Company Longhorn Energy Resources, Inc. Lease & Well No. Brass #1

Elevation 1863 Kelly Bushing Formation Douglas Effective Pay - Ft. Ticket No. 14809

Date 2/28/82 Sec. 30 Twp. 32S Range 15W County Barber State Kansas

Test Approved by Robert C Lewellyn Western Representative Jeff Piotrowski

Formation Test No. 1 Interval Tested from 4094 ft. to 4110 ft. Total Depth 4110 ft.

Packer Depth 4089 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4094 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4097 ft. Recorder Number 1565 Cap. 4900

Bottom Recorder Depth (Outside) 4100 ft. Recorder Number 1560 Cap. 4500

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

Drilling Contractor Big "H" Rig #1 Drill Collar Length 390 I. D. 2.2 in.

Mud Type Drispac Viscosity 39 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 28.8 cc. Drill Pipe Length 3684 I. D. 3.8 in.

Chlorides 15,000 P.P.M. Test Tool Length 20 ft. Tool Size 5½OD in.

Jars: Make - Serial Number - Anchor Length 16 ft. Size 5½OD 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 4½XH in.

Blow: Fair throughout test.

Recovered 10 ft. of slightly oil cut water

Recovered 600 ft. of water Chlorides 121,000 PPM

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Slid tool 20 ft to bottom

Read bottom recorder

Time Set Packer(s) 12:35 A.M. P.M. Time Started Off Bottom 5:20 A.M. P.M. Maximum Temperature 116

Initial Hydrostatic Pressure ..... (A) 2031 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 100 P.S.I. to (C) 137 P.S.I.

Initial Closed In Period ..... Minutes 48 (D) 1495 P.S.I.

Final Flow Period ..... Minutes 120 (E) 198 P.S.I. to (F) 287 P.S.I.

Final Closed In Period ..... Minutes 90 (G) 1466 P.S.I.

Final Hydrostatic Pressure ..... (H) 2020 P.S.I.

WTC-

WESTERN TESTING CO., INC.
Pressure Data

Date 2/28/82 Test Ticket No. 14809

Recorder No. 1560 Capacity 4500 Location 4100 Ft.

Clock No. - Elevation 1863 Kelly Bushing Well Temperature 116 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	2031 P.S.I.	Open Tool	12:35P M	
B	First Initial Flow Pressure	100 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	137 P.S.I.	Initial Closed-in Pressure	45 Mins.	48 Mins.
D	Initial Closed-in Pressure	1495 P.S.I.	Second Flow Pressure	120 Mins.	120 Mins.
E	Second Initial Flow Pressure	198 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	287 P.S.I.			
G	Final Closed-in Pressure	1466 P.S.I.			
H	Final Hydrostatic Mud	2020 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.

Point Mins.	Press.
P 1 0	100
P 2 5	100
P 3 10	100
P 4 15	104
P 5 20	109
P 6 25	118
P 7 30	137
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In

Breakdown: 16 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	137
3	520
6	872
9	1173
12	1291
15	1345
18	1392
21	1416
24	1430
27	1440
30	1453
33	1465
36	1475
39	1482
42	1486
45	1493
48	1495

Second Flow Pressure

Breakdown: 25 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	198
5	198
10	198
15	200
20	205
25	210
30	217
35	220
40	225
45	229
50	235
55	240
60	245
65	250
70	254
75	257
80	261
85	264
90	268
95	272
100	276

CONT'D NEXT PAGE

Final Shut-In

Breakdown: 30 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	287
3	869
6	1095
9	1203
12	1264
15	1297
18	1320
21	1341
24	1359
27	1375
30	1383
33	1392
36	1400
39	1409
42	1413
45	1418
48	1426
51	1428
54	1435
57	1438
60	1443

CONT'D NEXT PAGE

WESTERN TESTING CO., INC.

Pressure Data

Date 2/28/82 Test Ticket No. 14809

Recorder No. 1560 Capacity 4500 Location 4100 Ft.

Clock No. - Elevation 1863 Kelly Bushing Well Temperature 116 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2031 P.S.I.	Open Tool	12:35P M	
B First Initial Flow Pressure	100 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	137 P.S.I.	Initial Closed-in Pressure	45 Mins.	48 Mins.
D Initial Closed-in Pressure	1495 P.S.I.	Second Flow Pressure	120 Mins.	120 Mins.
E Second Initial Flow Pressure	198 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	287 P.S.I.			
G Final Closed-in Pressure	1466 P.S.I.			
H Final Hydrostatic Mud	2020 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: 16 Inc.
of 3 mins. and a
final inc. of 0 Min.

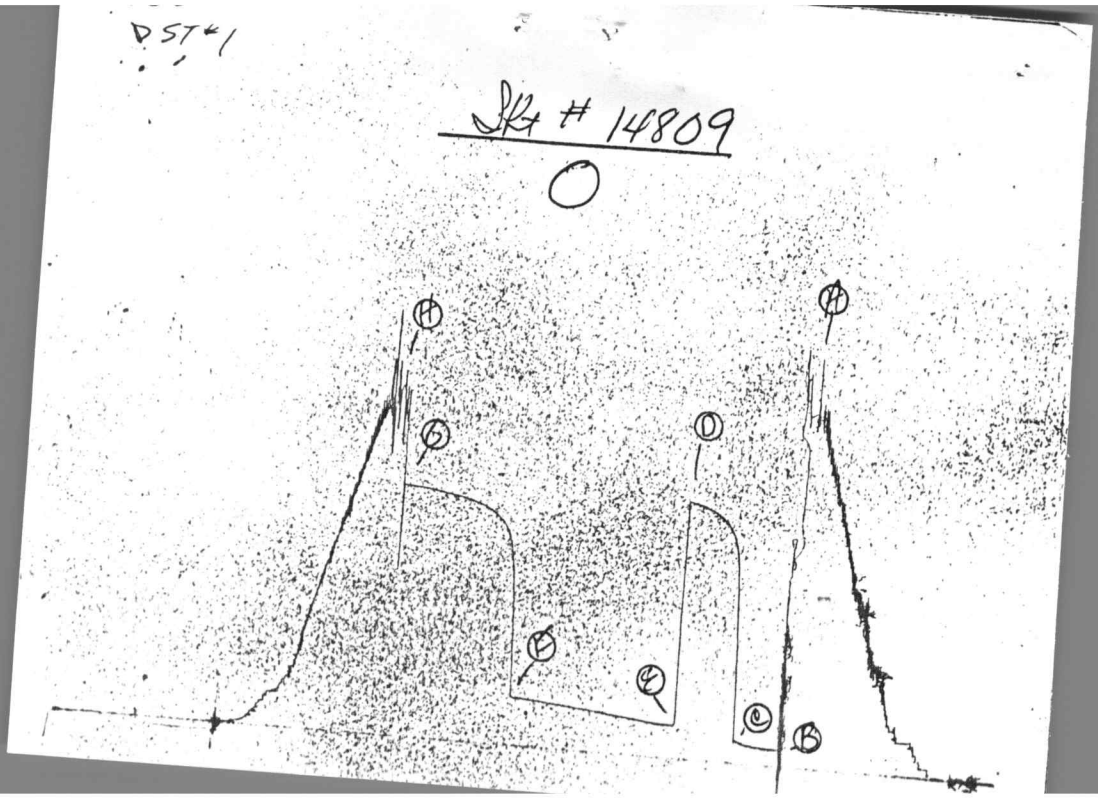
Second Flow Pressure
Breakdown: 25 Inc.
of 5 mins. and a
final inc. of 0 Min.

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				105	279	63	1446
P 2				110	282	66	1450
P 3				115	285	69	1452
P 4				120	287	72	1454
P 5						75	1456
P 6						78	1458
P 7						81	1460
P 8						84	1462
P 9						87	1464
P10						90	1466
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

DST #1

Ticket # 14809



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET № 14809

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

Elevation 1863 KB Formation Douglas Eff. Pay Ft.

New

District Pratt Date 2-28-82 Customer Order No.

COMPANY NAME Longhorn Energy Resources Inc.

ADDRESS Box 1314 Great Bend KS

LEASE AND WELL NO. Brass #1 COUNTY Barber STATE KS Sec. 30 Twp 32S Rge 15W

Mail Invoice To Same No. Copies Requested Reg
Co. Name Address

Mail Charts To Same No. Copies Requested 3
Address

Formation Test No. 1 Interval Tested from 4094 ft. to 4110 ft. Total Depth 4110 ft.

Packer Depth 4089 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 4094 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4095 ft. Recorder Number 1565 Cap. 4900

Bottom Recorder Depth (Outside) 4100 ft. Recorder Number 1560 Cap. 4500

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Big "H" #1 Drill Collar Length 390 I. D. 2.2 in.

Mud Type Dispac Viscosity 39 Weight Pipe Length — I. D. — in.

Weight 9.3 Water Loss 28.8 cc. Drill Pipe Length 3684 I. D. 3.8 in.

Chlorides 15,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make — Serial Number — Anchor Length 16 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: Fair thro Both Flow Periods
Thru Out Test

Recovered 10 ft. of Slightly Oil Cut Water

Recovered 600 ft. of Water Chlorides 124,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Slid tool 20 ft. to Bottom
Read Bottom Recorder

RECEIVED
MAR 03 1982

Time On Location 9:30 A.M. P.M. Time Pick Up Tool 10:00 A.M. P.M. Time Off Location 8:30 A.M. P.M.

Time Set Packer(s) 12:35 A.M. P.M. Time Started Off Bottom 5:20 A.M. P.M. Maximum Temperature 116°

Initial Hydrostatic Pressure			(A)	2017	P.S.I.	
Initial Flow Period	Minutes 30		(B)	92	P.S.I. to (C)	127 P.S.I.
Initial Closed In Period	Minutes 45		(D)	1477	P.S.I.	
Final Flow Period	Minutes 120		(E)	185	P.S.I. to (F)	289 P.S.I.
Final Closed In Period	Minutes 90		(G)	1443	P.S.I.	
Final Hydrostatic Pressure			(H)	1995	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 of Customer or his authorized representative

Western Representative

FIELD INVOICE

Open Hole Test	$ 700.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage 55	$ 41.25
Fluid Sampler	$
Extra Charts	$

WESTERN TESTING CO., INC.
Pressure Data

Date 2-28-82 Test Ticket No. 14809

Recorder No. 1560 Capacity 4500 Location N100 F

Clock No. — — — — Elevation 1863 KB Well Temperature 116 °

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2031 P.S.I.		Open Tool	12:35P M	
B	First Initial Flow Pressure	100 P.S.I.		First Flow Pressure	30 Mins.	30 Mins
C	First Final Flow Pressure	137 P.S.I.		Initial Closed-in Pressure	45 Mins.	48 Mins
D	Initial Closed-in Pressure	1495 P.S.I.		Second Flow Pressure	120 Mins.	120 Mins
E	Second Initial Flow Pressure	198 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins
F	Second Final Flow Pressure	287 P.S.I.				
G	Final Closed-in Pressure	1466 P.S.I.				
H	Final Hydrostatic Mud	2020 P.S.I.				

PRESSURE BREAKDOWN

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

Point	Mins.	Press.
P 1	0	100
P 2	5	100
P 3	10	100
P 4	15	104
P 5	20	109
P 6	25	118
P 7	30	137
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 16 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	137
3	520
6	872
9	1173
12	1291
15	1345
18	1392
21	1416
24	1430
27	1440
30	1453
33	1465
36	1475
39	1482
42	1486
45	1493
48	1495
51	
54	
57	
60	

Second Flow Pressure
Breakdown: 25 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	198
5	198
10	198
15	200
20	205
25	210
30	217
35	220
40	225
45	229
50	235
55	240
60	245
65	250
70	254
75	257
80	261
85	264
90	268
95	272
100	276

cont

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

Point Minutes	Press.
0	287
3	869
6	1095
9	1203
12	1264
15	1297
18	1320
21	1341
24	1359
27	1375
30	1383
33	1392
36	1400
39	1409
42	1413
45	1418
48	1426
51	1428
54	1435
57	1438
60	1443

Cont

WTC - 4

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 14809

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
Breakdown: _____ Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Mins.	Press.
P 1	
P 2	
P 3	
P 4	
P 5	
P 6	
P 7	
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

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

Point Minutes	Press.
63	
66	
69	
72	
75	
78	
81	
84	
87	
90	
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

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

Point Minutes	Press.
105	279
110	282
115	285
120	287

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

Point Minutes	Press.
63	1446
66	1450
69	1452
72	1454
75	1456
78	1458
81	1460
84	1462
87	1464
90	1466
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

Company Longhorn Energy Resources, Inc. Lease & Well No. #1 Brass

Elevation - Formation Marmaton Effective Pay - Ft. Ticket No. 13963

Date 3/3/82 Sec. 30 Twp. 32S Range 15W County Barber State Kansas

Test Approved by Robert C Lewellyn Western Representative Richard Howell

Formation Test No. 2 Interval Tested from 4669 ft. to 4765 ft. Total Depth 4765 ft.

Packer Depth 4664 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4669 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4716 ft. Recorder Number 2606 Cap. 4150

Bottom Recorder Depth (Outside) 4720 ft. Recorder Number 4332 Cap. 4200

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

Drilling Contractor Big "H" Rig #1 Drill Collar Length 397 I. D. 2.2 in.

Mud Type Drispac Viscosity 47 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 12.0 cc. Drill Pipe Length 4314 I. D. 3.8 in.

Chlorides 17,000 P.P.M. Test Tool Length 20 ft. Tool Size 5½ in.

Jars: Make - Serial Number - Anchor Length 96 ft. Size 5½ & 6½ 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 4½XH in.

Blow: Initial flow period strong - gas to surface in 5 minutes. See attached sheet for gas measurements.

Recovered 300 ft. of gas cut drilling mud

Recovered 250 ft. of heavy gas cut drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: Packers did not seat at first. Packers were pulled loose & got a packer seat on second try.

Time Set Packer(s) 7:30 ~~A.M.~~ P.M. Time Started Off Bottom 11:45 A.M. P.M. Maximum Temperature 128

Initial Hydrostatic Pressure			(A)	2324	P.S.I.	
Initial Flow Period	Minutes 30	(B)	326	P.S.I. to (C)	277	P.S.I.
Initial Closed In Period	Minutes 45	(D)	1676	P.S.I.		
Final Flow Period	Minutes 90	(E)	216	P.S.I. to (F)	206	P.S.I.
Final Closed In Period	Minutes 90	(G)	1647	P.S.I.		
Final Hydrostatic Pressure		(H)	2288	P.S.I.		

WTC

GAS FLOW REPORT

Date 3/3/82 Ticket 13963 Company Longhorn Energy Resources, Inc.

Well Name and No. #1 Brass Dst No. 2 Interval Tested 4669-4765

County Barber State Kansas Sec. 30 Twp. 32S 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
	Gas to surface in 5 minutes		**PRE FLOW**			
	5 Min	34 PSIG	1½" Orifice			2,798,000 C.F.P.D.
	15 Min	21 PSIG	1½" Orifice			2,012,000 C.F.P.D.
	25 Min	7 PSIG	1½" Orifice			1,036,000 C.F.P.D.
			SECOND FLOW			
	10 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.
	20 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.
	30 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.
	40 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.
	50 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.
	60 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.
	70 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.
	80 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.
	90 Min	4 PSIG	1½" Orifice			764,000 C.F.P.D.

GAS BOTTLE

Serial No. - Date Bottle Filled - Date to be Invoiced 3/3/82

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 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 Longhorn Energy Resources, Inc.

Authorized by Robert C. Lewellyn

FORM WTC 6

WESTERN TESTING CO., INC.
Pressure Data

Date 3/3/82 Test Ticket No. 13963

Recorder No. 2606 Capacity 4150 Location 4716 Ft.

Clock No. - Elevation - Well Temperature 128 °F

Point		Pressure	
A	Initial Hydrostatic Mud	2324	P.S.I.
B	First Initial Flow Pressure	326	P.S.I.
C	First Final Flow Pressure	277	P.S.I.
D	Initial Closed-in Pressure	1676	P.S.I.
E	Second Initial Flow Pressure	216	P.S.I.
F	Second Final Flow Pressure	206	P.S.I.
G	Final Closed-in Pressure	1647	P.S.I.
H	Final Hydrostatic Mud	2288	P.S.I.

	Time Given	Time Computed
Open Tool	7:30P M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	45 Mins.	45 Mins.
Second Flow Pressure	90 Mins.	90 Mins.
Final Closed-in Pressure	90 Mins.	90 Mins.

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	326
P 2 5	326
P 3 10	348
P 4 15	403
P 5 20	337
P 6 25	283
P 7 30	277
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	277
3	1396
6	1569
9	1603
12	1617
15	1626
18	1636
21	1643
24	1651
27	1658
30	1662
33	1666
36	1670
39	1672
42	1674
45	1676

Second Flow Pressure
Breakdown: 18 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	216
5	216
10	216
15	216
20	216
25	215
30	213
35	213
40	213
45	212
50	211
55	210
60	209
65	208
70	207
75	206
80	206
85	206
90	206

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

Point Minutes	Press.
0	206
3	1259
6	1460
9	1494
12	1513
15	1527
18	1544
21	1553
24	1563
27	1571
30	1579
33	1585
36	1590
39	1596
42	1601
45	1607
48	1611
51	1616
54	1620
57	1623
60	1626

CONT'D NEXT PAGE

WESTERN TESTING CO., INC.
Pressure Data

Date 3/3/82 Test Ticket No. 13963

Recorder No. 2606 Capacity 4150 Location 4716 Ft.

Clock No. - Elevation - Well Temperature 128 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2324	P.S.I.	Open Tool	7:30P M	
B	First Initial Flow Pressure	326	P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	277	P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	1676	P.S.I.	Second Flow Pressure	90 Mins.	90 Mins.
E	Second Initial Flow Pressure	216	P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	206	P.S.I.			
G	Final Closed-in Pressure	1647	P.S.I.			
H	Final Hydrostatic Mud	2288	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: 18 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						63	1632
P 2						66	1635
P 3						69	1636
P 4						72	1637
P 5						75	1639
P 6						78	1641
P 7						81	1643
P 8						84	1645
P 9						87	1646
P10						90	1647
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

#2606 DS1-2

SK #13963

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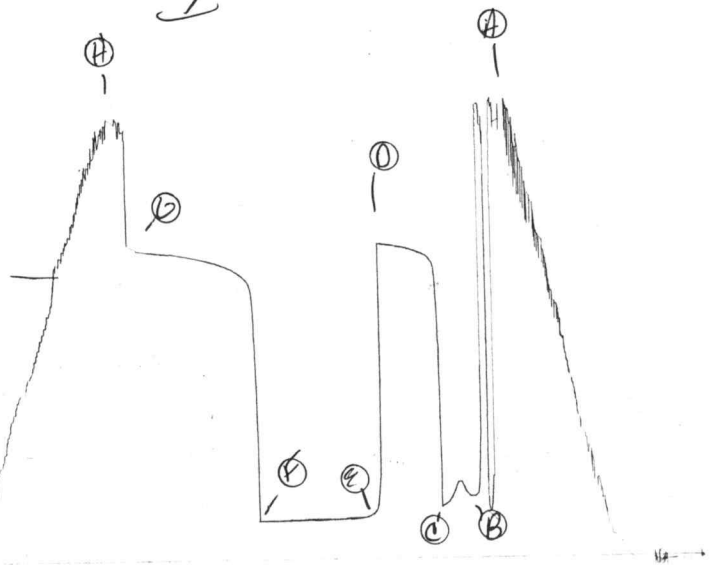

WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET № 13963

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

Plus Mike Card

Elevation _____ Formation MARMATON Eff. Pay _____ Ft.

District PRATT Date 3/3/82 Customer Order No. _____

COMPANY NAME LONGHORN DRILLING ENERGY Resources, Inc

ADDRESS Dep. 1314 St. Rend, Ks 67530

LEASE AND WELL NO. #1 BRASS COUNTY BARBER STATE KS. Sec. 30 Twp. 32S Rge. 15W

Mail Invoice To SAME Co. Name Address No. Copies Requested Req.

Mail Charts To SAME Address No. Copies Requested Req.

Formation Test No. 2 Interval Tested from 4669 ft. to 4765 ft. Total Depth 4765 ft.

Packer Depth 4664 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 4669 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4716 ft. Recorder Number #2606 Cap. 4150

Bottom Recorder Depth (Outside) 4720 ft. Recorder Number 4332 Cap. 4200

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

Drilling Contractor Big "H" #1

Mud Type DRISPAC Viscosity 47

Weight 9.3 Water Loss 12 cc.

Chlorides 17,000 P.P.M.

Jars: Make _____ Serial Number _____

Did Well Flow? NO Reversed Out NO

Drill Collar Length 397 I. D. 2.2 in.

Weight Pipe Length _____ I. D. _____ in.

Drill Pipe Length 4314 I. D. 3.8 in.

Test Tool Length 20 ft. Tool Size 5 1/2 in.

Anchor Length 96 ft. Size 5 1/2 x 6 1/2 in.

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: INITIAL - STRONG - G.T.S. 5 MIN.
FINAL - SEE GAS FLOW REPORT # 3736 Attached sheet for Gas Measurements

RECEIVED MAR 05 1982

Recovered 300 ft. of GAS CUT DRILLING MUD

Recovered 250 ft. of HEAVY GAS CUT DRILLING MUD

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: PACKERS DID NOT SEAT AT FIRST, SO WE PULLED LOOSE & GOT A PACKER SEAT ON SECOND TRY.

Time On Location 4:00 A.M. (P.M.) Time Pick Up Tool 5:00 A.M. (P.M.) Time Off Location _____ A.M. P.M.

Time Set Packer(s) 7:30 A.M. (P.M.) Time Started Off Bottom 11:45 A.M. (P.M.) Maximum Temperature 128° F

Initial Hydrostatic Pressure			(A)	2292	P.S.I.	
Initial Flow Period	Minutes	30	(B)	312	P.S.I. to (C)	239 P.S.I.
Initial Closed In Period	Minutes	45	(D)	1663	P.S.I.	
Final Flow Period	Minutes	90	(E)	228	P.S.I. to (F)	187 P.S.I.
Final Closed In Period	Minutes	90	(G)	1632	P.S.I.	
Final Hydrostatic Pressure			(H)	2240	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 Robert C. Llewellyn
Signature of Customer or his authorized representative

Western Representative Richard Howell THANKS!

FIELD INVOICE

Open Hole Test	$ 1760.00
Misrun	$ _____
Straddle Test	$ _____
Jars	$ _____
Selective Zone	$ _____
Safety Joint	$ _____
Standby	$ _____
Evaluation	$ _____
Extra Packer	$ _____
Circ. Sub.	$ _____
Mileage 55	$ 41.25
Fluid Sampler	$ _____
Extra Charts	$ _____

Phone 316 262-5861

P. O. Box 1599
WICHITA, KANSAS 67201

WESTERN TESTERS

No. 3236

GAS FLOW REPORT

Date 3/3/82 Ticket #13963 Company Longhorn Energy Resources, Inc.

Well Name and No. Brass #1 Dst No. 2 Interval Tested 4669-4765

County Barber State Ks. 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
	G.T.S. 5 MIN.				**PRE FLOW**
5	34 PSIG	1½	orifice		2,798,000 C.F.P.D
15	21	"			2,012,000
25	7	"			1,036,000
					SECOND FLOW
10	4 PSIG	1½	orifice		764,000 C.F.P.D
20	4	"			" "
30	4	"			" "
40	4	"			" "
50	4	"			" "
60	4	"			" "
70	"				" "
80	"				" "
90	"				" "

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 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 Longhorn Energy Resources

Authorized by Robert C. Llewellyn

FORM WTC 9

WESTERN TESTING CO., INC.
Pressure Data

Date 3-3-82 Test Ticket No. 13963

Recorder No. 2606 Capacity 4150 Location 4716 Ft

Clock No. — — — — Elevation — Well Temperature 128 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	2324	P.S.I.	Open Tool	7:30 PM	
B	First Initial Flow Pressure	326	P.S.I.	First Flow Pressure	30 Mins.	30 Mins
C	First Final Flow Pressure	277	P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins
D	Initial Closed-in Pressure	1676	P.S.I.	Second Flow Pressure	90 Mins.	90 Mins
E	Second Initial Flow Pressure	216	P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins
F	Second Final Flow Pressure	206	P.S.I.			
G	Final Closed-in Pressure	1647	P.S.I.			
H	Final Hydrostatic Mud	2288	P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	326
P 2 5	326
P 3 10	348
P 4 15	403
P 5 20	337
P 6 25	283
P 7 30	277
P 8 35	
P 9 40	
P10 45	
P11 50	
P12 55	
P13 60	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 15 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	277
3	1396
6	1569
9	1603
12	1617
15	1626
18	1636
21	1643
24	1651
27	1658
30	1662
33	1666
36	1670
39	1672
42	1674
45	1676
48	
51	
54	
57	
60	

Second Flow Pressure
Breakdown: 18 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	216
5	
10	
15	
20	216
25	215
30	213
35	213
40	213
45	212
50	211
55	210
60	209
65	208
70	207
75	206
80	
85	
90	206

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

Point Minutes	Press.
0	206
3	1259
6	1460
9	1494
12	1513
15	1527
18	1544
21	1553
24	1563
27	1571
30	1579
33	1585
36	1590
39	1596
42	1601
45	1607
48	1611
51	1616
54	1620
57	1623
60	1624

cont

WTC - 4

WESTERN TESTING CO., INC.
Pressure Data

Date _____ Test Ticket No. 13963

Recorder No. _____ Capacity _____ Location _____ F

Clock No. _____ Elevation _____ Well Temperature _____ °

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 5 mins. and a		of 3 mins. and a		of 5 mins. and a		of 3 mins. and a	
final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.		final inc. of 0 Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1		63				63	1632
P 2		66				66	1635
P 3		69				69	1636
P 4		72				72	1637
P 5		75				75	1639
P 6		78				78	1641
P 7		81				81	1643
P 8		84				84	1645
P 9		87				87	1646
P10		90				90	1647
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	

WTC - 4

Company Longhorn Energy Resources, Inc. Lease & Well No. #1 Brass

Elevation 1863 Kelly Bushing Formation Mississippi Effective Pay - Ft. Ticket No. 15830

Date 3/5/82 Sec. 30 Twp. 32S Range 15W County Barber State Kansas

Test Approved by Robert C Lewellyn Western Representative Rod Tritt

Formation Test No. 4 Interval Tested from 4809 ft. to 4824 ft. Total Depth 4824 ft.

Packer Depth 4804 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 4809 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4813 ft. Recorder Number 2606 Cap. 4150

Bottom Recorder Depth (Outside) 4816 ft. Recorder Number 4332 Cap. 4200

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

Drilling Contractor Big H Drilling, Inc. Rig #1 Drill Collar Length 406 I. D. 2¼ in.

Mud Type Drispac Viscosity 65 Weight Pipe Length - I. D. - in.

Weight 9.3 Water Loss 13.8 cc. Drill Pipe Length 4383 I. D. 3.8 in.

Chlorides 19,000 P.P.M. Test Tool Length 20 ft. Tool Size 5½OD in.

Jars: Make No Serial Number - Anchor Length 15 ft. Size 5½OD 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 4½FH in.

Blow: Fair depleting to very weak blow on initial flow period. Very weak blow on final flow period for 25 minutes, then died.

Recovered 120 ft. of drilling mud

Recovered 120 ft. of slightly oil cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 12:35 ~~A.M.~~ P.M. Time Started Off Bottom 3:20 ~~A.M.~~ P.M. Maximum Temperature 127

Initial Hydrostatic Pressure			(A) 2355	P.S.I.		
Initial Flow Period	Minutes 30	(B) 104	P.S.I. to	(C) 123	P.S.I.	
Initial Closed In Period	Minutes 48	(D) 1172	P.S.I.			
Final Flow Period	Minutes 30	(E) 214	P.S.I. to	(F) 214	P.S.I.	
Final Closed In Period	Minutes 60	(G) 1120	P.S.I.			
Final Hydrostatic Pressure			(H) 2355	P.S.I.		

WTC-

WESTERN TESTING CO., INC.
Pressure Data

Date 3/5/82 Test Ticket No. 15830

Recorder No. 2606 Capacity 4150 Location 4813 Ft.

Clock No. - Elevation 1863 Kelly Bushing Well Temperature 127 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2355 P.S.I.	Open Tool	12:35P M	
B First Initial Flow Pressure	104 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	123 P.S.I.	Initial Closed-in Pressure	45 Mins.	48 Mins.
D Initial Closed-in Pressure	1172 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	214 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	214 P.S.I.			
G Final Closed-in Pressure	1120 P.S.I.			
H Final Hydrostatic Mud	2355 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
P 1 0	104
P 2 5	122
P 3 10	123
P 4 15	123
P 5 20	123
P 6 25	123
P 7 30	123
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 16 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	123
3	125
6	126
9	140
12	193
15	266
18	355
21	469
24	591
27	717
30	829
33	917
36	998
39	1062
42	1115
45	1163
48	1172

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

Point Minutes	Press.
0	214
5	214
10	214
15	214
20	214
25	214
30	214

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	214
3	214
6	214
9	214
12	226
15	243
18	278
21	340
24	410
27	490
30	572
33	655
36	735
39	804
42	875
45	927
48	990
51	1027
54	1070
57	1106
60	1120

JR# 15830

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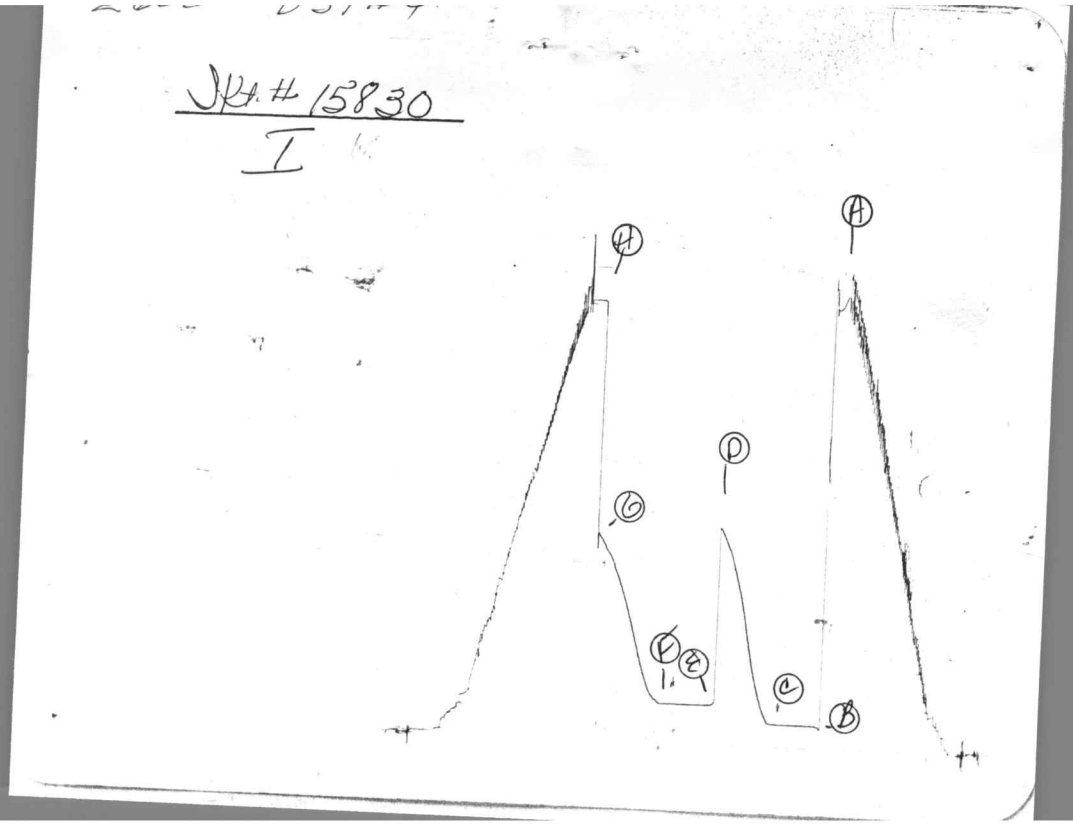

WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET No. 15830

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

Elevation 1863 KB Formation Miss Eff. Pay Ft.

District PRATT Date 3-5-82 Customer Order No.

COMPANY NAME Longhorn Energy Resources Inc

ADDRESS P.O. Box 1314 Gt Bend Kansas, 67530

LEASE AND WELL NO. 1 BRASS COUNTY Barber STATE Kansas Sec. 30 Twp. 32 S Rge. 15 W

Mail Invoice To #1 BRASS (Co. Name) SAME (Address) No. Copies Requested 5

Mail Charts To SAME (Address) No. Copies Requested 5

Formation Test No. 4 Interval Tested From 4809 ft. to 4824 ft. Total Depth 4824 ft.

Packer Depth 4804 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Packer Depth 4809 ft. Size 6 3/4 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 4813 ft. Recorder Number 2606 Cap. 4150

Bottom Recorder Depth (Outside) 4816 ft. Recorder Number 4332 Cap. 4200

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

Drilling Contractor Rig 4 Drilling Inc Rig 1 Drill Collar Length 406 I. D. 2 1/4 in.

Mud Type Dispac Viscosity 65 Weight Pipe Length — I. D. 3 in.

Weight 9.3 Water Loss 13.8 cc. Drill Pipe Length 4383 I. D. 3.8 in.

Chlorides 19,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.

Jars: Make NO Serial Number — Anchor Length 15 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 FH in.

Blow: fair depleting to very weak blow on initial flow very weak blow on final flow for 25 minutes died

Recovered 120 ft. of Drilling mud

Recovered 120 ft. of slightly oil cut mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

RECEIVED
MAR 09 1982

Time On Location 10:00 A.M. P.M. Time Pick Up Tool 10:45 A.M. P.M. Time Off Location 7:00 A.M. P.M.

Time Set Packer(s) 12:35 A.M. P.M. Time Started Off Bottom 3:20 A.M. P.M. Maximum Temperature 122°F

Initial Hydrostatic Pressure		(A)	2397	P.S.I.	
Initial Flow Period	Minutes 30	(B)	104	P.S.I. to (C)	124 P.S.I.
Initial Closed In Period	Minutes 45	(D)	1194	P.S.I.	
Final Flow Period	Minutes 30	(E)	208	P.S.I. to (F)	208 P.S.I.
Final Closed In Period	Minutes 60	(G)	1142	P.S.I.	
Final Hydrostatic Pressure		(H)	2344	P.S.I.	

COMPANY TERMS

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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 Robert C. Lemellyn
Signature of Customer or his authorized representative

Western Representative Rod Tritt Thank you

FIELD INVOICE

Open Hole Test	$ 700.00
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 3-5-82 Test Ticket No. 15830

Recorder No. 2606 Capacity 4150 Location 4813 F

Clock No. — — — — Elevation 1863 KB Well Temperature 127 °

Point		Pressure	
A	Initial Hydrostatic Mud	2355	P.S.I.
B	First Initial Flow Pressure	104	P.S.I.
C	First Final Flow Pressure	123	P.S.I.
D	Initial Closed-in Pressure	1172	P.S.I.
E	Second Initial Flow Pressure	214	P.S.I.
F	Second Final Flow Pressure	214	P.S.I.
G	Final Closed-in Pressure	1120	P.S.I.
H	Final Hydrostatic Mud	2355	P.S.I.

	Time Given	Time Computed
Open Tool	12:35 P M	
First Flow Pressure	30 Mins.	30 Mins
Initial Closed-in Pressure	45 Mins.	48 Mins
Second Flow Pressure	30 Mins.	30 Mins
Final Closed-in Pressure	60 Mins.	60 Mins

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 4 Inc. of 5 mins. and a final inc. of 0 Min.

Point Mins.		Press.
P 1	0	104
P 2	5	122
P 3	10	123
P 4	15	|
P 5	20	|
P 6	25	
P 7	30	123
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 16 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	123
3	125
6	126
9	140
12	193
15	266
18	355
21	469
24	591
27	717
30	829
33	917
36	998
39	1062
42	1115
45	1163
48	1172
51	
54	
57	
60	

Second Flow Pressure
Breakdown: 4 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	214
5	|
10	|
15	|
20	|
25	
30	214
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	

Final Shut-In
Breakdown: 20 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	214
3	|
6	|
9	214
12	226
15	243
18	278
21	340
24	410
27	490
30	572
33	655
36	735
39	804
42	875
45	927
48	990
51	1027
54	1070
57	1106
60	1120

WTC - 4