



Home Office: Wichita, Kansas 67201
P.O. Box 1599 (316) 262-5861

Company Graves Drilling Company, Inc. Lease & Well No. Murphy #1
Elevation -- Formation Kansas City Effective Pay ---- Ft. Ticket No. 4208
Date 12/6/79 Sec. 6 Twp. 23S Range 11W County Stafford State Kansas
Test Approved by R. E. Rowland Western Representative Denis Wondra
Formation Test No. 1 Interval Tested from 3438 ft. to 3450 ft. Total Depth 3450 ft.
Packer Depth 3433 ft. Size 6 3/4 in. Packer Depth 3438 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) 3440 ft. Recorder Number 3474 Cap. 3000
Bottom Recorder Depth (Outside) 3443 ft. Recorder Number 3659 Cap. 4000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Merckle Drilling Rig #1 Drill Collar Length - I. D. - in.
Mud Type drispac Viscosity 45 Weight Pipe Length 496 I. D. 2.8 in.
Weight 9.3 Water Loss 11.2 cc. Drill Pipe Length 2920 I. D. 3.8 in.
Chlorides 17,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
Jars: Make - Serial Number - Anchor Length 12 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. Decreasing throughout first flow period. Few bubbles. Died in six minutes on second opening.
10 ft. of drilling mud
Recovered 10 ft. of drilling mud
Recovered 10 ft. of drilling mud
Recovered 10 ft. of drilling mud
Recovered 10 ft. of drilling mud
Recovered 10 ft. of drilling mud
Remarks: Hit bridge 1180' off bottom. Slid tool 3' to bottom. Pressures incorrect due to plugged tool. Plugged anchor.
Time Set Packer(s) 6:38 ~~A.M.~~ P.M. Time Started Off Bottom 9:25 ~~A.M.~~ P.M. Maximum Temperature 105°
Initial Hydrostatic Pressure (A) 1683 P.S.I.
Initial Flow Period Minutes 15 (B) 53 P.S.I. to (C) 53 P.S.I.
Initial Closed In Period Minutes 45 (D) 1655 P.S.I.
Final Flow Period Minutes 60 (E) 76 P.S.I. to (F) 46 P.S.I.
Final Closed In Period Minutes 45 (G) 1527 P.S.I.
Final Hydrostatic Pressure (H) 1676 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 12/6/79 Test Ticket No. 4208
 Recorder No. 3474 Capacity 3000 Location 3440 Ft.
 Clock No. --- Elevation ---- Well Temperature 105 °F
 Point Pressure Time Given Time Computed
 A. Initial Hydrostatic Mud 1683 P.S.I. Open Tool 6:38P M
 B First Initial Flow Pressure 53 P.S.I. First Flow Pressure 15 Mins. 15 Mins.
 C First Final Flow Pressure 53 P.S.I. Initial Closed-in Pressure 45 Mins. 45 Mins.
 D Initial Closed-in Pressure 1655 P.S.I. Second Flow Pressure 60 Mins. 60 Mins.
 E Second Initial Flow Pressure 76 P.S.I. Final Closed-in Pressure 45 Mins. 45 Mins.
 F Second Final Flow Pressure 46 P.S.I.
 G Final Closed-in Pressure 1527 P.S.I.
 H Final Hydrostatic Mud 1676 P.S.I.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>15</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>15</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>53</u>	<u>0</u>	<u>53</u>	<u>0</u>	<u>76</u>	<u>0</u>	<u>46</u>
P 2 <u>5</u>	Plugging action	<u>3</u>	<u>67</u>	<u>5</u>	Plugging action	<u>3</u>	<u>61</u>
P 3 <u>10</u>	Plugging action	<u>6</u>	<u>108</u>	<u>10</u>	Plugging action	<u>6</u>	<u>92</u>
P 4 <u>15</u>	<u>53</u>	<u>9</u>	<u>373</u>	<u>15</u>	Plugging action	<u>9</u>	<u>253</u>
P 5		<u>12</u>	<u>930</u>	<u>20</u>	Plugging action	<u>12</u>	<u>794</u>
P 6		<u>15</u>	<u>1088</u>	<u>25</u>	Plugging action	<u>15</u>	<u>1138</u>
P 7		<u>18</u>	<u>1236</u>	<u>30</u>	Plugging action	<u>18</u>	<u>1386</u>
P 8		<u>21</u>	<u>1342</u>	<u>35</u>	Plugging action	<u>21</u>	<u>1459</u>
P 9		<u>24</u>	<u>1408</u>	<u>40</u>	Plugging action	<u>24</u>	<u>1497</u>
P10		<u>27</u>	<u>1464</u>	<u>45</u>	Plugging action	<u>27</u>	<u>1517</u>
P11		<u>30</u>	<u>1521</u>	<u>50</u>	Plugging action	<u>30</u>	<u>1518</u>
P12		<u>33</u>	<u>1555</u>	<u>55</u>	Plugging action	<u>33</u>	<u>1523</u>
P13		<u>36</u>	<u>1573</u>	<u>60</u>	<u>46</u>	<u>36</u>	<u>1524</u>
P14		<u>39</u>	<u>1601</u>			<u>39</u>	<u>1525</u>
P15		<u>42</u>	<u>1622</u>			<u>42</u>	<u>1526</u>
P16		<u>45</u>	<u>1655</u>			<u>45</u>	<u>1527</u>
P17							
P18							
P19							
P20							

Company Graves Drilling Company, Inc. Lease & Well No. Murphy #1
Elevation 1812 Ground Level Formation Kansas City Effective Pay --- Ft. Ticket No. 4209
Date 12/7/79 Sec. 6 Twp. 23S Range 11W County Stafford State Kansas

Test Approved by R. E. Rowland Western Representative Denis Wondra

Formation Test No. 2 Interval Tested from 3438 ft. to 3450 ft. Total Depth 3450 ft.

Packer Depth 3433 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

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

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3440 ft. Recorder Number 3474 Cap. 3000

Bottom Recorder Depth (Outside) 3443 ft. Recorder Number 3659 Cap. 4000

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

Drilling Contractor Merckle Drilling Company Rig# 1 Drill Collar Length - I. D. - in.

Mud Type drispac Viscosity 40 Weight Pipe Length 496 I. D. 2.8 in.

Weight 9.3 Water Loss 11.2 cc. Drill Pipe Length 2920 I. D. 3.8 in.

Chlorides 17,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 in.

Jars: Make -- Serial Number -- Anchor Length 12 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 in.

Blow: Weak. Increased to one inch by end of first flow period. Steady one inch blow throughout second opening.

Recovered 40 ft. of oil cut mud

Recovered - ft. of Some free oil on top of tool.

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: -

Time Set Packer(s) 3:53 ~~P.M.~~ A.M. Time Started Off Bottom 6:40 ~~P.M.~~ A.M. Maximum Temperature 108⁰

Initial Hydrostatic Pressure - (A) 1680 P.S.I.

Initial Flow Period 15 Minutes (B) 31 P.S.I. to (C) 24 P.S.I.

Initial Closed In Period 45 Minutes (D) 83 P.S.I.

Final Flow Period 60 Minutes (E) 36 P.S.I. to (F) 26 P.S.I.

Final Closed In Period 45 Minutes (G) 58 P.S.I.

Final Hydrostatic Pressure - (H) 1646 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

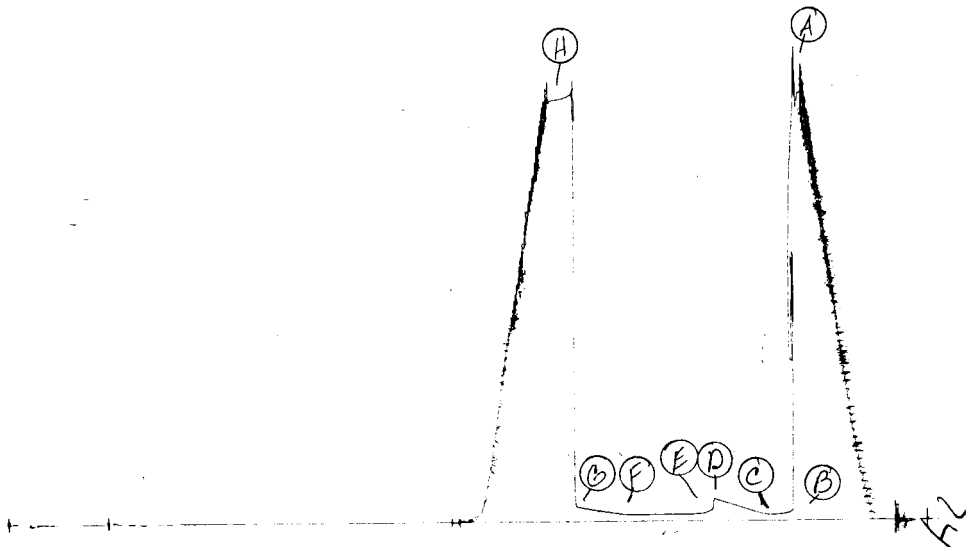
Date 12/7/79 Recorder No. 3474 Capacity 3000 Test Ticket No. 4209
 Clock No. ---- Elevation 1812 Ground Level Location 3440 Ft. 108 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1680 P.S.I.	Open Tool	3:53A	M
B First Initial Flow Pressure	31 P.S.I.	First Flow Pressure	15 Mins.	15 Mins.
C First Final Flow Pressure	24 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	83 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	36 P.S.I.	Final Closed-in Pressure	45 Mins.	45 Mins.
F Second Final Flow Pressure	26 P.S.I.			
G Final Closed-in Pressure	58 P.S.I.			
H Final Hydrostatic Mud	1646 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>12</u> Inc.		Breakdown: <u>15</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>31</u>	<u>0</u>	<u>24</u>	<u>0</u>	<u>36</u>	<u>0</u>	<u>26</u>
P 2 <u>5</u>	<u>28</u>	<u>3</u>	<u>24</u>	<u>5</u>	<u>32</u>	<u>3</u>	<u>26</u>
P 3 <u>10</u>	<u>25</u>	<u>6</u>	<u>26</u>	<u>10</u>	<u>29</u>	<u>6</u>	<u>29</u>
P 4 <u>15</u>	<u>24</u>	<u>9</u>	<u>30</u>	<u>15</u>	<u>26</u>	<u>9</u>	<u>30</u>
P 5		<u>12</u>	<u>35</u>	<u>20</u>	<u>26</u>	<u>21</u>	<u>33</u>
P 6		<u>15</u>	<u>38</u>	<u>25</u>	<u>26</u>	<u>15</u>	<u>36</u>
P 7		<u>18</u>	<u>41</u>	<u>30</u>	<u>26</u>	<u>18</u>	<u>38</u>
P 8		<u>21</u>	<u>48</u>	<u>35</u>	<u>26</u>	<u>21</u>	<u>41</u>
P 9		<u>24</u>	<u>53</u>	<u>40</u>	<u>26</u>	<u>24</u>	<u>43</u>
P10		<u>27</u>	<u>58</u>	<u>45</u>	<u>26</u>	<u>27</u>	<u>45</u>
P11		<u>30</u>	<u>62</u>	<u>50</u>	<u>26</u>	<u>30</u>	<u>47</u>
P12		<u>33</u>	<u>67</u>	<u>55</u>	<u>26</u>	<u>33</u>	<u>50</u>
P13		<u>36</u>	<u>71</u>	<u>60</u>	<u>26</u>	<u>36</u>	<u>53</u>
P14		<u>39</u>	<u>76</u>			<u>39</u>	<u>55</u>
P15		<u>42</u>	<u>80</u>			<u>42</u>	<u>57</u>
P16		<u>45</u>	<u>83</u>			<u>45</u>	<u>58</u>
P17							
P18							
P19							
P20							

TH# 4209
I





Home Office: Wichita, Kansas 67201

P.O. Box 1599

(316) 262-5861

Graves Drilling Company

Murphy #1

Company _____ Lease & Well No. _____
Elevation 1812 Ground Level Formation Simpson Effective Pay --- Ft. Ticket No. 4210
Date 12/8/79 Sec. 6 Twp. 23S Range 11W County Stafford State Kansas
Test Approved by R. E. Rowland Western Representative Denis Wondra
Formation Test No. 3 Interval Tested from 3640 ft. to 3670 ft. Total Depth 3670 ft.
Packer Depth 3635 ft. Size 6 3/4 in. Packer Depth 3640 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) 3660 ft. Recorder Number 3474 Cap. 3000
Bottom Recorder Depth (Outside) 3663 ft. Recorder Number 3659 Cap. 4000
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Merckle Drilling Rig #1 Drill Collar Length - I. D. - in.
Mud Type drispac Viscosity 50 Weight Pipe Length 496 I. D. 2.8 in.
Weight 9.3 Water Loss 12.8 cc. Drill Pipe Length 3122 I. D. 3.8 in.
Chlorides 20,000 PPM. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
Jars: Make -- Serial Number -- Anchor Length 30 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: Very weak during first flow period. No blow on second opening.

Recovered 30 ft. of drilling mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: _____

Time Set Packer(s) 8:58 A.M. Time Started Off Bottom 11:35 A.M. Maximum Temperature 109⁰
---P.M. ---P.M.
Initial Hydrostatic Pressure (A) 1826 P.S.I.
Initial Flow Period Minutes 15 (B) 38 P.S.I. to (C) 32 P.S.I.
Initial Closed In Period Minutes 39 (D) 37 P.S.I.
Final Flow Period Minutes 50 (E) 33 P.S.I. to (F) 33 P.S.I.
Final Closed In Period Minutes 45 (G) 39 P.S.I.
Final Hydrostatic Pressure (H) 1802 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 12/8/79 Test Ticket No. 4210
 Recorder No. 3474 Capacity 3000 Location 3660 Ft.
 Clock No. ---- Elevation 1812 Ground Level Well Temperature 109 °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	1826	P.S.I.	8:58A	M
B. First Initial Flow Pressure	38	P.S.I.	15	15
C. First Final Flow Pressure	32	P.S.I.	45	39
D. Initial Closed-in Pressure	37	P.S.I.	50	50
E. Second Initial Flow Pressure	33	P.S.I.	45	45
F. Second Final Flow Pressure	33	P.S.I.		
G. Final Closed-in Pressure	39	P.S.I.		
H. Final Hydrostatic Mud	1802	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>3</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>15</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>38</u>	<u>0</u>	<u>32</u>	<u>0</u>	<u>33</u>	<u>0</u>	<u>33</u>
P 2 <u>5</u>	<u>38</u>	<u>3</u>	<u>32</u>	<u>5</u>	<u>33</u>	<u>3</u>	<u>34</u>
P 3 <u>10</u>	<u>33</u>	<u>6</u>	<u>32</u>	<u>10</u>	<u>33</u>	<u>6</u>	<u>35</u>
P 4 <u>15</u>	<u>32</u>	<u>9</u>	<u>32</u>	<u>15</u>	<u>33</u>	<u>9</u>	<u>35</u>
P 5		<u>12</u>	<u>32</u>	<u>20</u>	<u>33</u>	<u>12</u>	<u>36</u>
P 6		<u>15</u>	<u>32</u>	<u>25</u>	<u>33</u>	<u>15</u>	<u>37</u>
P 7		<u>18</u>	<u>32</u>	<u>30</u>	<u>33</u>	<u>18</u>	<u>37</u>
P 8		<u>21</u>	<u>32</u>	<u>35</u>	<u>33</u>	<u>21</u>	<u>37</u>
P 9		<u>24</u>	<u>33</u>	<u>40</u>	<u>33</u>	<u>24</u>	<u>37</u>
P10		<u>27</u>	<u>34</u>	<u>45</u>	<u>33</u>	<u>27</u>	<u>37</u>
P11		<u>30</u>	<u>35</u>	<u>50</u>	<u>33</u>	<u>30</u>	<u>37</u>
P12		<u>33</u>	<u>36</u>			<u>33</u>	<u>38</u>
P13		<u>36</u>	<u>36</u>			<u>36</u>	<u>38</u>
P14		<u>39</u>	<u>37</u>			<u>39</u>	<u>38</u>
P15						<u>42</u>	<u>39</u>
P16						<u>45</u>	<u>39</u>
P17							
P18							
P19							
P20							