

Company Longhorn Energy Resources, Inc. Lease & Well No. #3 Brass
 Elevation ---- Formation Mississippi Effective Pay --- Ft. Ticket No. 16428
 Date 9/ 23 /82 Sec. 30 Twp. 32S Range 15W County Barber State Kansas
 Test Approved by Kurt Harlow (?) Western Representative Jeff Piotrowski

Formation Test No. 1 Interval Tested from 4685 ft. to 4740 ft. Total Depth 4740 ft.
 Packer Depth 4680 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4685 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4688 ft. Recorder Number 1565 Cap. 4900
 Bottom Recorder Depth (Outside) 4691 ft. Recorder Number 1560 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Big "A" Drlg. Rig #1 Drill Collar Length 330 I. D. 2.2 in.
 Mud Type drispac Viscosity 54 Weight Pipe Length - I. D. - in.
 Weight 9.3 Water Loss 12.4 cc. Drill Pipe Length 4335 I. D. 3.8 in.
 Chlorides 9,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 55 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 XH in.

Blow: Weak slowly building to strong on initial flow. Strong throughout final flow period.

Recovered 900 ft. of gas in pipe
 Recovered 30 ft. of gas cut mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 9:05 ~~A.M.~~ P.M. Time Started Off Bottom 1:50 ~~A.M.~~ P.M. Maximum Temperature 122°
 Initial Hydrostatic Pressure (A) 2261 P.S.I.
 Initial Flow Period Minutes 30 (B) 16 P.S.I. to (C) 16 P.S.I.
 Initial Closed In Period Minutes 45 (D) 422 P.S.I.
 Final Flow Period Minutes 120 (E) 11 P.S.I. to (F) 12 P.S.I.
 Final Closed In Period Minutes 90 (G) 781 P.S.I.
 Final Hydrostatic Pressure (H) 2261 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 9/23/82 Test Ticket No. 16428
 Recorder No. 1565 Capacity 4900 Location 4688 Ft.
 Clock No. --- Elevation --- Well Temperature 122 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2261</u> P.S.I.	Open Tool	<u>9:05 P</u>	<u>M</u>
B First Initial Flow Pressure	<u>16</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>16</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>422</u> P.S.I.	Second Flow Pressure	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>11</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>12</u> P.S.I.			
G Final Closed-in Pressure	<u>781</u> P.S.I.			
H Final Hydrostatic Mud	<u>2261</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>15</u> Inc.		Breakdown: <u>24</u> Inc.		Breakdown: <u>30</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>16</u>	<u>0</u> <u>16</u>	<u>0</u> <u>16</u>	<u>0</u> <u>11</u>	<u>11</u>	<u>0</u> <u>12</u>	<u>12</u>
P 2	<u>5</u> <u>16</u>	<u>3</u> <u>27</u>	<u>3</u> <u>27</u>	<u>5</u> <u>11</u>	<u>11</u>	<u>3</u> <u>20</u>	<u>20</u>
P 3	<u>10</u> <u>16</u>	<u>6</u> <u>53</u>	<u>6</u> <u>53</u>	<u>10</u> <u>11</u>	<u>11</u>	<u>6</u> <u>49</u>	<u>49</u>
P 4	<u>15</u> <u>16</u>	<u>9</u> <u>82</u>	<u>9</u> <u>82</u>	<u>15</u> <u>11</u>	<u>11</u>	<u>9</u> <u>79</u>	<u>79</u>
P 5	<u>20</u> <u>16</u>	<u>12</u> <u>111</u>	<u>12</u> <u>111</u>	<u>20</u> <u>11</u>	<u>11</u>	<u>12</u> <u>110</u>	<u>110</u>
P 6	<u>25</u> <u>16</u>	<u>15</u> <u>143</u>	<u>15</u> <u>143</u>	<u>25</u> <u>11</u>	<u>11</u>	<u>15</u> <u>143</u>	<u>143</u>
P 7	<u>30</u> <u>16</u>	<u>18</u> <u>172</u>	<u>18</u> <u>172</u>	<u>30</u> <u>11</u>	<u>11</u>	<u>18</u> <u>172</u>	<u>172</u>
P 8		<u>21</u> <u>204</u>	<u>21</u> <u>204</u>	<u>35</u> <u>11</u>	<u>11</u>	<u>21</u> <u>207</u>	<u>207</u>
P 9		<u>24</u> <u>234</u>	<u>24</u> <u>234</u>	<u>40</u> <u>11</u>	<u>11</u>	<u>24</u> <u>240</u>	<u>240</u>
P10		<u>27</u> <u>266</u>	<u>27</u> <u>266</u>	<u>45</u> <u>11</u>	<u>11</u>	<u>27</u> <u>265</u>	<u>265</u>
P11		<u>30</u> <u>295</u>	<u>30</u> <u>295</u>	<u>50</u> <u>11</u>	<u>11</u>	<u>30</u> <u>290</u>	<u>290</u>
P12		<u>33</u> <u>323</u>	<u>33</u> <u>323</u>	<u>55</u> <u>11</u>	<u>11</u>	<u>33</u> <u>321</u>	<u>321</u>
P13		<u>36</u> <u>353</u>	<u>36</u> <u>353</u>	<u>60</u> <u>11</u>	<u>11</u>	<u>36</u> <u>349</u>	<u>349</u>
P14		<u>39</u> <u>380</u>	<u>39</u> <u>380</u>	<u>65</u> <u>11</u>	<u>11</u>	<u>39</u> <u>378</u>	<u>378</u>
P15		<u>42</u> <u>411</u>	<u>42</u> <u>411</u>	<u>70</u> <u>11</u>	<u>11</u>	<u>42</u> <u>400</u>	<u>400</u>
P16		<u>45</u> <u>422</u>	<u>45</u> <u>422</u>	<u>75</u> <u>12</u>	<u>12</u>	<u>45</u> <u>432</u>	<u>432</u>
P17				<u>80</u> <u>12</u>	<u>12</u>	<u>48</u> <u>462</u>	<u>462</u>
P18				<u>85</u> <u>12</u>	<u>12</u>	<u>51</u> <u>485</u>	<u>485</u>
P19				<u>90</u> <u>12</u>	<u>12</u>	<u>54</u> <u>512</u>	<u>512</u>
P20				<u>95</u> <u>12</u>	<u>12</u>	<u>57</u> <u>539</u>	<u>539</u>
				<u>100</u> <u>12</u>	<u>12</u>	<u>60</u> <u>563</u>	<u>563</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 9/23/82

Test Ticket No. 16428

Recorder No. 1565 Capacity 4900

Location 4688 Ft.

Clock No. --- Elevation --- Well Temperature 122 °F

Point	Pressure			Time Given	Time Computed
		P.S.I.			
A. Initial Hydrostatic Mud	2261	P.S.I.	Open Tool	9:05 P	M
B. First Initial Flow Pressure	16	P.S.I.	First Flow Pressure	30	30 Mins.
C. First Final Flow Pressure	16	P.S.I.	Initial Closed-in Pressure	45	45 Mins.
D. Initial Closed-in Pressure	422	P.S.I.	Second Flow Pressure	120	120 Mins.
E. Second Initial Flow Pressure	11	P.S.I.	Final Closed-in Pressure	90	90 Mins.
F. Second Final Flow Pressure	12	P.S.I.			
G. Final Closed-in Pressure	781	P.S.I.			
H. Final Hydrostatic Mud	2261	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: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 24 Inc.
of 5 mins. and a
final inc. of 0 Min.

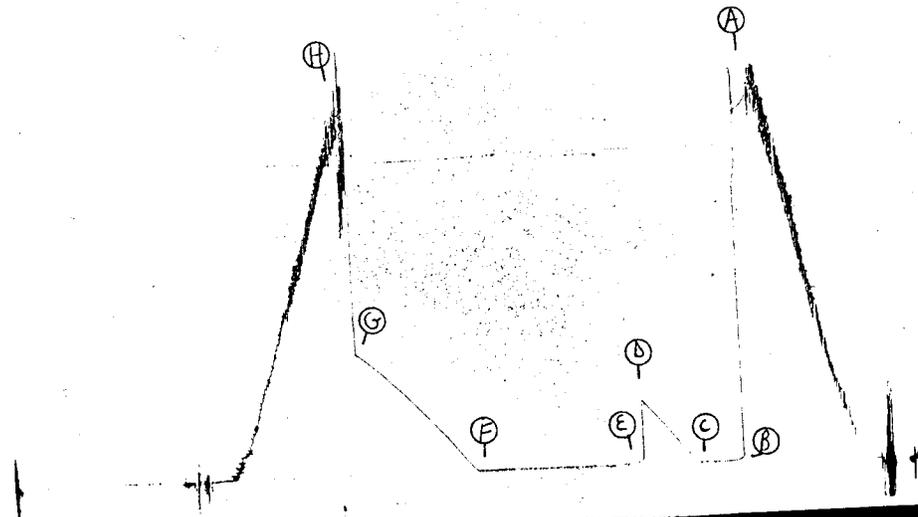
Final Shut-In
Breakdown: 30 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Mins.	Press.	Minutes	Press.	Minutes	Press.	Minutes	Press.
P 1					105	12	63	591
P 2					110	12	66	616
P 3					115	12	69	639
P 4					120	12	72	663
P 5							75	686
P 6							78	709
P 7							81	728
P 8							84	748
P 9							87	768
P10							90	781
P11								
P12								
P13								
P14								
P15								
P16								
P17								
P18								
P19								
P20								

1565
DST #1

TKT # 16428

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WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET

No 16428

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

Elevation _____ Formation Miss Eff. Pay _____ Ft.

District Pratt Date 9/23/82 Customer Order No. _____

COMPANY NAME Loughorn Energy Resources, Inc.

ADDRESS P.O. Box 1314, Great Bend KS 67530

LEASE AND WELL NO. Brass #3 COUNTY Barber STATE KS Sec. 30 Twp. 32S Rge. 15W

Mail Invoice To Same # 3 BRASS No. Copies Requested Reg

Mail Charts To Same Co. Name _____ Address _____ No. Copies Requested Reg

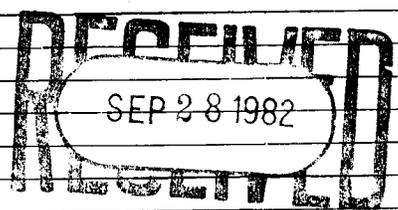
Formation Test No. 1 Interval Tested From 4685 ft. to 4740 ft. Total Depth 4740 ft.
Packer Depth 4680 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 4685 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4688 ft. Recorder Number 1565 Cap. 4500
Bottom Recorder Depth (Outside) 4691 ft. Recorder Number 1560 Cap. 4500
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Big "A" #1 Drill Collar Length 330 I. D. 2.2 in.
Mud Type Disper Viscosity 54 Weight Pipe Length _____ I. D. _____ in.
Weight 9.3 Water Loss 12.4 cc. Drill Pipe Length 4335 I. D. 3.8 in.
Chlorides 9,000 P.P.M. Test Tool Length 20 ft. Tool Size 5/2 OD in.
Jars: Make _____ Serial Number _____ Anchor Length 55 ft. Size 5/2 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 XH in.

Blow: Work slowly Building to Strong I.F. - Strong thru F.F.

Recovered 900 ft. of Gss In Pipe
Recovered 30 ft. of Gss Cut Mud
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Remarks: _____



Time On Location 6:00 A.M. Time Pick Up Tool 7:30 P.M. Time Off Location 4:30 P.M.
Time Set Packer(s) 9:05 A.M. Time Started Off Bottom 1:50 P.M. Maximum Temperature 122°
Initial Hydrostatic Pressure (A) 2258 P.S.I.
Initial Flow Period Minutes 30 (B) 12 P.S.I. to (C) 12 P.S.I.
Initial Closed In Period Minutes 45 (D) 408 P.S.I.
Final Flow Period Minutes 120 (E) 12 P.S.I. to (F) 12 P.S.I.
Final Closed In Period Minutes 90 (G) 779 P.S.I.
Final Hydrostatic Pressure (H) 2258 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] Kurt Harlow?
Signature of Customer or his authorized representative

Western Representative [Signature]

FIELD INVOICE

Open Hole Test \$ 1675.00
Misrun \$ _____
Straddle Test \$ _____
Jars \$ _____
Selective Zone \$ _____
Safety Joint \$ _____
Standby \$ _____
Evaluation \$ _____
Extra Packer \$ _____
Circ. Sub. \$ _____
Mileage \$ _____
Fluid Sampler \$ _____

WESTERN TESTING CO., INC.

Pressure Data

Date: 9-23 Test Ticket No. 16428
 Recorder No. 1565 Capacity 4900 Location 4688 Ft.
 Clock No. _____ Elevation _____ Well Temperature 122 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2261</u> P.S.I.		<u>9:05 P</u>	
B First Initial Flow Pressure	<u>16</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>16</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>422</u> P.S.I.	Second Flow Pressure	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>11</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>12</u> P.S.I.			
G Final Closed-in Pressure	<u>781</u> P.S.I.			
H Final Hydrostatic Mud	<u>2261</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>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	Second Flow Pressure Breakdown: <u>24</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 0	<u>16</u>	0	<u>16</u>	0	<u>11</u>	0	<u>12</u>
P 2 5		3	<u>27</u>	5		3	<u>20</u>
P 3 10		6	<u>53</u>	10		6	<u>49</u>
P 4 15		9	<u>82</u>	15		9	<u>79</u>
P 5 20		12	<u>111</u>	20		12	<u>110</u>
P 6 25		15	<u>143</u>	25		15	<u>143</u>
P 7 30	<u>16</u>	18	<u>173</u>	30		18	<u>175</u>
P 8 35		21	<u>204</u>	35		21	<u>207</u>
P 9 40		24	<u>234</u>	40		24	<u>240</u>
P 10 45		27	<u>266</u>	45		27	<u>265</u>
P 11 50		30	<u>295</u>	50		30	<u>290</u>
P 12 55		33	<u>323</u>	55		33	<u>321</u>
P 13 60		36	<u>353</u>	60		36	<u>349</u>
P 14		39	<u>380</u>	65		39	<u>378</u>
P 15		42	<u>411</u>	70	<u>11</u>	42	<u>400</u>
P 16		45	<u>422</u>	75	<u>12</u>	45	<u>432</u>
P 17		48		80	<u>12</u>	48	<u>462</u>
P 18		51		85	<u>12</u>	51	<u>485</u>
P 19		54		90	<u>12</u>	54	<u>512</u>
P 20		57		95	<u>12</u>	57	<u>539</u>
		60		100	<u>12</u>	60	<u>563</u>

WESTERN TESTING CO., INC.
Pressure Data

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

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud _____	P.S.I.	Open Tool	_____ 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	105	63
P 2	_____	66	110	66
P 3	_____	69	115	69
P 4	_____	72	120	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

Company Longhorn Energy Resources, Inc. Lease & Well No. #3 Brass
 Elevation ---- Formation Mississippi Effective Pay --- Ft. Ticket No. 16429
 Date 9/24/82 Sec. 30 Twp. 32S Range 15W County Barber State Kansas
 Test Approved by David J. Goldah Western Representative Jeff Piotrowski

Formation Test No. 2 Interval Tested from 4684 ft. to 4754 ft. Total Depth 4754 ft.
 Packer Depth 4679 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4685 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4694 ft. Recorder Number 1565 Cap. 4900
 Bottom Recorder Depth (Outside) 4697 ft. Recorder Number 1560 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Big "A" Drlg. Rig #1 Drill Collar Length 330 I. D. 2.2 in.
 Mud Type drispac Viscosity 65 Weight Pipe Length - I. D. - in.
 Weight 9.4 Water Loss 11.4 cc. Drill Pipe Length 4334 I. D. 3.8 in.
 Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 70 ft. Size 5 1/2 OD
 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 XH in.

Blow: Strong through initial flow period. Gas to surface twelve minutes on final flow; see attached sheet for gas measurements.

Recovered 60 ft. of slightly oil cut mud
 Recovered 120 ft. of very heavy oil cut froggy mud
 Recovered 300 ft. of slightly mud cut froggy oil
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s)	<u>2:00</u>	A.M. P.M.	Time Started Off Bottom	<u>6:45</u>	A.M. P.M.	Maximum Temperature	<u>122°</u>
Initial Hydrostatic Pressure			(A)	<u>2379</u>	P.S.I.		
Initial Flow Period			Minutes <u>30</u>	(B)	<u>84</u>	P.S.I. to (C)	<u>118</u> P.S.I.
Initial Closed In Period			Minutes <u>42</u>	(D)	<u>1674</u>	P.S.I.	
Final Flow Period			Minutes <u>120</u>	(E)	<u>129</u>	P.S.I. to (F)	<u>233</u> P.S.I.
Final Closed In Period			Minutes <u>90</u>	(G)	<u>1648</u>	P.S.I.	
Final Hydrostatic Pressure			(H)	<u>2379</u>	P.S.I.		

GAS FLOW REPORT

Date 9/24/82 Ticket 16429 Company Longhorn Energy Resources, Inc.
 Well Name and No. #3 Brass Dst No. 2 Interval Tested 4684'-4754'
 County Barber State Kansas Sec. 30 Twp. 32S Rg. 15W

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					

Gas to surface in twelve minutes. SECOND FLOW					
10 min.	17" of water	1/4" orifice			6,930 CFPD
20 min.	26" of water	1/4" orifice			8,560 CFPD
30 min.	28" of water	1/4" orifice			8,890 CFPD
40 min.	30" of water	1/4" orifice			9,200 CFPD
50 min.	30" of water	1/4" orifice			9,200 CFPD
60 min.	2" of water	1/2" orifice			8,870 CFPD
70 min.	2" of water	1/2" orifice			8,870 CFPD
80 min.	2" of water	1/2" orifice			8,870 CFPD
90 min.	2" of water	1/2" orifice			8,870 CFPD
100 min.	2" of water	1/2" orifice			8,870 CFPD
110 min.	2" of water	1/2" orifice			8,870 CFPD

GAS BOTTLE

Serial No. ---- Date Bottle Filled --- Date to be Invoiced 9/24/82

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 piug 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 Longhorn Energy Resources, Inc.
 Authorized by David J. Goldah

WESTERN TESTING CO., INC.
Pressure Data

Date 9/24/82 Test Ticket No. 16429
 Recorder No. 1565 Capacity 4900 Location 4694 Ft.
 Clock No. -- Elevation --- Well Temperature 122 °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2379</u>	P.S.I.	<u>2:00P</u>	<u>M</u>
B. First Initial Flow Pressure	<u>84</u>	P.S.I.	<u>30</u>	<u>30</u> Mins.
C. First Final Flow Pressure	<u>118</u>	P.S.I.	<u>45</u>	<u>42</u> Mins.
D. Initial Closed-in Pressure	<u>1674</u>	P.S.I.	<u>120</u>	<u>120</u> Mins.
E. Second Initial Flow Pressure	<u>129</u>	P.S.I.	<u>90</u>	<u>90</u> Mins.
F. Second Final Flow Pressure	<u>233</u>	P.S.I.		
G. Final Closed-in Pressure	<u>1648</u>	P.S.I.		
H. Final Hydrostatic Mud	<u>2379</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>14</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>24</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.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>84</u>	<u>0</u>	<u>118</u>	<u>0</u>	<u>129</u>	<u>0</u>	<u>233</u>
P 2	<u>86</u>	<u>3</u>	<u>473</u>	<u>5</u>	<u>129</u>	<u>3</u>	<u>364</u>
P 3	<u>92</u>	<u>6</u>	<u>703</u>	<u>10</u>	<u>129</u>	<u>6</u>	<u>510</u>
P 4	<u>103</u>	<u>9</u>	<u>988</u>	<u>15</u>	<u>131</u>	<u>9</u>	<u>691</u>
P 5	<u>109</u>	<u>12</u>	<u>1278</u>	<u>20</u>	<u>136</u>	<u>12</u>	<u>938</u>
P 6	<u>115</u>	<u>15</u>	<u>1436</u>	<u>25</u>	<u>143</u>	<u>15</u>	<u>1158</u>
P 7	<u>118</u>	<u>18</u>	<u>1519</u>	<u>30</u>	<u>148</u>	<u>18</u>	<u>1283</u>
P 8		<u>21</u>	<u>1570</u>	<u>35</u>	<u>153</u>	<u>21</u>	<u>1372</u>
P 9		<u>24</u>	<u>1598</u>	<u>40</u>	<u>157</u>	<u>24</u>	<u>1434</u>
P10		<u>27</u>	<u>1621</u>	<u>45</u>	<u>161</u>	<u>27</u>	<u>1478</u>
P11		<u>30</u>	<u>1637</u>	<u>50</u>	<u>165</u>	<u>30</u>	<u>1506</u>
P12		<u>33</u>	<u>1650</u>	<u>55</u>	<u>170</u>	<u>33</u>	<u>1531</u>
P13		<u>36</u>	<u>1659</u>	<u>60</u>	<u>176</u>	<u>36</u>	<u>1548</u>
P14		<u>39</u>	<u>1667</u>	<u>65</u>	<u>182</u>	<u>39</u>	<u>1561</u>
P15		<u>42</u>	<u>1674</u>	<u>70</u>	<u>187</u>	<u>42</u>	<u>1573</u>
P16				<u>75</u>	<u>192</u>	<u>45</u>	<u>1583</u>
P17				<u>80</u>	<u>199</u>	<u>48</u>	<u>1591</u>
P18				<u>85</u>	<u>207</u>	<u>51</u>	<u>1598</u>
P19				<u>90</u>	<u>214</u>	<u>54</u>	<u>1605</u>
P20				<u>95</u>	<u>220</u>	<u>57</u>	<u>1612</u>
				<u>100</u>	<u>227</u>	<u>60</u>	<u>1618</u>

WESTERN TESTING CO., INC.
Pressure Data

Date 9/24/82 Test Ticket No. 16429
 Recorder No. 1565 Capacity 4900 Location 4694 Ft.
 Clock No. -- Elevation --- Well Temperature 122 °F

Point	Pressure			Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2379</u>	P.S.I.	Open Tool	<u>2:00P</u>	<u>M</u>
B First Initial Flow Pressure	<u>84</u>	P.S.I.	First Flow Pressure	<u>30</u>	<u>30</u> Mins.
C First Final Flow Pressure	<u>118</u>	P.S.I.	Initial Closed-in Pressure	<u>45</u>	<u>42</u> Mins.
D Initial Closed-in Pressure	<u>1674</u>	P.S.I.	Second Flow Pressure	<u>120</u>	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>129</u>	P.S.I.	Final Closed-in Pressure	<u>90</u>	<u>90</u> Mins.
F Second Final Flow Pressure	<u>233</u>	P.S.I.			
G Final Closed-in Pressure	<u>1648</u>	P.S.I.			
H Final Hydrostatic Mud	<u>2379</u>	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: 14 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 24 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

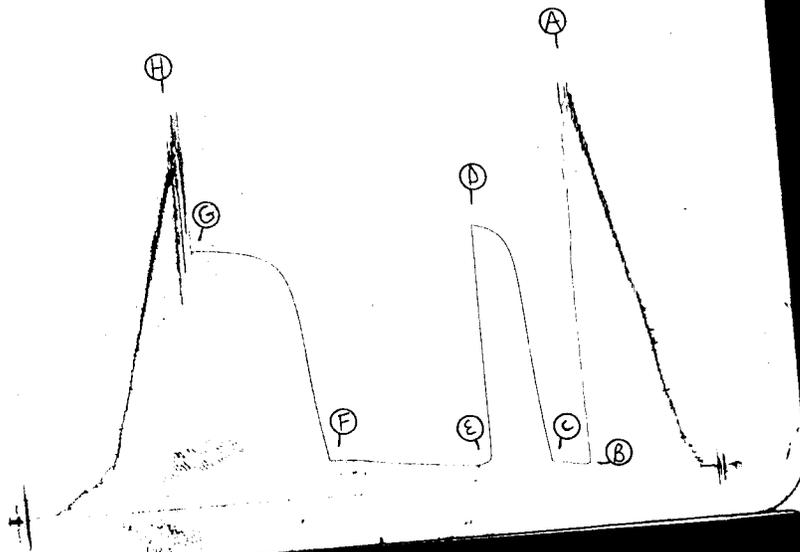
Final Shut-In
 Breakdown: 30 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1				<u>105</u>	<u>229</u>	<u>63</u>	<u>1622</u>
P 2				<u>110</u>	<u>231</u>	<u>66</u>	<u>1626</u>
P 3				<u>115</u>	<u>232</u>	<u>69</u>	<u>1630</u>
P 4				<u>120</u>	<u>233</u>	<u>72</u>	<u>1634</u>
P 5						<u>75</u>	<u>1638</u>
P 6						<u>78</u>	<u>1640</u>
P 7						<u>81</u>	<u>1642</u>
P 8						<u>84</u>	<u>1644</u>
P 9						<u>87</u>	<u>1646</u>
P10						<u>90</u>	<u>1648</u>
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

1565
DST^α

TKT # 16429

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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET

No 16429

OK

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

Elevation _____ Formation Miss. Eff. Pay _____ Ft.

District Pratt Date 9/24/82 Customer Order No. _____

COMPANY NAME Longhorn Energy Resources, Inc.

ADDRESS P.O. Box 1314, Great Bend KS 67530

LEASE AND WELL NO. Brass #3 COUNTY Barber STATE KS Sec. 30 Twp. 32S Rge. 15W

Mail Invoice To Same #3 BRASS No. Copies Requested Reg

Mail Charts To Same Co. Name _____ Address _____ No. Copies Requested Reg

Address _____

Formation Test No. 2 Interval Tested From 4684 ft. to 4754 ft. Total Depth 4754 ft.

Packer Depth 4679 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 4684 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4694 ft. Recorder Number 1565 Cap. 4900

Bottom Recorder Depth (Outside) 4697 ft. Recorder Number 1560 Cap. 4500

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

Drilling Contractor Big "H" Drill Collar Length 330 I. D. 2.2 in.

Mud Type Drisc Viscosity 65 Weight Pipe Length _____ I. D. _____ in.

Weight 9.9 Water Loss 11.4 cc. Drill Pipe Length 4334 I. D. 3.8 in.

Chlorides 14,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make _____ Serial Number _____ Anchor Length 70 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 2 7/8 in. Tool Joint Size 4 1/2 x H in.

Blow: Strong thin IF - GTS 12 min FF See Gas Flow Report

Recovered 60 ft. of Slightly Oil Cut Mud

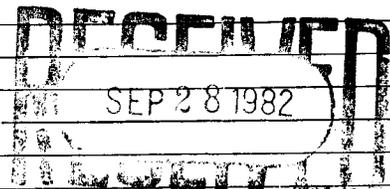
Recovered 120 ft. of Very Heavy Oil Cut Frogy Mud

Recovered 300 ft. of Slightly Mud Cut Frogy Oil

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____



Time On Location _____ A.M. Time Pick Up Tool 12:30 P.M. Time Off Location 10:00 A.M. P.M.

Time Set Packer(s) 2:00 A.M. P.M. Time Started Off Bottom 6:45 A.M. P.M. Maximum Temperature 122°

Initial Hydrostatic Pressure _____ (A) 2406 P.S.I.

Initial Flow Period _____ Minutes 30 (B) 86 P.S.I. to (C) 123 P.S.I.

Initial Closed In Period _____ Minutes 45 (D) 1655 P.S.I.

Final Flow Period _____ Minutes 120 (E) 123 P.S.I. to (F) 235 P.S.I.

Final Closed In Period _____ Minutes 90 (G) 1642 P.S.I.

Final Hydrostatic Pressure _____ (H) 2307 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 David J. Galdak
Signature of Customer or his authorized representative David J. Galdak (?)

Western Representative W. Reston

FIELD INVOICE

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

WESTERN TESTING CO., INC.
Pressure Data

Date 9-24

Recorder No. 1565

Capacity 4900

Test Ticket No. 16429

Location 4694 Ft.

Clock No.

Elevation

Well Temperature 120 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2379</u> P.S.I.	<u>2:00 P</u> M	
B First Initial Flow Pressure	<u>84</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>118</u> P.S.I.	<u>45</u> Mins.	<u>42</u> Mins.
D Initial Closed-in Pressure	<u>1674</u> P.S.I.	<u>120</u> Mins.	<u>120</u> Mins.
E Second Initial Flow Pressure	<u>129</u> P.S.I.	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>233</u> P.S.I.		
G Final Closed-in Pressure	<u>1648</u> P.S.I.		
H Final Hydrostatic Mud	<u>2379</u> 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: 14 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 24 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 30 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 0	<u>84</u>	0	<u>118</u>	0	<u>129</u>	0	<u>233</u>
P 2 5	<u>86</u>	3	<u>473</u>	5	<u>129</u>	3	<u>364</u>
P 3 10	<u>92</u>	6	<u>703</u>	10	<u>129</u>	6	<u>510</u>
P 4 15	<u>103</u>	9	<u>988</u>	15	<u>131</u>	9	<u>691</u>
P 5 20	<u>109</u>	12	<u>1278</u>	20	<u>136</u>	12	<u>938</u>
P 6 25	<u>115</u>	15	<u>1436</u>	25	<u>143</u>	15	<u>1158</u>
P 7 30	<u>118</u>	18	<u>1519</u>	30	<u>148</u>	18	<u>1283</u>
P 8 35		21	<u>1570</u>	35	<u>153</u>	21	<u>1372</u>
P 9 40		24	<u>1598</u>	40	<u>157</u>	24	<u>1434</u>
P10 45		27	<u>1621</u>	45	<u>161</u>	27	<u>1478</u>
P11 50		30	<u>1637</u>	50	<u>165</u>	30	<u>1506</u>
P12 55		33	<u>1650</u>	55	<u>170</u>	33	<u>1531</u>
P13 60		36	<u>1659</u>	60	<u>176</u>	36	<u>1548</u>
P14		39	<u>1667</u>	65	<u>182</u>	39	<u>1561</u>
P15		42	<u>1674</u>	70	<u>187</u>	42	<u>1575</u>
P16		45		75	<u>192</u>	45	<u>1583</u>
P17		48		80	<u>199</u>	48	<u>1591</u>
P18		51		85	<u>207</u>	51	<u>1598</u>
P19		54		90	<u>214</u>	54	<u>1605</u>
P20		57		95	<u>220</u>	57	<u>1612</u>
		60		100	<u>227</u>	60	<u>1618</u>

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WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 16429
 Recorder No. _____ Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud _____	P.S.I. _____	Open Tool _____	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

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 _____		63 _____		105 _____	229 _____	63 _____	1622 _____
P 2 _____		66 _____		110 _____	231 _____	66 _____	1626 _____
P 3 _____		69 _____		115 _____	232 _____	69 _____	1630 _____
P 4 _____		72 _____		120 _____	233 _____	72 _____	1634 _____
P 5 _____		75 _____				75 _____	1638 _____
P 6 _____		78 _____				78 _____	1640 _____
P 7 _____		81 _____				81 _____	1642 _____
P 8 _____		84 _____				84 _____	1644 _____
P 9 _____		87 _____				87 _____	1646 _____
P10 _____		90 _____				90 _____	1648 _____
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 _____	