

OPERATOR: Thoroughbred Associates, LLC
LEASE NAME: Bird Ranch #1
LOCATION: NE NE SE, 2310' FSL & 330' FEL
Sec. 5-T32S-R19W
Comanche County, Kansas
API#:15-033-211340000

DST #1 5136-5282 (Miss). 30-60-45-90. SBOBOB in 30 seconds, GTS in 4".
Initial gauges: 994 MCF/5"; 1813 MCF/10"; 2117 MCF/20", 2806 MCF/30", all on
1" orifice. Final open: gauged gas throughout. 1824 MCF/5"; 2075 MCF/10";
2675 MCF/20" and stabilized, all on 1-1/2" choke. Gas did burn. Rec. 325'
sgcm, w/scum of oil, 5% gas. FP 859-849/755-856#. SIP 1820/1820#. HP
2598/2543#. BHT 115 degrees.

LOG TOPS

Heebner	4330' -2201
BrownLime	4506' -2377
Lansing	4517' -2388
Stark	4833' -2704
Marmaton	4996' -2867
Cherokee	5113' -2984
Mississippi	5193' -3064
Viola	6010' -3881
LTD	6074' -3945

RECEIVED
KANSAS CORPORATION COMMISSION

JUL 18 2001
7-18-01
CONSERVATION DIVISION

WELL NAME

Bird Ranch #1

COMPANY

Thoroughbred Associates

LOCATION

5-32s-19w

Comanche co Kansas

DATE

12/20/00

TRILOBITE TESTING L.L.C.

OPERATOR : Thoroughbred Associates
WELL NAME: Bird Ranch #1
LOCATION : 5-32S-19W Comanche co KS
INTERVAL : 5136.00 To 5282.00 ft

DATE 12-18-00
KB 2129.00 ft TICKET NO: 13613 DST #1
GR 2124.00 ft FORMATION: Mississippi
TD 5282.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	10242	10242	3017			PF Fr. 0310 to 0340 hr
SI 60 Range(Psi)	4100.0	4100.0	5000.0	0.0	0.0	IS Fr. 0340 to 0440 hr
SF 45 Clock(hrs)	12 HR	12 HR	Elect			SF Fr. 0440 to 0525 hr
FS 90 Depth(ft)	5279.0	5279.0	5138.0	0.0	0.0	FS Fr. 0525 to 0655 hr

	Field	1	2	3	4	
A. Init Hydro	2598.0	0.0	2475.0	0.0	0.0	T STARTED 0055 hr
B. First Flow	859.0	0.0	867.0	0.0	0.0	T ON BOTM 0307 hr
B1. Final Flow	849.0	0.0	805.0	0.0	0.0	T OPEN 0310 hr
C. In Shut-in	1820.0	0.0	1771.0	0.0	0.0	T PULLED 0655 hr
D. Init Flow	755.0	0.0	654.0	0.0	0.0	T OUT 1030 hr
E. Final Flow	856.0	0.0	795.0	0.0	0.0	
F. Fl Shut-in	1820.0	0.0	1776.0	0.0	0.0	
G. Final Hydro	2543.0	0.0	2424.0	0.0	0.0	
Inside/Outside	I	I	I			

RECOVERY

Tot Fluid 325.00 ft of 249.00 ft in DC and 76.00 ft in DP
4813.00 ft of Gas in pipe
325.00 ft of Slightly gas cut mud w/ scum of oil
0.00 ft of 5% gas 95% mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of

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

TOOL DATA-----
Tool Wt. 3800.00 lbs
Wt Set On Packer 20000.00 lbs
Wt Pulled Loose 11000.00 lbs
Initial Str Wt 74000.00 lbs
Unseated Str Wt 75000.00 lbs
Bot Choke 0.75 in
Hole Size 7.78 in
D Col. ID 2.25 in
D. Pipe ID 3.80 in
D.C. Length 249.00 ft
D.P. Length 4889.00 ft

BLOW DESCRIPTION

Initial Flow:
Gauged 2,806,000 CFPD in 30 minutes.
Initial Shut-In:
No blow back.
Final Flow:
Gas stabilized at 2,675,000 CFPD.
Final Shut-In:
No blow back.

Gas burned.

SAMPLES: One
SENT TO: Caraway

Test Successful: Y

MUD DATA-----
Mud Type Chemical
Weight 9.30 lb/c
Vis. 58.00 S/L
W.L. 8.80 in3
F.C. 0.00 in
Mud Drop Y 5.0 ft

Amt. of fill 0.00 ft
Btm. H. Temp. 115.00 F
Hole Condition Good
% Porosity 0.00
Packer Size 6.75 in
No. of Packers 2
Cushion Amt. 0.00
Cushion Type
Reversed Out N
Tool Chased N
Tester Lanny Saloga
Co. Rep. Paul Gunzelman
Contr. Pickrell
Rig # 1
Unit #
Pump T.

GAS RECOVERY

COMPANY: Thoroughbred Associates

DATE: 12-18-00

WELL NAME: Bird Ranch #1

KB Elev: 2129.00 ft TICKET #13613 DST #1

WELL LOCATION: 5-32S-19W Comanche co KS

GR Elev: 2124.00 ft FORMATION: Mississippi

INTERVAL Fr.: 5136.00 To 5282.00 T.D.: 5282.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla Orifice

***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.00	32	0	994000.0
10	1.00	70	0	1813000.0
20	1.00	84	0	2117000.0
30	1.00	104	0	2806000.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	1.50	18	0	1824000.0
10	1.50	22	0	2075000.0
20	1.50	32	0	2675000.0
30	1.50	32	0	2675000.0
40	1.50	32	0	2675000.0
45	1.50	32	0	2675000.0

Operator.....: Thoroughbred Associates
Well Name.....: Bird Ranch #1
DST Number.....: 1

Location.: 5-32s-19w Comanche KS Recorder No...: 3017
Test Type: Conventional Recorder Depth: 5138
Formation: Mississippi Test Interval.: 5136-5282

RESERVOIR CALCULATIONS: Gas calculations based on shut-in #2

RESERVOIR PARAMETERS USED:

Net Pay.....: 5.00 ft
Porosity.....: 18.00 %
Bottom Hole Temp.....: 115.00 F
Specific Gravity.....: 0.808
Z factor.....: .9982
Compressibility.....: 0.034604 /psi
Viscosity.....: 0.0122 cp
Total Flowing Time.....: 105.00 min.
Flow Rate.....: 2675.00 mcf/d
Final Flowing Pressure.....: 795.00 psi
Horner Slope.....: 0.2111 *10⁶ psi²/cycle
Extrapolated Pressure.....: 1791.41 psi
Assumed Drainage Radius.....: 1500.00 ft
Well Bore Radius.....: 3.94 in

RESULTS:

Effective Permeability.....: 29.030682 md
Flow Capacity.....: 145.1534 md.ft
Transmissibility.....: 11897.8207 md.ft/cp
Skin Factor.....: 12.4324
Pressure Drop Across Skin.....: 911.6655 psi
Radius of Investigation.....: 23.7119 ft
Damage Ratio.....: 3.8333
Absolute Open Flow.....: 3330.3855 mcf/d
Absolute Open Flow W/O Damage.: 12766.3741 mcf/d
Estimated Stabilized AOF.....: 3882.6287 mcf/d

*** TOOL, DIAGRAM *** CONVENTIONAL

WELL NAME: Bird Ranch #1

LOCATION : 5-32S-19W Comanche co KS

TICKET No. 13613 D.S.T. No. 1 DATE 12-18-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 24

TOTAL TOOL 51

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands	Single	Total
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D.P. ANCHOR STND.Stands	2 Single	Total 122
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TOTAL ASSEMBLY 173

D.C. ABOVE TOOLS.Stands	4 Single	Total 249
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D.P. ABOVE TOOLS.Stands 79 Single Total 4889

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5311

TOTAL DEPTH 5282

TOTAL DRILL PIPE ABOVE K.B. 29

REMARKS:

On I.F.P. blew a heavy mist of mud 20 min.
Into turning to a light mist at 30 min. Reading. I.F.P.
Blew heavy mist of mud 10 thru 30 min. Blew
light mist 40 & 45 min. F.F.P.

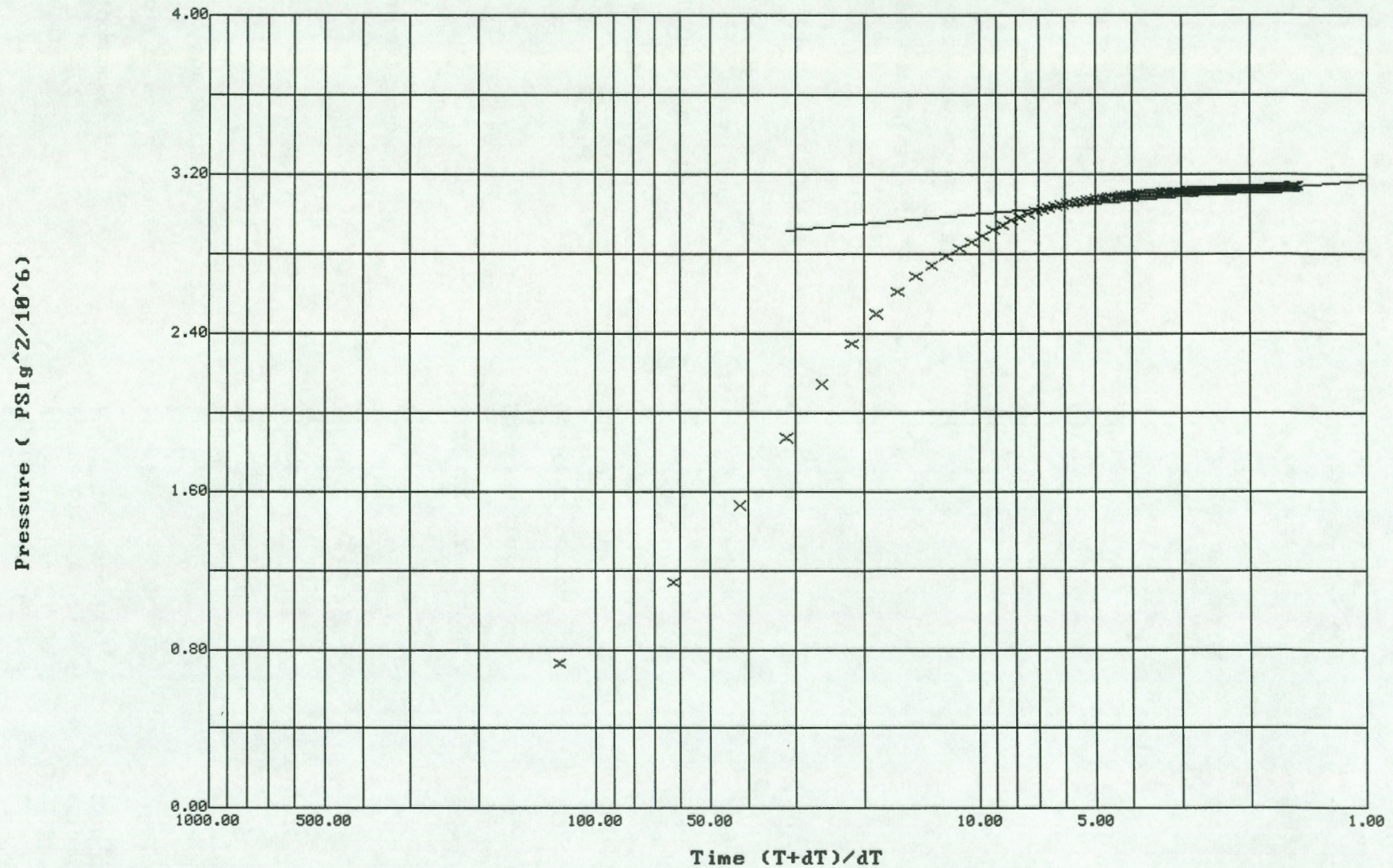
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P² Horner Plot: shut-in #1

13613 D.S.T.#1 Bird Ranch #1 Thoroughbred Associates

Slope: 0.1644 PSig²/10⁶/cycle

Ext. Pressure: 1779.7345 PSig

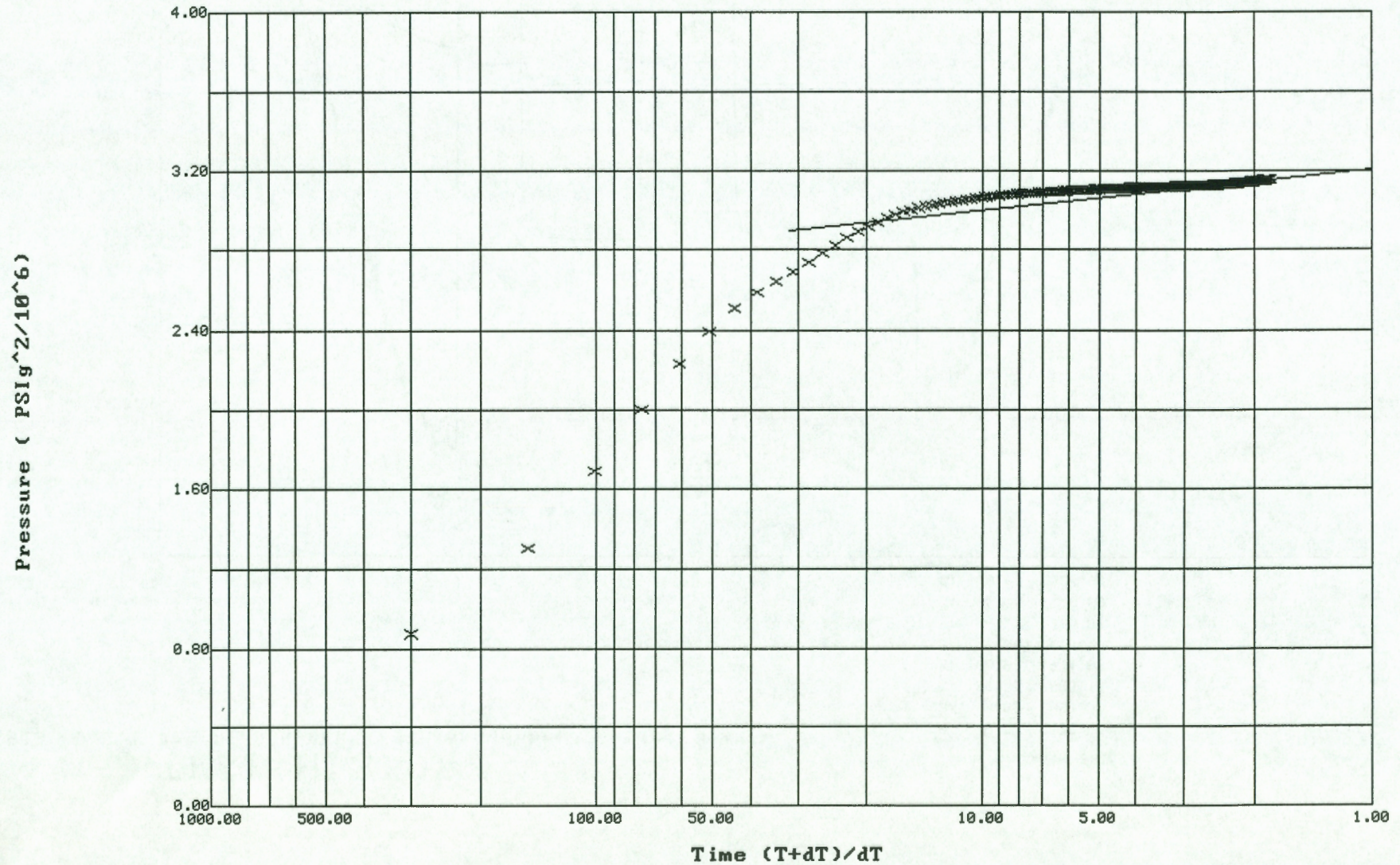


P² Horner Plot: shut-in #2

13613 D.S.T.#1 Bird Ranch #1 Thoroughbred Associates

Slope: 0.2111 PSig²/10⁶/cycle

Ext. Pressure: 1791.4073 PSig



TEST HISTORY

13613 D.S.T.#1 Bird Ranch #1 Thoroughbred Associates

Flag Points

t(Min.) P(PSig)

A:	0.00	2475.89
B:	0.00	867.56
C:	30.75	805.16
D:	60.00	1771.63
E:	0.00	654.25
F:	44.25	795.81
G:	91.25	1776.36
Q:	0.00	2424.94

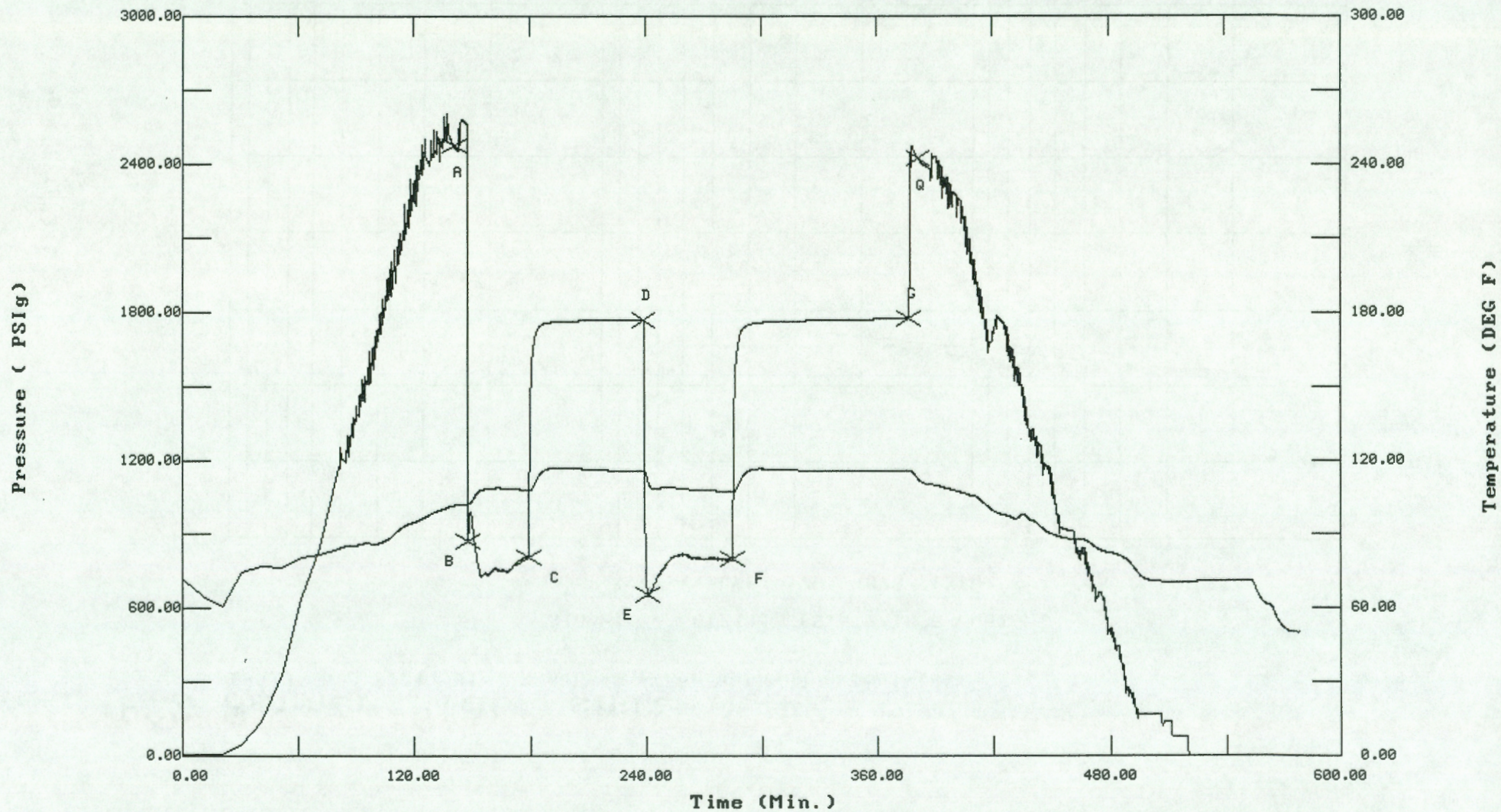
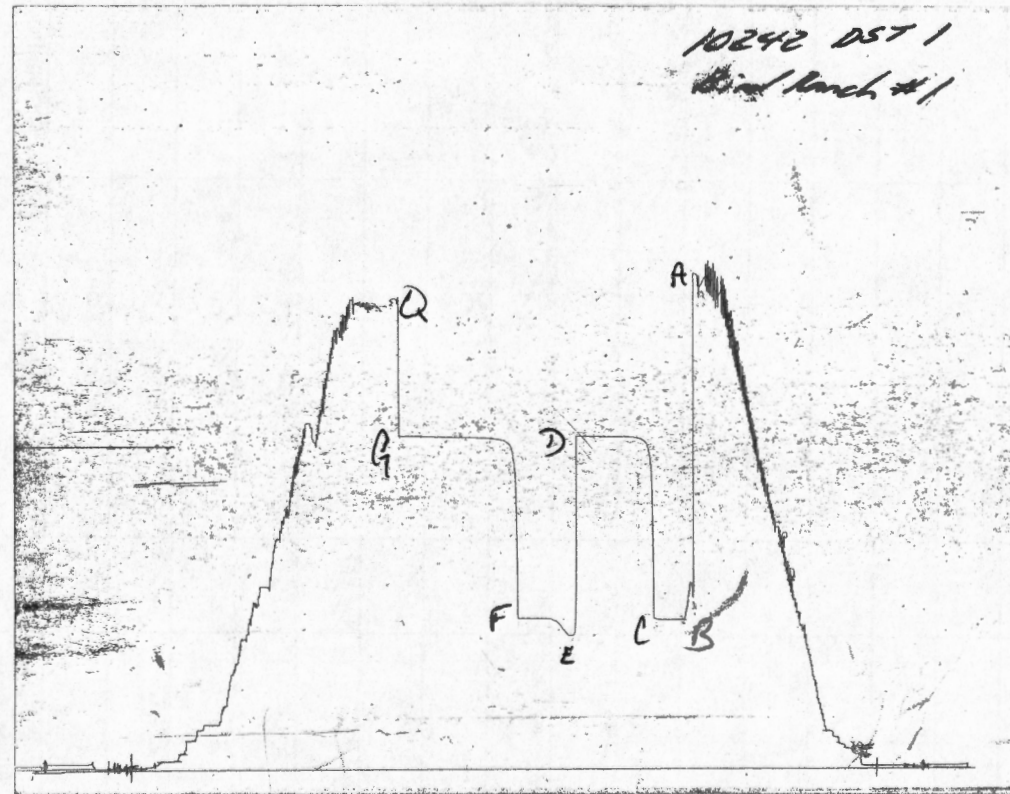


CHART PAGE



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

**TRILOBITE
TESTING L.L.C.**

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

GAS VOLUME REPORT

Thoroughbred Ass.
OPERATOR

Bird Ranch #1
WELL NAME AND NO.

DST NO. 1

GTS 4 min. into I.F.P.

I. F. P.

F.F.P.

Min.	Ins. of Water (PSIG)	Orifice Size	CF/D	Min.	Ins. of Water (PSIG)	Orifice Size	CF/D
5	32	1"	994,000	5	18	1 1/2"	1,824,000
10	70	"	1,813,000	10	22	"	2,075,000
20	84	"	2,117,000	20	32	"	2,675,000
30	104	"	2,806,000	30	32	"	2,675,000
				40	32	"	2,675,000
				45	32	"	2,675,000
REMARKS: At 20 min. blowing a heavy mist of mud. At 30 still blowing a light mist of mud.				REMARKS: Blowing heavy mist of mud in 10 min - 20 min - 30 min - A light mist 40 + 45 min.			

Remarks: Gas burned.

1 sample to Caraway

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Nº 13613

Test Ticket

Well Name & No. Bird Ranch #1 Test No. 1 Date 12-18-00
Company Thoroughbred Assoc. Zone Tested Miss.
Address Wichita KS 67226 Elevation 2129 KB 2124 GL
Co. Rep / Geo. Paul Gunzelman Cont. Pickell Rq 1 Est. Ft. of Pay Por. %
Location: Sec. 5 Twp. 32.5 Rge. 19W Co. Comanche State KS
No. of Copies Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 5136-5282 Initial Str Wt./Lbs. 74000 Unseated Str Wt./Lbs. 75,000
Anchor Length 146' Tool = 27 Wt. Set Lbs. Wt. Pulled Loose/Lbs. 14,000
Top Packer Depth 5131 Tool Weight 3800
Bottom Packer Depth 5136 Hole Size — 7 7/8" Rubber Size — 6 3/4"
Total Depth 5282 Wt. Pipe Run Drill Collar Run 249
Mud Wt. 9.3 LCM Vis. 58 WL 8.8 Drill Pipe Size 4 1/2 x H Ft. Run 4889 29' up
Blow Description Strong OBB in 30 sec GTS in 4 min. See Flow Chart. T.F.P.
No blow-back T.S.T.P.
See Flow Chart. F.F.P.
No blow-back F.S.T.P.

Recovery — Total Feet 325 GIP 4813 Ft. in DC 249 Ft. in DP 76
Rec. 325 Feet Of 5 1/2" gas cut mud w/ 5% gas %oil %water 95 %mud
Rec. Feet Of oil %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 115 °F Gravity °API D@ °F Corrected Gravity °API
RW @ °F Chlorides ppm Recovery Chlorides 4,000 ppm System

	AK-1	Alpine	
(A) Initial Hydrostatic Mud	<u>2598</u>	<u>2475</u>	PSI Recorder No. <u>3017 "12:40"</u> T-On Location <u>10:30 PM</u>
(B) First Initial Flow Pressure	<u>859</u>	<u>867</u>	PSI (depth) <u>5138</u> T-Started <u>12:55 AM</u>
(C) First Final Flow Pressure	<u>849</u>	<u>805</u>	PSI Recorder No. <u>10242</u> T-Open <u>3:10 AM</u>
(D) Initial Shut-In Pressure	<u>1820</u>	<u>1771</u>	PSI (depth) <u>5279</u> T-Pulled <u>6:55 AM</u>
(E) Second Initial Flow Pressure	<u>255</u>	<u>654</u>	PSI Recorder No. <u> </u> T-Out <u>10:30 AM</u>
(F) Second Final Flow Pressure	<u>856</u>	<u>795</u>	PSI (depth) <u> </u> T-Off Location <u> </u>
(G) Final Shut-in Pressure	<u>1820</u>	<u>1776</u>	PSI Initial Opening <u>30</u> Test <u>900</u> ✓
(Q) Final Hydrostatic Mud	<u>2543</u>	<u>2424</u>	PSI Initial Shut-in <u>60</u> Jars <u>200</u> ✓

C1900040.017
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Approved By Paul Gunzelman

Our Representative Ernest A. Salazar

Final Flow 45 Safety Joint 50 ✓
Final Shut-in 90 Straddle
Circ. Sub
Sampler
Extra Packer
Elec. Rec. 150 ✓
Mileage 140 60 ✓
Other 1 2 Hrs. 140
TOTAL PRICE \$ 4,420 ⁰⁰

9:25
9:35
12:00