

Company Aurora, Inc.

Lease & Well No. Fairchild #1

Elevation -- Formation Mississippi

Effective Pay - Ft. Ticket No. 10452

Date 4/10/81 Sec. 13 Twp. 28S Range

County 8W State Kingman Kansas

Test Approved by Terry McLeod

Western Representative Stuart Stover

Formation Test No. 1 Interval Tested from 4038 ft. to 4046 ft. Total Depth 4046 ft.

Packer Depth 4033 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4038 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4042 ft. Recorder Number 11018 Cap. 4500

Bottom Recorder Depth (Outside) 4046 ft. Recorder Number HT 44 Cap. -

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

Drilling Contractor H-30, Inc. Drlg. Rig #3 Drill Collar Length 180 I. D. 2 1/4 in.

Mud Type drispac Viscosity 44 Weight Pipe Length - I. D. - in.

Weight 9.2 Water Loss 12.0 cc. Drill Pipe Length - I. D. - in.

Chlorides 20,000 P.P.M. Test Tool Length 23 ft. Tool Size 3 1/2 in.

Jars: Make - Serial Number - Anchor Length 8 ft. Size 4 1/2 in.

Did Well Flow? - Reversed Out - Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.

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

Blow: --

Recovered 200 ft. of drilling mud

Recovered - ft. of -

Remarks: MISRUN PACKER FAILURE

Time Set Packer(s) 3:15 A.M. P.M. Time Started Off Bottom 3:30 A.M. P.M. Maximum Temperature ?

Initial Hydrostatic Pressure (A) 2016 P.S.I.

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

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

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

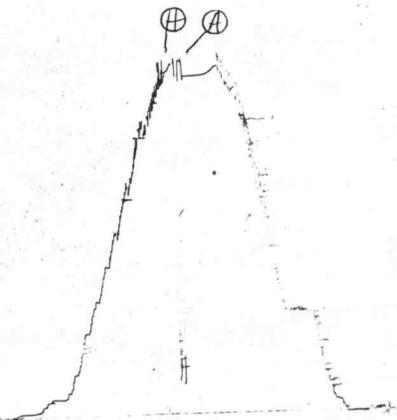
Final Closed In Period (G) - Minutes P.S.I.

Final Hydrostatic Pressure (H) 2002 P.S.I.

TKT # 10452

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Company Aurora, Inc. Lease & Well No. Fairchild #1
 Elevation - Formation Mississippi Effective Pay - Ft. Ticket No. 10453
 Date 4/10/81 Sec. 13 Twp. 28S Range 8W County Kingman State Kansas
 Test Approved by Terry McLeod Western Representative Stuart Stover

Formation Test No. 2 Interval Tested from 4042 ft. to 4046 ft. Total Depth 4046 ft.
 Packer Depth 4037 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4042 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4046 ft. Recorder Number 11018 Cap. 4425
 Bottom Recorder Depth (Outside) - ft. Recorder Number - Cap. -
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor H-30, Inc. Drlg. Rig #3 Drill Collar Length 180 I. D. 2 1/4 in.
 Mud Type drispac Viscosity 44 Weight Pipe Length - I. D. - in.
 Weight 9.2 Water Loss 12.0 cc. Drill Pipe Length 3839 I. D. 4.0 in.
 Chlorides 20,000 P.P.M. Test Tool Length 23 ft. Tool Size 3 1/2 in.
 Jars: Make - Serial Number - Anchor Length 4 ft. Size 4 1/2 in.
 Did Well Flow? - Reversed Out - Surface Choke Size 1/2 Bottom Choke Size 1/2 in.
 Main Hole Size 7 7/8 in. Tool Joint Size - in.

Blow: Fair blow.

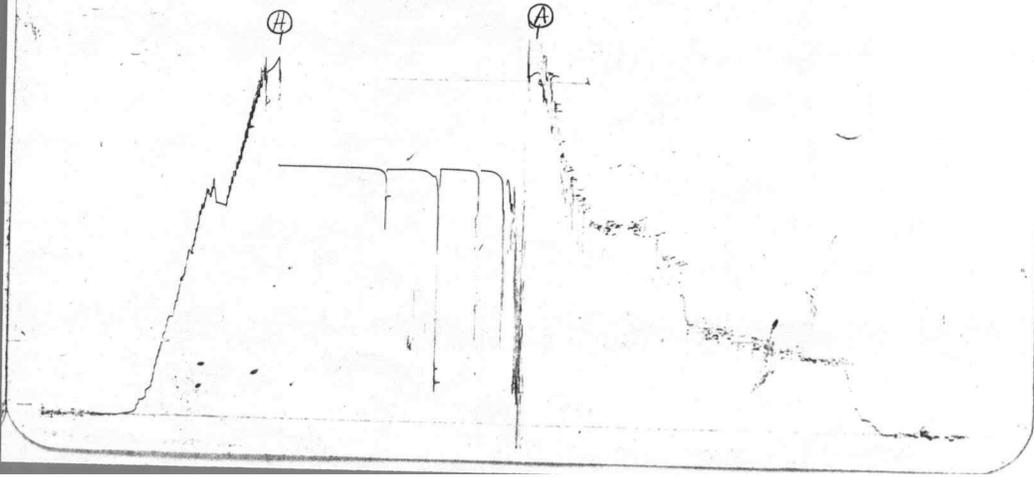
Recovered 120 ft. of drilling mud
 Recovered - ft. of -
 Recovered - ft. of -
 Recovered - ft. of -
 Recovered - ft. of -

Remarks: MISRUN PLUGGED ANCHOR

Time Set Packer(s) 7:10 ~~AM~~ P.M. Time Started Off Bottom 10:10 ~~AM~~ P.M. Maximum Temperature ?
 Initial Hydrostatic Pressure 2013 (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 1969 (H) P.S.I.

TKT # 10453 11018-10453

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Company Aurora, Inc. Lease & Well No. Fairchild #1
 Elevation --- Formation Mississippi Effective Pay - Ft. Ticket No. 1045
 Date 4/11/81 Sec. 13 Twp. 28S Range 8W County Kingman State Kansas
 Test Approved by William R. Shingler Western Representative Stuart Stover

Formation Test No. 3 Interval Tested from 4046 ft. to 4052 ft. Total Depth 4052 ft.
 Packer Depth 4041 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4046 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4052 ft. Recorder Number 11018 Cap. 4425
 Bottom Recorder Depth (Outside) - ft. Recorder Number - Cap. -
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor H-30, Inc. Drlg. Rig #3 Drill Collar Length 180 I. D. 2 1/4 in.
 Mud Type drispac Viscosity 48 Weight Pipe Length - I. D. - in.
 Weight 9.2 Water Loss 12.0 cc. Drill Pipe Length 3843 I. D. 4.0 in.
 Chlorides 21,000 P.P.M. Test Tool Length 23 ft. Tool Size 3 1/2 in.
 Jars: Make - Serial Number - Anchor Length 6 ft. Size 4 1/2 in.
 Did Well Flow? - Reversed Out - Surface Choke Size 1/2 in. Bottom Choke Size 1/2 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 XH in.

Blow: Gas to surface in ten minutes. See attached sheet for gas measurements.

Recovered 180 ft. of drilling mud
 Recovered 120 ft. of muddy water Chlorides 84,000 ppm
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks: Slowly lost mud for the first five minutes; then sealed off.

Time Set Packer(s) 10:00 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 12:30 ~~A.M.~~ ^{P.M.} Maximum Temperature ?
 Initial Hydrostatic Pressure (A) 2055 P.S.I.
 Initial Flow Period Minutes 30 (B) 147 P.S.I. to (C) 142 P.S.I.
 Initial Closed In Period Minutes 33 (D) 1425 P.S.I.
 Final Flow Period Minutes 30 (E) 173 P.S.I. to (F) 160 P.S.I.
 Final Closed In Period Minutes 63 (G) 1426 P.S.I.
 Final Hydrostatic Pressure (H) 2055 P.S.I.

GAS FLOW REPORT

Date 4/11/81 Ticket 10454 Company Aurora, Inc.
 Well Name and No. Fairchild #1 Dst No. 3 Interval Tested 4046'-4052'
 County Kingman State Kansas Sec. 13 Twp. 28S Rg. 8W

Time Gauge Pre-Flow	Time Gauge in Min.	P.S.I. on Meria 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
PRE FLOW						
	10 min.	4.0 PSIG		1" orifice		283,000 CFPD
	20 min.	4.5 PSIG		1" orifice		301,000 CFPD
	30 min.	5.5 PSIG		1" orifice		336,000 CFPD
SECOND FLOW						
	10 min.	7.0 PSIG		1" orifice		385,000 CFPD
	20 min.	7.5 PSIG		1" orifice		400,000 CFPD
	30 min.	7.5 PSIG		1" orifice		400,000 CFPD

GAS BOTTLE

Serial No. -- Date Bottle Filled -- ---- Date to be Invoiced 4/11/81

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 Aurora, Inc.
 Authorized by W. R. Shingler

WESTERN TESTING CO., INC.

Pressure Data

Date 4/11/81 Test Ticket No. 10454
 Recorder No. 11018 Capacity 4425 Location 4052 Ft.
 Clock No. _____ Elevation - Well Temperature _____ °F

Point	Pressure			Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2055</u>	P.S.I.	Open Tool	<u>10:00A</u> M	
B First Initial Flow Pressure	<u>147</u>	P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>142</u>	P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>1425</u>	P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>173</u>	P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
F Second Final Flow Pressure	<u>160</u>	P.S.I.			
G Final Closed-in Pressure	<u>1426</u>	P.S.I.			
H Final Hydrostatic Mud	<u>2055</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.
	<u>6</u>		<u>11</u>		<u>6</u>		<u>21</u>	
	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.							
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1 <u>0</u>	<u>147</u>	<u>0</u>	<u>142</u>	<u>0</u>	<u>173</u>	<u>0</u>	<u>160</u>	
P 2 <u>5</u>	<u>156</u>	<u>3</u>	<u>845</u>	<u>5</u>	<u>162</u>	<u>3</u>	<u>1070</u>	
P 3 <u>10</u>	<u>139</u>	<u>6</u>	<u>1302</u>	<u>10</u>	<u>160</u>	<u>6</u>	<u>1271</u>	
P 4 <u>15</u>	<u>136</u>	<u>9</u>	<u>1355</u>	<u>15</u>	<u>160</u>	<u>9</u>	<u>1324</u>	
P 5 <u>20</u>	<u>136</u>	<u>12</u>	<u>1379</u>	<u>20</u>	<u>160</u>	<u>12</u>	<u>1350</u>	
P 6 <u>25</u>	<u>140</u>	<u>15</u>	<u>1394</u>	<u>25</u>	<u>160</u>	<u>15</u>	<u>1368</u>	
P 7 <u>30</u>	<u>142</u>	<u>18</u>	<u>1405</u>	<u>30</u>	<u>160</u>	<u>18</u>	<u>1381</u>	
P 8 _____		<u>21</u>	<u>1412</u>			<u>21</u>	<u>1390</u>	
P 9 _____		<u>24</u>	<u>1416</u>			<u>24</u>	<u>1396</u>	
P10 _____		<u>27</u>	<u>1422</u>			<u>27</u>	<u>1403</u>	
P11 _____		<u>30</u>	<u>1424</u>			<u>30</u>	<u>1407</u>	
P12 _____		<u>33</u>	<u>1425</u>			<u>33</u>	<u>1409</u>	
P13 _____						<u>36</u>	<u>1411</u>	
P14 _____						<u>39</u>	<u>1413</u>	
P15 _____						<u>42</u>	<u>1416</u>	
P16 _____						<u>45</u>	<u>1419</u>	
P17 _____						<u>48</u>	<u>1421</u>	
P18 _____						<u>51</u>	<u>1423</u>	
P19 _____						<u>54</u>	<u>1424</u>	
P20 _____						<u>57</u>	<u>1425</u>	
						<u>60</u>	<u>1426</u>	
						<u>63</u>	<u>1426</u>	

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