

WELL NAME: Applegate #1
COMPANY: Bennett & Schulte Oil Company
LOCATION: 11-10S-12W
Osborne County Kansas
DATE: 07/09/96

TRILOBITE TESTING L.L.C.

OPERATOR : Bennett & Schulte

DATE 07/08/96

WELL NAME: Applegate #1

KB 1723.00 ft

TICKET NO: 9417

DST #1

LOCATION : 11-10S-12W Osborne Cty KS

GR 1718.00 ft

FORMATION: LKC

INTERVAL : 2929.00 To 2970.00 ft

TD 2970.00 ft

TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	24174	24174	10992			PF Fr. 2002 to 2032 hr
SI 45 Range(Psi)	3050.0	3050.0	4250.0	0.0	0.0	IS Fr. 2032 to 2117 hr
SF 30 Clock(hrs)	12	12	12			SF Fr. 2117 to 2147 hr
FS 45 Depth(ft)	2934.0	2934.0	2965.0	0.0	0.0	FS Fr. 2147 to 2232 hr

	Field	1	2	3	4	
A. Init Hydro	1424.0	1427.0	0.0	0.0	0.0	T STARTED 1856 hr
B. First Flow	30.0	24.0	0.0	0.0	0.0	T ON BOTM 2000 hr
B1. Final Flow	30.0	24.0	0.0	0.0	0.0	T OPEN 2202 hr
C. In Shut-in	1047.0	1042.0	0.0	0.0	0.0	T PULLED 2232 hr
D. Init Flow	30.0	33.0	0.0	0.0	0.0	T OUT 2346 hr
E. Final Flow	30.0	33.0	0.0	0.0	0.0	
F. Fl Shut-in	964.0	958.0	0.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1416.0	1401.0	0.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	I	I	O			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 38000.00 lbs
						Initial Str Wt 29000.00 lbs
						Unseated Str Wt 29000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 2930.00 ft

RECOVERY

Tot Fluid 15.00 ft of 0.00 ft in DC and 15.00 ft in DP
 15.00 ft of Oil specked mud - 2% oil, 98% mud

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Weak blow building to .25"

Final Flow -
 No blow

MUD DATA-----

Mud Type	Chemical
Weight	8.80 lb/c
Vis.	47.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop	

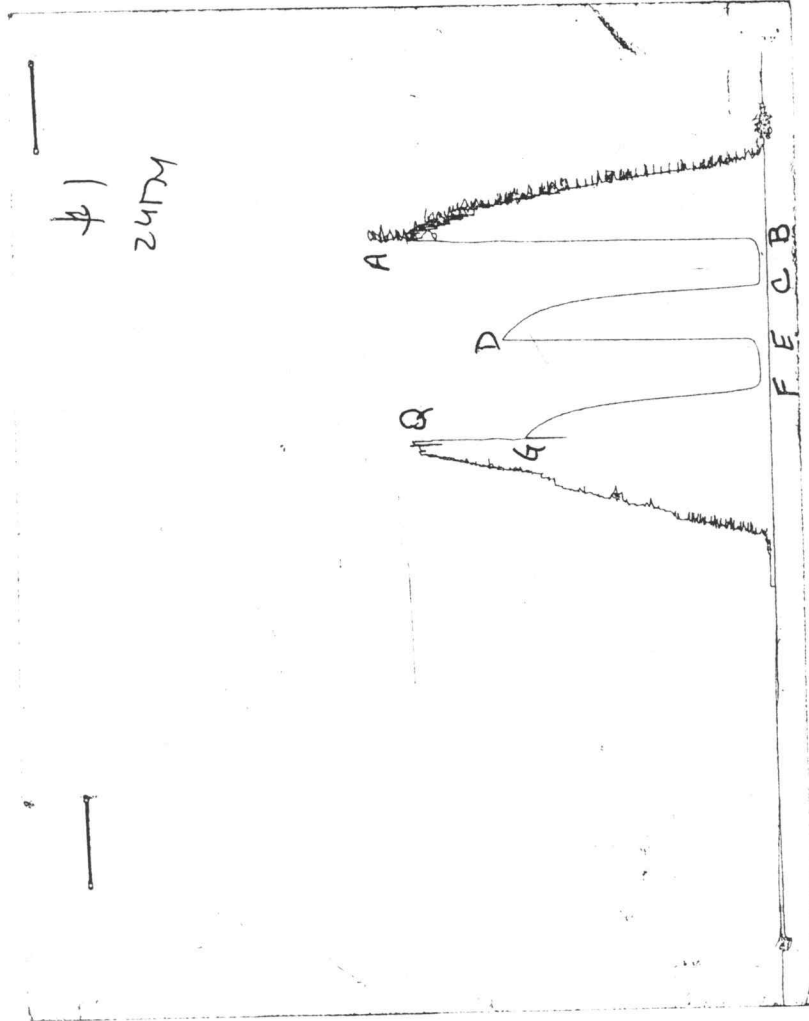
Amt. of fill	0.00 ft
Btm. H. Temp.	97.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	

Tester Paul Simpson
 Co. Rep. Dave Shumaker
 Contr. VonFeldt
 Rig # 1
 Unit #
 Pump T.

SAMPLES:
 SENT TO:

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

*** TOOL DIAGRAM *** CONV

WELL NAME: Applegate #1

LOCATION : 11-10S-12W Osborne Cty KS

TICKET No. 9417 D.S.T. No. 1 DATE 07/08/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 41

TOTAL TOOL 61

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 61

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 2930

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 2991

TOTAL DEPTH 2970

TOTAL DRILL PIPE ABOVE K.B. 21

REMARKS:

┌	P.O. SUB	
├	C.O. SUB	2909
┌	S.I. TOOL	2915
├		
├	HMV	2920
┌	JARS N/A	
├		
├	SAFETY JOINT N/A	
█	PACKER	2924
█	PACKER	2929
├	DEPTH 2929	
├	STUBB	2930
├	ANCHOR	
├		
├	AK-1 recorder	2934
├		
├	perf	
├		
├	T.C.	
├	DEPTH	
├		
├	AK-1 recorder	2965
├		
├	BULLNOSE 5' bull plug	
├	T.D.	2970

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 9417

Well Name & No. <u>Applegate #1</u>	Test No. <u>1</u>	Date <u>2-8-96</u>
Company <u>Beneff & Schulte</u>	Zone Tested <u>LKC</u>	
Address <u>Box 329 Russell KS 67665</u>	Elevation <u>1723</u> KB <u>1718</u> GL	
Co. Rep / Geo. <u>Dave Shumaker</u>	Cont. <u>Vanfeldt #1</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>1</u> Twp. <u>10s</u> Rge. <u>12w</u> Co. <u>Osborne</u> State <u>KS</u>		
No. of Copies _____	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>2929-2970</u>	Initial Str Wt./Lbs. 1500 ²⁹⁰⁰	Unseated Str Wt./Lbs. <u>29,000</u>
Anchor Length <u>41</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>38,000</u>
Top Packer Depth <u>2924</u>	Tool Weight <u>1800</u>	
Bottom Packer Depth <u>2929</u>	Hole Size — <u>7 7/8"</u>	Rubber Size — <u>6 3/4"</u>
Total Depth <u>2970</u>	Wt. Pipe Run _____	Drill Collar Run _____
Mud Wt. <u>8.8</u> LCM _____ Vis. <u>47</u> WL <u>8.8</u>	Drill Pipe Size <u>4 1/2 X H</u>	Ft. Run <u>2930</u>
Blow Description <u>weak blow building to 1/2"</u>		

sf. no blow

Recovery — Total Feet <u>15</u>	GIP _____	Ft. in DC _____	Ft. in DP <u>15</u>
Rec. <u>15</u> Feet Of <u>oil specked mud</u>	%gas <u>2</u> %oil _____	%water <u>98</u> %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____	%water _____ %mud _____	

BHT 97 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API

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

(A) Initial Hydrostatic Mud <u>1424</u>	PSI Recorder No. <u>24174</u>	T-Started <u>1856</u>
(B) First Initial Flow Pressure <u>30</u>	PSI (depth) <u>2934</u>	T-Open <u>2002</u>
(C) First Final Flow Pressure <u>30</u>	PSI Recorder No. <u>10992</u>	T-Pulled <u>2232</u>
(D) Initial Shut-in Pressure <u>1047</u>	PSI (depth) <u>2965</u>	T-Out <u>2346</u>
(E) Second Initial Flow Pressure <u>30</u>	PSI Recorder No. _____	
(F) Second Final Flow Pressure <u>30</u>	PSI (depth) _____	
(G) Final Shut-in Pressure <u>964</u>	PSI Initial Opening <u>30</u>	Test <u>1000</u>
(H) Final Hydrostatic Mud <u>1416</u>	PSI Initial Shut-in <u>45</u>	Jars _____
	Final Flow <u>30</u>	Safety Joint _____
	Final Shut-in <u>45</u>	Straddle _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [Signature]
Our Representative [Signature]

Circ. Sub _____
Sampler _____
Extra Packer _____
Elect. Rec. _____
Other _____
TOTAL PRICE \$ 6000

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TRILOBITE TESTING L.L.C.

OPERATOR : Bennett & Schulte
 WELL NAME: Applegate #1
 LOCATION : 11-10S-12W Osborne Cty KS
 INTERVAL : 2961.00 To 3000.00 ft

DATE 07/09/96
 KB 1723.00 ft TICKET NO: 9418 DST #2
 GR 1718.00 ft FORMATION: LKC "B"
 TD 3000.00 ft TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	24174	24174	10992			PF Fr. 0714 to 0744 hr
SI 30 Range(Psi)	3050.0	3050.0	4250.0	0.0	0.0	IS Fr. 0744 to 0814 hr
SF 10 Clock(hrs)	12	12	12			SF Fr. 0814 to 0824 hr
FS 0 Depth(ft)	2965.0	2965.0	2995.0	0.0	0.0	FS Fr. to hr

	Field	1	2	3	4	
A. Init Hydro	1499.0	1472.0	0.0	0.0	0.0	T STARTED 0625 hr
B. First Flow	0.0	0.0	0.0	0.0	0.0	T ON BOTM 0712 hr
B1. Final Flow	0.0	0.0	0.0	0.0	0.0	T OPEN 0714 hr
C. In Shut-in	1129.0	1109.0	0.0	0.0	0.0	T PULLED 0838 hr
D. Init Flow	30.0	33.0	0.0	0.0	0.0	T OUT 0929 hr
E. Final Flow	30.0	33.0	0.0	0.0	0.0	
F. Fl Shut-in	0.0	0.0	0.0	0.0	0.0	
G. Final Hydro	1474.0	1445.0	0.0	0.0	0.0	TOOL DATA-----
Inside/Outside	I	I	O			Tool Wt. 1800.00 lbs

RECOVERY

Tot Fluid 3.00 ft of 0.00 ft in DC and 3.00 ft in DP
 3.00 ft of Mud with oil specks

Wt Set On Packer 20000.00 lbs
 Wt Pulled Loose 34000.00 lbs
 Initial Str Wt 29000.00 lbs
 Unseated Str Wt 29000.00 lbs
 Bot Choke 0.75 in
 Hole Size 7.88 in
 D Col. ID 2.25 in
 D. Pipe ID 3.80 in
 D.C. Length 0.00 ft
 D.P. Length 2961.00 ft

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow -
 Surface blow died in 10 minutes
 Final Flow -
 No blow

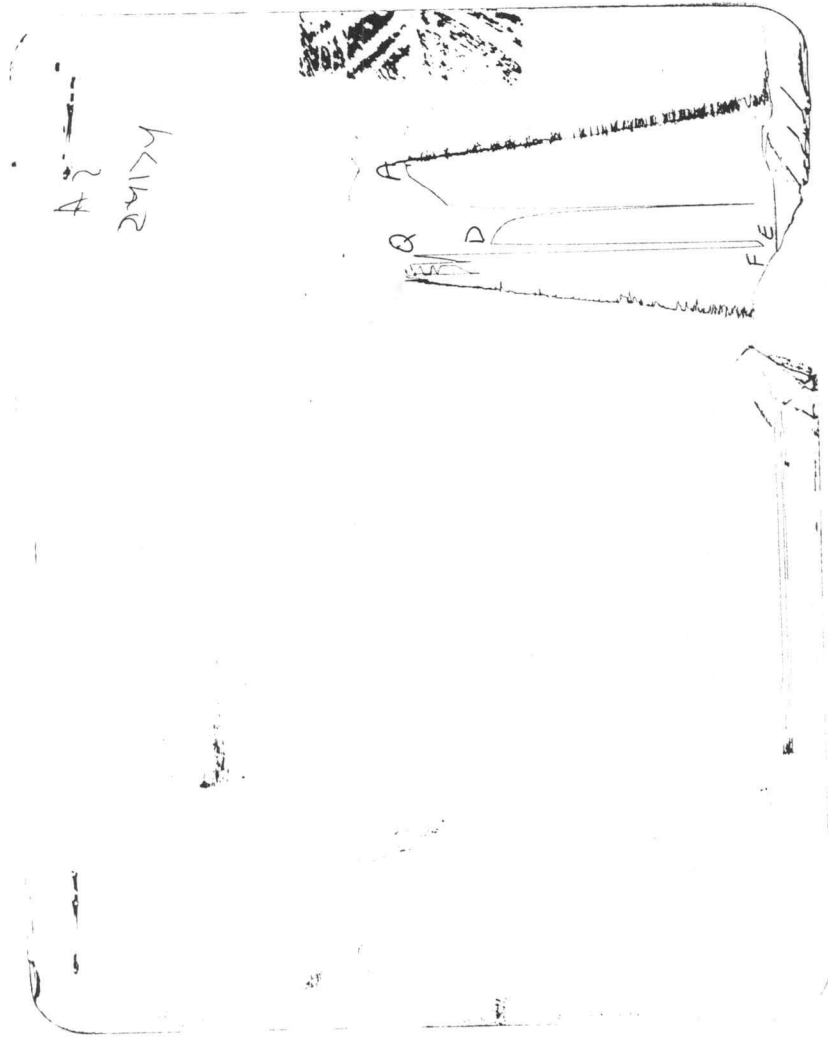
MUD DATA-----
 Mud Type Chemical
 Weight 8.80 lb/c
 Vis. 47.00 S/L
 W.L. 8.80 in3
 F.C. 0.00 in
 Mud Drop

Amt. of fill 0.00 ft
 Btm. H. Temp. 96.00 F
 Hole Condition
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out
 Tool Chased
 Tester Paul Simpson
 Co. Rep. Dave Shumaker
 Contr. VonFeldt
 Rig # 1
 Unit #
 Pump T.

SAMPLES:
 SENT TO:

Test Successful: Y

CHART PAGE



This is a photocopy of the actual AK-1 recorder chart

*** TOOL DIAGRAM *** CONV

WELL NAME: Applegate #1

LOCATION : 11-10S-12W Osborne Cty KS

TICKET No. 9418 D.S.T. No. 2 DATE 07/09/96

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 39

TOTAL TOOL 59

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY 59

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands Single Total 2961

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3020

TOTAL DEPTH 3000

TOTAL DRILL PIPE ABOVE K.B. 20

REMARKS:

H	P.O. SUB	
H	C.O. SUB	2941
H	S.I. TOOL	2947
H		
H	HMV	2952
H	JARS N/A	
H		
H	SAFETY JOINT N/A	
■	PACKER	2956
■	PACKER	2961
H	DEPTH 2961	
H	STUBB	2962
H	ANCHOR	
H		
H	AK-1 recorder	2965
H		
H	perf	
H		
H	T.C.	
H	DEPTH	
H		
H	AK-1 recorder	2995
H		
H	BULLNOSE 5' bull plug	
H	T.D.	3000

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No. 9418

Well Name & No. Applegate #1 Test No. 2 Date 7-9-96
Company Bennett & Schulte Zone Tested LKC B
Address _____ Elevation 1723 KB 1718 GL
Co. Rep / Geo. Dave Skumaker Cont. Dunfield #1 Est. Ft. of Pay _____ Por. _____ %
Location: Sec. 11 Twp. 10s Rge. 12w Co. Osborne State Ks
No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 2961-3000 Initial Str Wt./Lbs. 29,000 Unseated Str Wt./Lbs. 29,000
Anchor Length ~~296~~ 39 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 34,000
Top Packer Depth 2965.6 Tool Weight 1800
Bottom Packer Depth ~~30~~ 2961 Hole Size — 7 7/8" Rubber Size — 6 3/4"
Total Depth 3000 Wt. Pipe Run _____ Drill Collar Run _____
Mud Wt. _____ LCM _____ Vis. _____ WL _____ Drill Pipe Size 4 1/2 x 8 Ft. Run 2961
Blow Description surface blow died in 10 minutes

ff-no blow

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP	%gas	%oil	%water	%mud
<u>3</u>			<u>3</u>				
Rec. <u>3</u> Feet Of <u>Mud w/ oil spots</u>							
Rec. _____ Feet Of _____							
Rec. _____ Feet Of _____							
Rec. _____ Feet Of _____							
Rec. _____ Feet Of _____							

BHT 96 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 1499 PSI Recorder No. 24174 T-Started 0625
(B) First Initial Flow Pressure _____ PSI (depth) 2965 T-Open 0714
(C) First Final Flow Pressure _____ PSI Recorder No. 10992 T-Pulled 0838
(D) Initial Shut-in Pressure 1129 PSI (depth) 2995 T-Out 0929
(E) Second Initial Flow Pressure 30 PSI Recorder No. _____
(F) Second Final Flow Pressure 30 PSI (depth) _____
(G) Final Shut-in Pressure _____ PSI Initial Opening 30 Test 6000
(H) Final Hydrostatic Mud 1474 PSI Initial Shut-in 30 Jars _____
Final Flow 10 Safety Joint _____
Final Shut-in _____ Straddle _____

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Approved By [Signature]
Our Representative [Signature]

Circ. Sub _____
Sampler _____
Extra Packer _____
Elect. Rec. _____
Other _____
TOTAL PRICE \$ 6000

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