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

Company Graham-Michaelis Corporation | Lease & Well No. Ruby #1-23

Elevation 1766 Kelly Bushing | Formation Topeka | Effective Pay --- Ft. | Ticket No. 3813

Date 11/29/79 | Sec. 23 | Twp. 15S | Range 12W | County Russell | State Kansas

Test Approved by Charles B. Spradlin | Western Representative Vernon Wondra

Formation Test No. 1 | Interval Tested from 2729 ft. to 2803 ft. | Total Depth 2803 ft.

Packer Depth 2724 ft. | Size 6 3/4 in. | Packer Depth - ft. | Size - in.

Packer Depth 2729 ft. | Size 6 3/4 in. | Packer Depth - ft. | Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2758 ft. | Recorder Number 10979 | Cap. 4100

Bottom Recorder Depth (Outside) 2760 ft. | Recorder Number 1563 | Cap. 4200

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

Drilling Contractor Red Tiger Drilling Co. Rig #5 | Drill Collar Length -- | I. D. -- in.

Mud Type starch | Viscosity 39 | Weight Pipe Length 863 | I. D. 2.7 in.

Weight 10.3 | Water Loss 12.4 cc. | Drill Pipe Length 1845 | I. D. 3.8 in.

Chlorides 88,000 P.P.M. | Test Tool Length 21 ft. | Tool Size 5½OD in.

Jars: Make -- | Serial Number -- | Anchor Length 74 ft. | Size 5½OD +31'WP 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: Very weak blow throughout both flow periods.

Recovered 70 ft. of watery mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 2:00 ~~A.M.~~ P.M. | Time Started Off Bottom 5:45 ~~A.M.~~ P.M. | Maximum Temperature 98°

Initial Hydrostatic Pressure		(A) 1506	P.S.I.	
Initial Flow Period	Minutes 30	(B) 42 P.S.I.	to (C) 34	P.S.I.
Initial Closed In Period	Minutes 45	(D) 856	P.S.I.	
Final Flow Period	Minutes 60	(E) 55 P.S.I.	to (F) 827	P.S.I.
Final Closed In Period	Minutes 90	(G) 827	P.S.I.	
Final Hydrostatic Pressure		(H) 1500	P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 11-29-79 Test Ticket No. 3813

Recorder No. 10979 Capacity 4100 Location 2758 Ft.

Clock No. - Elevation 1766 Kelly Bushing Well Temperature 98 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1506 P.S.I.	Open Tool	2:00P. M	
B First Initial Flow Pressure	42 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	34 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	856 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	55 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	59 P.S.I.			
G Final Closed-in Pressure	827 P.S.I.			
H Final Hydrostatic Mud	1500 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	42
P 2 5	42
P 3 10	34
P 4 15	34
P 5 20	34
P 6 25	34
P 7 30	34
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	34
3	200
6	405
9	527
12	608
15	671
18	710
21	744
24	769
27	792
30	808
33	821
36	833
39	844
42	850
45	856

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	55
5	55
10	48
15	46
20	48
25	50
30	53
35	54
40	55
45	56
50	57
55	58
60	59

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

Point Minutes	Press.
0	59
3	128
6	275
9	391
12	475
15	533
18	577
21	604
24	635
27	660
30	677
33	706
36	717
39	729
42	735
45	748
48	757
51	765
54	773
57	781
60	788

WTC - 4

Cont'd on next page

WESTERN TESTING CO., INC.

Pressure Data

Date 11-29-79 Test Ticket No. 3813

Recorder No. 10979 Capacity 4100 Location 2758 Ft.

Clock No. - Elevation 1766 Kelly Bushing Well Temperature 98 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1506 P.S.I.	Open Tool	2:00P. M	
B First Initial Flow Pressure	42 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	34 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D Initial Closed-in Pressure	856 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E Second Initial Flow Pressure	55 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F Second Final Flow Pressure	59 P.S.I.			
G Final Closed-in Pressure	827 P.S.I.			
H Final Hydrostatic Mud	1500 P.S.I.			

PRESSURE BREAKDOWN

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

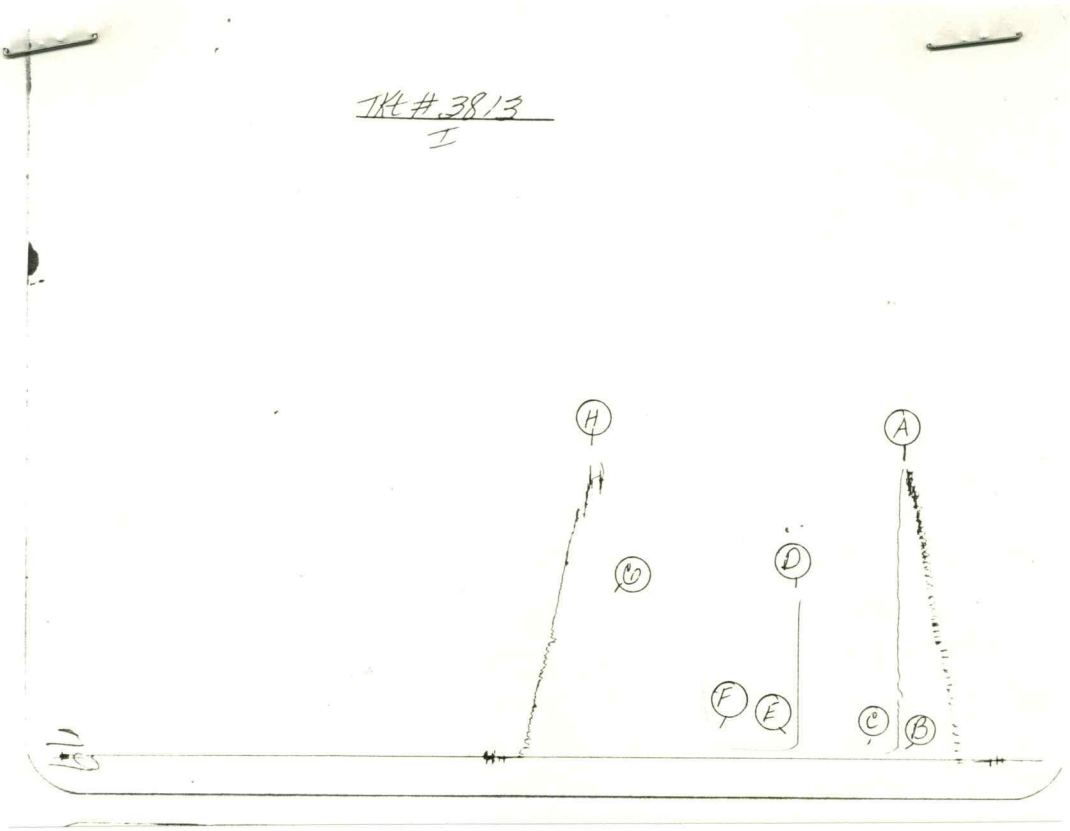
Initial Shut-In
Breakdown: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 12 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	794
P 2						66	798
P 3						69	802
P 4						72	806
P 5						75	810
P 6						78	814
P 7						81	818
P 8						84	821
P 9						87	824
P10						90	827
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

COMPANY GRAHAM-MICHAELIS CORPORATION LEASE AND WELL NO. RUBY #1-23 SEC. 23 TWP. 15S RGE. 12W TEST NO. 1 DATE 11/29/79



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1508	1506	PSI
(B)	First Initial Flow Pressure	31	42	PSI
(C)	First Final Flow Pressure	31	34	PSI
(D)	Initial Closed-in Pressure	847	856	PSI
(E)	Second Initial Flow Pressure	42	55	PSI
(F)	Second Final Flow Pressure	52	59	PSI
(G)	Final Closed-in Pressure	816	827	PSI
(H)	Final Hydrostatic Mud	1497	1500	PSI

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

Company Graham-Michaelis Corporation — Lease & Well No. Ruby #1-23

Elevation 1766 Kelly Bushing — Formation Topeka (Douglas) — Effective Pay -- Ft. — Ticket No. 3814

Date 11/30/79 — Sec. 23 — Twp. 15S — Range 12W — County Russell — State Kansas

Test Approved by Charles B. Spradlin — Western Representative Vernon Wondra

Formation Test No. 2 — Interval Tested from 2814 ft. to 2855 ft. — Total Depth 2855 ft.

Packer Depth 2809 ft. — Size 6 3/4 in. — Packer Depth -- ft. — Size -- in.

Packer Depth 2814 ft. — Size 6 3/4 in. — Packer Depth -- ft. — Size -- in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 2845 ft. — Recorder Number 10979 — Cap. 4100

Bottom Recorder Depth (Outside) 2848 ft. — Recorder Number 1563 — Cap. 4200

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

Drilling Contractor Red Tiger Drilling Co. Rig #5 — Drill Collar Length -- — I. D. -- in.

Mud Type starch — Viscosity 44 — Weight Pipe Length 894 — I. D. 2.7 in.

Weight 10.4 — Water Loss 9.2 cc. — Drill Pipe Length 1899 — I. D. 3.8 in.

Chlorides 70,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½OD in.

Jars: Make -- — Serial Number -- — Anchor Length 41 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: Very weak blow throughout both flow periods.

Recovered 90 ft. of gas in pipe

Recovered 30 ft. of gas cut mud with few spots of oil throughout.

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 7:45 ~~P.M.~~ A.M. — Time Started Off Bottom 11:30 A.M. P.M. — Maximum Temperature 99°

Initial Hydrostatic Pressure			(A) 1568	P.S.I.		
Initial Flow Period	Minutes 30	(B) 36	P.S.I. to	(C) 19	P.S.I.	
Initial Closed In Period	Minutes 42	(D) 78	P.S.I.			
Final Flow Period	Minutes 60	(E) 37	P.S.I. to	(F) 22	P.S.I.	
Final Closed In Period	Minutes 84	(G) 130	P.S.I.			
Final Hydrostatic Pressure			(H) 1564	P.S.I.		

WESTERN TESTING CO., INC.

Pressure Data

Date 11-30-79 Test Ticket No. 3814

Recorder No. 10979 Capacity 4100 Location 2845 Ft.

Clock No. - Elevation 1766 Kelly Bushing Well Temperature 99 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1568	P.S.I.
B	First Initial Flow Pressure	36	P.S.I.
C	First Final Flow Pressure	19	P.S.I.
D	Initial Closed-in Pressure	78	P.S.I.
E	Second Initial Flow Pressure	37	P.S.I.
F	Second Final Flow Pressure	22	P.S.I.
G	Final Closed-in Pressure	130	P.S.I.
H	Final Hydrostatic Mud	1564	P.S.I.

	Time Given	Time Computed
Open Tool	7:45A. M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	45 Mins.	42 Mins.
Second Flow Pressure	60 Mins.	60 Mins.
Final Closed-in Pressure	90 Mins.	84 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	36
P 2	5	36
P 3	10	25
P 4	15	22
P 5	20	19
P 6	25	19
P 7	30	19
P 8		
P 9		
P10		
P11		
P12		
P13		
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 14 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	19
	3	19
	6	23
	9	28
	12	32
	15	38
	18	42
	21	47
	24	53
	27	58
	30	61
	33	63
	36	68
	39	74
	42	78

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	37
	5	37
	10	29
	15	24
	20	22
	25	22
	30	22
	35	22
	40	22
	45	22
	50	22
	55	22
	60	22

Final Shut-In
Breakdown: 28 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point	Minutes	Press.
	0	22
	3	27
	6	32
	9	35
	12	38
	15	42
	18	43
	21	44
	24	48
	27	53
	30	55
	33	60
	36	65
	39	68
	42	71
	45	76
	48	79
	51	83
	54	88
	57	92
	60	97

Cont'd on next page

WESTERN TESTING CO., INC.

Pressure Data

Date 11-30-79 Test Ticket No. 3814

Recorder No. 10979 Capacity 4100 Location 2845 Ft.

Clock No. - Elevation 1766 Kelly Bushing Well Temperature 99 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1568 P.S.I.		Open Tool	7:45A. M	
B	First Initial Flow Pressure	36 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	19 P.S.I.		Initial Closed-in Pressure	45 Mins.	42 Mins.
D	Initial Closed-in Pressure	78 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	37 P.S.I.		Final Closed-in Pressure	90 Mins.	84 Mins.
F	Second Final Flow Pressure	22 P.S.I.				
G	Final Closed-in Pressure	130 P.S.I.				
H	Final Hydrostatic Mud	1564 P.S.I.				

PRESSURE BREAKDOWN

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

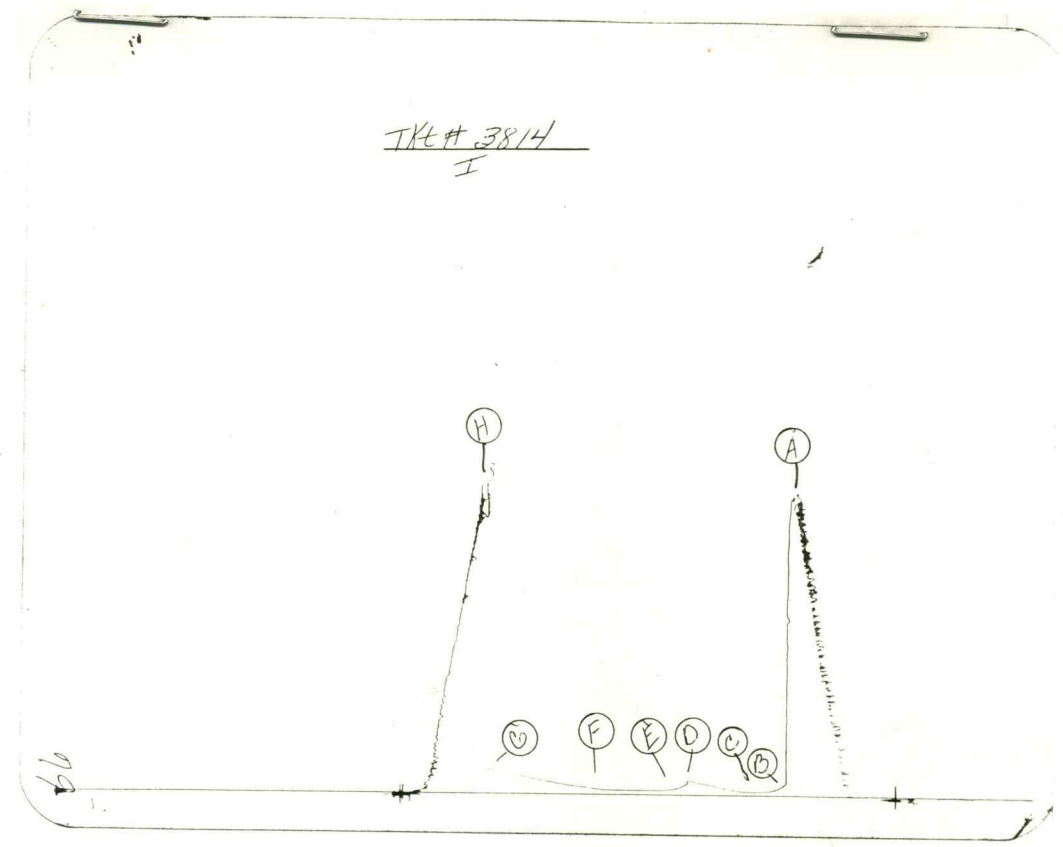
Initial Shut-In
Breakdown: 14 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 28 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	101
P 2						66	105
P 3						69	109
P 4						72	112
P 5						75	117
P 6						78	122
P 7						81	125
P 8						84	130
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

COMPANY GRAHAM-MICHAELIS CORPORATION LEASE AND WELL NO. RUBY #1-23 SEC. 23 TWP. 15S RGE. 12W TEST NO. 2 DATE 11/30/79



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1590	1568	PSI
(B)	First Initial Flow Pressure	21	36	PSI
(C)	First Final Flow Pressure	21	19	PSI
(D)	Initial Closed-in Pressure	73	78	PSI
(E)	Second Initial Flow Pressure	21	37	PSI
(F)	Second Final Flow Pressure	21	22	PSI
(G)	Final Closed-in Pressure	126	130	PSI
(H)	Final Hydrostatic Mud	1569	1564	PSI

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

Company Graham-Michealis Corporation | Lease & Well No. Ruby #1-23

Elevation 1766 Kelly Bushing | Formation Lansing | Effective Pay --- Ft. | Ticket No. 3815

Date 12/1/79 | Sec. 23 | Twp. 15S | Range 12W | County Russell | State Kansas

Test Approved by Charles Spradlin | Western Representative Vernon Wondra

Formation Test No. 3 | Interval Tested from 2905 ft. to 2960 ft. | Total Depth 2960 ft.

Packer Depth 2900 ft. | Size 6 3/4 in. | Packer Depth - ft. | Size - in.

Packer Depth 2905 ft. | Size 6 3/4 in. | Packer Depth - ft. | Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2909 ft. | Recorder Number 10979 | Cap. 4100

Bottom Recorder Depth (Outside) 2912 ft. | Recorder Number 1563 | Cap. 4200

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

Drilling Contractor Red Tiger Drilling Co. Rig #5 | Drill Collar Length - | I. D. - in.

Mud Type starch | Viscosity 42 | Weight Pipe Length 863 | I. D. 2.7 in.

Weight 10.2+ | Water Loss 7.6 cc. | Drill Pipe Length 2021 | I. D. 3.8 in.

Chlorides 67,000 P.P.M. | Test Tool Length 21 ft. | Tool Size 5½OD in.

Jars: Make -- | Serial Number -- | Anchor Length 55 ft. | Size 5½OD + 31' WR.

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: Weak blow increased to strong blow by end of first flow period. Strong blow decreased to good blow by end of second flow period.

Recovered 20 ft. of gas cut mud

Recovered 40 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Geologist originally also reported 960' G.I.P.

Remarks:

Time Set Packer(s) 6:00 A.M. ~~P.M.~~ | Time Started Off Bottom 9:45 A.M. ~~P.M.~~ | Maximum Temperature 102°

Initial Hydrostatic Pressure (A) 1590 P.S.I.

Initial Flow Period Minutes 30 (B) 59 P.S.I. to (C) 17 P.S.I.

Initial Closed In Period Minutes 42 (D) 210 P.S.I.

Final Flow Period Minutes 60 (E) 34 P.S.I. to (F) 25 P.S.I.

Final Closed In Period Minutes 90 (G) 395 P.S.I.

Final Hydrostatic Pressure (H) 1582 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 12/1/79 Test Ticket No. 3815

Recorder No. 10979 Capacity 4100 Location 2909 Ft.

Clock No. ---- Elevation 1766 Kelly Bushing Well Temperature 102 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1590 P.S.I.	Open Tool	6:00A M	
B	First Initial Flow Pressure	59 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	17 P.S.I.	Initial Closed-in Pressure	45 Mins.	42 Mins.
D	Initial Closed-in Pressure	210 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	34 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	25 P.S.I.			
G	Final Closed-in Pressure	395 P.S.I.			
H	Final Hydrostatic Mud	1582 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	59
P 2 5	59
P 3 10	25
P 4 15	17
P 5 20	17
P 6 25	17
P 7 30	17
P 8	
P 9	
P10	
P11	
P12	
P13	
P14	
P15	
P16	
P17	
P18	
P19	
P20	

Initial Shut-In
Breakdown: 14 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	17
3	17
6	23
9	34
12	44
15	55
18	63
21	69
24	74
27	88
30	113
33	139
36	166
39	191
42	210

Second Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	34
5	34
10	25
15	25
20	25
25	25
30	25
35	25
40	25
45	25
50	25
55	25
60	25

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

Point Minutes	Press.
0	25
3	38
6	53
9	67
12	82
15	97
18	111
21	126
24	139
27	153
30	166
33	183
36	197
39	210
42	225
45	239
48	250
51	263
54	277
57	286
60	300

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WESTERN TESTING CO., INC.

Pressure Data

Date 12/1/79 Test Ticket No. 3815

Recorder No. 10979 Capacity 4100 Location 2909 Ft.

Clock No. ---- Elevation 1766 Kelly Bushing Well Temperature 102 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1590 P.S.I.		Open Tool	6:00A M	
B	First Initial Flow Pressure	59 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	17 P.S.I.		Initial Closed-in Pressure	45 Mins.	42 Mins.
D	Initial Closed-in Pressure	210 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	34 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	25 P.S.I.				
G	Final Closed-in Pressure	395 P.S.I.				
H	Final Hydrostatic Mud	1582 P.S.I.				

PRESSURE BREAKDOWN

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

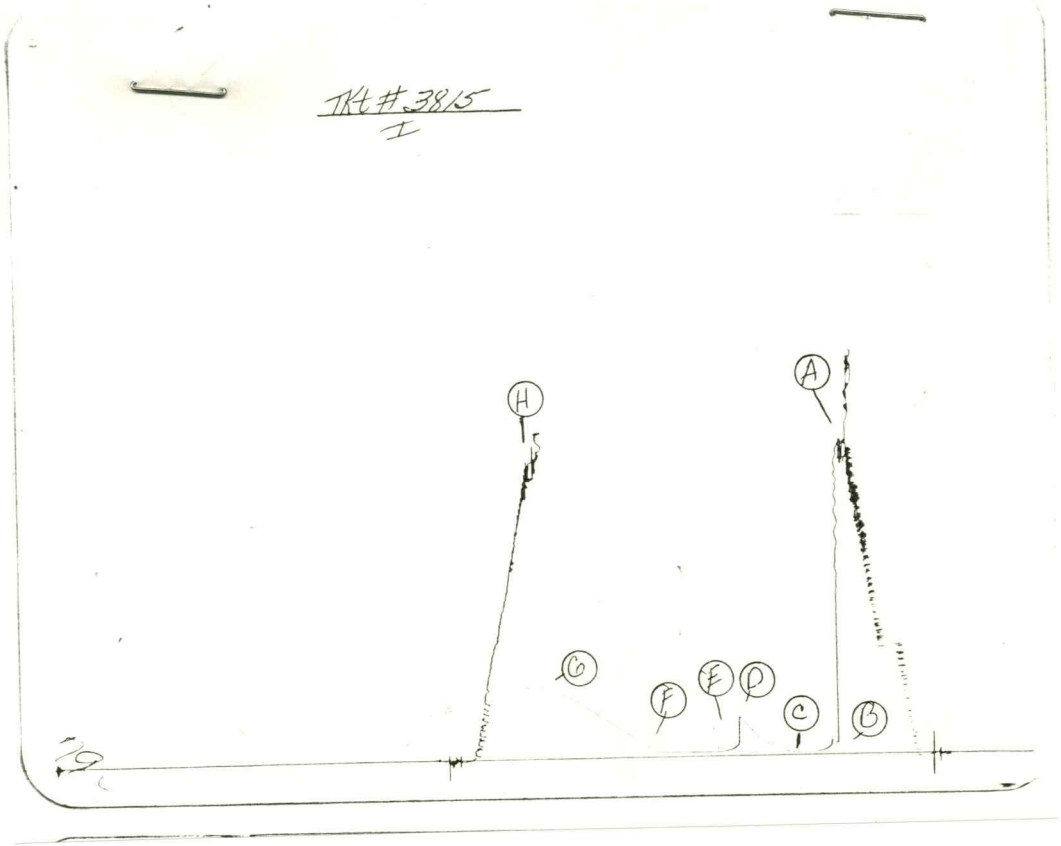
Initial Shut-In
Breakdown: 14 Inc. of 3 mins. and a final inc. of 0 Min.

Second Flow Pressure
Breakdown: 12 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	313
P 2						66	326
P 3						69	336
P 4						72	347
P 5						75	353
P 6						78	366
P 7						81	372
P 8						84	380
P 9						87	389
P10						90	395
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

COMPANY GRAHAM-MICHAELIS CORPORATION LEASE AND WELL NO. RUBY #1-23 SEC. 23 TWP. 15S RGE. 12W TEST NO. 3 DATE 12/1/79



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1590	1590	PSI
(B)	First Initial Flow Pressure	21	59	PSI
(C)	First Final Flow Pressure	21	17	PSI
(D)	Initial Closed-in Pressure	210	210	PSI
(E)	Second Initial Flow Pressure	21	34	PSI
(F)	Second Final Flow Pressure	21	25	PSI
(G)	Final Closed-in Pressure	388	395	PSI
(H)	Final Hydrostatic Mud	1569	1582	PSI

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

Company Graham-Michaelis Corporation — Lease & Well No. Ruby #1-23

Elevation 1766 Kelly Bushing Formation Lansing — Effective Pay === Ft. — Ticket No. 3816

Date 12/1/79 — Sec. 23 — Twp. 15S — Range 12W — County Russell — State Kansas

Test Approved by Charles B. Spradlin — Western Representative Vernon Wondra

Formation Test No. 4 — Interval Tested from 2962 ft. to 2990 ft. — Total Depth 2990 ft.

Packer Depth 2957 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 2962 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2980 ft. — Recorder Number 10979 — Cap. 4100

Bottom Recorder Depth (Outside) 2983 ft. — Recorder Number 1563 — Cap. 4200

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

Drilling Contractor Red Tiger Drilling Co. Rig #5 — Drill Collar Length -- — I. D. -- in.

Mud Type starch — Viscosity 42 — Weight Pipe Length 894 — I. D. 2.7 in.

Weight 10.2+ — Water Loss 7.6 cc. — Drill Pipe Length 2047 — I. D. 3.8 in.

Chlorides 67,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½OD in.

Jars: Make -- — Serial Number -- — Anchor Length 28 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: Very weak blow,died in five minutes on first flow period. Flushed tool on second flow period. Blow died in five minutes.

Recovered 15 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 8:10 A.M. P.M. — Time Started Off Bottom 10:40 A.M. P.M. — Maximum Temperature 101°

Initial Hydrostatic Pressure		(A) 1609	P.S.I.	
Initial Flow Period	Minutes 30	(B) 50 P.S.I.	to (C) 45	P.S.I.
Initial Closed In Period	Minutes 45	(D) 54	P.S.I.	
Final Flow Period	Minutes 30	(E) 53 P.S.I.	to (F) 67	P.S.I.
Final Closed In Period	Minutes 45	(G) 63	P.S.I.	
Final Hydrostatic Pressure		(H) 1592	P.S.I.	

WESTERN TESTING CO., INC.

Pressure Data

Date 12/1/79 Test Ticket No. 3816

Recorder No. 10979 Capacity 4100 Location 2980 Ft.

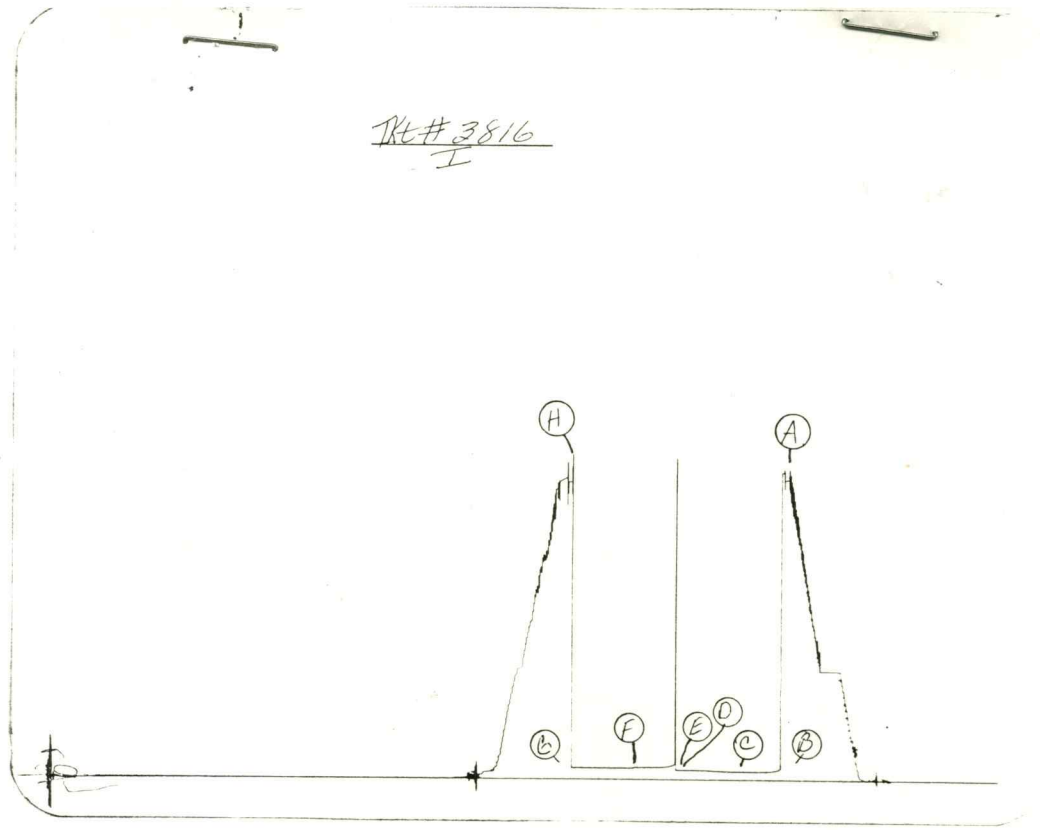
Clock No. --- Elevation 1766 Kelly Bushing Well Temperature 101 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1609 P.S.I.		Open Tool	8:10P M	
B	First Initial Flow Pressure	50 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	45 P.S.I.		Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	54 P.S.I.		Second Flow Pressure	30 Mins.	30 Mins.
E	Second Initial Flow Pressure	53 P.S.I.		Final Closed-in Pressure	45 Mins.	45 Mins.
F	Second Final Flow Pressure	67 P.S.I.				
G	Final Closed-in Pressure	63 P.S.I.				
H	Final Hydrostatic Mud	1592 P.S.I.				

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: 6 Inc.		Breakdown: 15 Inc.		Breakdown: 6 Inc.		Breakdown: 15 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 0	50	0	45	0	53 flushed tool	0	67
P 2 5	50	3	45	5	71	3	63
P 3 10	46	6	45	10	69	6	63
P 4 15	45	9	45	15	67	9	63
P 5 20	45	12	48	20	67	12	63
P 6 25	45	15	50	25	67	15	63
P 7 30	45	18	50	30	67	18	63
P 8		21	53			21	63
P 9		24	53			24	63
P10		27	54			27	63
P11		30	54			30	63
P12		33	54			33	63
P13		36	54			36	63
P14		39	54			39	63
P15		42	54			42	63
P16		45	54			45	63
P17							
P18							
P19							
P20							

COMPANY GRAHAM-MICHAELIS CORPORATION LEASE AND WELL NO. RUBY #1-23 SEC. 23 TWP. 15S RGE. 12W TEST NO. 4 DATE 12/1/79



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1590	1609	PSI
(B)	First Initial Flow Pressure	42	50	PSI
(C)	First Final Flow Pressure	42	45	PSI
(D)	Initial Closed-in Pressure	42	54	PSI
(E)	Second Initial Flow Pressure	63	53	PSI
(F)	Second Final Flow Pressure	63	67	PSI
(G)	Final Closed-in Pressure	63	63	PSI
(H)	Final Hydrostatic Mud	1579	1592	PSI

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

Company Graham-Michaelis Corporation — Lease & Well No. Ruby #1-23

Elevation 1766 Kelly Bushing — Formation Lansing — Effective Pay ---- Ft. — Ticket No. 3817

Date 12/2/79 — Sec. 23 — Twp. 15S — Range 12W — County Russell — State Kansas

Test Approved by Charles B. Spradlin — Western Representative Vernon Wondra

Formation Test No. 5 — Interval Tested from 2990 ft. to 3037 ft. — Total Depth 3037 ft.

Packer Depth 2985 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Packer Depth 2990 ft. — Size 6 3/4 in. — Packer Depth - ft. — Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 2992 ft. — Recorder Number 10979 — Cap. 4100

Bottom Recorder Depth (Outside) 2995 ft. — Recorder Number 1563 — Cap. 4200

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

Drilling Contractor Red Tiger Drilling Co. Rig #5 — Drill Collar Length - — I. D. - in.

Mud Type starch — Viscosity 44 — Weight Pipe Length 863 — I. D. 2.7 in.

Weight 10.3 — Water Loss 9.4 cc. — Drill Pipe Length 2106 — I. D. 3.8 in.

Chlorides 74,000 P.P.M. — Test Tool Length 21 ft. — Tool Size 5½OD in.

Jars: Make -- — Serial Number -- — Anchor Length 47 ft. — Size 5½OD + 31' WP 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: Strong blow throughout both flow periods.

Recovered 120 ft. of gas cut mud

Recovered 60 ft. of gas cut watery mud

Recovered 180 ft. of gas cut muddy water

Recovered ft. of

Recovered ft. of

Geologist also reported 1020' GIP

Remarks:

Time Set Packer(s) 8:05 ~~P.M.~~ A.M. — Time Started Off Bottom 11:50 ~~P.M.~~ A.M. — Maximum Temperature 103°

Initial Hydrostatic Pressure ..... (A) 1666 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 32 P.S.I. to (C) 53 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 642 P.S.I.

Final Flow Period ..... Minutes 60 (E) 88 P.S.I. to (F) 143 P.S.I.

Final Closed In Period ..... Minutes 90 (G) 652 P.S.I.

Final Hydrostatic Pressure ..... (H) 1641 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 12/2/79 Test Ticket No. 3817

Recorder No. 10979 Capacity 4100 Location 2992 Ft.

Clock No. --- Elevation 1766 Kelly Bushing Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
Initial Hydrostatic Mud	1666 P.S.I.	Open Tool	8:05A M	
First Initial Flow Pressure	32 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
First Final Flow Pressure	53 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
Initial Closed-in Pressure	642 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
Second Initial Flow Pressure	88 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
Second Final Flow Pressure	143 P.S.I.			
Final Closed-in Pressure	652 P.S.I.			
Final Hydrostatic Mud	1641 P.S.I.			

PRESSURE BREAKDOWN

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

Point Mins.	Press.
1 0	32
2 5	32
3 10	32
4 15	32
5 20	38
6 25	46
7 30	53
8	
9	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
0	

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

Point Minutes	Press.
0	53
3	275
6	399
9	481
12	535
15	563
18	585
21	600
24	608
27	617
30	625
33	629
36	633
39	637
42	640
45	642

Second Flow Pressure
Breakdown: 12 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	88
5	88
10	86
15	90
20	95
25	90
30	109
35	113
40	122
45	128
50	132
55	139
60	143

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

Point Minutes	Press.
0	143
3	317
6	426
9	494
12	531
15	554
18	575
21	585
24	596
27	602
30	608
33	612
36	617
39	623
42	627
45	629
48	631
51	633
54	635
57	637
60	640

WTC - 4

continued next page

WESTERN TESTING CO., INC.

Pressure Data

Date 12/2/79 Test Ticket No. 3817

Recorder No. 10979 Capacity 4100 Location 2992 Ft.

Clock No. --- Elevation 1766 Kelly Bushing Well Temperature 103 °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1666 P.S.I.	Open Tool	8:05A M	
B	First Initial Flow Pressure	32 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	53 P.S.I.	Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	642 P.S.I.	Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	88 P.S.I.	Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	143 P.S.I.			
G	Final Closed-in Pressure	652 P.S.I.			
H	Final Hydrostatic Mud	1641 P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In
Breakdown: 6 Inc.	Breakdown: 15 Inc.	Breakdown: 12 Inc.	Breakdown: 30 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	641
P 2						66	643
P 3						69	644
P 4						72	645
P 5						75	646
P 6						78	647
P 7						81	649
P 8						84	650
P 9						87	651
P10						90	652
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

COMPANY GRAHAM-MICHAELIS CORPORATION LEASE AND WELL NO. RUBY #1-23 SEC. 23 TWP. 15S RGE. 12W TEST NO. 5 DATE 12/2/79

Tkt #3817
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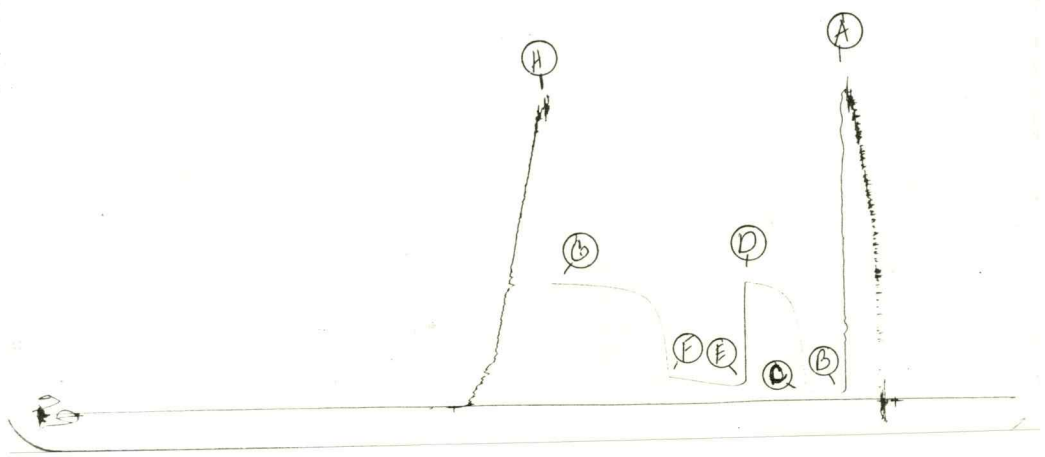


This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1651	1666	PSI
(B)	First Initial Flow Pressure	31	32	PSI
(C)	First Final Flow Pressure	52	53	PSI
(D)	Initial Closed-in Pressure	629	642	PSI
(E)	Second Initial Flow Pressure	84	88	PSI
(F)	Second Final Flow Pressure	147	143	PSI
(G)	Final Closed-in Pressure	639	652	PSI
(H)	Final Hydrostatic Mud	1641	1641	PSI

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company Graham-Michaelis Corporation Lease & Well No. Ruby #1-23

Elevation 1766 Kelly Bushing Formation Kansas City Effective Pay ---- Ft. Ticket No. 3818

Date 12/3/79 Sec. 23 Twp. 15S Range 12W County Russell State Kansas

Test Approved by Charles B. Spradlin Western Representative Vernon Wondra

Formation Test No. 6 Interval Tested from 3097 ft. to 3159 ft. Total Depth 3159 ft.

Packer Depth 3092 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3097 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3141 ft. Recorder Number 10979 Cap. 4100

Bottom Recorder Depth (Outside) 3144 ft. Recorder Number 1563 Cap. 4200

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

Drilling Contractor Red Tiger Drilling Co. Rig #5 Drill Collar Length -- I. D. -- in.

Mud Type starch Viscosity 42 Weight Pipe Length 863 I. D. 2.7 in.

Weight 10.2 Water Loss 9.6 cc. Drill Pipe Length 2213 I. D. 3.8 in.

Chlorides 68,000 P.P.M. Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make -- Serial Number --- Anchor Length 62 ft. Size 5½OD + 31' W.P.

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: Very weak blow throughout both flow periods.

Recovered 50 ft. of muddy water (chlorides 62,000 ppm)

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 11:00 ~~A.M.~~ ~~P.M.~~ Time Started Off Bottom 2:45 ~~A.M.~~ P.M. Maximum Temperature 104°

Initial Hydrostatic Pressure			(A) 1719	P.S.I.		
Initial Flow Period	Minutes 30	(B) 27	P.S.I. to	(C) 13	P.S.I.	
Initial Closed In Period	Minutes 45	(D) 733	P.S.I.			
Final Flow Period	Minutes 60	(E) 46	P.S.I. to	(F) 29	P.S.I.	
Final Closed In Period	Minutes 90	(G) 725	P.S.I.			
Final Hydrostatic Pressure			(H) 1689	P.S.I.		

W1

WESTERN TESTING CO., INC.

Pressure Data

Date 12/3/79 Test Ticket No. 3818

Recorder No. 10979 Capacity 4100 Location 3141 Ft.

Clock No. ---- Elevation 1766 Kelly Bushing Well Temperature 104 °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1719 P.S.I.		Open Tool	11:00A M	
B	First Initial Flow Pressure	27 P.S.I.		First Flow Pressure	30 Mins.	30 Mins.
C	First Final Flow Pressure	13 P.S.I.		Initial Closed-in Pressure	45 Mins.	45 Mins.
D	Initial Closed-in Pressure	733 P.S.I.		Second Flow Pressure	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	46 P.S.I.		Final Closed-in Pressure	90 Mins.	90 Mins.
F	Second Final Flow Pressure	29 P.S.I.				
G	Final Closed-in Pressure	725 P.S.I.				
H	Final Hydrostatic Mud	1689 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	27
P 2 5	23
P 3 10	13
P 4 15	13
P 5 20	13
P 6 25	13
P 7 30	13
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	13
3	55
6	282
9	462
12	575
15	625
18	654
21	675
24	688
27	698
30	706
33	715
36	719
39	725
42	729
45	733

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	46
5	38
10	25
15	21
20	21
25	21
30	22
35	23
40	26
45	27
50	28
55	28
60	29

Final Shut-In
Breakdown: 33 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Minutes	Press.
0	29
3	74
6	183
9	334
21	452
15	527
18	571
21	604
24	625
27	638
30	650
33	657
36	664
39	671
42	678
45	685
48	689
51	694
54	697
57	701
60	704

continued next page

WESTERN TESTING CO., INC.

Pressure Data

Date 12/3/79 Test Ticket No. 3818

Recorder No. 10979 Capacity 4100 Location 3141 Ft.

Clock No. ---- Elevation 1766 Kelly Bushing Well Temperature 104 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1719	P.S.I.
B	First Initial Flow Pressure	27	P.S.I.
C	First Final Flow Pressure	13	P.S.I.
D	Initial Closed-in Pressure	733	P.S.I.
E	Second Initial Flow Pressure	46	P.S.I.
F	Second Final Flow Pressure	29	P.S.I.
G	Final Closed-in Pressure	725	P.S.I.
H	Final Hydrostatic Mud	1689	P.S.I.

	Time Given	Time Computed
Open Tool	11:00A M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	45 Mins.	45 Mins.
Second Flow Pressure	60 Mins.	60 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.

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

Second Flow Pressure
Breakdown: 12 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 33 Inc.
of 3 mins. and a
final inc. of 0 Min.

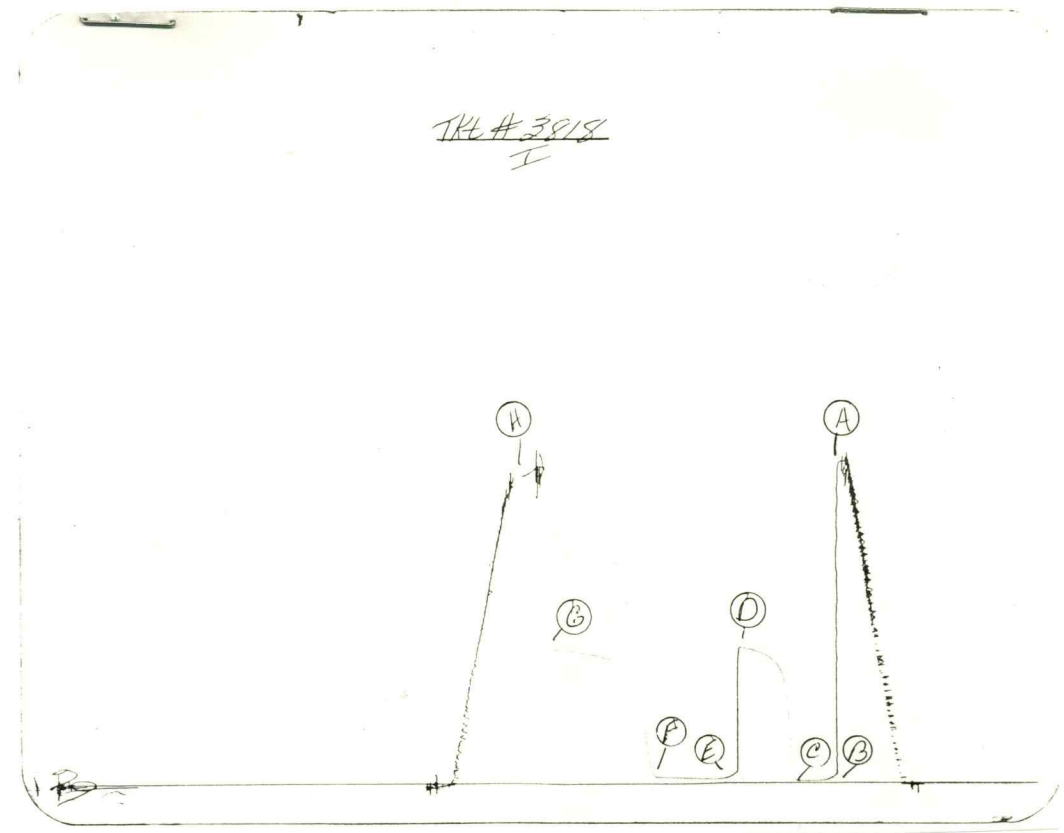
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	708
P 2						66	711
P 3						69	713
P 4						72	715
P 5						75	718
P 6						78	720
P 7						81	722
P 8						84	723
P 9						87	724
P10						90	725
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

COMPANY GRAHAM-MICHAELIS CORPORATION

LEASE AND WELL NO. RUBY #1-23

SEC. 23 TWP. 15S RGE. 12W

TEST NO. 6 DATE 12/3/79



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1692	1719	PSI
(B)	First Initial Flow Pressure	10	27	PSI
(C)	First Final Flow Pressure	10	13	PSI
(D)	Initial Closed-in Pressure	722	733	PSI
(E)	Second Initial Flow Pressure	21	46	PSI
(F)	Second Final Flow Pressure	42	29	PSI
(G)	Final Closed-in Pressure	722	725	PSI
(H)	Final Hydrostatic Mud	1723	1689	PSI

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 (316) 262-5861

Company Graham - Michaelis Corporation Lease & Well No. Ruby #1-23

Elevation 1766 Kelly Bushing Formation Quartzsite Effective Pay --- Ft. Ticket No. 3819

Date 12/4/79 Sec. 23 Twp. 15S Range 12W County Russell State Kansas

Test Approved by Charles B. Spradlin Western Representative Vernon Wondra

Formation Test No. 7 Interval Tested from 3207 ft. to 3245 ft. Total Depth 3245 ft.

Packer Depth 3202 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Packer Depth 3207 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3235 ft. Recorder Number 10979 Cap. 4100

Bottom Recorder Depth (Outside) 3238 ft. Recorder Number 1563 Cap. 4200

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

Drilling Contractor Red Tiger Drilling Co. Rig #5 Drill Collar Length - I. D. - in.

Mud Type starch Viscosity 43 Weight Pipe Length 894 I. D. 2.7 in.

Weight 10.1 Water Loss 6.8 cc. Drill Pipe Length 2292 I. D. 3.8 in.

Chlorides 65,000 P.P.M. Test Tool Length 21 ft. Tool Size 5½OD in.

Jars: Make -- Serial Number -- Anchor Length 38 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: Very weak blow throughout first flow period. Few bubbles throughout second flow period.

Recovered 30 ft. of mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 12:15 ~~A.M.~~ P.M. Time Started Off Bottom 2:45 ~~A.M.~~ P.M. Maximum Temperature 109°

Initial Hydrostatic Pressure ..... (A) 1820 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 53 P.S.I. to (C) 27 P.S.I.

Initial Closed In Period ..... Minutes 45 (D) 1049 P.S.I.

Final Flow Period ..... Minutes 30 (E) 59 P.S.I. to (F) 37 P.S.I.

Final Closed In Period ..... Minutes 45 (G) 1039 P.S.I.

Final Hydrostatic Pressure ..... (H) 1740 P.S.I.

W1

WESTERN TESTING CO., INC.

Pressure Data

Date 12/4/79 Test Ticket No. 3819

Recorder No. 10979 Capacity 4100 Location 3235 Ft.

Clock No. ---- Elevation 1766 Kelly Bushing Well Temperature 109 °F

Point		Pressure	
A	Initial Hydrostatic Mud	1820	P.S.I.
B	First Initial Flow Pressure	53	P.S.I.
C	First Final Flow Pressure	27	P.S.I.
D	Initial Closed-in Pressure	1049	P.S.I.
E	Second Initial Flow Pressure	59	P.S.I.
F	Second Final Flow Pressure	37	P.S.I.
G	Final Closed-in Pressure	1039	P.S.I.
H	Final Hydrostatic Mud	1740	P.S.I.

	Time Given	Time Computed
Open Tool	12:15P M	
First Flow Pressure	30 Mins.	30 Mins.
Initial Closed-in Pressure	45 Mins.	45 Mins.
Second Flow Pressure	30 Mins.	30 Mins.
Final Closed-in Pressure	45 Mins.	45 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	53
P 2 5	46
P 3 10	34
P 4 15	29
P 5 20	27
P 6 25	27
P 7 30	27
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	27
3	69
6	214
9	387
12	567
15	723
18	833
21	910
24	962
27	992
30	1012
33	1027
36	1037
39	1041
42	1047
45	1049

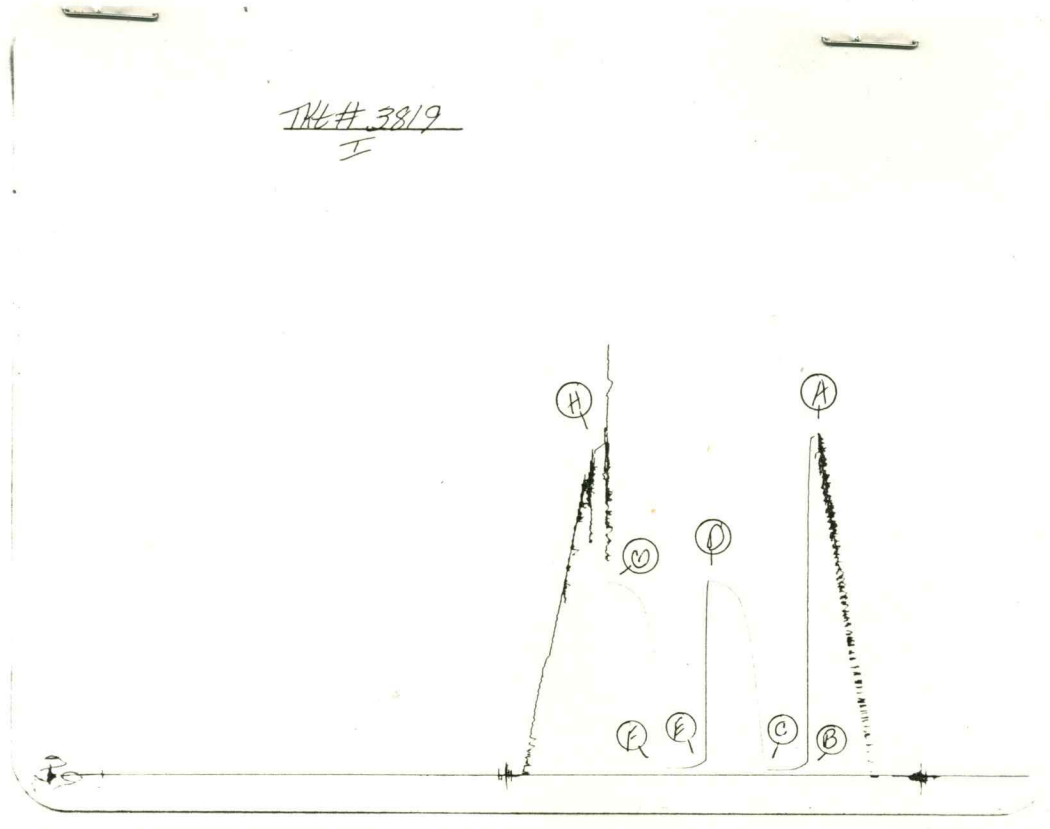
Second Flow Pressure
Breakdown: 6 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	59
5	55
10	42
15	37
20	37
25	37
30	37

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

Point Minutes	Press.
0	37
3	181
6	382
9	556
12	721
15	833
18	900
21	948
24	975
27	998
39	1010
33	1021
36	1027
39	1033
42	1036
45	1039

COMPANY GRAHAM-MICHAELIS CORPORATION
LEASE AND WELL NO. RUBY #1-23
SEC. 23 TWP. 15S RGE. 12W
TEST NO. 7 DATE 12/4/79



This is an actual photograph of recorder chart.

POINT		PRESSURE Field Reading	Office Reading	
(A)	Initial Hydrostatic Mud	1725	1820	PSI
(B)	First Initial Flow Pressure	21	53	PSI
(C)	First Final Flow Pressure	21	27	PSI
(D)	Initial Closed-in Pressure	1045	1049	PSI
(E)	Second Initial Flow Pressure	31	59	PSI
(F)	Second Final Flow Pressure	31	37	PSI
(G)	Final Closed-in Pressure	1034	1039	PSI
(H)	Final Hydrostatic Mud	1764	1740	PSI