API NO. 15- 147-20574 - 12W

County Phillips

_____ Sec. 23 Rte. 20 X

2190 Feet from SE (circle one) Line of Section

2170 Feet from SW (circle one) Line of Section

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

Lease Name Hansen C

Field Name Hansen

Producing Formation LKC

Elevation: Ground 2176 FT 2181

Total Depth 3605 PTD 3584

Amount of Surface Pipe Set and Cemented at 362 Feet

Multiple Stage Cementing Collar Used? X Yes 0 No

If yes, show depth set 1661 Feet

If Alternate II completion, cement circulated from 1661 feet depth to surface w/ 310 bbls

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content ppm Fluid volume bbls

Dewatering Method Used:

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name Hansen C

County Phillips

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 spudding date, re-completion, workover or conversion of a well. Rule 82-3-103, 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
Title Sr. Engineering Technician
Date 6/26/97

Subscribed and sworn to before me this 26th day of June, 1997.
Notary Public

Date Commission Expires August 27, 1996 July 23, 1998

K.C.C. OFFICE USE ONLY

Letter of Confidentiality Attached
Wireline Log Received
Geologist Report Received
KCC
S/W Rep
NGPA
KGS
Plug
Other
(Specify)

Form ACO-1 (7-91)
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 ELogs Run:
- High Resolution Induction
- Density/Neutron & Micro
- Log GR w/CCL

---

**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 OD.)</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>14.75&quot;</td>
<td>10.75&quot;</td>
<td>K-55</td>
<td>362</td>
<td>Class A</td>
<td>360</td>
<td>3% CaO 25% floccule</td>
</tr>
<tr>
<td>Production</td>
<td>9 7/8&quot;</td>
<td>7&quot;</td>
<td>K-55</td>
<td>3599</td>
<td>Mid-Con</td>
<td>205</td>
<td>2% CaO 1/4% floccule</td>
</tr>
</tbody>
</table>

---

**ADDITIONAL CEMENTING/SQUEEZE RECORD**

<table>
<thead>
<tr>
<th>Purpose:</th>
<th>Depth Top Bottom</th>
<th>Type of Cement</th>
<th># Sacks Used</th>
<th>Type and Percent Additives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perforate</td>
<td></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 To</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:
- 4 SPF
  - 3459-63, 3440-42, 3428-31, 3399-3402
  - 3360-65, 3340-44, 3326-30, 3306-11
  - 3275-80

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

(Amount and Kind of Material Used) Depth
- 1900 gals. 15% Ne/Fe Az
- 3459/3280

**TUBING RECORD**

<table>
<thead>
<tr>
<th>Size</th>
<th>Set At</th>
<th>Packer At</th>
<th>Liner Run</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 3/8&quot;</td>
<td>3403</td>
<td></td>
<td>☐ Yes ☐ No</td>
</tr>
</tbody>
</table>

Date of First, Resumed Production, SWD or Inj.
- 5/1/97

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

Estimated Production Per 24 Hours
- Oil: 75 Bbls.
- Gas: MCF
- Water: 270 Bbls.
- Gas-Oil Ratio

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

**METHOD OF COMPLETION**

Production Interval
- ☐ Open Hole ☑ Perf. ☐ Dually Comp. ☐ Commingled

- ☐ Other (Specify)
JOB SUMMARY

WELL DATA

- Field: 
- Sec.: 23
- Twp.: 55
- Rng.: 20W
- County: Phillips
- State: KS

- Formation Name: 
- Thickness: FROM TO
- Initial Prod: OIL BPD, WATER BPD, GAS BPD, MCF/D
- Present Prod: OIL BPD, WATER BPD, GAS BPD, MCF/D
- Completion Date: 
- Mud Type: 
- Mud Weight: 
- Packer Type: 
- Set at: 
- Bottom Hole Temp: 
- Pressure: 

- Casing:
  - New: N
  - Used: 23
  - Size: 7"
  - Liner: 
  - Tubing: 
  - Open Hole: 978
  - Mats: 3578
  - Shots/ft.: 

- Perforations:

ORIGINAL

TOOLS AND ACCESSORIES

- Type and Size: 
- Qty.: 
- Make:
  - Rod: 1400
  - Float Shoe: 363
  - Guide Shoe: 
  - Centralizers: 5-4
  - Bottom Plug: 
  - Top Plug: 
  - Head: 
  - Packer:
  - Other:

MATERIALS

- Treat. Fluid: Density: Lb/gal
- Displ. Fluid: Density: Lb/gal
- Prop. Type: 
- Prop. Type: Size: Lb
- Acid Type: %
- Acid Type: %
- Acid Type: %
- Surfactant Type: 
- Ne Agent Type: 
- Fluid Loss Adj. Type: 
- Gelling Agent Type: 
- Frac. Red. Agent Type: 
- Breaker Type: 
- Blocking Agent Type: 
- Perf. Balls Type: Qty.

PERSONNEL AND SERVICE UNITS

- Name: W. Wilson
- Unit No. & Type: 89317
- Location: PHIL

DEPARTMENT: CMWPT

DESCRIPTION OF JOB: 7" 2-STAGE LONESTARR

Cement:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Number of Sacks</th>
<th>Cement</th>
<th>Brand</th>
<th>Bulk Sack</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>205</td>
<td>-medder</td>
<td>280</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>310</td>
<td>medder</td>
<td>280</td>
<td>2</td>
</tr>
</tbody>
</table>

- Pressures in PSI:
- Circulating Displacement:
- Breakdown:
- Maximum:
- Average:
- Fracture Gradient:
- Shut-in Instant:
- 5-Min.:
- 15-Min.:
- Hydraulic Horsepower:

- Additives:
  - Yield Cuft/Sk: 3.11
  - Mixed Lbs/Gal: 11.2

- Order:
- Available:
- Used:
- Average Rates:
- Overall:
- Cement Left in Pipe:
  - Feet: 37.16
  - Reason: Baffle

REMARKS:

Customer:

Customer Representative:

HALLIBURTON

OPERATOR C

CUSTOMER

Date: 3-23

FORM 2025-R4
<table>
<thead>
<tr>
<th>CHART NO.</th>
<th>TIME</th>
<th>RATE (BPM)</th>
<th>VOLUME (GALLONS)</th>
<th>PUMPS</th>
<th>PRESSURE (PSI)</th>
<th>DESCRIPTION OF OPERATION AND MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0100</td>
<td>6</td>
<td>20</td>
<td>✓</td>
<td>200</td>
<td>BREAK CIRCULATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>10</td>
<td>✓</td>
<td>200</td>
<td>ROTATE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>5</td>
<td>✓</td>
<td>200</td>
<td>PUMP SUPERFLUSH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0218</td>
<td>168.8</td>
<td>✓</td>
<td>200</td>
<td>PUMP H RO SPACER</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0250</td>
<td></td>
<td></td>
<td>200</td>
<td>MAX CONCENT - 1ST SLICE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0251</td>
<td></td>
<td></td>
<td>800</td>
<td>WASH OUT PUMP + LINES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0255</td>
<td>7½</td>
<td>✓</td>
<td>800</td>
<td>STOP - ROTATE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0310</td>
<td>140</td>
<td></td>
<td>1500</td>
<td>RELEASE 1ST STAGE PLUG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0315</td>
<td>1500</td>
<td></td>
<td>1500</td>
<td>RELEASE PSI - HELD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0320</td>
<td></td>
<td></td>
<td>950</td>
<td>DROP D.V. OPENING PLUG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0328</td>
<td>950</td>
<td>✓</td>
<td>950</td>
<td>LOAD 2ND STAGE PLUG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0330</td>
<td></td>
<td></td>
<td></td>
<td>OPEN D.V. TOOL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0800</td>
<td>4½</td>
<td></td>
<td>800</td>
<td>PLUG RATTLE - 10 SYS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0800</td>
<td>7½</td>
<td>✓</td>
<td>200</td>
<td>MIX CONCENT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0832</td>
<td>7½</td>
<td>✓</td>
<td>200</td>
<td>WASH OUT PUMP - LINES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0833</td>
<td>6½</td>
<td>✓</td>
<td>200</td>
<td>RELEASE 2ND STAGE CLOSING PLUG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0837</td>
<td>6½</td>
<td>✓</td>
<td>350</td>
<td>DEFLUE PLUG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0848</td>
<td>6½</td>
<td>✓</td>
<td>1600</td>
<td>PLUG DOWN - SET UP 1360 SYS GPM CUM TO BT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0851</td>
<td>6½</td>
<td></td>
<td>1600</td>
<td>SETUP CLOSE D.V. TOOL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1030</td>
<td></td>
<td></td>
<td></td>
<td>WASH UP</td>
</tr>
<tr>
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<td>PUMP UP</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>JOB COMPLETE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>THANKYOU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>WAYNE, RAY, TOM</td>
</tr>
</tbody>
</table>
**HALLIBURTON SUMMARY**

**WELL DATA**
- FIELD: [Field Name]
- SEC: 23
- TWP: 5
- RIG: 20W
- COUNTY: PH
- STATE: KS
- CASING: N
- LINER: [Liner Details]
- TUBING: [Tubing Details]
- DRILL HOLE TEMP: [Temperature]
- TOTAL DEPTH: [Depth]
- MUD TYPE: [Mud Type]
- MUD WT: [Mud Weight]
- MAXIMUM PRESS: [Maximum Pressure]

**NEW USED MATERIALS**
- WEIGHT BOX: [Box Weight]
- TO: [To]

**TOOLS AND ACCESSORIES**
- TYPE AND SIZE: [Type and Size]
- QTY: [Quantity]
- MAKE: [Make]
- FLOAT COLLAR
- FLOAT SHOE
- GUIDE SHOE
- CENTRALIZERS
- BOTTOM PLUG
- TOP PLUG: [Plug Details]
- HEAD: [Head Details]
- PACKER: [Packer Details]
- OTHER: [Other Details]

**MATERIALS**
- TREAT. FLUID: [Treatment Fluid]
- OGVITY: [Gravity]
- LB/GAL: [Per Gallon]
- DISP. FLUID: [Dispersion Fluid]
- DENSITY: [Density]
- LB/GAL: [Per Gallon]
- PROP. TYPE 1: [Propellant Type]
- SIZE: [Size]
- LB: [Weight]
- PROP. TYPE 2: [Propellant Type]
- SIZE: [Size]
- LB: [Weight]
- ACID TYPE 1: [Acid Type]
- CAL: [Volume]
- ACID TYPE 2: [Acid Type]
- CAL: [Volume]
- ACID TYPE 3: [Acid Type]
- CAL: [Volume]
- SUEFACTANT TYPE: [Surfactant Type]
- GAL: [Volume]
- NE AGENT TYPE: [Ne Agent Type]
- GAL: [Volume]
- FLUID LOSS ADD. TYPE: [Fluid Loss Additive Type]
- GAL-LB: [Volume]
- GELLING AGENT TYPE: [Gelling Agent Type]
- GAL-LB: [Volume]
- FRAC. ADD. AGENT TYPE: [Fracture Additive Type]
- GAL-LB: [Volume]
- BREAKER TYPE: [Breaker Type]
- GAL-LB: [Volume]
- BLOCKING AGENT TYPE: [Blocking Agent Type]
- GAL-LB: [Volume]
- PERF. BALLS: [Perforation Balls]
- QTY: [Quantity]
- OTHER: [Other]

**CEMENT DATA**
- STAGE: [Stage]
- NUMBER OF BAGS: [Number of Bags]
- CEMENT: [Cement Details]
- BRAND: [Brand]
- BULK SACKED: [Bulk Sacked]
- ADDITIVES: [Additives]
- YIELD CFT/SF: [Yield CFT/SF]
- MIXED LBS/GAL: [Mixed Lbs/Gal]

**PRESSURES IN PSI**
- CIRCULATING: [Circulating Pressure]
- BREAKDOWN: [Breakdown Pressure]
- AVERAGE: [Average Pressure]
- MAXIMUM: [Maximum Pressure]
- FRACTURE GRADIENT: [Fracture Gradient]
- HYDRAULIC HORSEPOWER: [Hydraulic Horsepower]
- ORDERED: [Ordered Volume]
- AVAILABLE: [Available Volume]
- USED: [Used Volume]
- AVERAGE RATES IN BPM: [Average Rates in BPM]
- TREATING: [Treating Details]
- CEMENT LEFT IN PIPE: [Cement Left in Pipe]
- FEET: [Feet]
- REASON: [Reason]

**SUMMARY**
- VOLUMES: [Volume Details]
- TYPE: [Type]
- MG USG: [Mg USG]
- BBL: [Barrels]
- GAL: [Gallons]
- LOAD & BLOW: [Load and Blow]
- PDA: [PDA]
- TREATMENT: [Treatment Details]
- DISPENSE: [Dispense]
- CEMENT SLURRY: [Cement Slurry]
- TOTAL VOLUME: [Total Volume]

**REMARKS**
- SEE CHART - JOB LCN

**CUSTOMER**
- [Customer Details]