STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

API NO. 15-147-20,512-00-00

County Phillips

SE SW NE Sec. 16 Twp. 4S Rge. 19 X West
2970 Ft. North from Southeast Corner of Section
1650 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)

Lease Name Morgan

Field Name WOLF CREEK

Producing Formation LANSING-KC

Elevation: Ground 2055' KB 2060'

Total Depth 3516' PBD

Amount of Surface Pipe Set and Cemented at 226 Feet

Multiple Stage Cementing Collar Used? Yes X No

If yes, show depth set 1595' Feet

If Alternate II completion, cement circulated from 1595'

feet depth to SURFACE w/ 650 sx cm.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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 drillers time log 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. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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 JAMES T. BARVAIS
Title PRESIDENT Date 11-30-89

Subscribed and sworn to before me this 30TH day of NOVEMBER, 19 89.

Notary Public

Date Commission Expires May 3, 1990

K.C.C. OFFICE USE ONLY
Letter of Confidentiality Attached
Drillers Time Log Received

Distribution

KCC SMD/Rep NGPA Other (Specify)
KGS Plug

Form ACO-1 (7-89)
INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem 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 during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken
(Attach Additional Sheets.)
□ Yes ☑ No

Samples Sent to Geological Survey
□ Yes ☑ No

Cores Taken
□ Yes ☑ No

Electric Log Run
(Submit Copy.)
☑ Yes ☑ No

Formation Description
☑ Log ☑ Sample

Name
ANHYDRITE 1584' 1616'
TOPEKA 3016'
HEEBNER 3216'
TORONTO 3242'
LANSING-KC 3260'
BASE KC 3478'
RTD 3515'

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>20#</td>
<td>226'</td>
<td>POZMIX &amp;</td>
<td>140</td>
<td>2% GEL -3% CC.</td>
</tr>
<tr>
<td>PRODUCTION</td>
<td>7 7/8&quot;</td>
<td>5 1/2&quot;</td>
<td>14#</td>
<td>3513'</td>
<td>STANDARD</td>
<td>120</td>
<td>10% SALT &amp; 5% CAL SEAL</td>
</tr>
</tbody>
</table>

PERFORATION RECORD
(Specify Footage of Each Interval Perforated)

<table>
<thead>
<tr>
<th>Shots Per Foot</th>
<th>Specify Footage of Each Interval Perforated</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (2 HOLES)</td>
<td>3432'</td>
</tr>
<tr>
<td>2 (7 HOLES)</td>
<td>3354' - 3357'</td>
</tr>
<tr>
<td>1 (1 HOLES)</td>
<td>3341'</td>
</tr>
<tr>
<td>1 (7 HOLES)</td>
<td>3312' - 3318'</td>
</tr>
<tr>
<td>1 (5 HOLES)</td>
<td>3296' - 3300'</td>
</tr>
<tr>
<td>2 (5 HOLES)</td>
<td>3260' - 3262'</td>
</tr>
<tr>
<td>2 (5 HOLES)</td>
<td>3242' - 3244'</td>
</tr>
</tbody>
</table>

Acid, Fracture, Shot, Cement Squeeze Record
(Amount and Kind of Material Used)

<table>
<thead>
<tr>
<th>Depth</th>
<th>250 MUD ACID (15%) AND RETREATED WITH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250 15% MUD ACID AND 1500 GALLONS OF</td>
</tr>
<tr>
<td></td>
<td>15% NON-F ACID</td>
</tr>
<tr>
<td></td>
<td>350 GALLONS 15% MUD ACID AND RETREATED</td>
</tr>
<tr>
<td></td>
<td>WITH 1500 GALLONS OF 15% NON-F ACID</td>
</tr>
<tr>
<td></td>
<td>250 GALLONS OF 15% MUD ACID AND RETREATED</td>
</tr>
<tr>
<td></td>
<td>WITH 1500 GALLONS OF 15% NON-F ACID</td>
</tr>
</tbody>
</table>

TUBING RECORD

<table>
<thead>
<tr>
<th>Size</th>
<th>Set At</th>
<th>Packer At</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 3/8&quot;</td>
<td>3446'</td>
<td>NONE</td>
</tr>
</tbody>
</table>

Date of First Production
11-28-89

Producing Method
☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production
Oil Bbls. | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |
15 | NONE | 15 | 50/50 | 37 |

Disposition of Gas:
☐ Vented ☐ Sold ☐ Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION
□ Open Hole ☑ Perforation □ Dually Completed ☐ Commingled
☐ Other (Specify)
EMPHASIS OIL OPERATIONS  
P. O. BOX 506  
RUSSELL, KS 67665  

15-147-20512-00-00  

DRILLERS LOG  

OPERATOR: American Petroleum Company, Inc.  
3500 North Rock Rd., Bldg. #1300  
Wichita, Kansas 67226  

CONTRACTOR: Emphasis Oil Operations  
Box 506  
Russell, KS 67665  

LEASE: Morgan  
WELL #2  

LOCATION: SE SW NE  
Section 16-4S-19W  
Phillips County, Kansas  

LOGGERS TOTAL DEPTH: 3515'  
ROTARY TOTAL DEPTH: 3516'  
COMMANDED: 8/16/89  
COMPLETED: 8/20/89  
ELEVATION: 2060' K.B.  

CASING: 8-5/8" @ 226' w/140 sks cement  
5-1/2" @ 3513' w/120 sks cement  

DEPTHS & FORMATIONS  
(All measurements from K.B.)  

Top Soil, Sand & Clay  
90'  Red Bed  
1589'  
Shale  
710'  Anhydrite  
1616'  
Dakota & Sand  
1002'  Red Bed  
2000'  
Red Bed  
1114'  Shale  
3030'  
Cedar Hills Sand  
1308'  Lime & Shale Stks.  
(R.T.D.) 3516'  

STATE OF KANSAS  
) ss  
COUNTY OF RUSSELL  

Kyle B. Branum, of Emphasis Oil Operations, states that the above and foregoing is a true and correct log of the above captioned well, to the best of his knowledge.  

Kyle B. Branum  

Subscribed and sworn to before me on August 21, 1989.  

Glenda R. Tiffin, Notary Public
**Halliburton Services**

**Invoice**

**Bill To:**
P.O. Box 951046
Dallas, TX 75395-1046

**Remit To:**
American Petroleum Company
Suite 600
1300 Colorado Derby Building
Wichita, KS 67202-0000

**Organ:** Phillips

**State:** KS

**Plant Name:** Emphasis Drlg. #7

**Job Purpose:** Cement Surface Casing

**Ticket Date:** 08/16/1989

---

**Price Ref. No.:** 17800

**Check No.:** 10014

**Date:** 8-24-89

---

### PACING AREA - MID CONTINENT

<table>
<thead>
<tr>
<th>Price Ref. No.</th>
<th>Description</th>
<th>Quantity</th>
<th>U/M</th>
<th>Unit Price</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>000-117</td>
<td>Mileage</td>
<td>43</td>
<td>MI</td>
<td>2.20</td>
<td>94.60</td>
</tr>
<tr>
<td>001-016</td>
<td>Cementing casing</td>
<td>206</td>
<td>FT</td>
<td>395.00</td>
<td>395.00</td>
</tr>
<tr>
<td>030-503</td>
<td>Cmtg Plug LA-11, CP-1, CP-3, Top</td>
<td>8 5/8</td>
<td>IN</td>
<td>58.00</td>
<td>58.00</td>
</tr>
<tr>
<td>504-308</td>
<td>Standard cement</td>
<td>184</td>
<td>SK</td>
<td>6.75</td>
<td>567.00</td>
</tr>
<tr>
<td>506-105</td>
<td>Pozmix A</td>
<td>56</td>
<td>SK</td>
<td>3.50</td>
<td>196.00</td>
</tr>
<tr>
<td>506-121</td>
<td>Halliburton-Gel 2%</td>
<td>12</td>
<td>SK</td>
<td>0.00</td>
<td>N/C</td>
</tr>
<tr>
<td>509-406</td>
<td>Anhydrous calcium chloride</td>
<td>4</td>
<td>SK</td>
<td>25.75</td>
<td>103.00</td>
</tr>
<tr>
<td>500-207</td>
<td>Bulk service charge</td>
<td>148</td>
<td>CFT</td>
<td>.95</td>
<td>140.60</td>
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<tr>
<td>500-306</td>
<td>Mileage cmtg mat del or return</td>
<td>270.69</td>
<td>TMI</td>
<td>.70</td>
<td>189.48</td>
</tr>
</tbody>
</table>

---

**Invoice Subtotal:**

$1,743.68

**Discount - (BID):**

$348.73

**Invoice Bid Amount:**

$1,394.95

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**KANSAS STATE SALES TAX:**

$40.66

**DECATUR COUNTY SALES TAX:**

$9.57

---

**Invoice Total - Please Pay This Amount:** $1,445.18

---

**Terms:**

Invoices payable net by the 20th of the following month after date of invoice. Upon
Customer's default in payment of Customer's account by the last day of the month
following the month in which the invoice is dated, Customer agrees to pay interest
thereon after default at the highest lawful contract rate applicable but never
to exceed 18% per annum. In the event it becomes necessary to employ an attorney to
enforce collection of said account, Customer agrees to pay all collection costs and

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**ORM 1900-R3**

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**Page:** 1
**INVOICE**

**HALLIBURTON SERVICES**

**MORGAN 2**

**PHILLIPS**

**OBERLIN**

**AMERICAN PETROLEUM COMPANY INC**

3500 NORTH ROCK ROAD

BUILDING 1300

WICHITA, KS 67226

**PRICE REF. NO.** | **DESCRIPTION** | **QUANTITY** | **UOM** | **UNIT PRICE** | **AMOUNT**
--- | --- | --- | --- | --- | ---
000-117 | MILEAGE | 43 | MI | 2.20 | 94.60
001-016 | CEMENTING CASING | 3515 | FT | 1,001.00 | 1,001.00
030-016 | CEMENTING PLUG 5W ALUM TOP | 5 1/2 | IN | 46.00 | 46.00
018-317 | SUPER FLUSH | 1 | EA | 46.00 | 46.00
12A | GUIDE SHOE - 5 1/2" 8RD THD. | 10 | SK | 72.00 | 720.00
825.205 | INSERT FLOAT VALVE - 5 1/2"8RD | 1 | EA | 104.00 | 104.00
815.19251 | FILL-UP UNIT 5 1/2"-6 5/8" | 1 | EA | 63.00 | 63.00
815.19311 | CENTRALIZER 5-1/2" MODEL S-4 | 6 | EA | 44.00 | 264.00
807.93022 | CEMENT BASKET 5 1/2" | 1 | EA | 90.00 | 90.00
800.8883 | STANDARD CEMENT | 120 | SK | 6.75 | 810.00
508-127 | CAL SEAL | 6 | SK | 14.60 | 87.60
509-968 | SALT | 520 | LB | 0.63 | 327.60
507-775 | HALAD-322 | 46 | LB | 5.50 | 253.00
507-970 | D-AIR 1, POWDER | 31 | LB | 2.50 | 77.50
509-968 | SALT | 300 | LB | 0.63 | 189.00
500-207 | BULK SERVICE CHARGE | 135 | CFT | 0.95 | 128.25
500-306 | MILEAGE CMTG MAT DEL OR RETURN | 268.26 | TMI | 0.70 | 187.78

**INVOICE SUBTOTAL**

**DISCOUNT-(BID)**

**INVOICE BID AMOUNT**

4,028.39

805.67-

3,222.72

**TOTAL**

4,834.06

**TERMS**

INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 1% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE THE OBLIGATIONS OF THIS INVOICE, CUSTOMER AGREES TO PAY ALL SOLELY.
**INVOICE**

**HALLIBURTON SERVICES**

**MORGAN 2**

**PHILLIPS**

**HAYS**

**DESCRIPTION** | **QUANTITY** | **U/M** | **UNIT PRICE** | **AMOUNT**
---|---|---|---|---
**PRICING AREA - MID CONTINENT**

MOVILEAGE | 43 | MI | 2.20 | 94.60

CEMENT SQUEEZE | 1595 | FT | 879.00 | 879.00

SACKED SAND 20/40 & SMALLER | 1 | UNT | 7.95 | 7.95

ANHYDROUS CALCIUM CHLORIDE | 2 | SK | 25.75 | 51.50

TEMPERATURE SURVEY | 1 | RUN | 255.00 | 255.00

PLUGGING BACK ADD. HR. | 3 | HR | 140.00 | 420.00

STANDARD CEMENT | 75 | SK | 5.45 | 408.75

HALLIBURTON LIGHT CEMENT -PREM | 275 | SK | 4.92 | 1,353.00

BULK SERVICE CHARGE | 350 | CFT | .95 | 332.50

MILEAGE CMTG MAT DEL OR RETURN | 696.708 | TMI | .70 | 487.70

HALLIBURTON LIGHT CEMENT -PREM | 200 | SK | 4.92 | 984.00

STANDARD CEMENT | 60 | SK | 5.45 | 327.00

POZMIX A | 40 | SK | 2.88 | 115.20

ANHYDROUS CALCIUM CHLORIDE | 6 | SK | 25.75 | 154.50

BULK SERVICE CHARGE | 312 | CFT | .95 | 296.40

MILEAGE CMTG MAT DEL OR RETURN | 591.68 | TMI | .70 | 414.18

**INVOICE SUBTOTAL**

6,589.23

**DISCOUNT-(BID)**

1,266.84-

5,322.39

**INVOICE TOTAL**

$5,574.55

**TERMS**

INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE. UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO COLLECT PAYMENT OF SAID ACCOUNT CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND EXPENSES INCURRED THEREFOR.

**DIRECT CORRESPONDENCE TO:**

AMERICAN PETROLEUM COMPANY INC
3500 NORTH ROCK ROAD
BUILDING 1300
WICHITA, KS 67226