

Company Texas Energies, Inc. Lease & Well No. #1-24 Herman
Elevation 2420 Kelly Bushing Formation Mississippi Effective Pay -- Ft. Ticket No. 16378
Date 8/ 14 /82 Sec. 24 Twp. 27S Range 22W County Ford State Kansas
Test Approved by Ron Falwell Western Representative Jim Wondra

Formation Test No. 1 Interval Tested from 4978 ft. to 4995 ft. Total Depth 4995 ft.

Packer Depth 4973 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 4978 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4984 ft. Recorder Number 2607 Cap 4150

Bottom Recorder Depth (Outside) 4987 ft. Recorder Number 3351 Cap 4000

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

Drilling Contractor Wheatstate Drlg. Rig #1 Drill Collar Length 303 I. D. 2 1/4 in.

Mud Type premix-driscopac Viscosity 55 Weight Pipe Length - I. D. - in.

Weight 9.4 Water Loss 9.8 cc. Drill Pipe Length 4646 I. D. 3.8 in.

Chlorides 25,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.

Jars: Make WTC Serial Number 410 Anchor Length 17 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: Weak blow throughout initial flow period. Weak blow died in five minutes on final flow period. Flushed tool and blew for twenty minutes.

Recovered 70 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Slid tool six feet to bottom.

Time Set Packer(s) 1:50 A.M. Time Started Off Bottom 4:50 A.M. Maximum Temperature 129°

Initial Hydrostatic Pressure 2643 P.S.I. (A)

Initial Flow Period 30 Minutes (B) 235 * P.S.I. to (C) 233 * P.S.I.

Initial Closed In Period 45 Minutes (D) 1319 P.S.I.

Final Flow Period 45 Minutes (E) 180 * P.S.I. to (F) 221 * P.S.I.

Final Closed In Period 57 Minutes (G) 431 P.S.I.

Final Hydrostatic Pressure 2595 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 8/14/82 Test Ticket No. 16378
 Recorder No. 2607 Capacity 4150 Location 4984 Ft.
 Clock No. -- Elevation -- Well Temperature -- °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2643	P.S.I.	1:50A	M
B First Initial Flow Pressure	235 *	P.S.I.	30	Mins. 30
C First Final Flow Pressure	233 *	P.S.I.	45	Mins. 45
D Initial Closed-in Pressure	1319	P.S.I.	45	Mins. 45
E Second Initial Flow Pressure	180 *	P.S.I.	60	Mins. 57
F Second Final Flow Pressure	221 *	P.S.I.		
G Final Closed-in Pressure	431	P.S.I.		
H Final Hydrostatic Mud	2595	P.S.I.		

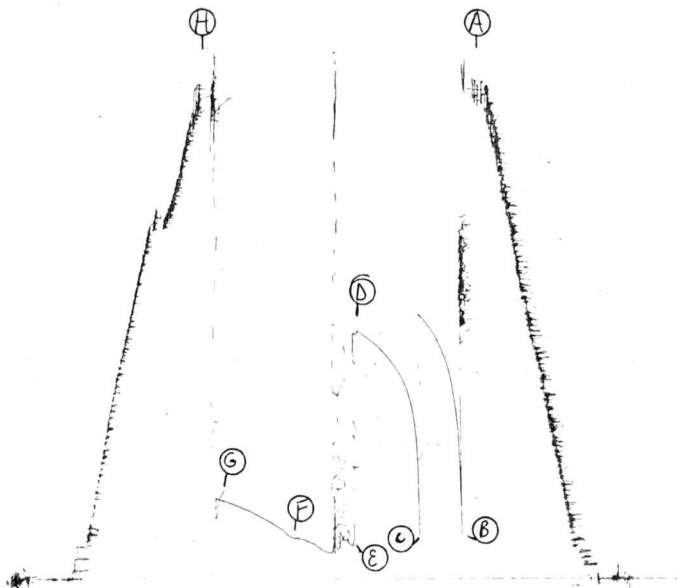
* PRESSURES QUESTIONABLE DUE TO PLUGGED TOOL

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>9</u> Inc.		Breakdown: <u>19</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 0	235 *	0	233 *	0	180 *	0	221 *
P 2 5	906 *	3	758	5	213 *	3	230
P 3 10	1109*	6	912	10	245 *	6	250
P 4 15	1215*	9	995	15	FLUSHED TOOL	9	267
P 5 20	1292*	12	1049	20	143 *	12	282
P 6 25	1351*	15	1092	25	162 *	15	296
P 7 30	233 *	18	1126	30	189 *	18	307
P 8		21	1157	35	201 *	21	319
P 9		24	1185	40	213 *	24	332
P10		27	1210	45	221 *	27	343
P11		30	1233			30	355
P12		33	1252			33	366
P13		36	1271			36	375
P14		39	1287			39	383
P15		42	1303			42	393
P16		45	1319			45	402
P17						48	410
P18						51	417
P19						54	423
P20						57	431

TKT # 16378

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Company Texas Energies, Inc. Lease & Well No. #1-24 Herman
 Elevation 2420 Kelly Bushing Formation Mississippi Effective Pay -- Ft. Ticket No. 16379
 Date 8/ 15 /82 Sec. 24 Twp. 27S Range 22W County Ford State Kansas
 Test Approved by Ron Falwell Western Representative Jim Wondra
 Formation Test No. 2 Interval Tested from 4979 ft. to 5018 ft. Total Depth 5018 ft.
 Packer Depth 4974 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 4979 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 5002 ft. Recorder Number 2607 Cap. 4150
 Bottom Recorder Depth (Outside) 5010 ft. Recorder Number 3351 Cap. 4000
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Wheatstate Drlg. Rig #1 Drill Collar Length 303 I. D. 2 1/4 in.
 Mud Type premix-driscopac Viscosity 47 Weight Pipe Length - I. D. - in.
 Weight 9.4 Water Loss 7.2 cc. Drill Pipe Length 4657 I. D. 3.8 in.
 Chlorides 26,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.
 Jars: Make WTC Serial Number 410 Anchor Length 39 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: Strong blow throughout flow periods. Gas to surface in eleven minutes on pre-flow.
See attached sheet for gas measurements.

Recovered 190 ft. of gas cut mud

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

Time Set Packer(s) 9:35 ~~P.M.~~ A.M. Time Started Off Bottom 1:20 ~~P.M.~~ A.M. Maximum Temperature 129°
 Initial Hydrostatic Pressure _____ (A) 2605 P.S.I.
 Initial Flow Period _____ Minutes 30 (B) 124 P.S.I. to (C) 124 P.S.I.
 Initial Closed In Period _____ Minutes 63 (D) 1515 P.S.I.
 Final Flow Period _____ Minutes 45 (E) 105 P.S.I. to (F) 105 P.S.I.
 Final Closed In Period _____ Minutes 90 (G) 1483 P.S.I.
 Final Hydrostatic Pressure _____ (H) 2571 P.S.I.

GAS FLOW REPORT

Date 8/15/82 Ticket 16379 Company Texas Energies, Inc.
 Well Name and No. Herman #1-24 Dst No. 2 Interval Tested 4979'-5018'
 County Ford State Kansas Sec. 24 Twp. 27S Rg. 22W

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
Gas to surface in eleven minutes. PRE FLOW					
15 min.	17" of water	1½" orifice			287,000 CFPD
20 min.	16" of water	1½" orifice			278,000 CFPD
30 min.	17" of water	1½" orifice			287,000 CFPD

SECOND FLOW					
5 min.	28" of water	1½" orifice			368,000 CFPD
10 min.	20" of water	1½" orifice			211,000 CFPD
20 min.	12" of water	1½" orifice			241,000 CFPD
30 min.	12" of water	1½" orifice			241,000 CFPD
40 min.	11" of water	1½" orifice			231,000 CFPD
45 min.	11" of water	1½" orifice			231,000 CFPD

GAS BOTTLE

Serial No. --- Date Bottle Filled -- Date to be Invoiced 8/15/82

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 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 Texas Energies, Inc.
 Authorized by Ron Falwell

WESTERN TESTING CO., INC.
Pressure Data

Date 8/15/82 Test Ticket No. 16379
Recorder No. 2607 Capacity 4150 Location 5007 Ft.
Clock No. --- Elevation 2420 Kelly Bushing Well Temperature 129 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2605</u> P.S.I.	Open Tool	<u>9:35P</u> M	
B First Initial Flow Pressure	<u>124</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>124</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
D Initial Closed-in Pressure	<u>1515</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>105</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>105</u> P.S.I.			
G Final Closed-in Pressure	<u>1483</u> P.S.I.			
H Final Hydrostatic Mud	<u>2571</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>21</u> Inc.		Breakdown: <u>9</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>124</u>	<u>0</u>	<u>124</u>	<u>0</u>	<u>105</u>	<u>0</u>	<u>105</u>
P 2 <u>5</u>	<u>124</u>	<u>3</u>	<u>447</u>	<u>5</u>	<u>105</u>	<u>3</u>	<u>542</u>
P 3 <u>10</u>	<u>124</u>	<u>6</u>	<u>783</u>	<u>10</u>	<u>105</u>	<u>6</u>	<u>795</u>
P 4 <u>15</u>	<u>124</u>	<u>9</u>	<u>1025</u>	<u>15</u>	<u>105</u>	<u>9</u>	<u>935</u>
P 5 <u>20</u>	<u>124</u>	<u>12</u>	<u>1157</u>	<u>20</u>	<u>105</u>	<u>12</u>	<u>1019</u>
P 6 <u>25</u>	<u>124</u>	<u>15</u>	<u>1228</u>	<u>25</u>	<u>105</u>	<u>15</u>	<u>1081</u>
P 7 <u>30</u>	<u>124</u>	<u>18</u>	<u>1274</u>	<u>30</u>	<u>105</u>	<u>18</u>	<u>1128</u>
P 8		<u>21</u>	<u>1311</u>	<u>35</u>	<u>105</u>	<u>21</u>	<u>1171</u>
P 9		<u>24</u>	<u>1342</u>	<u>40</u>	<u>105</u>	<u>24</u>	<u>1209</u>
P10		<u>27</u>	<u>1361</u>	<u>45</u>	<u>105</u>	<u>27</u>	<u>1235</u>
P11		<u>30</u>	<u>1382</u>			<u>30</u>	<u>1259</u>
P12		<u>33</u>	<u>1400</u>			<u>33</u>	<u>1279</u>
P13		<u>36</u>	<u>1417</u>			<u>36</u>	<u>1301</u>
P14		<u>39</u>	<u>1432</u>			<u>39</u>	<u>1322</u>
P15		<u>42</u>	<u>1446</u>			<u>42</u>	<u>1338</u>
P16		<u>45</u>	<u>1461</u>			<u>45</u>	<u>1356</u>
P17		<u>48</u>	<u>1472</u>			<u>48</u>	<u>1372</u>
P18		<u>51</u>	<u>1482</u>			<u>51</u>	<u>1387</u>
P19		<u>54</u>	<u>1491</u>			<u>54</u>	<u>1398</u>
P20		<u>57</u>	<u>1498</u>			<u>57</u>	<u>1409</u>
		<u>60</u>	<u>1508</u>			<u>60</u>	<u>1419</u>
		<u>63</u>	<u>1515</u>				

WESTERN TESTING CO., INC.
Pressure Data

Date 8/15/82 Test Ticket No. 16379
Recorder No. 2607 Capacity 4150 Location 5007 Ft.
Clock No. --- Elevation 2420 Kelly Bushing Well Temperature 129 °F

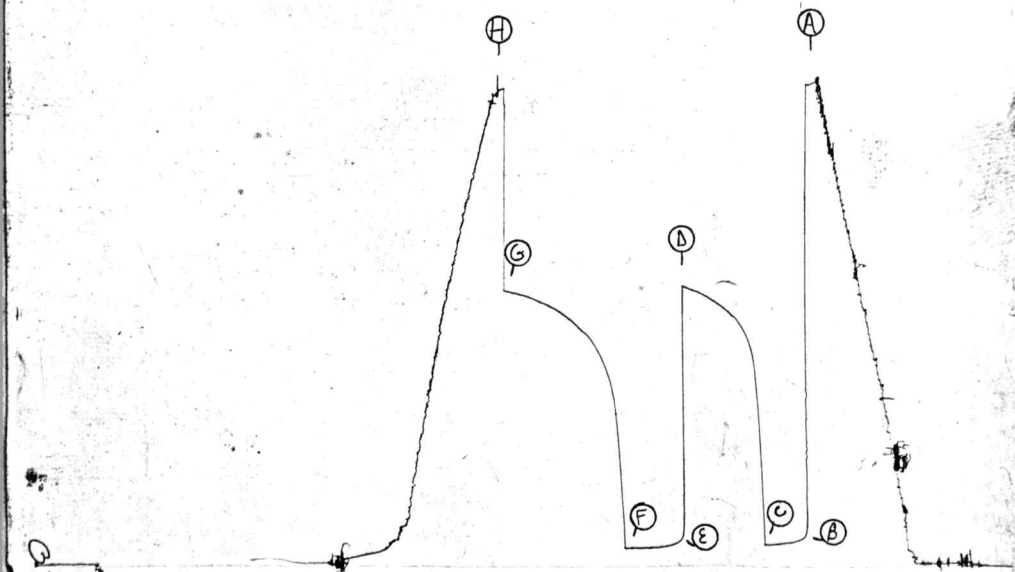
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2605</u> P.S.I.	Open Tool	<u>9:35P</u> M	
B First Initial Flow Pressure	<u>124</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>124</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
D Initial Closed-in Pressure	<u>1515</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>105</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>105</u> P.S.I.			
G Final Closed-in Pressure	<u>1483</u> P.S.I.			
H Final Hydrostatic Mud	<u>2571</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>21</u> Inc.		Breakdown: <u>9</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						63	1429
P 2						66	1437
P 3						69	1446
P 4						72	1466
P 5						75	1462
P 6						78	1467
P 7						81	1474
P 8						84	1479
P 9						87	1481
P10						90	1483
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT # 16379

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Company Texas Energies, Inc. Lease & Well No. #1-24 Herman
Elevation 2420 Kelly Bushing Formation Mississippi Effective Pay -- Ft. Ticket No. 16380
Date 8/ 16 /82 Sec. 24 Twp. 27S Range 22W County Ford State Kansas
Test Approved by Ron Falwell Western Representative Jim Wondra
Formation Test No. 3 Interval Tested from 5043 ft. to 5064 ft. Total Depth 5064 ft.
Packer Depth 5038 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Packer Depth 5043 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 5053 ft. Recorder Number 2607 Cap. 4150
Bottom Recorder Depth (Outside) 5056 ft. Recorder Number 3351 Cap. 4000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Wheatstate Drlg. Rig #1 Drill Collar Length 303 I. D. 2 1/4 in.
Mud Type premix-driscap Viscosity 39 Weight Pipe Length - I. D. - in.
Weight 9.5 Water Loss 80 cc. Drill Pipe Length 4711 I. D. 3.8 in.
Chlorides 32,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.
Jars: Make WTC Serial Number 410 Anchor Length 21 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: Strong blow throughout initial flow period. Fair decreased to weak blow on final flow period.

Recovered 120 ft. of slightly oil cut watery mud - gassy
Recovered 710 ft. of gassy salt water (Chlorides 58,000 ppm)
Recovered 120 ft. of gas in pipe
Recovered ft. of
Recovered ft. of

Remarks:

Time Set Packer(s) 9:30 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 12:45 ~~P.M.~~ ^{A.M.} Maximum Temperature 130°
Initial Hydrostatic Pressure 2613 (A) P.S.I.
Initial Flow Period 30 Minutes (B) 127 P.S.I. to (C) 200 P.S.I.
Initial Closed In Period 48 Minutes (D) 1573 P.S.I.
Final Flow Period 45 Minutes (E) 312 P.S.I. to (F) 354 P.S.I.
Final Closed In Period 75 Minutes (G) 1578 P.S.I.
Final Hydrostatic Pressure 2599 (H) P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 8/16/82 Test Ticket No. 16380
 Recorder No. 2607 Capacity 4150 Location 5053 Ft.
 Clock No. --- Elevation 2420 Kelly Bushing Well Temperature 130 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2613</u> P.S.I.	Open Tool	9:30A	M
B First Initial Flow Pressure	<u>127</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>200</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>48</u> Mins.
D Initial Closed-in Pressure	<u>1573</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>312</u> P.S.I.	Final Closed-in Pressure	<u>75</u> Mins.	<u>75</u> Mins.
F Second Final Flow Pressure	<u>354</u> P.S.I.			
G Final Closed-in Pressure	<u>1578</u> P.S.I.			
H Final Hydrostatic Mud	<u>2599</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>16</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>25</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>127</u>	<u>0</u>	<u>200</u>	<u>0</u>	<u>312</u>	<u>0</u>	<u>354</u>
P 2 <u>5</u>	<u>127</u>	<u>3</u>	<u>818</u>	<u>5</u>	<u>312</u>	<u>3</u>	<u>1309</u>
P 3 <u>10</u>	<u>136</u>	<u>6</u>	<u>1336</u>	<u>10</u>	<u>312</u>	<u>6</u>	<u>1418</u>
P 4 <u>15</u>	<u>145</u>	<u>9</u>	<u>1440</u>	<u>15</u>	<u>312</u>	<u>9</u>	<u>1451</u>
P 5 <u>20</u>	<u>159</u>	<u>12</u>	<u>1479</u>	<u>20</u>	<u>315</u>	<u>12</u>	<u>1468</u>
P 6 <u>25</u>	<u>176</u>	<u>15</u>	<u>1500</u>	<u>25</u>	<u>320</u>	<u>15</u>	<u>1482</u>
P 7 <u>30</u>	<u>200</u>	<u>18</u>	<u>1513</u>	<u>30</u>	<u>329</u>	<u>18</u>	<u>1499</u>
P 8		<u>21</u>	<u>1523</u>	<u>35</u>	<u>338</u>	<u>21</u>	<u>1510</u>
P 9		<u>24</u>	<u>1533</u>	<u>40</u>	<u>347</u>	<u>24</u>	<u>1520</u>
P10		<u>27</u>	<u>1543</u>	<u>45</u>	<u>354</u>	<u>27</u>	<u>1528</u>
P11		<u>30</u>	<u>1549</u>			<u>30</u>	<u>1535</u>
P12		<u>33</u>	<u>1555</u>			<u>33</u>	<u>1540</u>
P13		<u>36</u>	<u>1560</u>			<u>36</u>	<u>1545</u>
P14		<u>39</u>	<u>1564</u>			<u>39</u>	<u>1550</u>
P15		<u>42</u>	<u>1567</u>			<u>42</u>	<u>1554</u>
P16		<u>45</u>	<u>1570</u>			<u>45</u>	<u>1558</u>
P17		<u>48</u>	<u>1573</u>			<u>48</u>	<u>1562</u>
P18						<u>51</u>	<u>1566</u>
P19						<u>54</u>	<u>1569</u>
P20						<u>57</u>	<u>1571</u>
						<u>60</u>	<u>1573</u>

Pressure Data

Test Ticket No. 16380

Location 5053 Ft.

Well Temperature 130 °F[illegible]

TKT # 16380

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