



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET NO 7383

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

Elevation 1949 KB Formation Lansing Eff. Pay Ft.

District Great Bend Date 9-13-80 Customer Order No.

COMPANY NAME THE Roxana Corp.

ADDRESS BOX 1162 Great Bend KS 67530

LEASE AND WELL NO. Gagleman B COUNTY BANTON STATE KS Sec. 29 Twp 19S Rge 15W

Mail Invoice To Co. Name Address No. Copies Requested 5

Mail Charts To Co. Name Address No. Copies Requested 5

Formation Test No. 1 Interval Tested from 3430 ft. to 3460 ft. Total Depth 3460 ft.

Packer Depth 3425 ft. Size 6 3/4 in. Packer Depth 3430 ft. Size 6 3/4 in.

Packer Depth ft. Size in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3453 ft. Recorder Number 6077 Cap. 4700

Bottom Recorder Depth (Outside) 3456 ft. Recorder Number 1251 Cap. 4250

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Roco Rig #1 Drill Collar Length I. D. in.

Mud Type Stanch Viscosity 42 Weight Pipe Length 316 I. D. 2.7 in.

Weight 10.4 Water Loss 12.8 cc. Drill Pipe Length 3093 I. D. 3.8 in.

Chlorides 95,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make Serial Number Anchor Length 30 ft. Size 5 1/2 in.

Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: weak Blow Did in 14 min first opening Initial Flow period

NO Blow second opening - Flushed Tool - NO BLOW.

Recovered 5 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time On Location 12:30 P.M. Time Pick Up Tool 1:30 P.M. Time Off Location 6:45 P.M.

Time Set Packer(s) 3:08 P.M. Time Started Off Bottom 4:57 P.M. Maximum Temperature 116

Initial Hydrostatic Pressure (A) 1928 P.S.I.

Initial Flow Period Minutes 30 (B) 49 P.S.I. to (C) 49 P.S.I.

Initial Closed In Period Minutes 30 (D) 465 P.S.I.

Final Flow Period Minutes 17 (E) 61 P.S.I. to (F) 61 P.S.I.

Final Closed In Period Minutes 30 (G) 465 P.S.I.

Final Hydrostatic Pressure (H) 1904 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.

J.C. MUSGROVE

Test Approved By Signature of Customer or his authorized representative

Western Representative Roger Lisenby Thank you

FIELD INVOICE

Open Hole Test \$550.00

Misrun \$

Straddle Test \$

Jars \$

Selective Zone \$

Safety Joint \$

Standby \$

Evaluation \$

Extra Packer \$

Circ. Sub. \$

12 Mileage \$ 9.00

Fluid Sampler \$

Extra Charts \$

Insurance \$ 40.00

TOTAL \$599.00

WESTERN TESTING CO., INC.

Pressure Data

Date 9-13-80

Test Ticket No. 7383

Recorder No. 6077

Capacity 4700

Location 3453 Ft.

Clock No. \_\_\_\_\_ Elevation 1949 KB

Well Temperature 116 °F

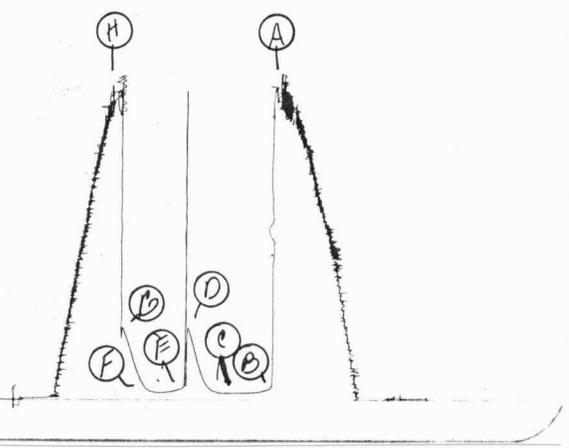
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1899</u>	P.S.I.	<u>3:08</u> P.M.	
B First Initial Flow Pressure	<u>65</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>40</u>	P.S.I.	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>460</u>	P.S.I.	<u>17</u> Mins.	<u>20</u> Mins.
E Second Initial Flow Pressure	<u>75</u>	P.S.I.	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>43</u>	P.S.I.		
G Final Closed-in Pressure	<u>465</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1885</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>4</u> Inc.		Breakdown: <u>9</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>65</u>	<u>0</u>	<u>40</u>	<u>0</u>	<u>75</u>	<u>0</u>	<u>43</u>
P 2 <u>5</u>	<u>60</u>	<u>3</u>	<u>40</u>	<u>5</u>	<u>63</u>	<u>3</u>	<u>45</u>
P 3 <u>10</u>	<u>48</u>	<u>6</u>	<u>43</u>	<u>10</u>	<u>50</u>	<u>6</u>	<u>55</u>
P 4 <u>15</u>	<u>43</u>	<u>9</u>	<u>48</u>	<u>15</u>	<u>45</u>	<u>9</u>	<u>70</u>
P 5 <u>20</u>	<u>38</u>	<u>12</u>	<u>58</u>	<u>20</u>	<u>43</u>	<u>12</u>	<u>100</u>
P 6 <u>25</u>	<u>40</u>	<u>15</u>	<u>68</u>	<u>25</u>		<u>15</u>	<u>158</u>
P 7 <u>30</u>	<u>40</u>	<u>18</u>	<u>105</u>	<u>30</u>		<u>18</u>	<u>228</u>
P 8 <u>35</u>		<u>21</u>	<u>158</u>	<u>35</u>		<u>21</u>	<u>313</u>
P 9 <u>40</u>		<u>24</u>	<u>238</u>	<u>40</u>		<u>24</u>	<u>395</u>
P10 <u>45</u>		<u>27</u>	<u>328</u>	<u>45</u>		<u>27</u>	<u>465</u>
P11 <u>50</u>		<u>30</u>	<u>423</u>	<u>50</u>		<u>30</u>	
P12 <u>55</u>		<u>33</u>	<u>460</u>	<u>55</u>		<u>33</u>	
P13 <u>60</u>		<u>36</u>		<u>60</u>		<u>36</u>	
P14 _____		<u>39</u>		<u>65</u>		<u>39</u>	
P15 _____		<u>42</u>		<u>70</u>		<u>42</u>	
P16 _____		<u>45</u>		<u>75</u>		<u>45</u>	
P17 _____		<u>48</u>		<u>80</u>		<u>48</u>	
P18 _____		<u>51</u>		<u>85</u>		<u>51</u>	
P19 _____		<u>54</u>		<u>90</u>		<u>54</u>	
P20 _____		<u>57</u>				<u>57</u>	
		<u>60</u>				<u>60</u>	

6099

JK# 2383  
I



Company The Roxana Corporation Lease & Well No. Gagleman B  
 Elevation 1949 Kelly Bushing Formation Lansing Effective Pay - Ft. Ticket No. 7383  
 Date 9-13-80 Sec. 29 Twp. 19S Range 15W County Barton State Kansas  
 Test Approved by J C Musgrove Western Representative Roger Lisenby

Formation Test No. 1 Interval Tested from 3430 ft. to 3460 ft. Total Depth 3460 ft.  
 Packer Depth 3425 ft. Size 6 3/4 in. Packer Depth 3430 ft. Size 6 3/4 in.  
 Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 3453 ft. Recorder Number 6077 Cap. 4700  
 Bottom Recorder Depth (Outside) 3456 ft. Recorder Number 1051 Cap. 4250  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Roco Rig #1 Drill Collar Length - I. D. - in.  
 Mud Type Starch Viscosity 42 Weight Pipe Length 316 I. D. 2.7 in.  
 Weight 10.4 Water Loss 12.8 cc. Drill Pipe Length 3093 I. D. 3.8 in.  
 Chlorides 95,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.  
 Jars: Make - Serial Number - Anchor Length 30 ft. Size 5 1/2 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: Weak blow-died in 14 minutes initial flow period. No blow final flow period.

Recovered 5 ft. of mud  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks: \_\_\_\_\_

Time Set Packer(s) 3:08 ~~A.M.~~ P.M. Time Started Off Bottom 4:57 ~~A.M.~~ P.M. Maximum Temperature 116  
 Initial Hydrostatic Pressure ..... (A) 1899 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 65 P.S.I. to (C) 40 P.S.I.  
 Initial Closed In Period ..... Minutes 33 (D) 460 P.S.I.  
 Final Flow Period ..... Minutes 20 (E) 75 P.S.I. to (F) 43 P.S.I.  
 Final Closed In Period ..... Minutes 27 (G) 465 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1885 P.S.I.

# WESTERN TESTING CO., INC.

## Pressure Data

Date 9-13-80 Test Ticket No. 7383  
 Recorder No. 6077 Capacity 4700 Location 3453 Ft.  
 Clock No. ----- Elevation 1949 Kelly Bushing Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1899 P.S.I.	Open Tool	3:08 P M	
B First Initial Flow Pressure	65 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	40 P.S.I.	Initial Closed-in Pressure	30 Mins.	33 Mins.
D Initial Closed-in Pressure	460 P.S.I.	Second Flow Pressure	17 Mins.	20 Mins.
E Second Initial Flow Pressure	75 P.S.I.	Final Closed-in Pressure	30 Mins.	27 Mins.
F Second Final Flow Pressure	43 P.S.I.			
G Final Closed-in Pressure	465 P.S.I.			
H Final Hydrostatic Mud	1885 P.S.I.			

### PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes
P 1 0	65	0	40	0	75	0	43	0
P 2 5	60	3	40	3	63	3	45	3
P 3 10	48	6	43	6	50	6	55	6
P 4 15	43	9	48	9	45	9	70	9
P 5 20	38	12	58	12	43	12	100	12
P 6 25	40	15	68	15		15	158	15
P 7 30	40	18	105	18		18	228	18
P 8		21	158	21		21	313	21
P 9		24	238	24		24	395	24
P10		27	328	27		27	465	27
P11		30	423	30				30
P12		33	460	33				33
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 7384

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

Elevation 1949 KB Formation ARBUCKLE Eff. Pay

COMPANY NAME The Roxana Corporation District Great Bend Date 9-14-80 Customer Order No.

ADDRESS BOX 1162 Great Bend KS 67530

LEASE AND WELL NO. COUNTY Barton STATE KS Sec. 29 Twp 19S Rge 15W

Mail Invoice To Co. Name Address No. Copies Requested 5

Mail Charts To same Address No. Copies Requested 5

Formation Test No. 2 Interval Tested from 3634 ft. to 3645 ft. Total Depth 3645 ft.

Packer Depth 3629 ft. Size 1 3/4 in. Packer Depth 3634 ft. Size 1 3/4 in.

Packer Depth ft. Size in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3638 ft. Recorder Number 4077 Cap. 4700

Bottom Recorder Depth (Outside) 3641 ft. Recorder Number 1051 Cap. 4250

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor RECO RIG #1 Drill Collar Length I. D. in.

Mud Type STANCH Viscosity 37 Weight Pipe Length 346 I. D. 2.17 in.

Weight 10.3 Water Loss 17.6 cc. Drill Pipe Length 3267 I. D. 3.8 in.

Chlorides 88,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.

Jars: Make Serial Number Anchor Length 11 ft. Size 5 1/2 in.

Did Well Flow? Gas Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

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

Blow: GAS TO SURFACE IN 2 MINUTES

Recovered 65 ft. of MUDDY GASSY OIL

Recovered 240 ft. of clean oil (GASSY) 32 Gravity

Recovered 300 ft. of water

Recovered ft. of

Recovered ft. of

Remarks: G

Gas Ticket # 1439

Time On Location 3:30 AM P.M. Time Pick Up Tool 5:00 AM P.M. Time Off Location 11:45 AM P.M.

Time Set Packer(s) 6:06 AM P.M. Time Started Off Bottom 8:08 AM P.M. Maximum Temperature 123

Initial Hydrostatic Pressure (A) 1988 P.S.I.

Initial Flow Period Minutes 30 (B) 220 P.S.I. to (C) 257 P.S.I.

Initial Closed In Period Minutes 30 (D) 1092 P.S.I.

Final Flow Period Minutes 30 (E) 306 P.S.I. to (F) 306 P.S.I.

Final Closed In Period Minutes 30 (G) 1069 P.S.I.

Final Hydrostatic Pressure (H) 1964 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 J.C. Musgrave Signature of Customer or his authorized representative

Western Representative Roger Lisensky Thank you

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test \$550.00, Mileage \$9.00, TOTAL \$559.00.



**GAS FLOW REPORT**

**Nº 1439**

Date 9-14-80 Ticket 7384 Company Roxana  
 Well Name and No. #1 GAGELMAN Dst No. 2 Interval Tested 3434-3445  
 County Barton State KS Sec. 29 Twp. 17 Rg. 15

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
<b>Gas TO SURFACE IN 2 MIN PRE FLOW</b>					
	PSI				Cubic Foot Per Day
10	20	1/2 INCH	—	—	177,000 CFPD
20	44	1/2 INCH	—	—	306,000 CFPD
28	54	1/2 INCH	—	—	357,000 CFPD
					OK

					<b>SECOND FLOW</b>	
					Cubic Foot Per Day	
5min	64 lbs	1/2"	—	—	409,000	CFPD
10min	67 "	1/2"	—	—	424,000	CFPD
15 "	62 "	1/2"	—	—	398,000	CFPD
20	57 "	1/2"	—	—	373,000	CFPD
25	53	1/2"	—	—	352,000	CFPD
30	51	1/2"	—	—	342,000	CFPD
						OK

*(DID NOT WANT GAS BOTTLE)*

**GAS BOTTLE**

Serial No. #106 Date Bottle Filled 9-14-80 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% per month, equal to 12% 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 Roxana

Authorized by [Signature]

WESTERN TESTING CO., INC.

Pressure Data

Date 9-14-80 Test Ticket No. 7384  
 Recorder No. 6077 Capacity 4700 Location 3638 Ft.  
 Clock No. \_\_\_\_\_ Elevation 1949 KB Well Temperature 123 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1995</u>	P.S.I.	<u>6:06 P<sub>M</sub></u>	
B First Initial Flow Pressure	<u>250</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>255</u>	P.S.I.	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>1092</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>343</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>313</u>	P.S.I.		
G Final Closed-in Pressure	<u>1060</u>	P.S.I.		
H Final Hydrostatic Mud	<u>1983</u>	P.S.I.		

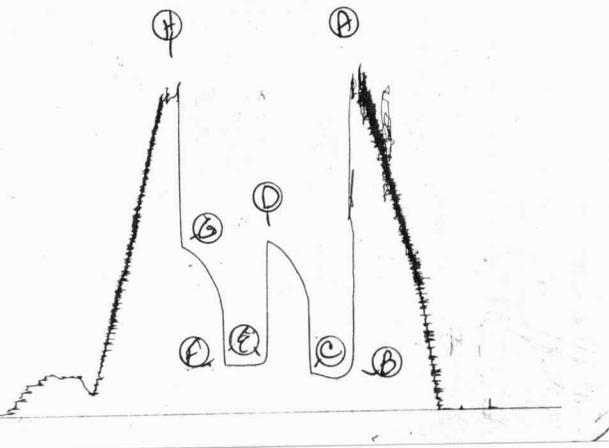
PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:		Breakdown:		Breakdown:		Breakdown:	
	<u>6</u> Inc.		<u>11</u> Inc.		<u>6</u> Inc.		<u>10</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>250</u>	<u>0</u> <u>255</u>	<u>0</u> <u>343</u>	<u>0</u> <u>313</u>	<u>0</u> <u>313</u>	<u>0</u> <u>313</u>	<u>0</u> <u>313</u>	
P 2	<u>5</u> <u>240</u>	<u>3</u> <u>734</u>	<u>5</u> <u>318</u>	<u>3</u> <u>657</u>	<u>5</u> <u>318</u>	<u>3</u> <u>657</u>	<u>3</u> <u>657</u>	
P 3	<u>10</u> <u>220</u>	<u>6</u> <u>800</u>	<u>10</u> <u>313</u>	<u>6</u> <u>773</u>	<u>10</u> <u>313</u>	<u>6</u> <u>773</u>	<u>6</u> <u>773</u>	
P 4	<u>15</u> <u>220</u>	<u>9</u> <u>867</u>	<u>15</u> <u>313</u>	<u>9</u> <u>831</u>	<u>15</u> <u>313</u>	<u>9</u> <u>831</u>	<u>9</u> <u>831</u>	
P 5	<u>20</u> <u>235</u>	<u>12</u> <u>906</u>	<u>20</u> <u>313</u>	<u>12</u> <u>882</u>	<u>20</u> <u>313</u>	<u>12</u> <u>882</u>	<u>12</u> <u>882</u>	
P 6	<u>25</u> <u>245</u>	<u>15</u> <u>944</u>	<u>25</u> <u>313</u>	<u>15</u> <u>928</u>	<u>25</u> <u>313</u>	<u>15</u> <u>928</u>	<u>15</u> <u>928</u>	
P 7	<u>30</u> <u>255</u>	<u>18</u> <u>983</u>	<u>30</u> <u>313</u>	<u>18</u> <u>961</u>	<u>30</u> <u>313</u>	<u>18</u> <u>961</u>	<u>18</u> <u>961</u>	
P 8	<u>35</u> _____	<u>21</u> <u>1017</u>	<u>35</u> _____	<u>21</u> <u>995</u>	<u>35</u> _____	<u>21</u> <u>995</u>	<u>21</u> <u>995</u>	
P 9	<u>40</u> _____	<u>24</u> <u>1044</u>	<u>40</u> _____	<u>24</u> <u>1014</u>	<u>40</u> _____	<u>24</u> <u>1014</u>	<u>24</u> <u>1014</u>	
P 10	<u>45</u> _____	<u>27</u> <u>1065</u>	<u>45</u> _____	<u>27</u> <u>1034</u>	<u>45</u> _____	<u>27</u> <u>1034</u>	<u>27</u> <u>1034</u>	
P 11	<u>50</u> _____	<u>30</u> <u>1077</u>	<u>50</u> _____	<u>30</u> <u>1060</u>	<u>50</u> _____	<u>30</u> <u>1060</u>	<u>30</u> <u>1060</u>	
P 12	<u>55</u> _____	<u>33</u> <u>1092</u>	<u>55</u> _____	_____	<u>55</u> _____	_____	_____	
P 13	<u>60</u> _____	<u>36</u> _____	<u>60</u> _____	_____	<u>60</u> _____	_____	_____	
P 14	_____	<u>39</u> _____	<u>65</u> _____	_____	<u>65</u> _____	_____	_____	
P 15	_____	<u>42</u> _____	<u>70</u> _____	_____	<u>70</u> _____	_____	_____	
P 16	_____	<u>45</u> _____	<u>75</u> _____	_____	<u>75</u> _____	_____	_____	
P 17	_____	<u>48</u> _____	<u>80</u> _____	_____	<u>80</u> _____	_____	_____	
P 18	_____	<u>51</u> _____	<u>85</u> _____	_____	<u>85</u> _____	_____	_____	
P 19	_____	<u>54</u> _____	<u>90</u> _____	_____	<u>90</u> _____	_____	_____	
P 20	_____	<u>57</u> _____	_____	_____	_____	_____	_____	
		<u>60</u> _____						

6035

SK #7384

I



Company The Roxana Corporation Lease & Well No. Gagleman 'B'  
 Elevation 1949 Kelly Bushing Formation Arbuckle Effective Pay - Ft. Ticket No. 7384  
 Date 9-14-80 Sec. 29 Twp. 19S Range 15W County Barton State Kansas  
 Test Approved by J C Musgrove Western Representative Roger Lisenby

Formation Test No. 2 Interval Tested from 3634 ft. to 3645 ft. Total Depth 3645 ft.  
 Packer Depth 3629 ft. Size 6 3/4 in. Packer Depth 3634 ft. Size 6 3/4 in.  
 Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -  
 Top Recorder Depth (Inside) 3638 ft. Recorder Number 6077 Cap. 4700  
 Bottom Recorder Depth (Outside) 3641 ft. Recorder Number 1051 Cap. 4250  
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Roco Rig #1 Drill Collar Length - I. D. - in.  
 Mud Type Starch Viscosity 37 Weight Pipe Length 346 I. D. 2.7 in.  
 Weight 10.3 Water Loss 17.6 cc. Drill Pipe Length 3267 I. D. 3.8 in.  
 Chlorides 88,000 P.P.M. Test Tool Length 21 ft. Tool Size 4 3/4 in.  
 Jars: Make - Serial Number - Anchor Length 11 ft. Size 5 1/2 in.  
 Did Well Flow? Gas Reversed Out - 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: Gas to surface in 2 minutes.

Recovered 65 ft. of muddy gassy oil  
 Recovered 240 ft. of clean oil (gassy) 32 gravity  
 Recovered 300 ft. of water  
 Recovered          ft. of           
 Recovered          ft. of         

Remarks: See attached sheet for gas measurements.

Time Set Packer(s) 6:06 <sup>A.M.</sup> P.M. Time Started Off Bottom 8:08 <sup>A.M.</sup> P.M. Maximum Temperature 123  
 Initial Hydrostatic Pressure ..... (A) 1995 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 250 P.S.I. to (C) 255 P.S.I.  
 Initial Closed In Period ..... Minutes 33 (D) 1092 P.S.I.  
 Final Flow Period ..... Minutes 30 (E) 343 P.S.I. to (F) 313 P.S.I.  
 Final Closed In Period ..... Minutes 30 (G) 1060 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1983 P.S.I.

## GAS FLOW REPORT

Date 9-14-80 Ticket 7384 Company The Roxana Corporation  
 Well Name and No. #1 Gagelman Dst No. 2 Interval Tested 3634-3645  
 County Barton State Kansas Sec. 29 Twp. 19S Rg. 15W

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 IN 2 MINUTES					
	10 Min	20 PSIG	½" Orifice			177,000 C.F.P.D.
	20 Min	44 PSIG	½" Orifice			306,000 C.F.P.D.
	28 Min	54 PSIG	½" Orifice			357,000 C.F.P.D.

<b>SECOND FLOW</b>						
	5 Min	64 LBS	½" Orifice			409,000 C.F.P.D.
	10 Min	67 LBS	½" Orifice			424,000 C.F.P.D.
	15 Min	62 LBS	½" Orifice			398,000 C.F.P.D.
	20 Min	57 LBS	½" Orifice			373,000 C.F.P.D.
	25 Min	53 LBS	½" Orifice			352,000 C.F.P.D.
	30 Min	51 LBS	½" Orifice			342,000 C.F.P.D.

### GAS BOTTLE

Serial No. - Date Bottle Filled 9-14-80 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 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 The Roxana Corporation  
 Authorized by J C Musgrove

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

Date 9-14-80

Test Ticket No. 7384

Recorder No. 6077

Capacity 4700

Location 3638 Ft.

Clock No. -----

Elevation 1949 Kelly Bushing

Well Temperature 123 °F

Point	Pressure	P.S.I.	Open Tool	Time	
				Given	Computed
A Initial Hydrostatic Mud	1995	P.S.I.	Open Tool	6:06	P M
B First Initial Flow Pressure	250	P.S.I.	First Flow Pressure	30	Mins. 30 Mins.
C First Final Flow Pressure	255	P.S.I.	Initial Closed-in Pressure	30	Mins. 33 Mins.
D Initial Closed-in Pressure	1092	P.S.I.	Second Flow Pressure	30	Mins. 30 Mins.
E Second Initial Flow Pressure	343	P.S.I.	Final Closed-in Pressure	30	Mins. 30 Mins.
F Second Final Flow Pressure	313	P.S.I.			
G Final Closed-in Pressure	1060	P.S.I.			
H Final Hydrostatic Mud	1983	P.S.I.			

**PRESSURE BREAKDOWN**

**First Flow Pressure**  
Breakdown: 6 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

**Initial Shut-In**  
Breakdown: 11 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

**Second Flow Pressure**  
Breakdown: 6 Inc.  
of 5 mins. and a  
final inc. of 0 Min.

**Final Shut-In**  
Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>250</u>	<u>0</u>	<u>255</u>	<u>0</u>	<u>343</u>	<u>0</u>	<u>313</u>
P 2 <u>5</u>	<u>240</u>	<u>3</u>	<u>734</u>	<u>5</u>	<u>318</u>	<u>3</u>	<u>657</u>
P 3 <u>10</u>	<u>220</u>	<u>6</u>	<u>800</u>	<u>10</u>	<u>313</u>	<u>6</u>	<u>773</u>
P 4 <u>15</u>	<u>220</u>	<u>9</u>	<u>867</u>	<u>15</u>	<u>313</u>	<u>9</u>	<u>831</u>
P 5 <u>20</u>	<u>235</u>	<u>12</u>	<u>906</u>	<u>20</u>	<u>313</u>	<u>12</u>	<u>882</u>
P 6 <u>25</u>	<u>245</u>	<u>15</u>	<u>944</u>	<u>25</u>	<u>313</u>	<u>15</u>	<u>928</u>
P 7 <u>30</u>	<u>255</u>	<u>18</u>	<u>983</u>	<u>30</u>	<u>313</u>	<u>18</u>	<u>961</u>
P 8 _____	_____	<u>21</u>	<u>1017</u>	_____	_____	<u>21</u>	<u>995</u>
P 9 _____	_____	<u>24</u>	<u>1044</u>	_____	_____	<u>24</u>	<u>1014</u>
P10 _____	_____	<u>27</u>	<u>1065</u>	_____	_____	<u>27</u>	<u>1034</u>
P11 _____	_____	<u>30</u>	<u>1077</u>	_____	_____	<u>30</u>	<u>1060</u>
P12 _____	_____	<u>33</u>	<u>1092</u>	_____	_____	_____	_____
P13 _____	_____	_____	_____	_____	_____	_____	_____
P14 _____	_____	_____	_____	_____	_____	_____	_____
P15 _____	_____	_____	_____	_____	_____	_____	_____
P16 _____	_____	_____	_____	_____	_____	_____	_____
P17 _____	_____	_____	_____	_____	_____	_____	_____
P18 _____	_____	_____	_____	_____	_____	_____	_____
P19 _____	_____	_____	_____	_____	_____	_____	_____
P20 _____	_____	_____	_____	_____	_____	_____	_____