**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all tests. Report all copies of drill stem tests giving interval tested, time lost 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
(Attach Additional Sheets)

<table>
<thead>
<tr>
<th>Samples Sent to Geological Survey</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cores Taken</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Electric Log Run</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### Log Formation (Top), Depth and Datum

<table>
<thead>
<tr>
<th>Name</th>
<th>Top Depth</th>
<th>Datum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anhydrite</td>
<td>1748'</td>
<td>(+538)</td>
</tr>
<tr>
<td>Base/Anhydrite</td>
<td>1786'</td>
<td>(+500)</td>
</tr>
<tr>
<td>Topeka</td>
<td>3278'</td>
<td>(-992)</td>
</tr>
<tr>
<td>Heebner Shale</td>
<td>3484'</td>
<td>(-1198)</td>
</tr>
<tr>
<td>Toronto</td>
<td>3506'</td>
<td>(-1220)</td>
</tr>
<tr>
<td>Lansing</td>
<td>3524'</td>
<td>(-1238)</td>
</tr>
<tr>
<td>Stark Shale</td>
<td>3713'</td>
<td>(-1427)</td>
</tr>
<tr>
<td>Base/KC</td>
<td>3748'</td>
<td>(-1462)</td>
</tr>
<tr>
<td>Arbuckle</td>
<td>3848'</td>
<td>(-1562)</td>
</tr>
<tr>
<td>L.T.D.</td>
<td>3952'</td>
<td>(-1666)</td>
</tr>
</tbody>
</table>

### CASING RECORD

<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 Pipe</td>
<td>12 1/2</td>
<td>8 5/8</td>
<td>23</td>
<td>220.70</td>
<td>Common</td>
<td>150</td>
<td>2% Gel &amp; 3% CC</td>
</tr>
<tr>
<td>Production St.</td>
<td>7 7/8</td>
<td>5 1/2</td>
<td>15.5</td>
<td>3944</td>
<td>ASC</td>
<td>175</td>
<td>2% Gel</td>
</tr>
</tbody>
</table>

**LBL Tool @ 1755:**
60/40 Poz 400 6% Gel W/1/4# FC/shk

### 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></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protect Casing</td>
<td></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:

- 2 SPF 3857-60'
  - BP @ 3855'
- 2 SPF 3850-53'

### Producing Method

- [ ] Flowing
- [x] Pumping
- [ ] Gas Lift
- [ ] Other (Explain)

### Oil and Gas Data

<table>
<thead>
<tr>
<th>Date of First, Resumed Production, SWD or Entr.</th>
<th>Producing Method</th>
<th>Producing Method</th>
<th>Producing Method</th>
<th>Producing Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-8-02</td>
<td>[ ] Flowing</td>
<td>[ ] Pumping</td>
<td>[ ] Gas Lift</td>
<td>[ ] Other (Explain)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Production Per 24 Hours</th>
<th>Oil</th>
<th>Gas</th>
<th>Water</th>
<th>Bbls.</th>
<th>Gas-Oil Ratio</th>
<th>Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.89</td>
<td></td>
<td>33.78</td>
<td></td>
<td></td>
<td></td>
<td>29.5°</td>
</tr>
</tbody>
</table>

### Disposition of Gas

[ ] Vented  [ ] Sold  [x] Used on Lease

(If vented, Sumit ACO-18.)

[ ] Open Hole  [ ] Perfor.  [ ] Dually Comp.  [ ] Commingled

[ ] Other (Specify)
DRILLER’S LOG

Operator: John O. Farmer, Inc.
PO Box 352
Russell, KS 67665

Lease: Mentgen #1

Contractor: Discovery Drilling Co., Inc.
PO Box 763
Hays, KS 67601

Location: 30’ N & 90’ E of SW/NE/SE
Sec. 4/10S/21W
Graham Co., KS

Elevation: 2278’ Gr./2286’ KB

Completed: 6/6/02
Status: Oil Well

Loggers Total Depth: 3952’
Rotary Total Depth: 3950’
Commenced: 5/30/02
Casing: 8 5/8” @ 220.70′ w/156 sks
5 1/2” @ 3944’ w/175 sks
DV Tool @ 1755’ w/400 sks

DEPTHS & FORMATIONS
(All from KB)

Surface, Sand & Shale 0’  Shale 1786’
Dakota Sand 872’  Shale & Lime 2207’
Shale 945’  Shale 2496’
Cedar Hill Sand 1194’  Shale & Lime 2896’
Red Bed Shale 1484’  Lime & Shale 3316’
Anhydrite 1748’  RTD 3950’
Base Anhydrite 1786’

STATE OF KANSAS  )
COUNTY OF ELLIS  )

Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

Thomas H. Alm

Subscribed and sworn to before me on 6-10-02
My Commission expires: 8-9-03

(Place stamp or seal below)

Glenna S. Alm  
Notary Public

NOTARY PUBLIC - State of Kansas  
Glenna S. Alm  My Appt. Exp. 8-9-03
**ALLIED CEMENTING CO., INC.**

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

**CONFIDENTIAL**

**LEASE NUMBER:**
WELL # 1

**LOCATION:** Church of God

**CONTRACTOR:** Discovery Drilling

**TYPE OF JOB:** Sidetrack

**DATE:** 5/30/02

**TWP:** 10

**SEC:** 4

**RANGE:** 21

**CALLED OUT:** 1

**ON LOCATION:** 5/30/02

**JOB START:** 11:30 AM

**JOB FINISH:**

**COUNTY:** Graham

**STAGE:**

---

**CONTRACTOR:** Discovery Drilling

**OWNER:**

**CEMENT:**

**AMOUNT ORDERED:** 150 cu. yd. 3\% 

---

**COMMON:** 150

**POZMIX:** 65

**GEL:** 3

**CHLORIDE:** 5

---

**EQUIPMENT:**

**DISPLACEMENT:** 23\% 13,250 BBL

**PUMP TRUCK:**

**CEMENTER:**

**HELPERS:**

**DRIVER:**

---

**CHEMICALS:**

**DEPT OF JOB:**

**PUMP TRUCK CHARGE:** 520.00

**EXTRA FOOTAGE:**

**MILEAGE:**

**PLUG:**

---

**TOTAL:** 685.00

---

**REMARKS:**

Cement Cur

---

**CHARGE TO:**

John O Farmer Inc

---

**SIGNATURE:**

Carl F. Cooper

---

**PRINTED NAME:**

**RELEASED FROM CONFIDENTIAL**

---

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.
ALLIED CEMENTING CO., INC.

REMIT TO PO. BOX 31
RUSSELL, KANSAS 67665

CONFIDENTIAL

CONTRACTOR

TYPE OF JOB

HOLE SIZE

CASING SIZE

TUBING SIZE

DRILL PIPE

TOOL

PRES. MAX

MEAS. LINE

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT

EQUIPMENT

PUMP TRUCK

# 177

BULK TRUCK

# 282

BULK TRUCK

TRUCK

PUMP TRUCK CEMENTER BILL

HELP

DRIVER SHANE

HANDLING MILEAGE

REMARKS:

To Allied Cementing Co., Inc.

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SIGNATURE

PRINTED NAME

RELEASED FROM

CONFIDENTIAL

RECEIVED

AUG 28 2002

KCC WICHITA

AUG 27 2002

KCC
**ALLIED CEMENTING CO., INC.**

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

**CONFIDENTIAL**

**DATE:** 6-6-02  
**SECTION:** 4  
**TWP.:** 10  
**RANGE:** 21  
**CALLED OUT:** CR  
**ON LOCATION:** 3:00 PM  
**JOB START:** 8:00 AM  
**JOB FINISH:** 9:00 AM  
**LEASE:** Monton  
**WELL #:** 1  
**LOCATION:** Church of God  
**COUNTY:** Chautauqua  
**STATS:**

**CONTRACTOR** Discovery  
**OWNER**

**TYPE OF JOB**  
**HOLE SIZE**  
**CASING SIZE**  
**TUBING SIZE**  
**DRILL PIPE**  
**TOOL**  
**PRESS. MAX**  
**MEAS. LINE**  
**CEMENT LEFT IN CSG.**

**DISPLACEMENT**

**EQUIPMENT**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Quantity</th>
<th>Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUMP TRUCK</td>
<td>1</td>
<td>750</td>
<td>562.50</td>
</tr>
<tr>
<td>HELPER</td>
<td>1</td>
<td>150</td>
<td>150.00</td>
</tr>
<tr>
<td>DRIVER</td>
<td>1</td>
<td>100</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**REMARKS:**

D/V Tool #1737
1000 PSI to open tool
Comm. thru the bent pump into 4300 Linear ft. West  
Comm. to 4444 Linear ft. East
50 ft. ST to close tool
100 ft. Rake

**SERVICE**

**DEPTH OF JOB**

**PUMP TRUCK CHARGE** 650.00
**EXTRA FOOTAGE** 650.00
**MILEAGE**

**TOTAL** 1300.00

**FLOAT EQUIPMENT**

**TAX**

**TOTAL CHARGE**

**DISCOUNT**

**IF PAID IN 30 DAYS**

**RELEASED FROM CONFIDENTIAL**

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**

**PRINTED NAME**