

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

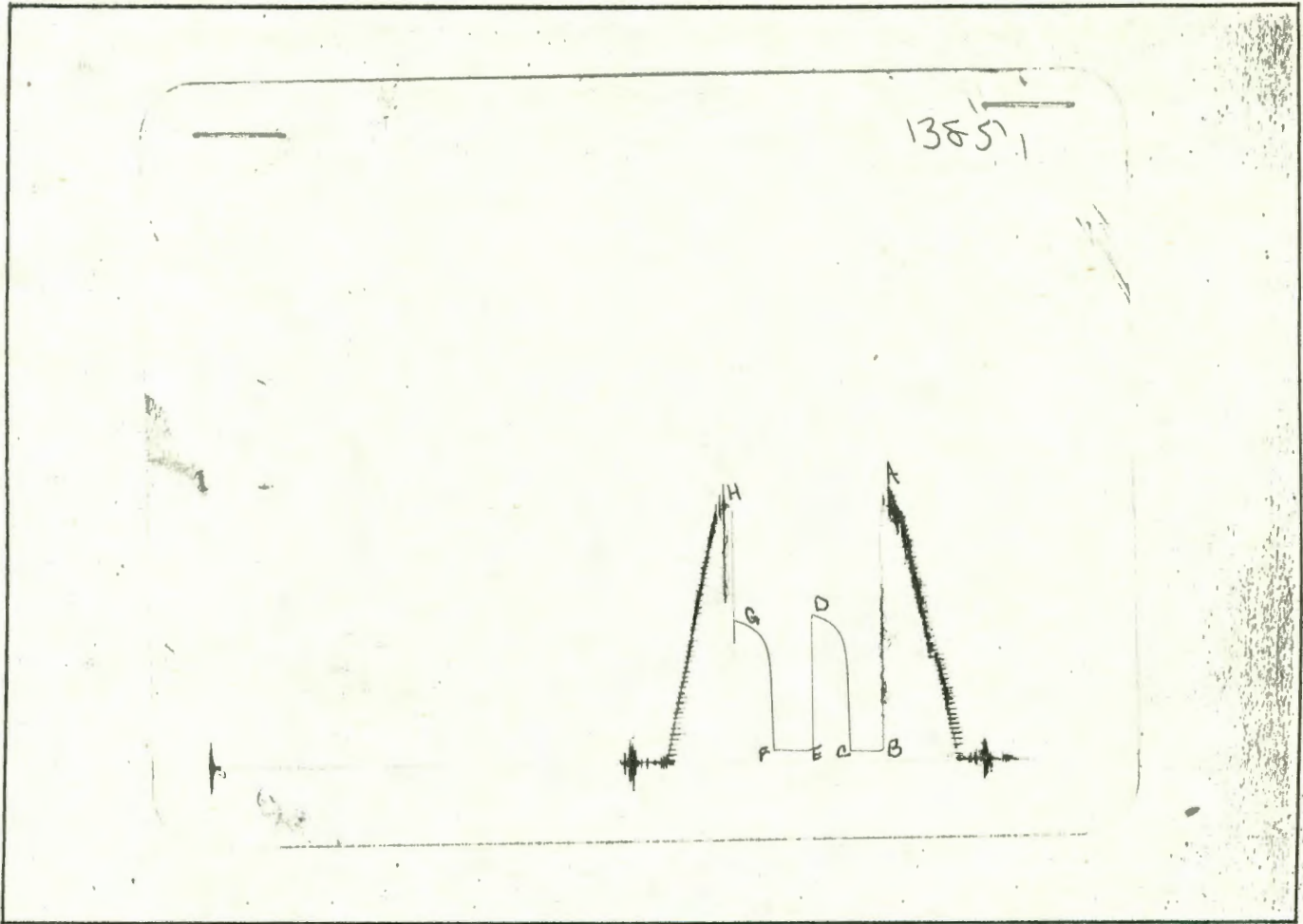
Drill-Stem Test Data

Well Name & No. <u>MCCLELLAN #9</u>	Test No. <u>1</u>	Date <u>4-21-89</u>
Company <u>WESTERN KANSAS EXPLORATION</u>	Zone Tested <u>TOPEKA</u>	
Address <u>PO BOX 126 HAYS KS 67601</u>	Elevation <u>2286</u>	
Co. Rep./Geo. <u>RANDY KILIAN</u>	Cont. <u>WKD #2</u>	Est. Ft. of Pay <u>0</u>
Location: Sec. <u>2</u>	Twp. <u>10s</u>	Rge. <u>21w</u> Co. <u>GRAHAM</u> State <u>KS</u>

Interval Tested <u>3271-3297</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>26</u>	Top Choke — 1" <u></u>
Top Packer Depth <u>3266</u>	Bottom Choke — 3/4" <u></u>
Bottom Packer Depth <u>3271</u>	Hole Size — 7 7/8" <u></u>
Total Depth <u>3297</u>	Rubber Size — 6 3/4" <u></u>
Wt. Pipe I.D. — 2.7 <u></u>	Ft. Run <u>0</u>
Drill Collar — 2.25 <u></u>	Ft. Run <u>0</u>
Mud Wt. <u></u> lb./gal.	Viscosity <u>0</u> Filtrate <u></u>
Tool Open @ <u>4:28PM</u> Initial Blow <u>(SLID TOOL 6' WHEN OPENED LOST 10' OF MUD)</u>	
<u>2" BLOW BUILDING TO 4 1/2"</u>	
Final Blow <u>VERY WEAK SURFACE BLOW BUILDING TO 1"</u>	

Recovery — Total Feet <u>75</u>	Flush Tool? <u></u>
Rec. <u>75</u> Feet of <u>WATERY MUD W/OIL SPECKS AT TOP</u>	
Rec. <u>0</u> Feet of <u></u>	
Rec. <u>0</u> Feet of <u></u>	
Rec. <u>0</u> Feet of <u></u>	
Rec. <u>0</u> Feet of <u></u>	
BHT <u>102.8</u> °F Gravity <u></u> °API @ <u>0</u> °F Corrected Gravity <u>0</u> °API	
RW <u>.131</u> @ <u>93.6</u> °F Chlorides <u>44000</u> ppm Recovery Chlorides <u></u> ppm System	
(A) Initial Hydrostatic Mud <u>1625.5</u> PSI AK1 Recorder No. <u>13308</u> Range <u>4700</u>	
(B) First Initial Flow Pressure <u>72.8</u> PSI @ (depth) <u>3296</u> w/Clock No. <u>19960</u>	
(C) First Final Flow Pressure <u>84.8</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>898.5</u> PSI @ (depth) <u>3292</u> w/Clock No. <u>17652</u>	
(E) Second Initial Flow Pressure <u>83.5</u> PSI Initial Opening <u>30</u>	
(F) Second Final Flow Pressure <u>83.5</u> PSI Initial Shut-In <u>30</u>	
(G) Final Shut-In Pressure <u>866.6</u> PSI Final Flow <u>30</u>	
(H) Final Hydrostatic Mud <u>1526.7</u> PSI Final Shut-In <u>30</u>	

Our Representative PAUL SIMPSON TOTAL PRICE \$ 400



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	1619	1625.5	PSI
(B) First Initial Flow Pressure.....	66	72.8	PSI
(C) First Final Flow Pressure.....	78	84.8	PSI
(D) Initial Closed-in Pressure.....	893	898.5	PSI
(E) Second Initial Flow Pressure.....	78	83.5	PSI
(F) Second Final Flow Pressure.....	78	83.5	PSI
(G) Final Closed-in Pressure.....	860	866.6	PSI
(H) Final Hydrostatic Mud.....	1520	1526.7	PSI

TRILOBITE TESTING COMPANY

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TEST TICKET

No 1724

Well Name & No. <u>Mc Clellan #9</u>	Test No. <u>1</u>	Date <u>4/21/89</u>
Company <u>Western Kansas Exploration</u>	Zone Tested <u>Topeka (Upper)</u>	
Address <u>P.O. Box 126 Hays Ks 67601</u>	Elevation <u>2286</u>	
Co. Rep./Geo. <u>Randy Kilian</u>	Cont. <u>WKO #2</u>	Est. Ft. of Pay _____
Location: Sec. <u>2</u>	Twp. <u>10s</u>	Rge. <u>21w</u> Co. <u>Graham</u> State <u>Ks</u>

Interval Tested <u>3271-3297</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>26</u>	Top Choke — 1" _____
Top Packer Depth <u>3266</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>3271</u>	Hole Size — 7 7/8" _____
Total Depth <u>3297</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run _____
Drill Collar — 2.25 _____	Ft. Run _____
Mud Wt. _____ lb./gal	Viscosity _____ Filtrate _____
Tool Open @ <u>4:28 PM</u>	Initial Blow <u>(slip tool 6" when opened last 10' of mud) 2" blow building to 4 1/2"</u>
Final Blow <u>very weak surface blow building to</u>	

Recovery — Total Feet <u>75</u>	Flush Tool? _____
Rec. <u>75</u> Feet of <u>watery mud w/ oil specks at top</u>	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	

BHT <u>1020</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API	
RW <u>.131</u> @ <u>93.6</u> °F Chlorides <u>44,000</u> ppm Recovery Chlorides _____ ppm System	
(A) Initial Hydrostatic Mud <u>1619</u> PSI AK1 Recorder No. <u>13308</u> Range <u>4700</u>	
(B) First Initial Flow Pressure <u>66</u> PSI @ (depth) <u>3296</u> w/Clock No. <u>19960</u>	
(C) First Final Flow Pressure <u>78</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>893</u> PSI @ (depth) <u>3292</u> w/Clock No. <u>17652</u>	
(E) Second Initial Flow Pressure <u>78</u> PSI Initial Opening <u>30</u> Test <u>400</u>	
(F) Second Final Flow Pressure <u>78</u> PSI Initial Shut-In <u>30</u> Jars _____	
(G) Final Shut-In Pressure <u>860</u> PSI Final Flow <u>30</u> Safety Joint _____	
(H) Final Hydrostatic Mud <u>1520</u> PSI Final Shut-In <u>30</u> Straddle _____	

Approved By <u>Randy Kilian</u>	Circ. Sub _____
<u>Paul Simpson</u>	Sampler _____
Our Representative _____	Extra Packer _____
	Other _____

TOTAL PRICE \$ 400

TRILOBITE TESTING COMPANY

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Drill-Stem Test Data

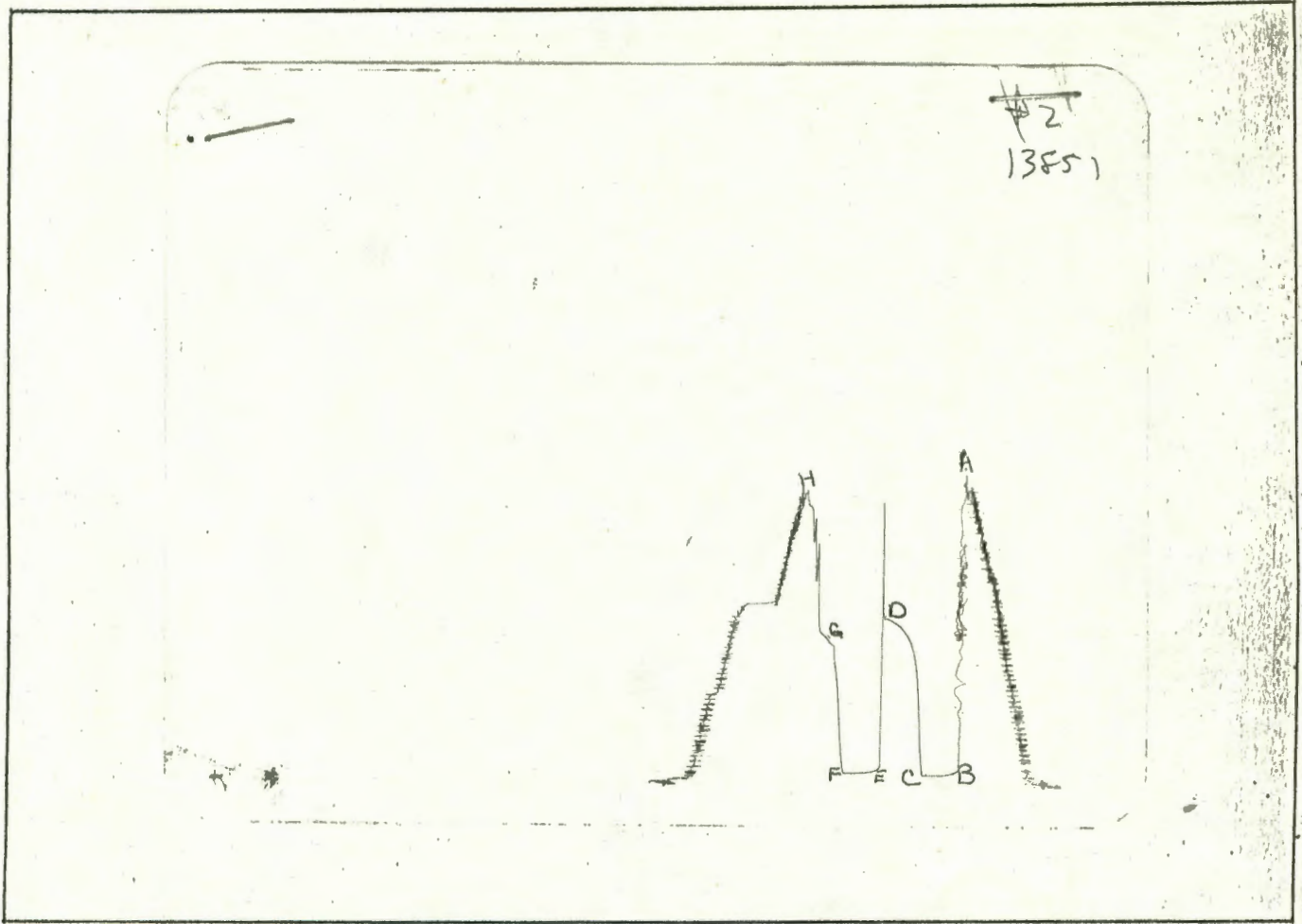
Well Name & No.	MCCLELLAN #9	Test No.	2	Date	4-22-89
Company	WESTERN KANSAS EXPLORATION	Zone Tested	TOPEKA		
Address	PO BOX 126 HAYS KS 67601	Elevation	2286		
Co. Rep./Geo.	RANDY KILIAN	Cont.	WKD #2	Est. Ft. of Pay	0
Location: Sec.	2	Twp.	10s	Rge.	21w
		Co.	GRAHAM	State	KS

Interval Tested	3412-3460	Drill Pipe Size	4 1/2 FH
Anchor Length	48	Top Choke - 1"	
Top Packer Depth	3407	Bottom Choke - 3/4"	
Bottom Packer Depth	3412	Hole Size - 7 7/8"	
Total Depth	3460	Rubber Size - 6 3/4"	
Wt. Pipe I.D. - 2.7		Ft. Run	0
Drill Collar - 2.25		Ft. Run	0
Mud Wt.	9.6 lb./gal.	Viscosity	42
		Filtrate	
Tool Open @ 9:47AM	Initial Blow	(SLIDE TOOL 5' WHEN OPENED) LOST 10' OF MUD	
		1 1/2" BLOW BUILDING TO 2 1/2"	
Final Blow	WEAK 1/8" BLOW BUILDING TO 2 1/2"		

Recovery - Total Feet	45	Flush Tool?	
Rec.	45	Feet of	THIN WATERY MUD WITH OIL SPECKS AT TOP
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	
Rec.	0	Feet of	
BHT	104 °F	Gravity	°API @ 0 °F
		Corrected Gravity	0 °API
RW	.158 @ 93.7 °F	Chlorides	32000 ppm
		Recovery Chlorides	ppm System
(A) Initial Hydrostatic Mud	1812.6	PSI	AK1 Recorder No. 13308 Range 4700
(B) First Initial Flow Pressure	65.5	PSI	@ (depth) 3459 w/Clock No. 19960
(C) First Final Flow Pressure	65.5	PSI	AK1 Recorder No. 13851 Range 4425
(D) Initial Shut-In Pressure	1026.8	PSI	@ (depth) 3455 w/Clock No. 17652
(E) Second Initial Flow Pressure	77.4	PSI	Initial Opening 30
(F) Second Final Flow Pressure	89.3	PSI	Initial Shut-In 30
(G) Final Shut-In Pressure	944.6	PSI	Final Flow 30
(H) Final Hydrostatic Mud	1756.8	PSI	Final Shut-In 30

Our Representative PAUL SIMPSON

TOTAL PRICE..... \$ 400



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	1808	1812.6	PSI
(B) First Initial Flow Pressure.....	59	65.5	PSI
(C) First Final Flow Pressure.....	59	65.5	PSI
(D) Initial Closed-in Pressure.....	1021	1026.8	PSI
(E) Second Initial Flow Pressure.....	71	77.4	PSI
(F) Second Final Flow Pressure.....	83	89.3	PSI
(G) Final Closed-in Pressure.....	938	944.6	PSI
(H) Final Hydrostatic Mud.....	1750	1756.8	PSI

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TEST TICKET

No 1725

Well Name & No. <u>Mc Clellan #9</u>	Test No. <u>2</u>	Date <u>4/22/89</u>		
Company <u>Western Kansas Exploration</u>	Zone Tested <u>Topk. (Lower)</u>			
Address <u>PO Box 126 Hays KS 67601</u>	Elevation <u>2286</u>			
Co. Rep./Geo. <u>Randy Kilian</u>	Cont. <u>W KD AZ</u>	Est. Ft. of Pay _____		
Location: Sec. <u>21</u>	Twp. <u>10s</u>	Rge. <u>21w</u>	Co. <u>Graham</u>	State <u>Ks</u>

Interval Tested <u>3412-3460</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>48</u>	Top Choke - 1" _____
Top Packer Depth <u>3407</u>	Bottom Choke - 3/4" _____
Bottom Packer Depth <u>3412</u>	Hole Size - 7 7/8" _____
Total Depth <u>3460</u>	Rubber Size - 6 3/4" _____
Wt. Pipe I.D. - 2.7 _____	Ft. Run _____
Drill Collar - 2.25 _____	Ft. Run _____
Mud Wt. <u>96</u> lb./gal.	Viscosity <u>42</u> Filtrate _____
Tool Open @ <u>9:48 AM</u>	Initial Blow <u>(slid tool 5' when opened) lost 10'</u>
	<u>of mud @ 1 1/2" blow building to 2 1/2"</u>
Final Blow <u>weak 8" blow building to 1 1/2"</u>	

Recovery - Total Feet <u>45</u>	Flush Tool? _____
Rec. <u>45</u> Feet of <u>thin watery mud w/ oil specs at top</u>	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	

BHT <u>104</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW <u>158</u> @ <u>93.7</u> °F Chlorides <u>32000</u> ppm Recovery Chlorides _____ ppm System
(A) Initial Hydrostatic Mud <u>1806</u> PSI AK1 Recorder No. <u>13308</u> Range <u>4700</u>
(B) First Initial Flow Pressure <u>59</u> PSI @ (depth) <u>3459</u> w/Clock No. <u>19960</u>
(C) First Final Flow Pressure <u>59</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4425</u>
(D) Initial Shut-In Pressure <u>1021</u> PSI @ (depth) <u>3455</u> w/Clock No. <u>17652</u>
(E) Second Initial Flow Pressure <u>71</u> PSI Initial Opening <u>30</u> Test <u>400</u>
(F) Second Final Flow Pressure <u>83</u> PSI Initial Shut-In <u>30</u> Jars _____
(G) Final Shut-In Pressure <u>938</u> PSI Final Flow <u>30</u> Safety Joint _____
(H) Final Hydrostatic Mud <u>1750</u> PSI Final Shut-In <u>30</u> Straddle _____

Approved By <u>Randy Kilian</u>	Circ. Sub _____
	Sampler _____
Our Representative <u>Paul Simpson</u>	Extra Packer _____
	Other _____

TOTAL PRICE \$ 400

TRILOBITE TESTING COMPANY

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Drill-Stem Test Data

Well Name & No.	MCCLELLAN #9	Test No.	3	Date	4-23-89
Company	WESTERN KANSAS EXPLORATION	Zone Tested	LKC 'IJK'		
Address	PO BOX 126 HAYS KS 67601	Elevation	2286 KB		
Co. Rep./Geo.	RANDY KILIAN	Cont.	WKD #2	Est. Ft. of Pay	0
Location: Sec.	2	Twp.	10S	Rge.	21W
		Co.	GRAHAM	State	KS

Interval Tested	3659-3715	Drill Pipe Size	4.5 FH
Anchor Length	56	Top Choke - 1"	
Top Packer Depth	3654	Bottom Choke - 3/4"	
Bottom Packer Depth	3659	Hole Size - 7 7/8"	
Total Depth	3715	Rubber Size - 6 3/4"	
Wt. Pipe I.D. - 2.7		Ft. Run	0
Drill Collar - 2.25		Ft. Run	0
Mud Wt.	10.2 lb./gal.	Viscosity	44
		Filtrate	13

Tool Open @ 2:56PM Initial Blow 1" BLOW BUILDING TO BOTTOM OF BUCKET
IN 8 MINUTES (WEAK BLOW BACK ON SHUTIN)

Final Blow 1/2" BLOW BUILDING TO BOTTOM OF BUCKET IN
16 MINUTES

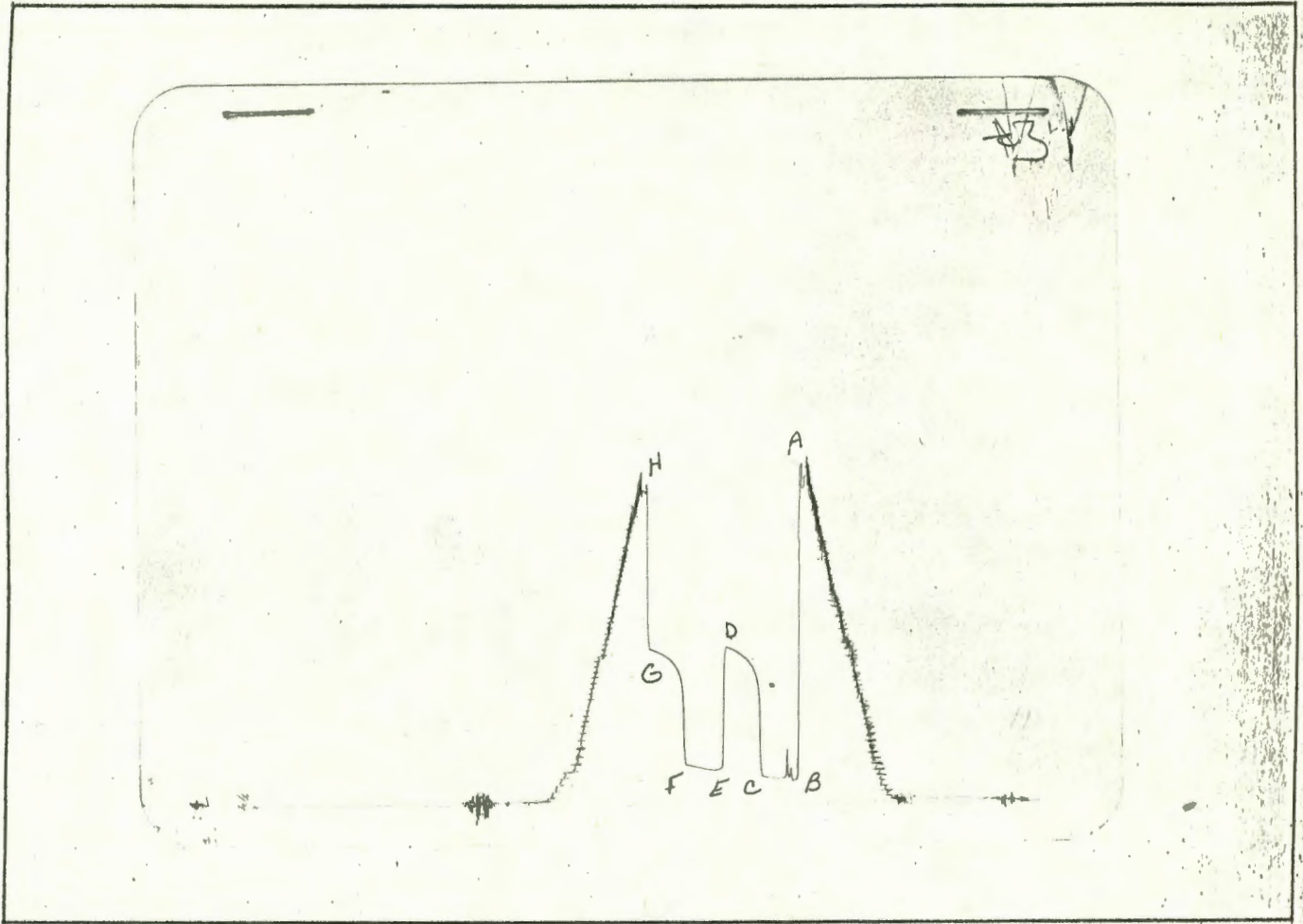
Recovery - Total Feet 450 Flush Tool? N

Rec.	50	Feet of	GAS IN PIPE
Rec.	30	Feet of	SLIGHTLY OIL CUT MUD 5% OIL 95% MUD
Rec.	180	Feet of	WATERY MUD CUT OIL 60% OIL 10% WATER 30% MUD
Rec.	180	Feet of	WATERY SLIGHTLY MUDDY OIL 60% OIL 30% WATER 10% MUD
Rec.	60	Feet of	GASSY MUD & WATER CUT OIL 35%G 30%O 25%W 10%M

BHT 107 °F Gravity °API @ 0 °F Corrected Gravity 0 °API
RW .11 @ 86.5 °F Chlorides 56000 ppm Recovery Chlorides 25000 ppm System

(A) Initial Hydrostatic Mud	2022.1	PSI	AK1 Recorder No.	1330B	Range	4700
(B) First Initial Flow Pressure	119.1	PSI	@ (depth)	3714	w/Clock No.	26191
(C) First Final Flow Pressure	167.2	PSI	AK1 Recorder No.	13851	Range	4425
(D) Initial Shut-In Pressure	948.1	PSI	@ (depth)	3710	w/Clock No.	17652
(E) Second Initial Flow Pressure	191.3	PSI	Initial Opening	30		
(F) Second Final Flow Pressure	234.7	PSI	Initial Shut-In	30		
(G) Final Shut-In Pressure	936.4	PSI	Final Flow	30		
(H) Final Hydrostatic Mud	1926.8	PSI	Final Shut-in	30		

Our Representative PAUL SIMPSON TOTAL PRICE \$ 400



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	2054	2022.1	PSI
(B) First Initial Flow Pressure.....	131	119.1	PSI
(C) First Final Flow Pressure.....	178	167.2	PSI
(D) Initial Closed-in Pressure.....	950	948.1	PSI
(E) Second Initial Flow Pressure.....	190	191.3	PSI
(F) Second Final Flow Pressure.....	238	234.7	PSI
(G) Final Closed-in Pressure.....	938	936.4	PSI
(H) Final Hydrostatic Mud.....	1936	1926.8	PSI

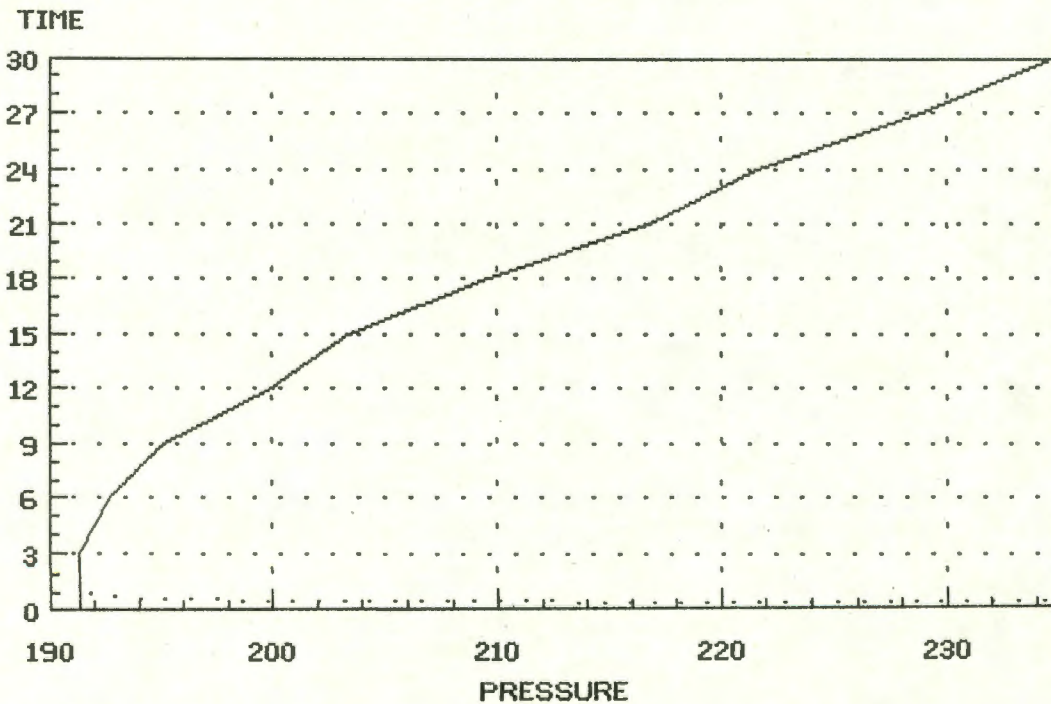
FINAL FLOW

RECORDER # 13308
DST #3

DT(MIN)	PRESSURE	<> PRESSURE
0	191.3	191.3
3	191.3	0
6	192.7	1.399994
9	195.1	2.400009
12	200	4.899994
15	203.4	3.399994
18	209.6	6.200012
21	216.8	7.199997
24	221.6	4.800003
27	228.9	7.299988
30	234.7	5.800003

DELTA T DELTA P

DST #3 FINAL FLOW
MCCLELLAN #9 RECORDER 13308

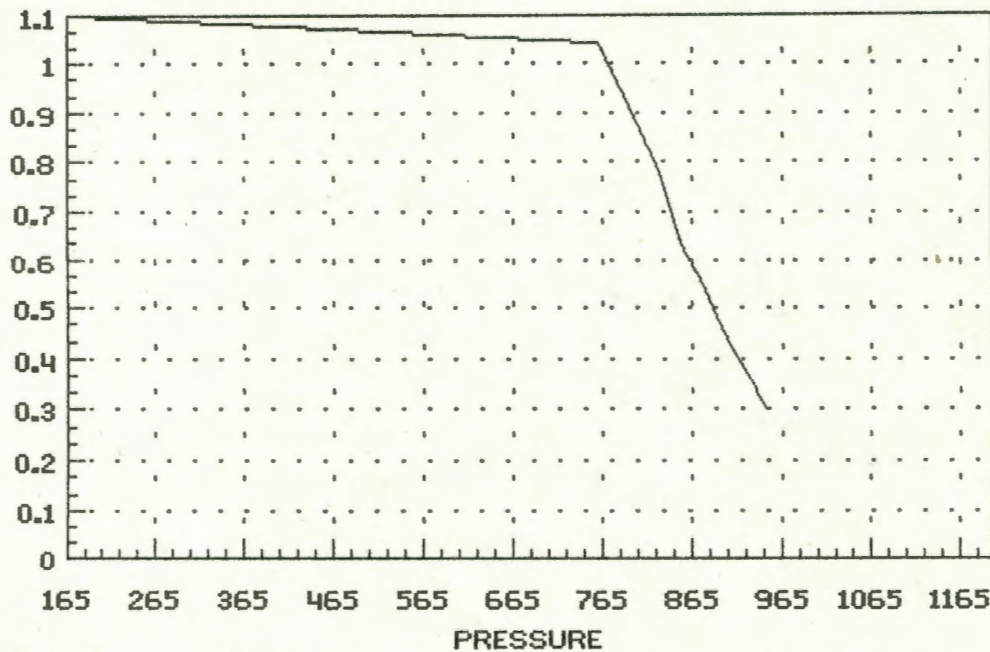


INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 78.57854 BBL/DAY

HORNER PLOT

DST #3 INITIAL SHUTIN
MCCLELLAN #9 RECORDER 13308

LOG(T+MIN/MIN)

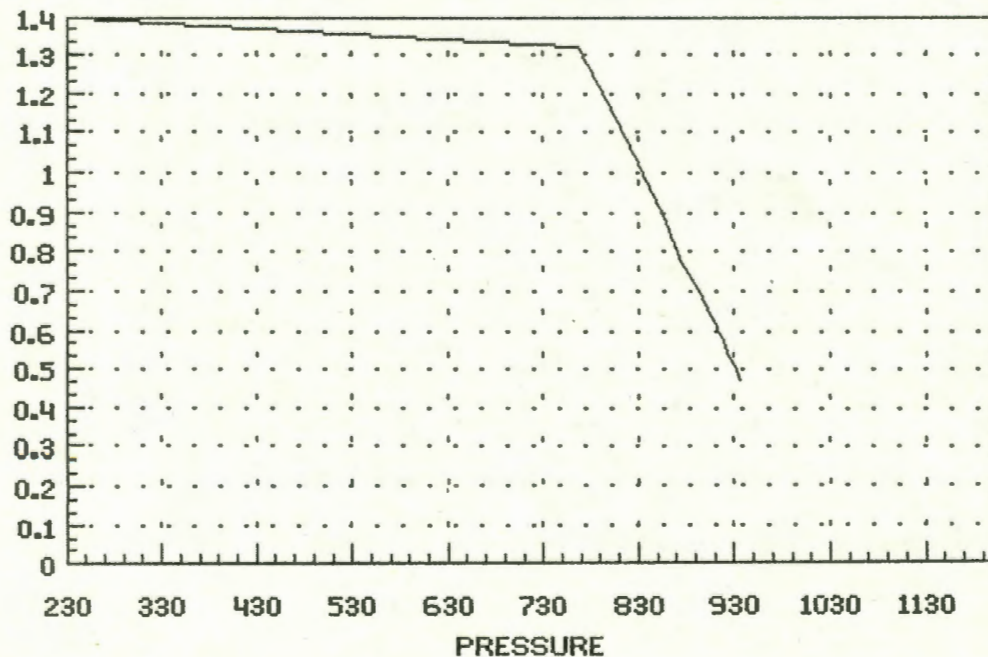


STATIC PRESSURE 1031.006
SLOPE 275.4572
POINTS USED 10

HORNER PLOT

DST #3 FINAL SHUTIN
MCCLELLAN #9 RECORDER 13308

LOG(T+MIN/MIN)



STATIC PRESSURE 1029.644
SLOPE 195.4646
POINTS USED 10

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TEST TICKET

No 2076

Well Name & No. <u>Mc Clellan #9</u>	Test No. <u>3</u>	Date <u>4/23/89</u>
Company <u>Western Kansas Exploration</u>	Zone Tested <u>LKC FJK</u>	
Address <u>Po Box 126 Hays Ks 67601</u>	Elevation <u>12286</u>	
Co. Rep./Geo. <u>Randy Kilan</u>	Cont. <u>WKO #2</u>	Est. Ft. of Pay _____
Location: Sec. <u>2</u>	Twp. <u>10s</u>	Rge. <u>21w</u>
	Co. <u>Graben</u>	State <u>Ks</u>

Interval Tested <u>3659-3715</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>56</u>	Top Choke - 1" _____
Top Packer Depth <u>3654</u>	Bottom Choke - 3/4" _____
Bottom Packer Depth <u>3659</u>	Hole Size - 7 7/8" _____
Total Depth <u>3715</u>	Rubber Size - 6 3/4" _____

Wt. Pipe I.D. - 2.7 _____	Ft. Run _____
Drill Collar - 2.25 _____	Ft. Run _____
Mud Wt. <u>10.7</u> lb./gal.	Viscosity <u>44</u>
	Filtrate <u>13</u>
Tool Open @ <u>2:56 PM</u>	Initial Blow <u>1" blow building to bottom</u>
	<u>of bucket in 8 minutes (weak/blow back on slud)</u>
Final Blow <u>1/2" blow building to bottom of bucket in</u>	
<u>16 minutes</u>	

Recovery - Total Feet <u>450</u>	Flush Tool? _____
Rec. <u>50</u> Feet of <u>GIP</u>	
Rec. <u>30</u> Feet of <u>SOCM 5% oil 95% mud</u>	
Rec. <u>180</u> Feet of <u>watery mud cut oil 60% oil 10% H2O 30% MC</u>	
Rec. <u>180</u> Feet of <u>watery slightly muddy oil 60% oil 30% H2O 10% MC</u>	
Rec. <u>60</u> Feet of <u>usy M & W CO 35% ggs 30% O 25% H2O 10% MC</u>	

BHT <u>10.7</u> °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW <u>.11</u> @ <u>86.5</u> °F Chlorides <u>56,000</u> ppm Recovery Chlorides <u>25,000</u> ppm System

(A) Initial Hydrostatic Mud <u>2054</u> PSI AK1 Recorder No. <u>13308</u> Range <u>4700</u>
(B) First Initial Flow Pressure <u>131</u> PSI @ (depth) <u>3714</u> w/Clock No. <u>26191</u>
(C) First Final Flow Pressure <u>178</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4425</u>
(D) Initial Shut-In Pressure <u>950</u> PSI @ (depth) <u>3710</u> w/Clock No. <u>17852</u>
(E) Second Initial Flow Pressure <u>190</u> PSI Initial Opening <u>30</u> Test _____
(F) Second Final Flow Pressure <u>238</u> PSI Initial Shut-In <u>30</u> Jars _____
(G) Final Shut-In Pressure <u>938</u> PSI Final Flow <u>30</u> Safety Joint _____
(H) Final Hydrostatic Mud <u>1936</u> PSI Final Shut-In <u>30</u> Straddle _____

Approved By _____	Circ. Sub _____
	Sampler _____
Our Representative <u>Pal Simpson</u>	Extra Packer _____
	Other _____

TOTAL PRICE \$ _____

TRILOBITE TESTING COMPANY

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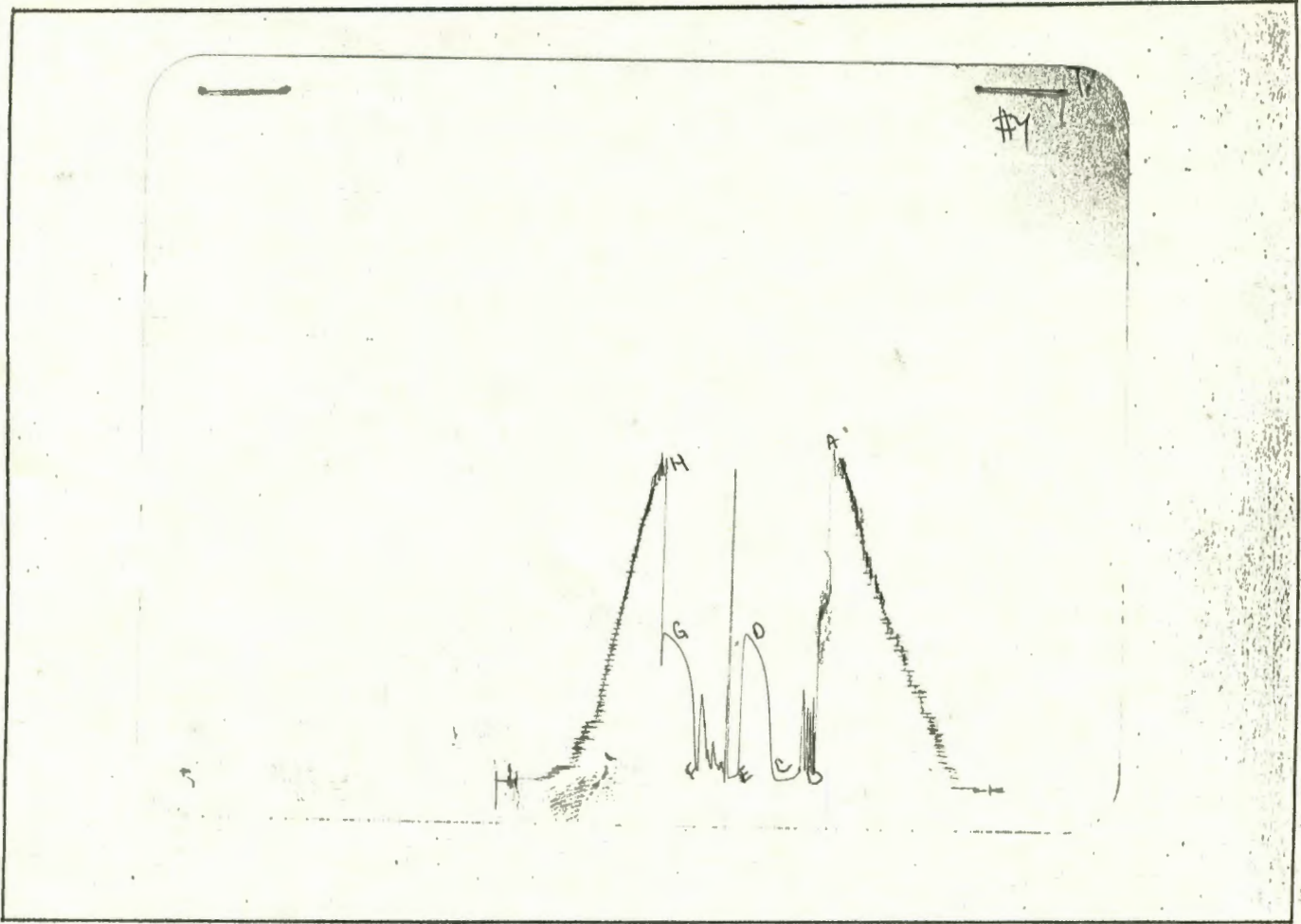
Drill-Stem Test Data

Well Name & No.	MCCLELLAN #9	Test No.	4	Date	4-24-89				
Company	WESTERN KANSAS EXPLORATION	Zone Tested	ARBUCKLE						
Address	PO BOX 126 HAYS KS 67601	Elevation	2286						
Co. Rep./Geo.	RANDY KILIAN	Cont.	WKD #2	Est. Ft. of Pay	0				
Location: Sec.	2	Twp.	10S	Rge.	21W	Co.	GRAHAM	State	KS

Interval Tested	3795-3806	Drill Pipe Size	4 1/2"						
Anchor Length	11	Top Choke - 1"							
Top Packer Depth	3790	Bottom Choke - 3/4"							
Bottom Packer Depth	3795	Hole Size - 7 7/8"							
Total Depth	3806	Rubber Size - 6 3/4"							
Wt. Pipe I.D. - 2.7		Ft. Run	0						
Drill Collar - 2.25		Ft. Run	0						
Mud Wt.	9.8	lb./gal.	Viscosity	44	Filtrate				
Tool Open @	10:10AM	Initial Blow	SLID TOOL 4' WHEN OPENED 1 1/2"						
	SURGING BLOW THROUGHOUT OPENING								
Final Blow	WEAK SURFACE BLOW FLUSHED TOOL								
	WEAK SURFACE BLOW THROUGHOUT								
Recovery - Total Feet	30	Flush Tool?							
Rec.	30	Feet of	SLIGHTLY OIL CUT MUD						
Rec.	0	Feet of	10% OIL 90% MUD						
Rec.	0	Feet of							
Rec.	0	Feet of							
Rec.	0	Feet of							
BHT	108	°F	Gravity	°API @	0	°F	Corrected Gravity	0	°API
RW	@	°F	Chlorides	ppm	Recovery	Chlorides	ppm	System	
(A) Initial Hydrostatic Mud	2011.7	PSI	AK1 Recorder No.	13308	Range	4700			
(B) First Initial Flow Pressure	33.7	PSI	@ (depth)	3805	w/Clock No.	26191			
(C) First Final Flow Pressure	53	PSI	AK1 Recorder No.	13851	Range	4425			
(D) Initial Shut-In Pressure	944.8	PSI	@ (depth)	3800	w/Clock No.	19960			
(E) Second Initial Flow Pressure	34.7	PSI	Initial Opening	30					
(F) Second Final Flow Pressure	46.7	PSI	Initial Shut-In	30					
(G) Final Shut-In Pressure	935.4	PSI	Final Flow	30					
(H) Final Hydrostatic Mud	1930.2	PSI	Final Shut-In	30					

Our Representative PAUL SIMPSON

TOTAL PRICE \$ 400



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	2018	2011.7	PSI
(B) First Initial Flow Pressure.....	36	33.7	PSI
(C) First Final Flow Pressure.....	48	53	PSI
(D) Initial Closed-in Pressure.....	950	944.8	PSI
(E) Second Initial Flow Pressure.....	48	34.7	PSI
(F) Second Final Flow Pressure.....	59	46.7	PSI
(G) Final Closed-in Pressure.....	938	935.4	PSI
(H) Final Hydrostatic Mud.....	1937	1930.2	PSI

INITIAL SHUT-IN BUILDUP
DST #4

RECORDER # 13308
INITIAL FLOW TIME (MIN.): 30

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	53	53
3	1.041205	354.2	301.2
6	.778011	573.9	219.7
9	.6367073	698.3	124.4
12	.5439701	771	72.70001
15	.4770353	826.1	55.09998
18	.425892	874.3	48.20001
21	.3852815	897.8	23.5
24	.352119	927.2	29.40003
27	.3244526	944.8	17.59998

FINAL SHUT-IN BUILDUP
DST #4

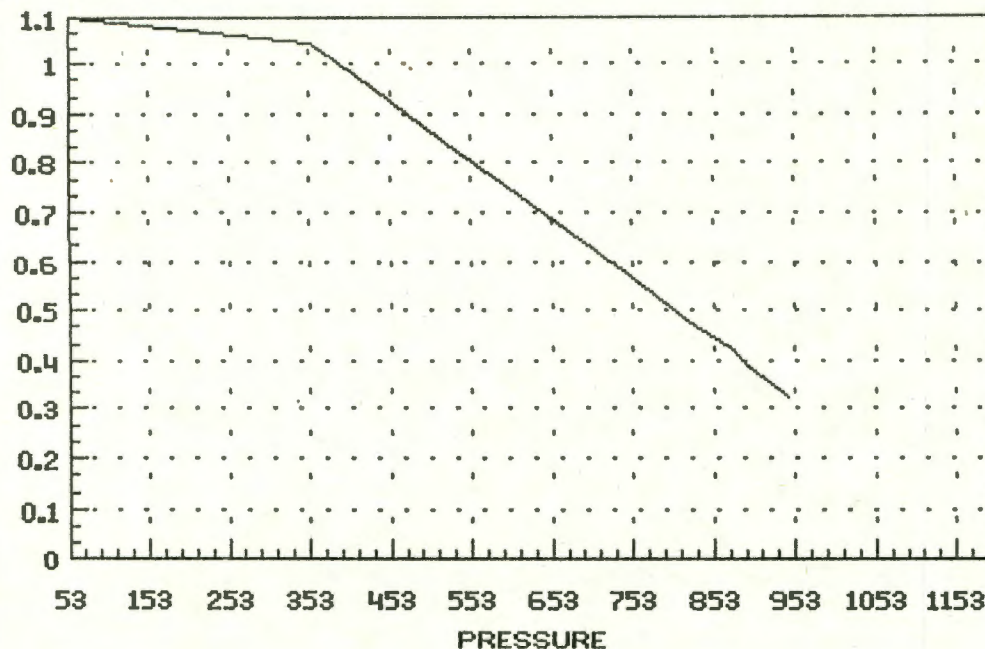
RECORDER # 13308
TOTAL FLOW TIME (MIN.): 60

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	46.7	46.7
3	1.321981	498.7	452
6	1.041205	656	157.3
9	.8844472	740.5	84.5
12	.778011	793.2	52.70001
15	.6988441	837.8	44.59998
18	.6367073	865.9	28.10004
21	.5861601	891.8	25.89996
24	.5439701	909.5	17.70001
27	.5080639	926	16.5
30	.4770353	935.4	9.400024

HORNER PLOT

DST #1 INITIAL SHUTIN
MCCLELLAN #9 RECORDER 13308

LOG(T+MIN/MIN)

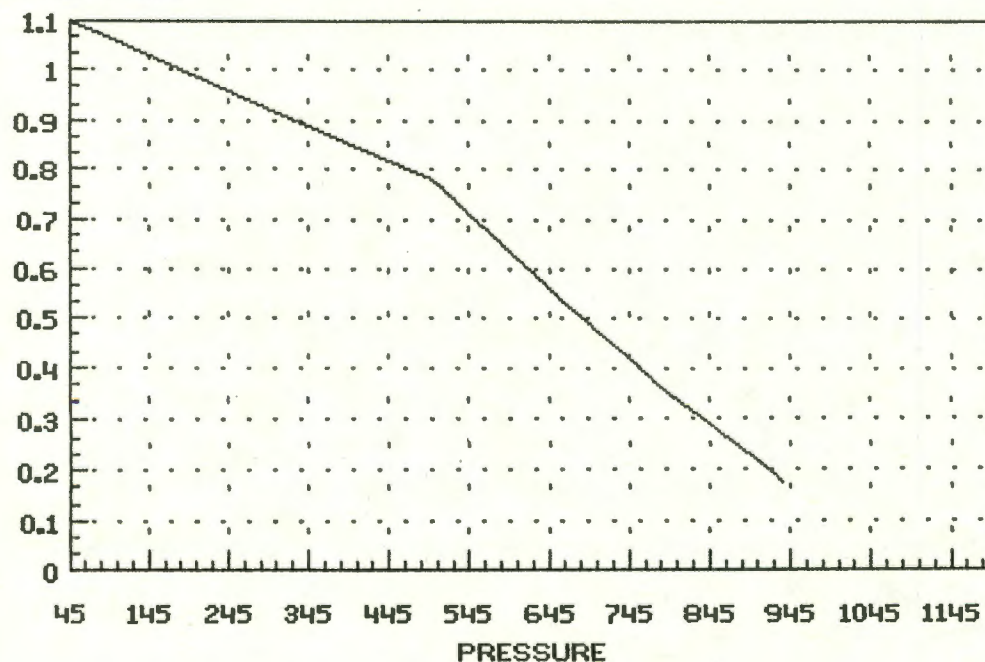


STATIC PRESSURE 1202.985
SLOPE 795.757
POINTS USED 9

HORNER PLOT

DST #4 FINAL SHUTIN
MCCLELLAN #9 RECORDER 13308

LOG(T+MIN/MIN)



STATIC PRESSURE 1150.861
SLOPE 451.6659
POINTS USED 7

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No. 2077

Well Name & No. <u>Mc Clellan #9</u>	Test No. <u>4</u>	Date <u>4/24/89</u>
Company <u>Western Kansas Exploration</u>	Zone Tested <u>Arbuckle</u>	
Address <u>PO Box 126 Hays KS 67601</u>	Elevation <u>2286</u>	
Co. Rep./Geo. <u>Randy Filten</u>	Cont. <u>WKD #2</u>	Est. Ft. of Pay _____
Location: Sec. <u>2</u>	Twp. <u>10S</u>	Rge. <u>2W</u> Co. <u>Graham</u> State <u>Ks</u>

PRINTERS
Hemphill

Interval Tested <u>3795-3806</u>	Drill Pipe Size <u>4 1/2 FH</u>
Anchor Length <u>11</u>	Top Choke - 1" _____
Top Packer Depth <u>3790</u>	Bottom Choke - 3/4" _____
Bottom Packer Depth <u>3795</u>	Hole Size - 7 7/8" _____
Total Depth <u>3806</u>	Rubber Size - 6 3/4" _____

Wt. Pipe I.D. - 2.7 _____	Ft. Run _____
Drill Collar - 2.25 _____	Ft. Run _____
Mud Wt. <u>98</u> lb./gal.	Viscosity <u>44</u> Filtrate _____
Tool Open @ <u>10:10 AM</u> Initial Blow <u>slid tool</u>	<u>4' when opened</u> <u>1 1/2" surging</u>
Final Blow <u>weak surface blow</u>	<u>flushed tool - weak surface blow</u>

Recovery - Total Feet <u>30</u>	Flush Tool? _____
Rec. <u>30</u> Feet of <u>SOCM</u>	<u>100% oil</u> <u>90% mud</u>
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	
Rec. _____ Feet of _____	

BHT 108 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud <u>2018</u> PSI	AK1 Recorder No. <u>13308</u>	Range <u>4700</u>
(B) First Initial Flow Pressure <u>36</u> PSI	@ (depth) <u>3805</u>	w/Clock No. <u>26101</u>
(C) First Final Flow Pressure <u>48</u> PSI	AK1 Recorder No. <u>13851</u>	Range <u>4425</u>
(D) Initial Shut-In Pressure <u>950</u> PSI	@ (depth) <u>3800</u>	w/Clock No. <u>19960</u>
(E) Second Initial Flow Pressure <u>48</u> PSI	Initial Opening <u>30</u>	Test <u>400</u>
(F) Second Final Flow Pressure <u>59</u> PSI	Initial Shut-in <u>30</u>	Jars _____
(G) Final Shut-In Pressure <u>938</u> PSI	Final Flow <u>30</u>	Safety Joint _____
(H) Final Hydrostatic Mud <u>1937</u> PSI	Final Shut-in <u>30</u>	Straddle _____

Approved By Randy Filten

Our Representative Paul Simpson

Circ. Sub _____

Sampler _____

Extra Packer _____

Other _____

TOTAL PRICE \$ 400

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

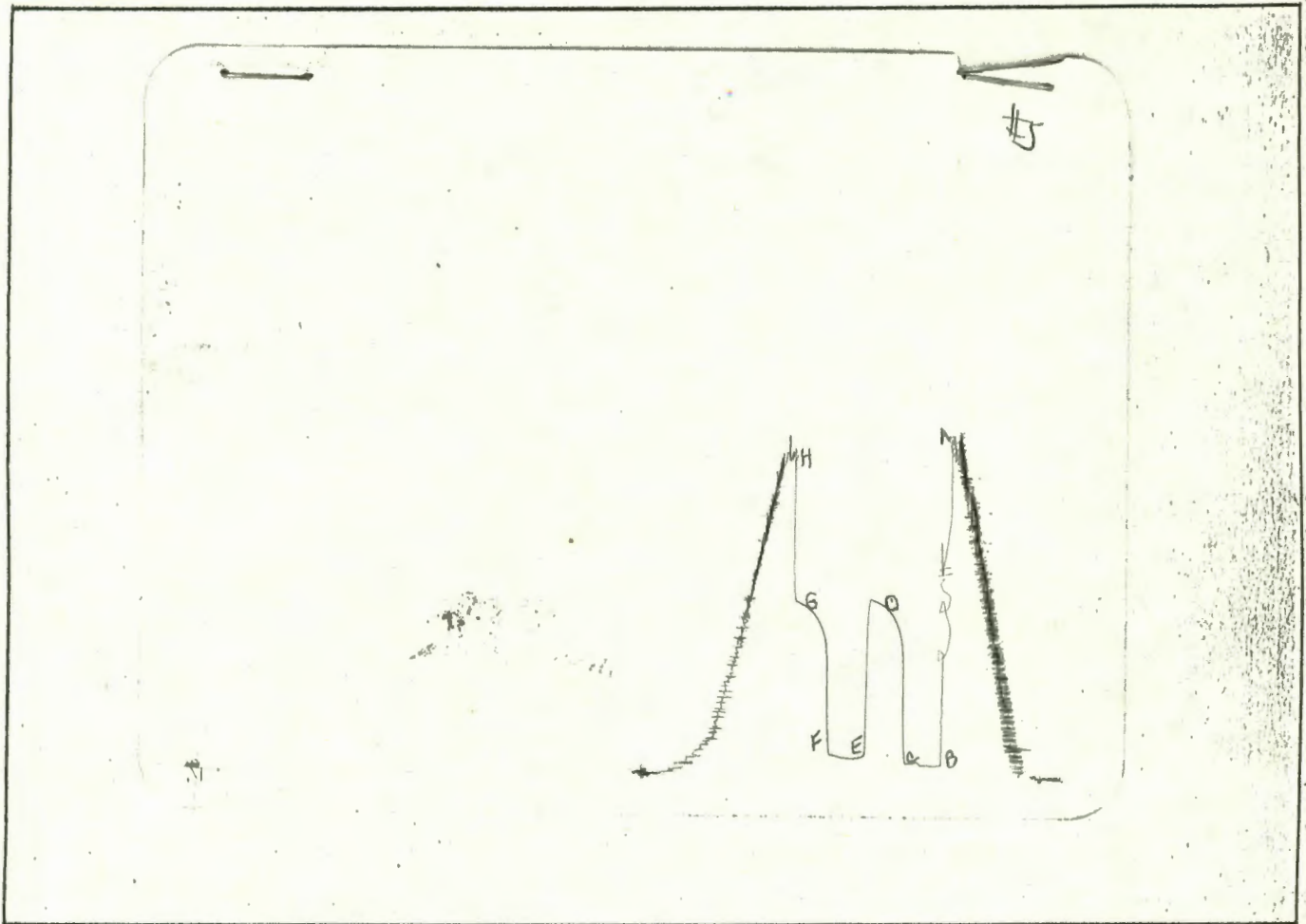
Well Name & No. <u>MCCLELLAN #9</u>	Test No. <u>5</u>	Date <u>4-24-89</u>
Company <u>WESTERN KANSAS EXPLORATION</u>	Zone Tested <u>ARBUCKLE</u>	
Address <u>PO BOX 126 HAYS KS 67601</u>	Elevation <u>2286</u>	
Co. Rep./Geol. <u>RANDY KILIAN</u>	Cont. <u>WKD #2</u>	Est. Ft. of Pay <u>4</u>
Location: Sec. <u>2</u>	Twp. <u>10S</u>	Rge. <u>21W</u> Co. <u>GRAHAM</u> State <u>KS</u>

Interval Tested <u>3819-3829</u>	Drill Pipe Size <u>4 1/2"</u>
Anchor Length <u>10</u>	Top Choke — 1" _____
Top Packer Depth <u>3814</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>3819</u>	Hole Size — 7 7/8" _____
Total Depth <u>3829</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run <u>0</u>
Drill Collar — 2.25 _____	Ft. Run <u>0</u>
Mud Wt. <u>10</u> lb./gal.	Viscosity <u>49</u> Filtrate _____
Tool Open @ <u>9:09PM</u> Initial Blow <u>BLOW BUILDING TO BOTTOM OF BUCKET</u>	
<u>IN 13 MIN (1/8" BLOW BACK ON SHUTIN)</u>	
Final Blow <u>1 1/2" BLOW BUILDING TO BOTTOM OF</u>	
<u>BUCKET IN 18 MIN</u>	
Recovery — Total Feet <u>365</u>	Flush Tool? _____
Rec. <u>60</u> Feet of <u>GAS IN PIPE</u>	
Rec. <u>245</u> Feet of <u>CLEAN GASSY OIL</u>	
Rec. <u>120</u> Feet of <u>MUDDY OIL</u>	
Rec. <u>0</u> Feet of _____	
Rec. <u>0</u> Feet of _____	
BHT <u>109</u> °F Gravity <u>29</u> °API @ <u>80</u> °F Corrected Gravity <u>27</u> °API	
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System	
(A) Initial Hydrostatic Mud <u>2087</u> PSI AK1 Recorder No. <u>13308</u> Range <u>4700</u>	
(B) First Initial Flow Pressure <u>70.8</u> PSI @ (depth) <u>3828</u> w/Clock No. <u>26191</u>	
(C) First Final Flow Pressure <u>85.3</u> PSI AK1 Recorder No. <u>13851</u> Range <u>4425</u>	
(D) Initial Shut-In Pressure <u>1073</u> PSI @ (depth) <u>3824</u> w/Clock No. <u>17652</u>	
(E) Second Initial Flow Pressure <u>102.2</u> PSI Initial Opening <u>30</u>	
(F) Second Final Flow Pressure <u>1061.2</u> PSI Initial Shut-In <u>30</u>	
(G) Final Shut-In Pressure <u>2012.7</u> PSI Final Flow <u>30</u>	
(H) Final Hydrostatic Mud _____ PSI Final Shut-In <u>30</u>	

Our Representative PAUL SIMPSON

TOTAL PRICE \$ 400

Printcraft Printers - Hays, KS



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	2077	2087	PSI
(B) First Initial Flow Pressure.....	83	70.8	PSI
(C) First Final Flow Pressure.....	107	85.3	PSI
(D) Initial Closed-in Pressure.....	1080	1073	PSI
(E) Second Initial Flow Pressure.....	119	102.2	PSI
(F) Second Final Flow Pressure.....	155	1061.2	PSI
(G) Final Closed-in Pressure.....	1068	2012.7	PSI
(H) Final Hydrostatic Mud.....	2007		PSI

COMPUTER EVALUATION BY TRILOBITE TESTING
WESTERN KANSAS EXPLORATION
REPORT FOR DST#5 FOR THE MCCLELLAN #9
2 10S 21W GRAHAM KS

TEST PARAMETERS

ELEVATION: 2286 KB EST. PAY: 4 FT
DATUM: -1543 ZONE TESTED: ARBUCKLE
TEST INTERVAL: 3819-3829
TIME INTERVALS: 30-30-30-30
RECORDER DEPTH: 3828 VISCOSITY: 12 CP
BOTTOM HOLE TEMP: 109 HOLE SIZE: 7.875 IN

CALCULATIONS

CUBIC FEET OF GAS IN PIPE: 4.790363
TOTAL FEET OF RECOVERY: 365
BARRELS IN DRILL PIPE: 5.1903
GAS OIL RATIO: .9229452 CU.FT./BBL
TOTAL BARRELS OF RECOVERY: 5.1903
UNCORR. INIT. PROD.: 124.5672 BBL/DAY
API GRAVITY: 28 FLUID GRADIENT: .384
CORRECTED PIPE FILLUP: 392.7084
CORR. BARRELS OF RECOVERY: 5.57424 BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE: 133.7818 BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE
34.96851

INITIAL SHUT-IN VALUES:
THEORETICAL STATIC PRESSURE 1174.084
SLOPE 335.8542
FINAL SHUT-IN VALUES
THEORETICAL STATIC PRESSURE 1171.902
SLOPE 232.0633

TRANSMISSIBILITY 93.737 (MD.-FT./CP.)
PERMEABILITY 281.211 (MD.)
INDICATED FLOW CAPACITY 1124.844 (MD.FT)
PRODUCTIVITY INDEX .1059228 (BARRELS/DAY/PSI)
DAMAGE RATIO .8052185
RADIUS OF INVESTIGATION 129.8948 (FT.)
POTENTIOMETRIC SURFACE 1175.641 (FT.)
DRAWDOWN FACTOR .1858473 (%)

INITIAL FLOW

 RECORDER # 13308
 DST #5

DT (MIN)	PRESSURE	<>	PRESSURE
0	70.8		70.8
3	70.8		0
6	73.2		2.399994
9	75.6		2.400002
12	75.6		0
15	77.1		1.5
18	82.9		5.800003
21	84.3		1.400002
24	85.3		1
27	85.3		0

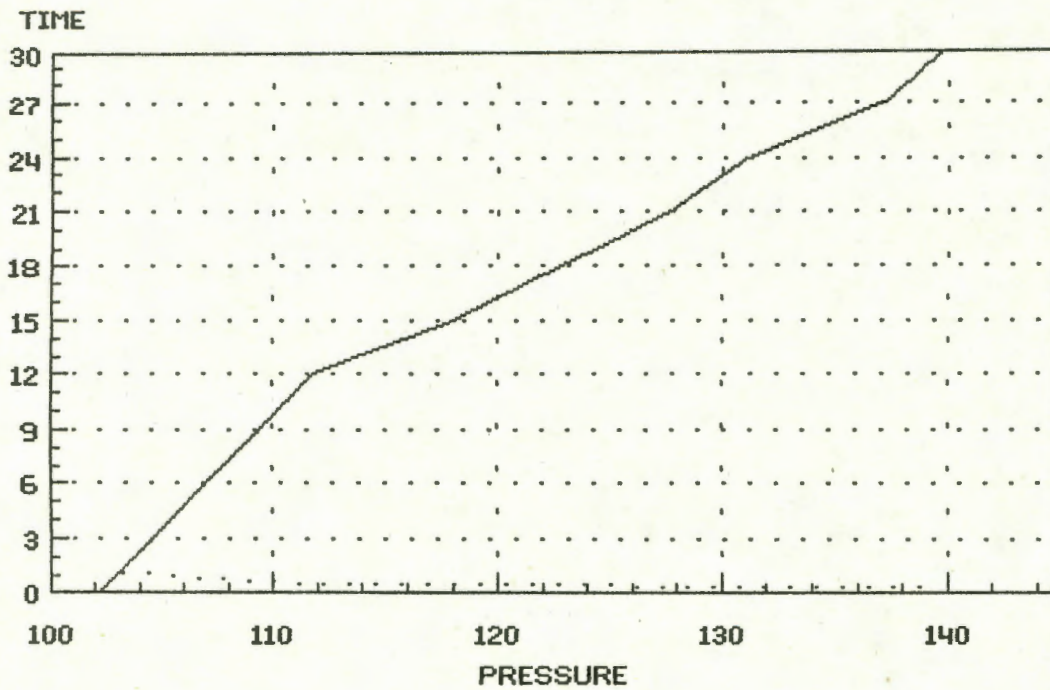
FINAL FLOW

 RECORDER # 13308
 DST #5

DT (MIN)	PRESSURE	<>	PRESSURE
0	102.2		102.2
3	104.6		2.400002
6	107		2.400002
9	109.4		2.400002
12	111.8		2.400002
15	118		6.199997
18	122.8		4.800003
21	127.7		4.899994
24	131.1		3.400009
27	137.3		6.199997
30	139.7		2.399994

DELTA T DELTA P

DST #5
MCCLELLAN #9 RECORDER 13308



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 34.96851 BBL/DAY

INITIAL SHUT-IN BUILDUP
DST #5

RECORDER # 13308
INITIAL FLOW TIME (MIN.): 30

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	85.3	85.3
3	1.041205	656	570.7
6	.778011	905.8	249.8
9	.6367073	963.5	57.70001
12	.5439701	995.1	31.59998
15	.4770353	1010.6	15.5
18	.425892	1031.8	21.20007
21	.3852815	1046	14.19995
24	.352119	1057.8	11.80005
27	.3244526	1067.3	9.5
30	.3009757	1073	5.699951

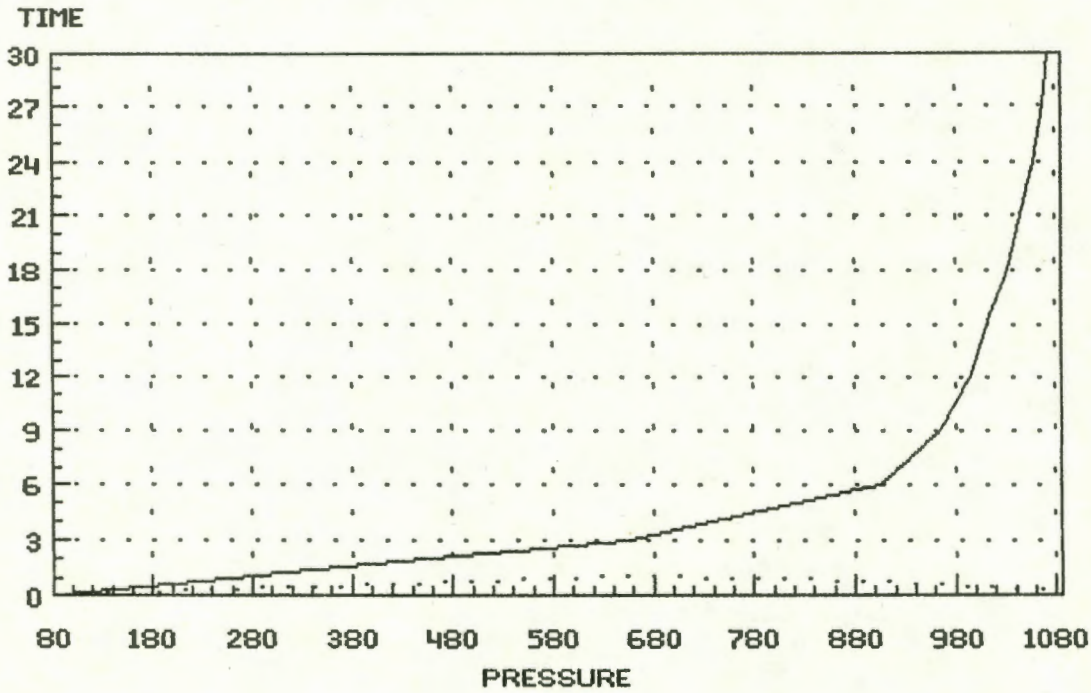
FINAL SHUT-IN BUILDUP
DST #5

RECORDER # 13308
TOTAL FLOW TIME (MIN.): 60

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	139.7	139.7
3	1.321981	836.8	697.1
6	1.041205	927	90.20001
9	.8844472	963.5	36.5
12	.778011	992.7	29.20001
15	.6988441	1015.3	22.59998
18	.6367073	1030.5	15.20001
21	.5861601	1044.7	14.19995
24	.5439701	1050.8	6.100098
27	.5080639	1057.8	7
30	.4770353	1061.2	3.399902

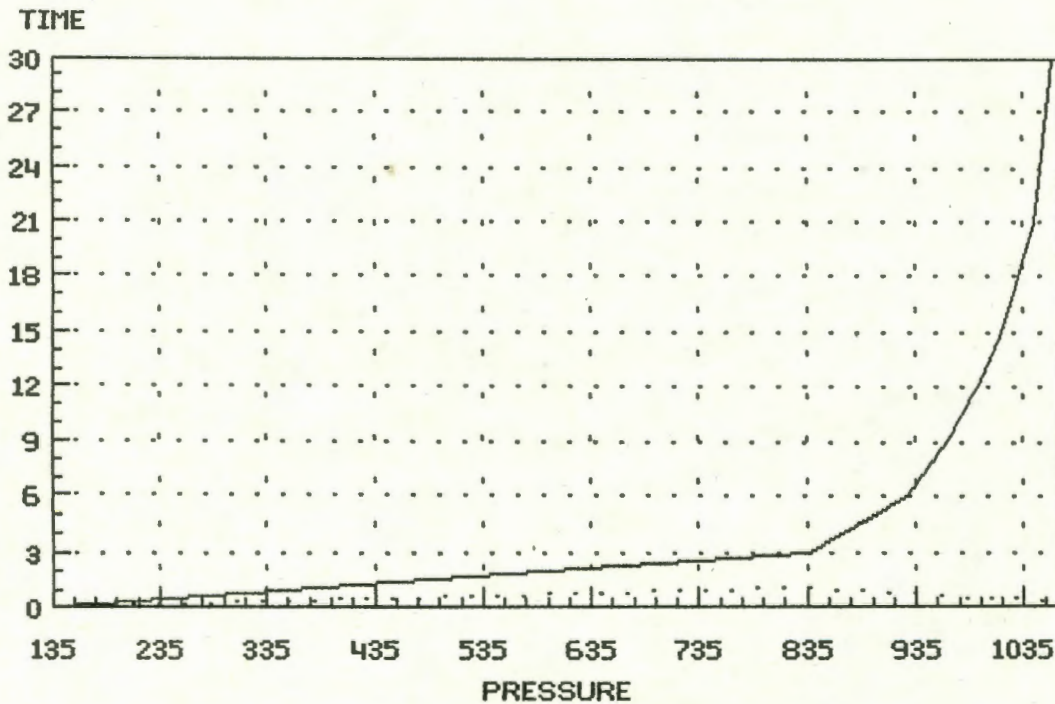
DELTA T DELTA P

DST #5 INITIAL SHUTIN
MCCLELLAN #9 RECORDER 13308



DELTA T DELTA P

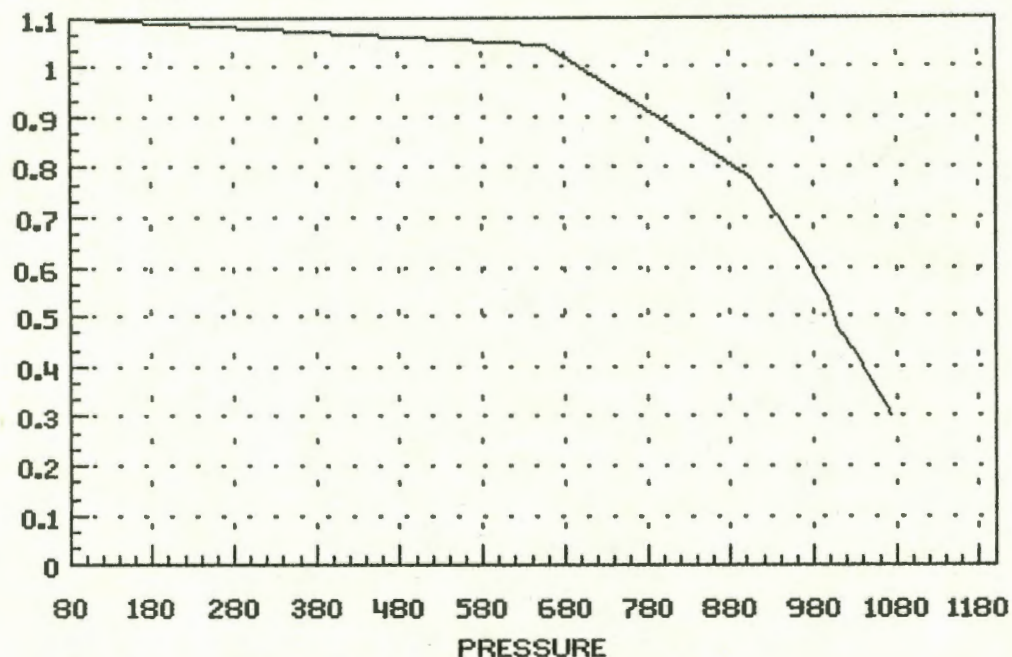
DST #5 FINAL SHUTIN
MCCLELLAN #9 RECORDER 13308



HORNER PLOT

DST #5 INITIAL SHUTIN
MCCLELLAN #9 RECORDER 13308

LOG(T+MIN/MIN)

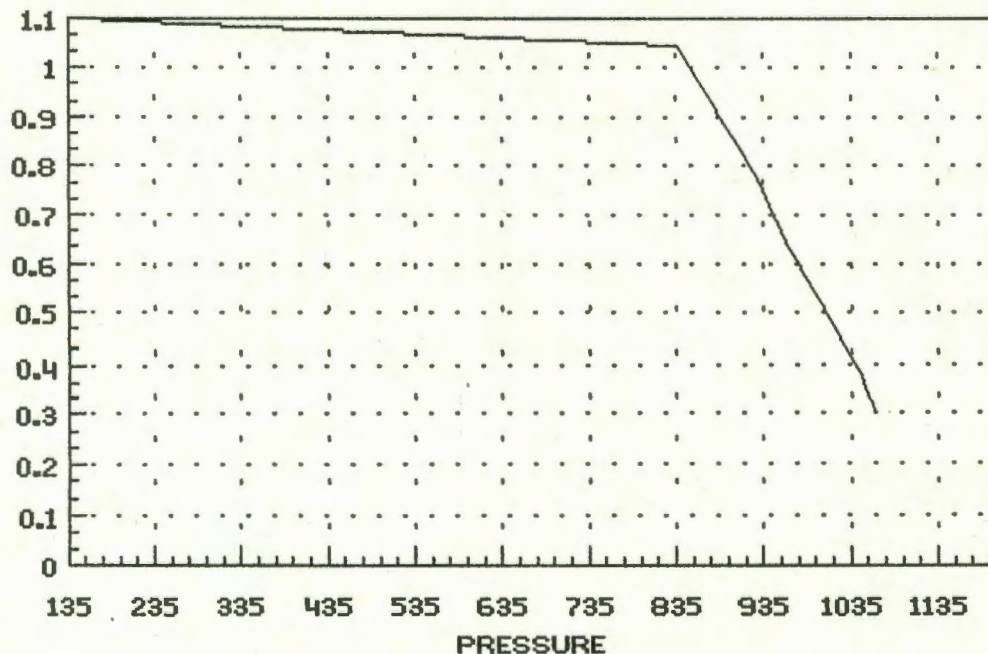


STATIC PRESSURE 1174.084
SLOPE 335.8542
POINTS USED 9

HORNER PLOT

DST #5 FINAL SHUTIN
MCCLELLAN #9 RECORDER 13308

LOG(T+MIN/MIN)



STATIC PRESSURE 1171.902
SLOPE 232.0633

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No. 2078

3 copies

Well Name & No.	Mc Clellan #9	Test No.	5	Date	4/24/89
Company	Western Kansas Exploration	Zone Tested	Arbuckle		
Address	PO Box 126 Hays, Ks 67601	Elevation	2786		
Co. Rep./Geo.	Randy Kibben	Cont.	WKO #2	Est. Ft. of Pay	4
Location: Sec.	2	Twp.	10s	Rge.	21w
			Co.	Graham	State
			Ks		

Interval Tested	3819-3829	Drill Pipe Size	4 1/2 FH
Anchor Length	10	Top Choke - 1"	
Top Packer Depth	3814	Bottom Choke - 3/4"	
Bottom Packer Depth	3819	Hole Size - 7 7/8"	
Total Depth	3829	Rubber Size - 6 3/4"	
Wt. Pipe I.D. - 2.7		Ft. Run	
Drill Collar - 2.25		Ft. Run	

Mud Wt.	10°	lb./gal.	49	Viscosity		Filtrate	
Tool Open @	9:10 AM	Initial Blow	1" blow building to bottom of bucket in 13 minutes (1/8" blow before shut in)				
Final Blow	1 1/2" blow building to bottom of bucket in 18 minutes						

Recovery - Total Feet	365	Flush Tool?	
Rec.	60	Feet of	G-IP
Rec.	245	Feet of	clean gassy oil
Rec.	120	Feet of	muddy oil
Rec.		Feet of	
Rec.		Feet of	

BHT	109	°F Gravity	29	°API @	80	°F Corrected Gravity	27	°API
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RW		@		°F Chlorides		ppm Recovery		Chlorides		ppm System
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(A) Initial Hydrostatic Mud	2077	PSI	AK1 Recorder No.	13308	Range	4700
(B) First Initial Flow Pressure	83	PSI	@ (depth)	3828	w/Clock No.	26191
(C) First Final Flow Pressure	107	PSI	AK1 Recorder No.	13851	Range	4425
(D) Initial Shut-In Pressure	1080	PSI	@ (depth)	3824	w/Clock No.	17652
(E) Second Initial Flow Pressure	119	PSI	Initial Opening	30	Test	400
(F) Second Final Flow Pressure	155	PSI	Initial Shut-In	30	Jars	
(G) Final Shut-In Pressure	1068	PSI	Final Flow	30	Safety Joint	
(H) Final Hydrostatic Mud	2007	PSI	Final Shut-In	30	Straddle	

Approved By	<i>[Signature]</i>	Circ. Sub	
Our Representative	Paul Simpson	Sampler	
		Extra Packer	
		Other	

TOTAL PRICE \$ 400

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

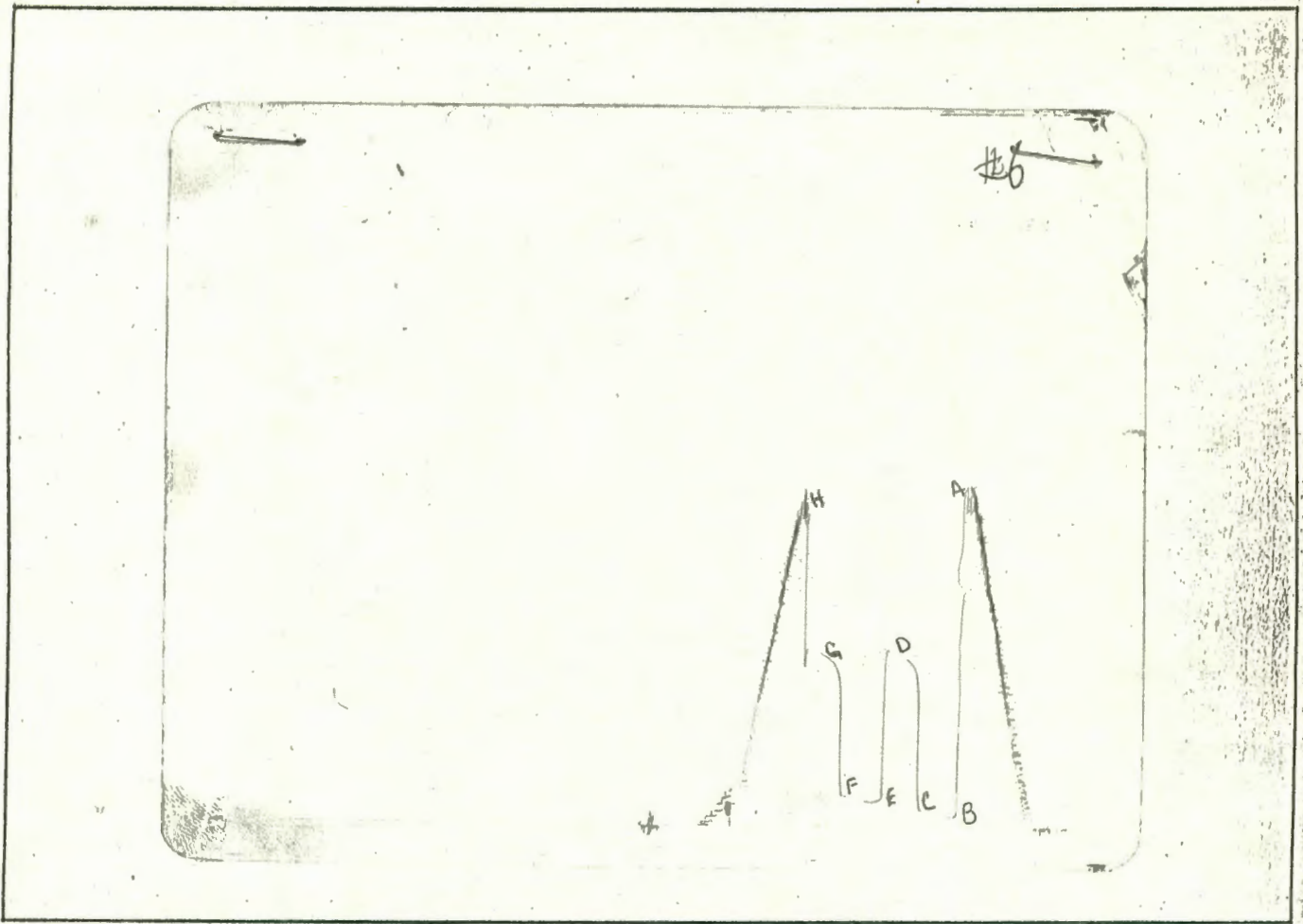
Drill-Stem Test Data

Well Name & No. <u>MCCLELLAN #9</u>	Test No. <u>6</u>	Date <u>4-25-89</u>
Company <u>WESTERN KANSAS EXPLORATION</u>	Zone Tested <u>ARBUCKLE</u>	
Address <u>PO BOX 126 HAYS KS 67601</u>	Elevation <u>2286</u>	
Co. Rep./Geo. <u>RANDY KILIAN</u>	Cont. <u>WKD #2</u>	Est. Ft. of Pay <u>8</u>
Location: Sec. <u>2</u>	Twp. <u>10S</u>	Rge. <u>21W</u> Co. <u>GRAHAM</u> State <u>KS</u>

Interval Tested <u>3832-3844</u>	Drill Pipe Size <u>4 1/2"</u>
Anchor Length <u>12</u>	Top Choke — 1" _____
Top Packer Depth <u>3827</u>	Bottom Choke — 3/4" _____
Bottom Packer Depth <u>3832</u>	Hole Size — 7 7/8" _____
Total Depth <u>3844</u>	Rubber Size — 6 3/4" _____
Wt. Pipe I.D. — 2.7 _____	Ft. Run <u>0</u>
Drill Collar — 2.25 _____	Ft. Run <u>0</u>
Mud Wt. <u>9.6</u> lb./gal.	Viscosity <u>55</u> Filtrate _____
Tool Open @ <u>9:15AM</u> Initial Blow <u>2" BLOW BUILDING TO BOTTOM OF</u> <u>BUCKET IN 8 MIN</u>	
Final Blow <u>WEAK 1/4" BLOW TO 1 1/2"</u>	

Recovery — Total Feet <u>450</u>	Flush Tool? _____
Rec. <u>0</u> Feet of _____	
Rec. <u>30</u> Feet of <u>MUDDY WATERY OIL 80% OIL 10% MUD 10% WATER</u>	
Rec. <u>120</u> Feet of <u>WATERY MUD CUT OIL 65% OIL 15% WATER 20% MUD</u>	
Rec. <u>180</u> Feet of <u>WATERY OIL 50% OIL 40% WATER 10% MUD</u>	
Rec. <u>120</u> Feet of <u>OIL CUT WATER</u>	
BHT <u>109</u> °F Gravity _____ °API @ <u>0</u> °F Corrected Gravity <u>0</u> °API	
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System	
(A) Initial Hydrostatic Mud <u>2104.5</u> PSI	AK1 Recorder No. <u>13308</u> Range <u>4700</u>
(B) First Initial Flow Pressure <u>63.6</u> PSI	@ (depth) <u>3843</u> w/Clock No. <u>26191</u>
(C) First Final Flow Pressure <u>116.6</u> PSI	AK1 Recorder No. <u>13851</u> Range <u>4425</u>
(D) Initial Shut-In Pressure <u>1090.9</u> PSI	@ (depth) <u>3839</u> w/Clock No. <u>19960</u>
(E) Second Initial Flow Pressure <u>142.1</u> PSI	Initial Opening <u>30</u>
(F) Second Final Flow Pressure <u>205.8</u> PSI	Initial Shut-In <u>30</u>
(G) Final Shut-In Pressure <u>1086.2</u> PSI	Final Flow <u>30</u>
(H) Final Hydrostatic Mud <u>1984.4</u> PSI	Final Shut-In <u>30</u>

Our Representative PAUL SIMPSON TOTAL PRICE \$ 400
Printcraft Printers - Hays, KS



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	2112	2104.5	PSI
(B) First Initial Flow Pressure.....	78	63.6	PSI
(C) First Final Flow Pressure.....	131	116.6	PSI
(D) Initial Closed-in Pressure.....	1104	1090.9	PSI
(E) Second Initial Flow Pressure.....	155	142.1	PSI
(F) Second Final Flow Pressure.....	214	205.8	PSI
(G) Final Closed-in Pressure.....	1104	1086.2	PSI
(H) Final Hydrostatic Mud.....	1971	1984.4	PSI

COMPUTER EVALUATION BY TRILOBITE TESTING
 WESTERN KANSAS EXPLORATION
 REPORT FOR DST#6 FOR THE MCCLELLAN #9
 2 10S 21W GRAHAM KS

 TEST PARAMETERS

ELEVATION:	2286 KB	EST. PAY:	8 FT
DATUM:	-1558	ZONE TESTED:	ARBUCKLE
TEST INTERVAL:	3832-3844		
		TIME INTERVALS:	30-30-30-30
RECORDER DEPTH:	3843	VISCOSITY:	12 CP
BOTTOM HOLE TEMP:	109	HOLE SIZE:	7.875 IN

 CALCULATIONS

CUBIC FEET OF GAS IN PIPE:	0		
TOTAL FEET OF RECOVERY:	450		
BARRELS IN DRILL PIPE:	6.399		
GAS OIL RATIO:	0 CU.FT./BBL		
TOTAL BARRELS OF RECOVERY:	6.399	UNCORR. INIT. PROD.:	153.576 BBL/DAY
API GRAVITY:	28	FLUID GRADIENT:	.384
CORRECTED PIPE FILLUP:	535.9375		
		CORR. BARRELS OF RECOVERY:	7.607701 BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:	182.5848 BBL/DAY		
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE	112.9567		

INITIAL SHUT-IN VALUES:	
THEORETICAL STATIC PRESSURE	1159.924
SLOPE	229.3324
FINAL SHUT-IN VALUES:	
THEORETICAL STATIC PRESSURE	1162.274
SLOPE	159.4714

TRANSMISSIBILITY	186.1669 (MD.-FT./CP.)
PERMEABILITY	279.2503 (MD.)
INDICATED FLOW CAPACITY	2234.002 (MD.FT)
PRODUCTIVITY INDEX	.2103686 (BARRELS/DAY/PSI)
DAMAGE RATIO	1.097593
RADIUS OF INVESTIGATION	129.4412 (FT.)
THEORETICAL POTENTIAL	200.4039 BBL/DAY
POTENTIOMETRIC SURFACE	1138.314 (FT.)
DRAWDOWN FACTOR	-.2026081 (%)

INITIAL FLOW

REORDER # 13308
DST #6

DT (MIN)	PRESSURE	<> PRESSURE
0	67.4	67.4
3	63.6	-3.800003
6	72.2	8.599999
9	79.5	7.300003
12	87.7	8.199997
15	97.3	9.600006
18	104.6	7.299996
21	111.8	7.200005
24	116.6	4.799996

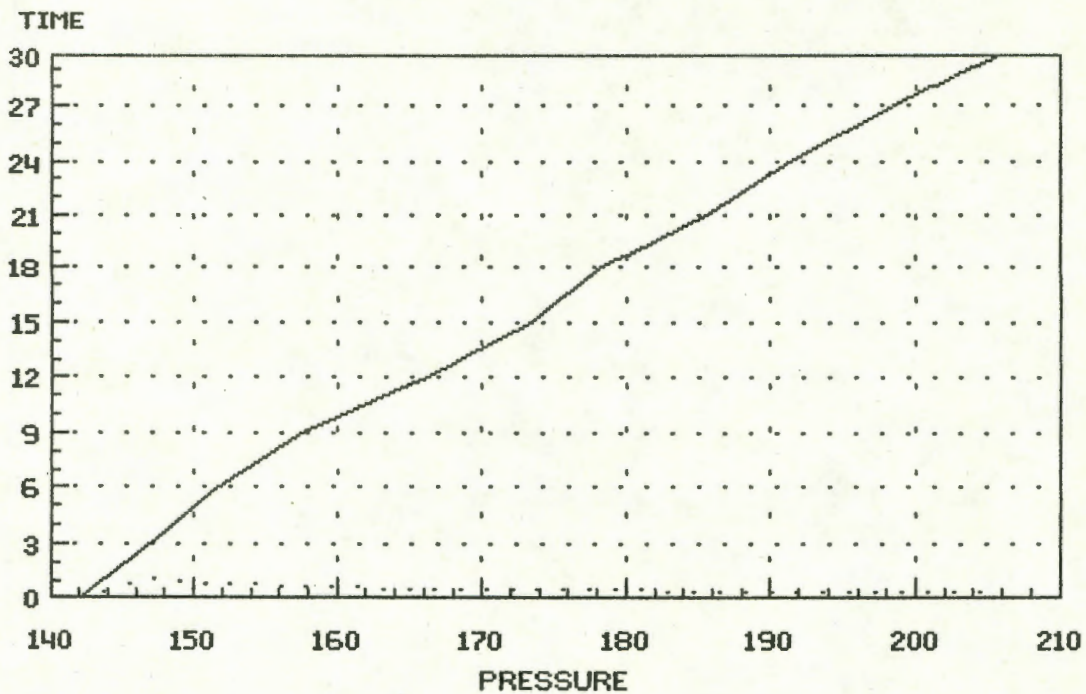
FINAL FLOW

REORDER # 13308
DST #6

DT (MIN)	PRESSURE	<> PRESSURE
0	142.1	142.1
3	146.9	4.799988
6	151.8	4.900009
9	157.6	5.800003
12	166.2	8.599991
15	173.4	7.199997
18	178.3	4.900009
21	185.5	7.199997
24	191.3	5.800003
27	198.5	7.199997
30	205.8	7.300003

DELTA T DELTA P

DST #6 FINAL FLOW
MCCLELLAN #9 RECORDER 13308



INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE 112.9567 BBL/DAY

INITIAL SHUT-IN BUILDUP
DST #6

RECORDER # 13308
INITIAL FLOW TIME (MIN.): 30

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	116.6	116.6
3	1.041205	873	756.4
6	.778011	985.7	112.7
9	.6367073	1012.9	27.20001
12	.5439701	1029.5	16.59998
15	.4770353	1046	16.5
18	.425892	1060.2	14.19995
21	.3852815	1069.7	9.5
24	.352119	1083.9	14.20007
27	.3244526	1087.2	3.299927
30	.3009757	1090.9	3.700073

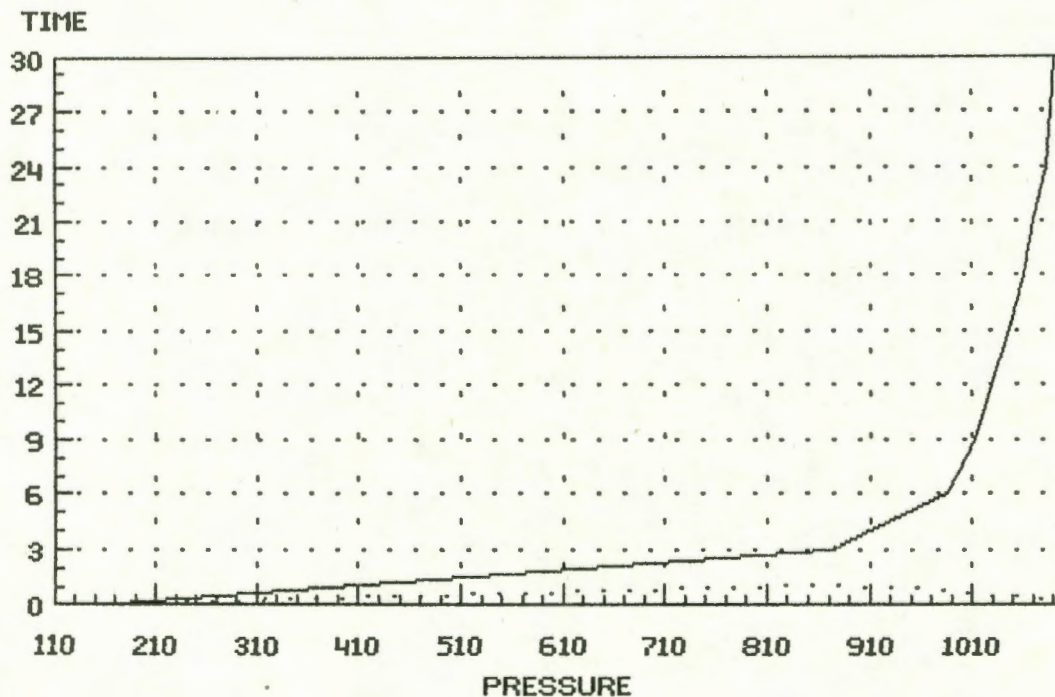
FINAL SHUT-IN BUILDUP
DST #6

RECORDER # 13308
TOTAL FLOW TIME (MIN.): 60

MIN	LOG(T+MIN/MIN)	PRESSURE	<> PRESSURE
0	0	205.8	205.8
3	1.321981	921.3	715.5
6	1.041205	998.7	77.40003
9	.8844472	1022.4	23.70001
12	.778011	1042.3	19.90003
15	.6988441	1060.2	17.8999
18	.6367073	1067.3	7.100098
21	.5861601	1073	5.699951
24	.5439701	1077.8	4.800049
27	.5080639	1081.5	3.699951
30	.4770353	1086.2	4.699951

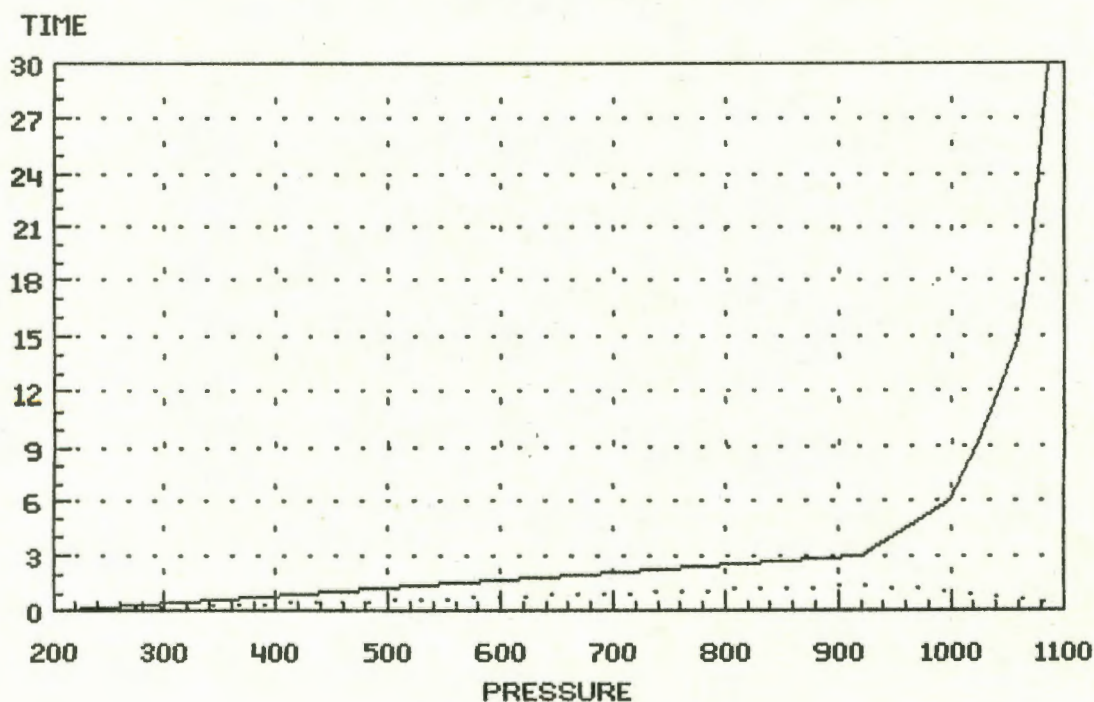
DELTA T DELTA P

DST #6 INITIAL SHUTIN
MCCLELLAN #9 RECORDER 13308



DELTA T DELTA P

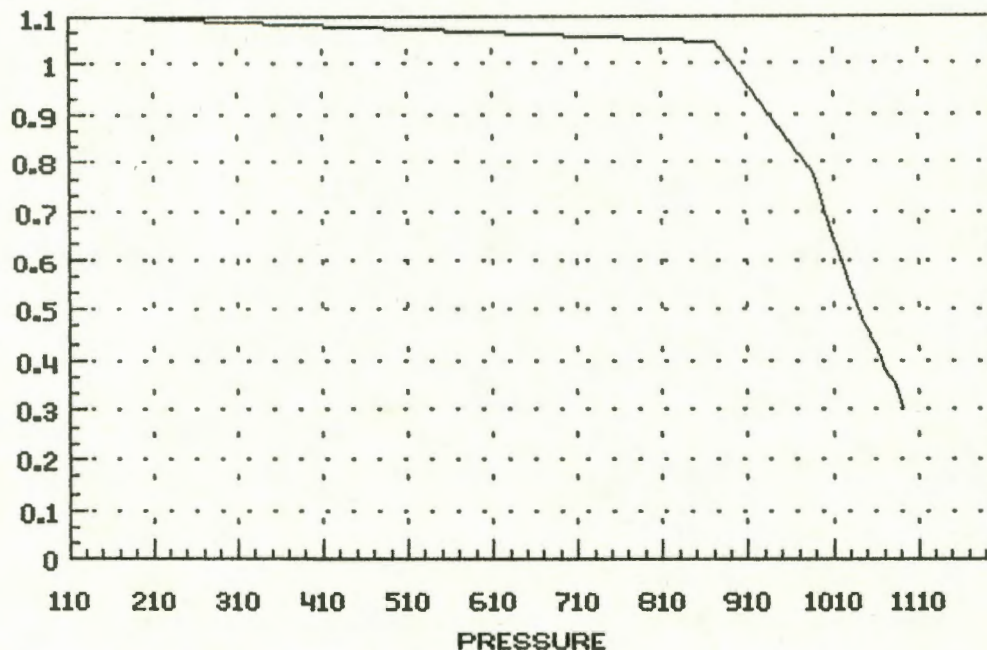
DST #6 FINAL SHUTIN
MCCLELLAN #9 RECORDER 13308



HORNER PLOT

DST #6 INITIAL SHUTIN
MCCLELLAN #9 RECORDER 13308

LOG(T+MIN)/MIN)

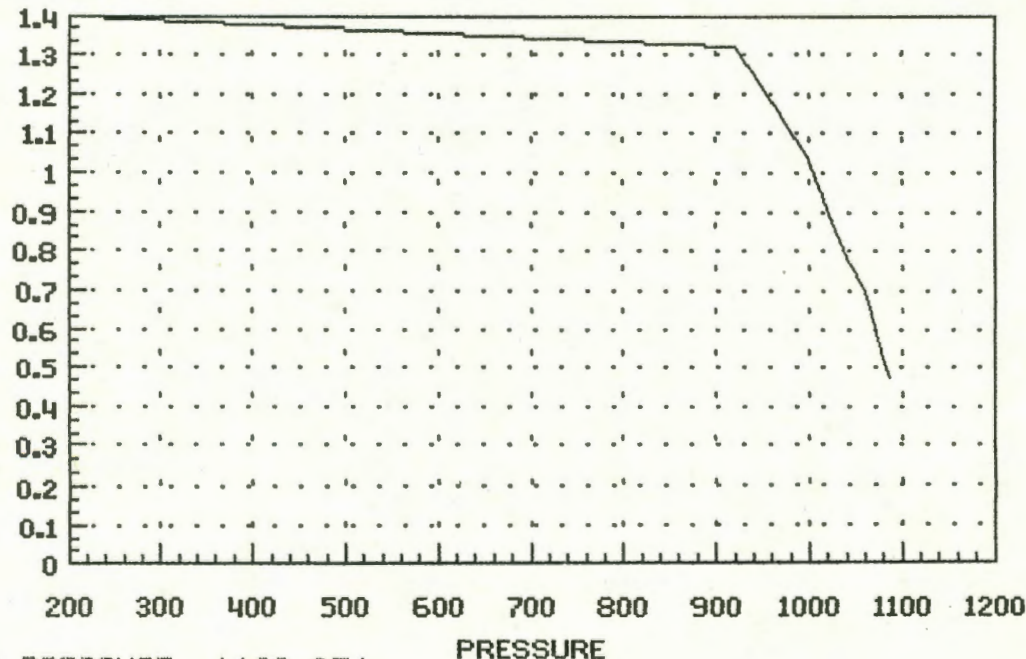


STATIC PRESSURE 1159.924
SLOPE 229.3324
POINTS USED 9

HORNER PLOT

DST #6 FINAL SHUTIN
MCCLELLAN #9 RECORDER 13308

LOG(T+MIN)/MIN)



STATIC PRESSURE 1162.274
SLOPE 159.4714
POINTS USED 10

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

No. 2079

Well Name & No. Mc Clellan #9 Test No. 6 Date 4/25/89
 Company Western Kansas Exploration Zone Tested Arbuckle
 Address P.O. Box 126 Hays KS 67601 Elevation 2286
 Co. Rep./Geo. Randy Kilian Cont. WKO #2 Est. Ft. of Pay 8'
 Location: Sec. 2 Twp. 10s Rge. 21w Co. Graham State Ks

Interval Tested 3832-3844 Drill Pipe Size 4 1/2 FA
 Anchor Length 12 Top Choke — 1" _____
 Top Packer Depth 3827 Bottom Choke — 3/4" _____
 Bottom Packer Depth 3832 Hole Size — 7 7/8" _____
 Total Depth 3844 Rubber Size — 6 3/4" _____
 Wt. Pipe I.D. — 2.7 _____ Ft. Run _____
 Drill Collar — 2.25 _____ Ft. Run _____
 Mud Wt. 96 lb./gal. Viscosity 55 Filtrate _____
 Tool Open @ 9:15 AM Initial Blow 2" blow building to bottom of bucket in 8 minutes
 Final Blow weak 2 1/2" blow building to 1 1/2"

Recovery — Total Feet 450 Flush Tool? _____

Rec.	Feet of	Fluid Description
<u>30</u>	Feet of	<u>Muddy watery oil 80% oil 10% mud 10% water</u>
<u>120</u>	Feet of	<u>water + mud cut oil 65% oil 15% H2O 20% mud</u>
<u>180</u>	Feet of	<u>Watery oil 50% oil 40% H2O 10% mud</u>
<u>120</u>	Feet of	<u>OCW 5% oil 95% H2O</u>

BHT 109 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

- (A) Initial Hydrostatic Mud 2112 PSI AK1 Recorder No. 13308 Range 4700
- (B) First Initial Flow Pressure 78 PSI @ (depth) 3843 w/Clock No. 26191
- (C) First Final Flow Pressure 131 PSI AK1 Recorder No. 13851 Range 4425
- (D) Initial Shut-In Pressure 1104 PSI @ (depth) 3839 w/Clock No. 19960
- (E) Second Initial Flow Pressure 155 PSI Initial Opening 30 Test 400
- (F) Second Final Flow Pressure 214 PSI Initial Shut-In 30 Jars _____
- (G) Final Shut-In Pressure 1104 PSI Final Flow 30 Safety Joint _____
- (H) Final Hydrostatic Mud 1271 PSI Final Shut-In 30 Straddle _____

Approved By Randy Kilian _____
 Our Representative Paul Simpson _____

Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

TOTAL PRICE \$ 400