<u>57</u>	<u>1225</u>
		<u>60</u>		<u>60</u>	<u>1255</u>	<u>60</u>	<u>1230</u>

WESTERN TESTING CO., INC.
Pressure Data

Date 8/17/82 Recorder No. 2607 Capacity 4150 Test Ticket No. 16382
 Location 4347 Ft. Elevation 1592 Kelly Bushing Well Temperature 121 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2283</u> P.S.I.	Open Tool	<u>2:45P</u>	<u>M</u>
B First Initial Flow Pressure	<u>159</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>159</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D Initial Closed-in Pressure	<u>1263</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>176</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>183</u> P.S.I.			
G Final Closed-in Pressure	<u>1255</u> P.S.I.			
H Final Hydrostatic Mud	<u>2233</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Initial Shut-In Breakdown: <u>23</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Second Flow Pressure Breakdown: <u>11</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Final Shut-In Breakdown: <u>30</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
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Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1		63	1259			63	1234
P 2		66	1263			66	1236
P 3		69	1263			69	1238
P 4						72	1240
P 5						75	1242
P 6						78	1244
P 7						81	1246
P 8						84	1248
P 9						87	1253
P10						90	1255
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							