API NO. 15- 065-22,663-00-00

County  Graham

30°W, N2 NW NE Sec. 21 Twp. 6 Rge. 24 X W

4950 Feet from ( ) N (circle one) Line of Section

2010 Feet from ( ) W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner: NE, SW, NW or SW (circle one)

Lease Name Harris  Yes  Well # 1

Field Name

Producing Formation

Elevation: Ground 2486' KB 2494'

Total Depth 4240' PBTD

Amount of Surface Pipe Set and Cemented at 283 Feet

Multiple Stage Cementing Collar Used? Yes  No

If yes, show depth set _______ Feet

If Alternate II completion, cement circulated from _______ depth to _______ w/ _______ sx cm.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content 1000 ppm  Fluid volume 80 bbls

Dewatering method used evaporation

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name

Location No.

County

Quarter Sec. Twp. S Rge. E/W

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, 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 on 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 Bryan Hess

Title Bryan Hess  Mgr.

Date 5-12-92

K.C.C. OFFICE USE ONLY

Letter of Confidentiality Attached

Wireline Log Received

Geologist Report Received

KCC SWD/Rep. NGPA Other

Re: Form ACO-1 (7-91)

NOTARY PUBLIC - State of Kansas

My Appt. Exp. 11-14-83

Wichita, Kansas
Hess Oil Company

Operator Name

Lease Name Harris

Sec. 21 Twp. 6 Rge. 24

County Graham

Log Formation (Top), Depth and Datums

- Anhydrite 2160' + 334'
- Base Anhydrite 2194' + 300'
- Topeka 3463' - 969'
- Heebner 3675' - 1171'
- Lansing 3707' - 1213'
- Conglomerate 4001' - 1507'
- Arbuckle 4179' - 1685'
- R.T.D. 4240' - 1746'

DST #1: 3740' - 3790'. 60-45-60-45. Strong blow bottom of bucket in 12 min.
Rec. 890' saltwater (chl. 45,000).
IH 1891, IF 96-259, ISI 1238, FF 326-442,

DST #2: 3830' - 3880'. 45-0-0-0. 3" blow decreasing, died in 30 min. Rec. 64' Mud. IH 2103, IF 76-76, ISI --, FF --, FSI --, FH 1978. Tmp 109.

DST #3: 3810' - 3880'. 60-45-60-45. Weak building blow bottom of bucket in 40 min.
2nd open bottom of bucket in 35 min. Rec. 625' Mud cut saltwater (chl. 50,000). IH 2017,

---

Casing Record

- New
- Used

Report all strings set-conductor, surface, intermediate, production, etc.

<table>
<thead>
<tr>
<th>Purpose of String</th>
<th>Size Hole Drilled</th>
<th>Size Casing Set (In O.D.)</th>
<th>Weight Lbs./Ft.</th>
<th>Setting Depth</th>
<th>Type of Cement</th>
<th># Sacks Used</th>
<th>Type and Percent Additives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>12-1/4&quot;</td>
<td>8-5/8&quot;</td>
<td>28#</td>
<td>283'</td>
<td>60/40 Poz</td>
<td>165</td>
<td>2% gel, 3% cc</td>
</tr>
</tbody>
</table>

---
**DRILLERS LOG**

**ORIGINAL**

**MALLARD JV, INC.**  
P. O. BOX 1009  
McPHERSON, KS 67460

**OPERATOR:** Hess Oil Company  
P. O. Box 1009  
McPherson, KS 67460  
**WELL:** Harris #1

**API #:** 15-065-22,663-00-00  
**LOC:** 30' W of N2 NW NE

**COMMENCED:** March 13, 1992  
**COMPLETED:** March 20, 1992  
**TOTAL DEPTH:** 4240 Ft  
**ELEVATION:** 2486 Ft GL, 2494 Ft KB  
**COUNTY:** Graham, Kansas

<table>
<thead>
<tr>
<th>STATUS:</th>
<th>D &amp; A - Arbuckle Formation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spud:</td>
<td>9:55 p.m. 3/13/92</td>
</tr>
<tr>
<td>Size Hole Drilled:</td>
<td>12-1/4&quot; x 285'</td>
</tr>
<tr>
<td>Surface Casing:</td>
<td>8-5/8&quot; x 28# x 272.92' (7 jts.)</td>
</tr>
<tr>
<td>Set At:</td>
<td>282.52'</td>
</tr>
<tr>
<td>Cement:</td>
<td>165 sacks 60/40 Pozmix, 2% gel, 3% cc</td>
</tr>
<tr>
<td>PD:</td>
<td>5:30 a.m. 3/14/92</td>
</tr>
</tbody>
</table>

| Size Hole Drilled: | 7-7/8" x 4240' |
| Plugged Hole With: | 25 sacks @ 4140' |
|                   | 25 sacks @ 2170' |
|                   | 100 sacks @ 1340' w/1 sk floseal |
|                   | 40 sacks @ 320' |
|                   | 10 sacks @ 40' |
|                   | 15 sacks rathole |
|                   | 10 sacks mousehole |
|                   | 225 sacks total - 60/40 Pozmix, 6% gel, 1 sk f/s |
| PD: | 3:30 p.m. 3/20/92 |

**Drill Stem Tests:** 3  
**Electric Log:** Yes

--- CERTIFICATE ---

Dick Hess, Vice-President of Mallard JV, Inc., hereby certifies that this is a true and correct copy of the log of the following well, as reflected by the files of Mallard JV, Inc.: Harris #1

[Signature]

Dick Hess, Vice-President

STATE OF KANSAS  ) ss.  
COUNTY OF McPHERSON ) ss.  

MAY 14 1992

Subscribed and sworn to before me this 2nd day of April 1992.

[Signature]

Bryan K. Hess, Notary Public
HARRIS #1

\[ B12 15-065-22663 \]

\[ N/2 NW NE of \]

SECTION 21 - 6S - 24W

GRAHAM COUNTY, KANSAS

Commenced: 3-13-92  
Completed: 3-19-92  
Contractor: Mallard J.V.

Elevations: 2486' GR, 2494' KB  
Surface Pipe: 200' of 8-5/8"  
Production Pipe: none

One foot drilling time was kept from 2140' to 2200' KB and from 3200' to total depth. Ten foot samples were kept (wet & dry) from 3400' to total depth.

Following are sample tops, descriptions of zones of interest (including shows of oil & gas), and results of all drill stem tests.

ANHYDRITE  
2160 ( +334 )

BASE ANHYDRITE  
2194 ( +300 )

TOPEKA  
3463 ( - 969 )

MAY 14 1992

CONSERVATION DIVISION
HEEBNER  
LANSONG  

3748-53' KB  
White, very finely crystalline, dense, limestone. Fair show of free oil (very slight show of heavy tar oil) in poor to fair intercrystalline porosity, fair cut, no odor, and good staining.

3758-68' KB  
White, very finely crystalline, dense, chalky, limestone. Weak show of free oil in poor to very poor intercrystalline porosity, no odor, good stain, and a weak cut.

3771-75' KB  
Tan, very finely crystalline, dense, limestone. Fair show of free oil in fair intercrystalline "on edge" porosity, weak odor, good staining, and a strong cut.

DRILL STEM TEST #1  
3740' to 3790' KB  50' Anchor

Blow: Slow build to bottom of bucket in 40min. 2cd opening in 30min.

Times: Open 60, Closed 45, Open 60, Closed 45.

Recovered: 890' Salt Water chl. 45,000ppm

Pressures: IH 1891#  IF 96-259#  ISIP 1238#  
           FH 1862#  FF 326-442#  FSIP 1209#

3818-23' KB  
Tan, very finely crystalline, dense, limestone. Weak show of free oil in poor to fair intercrystalline porosity, no odor, fair stain, and a weak cut.

3844-49' KB  
Tan, very finely crystalline, dense, limestone. Weak show of free oil in poor to fair intercrystalline porosity, no odor, good staining, and a fair cut.

3862-66' KB  
White to brown, very finely crystalline, dense, limestone. Fair show of free oil in poor to fair intercrystalline porosity, no odor, weak staining, and a weak cut. Some baxron porosity.
DRILL STEM TEST #2
3830' to 3880' KB  50' Anchor

Blow:  Blow died in 30min.
Times:  Open 45, Closed 0, Open 0, Closed 0.
Recovered:  64' Mud
Pressures:  IH 2103#  IF 76-76#  ISIP ---
                      FH 1978#  FF ---  FSIP ---

DRILL STEM TEST #3
3810' to 3880' KB  70' Anchor

Blow:  bottom of bucket in 35min. both opennings.
Times:  Open 60, Closed 45, Open 60, Closed 45.
Recovered:  625' Mud Cut Salt Water  (chl. 50,000ppm)
Pressures:  IH 2017#  IF 115-240#  ISIP 1410#
                      FH 1998#  FF 259-346#  FSIP 1410#

CONGLOMERATE
4001  (-1507)

ARBUCKLE
4179  (-1685)

RTD
4240  (-1746)

It was decided a Radiation Guard Log be run to help evaluate
this test. A Sonic log was also run in order to make a Synthetic
seismic log for further seismic evaluation. All logs were tested.
The Harris #1 was plugged according to state regulations on March

Sincerely,
James C. Hess
Geologist
<table>
<thead>
<tr>
<th>CHART NO.</th>
<th>TIME</th>
<th>RATE (BPM)</th>
<th>VOLUME (BBL) (GAL.)</th>
<th>PUMPS</th>
<th>PRESSURE (PSI)</th>
<th>TUBING</th>
<th>CASING</th>
<th>DESCRIPTION OF OPERATION AND MATERIALS</th>
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<tbody>
<tr>
<td></td>
<td>0800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CALLED OUT MUD CIRC. ON LOC. - MUDDY - CHAISED UP.</td>
</tr>
<tr>
<td></td>
<td>1030</td>
<td></td>
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<td>REQUESTED - A.S.A.P.</td>
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<td>1030</td>
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</tr>
<tr>
<td></td>
<td>1114</td>
<td>5</td>
<td>1</td>
<td>250°</td>
<td></td>
<td></td>
<td></td>
<td>ST. 10 H2O. 25 SKS 6% HAP 6% ICL 3\frac{1}{2} H2O. 50 BBL M.O.</td>
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<tr>
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<td>1135</td>
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<td></td>
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<td>1\frac{1}{2} PLUG DOWN - 11\frac{1}{2}</td>
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<tr>
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<td>1235</td>
<td>5</td>
<td>1</td>
<td>250°</td>
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<td></td>
<td>BIG LAVING DOWN DP</td>
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<td></td>
<td>1245</td>
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<td></td>
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<td>2\frac{1}{2} PLUG DOWN - 2170' BIG LAVING DOWN DP.</td>
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<tr>
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<td>1310</td>
<td>5</td>
<td>1</td>
<td>225°</td>
<td></td>
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<td></td>
<td>ST. 10 H2O. 100 SKS 6% HAP 6% ICL - 8 BBL H2O</td>
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<tr>
<td></td>
<td>1320</td>
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<td>3\frac{1}{2} PLUG DOWN - 1340' BIG LAVING DOWN DP.</td>
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<tr>
<td></td>
<td>1448</td>
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<td></td>
<td>ST. 5 H2O. 40 SKS 6% HAP 6% ICL - 1\frac{1}{2} H2O</td>
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<td></td>
<td>1454</td>
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<td>4\frac{1}{2} PLUG DOWN - 320' BIG LAVING DOWN DP.</td>
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<tr>
<td></td>
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<td>MEASURE HOLE - 15 SKS</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>WASH UP &amp; RACK UP</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>JOB COMPLETE</td>
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RECEIVED
STATE CORPORATION COMMISSION
MAY 1 1992
CONSERVATION DIVISION

CUSTOMER
<table>
<thead>
<tr>
<th>CHART NO.</th>
<th>TIME</th>
<th>RATE (BPM)</th>
<th>VOLUME (BBL)</th>
<th>PUMPS</th>
<th>PRESSURE (PSI)</th>
<th>DESCRIPTION OF OPERATION AND MATERIALS</th>
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<td>3-13-92</td>
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<td>3-14-92</td>
<td>0115</td>
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<td>On Loc. - Rig Drilling</td>
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<td>0115</td>
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<td>Requested - A.S.A.P.</td>
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<tr>
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<td>0315</td>
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<td>Rig Pulling D.C.</td>
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<td>0335</td>
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<td>Rig Starting Casing</td>
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<td>0505</td>
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<td>Rig Breaking Circulation</td>
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<td></td>
<td>0510</td>
<td>5</td>
<td>5 bbl.</td>
<td>1</td>
<td>150</td>
<td>St. Sec. of H2O</td>
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<td></td>
<td>0512</td>
<td>5</td>
<td>3 bbl.</td>
<td>1</td>
<td>175</td>
<td>St. 165 sec. of OVO 700 oz. 1/270 psi. 370 C.</td>
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<td></td>
<td>0520</td>
<td>5</td>
<td></td>
<td>1</td>
<td>200</td>
<td>Finish Cist. Turn Plug Loose</td>
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<tr>
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<td>0521</td>
<td>5</td>
<td>1 bl.</td>
<td>1</td>
<td>100</td>
<td>Start Displ</td>
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<tr>
<td></td>
<td>0530</td>
<td>y</td>
<td></td>
<td>1</td>
<td>200</td>
<td>Finish Displ - Plug Down</td>
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<tr>
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<td>0600</td>
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<td>Circulated 5 bbl. out flow ditch</td>
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<td></td>
<td></td>
<td>Wash Up + Rack Up</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Job Complete</td>
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MAY 14 1992

CONSERVATION