

15-077-21387

5-34s-8w

Auth

Computer inventoried

WELL NAME
Zimmerman "C-1"
COMPANY
Hartman Oil Co.
LOCATION
5-34s-8w
Harper co Kansas
DATE
10/11/00

RECEIVED
STATE CORPORATION COMMISSION

DEC 20 2000

CONSERVATION DIVISION
Wichita, Kansas

TRILOBITE TESTING L.L.C.

OPERATOR : Hartman Oil Co.

DATE 10-5-00

WELL NAME: Zimmerman "C-1"

KB 1317.00 ft

TICKET NO: 13085 DST #1

LOCATION : 5-34S-8W Harper co KS

GR 1309.00 ft

FORMATION: Fort Scott

INTERVAL : 4394.00 To 4415.00 ft

TD 4415.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	10242	10242	3017			PF Fr. 0235 to 0305 hr
SI 45	Range(Psi)	4175.0	4175.0	5000.0	0.0	0.0	IS Fr. 0305 to 0350 hr
SF 60	Clock(hrs)	12 HR	12 HR	Elect			SF Fr. 0350 to 0450 hr
FS 90	Depth(ft)	4412.0	4412.0	4396.0	0.0	0.0	FS Fr. 0450 to 0620 hr

	Field	1	2	3	4	
A. Init Hydro	2135.0	2148.0	2066.0	0.0	0.0	T STARTED 0100 hr
B. First Flow	51.0	67.0	27.0	0.0	0.0	T ON BOTM 0232 hr
B1. Final Flow	51.0	63.0	33.0	0.0	0.0	T OPEN 0235 hr
C. In Shut-in	851.0	856.0	869.0	0.0	0.0	T PULLED 0620 hr
D. Init Flow	63.0	76.0	39.0	0.0	0.0	T OUT 0845 hr
E. Final Flow	63.0	78.0	50.0	0.0	0.0	
F. Fl Shut-in	922.0	926.0	928.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2129.0	2139.0	2068.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	I	I	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 8000.00 lbs
						Initial Str Wt 56000.00 lbs
						Unseated Str Wt 57000.00 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 0.00 ft
						D.P. Length 4385.00 ft

RECOVERY

Tot Fluid 95.00 ft of 0.00 ft in DC and 95.00 ft in DP
 4290.00 ft of Gas in pipe
 35.00 ft of Mud w/scum of Oil
 0.00 ft of 100% mud
 60.00 ft of Mud cut gassy oil
 0.00 ft of 40% gas 30% oil 30% mud
 0.00 ft of
 0.00 ft of
 0.00 ft of

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

BLOW DESCRIPTION

Initial Flow:
 Strong bottom of bucket in 45 seconds
 Cracked 2" Decreased slightly in 30 minutes.

Initial Shut-In:
 Strong bottom of bucket immediately.
 Gas to surface in 25 minutes. Gauged 3,710 CFPD.

Final Shut-In:
 1/2" blow back.

Remarks: Est. 4 Ft. of Pay. Gas burned.

SAMPLES: One
 SENT TO: Caraway

Test Successful: Y

MUD DATA-----

Mud Type	Chemical
Weight	8.60 lb/c
Vis.	40.00 S/L
W.L.	14.00 in3
F.C.	0.00 in
Mud Drop Y	60.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	124.00 F
Hole Condition	Good
% Porosity	10.00
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.	Jon Christensen
Contr.	Duke
Rig #	2
Unit #	
Pump T.	

GAS RECOVERY

COMPANY: Hartman Oil Co. DATE: 10-5-00
WELL NAME: Zimmerman "C-1" KB Elev: 1317.00 ft TICKET #13085 DST #1
WELL LOCATION: 5-34S-8W Harper co KS GR Elev: 1309.00 ft FORMATION: Fort Scott
INTERVAL Fr.: 4394.00 To 4415.00 T.D.: 4415.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla Orifice

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
30	0.25	0	5	3710.0
40	0.25	0	5	3710.0
50	0.25	0	5	3710.0
55	0.25	0	5	3710.0

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Zimmerman "C-1"

LOCATION : 5-34S-8W Harper co KS

TICKET No. 13085 D.S.T. No. 1 DATE 10-5-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 21

TOTAL TOOL 48

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands 71 Single 1 Total 4385

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4433

TOTAL DEPTH 4415

TOTAL DRILL PIPE ABOVE K.B. 18

REMARKS:

Final 5 min. Of F.F.P. pressured up gas bottle.

P.O. SUB Cir. sub	4247
C.O. SUB Top of tool	4367
Co. sub	4368
S.I. TOOL Sterling	4373
HMV Sterling	4378
JARS Bowen	4383
SAFETY JOINT Bowen	4385
PACKER Sparton	4390
PACKER Sparton	4394
DEPTH	
1 ft.	4395
ANCHOR Rec. sub	4396
Alpine	4396
Pu. sub	4401
AK-1	4412
12 ft. perfs	4413
BULLNOSE 2 ft. perf	
T.D.	4415

NATURAL GAS ANALYSIS REPORT

Sampled by:

Trilobite Testing, L. L. C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:

Caraway Analytical, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 316-624-5389
Fax: 316-626-7108

Sample From: Zimmerman C-1 DST 1
Producer: Hartman Oil Co., Inc.

Pressure:
Temperature:

Time:
Sampler: Lanny Saloga
Source:

County: Harper
State: Kansas
Formation: Ft Scott

	Mole %	GPM
Helium	He: 0.048	0.000
Hydrogen	H2: 0.004	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 4.781	0.000
Carbon Dioxide	CO2: 0.035	0.000
Methane	C1: 54.469	0.000
Ethane	C2: 11.474	3.069
Propane	C3: 12.250	3.375
Iso Butane	iC4: 1.590	0.520
Normal Butane	nC4: 5.565	1.755
Iso Pentane	iC5: 1.800	0.659
Normal Pentane	nC5: 2.266	0.821
Hexanes Plus	C6+: 5.718	2.495

TOTAL: 100.000 12.693

Z Fact: 0.9919

SP.GR.: 1.0924

BTU (SAT): 1738.4 @ 14.73 psia

BTU (DRY): 1769.2 @ 14.73 psia

OCTANE RATING: 104.8

COMMENTS:

0.000

TEST HISTORY

13085 D.S.T.#1 Zimmerman "C-1" Hartman Oil Co.

Flag Points

t (Min.) P (PSig)

A:	0.00	2066.57
B:	0.00	27.56
C:	28.75	33.71
D:	44.75	869.29
E:	0.00	39.86
F:	57.75	50.31
G:	91.25	928.63
Q:	0.00	2068.64

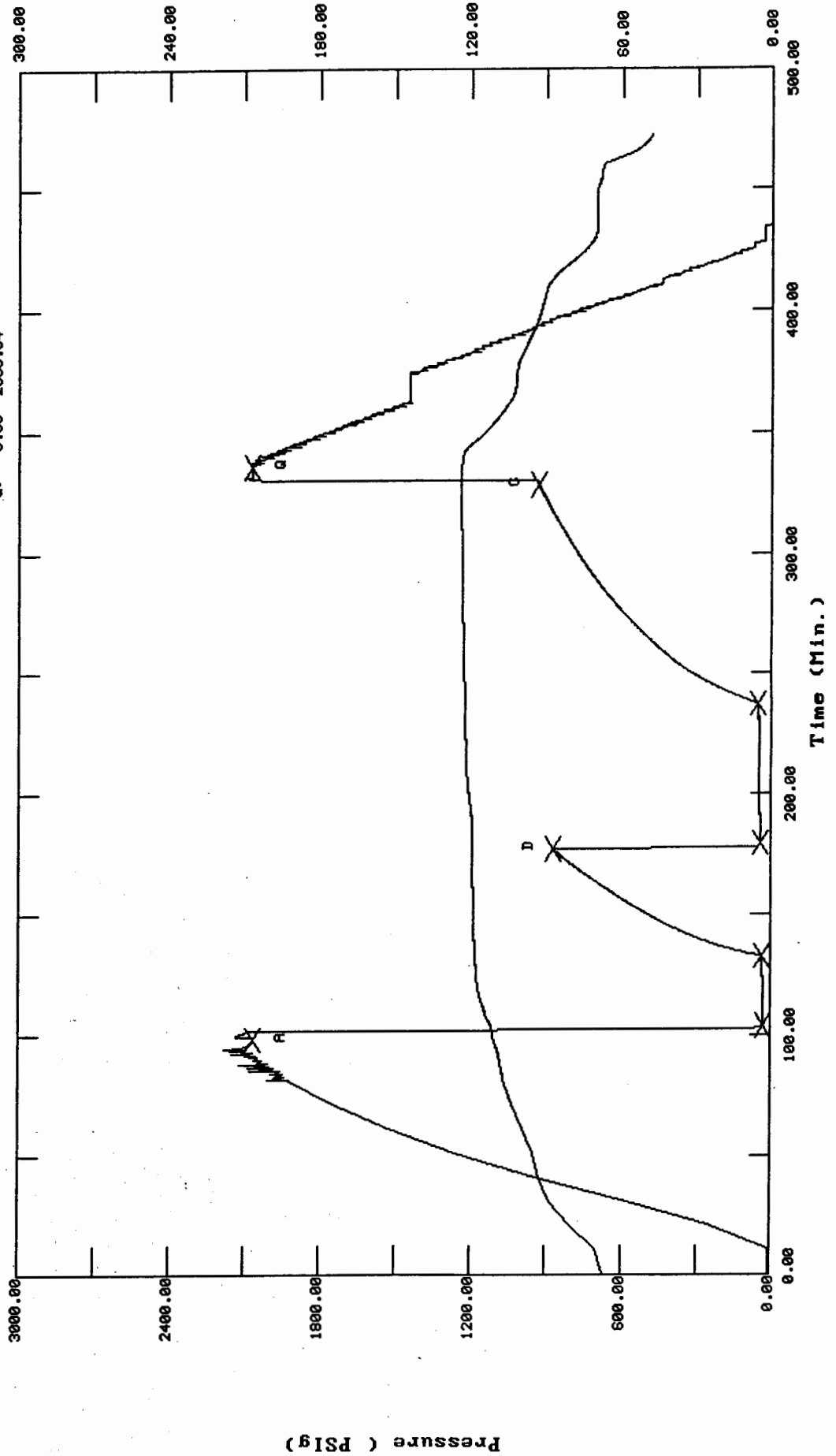
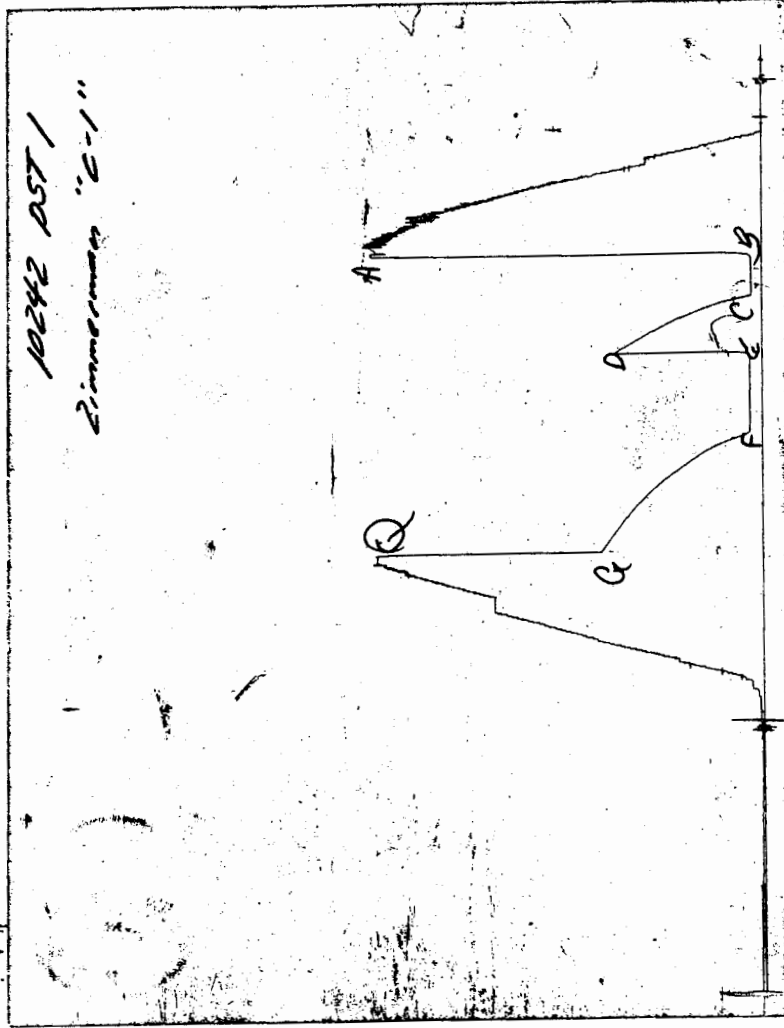
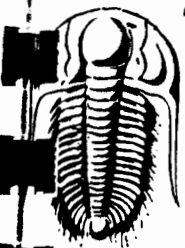


CHART PAGE



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

Hadman Oil Co.
OPERATOR

Zimmerman "G-1"
WELL NAME AND NO.

1
DST NO.

GTS 25 min. into F.F.P.

Z.F.P.

F.F.P.

In.	Ins. of Water PSIG	Orifice Size	MCF/D	Min.	Ins. of Water PSIG	Orifice Size	CF/D
		<i>No Gas</i>		<i>30</i>	<i>5</i>	<i>1/4"</i>	<i>3,710</i>
				<i>40</i>	<i>5</i>	<i>"</i>	<i>3,710</i>
				<i>50</i>	<i>5</i>	<i>"</i>	<i>3,710</i>
				<i>55</i>	<i>5</i>	<i>"</i>	<i>3,710</i>
				<i>60</i>	<i>Pressure up Bottle</i>		

Remarks: *Gas burned.*
1 sample to Caraway.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

No 13085

Test Ticket

Well Name & No. Zimmerman "C-1" Test No. 1 Date 10-5-00
 Company Hartman Oil Co. Zone Tested East Scott
 Address P.O. Box 54 Wichita Ks. 67201 Elevation 1317 KB 1309 GL
 Co. Rep / Geo. Jan Christensen Cont. Duke Rig 2 Est. Ft. of Pay 4 Por. 10 %
 Location: Sec. 5 Twp. 34S Rge. 8W Co. Hogear State Ks.
 No. of Copies Rep Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) _____

Interval Tested 4394-4415 Initial Str Wt./Lbs. 56,000 Unseated Str Wt./Lbs. 5700
 Anchor Length 21' Tool=27' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 800
 Top Packer Depth 4389 Tool Weight 1800
 Bottom Packer Depth 4394 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 4415 Wt. Pipe Run _____ Drill Collar Run 0
 Mud Wt. 8.6 LCM 15# Vis. 40 WL 140 Drill Pipe Size 4 1/2 XH Ft. Run 4385 18 1/4
 Blow Description Strong ORR in 45 sec. Contact 2" Decreased slightly 30 min. T.F.
3" blow-back T.S.T.P.
Strong ORR in 25 min. See Flow Chart. F.F.P.
1/2" blow-back F.S.T.P.

Recovery — Total Feet 95 GIP 4290 Ft. in DC 0 Ft. in DP 95
 Rec. 35 Feet Of Mud at sound Oil %gas _____ %oil _____ %water 100 %mud _____
 Rec. 60 Feet Of Mud at Gassy Oil 40%gas 30%oil %water 30 %mud _____
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet Of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 124 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API _____
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 22,000 ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2135</u>	<u>2066</u>		<u>3017 "00154"</u>	<u>10:15 AM</u>
(B) First Initial Flow Pressure	<u>51</u>	<u>27</u>		(depth) <u>4396</u>	T-Started <u>1:00 AM</u>
(C) First Final Flow Pressure	<u>51</u>	<u>33</u>		Recorder No. <u>10242</u>	T-Open <u>2:35 AM</u>
(D) Initial Shut-In Pressure	<u>851</u>	<u>869</u>		(depth) <u>4412</u>	T-Pulled <u>6:20 AM</u>
(E) Second Initial Flow Pressure	<u>63</u>	<u>39</u>		Recorder No. _____	T-Out <u>8:45 AM</u>
(F) Second Final Flow Pressure	<u>63</u>	<u>50</u>		(depth) _____	T-Off Location _____
(G) Final Shut-in Pressure	<u>922</u>	<u>928</u>		Initial Opening <u>30</u>	Test <input checked="" type="checkbox"/>
(Q) Final Hydrostatic Mud	<u>2129</u>	<u>2068</u>		Initial Shut-in <u>45</u>	Jars <input checked="" type="checkbox"/>
				Final Flow <u>60</u>	Safety Joint <input checked="" type="checkbox"/>
				Final Shut-in <u>90</u>	Straddle _____

A0600054.017
 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 W. Hartman

Our Representative Ernie S. DeGroot

_____ Circ. Sub/ _____
 _____ Sampler _____
 _____ Extra Packer _____
 _____ Elec. Rec. _____
 _____ Mileage 65 ✓
 _____ Other 1 1/4 ✓
 TOTAL PRICE \$ 1245.00

TRILOBITE TESTING L.L.C.

OPERATOR : Hartman Oil Co.

DATE 10-7-00

WELL NAME: Zimmerman "C-1"

KB 1317.00 ft

TICKET NO: 13086 DST #2

LOCATION : 5-34S-8W Harper co KS

GR 1309.00 ft

FORMATION: Mississippi

INTERVAL : 4580.00 To 4621.00 ft

TD 4621.00 ft

TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	10242	10242	3017			PF Fr. 0720 to 0750 hr
SI 45	Range(Psi)	4175.0	4175.0	5000.0	0.0	0.0	IS Fr. 0750 to 0835 hr
SF 60	Clock(hrs)	12 HR	12 HR	Elect			SF Fr. 0835 to 0935 hr
FS 90	Depth(ft)	4618.0	4618.0	4587.0	0.0	0.0	FS Fr. 0935 to 1105 hr

	Field	1	2	3	4	
A. Init Hydro	2307.0	2355.0	2243.0	0.0	0.0	T STARTED 0545 hr
B. First Flow	74.0	87.0	30.0	0.0	0.0	T ON BOTM 0717 hr
B1. Final Flow	74.0	81.0	48.0	0.0	0.0	T OPEN 0720 hr
C. In Shut-in	1636.0	1647.0	1636.0	0.0	0.0	T PULLED 1105 hr
D. Init Flow	95.0	101.0	52.0	0.0	0.0	T OUT 1330 hr
E. Final Flow	95.0	98.0	68.0	0.0	0.0	
F. Fl Shut-in	1783.0	1788.0	1778.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2246.0	2265.0	2208.0	0.0	0.0	Tool Wt. 2000.00 lbs
Inside/Outside	I	I	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 31000.00 lbs
						Initial Str Wt 58000.00 lbs
						Unseated Str Wt 59000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 0.00 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 4569.00 ft

RECOVERY

Tot Fluid 135.00 ft of 0.00 ft in DC and 135.00 ft in DP
 4434.00 ft of Gas in pipe
 75.00 ft of Oil & Gas cut Mud
 0.00 ft of 10% gas 30% oil 60% mud
 60.00 ft of Mud cut gassy oil
 0.00 ft of 23% gas 47% oil 30% mud
 0.00 ft of
 0.00 ft of
 0.00 ft of
 SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA-----

Mud Type Chemical
 Weight 9.00 lb/c
 Vis. 44.00 S/L
 W.L. 13.50 in3
 F.C. 0.00 in
 Mud Drop Y 60.0 ft

Amt. of fill 0.00 ft
 Btm. H. Temp. 124.00 F
 Hole Condition Good
 % Porosity 8.00
 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. Jon Christensen
 Contr. Duke
 Rig # 2
 Unit #
 Pump T.

BLOW DESCRIPTION

Initial Flow:
 Fair 2" built to strong bottom of bucket in 3 minutes. Cracked 2" slightly.
 Initial Shut-In:
 1 1/2" blow back.
 Final Flow:
 Strong bottom of bucket immediately.
 Gas to surface in 13 minutes. Gauged 17,200 CFPD
 Final Shut-In:
 1" blow back.

Gas burned
 SAMPLES: One
 SENT TO: Caraway

Test Successful: Y

GAS RECOVERY

COMPANY: Hartman Oil Co.

DATE: 10-7-00

WELL NAME: Zimmerman "C-1"

KB Elev: 1317.00 ft TICKET #13086 DST

WELL LOCATION: 5-34S-8W Harper co KS

GR Elev: 1309.00 ft FORMATION: Mississippi

INTERVAL Fr.: 4580.00 To 4621.00 T.D.: 4621.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla Orifice

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
20	0.50	0	8	17200.0
30	0.50	0	8	17200.0
40	0.50	0	9	18800.0
50	0.50	0	8	17200.0
55	0.50	0	8	17200.0

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Zimmerman "C-1"

LOCATION : 5-34S-8W Harper co KS

TICKET No. 13086 D.S.T. No. 2 DATE 10-7-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 10

TOTAL TOOL 37

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single 1 Total 31

TOTAL ASSEMBLY 68

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands 74 Single 1 Total 4569

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4637

TOTAL DEPTH 4621

TOTAL DRILL PIPE ABOVE K.B. 16

REMARKS:

Final 5 min. of F.F.P. shut 2" valve to press
ure up gas bottle.
From 20 to 55 min. Inches water guage flutua-
ted from 8 to 10 Inches of Water.

H	P.O. SUB Cir. sub	4433
H	C.O. SUB Top of tool	4553
	Co. sub	4554
H	S.I. TOOL Sterling	4559
H		
H		
H	HMV Sterling	4564
H		
H	JARS Bowen	4569
H		
H		
H	SAFETY JOINT Bowen	4571
H	PACKER Sparton	4576
H	PACKER Sparton	4580
H	DEPTH	
	1 ft.	4581
H	ANCHOR 5 ft. perf	4586
H		
H	Co. sub	4587
H		
H	Alpine	4587
H		
H		
H		
H		
H		
H		
H		
H		
H		
H		
H		
H	1 jt. DP 31 ft.	4618
H	AK-1	4618
H		
H	Co. sub	4619
H		
H	BULLNOSE 2 ft. perf	
H	T.D.	4621

NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L. L. C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, Inc
 P. O. Box 2137
 Liberal, Kansas 67905
 Phone: 316-624-5389
 Fax: 316-626-7108

Sample From: Zimmerman C-1 DST 2
Producer: Hartman Oil Co., Inc.

Pressure:
Temperature:

Time:
Sampler: Lanny Saloga
Source:

County: Harper
State: Kansas
Formation: Miss

	Mole %	GPM
Helium	He: 0.226	0.000
Hydrogen	H2: 0.007	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 5.980	0.000
Carbon Dioxide	CO2: 0.494	0.000
Methane	C1: 69.217	0.000
Ethane	C2: 8.303	2.221
Propane	C3: 5.799	1.598
Iso Butane	iC4: 0.830	0.272
Normal Butane	nC4: 2.802	0.883
Iso Pentane	iC5: 0.876	0.321
Normal Pentane	nC5: 1.435	0.520
Hexanes Plus	C6+: 4.031	1.759

TOTAL: 100.000 7.572

Z Fact: 0.9951
 SP.GR.: 0.8885
 BTU (SAT): 1395.2 @ 14.73 psia
 BTU (DRY): 1419.9 @ 14.73 psia

OCTANE RATING: 109.7

COMMENTS:

0.000

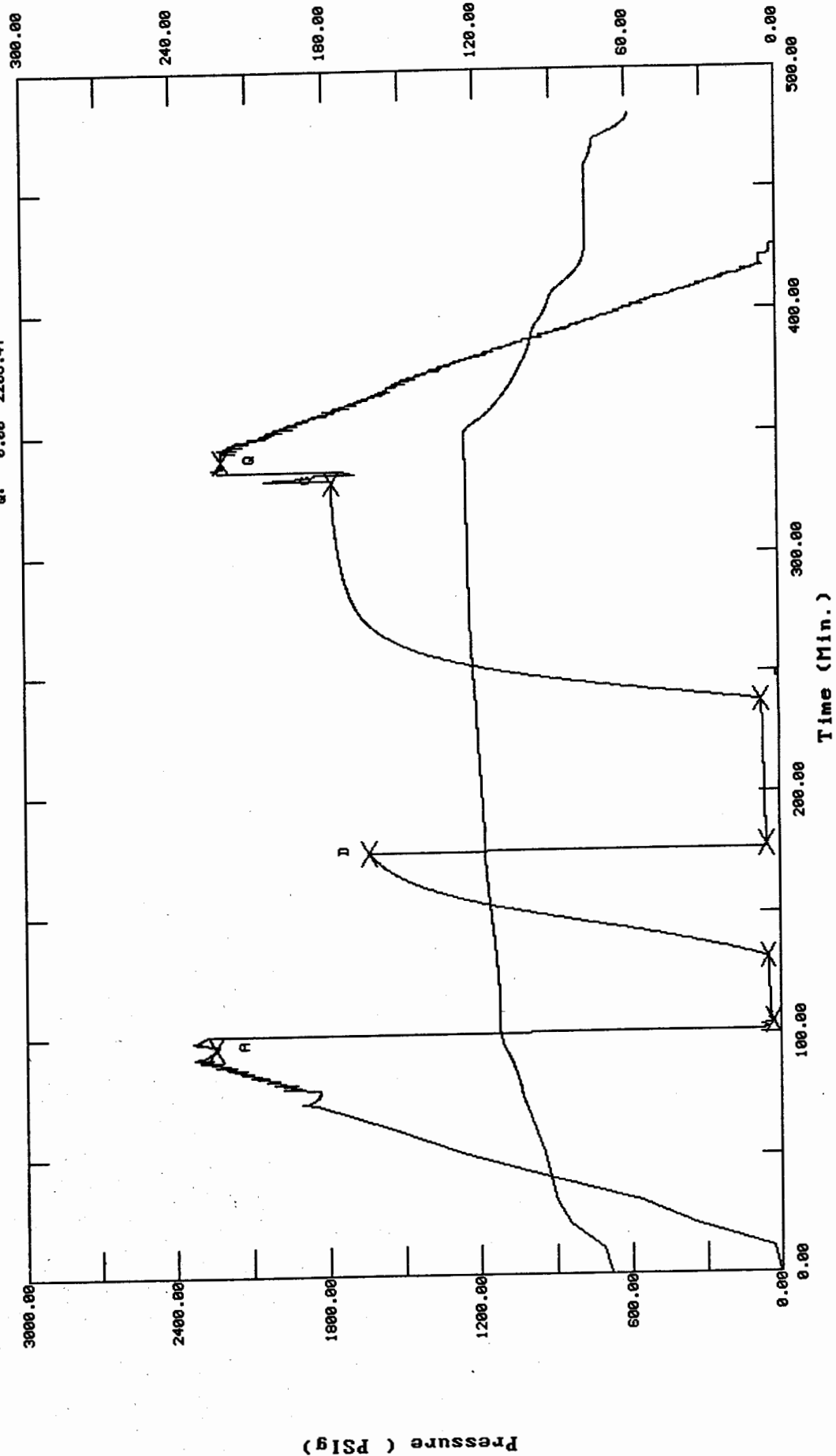
TEST HISTORY

13886 D.S.T.#2 Zimmerman "C-1" Hartman Oil Co.

Flag Points

t (Min.) P (PSIg)

A:	0.00	2243.80
B:	0.00	30.39
C:	26.75	48.63
D:	45.00	1636.85
E:	0.00	52.46
F:	60.25	68.64
G:	92.00	1778.50
Q:	0.00	2208.47

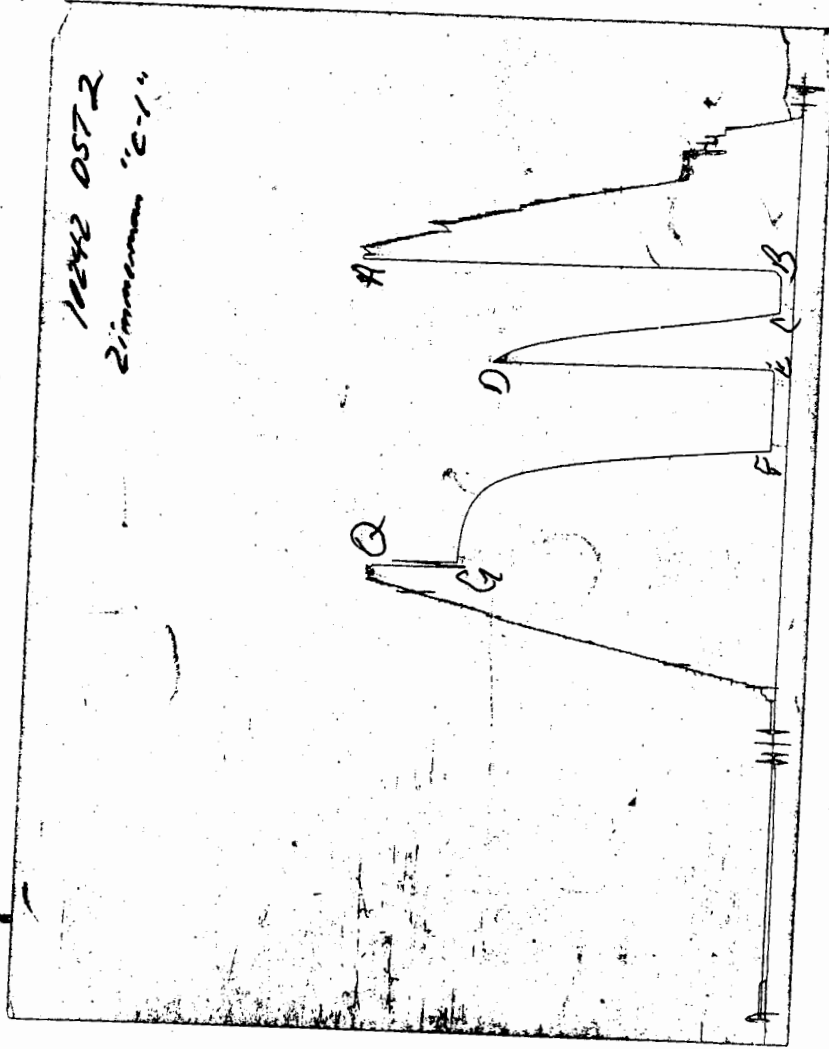


Temperature (DEG F)

Pressure (PSIg)

Time (Min.)

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

Hadman Oil Co.
OPERATOR

Zimmerman "C-1"
WELL NAME AND NO.

2
DST NO.

GTS, 13 min. into F.F.P.

T.F.P.

F.F.P.

In.	Ins. of Water PSIG	Orifice Size	MCF/D	Min.	Ins. of Water PSIG	Orifice Size	CF/D
	No Gas			20	8	1/2"	17,200
				30	8	"	17,200
				40	9	"	18,800
				50	8	"	17,200
				55	8	"	17,200
					60	Pressure up Gas bottle.	
				REMARK: From 20 to 60 min.			
				Fluctuated slightly between			
				8 & 10 inches of water.			

Remarks: Gas burned.
1 sample to Corvay

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

No 13086

Test Ticket

Well Name & No. Zimmerman "C-1" Test No. 2 Date 10-7-00
 Company Hartman Oil Co Zone Tested Miss
 Address Wichita KS 67201 Elevation 1317 KB 1309 GL
 Co. Rep / Geo. Taa Christensen Cont. Duke Rig 2 Est. Ft. of Pay 15 Por. 8 %
 Location: Sec. 5 Twp. 34.5 Rge. 8W Co. Hays State Ks.
 No. of Copies Reg Distribution Sheet (Y, N) N Turnkey (Y, N) N Evaluation (Y, N) _____

Interval Tested 4580-4621 Initial Str Wt./Lbs. 58000 Unseated Str Wt./Lbs. 59000
 Anchor Length 41' Tool = 27' Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 34000
 Top Packer Depth 4575 Tool Weight 2,000
 Bottom Packer Depth 4580 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 4621 Wt. Pipe Run _____ Drill Collar Run 0
 Mud Wt. 9.0 LCM 8# Vis. 44 WL 13.5 ^{744!} Drill Pipe Size 4 1/2 XH Ft. Run 4569 16' up

Blow Description Fract 2" built to string OBB in 3 min Control 2" slightly - T.F.P.
1 1/2" blow-back T.S.T.P.
String OBB in 13 min GTS in 13 min See Flow Chart F.F.P.
1" blow-back F.S.T.P.

Recovery — Total Feet 135 GIP 4434 Ft. in DC 0 Ft. in DP 135
 Rec. 75 Feet Of Oil & Gas cut mud 10 %gas 30 %oil %water 60 %mud
 Rec. 60 Feet Of Mud cut Gassy Oil 23 %gas 47 %oil %water 30 %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 Rec. _____ Feet Of _____ %gas %oil %water %mud
 BHT 124 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 17,000 ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2307</u>	<u>2243</u>		<u>3017 "05:38"</u>	<u>5:00 AM</u>
(B) First Initial Flow Pressure	<u>74</u>	<u>30</u>		(depth) <u>4587</u>	T-Started <u>5:45 AM</u>
(C) First Final Flow Pressure	<u>74</u>	<u>48</u>		Recorder No. <u>10242</u>	T-Open <u>7:20 AM</u>
(D) Initial Shut-In Pressure	<u>1636</u>	<u>1636</u>		(depth) <u>4618</u>	T-Pulled <u>11:05 AM</u>
(E) Second Initial Flow Pressure	<u>95</u>	<u>52</u>		Recorder No. _____	T-Out <u>1:30 PM</u>
(F) Second Final Flow Pressure	<u>95</u>	<u>68</u>		(depth) _____	T-Off Location _____
(G) Final Shut-in Pressure	<u>1783</u>	<u>1778</u>		Initial Opening <u>30</u>	Test <input checked="" type="checkbox"/>
(Q) Final Hydrostatic Mud	<u>2246</u>	<u>2208</u>		Initial Shut-in <u>45</u>	Jars <input checked="" type="checkbox"/>
				Final Flow <u>60</u>	Safety Joint <input checked="" type="checkbox"/>
				Final Shut-in <u>90</u>	Straddle _____
					Circ. Sub <input checked="" type="checkbox"/>
					Sampler _____
					Extra Packer _____
					Elec. Rec. <input checked="" type="checkbox"/>
					Mileage <u>165</u> <input checked="" type="checkbox"/>
					Other _____

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Approved By [Signature]
 Our Representative [Signature]

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