

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Drill-Stem Test Data **CONFIDENTIAL**

Well Name & No.	RUSSELL #1-27	Test No.	1	Date	5/1/90
Company	N-B COMPANY INC	Zone Tested	MARMATON		
Address	P.O. BOX 506 RUSSELL KS 67665	Elevation	1930 KB		
Co. Rep./Geo.	MY KYLE BRANUM	Cont.	EMPHASIS RIG #5	Est. Ft. of Pay	18
Location: Sec.	27	Twp.	25S	Rge.	13W
		Co.	STAFFORD	State	KANSAS

Interval Tested	4048-4075	Drill Pipe Size	4.5" XH
Anchor Length	27	Top Choke — 1"	Bottom Choke — ¾"
Top Packer Depth	4043	Hole Size — 77/8"	Rubber Size — 63/4"
Bottom Packer Depth	4048	Wt. Pipe I.D. — 2.7 Ft. Run	0
Total Depth	4075	Drill Collar — 2.25 Ft. Run	0
Mud Wt.	9.2	lb/gal.	Viscosity 43 Filtrate 11.2
Tool Open @	6:11 PM	Initial Blow	FAIR BLOW AT 2"-THEN BUILDING TO BOTTOM
			OF BUCKET-ISI-BLED 2" FOR 5 MIN-NO BLOW BACK
Final Blow	GOOD BLOW OFF BOTTOM OF BUCKET IN 10 MINUTES-BLED		
	2" FOR 5 MIN-BLOW BACK WEAK AT SURFACE IN 50 MIN-CONT. THROUGHOUT		
Recovery — Total Feet	120	Flush Tool?	
Rec. 60	Feet of	SLIGHTLY OIL CUT MUD-10%OIL/ 10% GAS/ 80% MUD	
Rec. 60	Feet of	SLIGHTLY OIL CUT MUDDY WTR-40% WTR/ 10%OIL/10%GAS/ 40%	
Rec. 0	Feet of		
Rec. 330	Feet of	GAS IN PIPE	
Rec. 0	Feet of		
BHT 120	°F Gravity	°API @ 0	°F corrected Gravity 0 °API
RW @	°F Chlorides	ppm Recovery	Chlorides 10000 ppm System
(A) Initial Hydrostatic Mud	1981.4	PSI AK1 Recorder No. 13615	Range 4575
(B) First Initial Flow Pressure	20.9	PSI @ (depth) 4050	w/Clock No. 14389
(C) First Final Flow Pressure	23.6	PSI AK1 Recorder No. 10248	Range 4400
(D) Initial Shut-In Pressure	1175.4	PSI @ (depth) 4072	w/Clock No. 27567
(E) Second Initial Flow Pressure	51.2	PSI AK1 Recorder No. 0	Range 0
(F) Second Final Flow Pressure	63.5	PSI @ (depth) 0	w/Clock No. 0
(G) Final Shut-In Pressure	1430.2	PSI Initial Opening 15	
(H) Final Hydrostatic Mud	1951.2	PSI Initial Shut-In 30	
		Final Flow 45	
		Final Shut-In 90	

RELEASED

AUG 21 1991

FROM CONFIDENTIAL

MR ROGER SELLS

400

Our Representative _____

TOTAL PRICE \$ _____

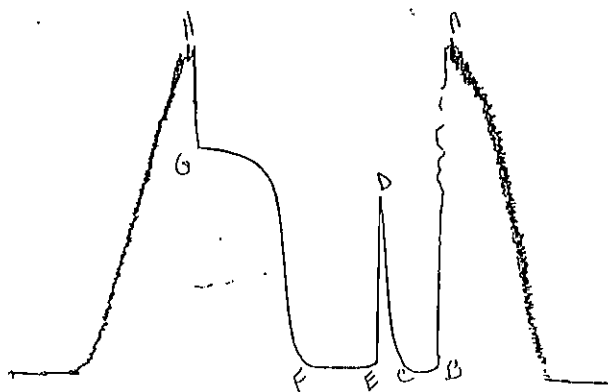
ORIGINAL

DST#

/

RECORDER#

131645



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud.....	1980	1981.4	PSI
(B) First Initial Flow Pressure.....	22	20.9	PSI
(C) First Final Flow Pressure.....	22	23.6	PSI
(D) Initial Closed-In Pressure.....	1173	1175.4	PSI
(E) Second Initial Flow Pressure.....	45	51.2	PSI
(F) Second Final Flow Pressure.....	56	63.5	PSI
(G) Final Closed-In Pressure.....	1428	1430.2	PSI
(H) Final Hydrostatic Mud.....	1947	1951.2	PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

ORIGINAL No. 2866

Well Name & No. Russell 1-27 Test No. 1 Date 5-1-50
 Company N-B Company Inc. 75912.5 Zone Tested Marm.
 Address P.O. Box 506 Russell, Ks. Elevation 1930 M.
 Co. Rep. / Geo. Kyle Branum Cont. Emphasis Rig Est. Ft. of Pay 18'
 Location: Sec. 27 Twp. 25 Rge. 13 Co. Stafford State Ks
 No. of Copies 4 Distribution Sheet Yes ☒ No Turnkey Yes ☒ No

Interval Tested 4048-4075 Drill Pipe Size 4 1/2 XH
 Anchor Length 27' Top Choke — 1" Bottom Choke — 1/4"
 Top Packer Depth 4043 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Bottom Packer Depth 4048 Wt. Pipe I.D. — 2.7 Ft. Run
 Total Depth 4025 Drill Collar — 2.25 Ft. Run

Mud Wt. 9.2 lb/gal. Viscosity 43 Filtrate 11.2

Tool Open @ 6:11 PM Initial Blow fair blowed 2" then building to bottom of bucket @ station. Bled 2" 5 min. No blow back

Final Blow good blow off bottom of bucket in 10 min. Bled 2" 5 min. blow back (went at surface) in 50 min. 50 min. 50 min. 50 min.

Recovery — Total Feet 120' Flush Tool? Yes

Rec. 60 Feet of slightly Oil Cut Mud - 10% Oil / 3 10% gas / 80% M.
 Rec. 60 Feet of slightly Oil Cut muddy Water - 40% water / 10% Oil / 10% gas / 40% M.
 Rec. 330 Feet of 50.5
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____

BHT 120 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 10,000 ppm System

(A) Initial Hydrostatic Mud 1980 PSI AK1 Recorder No. 13615 Range 41525

(B) First Initial Flow Pressure 22 PSI @ (depth) 4050 w/Clock No. 14389

(C) First Final Flow Pressure 22 PSI AK1 Recorder No. 10248 Range 4400

(D) Initial Shut-In Pressure 1173 PSI @ (depth) 4072 w/Clock No. 27567

(E) Second Initial Flow Pressure 45 PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure 56 PSI @ (depth) _____ w/Clock No. _____

(G) Final Shut-In Pressure 1428 PSI Initial Opening 15 Test 400⁰⁰

(H) Final Hydrostatic Mud 1947 PSI Initial Shut-In 30 Jars _____

Final Flow 45 Safety Joint _____

Final Shut-In 90 Straddle _____

Approved By [Signature] Circ. Sub ☒

Our Representative Roger L. Sells Sampler _____

Printcraft Printers - Hays, KS gave white Extra Packer _____

Other _____

TOTAL PRICE \$ 400⁰⁰

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Drill-Stem Test Data

Well Name & No. <u>RUSSELL #1-27</u>	Test No. <u>2</u>	Date <u>5/2/90</u>
Company <u>N-B COMPANY INC</u>	Zone Tested <u>SIMPSON SAND</u>	
Address <u>P.O. BOX 506 RUSSELL KS 67665</u>	Elevation <u>1930 KB</u>	
Co. Rep./Geo <u>MY KYLE BRANUM</u>	Cont. <u>EMPHASIS RIG #5</u>	Est. Ft. of Pay <u>0</u>
Location: Sec. <u>27</u>	Twp. <u>25S</u>	Rge. <u>13W</u> Co. <u>STAFFORD</u> State <u>KANSAS</u>

Interval Tested <u>4182-4226</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>44</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>4177</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>4182</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>0</u>
Total Depth <u>4226</u>	Drill Collar — 2.25 Ft. Run <u>0</u>
Mud Wt. <u>9.2</u> lb/gal.	Viscosity <u>52</u> Filtrate <u>10.4</u>
Tool Open @ <u>5:24 PM</u> Initial Blow <u>VERY WEAK SURFACE BLOW BUILDING TO</u>	
<u>3/4" - BLEED 2" - NO BLOW BACK</u>	
Final Blow <u>VERY WEAK SURFACE BLOW DYING IN 12 MINUTES</u>	

Recovery — Total Feet <u>3</u>	Flush Tool? <u></u>
Rec. <u>3</u> Feet of <u>SLIGHTLY OIL SPECKED MUD</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>0</u> °F Gravity <u></u> °API @ <u>0</u> °F Corrected Gravity <u>0</u> °API	
RW <u></u> @ <u></u> °F Chlorides <u></u> ppm Recovery Chlorides <u>10000</u> ppm System	
(A) Initial Hydrostatic Mud <u>2151.6</u> PSI	AK1 Recorder No. <u>13615</u> Range <u>4575</u>
(B) First Initial Flow Pressure <u>30.9</u> PSI	@ (depth) <u>4184</u> w/Clock No. <u>14389</u>
(C) First Final Flow Pressure <u>32.8</u> PSI	AK1 Recorder No. <u>10248</u> Range <u>4400</u>
(D) Initial Shut-In Pressure <u>60.2</u> PSI	@ (depth) <u>4223</u> w/Clock No. <u>27567</u>
(E) Second Initial Flow Pressure <u>34.5</u> PSI	AK1 Recorder No. <u>0</u> Range <u>0</u>
(F) Second Final Flow Pressure <u>35.6</u> PSI	@ (depth) <u>0</u> w/Clock No. <u>0</u>
(G) Final Shut-In Pressure <u>47.8</u> PSI	Initial Opening <u>15</u>
(H) Final Hydrostatic Mud <u>2110.3</u> PSI	Initial Shut-In <u>30</u>
	Final Flow <u>15</u>
	Final Shut-In <u>30</u>

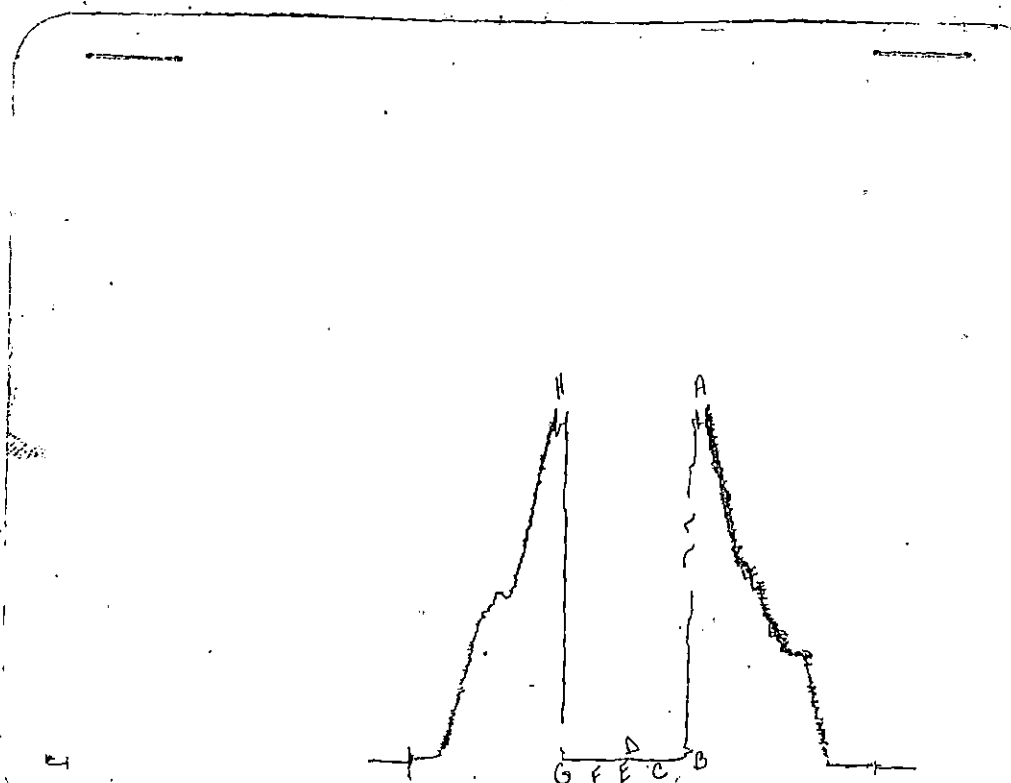
MR ROGER SELLS

400

Our Representative

TOTAL PRICE \$

ORIGINAL DST# 2 RECORDER# 13615



This is an actual photograph of recorder chart.

POINT	PRESSURE	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud.....	2146	2151.6 PSI
(B) First Initial Flow Pressure.....	33	30.9 PSI
(C) First Final Flow Pressure.....	33	32.8 PSI
(D) Initial Closed-In Pressure.....	56	60.2 PSI
(E) Second Initial Flow Pressure.....	33	34.5 PSI
(F) Second Final Flow Pressure.....	33	35.6 PSI
(G) Final Closed-In Pressure.....	45	47.8 PSI
(H) Final Hydrostatic Mud.....	2102	2110.3 PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

ORIGINAL No. 2867

Well Name & No. Russell 1-27 Test No. 2 Date 5-2-90
 Company N-B Company Inc. T59125 Zone Tested Simpson Sand
 Address P.O. Box 506 Russell, Ks. Elevation 1930 KR
 Co. Rep. / Geo. Kyle Brannum Cont. Emphasis Rig #5 Est. Ft. of Pay _____
 Location: Sec. 27 Twp. 25 Rge. 13 Co. Stafford State KS
 No. of Copies 4 Distribution Sheet _____ Yes X No _____ Turnkey _____ Yes X No _____

Interval Tested 4182 - 4226 Drill Pipe Size 4 1/2 XH
 Anchor Length 44 Top Choke — 1" _____ Bottom Choke — 1/4" _____
 Top Packer Depth 4177 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 4182 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 4226 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 9.2 lb / gal. Viscosity 52 Filtrate 10.4
 Tool Open @ 5:24 PM Initial Blow very weak surface blow building to
3/4" B.L.D. — No Blow Back
 Final Blow very weak surface blow dying in 12 min.

Recovery — Total Feet 3' Flush Tool? _____
 Rec. 3 Feet of slightly oil speckled mud
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 10,000 ppm System
 (A) Initial Hydrostatic Mud 2146 PSI AK1 Recorder No. 13615 Range 4575
 (B) First Initial Flow Pressure 33 PSI @ (depth) 4184 W/Clock No. 14389
 (C) First Final Flow Pressure 33 PSI AK1 Recorder No. 10248 Range 7400
 (D) Initial Shut-In Pressure 56 PSI @ (depth) 4223 W/Clock No. 27567
 (E) Second Initial Flow Pressure 33 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 33 PSI @ (depth) _____ W/Clock No. _____
 (G) Final Shut-In Pressure 45 PSI Initial Opening 15 Test 400⁰⁰
 (H) Final Hydrostatic Mud 2102 PSI Initial Shut-In 30 Jars _____
 Final Flow 15 Safety Joint _____
 Final Shut-In 30 Straddle _____

Approved By [Signature]
 Our Representative Roger L. Sell

Printcraft Printers - Hays, KS

Circ. Sub X
 Sampler _____
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ 400⁰⁰

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Drill-Stem Test Data

Well Name & No. <u>RUSSELL #1-27</u>	Test No. <u>3</u>	Date <u>5/3/90</u>
Company <u>N-B COMPANY INC</u>	Zone Tested <u>LOWER SIMPSON SAND</u>	
Address <u>P.O. BOX 506 RUSSELL KS 67665</u>	Elevation <u>1930 KB</u>	
Co. Rep./Geo <u>MY KYLE BRANUM</u>	Cont. <u>EMPHASIS RIG #5</u>	Est. Ft. of Pay <u>0</u>
Location: Sec. <u>27</u>	Twp. <u>25S</u>	Rge. <u>13W</u> Co. <u>STAFFORD</u> state <u>KANSAS</u>

Interval Tested <u>4217-4243</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>26</u>	Top Choke — 1" Bottom Choke — 1/4"
Top Packer Depth <u>4212</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>4217</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>0</u>
Total Depth <u>4243</u>	Drill Collar — 2.25 Ft. Run <u>0</u>
Mud Wt. <u>8.9</u> lb/gal.	Viscosity <u>49</u> Filtrate <u>11.0</u>
Tool Open @ <u>8:37</u> Initial Blow <u>FAIR BLOW BUILDING TO 4" AT SHUT-IN</u>	
<u>bled 2" FOR 5 MINUTES-NO BLOW BACK</u>	
Final Blow <u>FAIR BLOW BUILDING TO 2 1/2" IN 3 MIN &</u>	
<u>STAYING THROUGHOUT OPENING-BLED 2" FOR 5 MIN-NO BLOW BACK</u>	
Recovery — Total Feet <u>240</u>	Flush Tool? _____
Rec. <u>240</u> Feet of <u>MUD</u>	
Rec. <u>0</u> Feet of <u>PACKER FAILURE - TOOL PLUGGED OF-MISRUN</u>	
Rec. <u>0</u> Feet of _____	
Rec. <u>0</u> Feet of _____	
Rec. <u>0</u> Feet of _____	
BHT <u>0</u> °F Gravity _____ °API @ <u>0</u> °F Corrected Gravity <u>0</u> °API	
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides <u>10000</u> ppm System	
(A) Initial Hydrostatic Mud <u>0</u> PSI AK1 Recorder No. <u>13615</u> Range <u>4575</u>	
(B) First Initial Flow Pressure <u>0</u> PSI @ (depth) <u>4219</u> w/Clock No. <u>14389</u>	
(C) First Final Flow Pressure <u>0</u> PSI AK1 Recorder No. <u>10248</u> Range <u>4400</u>	
(D) Initial Shut-In Pressure <u>0</u> PSI @ (depth) <u>4240</u> w/Clock No. <u>27567</u>	
(E) Second Initial Flow Pressure <u>0</u> PSI AK1 Recorder No. <u>0</u> Range <u>0</u>	
(F) Second Final Flow Pressure <u>0</u> PSI @ (depth) <u>0</u> w/Clock No. <u>0</u>	
(G) Final Shut-In Pressure <u>0</u> PSI Initial Opening <u>15</u>	
(H) Final Hydrostatic Mud <u>0</u> PSI Initial Shut-In <u>30</u>	
	Final Flow <u>45</u>
	Final Shut-In <u>90</u>

MR ROGER SELLS

250

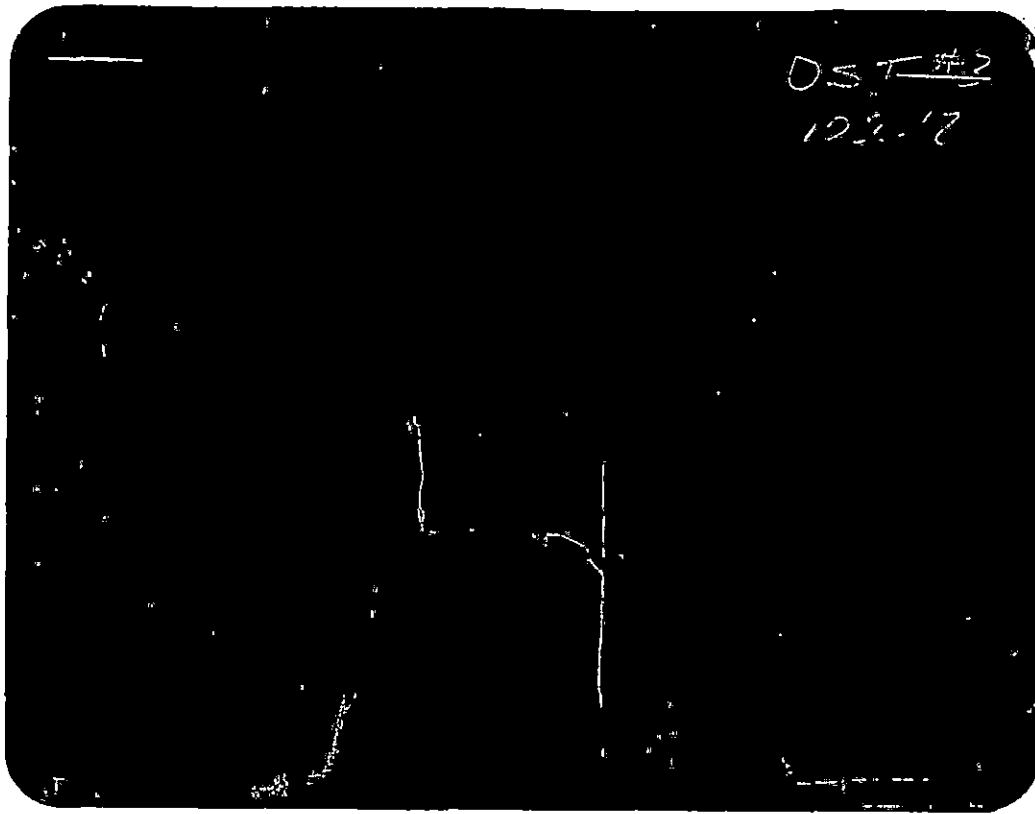
Our Representative _____

TOTAL PRICE \$ _____

ORIGINAL

DST# _____

RECORDER# _____



This is an actual photograph of recorder chart.

PRESSURE

POINT

Field
Reading

Office
Reading

(A) Initial Hydrostatic Mud.....	○	○	PSI
(B) First Initial Flow Pressure.....	○	○	PSI
(C) First Final Flow Pressure.....	○	○	PSI
(D) Initial Closed-In Pressure.....	○	○	PSI
(E) Second Initial Flow Pressure.....	○	○	PSI
(F) Second Final Flow Pressure.....	○	○	PSI
(G) Final Closed-In Pressure.....	○	○	PSI
(H) Final Hydrostatic Mud.....	○	○	PSI

TRILOBITE TESTING COMPANY

P.O. BOX 362 • Hays, Kansas 67601

TEST TICKET

ORIGINAL^{Nº} 2868

Name & No. Russell 1-27 Test No. 3 Date 5-3-90
 Company A-B Company, Inc. 759125 Zone Tested Town Simpson Sand
 P.O. Box 506 Russell, Ks. Elevation 1930 KB
 Sp. / Geo. Kyle Branum Cont. Emphasis Rig #5 Est. Ft. of Pay _____
 Location: Sec. 27 Twp. 25 Rge. 13 Co. Stafford State Ks.
 Copies 4 Distribution Sheet _____ Yes X No _____ Turnkey _____ Yes _____ No X

Well Tested 4217-4243 Drill Pipe Size 4 1/2 x 11
 Length 26' Top Choke — 1" Bottom Choke — 3/4"
 Casing Depth 4212 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Packer Depth 4217 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Depth 4243 Drill Collar — 2.25 Ft. Run _____
 Density 8.9 lb/gal. Viscosity 49 Filtrate 11.0
 Test @ 8:37 Initial Blow fair blow building to 4" @ shut-in
2" 5 min. no blow back.
fair blow building to 2 1/2" in 3 min. & staying thru
opening. Bled 2" 5 min. no blow back
 Total Feet 240 Flush Tool? _____

Feet of 240 no mud
 Feet of Packer Failure
 Feet of Tool Plugged off
 Feet of Mis Run

°F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 @ _____ °F Chlorides _____ ppm Recovery Chlorides 10,000 ppm System
 Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 13615 Range 4575
 Initial Flow Pressure _____ PSI @ (depth) 4219 w/Clock No. 14389
 Final Flow Pressure _____ PSI AK1 Recorder No. 10248 Range 4400
 Initial Shut-In Pressure _____ PSI @ (depth) 4240 w/Clock No. 27567
 Cond Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____
 Cond Final Flow Pressure _____ PSI @ (depth) _____ w/Clock No. _____
 Initial Shut-In Pressure _____ PSI Initial Opening 15 Test 250⁰⁰ 400⁰⁰
 Initial Hydrostatic Mud _____ PSI Initial Shut-In 30 Jars _____
 Final Flow 45 Safety Joint _____
 Final Shut-In 90 Straddle _____

Verified By Bill Owen
 Representative Roger F. Sells
 Craft Printers - Hays, KS
 Circ. Sub X
 Sampler _____
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ _____

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

ORIGINAL

Drill-Stem Test Data

Well Name & No. RUSSELL #1-27 Test No. 4 Date 5/3/90
 Company N-B COMPANY INC Zone Tested LWR SIMPSON SAND
 Address P.O. BOX 506 RUSSELL KS 67665 Elevation 1930 KB
 Op. Rep./Geol. MY KYLE BRANUM Cont. EMPHASIS RIG #5 Est. Ft. of Pay 0
 Location: Sec. 27 Twp. 25S Rge. 13W Co. STAFFORD State KANSAS

Interval Tested 4205-4243 Drill Pipe Size 4.5" XH
 Anchor Length 38 Top Choke — 1" Bottom Choke — ¼"
 Packer Depth 4200 Hole Size — 77/8" Rubber Size — 63/4"
 Bottom Packer Depth 4205 Wt. Pipe I.D. — 2.7 Ft. Run 0
 Total Depth 4243 Drill Collar — 2.25 Ft. Run 0
 Mud Wt. 8.9 lb/gal. Viscosity 49 Filtrate 11.0
 Well Open @ Initial Blow PACKER FAILURE-TRIED TO RE-SET PACKERS
TWICE-NO GOOD-CAME OUT OF THE HOLE
 Final Blow

Recovery — Total Feet 110 Flush Tool?
110 Feet of MUD
0 Feet of
0 Feet of
0 Feet of
0 Feet of
0 Feet of
0 °F Gravity °API @ 0 °F Corrected Gravity 0 °API

@ °F Chlorides ppm Recovery Chlorides 10000 ppm System
 Initial Hydrostatic Mud 0 PSI AK1 Recorder No. 13615 Range 4575
 First Initial Flow Pressure 0 PSI @ (depth) 4207 w/Clock No. 27501
 First Final Flow Pressure 0 PSI AK1 Recorder No. 10248 Range 4400
 Initial Shut-In Pressure 0 PSI @ (depth) 4240 w/Clock No. 27567
 Second Initial Flow Pressure 0 PSI AK1 Recorder No. 0 Range 0
 Second Final Flow Pressure 0 PSI @ (depth) 0 w/Clock No. 0
 Final Shut-In Pressure 0 PSI Initial Opening 15
 Final Hydrostatic Mud 0 PSI Initial Shut-In 30
 Final Flow 0
 Final Shut-In 0

MR ROGER SELLS

250

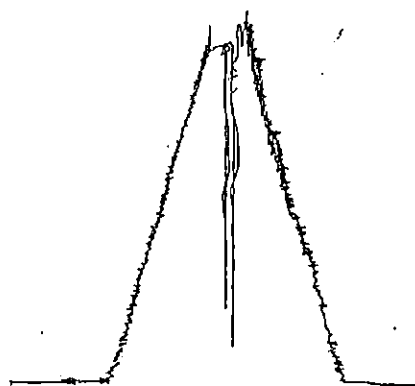
Representative

TOTAL PRICE \$

ORIGINAL

DST# 4

RECORDER# 13615



This is an actual photograph of recorder chart.

PRESSURE

POINT

Field
Reading

Office
Reading

(A) Initial Hydrostatic Mud.....	PSI
(B) First Initial Flow Pressure.....	PSI
(C) First Final Flow Pressure.....	PSI
(D) Initial Closed-In Pressure.....	PSI
(E) Second Initial Flow Pressure.....	PSI
(F) Second Final Flow Pressure.....	PSI
(G) Final Closed-In Pressure.....	PSI
(H) Final Hydrostatic Mud.....	PSI

TRILOBITE TESTING COMPANY

P.O. Box 362 • Hays, Kansas 67601

TEST TICKET

ORIGINAL No. 2869

Well Name & No. Russell 1-27 Test No. 4 Date 5-3-90
 Company N-B Company, Inc. T59125 Zone Tested Lower Simpson
 Address P.O. Box 506 Russell, KS. Elevation 1930 KB
 Co. Rep. / Geo. Kyle Brannum cont. Emphasis Rig #5 Est. Ft. of Pay _____
 Location: Sec. 27 Twp. 25 Rge. 13 Co. Stallard State KS.
 No. of Copies 4 Distribution Sheet _____ Yes X No _____ Turnkey _____ Yes X No _____

Interval Tested 4205 - 4243 Drill Pipe Size 4 1/2 x 4
 Anchor Length 38' Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 4200 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 4205 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 4243 Drill Collar — 2.25 Ft. Run _____
 Mud Wt. 8.9 lb/gal. Viscosity 49 Filtrate 11.0
 Tool Open @ _____ Initial Blow Packer Failure - tried to
set packers twice. no good - out of
 Final Blow the hole.

Recovery — Total Feet 110' Flush Tool? _____

Rec. 110 Feet of Mud
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____
 Rec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 10,000 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. 13615 Range 4575
 (B) First Initial Flow Pressure _____ PSI @ (depth) 4207 w/Clock No. 27501
 (C) First Final Flow Pressure _____ PSI AK1 Recorder No. 10248 Range 4400
 (D) Initial Shut-In Pressure _____ PSI @ (depth) 4240 w/Clock No. 27567
 (E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure _____ PSI @ (depth) _____ w/Clock No. _____
 (G) Final Shut-In Pressure _____ PSI Initial Opening 15 Test 400°
 (H) Final Hydrostatic Mud _____ PSI Initial Shut-In 30 Jars _____

Final Flow _____ Safety Joint _____
 Final Shut-In _____ Straddle _____

Approved By Bill Owen

Our Representative Roy L. Sell

Circ. Sub X
 Sampler _____
 Extra Packer _____
 Other _____
 TOTAL PRICE \$ _____