

Computer Inventoried

WELL NAME: Gowing # A-1
COMPANY: Hartman Oil Co. Inc.
LOCATION: 1-33S-6W
Harper County, Kansas
DATE: 1/8/98

TRILOBITE TESTING L.L.C.

OPERATOR : Hartman Oil Co., Inc.

DATE 1-1-98

WELL NAME: Gowing # A-1

KB 1348.00 ft

TICKET NO: 10887

DST #1

LOCATION : 1-33S-6W CO Harper KS

GR 1340.00 ft

FORMATION: Mississippi

INTERVAL : 4394.00 To 4425.00 ft

TD 4425.00 ft

TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 45	Rec.	13548	13548	10270			PF Fr. 0555 to 0640 hr
SI 60	Range(Psi)	4075.0	4075.0	4150.0	0.0	0.0	IS Fr. 0640 to 0740 hr
SF 80	Clock(hrs)	12 HR	12 HR	12 HR			SF Fr. 0740 to 0900 hr
FS 60	Depth(ft)	4417.0	4417.0	4420.0	0.0	0.0	FS Fr. 0900 to 1000 hr

	Field	1	2	3	4	
A. Init Hydro	2149.0	2176.0	0.0	0.0	0.0	T STARTED 0415 hr
B. First Flow	93.0	106.0	0.0	0.0	0.0	T ON BOTM 0550 hr
Bl. Final Flow	104.0	106.0	0.0	0.0	0.0	T OPEN 0555 hr
C. In Shut-in	1682.0	1619.0	0.0	0.0	0.0	T PULLED 1000 hr
D. Init Flow	145.0	142.0	0.0	0.0	0.0	T OUT 1250 hr
E. Final Flow	145.0	152.0	0.0	0.0	0.0	
F. Fl Shut-in	1599.0	1553.0	0.0	0.0	0.0	
G. Final Hydro	2149.0	2155.0	0.0	0.0	0.0	
Inside/Outside	0	0	I			

RECOVERY

Tot Fluid 330.00 ft of 0.00 ft in DC and 330.00 ft in DP

30.00 ft of Slightly oil cut mud 3% gas 3% oil 94% mud

120.00 ft of Slightly muddy gassy oil

0.00 ft of 60% gas 34% oil 2% water 4% mud

165.00 ft of Slightly muddy gassy oil

0.00 ft of 50% gas 43% oil 3% water 4% mud

15.00 ft of Oil cut water 3% gas 4% oil 93% water

0.00 ft of

0.00 ft of

SALINITY 61000.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:

Strong blow in 1 min.

Final Flow:

Gas to surface

Gas surfaced 15 mins. into Initial

Shut-in

SAMPLES:

SENT TO:

MUD DATA-----

Mud Type	Chemical
Weight	9.60 lb/c
Vis.	45.00 S/L
W.L.	15.20 in3
F.C.	0.00 in
Mud Drop	

Amt. of fill	0.00 ft
Btm. H. Temp.	116.00 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	Ray Schwager
Co. Rep.	Terry McLead
Contr.	Duke
Rig #	2
Unit #	
Pump T.	

Test Successful: Y

GAS RECOVERY

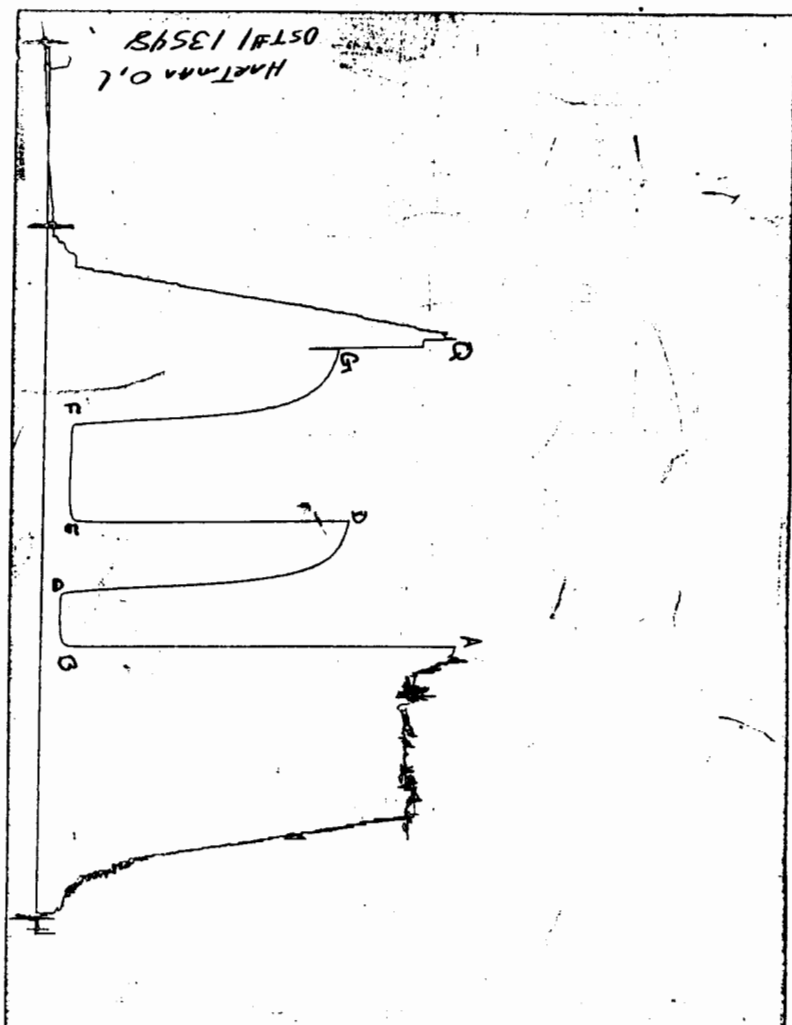
COMPANY: Hartman Oil Co., Inc. DATE: 1-1-98
WELL NAME: Gowing # A-1 KB Elev: 1348.00 ft TICKET #10887 DST #1
WELL LOCATION: 1-33S-6W CO Harper KS GR Elev: 1340.00 ft FORMATION: Mississippi
INTERVAL Fr.: 4394.00 To 4425.00 T.D.: 4425.00 ft TEST TYPE: CONV

AS RECOVERY MEASURED WITH Merla Gauge

**** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	0.50	0	10	19900.0
15	0.50	0	6	15400.0
25	0.50	0	6	15400.0
35	0.50	0	4	12500.0
45	0.50	0	3	10900.0
55	0.50	0	2	8870.0
65	0.50	0	2	8870.0
75	0.50	0	2	8870.0

CHART PAGE



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



GAS VOLUME REPORT

Gowing #A-1

WELL NAME AND NO.

DST NO.

100 SURFACED 15min INTO INITIAL SHUT-IN

2nd
Flow

Remarks:

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

No 10887

Well Name & No.	<u>GOWING # A-1</u>	Test No.	<u>1</u>	Date	<u>1-1-98</u>
Company	<u>HARTMAN Oil Co., Inc.</u>	Zone Tested	<u>Miss</u>		
Address	<u>P.O. Box 54 Wichita, Ks 67201</u>	Elevation	<u>1348</u>	KB	<u>1340</u> GL
Co. Rep / Geo.	<u>TERRY McLeod</u>	Cont.	<u>Duke Drilling 2</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>1</u>	Twp.	<u>33^s</u>	Rge.	<u>6</u> Co. <u>HARPER</u> State <u>Ks.</u>
No. of Copies	<u>Reg</u>	Distribution Sheet (Y, N)	<u>N</u>	Turnkey (Y, N)	<u>N</u> Evaluation (Y, N) <u> </u>

Interval Tested	<u>4394-4425</u>	Initial Str Wt./Lbs.	<u>48000</u>	Unseated Str Wt./Lbs.	<u>48000</u>
Anchor Length	<u>31</u>	Wt. Set Lbs.	<u>20000</u>	Wt. Pulled Loose/Lbs.	<u>50000</u>
Top Packer Depth	<u>4389</u>	Tool Weight	<u>2900</u>		
Bottom Packer Depth	<u>4394</u>	Hole Size — 7 7/8" <u>4</u>	Rubber Size — 6 3/4" <u>4</u>		
Total Depth	<u>4425</u>	Wt. Pipe Run	<u> </u>	Drill Collar Run	<u> </u>
Mud Wt. <u>9.6</u> LCM <u> </u> Vis. <u>45</u> WL <u>15.2</u>		Drill Pipe Size	<u>4 1/2 XH</u>	Ft. Run	<u>4394</u>
Blow Description <u>IFP - Strong Blow in 1 min</u>					
<u>FFP - Gas to surface</u>					

Gas surfaced 15 min into initial shut-in

Recovery — Total Feet	<u>330</u>	GIP	<u> </u>	Ft. in DC	<u> </u>	Ft. in DP	<u>330</u>
Rec. <u>30</u>	Feet Of	<u>Slightly oil cut mud</u>	3 %gas	3 %oil	<u> </u> %water	94 %mud	
Rec. <u>120</u>	Feet Of	<u>Slightly muddy gassy oil</u>	60 %gas	34 %oil	2 %water	4 %mud	
Rec. <u>165</u>	Feet Of	<u>Slightly muddy gassy oil</u>	50 %gas	43 %oil	3 %water	4 %mud	
Rec. <u>15</u>	Feet Of	<u>oil cut water</u>	3 %gas	4 %oil	93 %water	<u> </u> %mud	
Rec. <u> </u>	Feet Of	<u> </u>	%gas	%oil	%water	%mud	

BHT 116 °F Gravity °API D@ °F Corrected Gravity °API

RW @ °F Chlorides 61000 ppm Recovery Chlorides 4200 ppm System

(A) Initial Hydrostatic Mud	<u>2149</u>	PSI	Recorder No.	<u>10270</u>	T-Started	<u>4:15 AM</u>
(B) First Initial Flow Pressure	<u>93</u>	PSI	(depth)	<u>4420</u>	T-Open	<u>5:55 AM</u>
(C) First Final Flow Pressure	<u>104</u>	PSI	Recorder No.	<u>13548</u>	T-Pulled	<u>10:00 AM</u>
(D) Initial Shut-in Pressure	<u>1682</u>	PSI	(depth)	<u>4422</u>	T-Out	<u>12:50 pm</u>
(E) Second Initial Flow Pressure	<u>145</u>	PSI	Recorder No.	<u> </u>		
(F) Second Final Flow Pressure	<u>145</u>	PSI	(depth)	<u> </u>		
(G) Final Shut-in Pressure	<u>1599</u>	PSI	Initial Opening	<u>45</u>	Test	☒
(H) Final Hydrostatic Mud	<u>2149</u>	PSI	Initial Shut-in	<u>60</u>	Jars	<u> </u>

Final Flow 80 Safety Joint ☒

Final Shut-in 60 Straddle

Circ. Sub

Sampler

Extra Packer

Elect. Rec.

Other

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

Jay A. McLeod