

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
September 1999  
Form Must Be Typed

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

ORIGINAL

Operator: License # 30535  
Name: HARTMAN OIL CO., INC.  
Address: P. O. Box 54  
City/State/Zip: Wichita, KS. 67201  
Purchaser: Texaco  
Operator Contact Person: Stan Mitchell  
Phone: (316) 272-3988  
Contractor: Name: Duke Drilling Co., Inc  
License: 5929  
Wellsite Geologist: Terry McLeod  
Designate Type of Completion:  
 New Well  Re-Entry  Workover  
 Oil  SWD  SIOW  Temp. Abd.  
 Gas  ENHR  SIGW  
 Dry  Other (Core, WSW, Expl., Cathodic, etc)  
If Workover/Re-entry: Old Well Info as follows:  
Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_  
 Deepening  Re-perf.  Conv. to Enhr./SWD  
 Plug Back \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled Docket No. \_\_\_\_\_  
 Dual Completion Docket No. \_\_\_\_\_  
 Other (SWD or Enhr.?) Docket No. \_\_\_\_\_  
12-17-97 <sup>KCC</sup>  
12/28/97 <sup>JR</sup> 01/03/98 01/31/98  
Spud Date or Date Reached TD Completion Date or  
Recompletion Date Recompletion Date

API No. 15 - 077-21342-0000  
County: Harper  
C - NW - NE Sec. 01 Twp. 33 S. R. 06  East  West  
4,620 feet from  N (circle one) Line of Section  
1,980 feet from  W (circle one) Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
(circle one) NE  NW SW  
Lease Name: Gowing A Well #: 1  
Field Name: Wildcat  
Producing Formation: Mississippi  
Elevation: Ground: 1,340' Kelly Bushing: 1,348'  
Total Depth: 4,867' Plug Back Total Depth: 4,508'  
Amount of Surface Pipe Set and Cemented at 262 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from \_\_\_\_\_  
feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

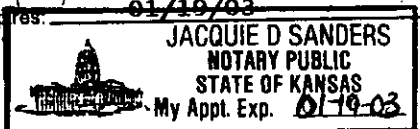
Drilling Fluid Management Plan ALT 1 JR 7-18-00  
(Data must be collected from the Reserve Pit)  
Chloride content \_\_\_\_\_ ppm Fluid volume \_\_\_\_\_ bbls  
Dewatering method used \_\_\_\_\_  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name: \_\_\_\_\_  
Lease Name: \_\_\_\_\_ License No.: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

RECEIVED  
KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION  
Wichita, Kansas  
JUN 19 2000  
06-19-2000

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: St. Mitchell  
Title: Production Supervisor Date: 06/12/00  
Subscribed and sworn to before me this 12th day of June,  
2000  
Notary Public: Jacquie D Sanders  
Date Commission Expires: 01/19/03



**KCC Office Use ONLY**  
 Letter of Confidentiality Attached  
If Denied, Yes  Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution  
KCC

Operator Name: HARTMAN OIL CO., INC. Lease Name: Gowing Well #: A-1  
 Sec. 01 Twp. 33 S. R. 06  East  West County: Harper

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Submit Copy)</i>  List All E. Logs Run: Dual Compensated Porosity Log Dual Induction Log Acoustic CementBond Log	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Datum</th> </tr> </thead> <tbody> <tr> <td>Heebner</td> <td>3,140</td> <td>-1,792</td> </tr> <tr> <td>Stalnaker</td> <td>3,525</td> <td>-2,177</td> </tr> <tr> <td>KC</td> <td>3,753</td> <td>-2,405</td> </tr> <tr> <td>Mississippi</td> <td>4,395</td> <td>-3,047</td> </tr> <tr> <td>Simpson</td> <td>4,860</td> <td>-3,512</td> </tr> <tr> <td>TD</td> <td>4,866</td> <td>-3,518</td> </tr> </tbody> </table>	Name	Top	Datum	Heebner	3,140	-1,792	Stalnaker	3,525	-2,177	KC	3,753	-2,405	Mississippi	4,395	-3,047	Simpson	4,860	-3,512	TD	4,866	-3,518
Name	Top	Datum																				
Heebner	3,140	-1,792																				
Stalnaker	3,525	-2,177																				
KC	3,753	-2,405																				
Mississippi	4,395	-3,047																				
Simpson	4,860	-3,512																				
TD	4,866	-3,518																				

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacs Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	20#	262	60-40 3% CC 2%	175	3% CC 2% Gel
Production	7 7/8"	5 1/2"	14#	4,549'	Class A	150	ASC & 5# Flo Seal

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	
2 SPF	4,402-10' (8')	16 holes	500 Gal. 7 1/2% HF Acid	Depth 4,402-10'

TUBING RECORD		Size 2 7/8"	Set At 4,476'	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumerd Production, SWD or Enhr. 01/31/98			Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)		
Estimated Production Per 24 Hours 13 BO	Oil Bbls. 13	Gas Mcf 25	Water Bbls. 95	Gas-Oil Ratio	Gravity

Disposition of Gas  Vented  Sold  Used on Lease *(If vented, Sumit ACO-18.)*

METHOD OF COMPLETION  Open Hole  Perf.  Dually Comp.  Commingled

Production Interval  Other (Specify) \_\_\_\_\_



# CEMENTING LOG

STAGE NO. 1

Date 12-17-97 District Med Lodge Ticket No. 5565  
 Company \_\_\_\_\_ Rig Duke #2  
 Lease \_\_\_\_\_ Well No. \_\_\_\_\_  
 County HARPER State KS  
 Location Freeport 3W-1N- Field \_\_\_\_\_  
12W

CASING DATA: PTA  Squeeze   
 Surface  Intermediate  Production  Liner   
 Size 8-5/8 Type J-55 Weight 20 Collar \_\_\_\_\_

Casing Depths: Top \_\_\_\_\_ Bottom \_\_\_\_\_

Drill Pipe: Size 4 1/2 Weight 16.60 Collars x hole  
 Open Hole: Size 12 1/4 T.D. \_\_\_\_\_ ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. 06.50 Lin. ft./Bbl. 15.77  
 Open Holes: Bbls/Lin. ft. 14.58 Lin. ft./Bbl. 6.8599  
 Drill Pipe: Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Annulus: Bbls/Lin. ft. 07.35 Lin. ft./Bbl. 16.3037  
 Bbls/Lin. ft. \_\_\_\_\_ Lin. ft./Bbl. \_\_\_\_\_  
 Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

CEMENT DATA:  
 Spacer Type: \_\_\_\_\_  
 Amt. \_\_\_\_\_ Skys Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type \_\_\_\_\_  
 Excess \_\_\_\_\_  
 Amt. \_\_\_\_\_ Skys Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

TAIL: Pump Time \_\_\_\_\_ hrs. Type CLASS A  
60/40 1340 CALI<sup>2</sup> + 2% Gel Excess \_\_\_\_\_  
 Amt. 17.5 Skys Yield 1.26 ft<sup>3</sup>/sk Density 14.8 PPG \_\_\_\_\_

WATER: Lead \_\_\_\_\_ gals/sk Tail 5.6 gals/sk Total 23 Bbls.

Pump Trucks Used 266 - Justin H.  
 Bulk Equip. 301 - Dannie L.

Float Equip: Manufacturer \_\_\_\_\_  
 Shoe: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Float: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Centralizers: Quantity \_\_\_\_\_ Plugs Top wooded Btm. \_\_\_\_\_  
 Stage Collars \_\_\_\_\_  
 Special Equip. \_\_\_\_\_  
 Disp. Fluid Type Fresh H<sub>2</sub>O Amt. 16/2 Bbls. Weight 8.34 PPG \_\_\_\_\_  
 Mud Type Chemical Weight 9.1 PPG \_\_\_\_\_

COMPANY REPRESENTATIVE John Ambruster

CEMENTER Narry Dreiling

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
<u>6:00</u>	<u>200</u>					<u>Pipe on Bottom - BREAK Circ.</u>
<u>6:05</u>	<u>150</u>		<u>39</u>		<u>5/2</u>	<u>Mix + Pump 1755XS - 60/40/3% CALI<sup>2</sup> + 2% Gel.</u>
						<u>Cement In. Stop pumps.</u>
						<u>Release Plug.</u>
<u>6:20</u>	<u>100</u>		<u>5</u>		<u>4</u>	<u>Start Fresh H<sub>2</sub>O Displace</u>
	<u>125</u>		<u>10</u>		<u>4</u>	<u>Slight PSI Increase</u>
	<u>135</u>		<u>12</u>		<u>3</u>	<u>Slow Rate</u>
<u>6:30</u>	<u>135</u>		<u>16 1/2</u>		<u>3</u>	<u>Stop pumps - Displace In.</u>
						<u>Shut In.</u>
						<u>Cement Circ. to Surface</u>

RECEIVED  
 STATE CORPORATION COMMISSION

JUL 13 2000

CONSERVATION DIVISION  
 Wichita, Kansas

FINAL DISP. PRESS: \_\_\_\_\_ PSI BUMP PLUG TO \_\_\_\_\_ PSI BLEEDBACK \_\_\_\_\_ BBLs. THANK YOU

# ALLIED CEMENTING CO., INC.

6565

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
med. ledge, ks

DATE <u>12-17-97</u>	SEC.	TWP.	RANGE	CALLED OUT <u>1:00 P.M.</u>	ON LOCATION <u>4:30 P.M.</u>	JOB START <u>6:00 P.M.</u>	JOB FINISH <u>7:00 P.M.</u>
LEASE	WELL #	LOCATION <u>Freeport, 3w-1n-12w</u>			COUNTY <u>Harper</u>	STATE <u>KS</u>	

OLD OR NEW (Circle one)

CONTRACTOR Duke Drilling  
 TYPE OF JOB Surface Csg.  
 HOLE SIZE 12 1/4 T.D. 263  
 CASING SIZE 8 5/8 x 20 DEPTH 262  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL DEPTH  
 PRES. MAX 250 MINIMUM 100  
 MEAS. LINE SHOE JOINT  
 CEMENT LEFT IN CSG. 15 feet  
 PERFS.

OWNER Hartman Oil Co  
CEMENT

AMOUNT ORDERED 17.55 x 5 CLASS A + 60/40/3% CILL<sup>2</sup> + 2% Gel

EQUIPMENT

PUMP TRUCK CEMENTER Harry Dreiling  
 # 266 HELPER Justin Hart  
 BULK TRUCK  
 # 301 DRIVER Randie Handwehr  
 BULK TRUCK  
 # DRIVER

COMMON @  
 POZ MIX @  
 GEL @  
 CHLORIDE @  
 @  
 @  
 @  
 @  
 @  
 @  
 HANDLING @  
 MILEAGE

TOTAL

REMARKS:  
Pipe on Bottom - Break Circ.  
Mix + Pump 17.55 x 5 CLASS A 60/40/  
3% CILL<sup>2</sup> + 2% Gel. Cement In.  
Release Plug Displacement Pump  
Plug w/ 16 1/2 Bls. Step Pumps. Shut In  
Cement Circ to Surface

SERVICE

DEPTH OF JOB 262'  
 PUMP TRUCK CHARGE  
 EXTRA FOOTAGE @  
 MILEAGE @  
 PLUG wooden @  
 @  
 @

TOTAL

CHARGE TO: Duke Drilling Co.  
 STREET  
 CITY STATE ZIP

FLOAT EQUIPMENT

@  
 @  
 @  
 @  
 @

TOTAL

TAX  
 TOTAL CHARGE  
 DISCOUNT IF PAID IN 30 DAYS

To Allied Cementing Co., Inc.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE John J. Armbruster  
 JOHN J. ARMBRUSTER

# ALLIED CEMENTING CO., INC.

6569

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

RECEIVED JAN 12 1998

SERVICE POINT:  
Med. Lodge, Ks.

DATE 1-3-98	SEC. 1	TWP. 33s	RANGE low	CALLED OUT 2:30 A.M.	ON LOCATION 5:00 A.M.	JOB START 8:45 A.M.	JOB FINISH 10:00 A.M.
LEASE Gowing	WELL # A-1	LOCATION 16014 Jct. 6E-25-1/2 E			COUNTY Harper	STATE Ks.	

OLD OR NEW (Circle one)

CONTRACTOR Duke #2

TYPE OF JOB Prod. Csg.

HOLE SIZE 7 7/8 T.D. 4866'

CASING SIZE 5/2 x 14 DEPTH 4549

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX 1400 MINIMUM 300

MEAS. LINE SHOE JOINT 32.50

CEMENT LEFT IN CSG.

PERFS.

OWNER Hartman Oil Co.

CEMENT

AMOUNT ORDERED 300 gals. mud-sweep

255 x 60/40/40 Gel

190 x 5# ASC + 5# KOL-SEAL

Used 150 x 5#.

COMMON A	15	@	6.35	95.25
POZMIX	10	@	3.25	32.50
GEL	1	@	9.50	9.50
CHLORIDE		@		
ASC	150	@	8.20	1230.00
KOL-SEAL	750#	@	.38	285.00
MUD SWEEP	300 Gals.	@	1.80	540.00
		@		
		@		
HANDLING	215	@	1.05	225.75
MILEAGE	215 x 35		.04	301.00

EQUIPMENT

PUMP TRUCK CEMENTER Arny Dreiling

233-302 HELPER Justin Hart

BULK TRUCK

# 240-250 DRIVER Randle Handwerker

BULK TRUCK

# DRIVER

TOTAL ~~\$2730.40~~  
2719.00

REMARKS:

SERVICE

Pipe on Bottom - Break Circ.  
mix + Pump 300 gals. mud-sweep  
150 x 5# 60/40/40 Rathok - 100 x 5# 60/40/40  
mousehole. 150 x 5# CLASSA-ASC +  
5# KOL-seal. Wash out Pump lines  
Release Plug. Pump + Displace Plug  
w/ 111 Bbs. Fresh H30. Bump Plug  
Release PST-FLOAT Held.

DEPTH OF JOB 4549'

PUMP TRUCK CHARGE 1214.00

EXTRA FOOTAGE @

MILEAGE 35 @ 2.85 99.75

PLUG Rubber 5/2 @ 50.00 50.00

@

@

RECEIVED  
STATE CORPORATION COMMISSION

TOTAL \$1363.75

CHARGE TO: Hartman Oil Co.

STREET 1223 N. Rock Rd., Bld. A-200

CITY WICHITA STATE KANSAS ZIP 67201

CONSERVATION DIVISION  
Wichita, Kansas

FLOAT EQUIPMENT

1-Req. Guide Shoe	@	168.00	168.00
1-AFU Insert	@	263.00	263.00
2-Baskets	@	142.00	284.00
10-Centerlizers	@	56.00	560.00
	@		

TOTAL \$1275.00

To Allied Cementing Co., Inc.  
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX \_\_\_\_\_

TOTAL CHARGE ~~\$5247.75~~

DISCOUNT ~~\$4214.09~~ 803.66 IF PAID IN 30 DAYS

Net # ~~4563.78~~

SIGNATURE X [Signature] Stan Mitchell

# ALLIED CEMENTING CO., INC. 4439

Federal Tax I.D.# ~~XXXXXXXXXX~~

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

RECEIVED JUN 30 2000

SERVICE POINT:  
med lodge, ks

DATE 6-23-00	SEC. 1	TWP. 33s	RANGE 6W	CALLED OUT 6:00 A.M.	ON LOCATION 8:30 A.M.	JOB START 9:30 A.M.	JOB FINISH 11:30 A.M.
LEASE Growing	WELL# A-1	LOCATION 160+14 Jct. 6E-2S-1/2E			COUNTY Harper	STATE KS.	
OLD OR NEW (Circle one) <u>OLD</u>				E/S			

CONTRACTOR Quality Well Service

OWNER Hartman Oil Co.

TYPE OF JOB O.H.P.

HOLE SIZE <u>7 7/8</u>	T.D.
CASING SIZE <u>8 7/8</u>	DEPTH <u>325</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX <u>200</u>	MINIMUM <u>100</u>
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT	

**CEMENT**

AMOUNT ORDERED 10sx Gel, 500# Halls  
175sx 60/40/4

COMMON	<u>105</u>	@ <u>6.35</u>	<u>666.75</u>
POZMIX	<u>70</u>	@ <u>3.25</u>	<u>227.50</u>
GEL	<u>16</u>	@ <u>9.50</u>	<u>152.00</u>
CHLORIDE		@	
<u>C.S. Halls 500#</u>		@ <u>15.50</u>	<u>77.50</u>
		@	
		@	
		@	
		@	
HANDLING	<u>175</u>	@ <u>1.05</u>	<u>183.75</u>
MILEAGE	<u>175 x 35</u>	<u>.04</u>	<u>245.00</u>

**EQUIPMENT**

PUMP TRUCK	CEMENTER <u>Larry D.</u>
# <u>343</u>	HELPER <u>Justin</u>
BULK TRUCK	
# <u>242</u>	DRIVER <u>mike</u>
BULK TRUCK	
#	DRIVER

TOTAL \$1552.50

**REMARKS:**

Csg. set c 110' Pump 9sx Gel  
500# Halls. 35sx 60/40/4 1sx Gel  
Displace w/ Fresh H<sub>2</sub>O.  
Csg. set c 750' Cement 35sx  
60/40/4.  
Csg. set c 310' Cement 100sx  
60/40/4 - Circ. to surface

**SERVICE**

DEPTH OF JOB		
PUMP TRUCK CHARGE		<u>450.00</u>
EXTRA FOOTAGE	@	
MILEAGE	<u>35</u>	@ <u>3.00</u> <u>105.00</u>
PLUG	@	
	@	
	@	

TOTAL \$555.00

CHARGE TO: Hartman Oil Co.

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**FLOAT EQUIPMENT**

	@	
	@	
	@	
	@	
	@	

TOTAL \_\_\_\_\_

To Allied Cementing Co., Inc.

You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE x Richard O. McIntyre

TAX 134.88  
TOTAL CHARGE 2242.38  
DISCOUNT 210.75 IF PAID IN 30 DAYS  
\$ 2031.63  
x Richard O McIntyre  
PRINTED NAME

**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.  
 WELL NAME: Gowing # A-1  
 LOCATION : 1-33S-6W CO Harper KS  
 INTERVAL : 4394.00 To 4425.00 ft

DATE 1-1-98  
 KB 1348.00 ft TICKET NO: 10887 DST #1  
 GR 1340.00 ft FORMATION: Mississippi  
 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
B1. 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			

TOOL DATA-----  
 Tool Wt. 2900.00 lbs  
 Wt Set On Packer 20000.00 lbs  
 Wt Pulled Loose 50000.00 lbs  
 Initial Str Wt 48000.00 lbs  
 Unseated Str Wt 48000.00 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 4394.00 ft

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

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

BLOW DESCRIPTION

Initial Flow:  
 Strong blow in 1 min.  
 Final Flow:  
 Gas to surface

Gas surfaced 15 mins. into Inital  
 Shut-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.	

SAMPLES:  
 SENT TO:

Test Successful: Y



GAS RECOVERY

-----

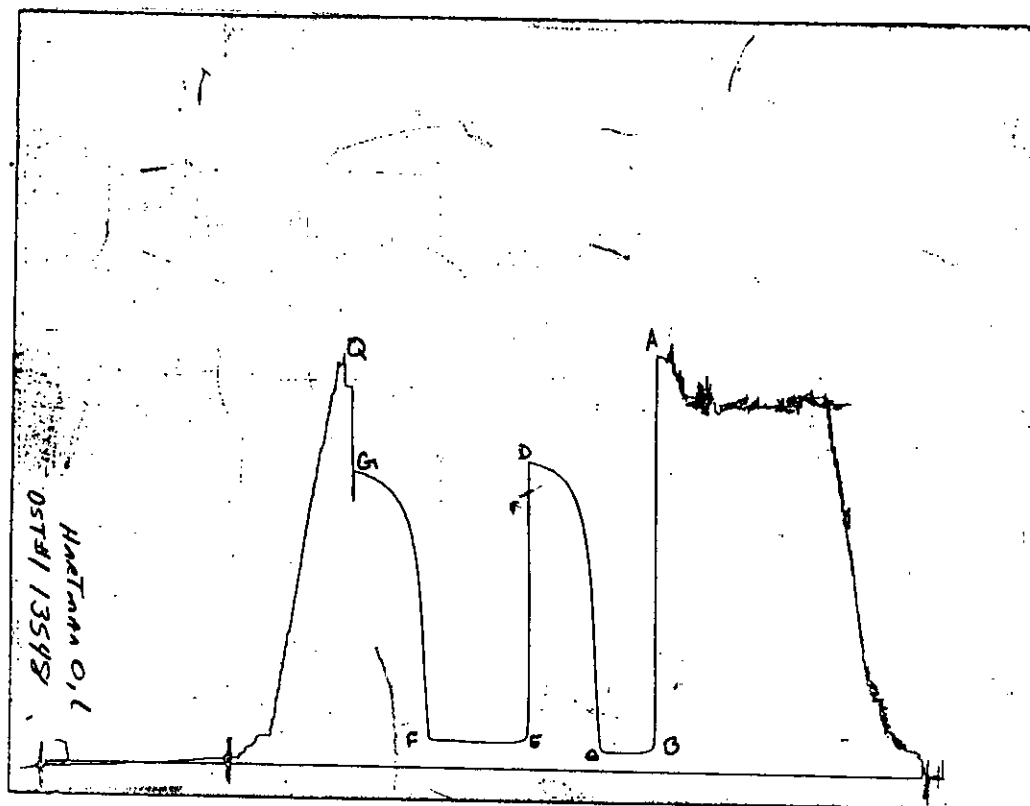
COMPANY: Hartman Oil Co., Inc. DATE: 1-1-98  
WELL NAME: Gowing # A-1 KB Elev: 1348.00 ft TICKET #10887 DST #1  
WELL LOCATION: 1-33S-6W CO Harper KS GR Elev: 1340.00 ft FORMATION: Mississippi  
PERFVAL Fr.: 4394.00 To 4425.00 T.D.: 4425.00 ft TEST TYPE: CONV

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



# 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 Dalg rig 2</u>	Est. Ft. of Pay <u>    </u> Por. <u>    </u> %
Location: Sec. <u>1</u>	Twp. <u>33<sup>s</sup></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>	<u>3</u> %gas	<u>3</u> %oil	<u>    </u> %water <u>94</u> %mud
Rec. <u>120</u> Feet Of <u>Slightly muddy gassy oil</u>	<u>60</u> %gas	<u>34</u> %oil	<u>2</u> %water <u>4</u> %mud
Rec. <u>165</u> Feet Of <u>Slightly muddy gassy oil</u>	<u>50</u> %gas	<u>43</u> %oil	<u>3</u> %water <u>4</u> %mud
Rec. <u>15</u> Feet Of <u>oil cut water</u>	<u>3</u> %gas	<u>4</u> %oil	<u>9.3</u> %water <u>    </u> %mud
Rec. <u>    </u> Feet Of <u>    </u>	<u>    </u> %gas	<u>    </u> %oil	<u>    </u> %water <u>    </u> %mud

BHT <u>116</u> °F Gravity <u>    </u>	*API D@ <u>    </u>	*F Corrected Gravity <u>    </u>	*API <u>    </u>
RW <u>    </u> @ <u>    </u> °F Chlorides <u>61000</u> ppm	Recovery Chlorides <u>4200</u> ppm	System <u>    </u>	
(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 <input checked="" type="checkbox"/>	
(H) Final Hydrostatic Mud <u>2149</u> PSI	Initial Shut-in <u>60</u>	Jars <u>    </u>	
	Final Flow <u>80</u>	Safety Joint <input checked="" type="checkbox"/>	
	Final Shut-in <u>60</u>	Straddle <u>    </u>	

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. M. [Signature]

- \_\_\_\_\_ Circ. Sub
- \_\_\_\_\_ Sampler
- \_\_\_\_\_ Extra Packer
- \_\_\_\_\_ Elect. Rec.
- \_\_\_\_\_ Other