

Company Energy Exploration, Inc. Lease & Well No. Essmiller #1  
 Elevation - Formation - Effective Pay - Ft. Ticket No. 9827  
 Date 3/2/81 Sec. 36 Twp. 19S Range 14W County Barton State Kansas  
 Test Approved by Curtis E Carey Western Representative Ray Schwager - Toby Halfhil

Formation Test No. 1 Interval Tested from 3317 ft. to 3345 ft. Total Depth 3345 ft.  
 Packer Depth 3312 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
 Packer Depth 3317 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3319 ft. Recorder Number 13269 Cap. 4375  
 Bottom Recorder Depth (Outside) 3322 ft. Recorder Number 13270 Cap. 4375  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length - I. D. - in.  
 Mud Type Starch Viscosity 36 Weight Pipe Length 317 I. D. 2.7 in.  
 Weight 10.0 Water Loss 17.2 cc. Drill Pipe Length 2974 I. D. 3.8 in.  
 Chlorides 88,000 P.P.M. Test Tool Length 26 ft. Tool Size 4 1/2 in.  
 Jars: Make - Serial Number - Anchor Length 28 ft. Size 5 1/2 in.  
 Did Well Flow? - Reversed Out - Surface Choke Size 5/8 in. Bottom Choke Size 5/8 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

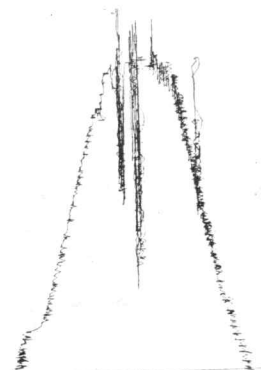
Blow: \_\_\_\_\_  
 \_\_\_\_\_  
 Recovered 90 ft. of mud  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Remarks: MISRUN - NO PRESSURES AVAILABLE

Time Set Packer(s)	<u>-</u>	A.M. P.M.	Time Started Off Bottom	<u>-</u>	A.M. P.M.	Maximum Temperature	<u>-</u>
Initial Hydrostatic Pressure	(A)					P.S.I.	
Initial Flow Period	Minutes		(B)			P.S.I. to (C)	P.S.I.
Initial Closed In Period	Minutes		(D)			P.S.I.	
Final Flow Period	Minutes		(E)			P.S.I. to (F)	P.S.I.
Final Closed In Period	Minutes		(G)			P.S.I.	
Final Hydrostatic Pressure	(H)					P.S.I.	

TKT # 9827

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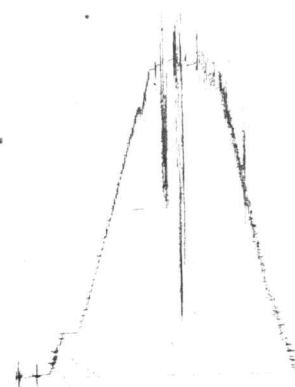
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TKT # 9827

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13269



Company Energy Exploration, Inc. Lease & Well No. Essmiller #1  
 Elevation - Formation - Effective Pay - Ft. Ticket No. 9828  
 Date 3/2/81 Sec. 36 Twp 19S Range 14W County Barton State Kansas  
 Test Approved by Curtis E Carey Western Representative Ray Schwager - Toby Halfhil

Formation Test No. 2 Interval Tested from 3317 ft. to 3345 ft. Total Depth 3345 ft.  
 Packer Depth 3312 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
 Packer Depth 3317 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3319 ft. Recorder Number 13269 Cap. 4375  
 Bottom Recorder Depth (Outside) 3322 ft. Recorder Number 13270 Cap. 4375  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length - I. D. - in.  
 Mud Type Starch Viscosity 45 Weight Pipe Length 317 I. D. 2.7 in.  
 Weight 10.0 Water Loss 17.2 cc. Drill Pipe Length 2974 I. D. 3.8 in.  
 Chlorides 88,000 P.P.M. Test Tool Length 26 ft. Tool Size 4 1/2 in.  
 Jars: Make - Serial Number - Anchor Length 28 ft. Size 5 1/2 in.  
 Did Well Flow? No Reversed Out No Surface Choke Size 5/8 in. Bottom Choke Size 5/8 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Fair blow building to strong blow on initial flow period. Strong blow throughout final flow period.

Recovered 2520 ft. of gas in pipe 10' gassy oil top of tool  
 Recovered 60 ft. of slightly oil cut gassy mud 10% mud; 86% oil; 4% gas  
 Recovered 30 ft. of water cut gassy mud  
 Recovered 60 ft. of heavy oil cut gassy mud  
 Recovered 170 ft. of frothy oil - 4% gas; 20% mud; 76% oil  
 Remarks: Slid tool approx 10' to bottom.

Time Set Packer(s) 10:15 ~~A.M.~~ P.M. Time Started Off Bottom 2:15 ~~A.M.~~ P.M. Maximum Temperature 99  
 Initial Hydrostatic Pressure ..... (A) 1771 P.S.I.  
 Initial Flow Period ..... Minutes 60 (B) 84 P.S.I. to (C) 123 P.S.I.  
 Initial Closed In Period ..... Minutes 57 (D) 1133 P.S.I.  
 Final Flow Period ..... Minutes 55 (E) 137 P.S.I. to (F) 165 P.S.I.  
 Final Closed In Period ..... Minutes 57 (G) 1081 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1771 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

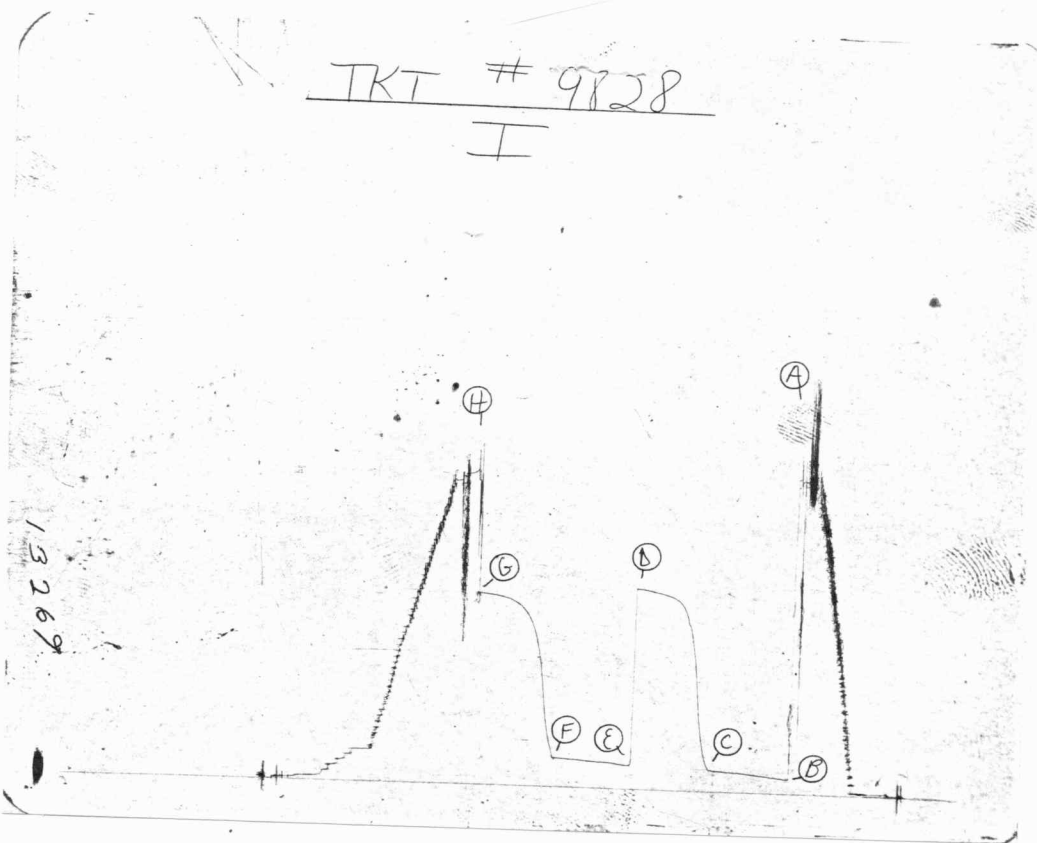
Date 3/2/81 Test Ticket No. 9828  
 Recorder No. 13269 Capacity 4375 Location 3319 Ft.  
 Clock No. - Elevation -- Well Temperature 99° °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1771</u>	P.S.I.	<u>10:15P</u> M	
B First Initial Flow Pressure	<u>84</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
C First Final Flow Pressure	<u>123</u>	P.S.I.	<u>60</u> Mins.	<u>57</u> Mins.
D Initial Closed-in Pressure	<u>1133</u>	P.S.I.	<u>60</u> Mins.	<u>55</u> Mins.
E Second Initial Flow Pressure	<u>137</u>	P.S.I.	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>165</u>	P.S.I.		
G Final Closed-in Pressure	<u>1081</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1771</u>	P.S.I.		

### PRESSURE BREAKDOWN

Point Mins.	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 <u>0</u>	<u>84</u>	<u>0</u>	<u>123</u>	<u>0</u>	<u>137</u>	<u>0</u>	<u>165</u>	
P 2 <u>5</u>	<u>87</u>	<u>3</u>	<u>165</u>	<u>5</u>	<u>138</u>	<u>3</u>	<u>262</u>	
P 3 <u>10</u>	<u>90</u>	<u>6</u>	<u>284</u>	<u>10</u>	<u>143</u>	<u>6</u>	<u>394</u>	
P 4 <u>15</u>	<u>96</u>	<u>9</u>	<u>469</u>	<u>15</u>	<u>149</u>	<u>9</u>	<u>589</u>	
P 5 <u>20</u>	<u>99</u>	<u>12</u>	<u>739</u>	<u>20</u>	<u>151</u>	<u>12</u>	<u>774</u>	
P 6 <u>25</u>	<u>104</u>	<u>15</u>	<u>891</u>	<u>25</u>	<u>152</u>	<u>15</u>	<u>865</u>	
P 7 <u>30</u>	<u>108</u>	<u>18</u>	<u>976</u>	<u>30</u>	<u>153</u>	<u>18</u>	<u>930</u>	
P 8 <u>35</u>	<u>111</u>	<u>21</u>	<u>1031</u>	<u>35</u>	<u>156</u>	<u>21</u>	<u>973</u>	
P 9 <u>40</u>	<u>115</u>	<u>24</u>	<u>1061</u>	<u>40</u>	<u>159</u>	<u>24</u>	<u>1002</u>	
P10 <u>45</u>	<u>117</u>	<u>27</u>	<u>1081</u>	<u>45</u>	<u>162</u>	<u>27</u>	<u>1023</u>	
P11 <u>50</u>	<u>120</u>	<u>30</u>	<u>1090</u>	<u>50</u>	<u>163</u>	<u>30</u>	<u>1037</u>	
P12 <u>55</u>	<u>122</u>	<u>33</u>	<u>1098</u>	<u>55</u>	<u>165</u>	<u>33</u>	<u>1050</u>	
P13 <u>60</u>	<u>123</u>	<u>36</u>	<u>1105</u>			<u>36</u>	<u>1059</u>	
P14		<u>39</u>	<u>1111</u>			<u>39</u>	<u>1064</u>	
P15		<u>42</u>	<u>1116</u>			<u>42</u>	<u>1070</u>	
P16		<u>45</u>	<u>1121</u>			<u>45</u>	<u>1074</u>	
P17		<u>48</u>	<u>1125</u>			<u>48</u>	<u>1076</u>	
P18		<u>51</u>	<u>1129</u>			<u>51</u>	<u>1078</u>	
P19		<u>54</u>	<u>1132</u>			<u>54</u>	<u>1080</u>	
P20		<u>57</u>	<u>1133</u>			<u>57</u>	<u>1081</u>	

TKT # 9828  
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Company Energy Exploration, Inc. Lease & Well No. Essmiller #1  
 Elevation - Formation - Effective Pay - Ft. Ticket No. 9829  
 Date 3/4/81 Sec. 36 Twp. 19S Range 14W County Barton State Kansas  
 Test Approved by Curtis E Carey Western Representative Ray Schwager - Toby Halfhil

Formation Test No. 3 Interval Tested from 3485 ft. to 3525 ft. Total Depth 3525 ft.  
 Packer Depth 3480 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.  
 Packer Depth 3485 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 3487 ft. Recorder Number 13269 Cap. 4375  
 Bottom Recorder Depth (Outside) 3490 ft. Recorder Number 13270 Cap. 4375  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Duke Drilling Rig #2 Drill Collar Length - I. D. - in.  
 Mud Type Starch Viscosity 46 Weight Pipe Length 317 I. D. 2.7 in.  
 Weight 9.9 Water Loss 14.0 cc. Drill Pipe Length 3142 I. D. 3.8 in.  
 Chlorides 67,000 P.P.M. Test Tool Length 26 ft. Tool Size 4.5 in.  
 Jars: Make - Serial Number - Anchor Length 40 ft. Size 5.5 in.  
 Did Well Flow? No Reversed Out No Surface Choke Size 5/8 in. Bottom Choke Size 5/8 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Initial flow period fair blow building to strong blow - gas to surface. Final flow period strong blow - gas to surface. See attached sheet for gas measurements.

Recovered 150 ft. of heavy gas cut mud - slight show of oil  
 Recovered 360 ft. of gas cut water  
 Recovered          ft. of           
 Recovered          ft. of           
 Recovered          ft. of         

Remarks:         

Time Set Packer(s) 10:48 ~~A.M.~~ P.M. Time Started Off Bottom 2:48 ~~A.M.~~ P.M. Maximum Temperature 103  
 Initial Hydrostatic Pressure ..... (A) 1858 P.S.I.  
 Initial Flow Period ..... Minutes 60 (B) 55 P.S.I. to (C) 129 P.S.I.  
 Initial Closed In Period ..... Minutes 60 (D) 1067 P.S.I.  
 Final Flow Period ..... Minutes 60 (E) 126 P.S.I. to (F) 187 P.S.I.  
 Final Closed In Period ..... Minutes 60 (G) 1062 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1854 P.S.I.

## GAS FLOW REPORT

Date 3/4/81 Ticket 9829 Company Energy Exploration, Inc.  
 Well Name and No. Esmiller #1 Dst No. 3 Interval Tested 3485-3525  
 County Barton State Kansas Sec. 36 Twp. 19S Rg. 14W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	P.S.I. on U-Tube Tester	Description of Flow
<b>PRE FLOW</b>						
Gas to surface 30 minutes						
	40 min.	16 PSIG	1/4" Orifice			20,700 C.F.P.D.
	60 Min	4.5" water	1/4" Orifice			3,280 C.F.P.D.

### SECOND FLOW

	5 Min	10" water	1/4" Orifice			5,320 C.F.P.D.
	20 Min	7" water	1/4" Orifice			4,450 C.F.P.D.
	35 Min	6" water	1/4" Orifice			4,120 C.F.P.D.
	50 Min	5" water	1/4" Orifice			3,710 C.F.P.D.
	60 Min	14" water	1/4" Orifice			6,330 C.F.P.D.

### GAS BOTTLE

Serial No.            - Date Bottle Filled            - Date to be Invoiced 3/4/81

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 Energy Exploration, Inc.  
 Authorized by Curtis E. Carey

# WESTERN TESTING CO., INC.

## Pressure Data

Date 3/4/81 Test Ticket No. 9829  
 Recorder No. 13269 Capacity 4375 Location 3487 Ft.  
 Clock No. - Elevation ----- Well Temperature 103 °F

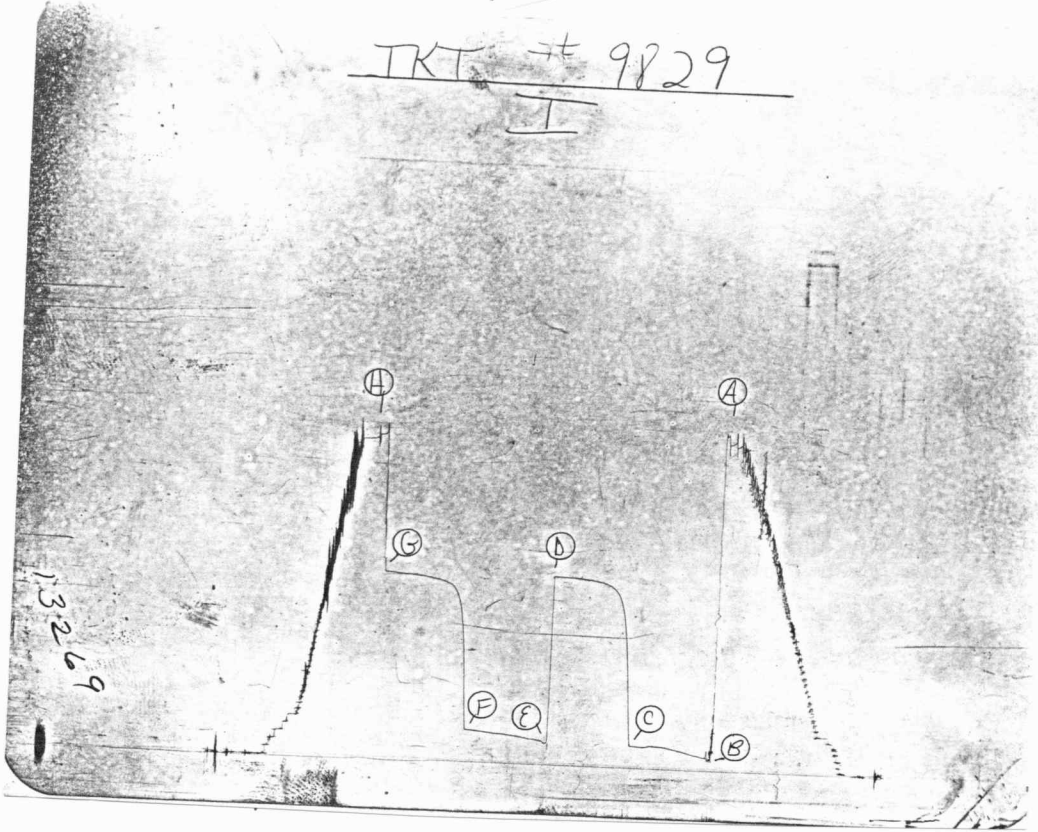
Point	Pressure		Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	1858	P.S.I.		10:48A	M
B First Initial Flow Pressure	55	P.S.I.	First Flow Pressure	60	Mins. 60 Mins.
C First Final Flow Pressure	129	P.S.I.	Initial Closed-in Pressure	60	Mins. 60 Mins.
D Initial Closed-in Pressure	1067	P.S.I.	Second Flow Pressure	60	Mins. 60 Mins.
E Second Initial Flow Pressure	126	P.S.I.	Final Closed-in Pressure	60	Mins. 60 Mins.
F Second Final Flow Pressure	187	P.S.I.			
G Final Closed-in Pressure	1062	P.S.I.			
H Final Hydrostatic Mud	1854	P.S.I.			

### PRESSURE BREAKDOWN

<b>First Flow Pressure</b> Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<b>Initial Shut-In</b> Breakdown: <u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	<b>Second Flow Pressure</b> Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	<b>Final Shut-In</b> Breakdown: <u>20</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
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Point	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Mins.	Press.	Minutes	Press.	Minutes	Press.	Minutes	Press.
P 1	0	55	0	129	0	126	0	187
P 2	5	77	3	522	5	140	3	695
P 3	10	84	6	820	10	147	6	880
P 4	15	92	9	935	15	151	9	962
P 5	20	103	12	987	20	159	12	996
P 6	25	110	15	1010	25	164	15	1008
P 7	30	119	18	1025	30	167	18	1018
P 8	35	127	21	1036	35	170	21	1024
P 9	40	131	24	1042	40	174	24	1030
P10	45	131	27	1045	45	178	27	1034
P11	50	125	30	1048	50	182	30	1038
P12	55	127	33	1050	55	184	33	1042
P13	60	129	36	1053	60	187	36	1046
P14			39	1056			39	1048
P15			42	1059			42	1050
P16			45	1061			45	1052
P17			48	1063			48	1054
P18			51	1064			51	1056
P19			54	1065			54	1058
P20			57	1066			57	1060
			60	1067			60	1062

TKT # 9829  
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