API NO. 15._163-23,265

County _BOOKS__

- SW - SE - SW Sec. 16 Twp. 7 Rge. 19 X W

- 330 Feet from SW (circle one) Line of Section
- 3630 Feet from NW (circle one) Line of Section

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

Lease Name _MUIR "B"_ Well # _1_

Field Name 

Producing Formation ARBUCKLE and LANSING "J"

Elevation: Ground _1973_ KB _1981_

Total Depth _3532'_ PBD _3487_

Amount of Surface Pipe Set and Cemented at _247_

Multiple Stage Cementing Collar Used? X Yes No
If yes, show depth set _1465_ Feet
If Alternate II completion, cement circulated from _1465_ Feet
to _surface_ w/ _250_ ex cnt.

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

Chloride content _11,000_ ppm Fluid volume _350 bbls_

Draining method used: evaporation and then restore to
near normal

Location of fluid disposal if hauled offsite:

Operator Name 

Lease Name 

County 

1995 Quarter Sec. Top. S Rng. B/W

Spud Date _8/11/95_

Date Reached TD _10/26/95_

Completion Date

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, reassembly, 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-11 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 

Title _President_ 

Subscribed and sworn to before me this_12/12/95_ of

Notary Public 

Date Commission Expires _12-19-96_

K.C.C. OFFICER USE ONLY

Letter of Confidentiality Attached

Distribution

Wireline Log Received

Geologist Report Received

RCC

SGD/Rep

NSPA

KGS

Plug

Other

(Specify)

Form ACO-1 (7-91)
Operator Name: Oil Producers, Inc. of Kansas
Lease Name: MUIR "B"
Well #: 1
Sec. 16 Top. 78 Rge. 19
County: BOOKS

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
- Samples Sent to Geological Survey
- Cores Taken
- Electric Log Run

Log Formation (Top), Depth and Datums

<table>
<thead>
<tr>
<th>Name</th>
<th>Top</th>
<th>Datum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anhydrite</td>
<td>1468</td>
<td>(+ 513)</td>
</tr>
<tr>
<td>Topeka</td>
<td>2932</td>
<td>(-9517)</td>
</tr>
<tr>
<td>Hesbner</td>
<td>3130</td>
<td>(-1149)</td>
</tr>
<tr>
<td>Lansing</td>
<td>3169</td>
<td>(-1188)</td>
</tr>
<tr>
<td>Base Kansas City</td>
<td>3390</td>
<td>(-1409)</td>
</tr>
<tr>
<td>Arbuckle</td>
<td>3429</td>
<td>(-1448)</td>
</tr>
<tr>
<td>Granite</td>
<td>3524</td>
<td>(-1540)</td>
</tr>
<tr>
<td>LTD</td>
<td>3531</td>
<td>(-1550)</td>
</tr>
</tbody>
</table>

Casing Record

- New [X] 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./Pt.</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</td>
<td>8 5/8&quot;</td>
<td>28</td>
<td>227</td>
<td>50 40 POZ 145</td>
<td>145</td>
<td>3% CC, 2% gel</td>
</tr>
<tr>
<td>production</td>
<td>7 7/8&quot;</td>
<td>4 1/2&quot;</td>
<td>10.5#</td>
<td>3530</td>
<td>50 50 POZ 25</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

Additional Cementing/Squeeze Record

<table>
<thead>
<tr>
<th>Purpose: Perforate</th>
<th>Depth Top Bottom Type of Cement</th>
<th>Sacks Used</th>
<th>Type and Percent Additives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect Casing</td>
<td>sur. 1465 Hallite</td>
<td>42 RHE</td>
<td></td>
</tr>
<tr>
<td>Plug Back To</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plug Off Zone</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Perforation Record - Bridge plugs set/Type

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

<table>
<thead>
<tr>
<th>Shots Per Foot</th>
<th>Specify footage of Each Interval Perforated</th>
</tr>
</thead>
<tbody>
<tr>
<td>see attached sheet</td>
<td>same</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>3474.86</td>
<td></td>
</tr>
</tbody>
</table>

Date of First, Resumed Production, SMD or Inj. 11/2/95

Producing Method: [X] Flowing [ ] Pumping [ ] Gas Lift [ ] Other (Explain)

<table>
<thead>
<tr>
<th>Estimated Production</th>
<th>Oil</th>
<th>Bbls.</th>
<th>Gas</th>
<th>Mcf</th>
<th>Water</th>
<th>Bbls.</th>
<th>Gas-Oil Ratio</th>
<th>Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 bopd</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

Disposition of Gas:

[ ] Vented [ ] Sold [ ] Used on Lease (If vented, submit AGO-18.)

Method of Completion

[ ] Open Hole [X] Perf. [ ] Dually Comp. [ ] Coamedled

Production Interval

[ ] see attached_
ATTACHMENT TO ACO-1 FOR MUIR "B" #1
ROOKS COUNTY, KS.
API #: 15-163-23,265

PERFORATION RECORD:

Arbuckle zone:

2 shots expandable 3451-3452’ and 3438-3441’
Acidize: 500 gallons 15% FE MCA with 12 ball sealers
Re-acidize: 2,000 gallons 15% DSFE

Lansing "J" zone:

4 shots expandable 3348-3350’
Acidize: 250 gallons 15% MCA
Re-acidize: 1000 gallons 15% SGA
WELL - MUIR B #1
LEGAL - SW/SE/SW OF 16-7s-19w IN Rooks Co. KS.
API# - 15-163-23,265
K.B. - 8' ABOVE G.L.
G.L. - 1973'
SURFACE CSN - 8 5/8" @ 247' WITH 145 SX 60/40
RTD - 3531'
LTD - 3531' (ELI RAG LOG 8/11/95)
PRODUCTION CSN - 4 1/2", 10.5# @ 3530' WITH 125 SX EA-2.
PORT COLLAR - 1465'
TWO-STAGE CEMENT - 250 SX CIRCULATED TO SURFACE.
TOP OF CEMENT - 2925'
PBTD - 3487' (ELI 8/17/95)
PERFORATIONS - ARBUCKLE------3451'-3452' 2/FT. 10/16/95
ARBUCKLE------3438'-3441' 2/FT. 10/16/95
LANSING-J------3348'-3350' 4/FT. 10/17/95
TUBING RAN - 15' MA, SN, 108 JTS. 2 3/8" (3453.51')
TUBING SET @ - 3474.86'
AVER TUB. JT - 31.98'
PUMP RAN - 2" X 1 1/2" X 14' RWTC WITH STRAINER
RODS RAN - PUMP, 2', 136-3/4", 6',6',4',4',2', P.R.
PUMP SET @ - 3459.61'
PUMPING UNIT - HELLSTAR 114, MODEL-114-73, S.N. - 10170 WITH 74".
MOTOR - 25 HP ELECTRIC.
GUN BBL - 12 1/2' X 15' 300 BBL STEEL.
STOCK TANK - 1 - 12' X 12 1/2' 250 BBL STEEL.
WATER TANK - NONE
8/17/95
ELI WIRELINE ON LOCATION TO RUN CORRELATION & BOND LOG. FOUND PBTM - 3487' (12' HIGH TO TOP OF INSERT @ 3499') FOUND TOP OF CEMENT - 2925' WITH EXCELLENT CEMENT BONDING.

10/16/95
KIowa WELL SERVICE ON LOCATION, RIG UP D-D DERRICK. SWAB WELL DOWN TO 3200' FROM SURFACE.
ELI ON LOCATION TO PERFORATE PROPOSED INTERVALS IN ARBUCKLE. PERFORATED ARBUCKLE - 3451'-3452' WITH 2 SHOTS/FT. EXPENDABLE GUN. PERFORATED ARBUCKLE - 3438'-3441' WITH 2 SHOTS/FT. EXPENDABLE GUN. FOUND TTL DEPTH @ 3487'.

KIowa SWABBED WELL DOWN TO PBTM - 3487' WITH SHOW OF OIL. 1/2 HR NATURAL TEST - RECOVERED 10' FLUID, VERY GOOD SHOW OIL.

HALLIBURTON ON LOCATION TO ACIDIZE ARBUCKLE PERFS 3451'-52' & 3438'-41' WITH 500 GALS 15% FE MCA ACID WITH 12 BALL SEALERS.

ACIDIZED ARBUCKLE PERFS AS FOLLOWS:
PUMP 150 GALS 15% FE MCA ACID.
PUMP 350 GALS 15% FE MCA ACID WITH 1 BALL/29 GALS ACID.
LOAD HOLE WITH FIELD BRINE.
PRESSURED TO 1200 psi, BROKE BACK TO 300 psi.
DISPLACED ACID IN INTERVALS UP TO 4 BPM - 250 psi.
NOTE: SAW NO NOTICEABLE BALL ACTION THROUGHOUT JOB.
ISIP - 100 psi, VAC - 1 MINUTE. TTL LOAD - 68 BBLs.

KIowa RIGGED TO SWAB TEST ARBUCKLE AFTER ACID.

TEST ARBUCKLE PERFS AFTER ACID AS FOLLOWS:
FOUND FL. LEV. @ 100' FROM SURFACE.
SWABBED WELL DOWN, RECOVERED 53.24 BBLs, 14% OIL.
1/2 HR. TEST - RECOVERED 1.16 BBLs, 50% OIL.
1 HR. TEST - RECOVERED 1.16 BBLs, 47% OIL.

HALLIBURTON ON LOCATION TO RE-ACIDIZE ARB PERFS W/2000 GALS 15% DSFE

RE-Acidized ARBUCKLE PERFS AS FOLLOWS:
PUMP 500 GALS 15% DSFE WITH 15 BALL SEALERS EQUALLY DISTRIBUTED.
PUMP 1500 GALS 15% DSFE ACID.
LOADED HOLE WITH 7 BBLs FIELD BRINE.
DISPLACED 100 GALS ACID @ 6 BPM - 250 psi TO 2200 psi (BALLED OFF RUN SWAB).
DISPLACED REMAINING 1900 GALS ACID @ 6 BPM - 280 psi TO 350 psi.
ISIP - 150 GALS. VAC - 1 MIN. TTL LOAD - 113 BBLs.

TEST ARBUCKLE AFTER RE-ACIDIZATION AS FOLLOWS:
SWABBED WELL DOWN RECOVERED 56.84 BBLs.
1/2 HR. TEST - RECOVERED 1.74 BBLs @ 46% OIL.
1/2 HR. TEST - RECOVERED 1.16 BBLs @ 44% OIL.
SHUT DOWN FOR THE NIGHT.
10/17/95

SICP - 0 psi, FLUID LEVEL - 2200' DOWN, FREE OIL - 700', OIL % - 56%
SBHP - 515 psi.
SWAB WELL DOWN & RECOVERED 17.69 BBL.$

**CONTINUE TESTING ARBUCKLE AS FOLLOWS:**

1 HR. TEST - RECOVERED 1.45 BBL.$ @ 43% OIL.
1 HR. TEST - RECOVERED 1.16 BBL.$ @ 46% OIL.

HALLIBURTON ON LOCATION WITH RBP.
MURFIN ON LOCATION WITH 101 JTS. 2 3/8" TBG (3218') FROM GALLAGHER.
RIH - WITH RBP & TBG.
SET RBP @ 3200'. SPOT 1 SK SAND ON PLUG.
POOH - WITH TBG.

HALLIBURTON ON LOCATION TO CEMENT TOP PORTION OF PRODUCTION CSN.

**2-STAGE PRODUCTION CSN AS FOLLOWS:**

TIE INTO PORT COLLAR WITH TBG @ 1465' AND OPEN TOOL.
PUMP INTO PORT COLLAR AND ESTABLISH BLOW ON ANNULUS.
MIX & PUMP 250 SX HALLIBURTON LITE CEMENT.
CIRCULATED 25 SX CEMENT TO SURFACE.
CLOSE PORT COLLAR, REVERSE CIRCULATED CLEAN.
POOH - WITH TBG & RBP.

**NOTE:** MARION SCHMIDT WITH KCC DISTRICT - 4 WITNESSED ALTERNATE-2 CEMENT JOB.
SHUT DOWN FOR THE NIGHT.

10/18/95

ELI WIRELINE ON LOCATION TO PERFORATE PROPOSED INTERVAL IN LANSING-J.
PERFORATED LANSING-J - 3348'-3350' 4 SHOTS/FT. EXPENDABLE CSN GUN.

HALLIBURTON ON LOCATION WITH RBP & RTTS PACKER.
RIH - WITH RBP, RTTS, & TBG.
SET RBP - 3390', SET RTTS - 3331'.
KWS SWABBED WELL DOWN TO 3331'. FOUND FL. LEV. 900' DOWN.

HALLIBURTON ON LOCATION TO ACIDIZE LANS-J WITH 250 GALS 15% MCA.

**ACIDIZED LANS-J AS FOLLOWS:**
PUMP 250 GALS 15% MCA.
LOAD HOLE & STARTED FEEDING.
DISPLACED ACID @ 2 BPM - 300 psi.
ISIP - 100 psi, VAC - 3 MINUTES, TTL LOAD - 21 BBL.$

**TEST LANSING-J AFTER ACID AS FOLLOWS:**
SWAB WELL DOWN & RECOVERED 13.37 BBL.$, GOOD SHOW OIL.
1/2 HR. TEST - RECOVERED 1.16 BBL.$ @ 27% OIL.

HALLIBURTON ON LOCATION TO RE-ACIDIZE LANS-J WITH 1000 GALS 15% SGA.

**RE-ACIDIZED LANS-J AS FOLLOWS:**
PUMP 1000 GALS 15% SGA ACID.
DISPLACED ACID @ 2 BPM - 200 psi TO 400 psi, OVER-FLUSHED WITH 6 BBL.$.
ISIP - 100 psi, VAC - 5 MINS, TTL LOAD - 43 BBL.$
10/18/95 CONT.

TEST LANS J AFTER RE-ACIDIZATION AS FOLLOWS:
SWAB WELL DOWN & RECOVERED 31.90 BBL'S WITH SHOW OF OIL.
1/2 HR TEST - RECOVERED 1.45 BBL'S @ 22% OIL.

POOH - WITH TBG, RTTS PACKER, & RBP.
RIG TO RUN PRODUCTION TUBING

RAN PRODUCTION TUBING AS FOLLOWS:
MUD ANCHOR X 2 3/8" 15.25'
SEATING NIPPLE X 2 3/8" 1.10'
108 JTS. 2 3/8" USED T&D TUBING 3453.51'
K.B. (8' < 3' ABOVE G.L.) 5.00'
TUBING SET @ 3474.86'
SEATING NIPPLE SET @ 3459.61'

SHUT DOWN FOR THE NIGHT.

10/19/95

RIGGED TO RUN RE-BUILT PUMP & RODS FROM GALLAGHER LEASE.

RUN PUMP & RODS AS FOLLOWS:
2" X 1 1/2" X 14' RWTC WITH STRAINER 16.00'
2' X 3/4" ROD SUB 2.00'
136-3/4" RODS USED 3400.00'
6',6',4',4',2' X 3/4" ROD SUBS 22.00'
1 1/4" X 16' POLISHED ROD 16.00'
PUMP SET @ 3459.61'

CLAMPED RODS OFF. RIG DOWN & MOVED OFF LOCATION.

10/20/95

MURFIN ON LOCATION WITH CAT.
BUILT PUMPING UNIT GRADE TO NORTH OF WELL.
BUILT TANK BATTERY GRADE TO EAST OF EXISTING TANK GRADE ON MUIR #1.

TOTAL LEASE SERVICE ON LOCATION WITH HELLSTAR 114 PUMPING UNIT WITH
25 HP ELECTRIC MOTOR FROM GALLAGHER LEASE & SET.

TOTAL LEASE SERVICE ON LOCATION WITH 12 1/2' X 15' 300 BBL STEEL GUN BBL
AND 12 1/2' X 12' 250 BBL STEEL STOCK TANK FROM GALLAGHER LEASE.
SET UP TANK BATTERY.

HOOKED UP WELL HEAD AND LAYED APPROX 400' OF 2" SCH-40 LEAD LINE.

10/23/95

NORTON DECATUR ON LOCATION & SET ELECTRIC SERVICE.
STEVES ON LOCATION & HOOKED UP ELECTRIC MOTOR.
GUN BBL BEING REPAIRED.
WILL PUT WELL IN SERVICE WITHIN THE WEEK.

END OF REPORT.
# Halliburton Invoice

## Invoice Details
- **Customer:** Oil Producers Inc., of Kansas
- **Vendor:** Halliburton
- **Location:** Wichita, KS 67208
- **Date:** 08/12/1995
- **Reference No.:** 15163-23265-00-00
- **File No.:** 94585

## Pricing Area - Mid Continent

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mileage Cementing Round Trip</td>
<td>100 MI</td>
<td>UNT</td>
<td>2.75</td>
<td>275.00</td>
</tr>
<tr>
<td>Cementing Casing</td>
<td>3531 FT</td>
<td>UNT</td>
<td>1,570.00</td>
<td>1,570.00</td>
</tr>
<tr>
<td>Clayfix II</td>
<td>2 GAL</td>
<td>UNT</td>
<td>28.00</td>
<td>56.00</td>
</tr>
<tr>
<td>Mid Flush</td>
<td>500 G AL</td>
<td>UNT</td>
<td>.85</td>
<td>425.00</td>
</tr>
<tr>
<td>Guide Shoe - 4 1/2&quot; 8RD THD.</td>
<td>1 EA</td>
<td>UNT</td>
<td>95.00</td>
<td>95.00</td>
</tr>
<tr>
<td>Centralizer 4-1/2 X 7-7/8</td>
<td>7 EA</td>
<td>UNT</td>
<td>50.00</td>
<td>350.00</td>
</tr>
<tr>
<td>4 1/2&quot; Latch Down Baffle</td>
<td>1 EA</td>
<td>UNT</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>3-Wiper L-D Plug - 4 1/2&quot;</td>
<td>1 EA</td>
<td>UNT</td>
<td>159.00</td>
<td>159.00</td>
</tr>
<tr>
<td>Cement Basket 4 1/2&quot;</td>
<td>2 EA</td>
<td>UNT</td>
<td>105.00</td>
<td>210.00</td>
</tr>
<tr>
<td>Baker Port Collar</td>
<td>1 EA</td>
<td>UNT</td>
<td>1,000.00</td>
<td>1,000.00</td>
</tr>
<tr>
<td>Cement - Standard</td>
<td>125 SK</td>
<td>UNT</td>
<td>8.86</td>
<td>1,076.50</td>
</tr>
<tr>
<td>Cement - 50/75 POMIX Standard</td>
<td>35 SK</td>
<td>UNT</td>
<td>6.75</td>
<td>236.25</td>
</tr>
<tr>
<td>Halliburton Gel 2X</td>
<td>100 LB</td>
<td>UNT</td>
<td>.00</td>
<td>N/C</td>
</tr>
<tr>
<td>Salt</td>
<td>1000 LB</td>
<td>UNT</td>
<td>.15</td>
<td>150.00</td>
</tr>
<tr>
<td>Halad-312</td>
<td>82 LB</td>
<td>UNT</td>
<td>7.00</td>
<td>566.00</td>
</tr>
<tr>
<td>Cal Seal 60</td>
<td>6 SK</td>
<td>UNT</td>
<td>25.90</td>
<td>155.40</td>
</tr>
<tr>
<td>Pulk Service Charge</td>
<td>107 CFT</td>
<td>UNT</td>
<td>1.35</td>
<td>245.70</td>
</tr>
<tr>
<td>Mileage Cmtc Mat Del or Return</td>
<td>408,450 THD</td>
<td>UNT</td>
<td>.90</td>
<td>388.03</td>
</tr>
</tbody>
</table>

## Invoice Subtotal: 2,338.88

## Invoice Amount: 1,932.42

---

**Terms:** If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but not to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 30% of the unpaid account, plus all collection and court costs.
**INVOICE**

**CUSTOMER COPY**

**INVOICE NO.** 839929  **DATE** 08/12/1995

**REMIT TO:**

P.O. BOX 951046
DALLAS, TX 75395-1046

**HALLIBURTON**

**ORIGINAL**

**WELL LEASE NO./PROJECT** B-K-1  **PROJECT CODE** BOOKS

**WELL/PROJECT LOCATION** KS, SAME

**OWNER**

**SERVICE LOCATION** DUKE DRILLING #1  **CONTRACTOR** CEMENT PRODUCTION CASING 08/12/1995

**JOB PURPOSE**

**PAY TO**

**ACCT. NO.** 46989  **CUSTOMER AGENT** BRAD STROK

**VENDOR NO.** 17  **CUSTOMER P.C. NUMBER** 17

**SHIPPED VIA** COMPANY TRUCK  **FILE NO.** 34585

**DIRECT CORRESPONDENCE TO:**

OIL PRODUCERS INC. OF KANSAS
BOX 6647
WICHITA, KS 67208

**P.O. BOX 1598**

LIBERAL, KS 67905-0000

**REFERENCE NO.**  **DESCRIPTION**  **QUANTITY**  **UN**  **UNIT PRICE**  **AMOUNT**

- KANSAS STATE SALES TAX 5  23  105.75
- HAYS CITY SALES TAX 9-11  37.92

**INVOICE TOTAL - PLEASE PAY THIS AMOUNT** $5,630.14

**TERMS:** If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but not to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.
<table>
<thead>
<tr>
<th>PRICE REFERENCE</th>
<th>SECONDARY REFERENCE/ PART NUMBER</th>
<th>ACCOUNTING LOC</th>
<th>ACCT.</th>
<th>DP</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>U/M</th>
<th>QTY</th>
<th>U/M</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>001-111</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MILEAGE</td>
<td>100</td>
<td>Mi</td>
<td></td>
<td></td>
<td>2.125</td>
<td>2125.00</td>
</tr>
<tr>
<td>001-016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PUMP SERVICE</td>
<td>353</td>
<td>Ft</td>
<td></td>
<td></td>
<td>6.030</td>
<td>2125.00</td>
</tr>
<tr>
<td>314-162</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CURV FOR IT</td>
<td>26</td>
<td>Mf</td>
<td></td>
<td></td>
<td>23.00</td>
<td>603.00</td>
</tr>
<tr>
<td>013-515</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MOD CLASH</td>
<td>6</td>
<td>D</td>
<td></td>
<td></td>
<td>50.00</td>
<td>300.00</td>
</tr>
<tr>
<td>40</td>
<td>825.301</td>
<td></td>
<td></td>
<td></td>
<td>GUIDE SLIDE</td>
<td>1</td>
<td>Ea</td>
<td></td>
<td></td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>40</td>
<td>809,600</td>
<td></td>
<td></td>
<td></td>
<td>CONTRACTORS (4)</td>
<td>7</td>
<td>Ea</td>
<td></td>
<td></td>
<td>44.00</td>
<td>308.00</td>
</tr>
<tr>
<td>014</td>
<td>801.031</td>
<td></td>
<td></td>
<td></td>
<td>OPEN BOWD BOWD</td>
<td>1</td>
<td>Ea</td>
<td></td>
<td></td>
<td>159.00</td>
<td>159.00</td>
</tr>
<tr>
<td>014</td>
<td>801.031</td>
<td></td>
<td></td>
<td></td>
<td>GUTHE BOWD BOWD</td>
<td>2</td>
<td>Ea</td>
<td></td>
<td></td>
<td>159.00</td>
<td>318.00</td>
</tr>
<tr>
<td>73</td>
<td>283.001</td>
<td></td>
<td></td>
<td></td>
<td>BASKETS</td>
<td>2</td>
<td>Ea</td>
<td></td>
<td></td>
<td>47.00</td>
<td>130.00</td>
</tr>
</tbody>
</table>

**LEGAL TERMS:** Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

**CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES**

The customer hereby acknowledges receipt of the materials and services listed on this ticket.

**DATE SIGNED:** 8-12-95

**TIME SIGNED:** 09:15 A.M.

**CUSTOMER FOR CUSTOMER'S AGENT (PLEASE PRINT):**

**CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE):**

**HALLIBURTON OPERATOR/ENGINEER:**

**HALLIBURTON APPROVAL:**

**APPLICABLE TAXES WILL BE ADDED ON INVOICE:**

**PAGE TOTAL:** 4495.00

**FROM CONTINUATION PAGE(S):** 2998.33

**SUB-TOTAL:** 7493.33
<table>
<thead>
<tr>
<th>PRICE REFERENCE</th>
<th>SECONDARY REFERENCE/ PART NUMBER</th>
<th>ACCOUNTING LOG</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>U/M</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>504-308</td>
<td>1</td>
<td></td>
<td>Standard Cement</td>
<td>125</td>
<td></td>
<td>8.86</td>
<td>1,107.50</td>
</tr>
<tr>
<td>504-130</td>
<td>1</td>
<td></td>
<td>50/50 Pozmix Standard</td>
<td>35</td>
<td></td>
<td>6.75</td>
<td>236.25</td>
</tr>
<tr>
<td>506-121</td>
<td>1</td>
<td></td>
<td>Isk Halliburton Gal@2%</td>
<td>n/c</td>
<td></td>
<td>n/c</td>
<td>n/c</td>
</tr>
<tr>
<td>509-968</td>
<td>1</td>
<td></td>
<td>Salt</td>
<td>1000</td>
<td>lb</td>
<td>15.00</td>
<td>150.00</td>
</tr>
<tr>
<td>507-775</td>
<td>1</td>
<td></td>
<td>Halad-322</td>
<td>88</td>
<td>lb</td>
<td>7.00</td>
<td>616.00</td>
</tr>
<tr>
<td>508-127</td>
<td>1</td>
<td></td>
<td>Cal Seal</td>
<td>6</td>
<td></td>
<td>25.90</td>
<td>155.40</td>
</tr>
</tbody>
</table>

- **SERVICE CHARGE**: 182
- **CUBIC FEET**: 1,35
- **MILEAGE CHARGE**: 16,338
- **TOTAL WEIGHT**: 408,430
- **LOADED MILES**: 95
- **TON MILES**: 388.03

**CONTINUATION TOTAL**: 2,898.88
**WELL DATA**

- **FIELD**
- **SEC.** 14
- **TWP.** 7
- **RNG.** 19 W
- **COUNTY** ROOKS
- **STATE** KS
- **FORM**
- **INITIAL PROD.** OIL
- **PRESENT PROD.** OIL
- **COMPLETION DATE**
- **MUD TYPE**
- **MUD WT.**
- **PACKER TYPE**
- **BOTTOM HOLE TEMP.**
- **PRESSURE**
- **TOTAL DEPTH**

**TOOLS AND ACCESSORIES**

<table>
<thead>
<tr>
<th>TYPE AND SIZE</th>
<th>QTY.</th>
<th>MAKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLOAT COLLAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLOAT SHOE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GUIDE SHOE</td>
<td>1</td>
<td>HOWCO</td>
</tr>
<tr>
<td>CENTRALIZERS</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>BOTTOM PLUG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOP PLUG</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>HEAD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BASKETS</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>POST COLLAR</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**MATERIALS**

- **TREAT. FLUID**
- **DISPL. FLUID**
- **PROP. TYPE**
- **PROP. SIZE**
- **ACID TYPE**
- **ACID TYPE**
- **ACID TYPE**
- **SURFACTANT TYPE**
- **NE AGENT TYPE**
- **FLUID LOSS ADD. TYPE**
- **GELLING AGENT TYPE**
- **FRIC. RED. AGENT TYPE**
- **BREAKER TYPE**
- **BLOCKING AGENT TYPE**
- **PERPAC BALLS TYPE**
- **OTHER**

**CEMENT DATA**

<table>
<thead>
<tr>
<th>STAGE</th>
<th>NUMBER OF SACKS</th>
<th>CEMENT BRAND</th>
<th>BULK SACKED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25</td>
<td>50/150</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>12.5</td>
<td>EA-2</td>
<td>B</td>
</tr>
</tbody>
</table>

**PRESSURES IN PSI**

- **CIRCULATING**
- **BREAKDOWN**
- **AVERAGE**
- **SHUT-IN INSTANT**
- **HYDRAULIC HORSEPOWER**
- **ORDERED**
- **TREATING**
- **FEET** 30.5' REASON LATE arriving

**SUMMARY**

- **VOLUMES**
- **LOAD & RINSE**
- **TREATMENT**
- **CEMENT SLURRY**
- **TOTAL VOLUME**
- **REMARKS**

**FIELD OFFICE**
<table>
<thead>
<tr>
<th>CHART NO.</th>
<th>TIME</th>
<th>RATE (BPM)</th>
<th>VOLUME (GAL)</th>
<th>PUMPS T</th>
<th>PRESSURE (PSI)</th>
<th>TUBING C</th>
<th>CASING</th>
<th>DESCRIPTION OF OPERATION AND MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>8-11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CALL BID - OUT</td>
</tr>
<tr>
<td>2145</td>
<td>8-11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ORIGINAL</td>
</tr>
<tr>
<td>0125</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BREAK CIRCULATION</td>
</tr>
<tr>
<td>0203</td>
<td>6</td>
<td>12</td>
<td>✓</td>
<td></td>
<td>300 PUMP MUDFLUSH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0206</td>
<td>6</td>
<td>20</td>
<td>✓</td>
<td></td>
<td>300 PUMP CAVITATION PENDING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0219</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>PLUG BONDING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0211</td>
<td>6</td>
<td>33.3</td>
<td>✓</td>
<td></td>
<td>250 MIX CEMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0218</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>WASH OUT PUMP - LEAKS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0229</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RESTART PUMP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0230</td>
<td>7</td>
<td>0</td>
<td>✓</td>
<td></td>
<td>600 HSTR PUMP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0231</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1500 PLUG DOWN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>JOB COMPLETE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Final Notes:**
- Pump Time: 30 min
- Main Off
- Wash Off
- Turn
**INVOICE**

**HALLIBURTON**

**CUSTOMER COPY**

**INVOICE NO.:** 839905  **DATE:** 08/07/1995

**WELL/LEASE NO./PROJECT:** B-31

**BOOKS**

**STATE:** KS  **OWNER:** SAME

**SERVICE LOCATION:** HAYS

**CONTRACTOR:** DUKE DRILLING

**JOB PURPOSE:** CEMENT SURFACE CASING  **TICKET DATE:** 08/07/1995

**ACCT. NO.:** 649589  **CUSTOMER AGENT:** H A MOORE  **FILE NO.:** 94587

**VENDOR NO.:** COMPANY, TRUCK

**SHIPPED VIA:**

---

**ORIGINAL**

**DIRECT CORRESPONDENCE TO:**

**OIL PRODUCERS INC. OF KANSAS**

**BOX 8647**

**WICHITA, KS 67208**

---

**REFERENCE NO.**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
<th>UM</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILEAGE CEMENTING ROUND TRIP</td>
<td>100</td>
<td>MI</td>
<td>2.75</td>
<td>278.00</td>
</tr>
<tr>
<td>CEMENTING CASING</td>
<td>237</td>
<td>PT</td>
<td>555.00</td>
<td>555.00</td>
</tr>
<tr>
<td>WOODEN PLUG</td>
<td>3/8</td>
<td>IN</td>
<td>95.00</td>
<td>95.00</td>
</tr>
<tr>
<td>CEMENT - 40/60 POZNIX STANDARD</td>
<td>145 SK</td>
<td></td>
<td>7.16</td>
<td>1,038.20</td>
</tr>
<tr>
<td>HALLIBURTON-GEL 3%</td>
<td>200 LB</td>
<td></td>
<td>.00</td>
<td>N/C</td>
</tr>
<tr>
<td>ANHYDROUS CALCIUM CHLORIDE</td>
<td>4 SK</td>
<td></td>
<td>36.75</td>
<td>147.00</td>
</tr>
<tr>
<td>BULK SERVICE CHARGE</td>
<td>153 CFT</td>
<td></td>
<td>1.35</td>
<td>206.55</td>
</tr>
<tr>
<td>MILEAGE CM TO NAT DEL OR RETURN</td>
<td>305.525 TMI</td>
<td>.95</td>
<td>280.25</td>
<td></td>
</tr>
</tbody>
</table>

**INVOICE SUBTOTAL**

2,637.00

**DISCOUNT-(BID)**

843.83%

**INVOICE BID AMOUNT**

1,793.17

---

**KANSAS STATE SALES TAX**

59.21

**HAYS CITY SALES TAX**

12.08

---

**INVOICE TOTAL - PLEASE PAY THIS AMOUNT**

$1,864.46

---

**TERMS:** If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 10% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid amount plus all collection and court costs.
**HALLIBURTON ENERGY SERVICES**

**SERVICE LOCATIONS**

<table>
<thead>
<tr>
<th>SERVICE LOCATION</th>
<th>WELL/PROJECT NO.</th>
<th>LEASE</th>
<th>COUNTY/Parish</th>
<th>STATE</th>
<th>CITY/OFFSHORE LOCATION</th>
<th>DATE</th>
<th>OWNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hay, KS 25525</td>
<td>#B-91</td>
<td>Roy</td>
<td>Wash.</td>
<td>KS</td>
<td>#1 Well Site</td>
<td>8-7-95</td>
<td>Same</td>
</tr>
</tbody>
</table>

**CONTRACTOR**

Duke Drilling Co

**RECEIVED**

Duke Drilling Co

**WELL TYPE**

- 01

**WELL CATEGORY**

- 01

**JOB PURPOSE**

- 010

**REFERRAL LOCATION**

- 4-17-19

---

**ACCOUNTING**

<table>
<thead>
<tr>
<th>PRICE REFERENCE</th>
<th>SECONDARY REFERENCE/ PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>U/M</th>
<th>QTY.</th>
<th>U/M</th>
</tr>
</thead>
<tbody>
<tr>
<td>000-117</td>
<td></td>
<td>MILEAGE 2297 m</td>
<td>1</td>
<td>R1</td>
<td>100</td>
<td>m.</td>
</tr>
<tr>
<td>001-016</td>
<td></td>
<td>Pump Service</td>
<td>1</td>
<td></td>
<td>239</td>
<td>ft.</td>
</tr>
<tr>
<td>030-503</td>
<td></td>
<td>Wooden Plug</td>
<td>1</td>
<td></td>
<td>1 ea</td>
<td>8.78 in</td>
</tr>
</tbody>
</table>

---

**LEGAL TERMS:** Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

**DATE SIGNED**

8-7-95

---

**CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES**

The customer hereby acknowledges receipt of the materials and services listed above.

---

**SIGNATURES**

Customer or Customer's Agent (Signature):

Customer or Customer's Agent (Please Print):

---

**PAGE TOTAL**

1682.00
<table>
<thead>
<tr>
<th>PRICE REFERENCE</th>
<th>SECONDARY REFERENCE PART NUMBER</th>
<th>ACCOUNTING</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>U/M</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>504-136</td>
<td></td>
<td>1</td>
<td>40/60 Pozmix-Standard</td>
<td>145</td>
<td></td>
<td></td>
<td>7.16</td>
</tr>
<tr>
<td>506-121</td>
<td></td>
<td>1</td>
<td>Zek Halliburton Gel92%</td>
<td></td>
<td></td>
<td></td>
<td>n/a</td>
</tr>
<tr>
<td>509-406</td>
<td></td>
<td>1</td>
<td>Calcium Chloride</td>
<td>4</td>
<td></td>
<td></td>
<td>36.75</td>
</tr>
</tbody>
</table>

|                      |                                 |            | SERVICE CHARGE | CUBIC FEET | 153  | 1.35 | 206.55   |
|                      |                                 |            | MILEAGE CHARGE | TOTAL MILES | 12122 | 95   | 290.25   |
|                      |                                 |            | LOADED MILES   | 50          |      |      |          |
|                      |                                 |            | TON MILES      | 303.525     |      |      |          |

CONTINUATION TOTAL: 1,682.00
**HALLIBURTON SUMMARY**

**FIELD**

- **FIELD NAME**
- **TYPE**

**WELL DATA**

- **SEC.** 4
- **TWP.** 7
- **RNG.** 19
- **COUNTY** Books
- **STATE** KS

**FORMATION NAME**

- **TYPE**

**INITIAL PROD.**

- **OIL**
- **WATER**
- **GAS**

**PRESENT PROD.**

- **OIL**
- **WATER**
- **GAS**

**COMPLETION DATE**

- **MUD TYPE**
- **MUD WT.**

**PACKER TYPE**

- **SET WT.**

**BOTTOM HOLE TEMP.**

- **PRESSURE**

**MISC. DATA**

- **TOTAL DEPTH** 2,742

**JOBSITE DATA**

- **Dated** 8-7-95
- **Time** 1,200

- **Dated** 8-7-95
- **Time** 1,500

**NEW**

- **USED**
- **WELL**
- **MAXIMUM PSI ALLOWABLE**

**LINER**

- **TUBING**
- **OPENHOLE**

**PERFORATIONS**

**PERSONNEL AND SERVICE UNITS**

- **NAME**
- **UNIT NO. & TYPE**
- **LOCATION**

**MATERIALS**

- **TREAT. FLUID**
- **DENSITY**

- **DISPL. FLUID**
- **DENSITY**

- **PROP. TYPE**
- **SIZE**

**OTHER**

- **ACID TYPE**
- **SURFACTANT TYPE**
- **NE AGENT TYPE**
- **FLUID LOSS ADD. TYPE**
- **GELING AGENT TYPE**
- **FRAC. RESIST. TYPE**
- **BREAKER TYPE**
- **BLOCKING AGENT TYPE**
- **PERFPAC BALLS TYPE**

**CEMENT DATA**

- **STAGE**
- **NUMBER OF BAGS**
- **CEMENT**
- **BRAND**
- **BULK SACKED**

**ADDITIVES**

- **YIELD**
- **MIXED LBS./GAL.**

**PRESSURES IN PSI**

- **CIRCULATING**
- **BREAKDOWN**
- **AVERAGE**
- **SHUT-IN INSTANT**
- **HYDRAULIC HORSEPOWER**

**SUMMARY**

- **LOAD & SKID**
- **TREATMENT**
- **CEMENT SLURRY**

**REMARKS**

- **STATE CORRECTED**
- **DEP. 10-18-95**

See Job Log + Chart

Thanks Allen & Ron

FIELD OFFICE
<table>
<thead>
<tr>
<th>CHART NO.</th>
<th>TIME</th>
<th>DATE (HRS)</th>
<th>VOLUME (BDL.)</th>
<th>PUMPS</th>
<th>PRESSURE (PSI)</th>
<th>DESCRIPTION OF OPERATION AND MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1200</td>
<td>1200</td>
<td></td>
<td></td>
<td></td>
<td>Called Out</td>
</tr>
<tr>
<td></td>
<td>1400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Galocation Rig Drilling</td>
</tr>
<tr>
<td>11.58</td>
<td>17.23</td>
<td>ORIGINAL</td>
<td></td>
<td></td>
<td></td>
<td>Davis Safety, set up Equip</td>
</tr>
<tr>
<td>17.45</td>
<td>19.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start out of hole w/ O.P.</td>
</tr>
<tr>
<td>18.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hole cut 242'</td>
</tr>
<tr>
<td>5</td>
<td>21.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start out of hole w/ O.P.</td>
</tr>
<tr>
<td>29.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rig up to Run 8 5/8 csl 28160l/cm</td>
</tr>
<tr>
<td>19.00</td>
<td>12.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40th Start O.D. 157 cm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40th Field s/s Plug Down Shut In</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Job Complete</td>
</tr>
</tbody>
</table>

Thanks Allen, Ron Doug
HALLIBURTON
SUMMARY

WELL DATA
FIELD: 
SEC: 4 TWP: 7 RNG: 15 COUNTY: Pott. STATE: KS
FORMATION NAME: TYPE:
FORMATION THICKNESS: FROM: TO:
INITIAL PROD: OIL: BPD, WATER: BPD, GAS: MCFPD
PRESENT PROD: OIL: BPD, WATER: BPD, GAS: MCFPD
COMPLETION DATE: MUD TYPE: MUD WT:
Packer TYPE: SET AT:
BOTTOM HOLE TEMP.: PRESSURE:
MISC. DATA: TOTAL DEPTH:

JOB DATA
CALLED OUT ON LOCATION JOB STARTED JOB COMPLETED
DATE: 8-7-96 TIME: 1200 DATE: 8-7-96 TIME: 1500 DATE: 8-7-96 TIME: 1930

PERSONNEL AND SERVICE UNITS
NAME: W. J. Worley, Jr. UNIT NO. & TYPE: Pit.
LOCATION: Hay, KS

MATERIALS
TREAT. FLUID: DENSITY: LB/GAL API
DISPL. FLUID: DENSITY: LB/GAL API
PROP. TYPE: SIZE: LB
PROP. TYPE: SIZE: LB
ACID TYPE: GAL: %
ACID TYPE: GAL: %
ACID TYPE: GAL: %
ACID TYPE: GAL: %
SURFACTANT TYPE: GAL: %
NE AGENT TYPE: GAL: %
FLUID LOSS ADD. TYPE: GAL-LB: %
GELLING AGENT TYPE: GAL-LB: %
FRICTION AGENT TYPE: GAL-LB: %
BREAKER TYPE: GAL-LB: %
BLOCKING AGENT TYPE: GAL-LB: %
PERFOR BALLS TYPE: QTY:

CEMENT DATA
STAGE NUMBER OF SACKS CEMENT BRAND BULK SACKED ADDITIVES YIELD CU/FT/SK MIXED LBS/GAL

PRESSURES IN PSI
CIRCULATING: DISPLACEMENT:
BREAKDOWN: MAXIMUM:
AVERAGE: FRACTURE GRADIENT:
SHUT-IN: INSTANT: 5-MIN: 15-MIN:
HYDRAULIC HORSEPOWER:
ORDERED AVAILABLE AVERAGE RATES IN BPM
TREATING DISPL. CEMENT LEFT IN PIPE:
FEET:

SUMMARY
VOLUMES
PRESSLUSH: BBL-GAL. TYPE:
LOAD & BOND: BBL-GAL.
PAO: BBL-GAL.
TREATMENT: BBL-GAL.
DISPL.: BBL-GAL.

TOTAL VOLUME: BBL-GAL.

REMARKS

CUSTOMER

FORM 2025-R4
<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>DESCRIPTION OF OPERATION AND MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10:23</td>
<td>5</td>
<td>Original</td>
<td></td>
<td></td>
<td>Start job of hole 20 ft</td>
</tr>
<tr>
<td></td>
<td>12:05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rig up to run 29' to 32' BHP</td>
</tr>
<tr>
<td>11:52</td>
<td>17:23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Start pipe</td>
</tr>
<tr>
<td>18:22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Break 4 1/2&quot;</td>
</tr>
<tr>
<td>52</td>
<td>3:35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reel over pipe</td>
</tr>
<tr>
<td>20:50</td>
<td>1:11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mud flow off</td>
</tr>
<tr>
<td></td>
<td>2:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mud flow off</td>
</tr>
</tbody>
</table>

CUSTOMER
<table>
<thead>
<tr>
<th>REFERENCE NO.</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
<th>UM</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-115</td>
<td>MILEAGE SPEC. TOOLS ROUND TRIP</td>
<td>100</td>
<td>MI</td>
<td>1.50</td>
<td>150.00</td>
</tr>
<tr>
<td>110-056</td>
<td>RBP</td>
<td>3236</td>
<td>FT</td>
<td>885.00</td>
<td>2884.80</td>
</tr>
<tr>
<td>116-437</td>
<td>PORT COLLAR POSITIONER</td>
<td>1</td>
<td>EA</td>
<td>300.00</td>
<td>300.00</td>
</tr>
<tr>
<td>116-228</td>
<td>STRIPPER TYPE HEAD</td>
<td>140.00</td>
<td></td>
<td>140.00</td>
<td></td>
</tr>
<tr>
<td>000-117</td>
<td>MILEAGE CEMENTING ROUND TRIP</td>
<td>1</td>
<td>EA</td>
<td>2.65</td>
<td>285.00</td>
</tr>
<tr>
<td>009-019</td>
<td>PLUGGING BK SPOT CEMENT OR MUD</td>
<td>1465</td>
<td>FT</td>
<td>1,255.00</td>
<td>1,255.00</td>
</tr>
<tr>
<td>504-316</td>
<td>CEMENT - HALL. LIGHT STANDARD</td>
<td>220</td>
<td>SK</td>
<td>3.03</td>
<td>666.60</td>
</tr>
<tr>
<td>507-210</td>
<td>FLICELE</td>
<td>88</td>
<td>LB</td>
<td>1.65</td>
<td>143.20</td>
</tr>
<tr>
<td>510-222</td>
<td>SACKED SAND 20/40 &amp; SMALLER</td>
<td>2</td>
<td>SK</td>
<td>9.40</td>
<td>18.80</td>
</tr>
<tr>
<td>500-225</td>
<td>CEMENTING MATERIALS RETURNED</td>
<td>130</td>
<td>CFT</td>
<td>1.35</td>
<td>175.50</td>
</tr>
<tr>
<td>500-306</td>
<td>MILEAGE CMTG MAT RETURN</td>
<td>267,800</td>
<td>TMI</td>
<td>.95</td>
<td>254.41</td>
</tr>
<tr>
<td>500-207</td>
<td>BULK SERVICE CHARGE</td>
<td>358</td>
<td>CFT</td>
<td>1.35</td>
<td>483.30</td>
</tr>
<tr>
<td>500-306</td>
<td>MILEAGE CMTG MAT DEL OR RETURN</td>
<td>773,200</td>
<td>TMI</td>
<td>.95</td>
<td>734.54</td>
</tr>
<tr>
<td>109-017</td>
<td>RTTS PACKER 10-18-95</td>
<td>3330</td>
<td>FT</td>
<td>1,225.00</td>
<td>1,225.00</td>
</tr>
<tr>
<td>117-000</td>
<td>TUBING &amp; ROTARY SUBS-ON-SHORE</td>
<td>2</td>
<td>IN</td>
<td>35.00</td>
<td>35.00</td>
</tr>
<tr>
<td>200-111</td>
<td>MILEAGE FOR STIMULATION EQUIP</td>
<td>100</td>
<td>MI</td>
<td>2.85</td>
<td>285.00</td>
</tr>
<tr>
<td>200-024</td>
<td>PUMPING SERVICE FIRST 4 HRS</td>
<td>400</td>
<td>PSI</td>
<td>675.00</td>
<td>675.00</td>
</tr>
<tr>
<td>208-009</td>
<td>MCA ACID</td>
<td>20</td>
<td>%</td>
<td>3.38</td>
<td>595.00</td>
</tr>
<tr>
<td>201-004</td>
<td></td>
<td>250</td>
<td>GAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CONTINUED ON NEXT PAGE**

**TERMS:** If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twenty-first day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 10% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.
## Invoice Details

**Company:** Halliburton

**Invoice Number:** 15-163.23265-00-00

**Date:** 10/18/1996

**Customer:** Oil Producers Inc. of Kansas

**Address:**
- P.O. Box 1598
- Liberal, KS 67905-0000

**Description:**

<table>
<thead>
<tr>
<th>Reference No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>206-300</td>
<td>SGA RETARDED ACID</td>
<td>20 %</td>
<td></td>
<td>1.75</td>
<td>1,750.00</td>
</tr>
<tr>
<td>201-004</td>
<td></td>
<td></td>
<td>1000</td>
<td>GAL</td>
<td>105.00</td>
</tr>
<tr>
<td>210-013</td>
<td>HAI-85M</td>
<td>2</td>
<td>GAL</td>
<td>52.50</td>
<td>105.00</td>
</tr>
<tr>
<td>206-310</td>
<td>SGA-1</td>
<td>20</td>
<td>GAL</td>
<td>25.00</td>
<td>500.00</td>
</tr>
<tr>
<td>218-702</td>
<td>LOSURF-259</td>
<td>4</td>
<td>GAL</td>
<td>39.00</td>
<td>156.00</td>
</tr>
</tbody>
</table>

**Invoice Subtotal:** 11,920.15

**Discount:** 4,267.73

**Invoice Bid Amount:**

- Kansas State Sales Tax: 7,652.42
- Hays City Sales Tax: 112.76

**Total:** $7,788.19

**Terms:** If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

**Form:** HAL-1900-F
<table>
<thead>
<tr>
<th>PRICE REFERENCE</th>
<th>SECONDARY REFERENCE/ PART NUMBER</th>
<th>ACCOUNTING LOC</th>
<th>ACCT</th>
<th>DF</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>U/M</th>
<th>QTY.</th>
<th>U/M</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>18L 1115</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>MILEAGE # 122 (274)</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>12</td>
<td>150</td>
</tr>
<tr>
<td>16L 0156</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>RCP</td>
<td>20</td>
<td>1/4</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>600</td>
</tr>
<tr>
<td>144 452</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>Pierc  1/2</td>
<td>1</td>
<td>1/2</td>
<td>1</td>
<td>1</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>116 338</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>Stopper 1/2</td>
<td>1</td>
<td>1/2</td>
<td>1</td>
<td>1</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>11B 117</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>Workings 5/8 (274)</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>100 019</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>Pumps 8</td>
<td>165</td>
<td>1/2</td>
<td>1</td>
<td>1</td>
<td>12</td>
<td>120</td>
</tr>
</tbody>
</table>

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS.

DATE SIGNED: [Date]
TIME SIGNED: [Time]

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: The customer hereby acknowledges receipt of the materials and services listed on this ticket.

CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT): [Signature]
CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE): [Signature]
HALLIBURTON OPERATOR/ENGINEER: [Signature]
EMPL: [Number]
HALLIBURTON APPROVAL: [Signature]
<table>
<thead>
<tr>
<th>PRICE REFERENCE</th>
<th>SECONDARY REFERENCE/ PART NUMBER</th>
<th>ACCOUNTING</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>U/M</th>
<th>QTY.</th>
<th>U/M</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>111.317</td>
<td></td>
<td>1</td>
<td>HTR5</td>
<td>133</td>
<td>LBS</td>
<td>1000</td>
<td>LBS</td>
<td>19.50</td>
<td>20250</td>
</tr>
<tr>
<td>222.32</td>
<td></td>
<td>1</td>
<td>Tool Job</td>
<td>1</td>
<td></td>
<td>371</td>
<td></td>
<td>38.10</td>
<td>1400</td>
</tr>
<tr>
<td>333.33</td>
<td></td>
<td>1</td>
<td>Rulerage</td>
<td>1</td>
<td></td>
<td>120</td>
<td></td>
<td>85.50</td>
<td>1026</td>
</tr>
<tr>
<td>444.44</td>
<td></td>
<td>1</td>
<td>Pump Service</td>
<td>450</td>
<td></td>
<td>2000</td>
<td></td>
<td>67.50</td>
<td>13500</td>
</tr>
<tr>
<td>555.55</td>
<td></td>
<td>1</td>
<td>T/L 4-3</td>
<td>350</td>
<td></td>
<td>2000</td>
<td></td>
<td>21.70</td>
<td>7410</td>
</tr>
<tr>
<td>666.66</td>
<td></td>
<td>1</td>
<td>SCA-1 35-6</td>
<td>1200</td>
<td>LBS</td>
<td>2000</td>
<td>LBS</td>
<td>11.50</td>
<td>13000</td>
</tr>
<tr>
<td>777.77</td>
<td></td>
<td>1</td>
<td>HTH 35-6</td>
<td>40</td>
<td></td>
<td>40</td>
<td></td>
<td>25.00</td>
<td>1000</td>
</tr>
<tr>
<td>888.88</td>
<td></td>
<td>1</td>
<td>SCA-1</td>
<td>40</td>
<td></td>
<td>40</td>
<td></td>
<td>25.00</td>
<td>1000</td>
</tr>
<tr>
<td>999.99</td>
<td></td>
<td>1</td>
<td>Load/257</td>
<td>4</td>
<td></td>
<td>40</td>
<td></td>
<td>64.00</td>
<td>2560</td>
</tr>
</tbody>
</table>

**TOTALS**

**SERVICE CHARGE**

**CUBIC FEET**

**MILEAGE CHARGE**

**TOTAL WEIGHT**

**LOADED MILES**

**TON MILES**

**CONTINUATION TOTAL**
<table>
<thead>
<tr>
<th>PRICE REFERENCE</th>
<th>SECONDARY REFERENCE/ PART NUMBER</th>
<th>ACCOUNTING LOG</th>
<th>ACCT</th>
<th>DF</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>U/M</th>
<th>QTY.</th>
<th>U/M</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>504-316</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>Halliburton Light Cement</td>
<td>350</td>
<td>C/2</td>
<td></td>
<td></td>
<td>8.03</td>
<td>2,810 50</td>
</tr>
<tr>
<td>507-210</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>Flocele</td>
<td>88</td>
<td>1b</td>
<td></td>
<td></td>
<td>1.65</td>
<td>145 20</td>
</tr>
<tr>
<td>510-222</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>Sand 20/40</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>9.80</td>
<td>19 60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRICE REFERENCE</th>
<th>SECONDARY REFERENCE/ PART NUMBER</th>
<th>ACCOUNTING LOG</th>
<th>ACCT</th>
<th>DF</th>
<th>DESCRIPTION</th>
<th>CUBIC FEET</th>
<th>TOTAL WEIGHT</th>
<th>LOADED MILES</th>
<th>TON MILES</th>
</tr>
</thead>
<tbody>
<tr>
<td>500-207</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>SERVICE CHARGE</td>
<td>10712</td>
<td>30,928</td>
<td>50</td>
<td>773.200</td>
</tr>
<tr>
<td>500-306</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>MILEAGE CHARGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No. B 285472
**WELL DATA**

<table>
<thead>
<tr>
<th>FORMATION NAME</th>
<th>TYPE</th>
<th>FORMATION THICKNESS</th>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL PROD: OIL</td>
<td>BPO</td>
<td>WATER</td>
<td>BPO</td>
<td>GAS</td>
</tr>
<tr>
<td>PRESENT PROD: OIL</td>
<td>BPO</td>
<td>WATER</td>
<td>BPO</td>
<td>GAS</td>
</tr>
<tr>
<td>COMPLETION DATE</td>
<td>MUD TYPE</td>
<td>MUD WT</td>
<td>PACKER TYPE</td>
<td>SET AT</td>
</tr>
<tr>
<td>BOTTOM HOLE TEMP</td>
<td>PRESSURE</td>
<td>TOTAL DEPTH</td>
<td>3487</td>
<td></td>
</tr>
</tbody>
</table>

**NEW CASING**

- WEIGHT
- SIZE
- FROM
- TO
- MAXIMUM PSI

**NEW TUBING**

- WEIGHT
- SIZE
- FROM
- TO
- MAXIMUM PSI

**OPEN HOLE**

- Top Depth
- Percisions
- Shots/FT

**PERFORATIONS**

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>3430</td>
<td>3450</td>
</tr>
<tr>
<td>3450</td>
<td>3452</td>
</tr>
<tr>
<td>3398</td>
<td>3350</td>
</tr>
</tbody>
</table>

**PERSONNEL AND SERVICE UNITS**

- NAME
  - W. Bogart
  - J. Sherry
  - J. Byrd
  - J. Colbert
  - J. Blessing
- UNIT NO. & TYPE
- LOCATION
  - Hays, B.
  - Hays, B.
  - Kem
  - Kem
  - Kem
  - Kem

**DEPARTMENT**

- Tool - Cased Hole Stimulation

**DESCRIPTION OF JOB**

- Cased Top Outside Thru Perforated

**JOB DONE THRU**

- TUBING
- CASING
- ANCHOR
- TBG/ANN

**CUSTOMER REPRESENTATIVE**

- Signature

**HALLIBURTON OPERATOR**

- Signature

**CEMENT DATA**

<table>
<thead>
<tr>
<th>STAGE</th>
<th>NUMBER OF BOLTS</th>
<th>CEMENT</th>
<th>BRAND</th>
<th>BULK BACKED</th>
<th>ADDITIVES</th>
<th>YIELD</th>
<th>MIXED</th>
</tr>
</thead>
<tbody>
<tr>
<td>350</td>
<td></td>
<td>HLC</td>
<td>7 1/2</td>
<td>1/4&quot; Flock</td>
<td></td>
<td>1.84</td>
<td>137</td>
</tr>
</tbody>
</table>

**PRESSURES IN PSI**

- CIRCULATING
- DISPLACEMENT
- BREAKDOWN
- MAXIMUM
- AVERAGE
- FRACTURE GRADIENT
- SHUT-IN
- INSTANT
- HYDRAULIC HORSEPOWER
- ORDERED
- AVAILABLE
- USED
- AVERAGE RATES IN BPM
- TREATING
- DISPL.
- OVERALL
- CEMENT LEFT IN PIPE
- FEET
- REASON

**SUMMARY**

- PRESLUSH: BBL/GAL.
- TYPE
- LOAD & BID: BBL/GAL.
- PAD BBL/GAL.
- TREATMENT: BBL/GAL.
- DISP. BBL/GAL.
- 1146
- TOTAL VOLUME: BBL/GAL.

**REMARKS**

- See Chit + Job Log
- Thank You

**FIELD OFFICE**

- Date

---

**FORM 2025-R4**
<table>
<thead>
<tr>
<th>TIME</th>
<th>VOLUME (GAL)</th>
<th>PRESSURE (PSI)</th>
<th>DESCRIPTION OF OPERATION AND MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00</td>
<td></td>
<td></td>
<td>Called out</td>
</tr>
<tr>
<td>10:10</td>
<td></td>
<td></td>
<td>On low rig sucking trip</td>
</tr>
<tr>
<td>10:30</td>
<td></td>
<td></td>
<td>Start in hole with 4½ RPB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Port Collar opener</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prof. 3432-31, 3432-52</td>
</tr>
<tr>
<td>12:00</td>
<td></td>
<td></td>
<td>Set RPB a 32½”</td>
</tr>
<tr>
<td>12:15</td>
<td>1000</td>
<td></td>
<td>Load hole 48½’ test to 1000 ft. hold</td>
</tr>
<tr>
<td>12:40</td>
<td>11</td>
<td></td>
<td>Spot sand 1st 11½’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Full tubing to locate Port Closure</td>
</tr>
<tr>
<td>13:45</td>
<td>2</td>
<td>300</td>
<td>Open Port Closure</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28m 302‘ RLB: on Abandonded</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Staff mixing 350‘ Hb.</td>
</tr>
<tr>
<td>1400</td>
<td></td>
<td></td>
<td>Pumped 6’1’ get circulation to surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mixed 70½’ 200‘</td>
</tr>
<tr>
<td>1425</td>
<td>70</td>
<td></td>
<td>Circulated to surface</td>
</tr>
<tr>
<td></td>
<td></td>
<td>45</td>
<td>Displace 4½’ 4½’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Closed Port Collar</td>
</tr>
<tr>
<td>1500</td>
<td></td>
<td>1000</td>
<td>Pressed to 10000 ft. hold</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Run 3 Joint 7½’</td>
</tr>
<tr>
<td>1545</td>
<td></td>
<td></td>
<td>Cut out and short wing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pumped 15½’ hole empty</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Run tubing to wash sand off rig</td>
</tr>
<tr>
<td>1630</td>
<td></td>
<td></td>
<td>Circulate sand off plug</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pull RPB out of liner</td>
</tr>
</tbody>
</table>

Thank you

Rogie Pac Jhon
<table>
<thead>
<tr>
<th>Job Log</th>
<th>HAL-2013-C</th>
<th>JOB TYPE</th>
<th>91509</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE</td>
<td>11-19-95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAGE NO.</td>
<td>21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHART NO.</th>
<th>TIME (H:M)</th>
<th>RATE (BPM)</th>
<th>VOLUME (BBL) (GAL)</th>
<th>PUMPS</th>
<th>PRESSURE (PSI)</th>
<th>DESCRIPTION OF OPERATION AND MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 500</td>
<td>0.800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Called out</td>
</tr>
<tr>
<td>1.830</td>
<td></td>
<td>ORIGINAL</td>
<td></td>
<td></td>
<td></td>
<td>On location, 1 tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Preparing @ 3348-50</td>
</tr>
<tr>
<td>10.25</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>START RTTS - RP 1, BORE</td>
</tr>
<tr>
<td>11.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACID ON LOCATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Set up Equipment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RTPO 3360'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RZTO 3340'</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SWAB WET, 30 min - Bore</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8%O2 ACID @ 3002 lb/hr, 30 min, 30#</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACID SPOTTED</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SET RTTS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LOAD THY</td>
</tr>
<tr>
<td>7</td>
<td>11:30</td>
<td>13 3/4</td>
<td>150</td>
<td></td>
<td></td>
<td>Tag loaded, rec on gate</td>
</tr>
<tr>
<td>2</td>
<td>11:31</td>
<td>1/2</td>
<td>200</td>
<td></td>
<td></td>
<td>TREATING 6 BBL 20% HCl Acid</td>
</tr>
<tr>
<td>2</td>
<td>11:32</td>
<td>1</td>
<td>300</td>
<td></td>
<td></td>
<td>TREATING 15 BBL Flush</td>
</tr>
<tr>
<td>2</td>
<td>11:34</td>
<td>2</td>
<td>200</td>
<td></td>
<td></td>
<td>TREATING 21 BBL total</td>
</tr>
<tr>
<td>2</td>
<td>11:36</td>
<td>2</td>
<td>400</td>
<td></td>
<td></td>
<td>TREATING</td>
</tr>
<tr>
<td>2</td>
<td>11:35</td>
<td>2</td>
<td>350</td>
<td></td>
<td></td>
<td>TREATING</td>
</tr>
<tr>
<td>2</td>
<td>11:36</td>
<td>2</td>
<td>300</td>
<td></td>
<td></td>
<td>ACID OUT ON OVERFLUSH</td>
</tr>
<tr>
<td>2</td>
<td>11:37</td>
<td>21</td>
<td>100</td>
<td></td>
<td></td>
<td>1ISP</td>
</tr>
<tr>
<td>2</td>
<td>11:40</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td>ON VACUUM, 3 MIN</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SWAB TEST</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BLH STC-1 ACID</td>
</tr>
<tr>
<td>7</td>
<td>13:20</td>
<td>2</td>
<td>200</td>
<td></td>
<td></td>
<td>TREAT ACID, 100AC, 20%, STC-1 ACID</td>
</tr>
<tr>
<td>7</td>
<td>13:34</td>
<td>2</td>
<td>400</td>
<td></td>
<td></td>
<td>Acid on formation</td>
</tr>
<tr>
<td>7</td>
<td>13:35</td>
<td>2</td>
<td>375</td>
<td></td>
<td></td>
<td>TREATING ACID, 24</td>
</tr>
<tr>
<td>7</td>
<td>13:41</td>
<td>2</td>
<td>375</td>
<td></td>
<td></td>
<td>ACID OUT ON OVERFLUSH 24 BBL 20% STC-1</td>
</tr>
<tr>
<td>7</td>
<td>13:44</td>
<td>43</td>
<td>100</td>
<td></td>
<td></td>
<td>1ISP</td>
</tr>
<tr>
<td>7</td>
<td>13:47</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td>ON VACUUM IN, SWAB 43 BBL total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BACK UP EQUIP</td>
</tr>
<tr>
<td>16:10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SWAB TEST</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RELEASE 3 BBL RTTS OUT OF HOLE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TANK OUT OF HOLE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TANK COMPLETE?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>THANK YOU</td>
</tr>
</tbody>
</table>
State Corporation Commission of Kansas
Oil & Gas Conservation Division
Well Completion Form
ACO-1 Well History
Description of Well and Lease

Operator: License # 8061
Name: OIL PRODUCERS, INC. OF KANSAS
Address: P.O. BOX 8647
City/State/Zip WICHITA, KANSAS 67208
Purchaser:
Operator Contact Person: DIANA RICHICK
Phone: (316) 681-0231
Contractor: Name: DUKE DRILLING CO.
License: 5929
Wellsite Geologist: ARDEN RATSILPP
Designate Type of Completion
Oil __ SWD __ STOW __ Temp. Abd.
Gas __ ENHR __ SWM __ Other (Core, WSW, Expl., Cathodic, etc)
If Workover:
Operator:
Well Name:
Comp. Date __ Old Total Depth __
Depening __ Re-perf. __ Conv. to Inj/SWD __
Plug Back __ Commingled Docket No.
Dual Completion Docket No.
Other (SWD or Inj) Docket No.
8/7/95 __ 8/11/95 __ 10/16/95
Spud Date __ Date Reached TD __ Completion Date

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 COMPLIANT 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: John S. Weir
Title: President
Subscribed and sworn to before me this __________ of __________ 19
Notary Public: Sheryl D. Murphy
Date Commission Expires: 12-19-96

Form ACO-1 (7-91)
**Operator Name:** Oil Producers, Inc. of Kansas  
**Lease Name:** MUIR "B"  
**Well #:** 1  
**Sec.:** 16, **Township:** 7S, **Range:** 19, **East/West:** West  
**County:** ROOKS

**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

**List All Logs Run:** Geo., Radiation Guard Log, Correlation Cement Bond Log

<table>
<thead>
<tr>
<th>Log</th>
<th>Formation (Top)</th>
<th>Depth and Datums</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Top</th>
<th>Datum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anhydrite</td>
<td>1448</td>
<td>(+ 511)</td>
</tr>
<tr>
<td>Topeka</td>
<td>2902</td>
<td>(-9517)</td>
</tr>
<tr>
<td>Hesbner</td>
<td>3130</td>
<td>(-1149)</td>
</tr>
<tr>
<td>Lansing</td>
<td>3169</td>
<td>(-1288)</td>
</tr>
<tr>
<td>Base Kansas City</td>
<td>3390</td>
<td>(-1409)</td>
</tr>
<tr>
<td>Arbuckle</td>
<td>3429</td>
<td>(-1448)</td>
</tr>
<tr>
<td>Granite</td>
<td>3524</td>
<td>(-1543)</td>
</tr>
<tr>
<td>LTD</td>
<td>3531</td>
<td>(-1550)</td>
</tr>
</tbody>
</table>

**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./Pt.</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</td>
<td>8 5/8&quot;</td>
<td>28</td>
<td>237</td>
<td>60 40 POE 115</td>
<td>3% CC, 2 gel</td>
<td></td>
</tr>
<tr>
<td>production</td>
<td>7 7/8&quot;</td>
<td>4 1/2&quot;</td>
<td>10.5#</td>
<td>3530</td>
<td>50 50 POE 25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional Cementing/Squeeze Record**

<table>
<thead>
<tr>
<th>Purpose:</th>
<th>Depth</th>
<th>Type of Cement</th>
<th># Sacks Used</th>
<th>Type and Percent Additives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perforate</td>
<td>Top Bottom</td>
<td>Hallite</td>
<td>220</td>
<td>Floccule</td>
</tr>
<tr>
<td>Protect Casing</td>
<td>sur. 1465</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plug Back TD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plug Off Zone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Perforation Record**

- Bridge Plugs Set/Type
- Specify Footage of Each Interval Perforated

- see attached sheet

**Acid, Fracture, Shot, Cement Squeeze Record**

(Amount and Kind of Material Used)

<table>
<thead>
<tr>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>same</td>
</tr>
</tbody>
</table>

**Tubing Record**

<table>
<thead>
<tr>
<th>Size</th>
<th>Set At</th>
<th>Packer At</th>
<th>Liner Run</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 3/8&quot;</td>
<td>3474.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Date of First, Resumed Production, SWD or Inj.**

11/2/95

**Producing Method**

- Flowing  
- Pumping  
- Gas Lift  
- Other (Explain)

- Estimated Production:  
  - Oil:  
  - Bbls.  
  - Gas:  
  - MCF  
  - Water:  
  - Bbls.  
  - Gas-Oil Ratio  
  - Gravity: 31°

**Disposition of Gas:**

- Vented  
- Sold  
- Used on Lease (If vented, submit ACO-18.)

- Open Hole  
- Perf.  
- Dually Comp.  
- Commingled

- Other (Specify)

**Production Interval**

- see attached_
ATTACHMENT TO ACO-1 FOR MUIR "B" #1
ROOKS COUNTY, KS.
API #: 15-163-23,265

PERFORATION RECORD:

Arbuckle zone:
2 shots expandable 3451-3452' and 3438-3441'
Acidize: 500 gallons 15% FE MCA with 12 ball sealers
Re-acidize: 2,000 gallons 15% DSFE

Lansing "J" zone:
4 shots expandable 3348-3350'
Acidize: 250 gallons 15% MCA
Re-acidize: 1000 gallons 15% SGA