

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1056304

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

# WELL COMPLETION FORM

### WELL HISTORY - DESCRIPTION OF WELL & LEASE

| OPERATOR: License #                         |   | API No. 15  |
|---|---|---|
| Name:                                       |   | Spot Description:   |
| Address 1:                                  |   |   |
| Address 2:                                  |   | Feet from North / South Line of Section   |
| City: Sta                                   | ate: Zip:+                                      | Feet from East / West Line of Section   |
|   |   | Footages Calculated from Nearest Outside Section Corner:                        |
|   |   |   |
| , , , , , , , , , , , , , , , , , , ,       |   | County:   |
|   |   | Lease Name: Well #:   |
|   |   | Field Name:   |
| -   |   |   |
|   |   | Producing Formation:  |
| Designate Type of Completion:               |   | Elevation: Ground: Kelly Bushing:   |
| New Well Re-I                               | Entry Workover                                  | Total Depth: Plug Back Total Depth:   |
| Oil WSW                                     | SWD SIOW  | Amount of Surface Pipe Set and Cemented at: Fee                                 |
| Gas D&A                                     | ENHR SIGW                                       | Multiple Stage Cementing Collar Used? Yes No                                    |
| OG  | GSW Temp. Abd.                                  | If yes, show depth set: Fee   |
| CM (Coal Bed Methane)                       |   | If Alternate II completion, cement circulated from:                             |
| Cathodic Other (Core,                       | Expl., etc.):                                   | feet depth to:w/sx cmi  |
| If Workover/Re-entry: Old Well Info         | o as follows:                                   |   |
| Operator:                                   |   |   |
| Well Name:                                  |   | Drilling Fluid Management Plan<br>(Data must be collected from the Reserve Pit) |
| Original Comp. Date:                        | Original Total Depth:                           |   |
| Deepening Re-perf.                          | Conv. to ENHR Conv. to SWD                      | Chloride content: ppm Fluid volume: bbls  |
|   |   | Dewatering method used:   |
| Plug Back:                                  | Plug Back Total Depth                           | Location of fluid disposal if hauled offsite:                                   |
| Commingled                                  | Permit #:                                       |   |
| Dual Completion                             | Permit #:                                       | Operator Name:  |
|   | Permit #:                                       | Lease Name: License #:  |
|   | Permit #:                                       | Quarter Sec TwpS. R East Wes  |
| GSW   | Permit #:                                       | County: Permit #:   |
|   |   |   |
| Spud Date or Date Read<br>Recompletion Date | ched TD Completion Date or<br>Recompletion Date |   |

#### AFFIDAVIT

I am the affiant and I hereby certify that 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.

## Submitted Electronically

| KCC Office Use ONLY                |
|------------------------------------|
| Letter of Confidentiality Received |
| Date:                              |
| Confidential Release Date:         |
| Wireline Log Received              |
| Geologist Report Received          |
| UIC Distribution                   |
| ALT I II III Approved by: Date:    |

|                         | Side Two    | 1       |
|-------------------------|-------------|---------|
| Operator Name:          | Lease Name: | Well #: |
| Sec TwpS. R East _ West | County:     |         |
|                         |             |         |

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

| Drill Stem Tests Taken<br>(Attach Additional Shi                                    | eets)                | Yes                       | No                   |   | og Formatio      | n (Top), Depth an | d Datum         | Sample                        |
|---|----------------------|---------------------------|----------------------|---|------------------|-------------------|-----------------|-------------------------------|
| Samples Sent to Geolog  | ,                    | Yes                       | No                   | Nam   | e                |                   | Тор             | Datum                         |
| Cores Taken<br>Electric Log Run<br>Electric Log Submitted B<br>(If no, Submit Copy) | Electronically       | Yes Yes Yes Yes           | ] No<br>] No<br>] No |   |                  |                   |                 |                               |
| List All E. Logs Run:   |                      |                           |                      |   |                  |                   |                 |                               |
|   |                      |                           | CASING R             |   |                  | on etc            |                 |                               |
| Purpose of String   | Size Hole<br>Drilled | Size Casin<br>Set (In O.D | g                    | onductor, surface, inte<br>Weight<br>Lbs. / Ft. | Setting<br>Depth | Type of<br>Cement | # Sacks<br>Used | Type and Percent<br>Additives |
|   |                      |                           |                      |   |                  |                   |                 |                               |

#### ADDITIONAL CEMENTING / SQUEEZE RECORD

| Purpose:<br>Perforate       | Depth<br>Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
|-----------------------------|---------------------|----------------|--------------|----------------------------|
| Protect Casing Plug Back TD |                     |                |              |                            |
| Plug Off Zone               |                     |                |              |                            |

| Shots Per Foot                       | PERFORATION RECORD - Bridge Plugs Set/Type<br>Specify Footage of Each Interval Perforated |                 |         |                 |         | )e                  |                         |                              | ement Squeeze Record<br>of Material Used) | Depth   |
|--------------------------------------|---|-----------------|---------|-----------------|---------|---------------------|-------------------------|------------------------------|---|---------|
|                                      |   |                 |         |                 |         |                     |                         |                              |   |         |
|                                      |   |                 |         |                 |         |                     |                         |                              |   |         |
|                                      |   |                 |         |                 |         |                     |                         |                              |   |         |
|                                      |   |                 |         |                 |         |                     |                         |                              |   |         |
|                                      |   |                 |         |                 |         |                     |                         |                              |   |         |
| TUBING RECORD:                       | Siz   | ze:             | Set At: | :               | Packer  | r At:               | Liner R                 | Run:                         | No  |         |
| Date of First, Resumed I             | Product   | ion, SWD or ENH | ۲.      | Producing N     | lethod: | ping                | Gas Lift                | Other (Explain)              |   |         |
| Estimated Production<br>Per 24 Hours |   | Oil Bb          | ls.     | Gas             | Mcf     | Wate                | er                      | Bbls.                        | Gas-Oil Ratio                             | Gravity |
|                                      |   |                 |         |                 |         |                     |                         |                              |   |         |
| DISPOSITIC                           | ON OF C   | GAS:            |         |                 | METHOD  | OF COMPLE           | TION:                   |                              | PRODUCTION INT                            | ERVAL:  |
| Vented Sold                          |   | Used on Lease   |         | Open Hole       | Perf.   | Dually<br>(Submit ) | Comp.<br>4 <i>CO-5)</i> | Commingled<br>(Submit ACO-4) |   |         |
| (If vented, Sub                      | mit ACC   | )-18.)          |         | Other (Specify) |         |                     |                         |                              |   |         |

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

| Form      | ACO1 - Well Completion               |
|-----------|--------------------------------------|
| Operator  | PostRock Midcontinent Production LLC |
| Well Name | HAHN 2-1                             |
| Doc ID    | 1056304                              |

All Electric Logs Run

| CDL  |  |
|------|--|
| DIL  |  |
| NDL  |  |
| TEMP |  |



DATE

211 W. 14TH STREET, CHANUTE, KS 66720 620-431-9500

D10088

| TICKET NUMBER    | V   | 7 | 0 | 7 | 7 |
|------------------|-----|---|---|---|---|
| FIELD TICKET REP | = # |   | _ |   |   |

/

FOREMAN Joe Blanchard

ssi 15-099-24635

API \_

**TREATMENT REPORT & FIELD TICKET CEMENT** WELL NAME & NUMBER

| DATE   |   | WELLN   | IAME & NUMBE   | R  | SEC     | TION     | TOWNSHI      | P          | RANGE              | COUNTY               |
|--|---|---|--|--|---------|----------|--------------|------------|--------------------|----------------------|
| 1-10-11                                      | HAhN  | 2   | -1   |  | 2       | ?        | 35           |            | 17                 | LR                   |
| FOREMAN /<br>OPERATOR                        |   | TIME<br>OUT   | LESS<br>LUNCH  | TRUCK<br>#                                 | TRAILI  | R        |              | UCK<br>URS |                    | EMPLOYEE             |
| Joe BIANCH                                   | hard 7:00   | 12:30   |  | 904850                                     |         | ·        | 5.           |            | 1                  | 24 L O               |
| Day Wall                                     |   | 1   |  | 931310                                     | 9328    | <u>۲</u> | 1            | 0          | 10                 | <u>_ Des-Inc</u>     |
| OTTO G. POW                                  |   | 1 1   |  | 903/97                                     |         |          |              |            |                    | A Do                 |
| MAHNAF                                       | $O' \rightarrow \cdots \rightarrow \cdots$                                      |   |  | 903600                                     |         |          |              | /          | - Ch<br>Day        | and the              |
|  |   |   |  | 9/3585                                     | 91783   | 7        |              | /          | - M.               | antell               |
| VesleyGa                                     | H DRA   |   |  | 912283                                     | 1105    | -(       |              |            | _(v,e              | Deg Jh               |
| DISPLACEMENT_                                | 5 13.5 SLURI<br>24.43 DISPL<br>5 154 51/2 1<br>5 of Comany                      | ACEMENT PSI .   |  | 1IX PSI                                    |         | RATE _   | 46pn         | η          |                    | s 16 BBI 1<br>bottom |
|  | D Casing  | 9:30  | STart.   | ed Cement                                  | - 11:30 | Ld       | 4 loc        | otic       | $\nu / \omega_{0}$ | 2:30                 |
|  |   |   | C.   | ed Cement<br>ement to<br>Description of se | s Susfa | ce       | 4 loc        | otic       | <u>/ در د</u>      | TOTAL                |
| ACCOUNT<br>CODE                              | D Casing  | JNITS   | C.   | ement to                                   | s Susfa | ce       | 4 loc        | otic       |                    |                      |
| ACCOUNT<br>CODE<br>104850<br>10397           | QUANTITY or L   | JNITS<br>Fore<br>Cem  | C.<br>man Pickup<br>ent Pump Truck   | ement to                                   | s Susfa | ce       | + loe        | o.+.c      |                    | TOTAL                |
| ACCOUNT<br>CODE<br>104850<br>10397           | QUANTITY or L   | JNITS<br>Fore<br>Cem<br>Bulk  | C .<br>man Pickup<br>ent Pump Truck<br>Truck   | ement to                                   | s Susfa | ce       | 4 loe        |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>04850<br>10397            | QUANTITY or L   | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans   | C.<br>man Pickup<br>ent Pump Truck   | ement to                                   | s Susfa | ce       | t loe        |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>104850<br>10397           | QUANTITY or L   | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans   | C.<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Truck  | ement to                                   | s Susfa | ce       | 4 loc        | <u>.</u>   |                    | TOTAL                |
| ACCOUNT<br>CODE<br>104850<br>703697          | QUANTITY or L   | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>Trans<br>80 Va   | C.<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Trailer<br>ac  | ement to                                   | s Susfa | ce       | 4 100        |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>704850<br>703697          | QUANTITY or L   | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>Trans<br>80 Va<br>24 F <del>f</del> Casir  | C.<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Trailer<br>ac  | ement to                                   | s Susfa | ce       | 4 loc        |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>704850<br>703697          | QUANTITY or L   | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>Trans<br>80 Va<br>24 Ff Casir<br>Centr   | C.<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Truck<br>sport Trailer<br>ac   | ement to                                   | s Susfa | ce       | 4 loc        |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>704850<br>703697          | QUANTITY or L   | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>Trans<br>80 Va<br>24 F <del>f</del> Casir<br>Centr<br>Contr<br>Float   | C.<br>man Pickup<br>ent Pump Truck<br>sport Truck<br>sport Trailer<br>ac<br>ng<br>ralizers<br>Shoe<br>r Plug   | CMELT J                                    | s Susfa | ce       | <u>+ 100</u> |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>704850<br>703697          | QUANTITY or U<br>QUANTITY or U<br>5. 5<br>1025.9                                | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>80 Va<br>24 Ff Casir<br>Centr<br>Centr<br>I Vipe<br>2 Frac I   | C<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Truck<br>sport Trailer<br>ac<br>19<br>ralizers<br>Shoe<br>r Plug<br>Baffles 477   | ement to                                   | s Susfa | ce       | 4 loc        |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>104850<br>703697          | QUANTITY or U<br>QUANTITY or U<br>5.5<br>1025.9<br>1025.9                       | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>Trans<br>80 Ve<br>Centr<br>C Centr<br>Float<br>I Wipe<br>2 Frac I<br>S Portla  | C.<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Trailer<br>ac<br>ng<br>ralizers<br>Shoe<br>r Plug<br>Baffles 477<br>und Cement   | CMELT J                                    | s Susfa | ce       | 4 100        |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>104850<br>703697          | QUANTITY or U<br>QUANTITY or U<br>5.5<br>1025.9<br>1025.9                       | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>Trans<br>80 Va<br>24 Ff Casir<br>6 Centr<br>1 Vipe<br>2 Frac I<br>2 Frac I<br>3 Sk Portla  | C.<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Trailer<br>ac<br>19<br>ralizers<br>Shoe<br>r Plug<br>Baffles 477<br>and Cement<br>nite                                       | CMELT J                                    | s Susfa | ce       |              |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>104850<br>703697          | QUANTITY or U<br>QUANTITY or U<br>5.5<br>1025.9<br>1025.9                       | UNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>80 $\forall z$<br>$z \neq Ff$ Casir<br>C Centr<br>C C Centr<br>C C Centr<br>C C C C C C C C C C C C C C C C C C C | C<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Truck<br>sport Trailer<br>ac<br>19<br>ralizers<br>Shoe<br>r Plug<br>Baffles 477<br>ind Cement<br>nite<br>eal                  | CMELT J                                    | s Susfa | ce       |              |            |                    | TOTAL                |
| ACCOUNT<br>CODE<br>704850<br>703697          | QUANTITY or U<br>QUANTITY or U<br>5.5<br>1025.9<br>1025.9                       | UNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>80 Va<br>24 Ff Casir<br>Contr<br>Contr<br>Float<br>I Wipe<br>2 Frac I<br>0 SK Portla<br>0 SK Portla<br>0 SK Portla<br>0 SK Pic-Sr<br>7 SK Premi  | C.<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Trailer<br>ac<br>ng<br>ralizers<br>Shoe<br>r Plug<br>Baffles 477<br>and Cement<br>nite<br>eal<br>ium Gel                     | CMELT J                                    | s Susfa | ce       |              |            |                    | TOTAL                |
| starte                                       | QUANTITY or U<br>QUANTITY or U<br>5.5<br>1025.9<br>1025.9                       | UNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>80 Va<br>24 Ff Casir<br>Contr<br>Contr<br>Float<br>I Wipe<br>2 Frac I<br>0 SK Portla<br>0 SK Portla<br>0 SK Portla<br>0 SK Pic-Sr<br>7 SK Premi  | C.<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Trailer<br>ac<br>ng<br>ralizers<br>Shoe<br>r Plug<br>Baffles 4777<br>and Cement<br>nite<br>eal<br>ium Gel<br>hloride         | ement for<br>Description of se             | s Susfa | ce       |              |            |                    | TOTAL                |
| STarte<br>ACCOUNT<br>CODE<br>704850<br>70397 | QUANTITY or L<br>QUANTITY or L<br>5.5<br>1025.9<br>1025.9<br>10<br>20<br>3<br>1 | JNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>80 Ve<br>24 Ff Casir<br>Centr<br>Contr<br>Float<br>I Wipe<br>2 Frac I<br>3E Portla<br>3E Gilson<br>5E Flo-Si<br>75E Premi<br>5E Cal C<br>KCL   | C<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Truck<br>sport Trailer<br>ac<br>19<br>ralizers<br>Shoe<br>r Plug<br>Baffles 4117<br>ntte<br>eal<br>ium Gel<br>hloride<br>51/2 | CMELT J                                    | s Susfa | ce       |              |            |                    | TOTAL                |
| STarte<br>ACCOUNT<br>CODE<br>704850<br>70397 | QUANTITY or L<br>QUANTITY or L<br>5.5<br>1025.9<br>1025.9<br>10<br>20<br>3<br>1 | UNITS<br>Fore<br>Cem<br>Bulk<br>Trans<br>80 Ve<br>2 FF<br>Casir<br>Contr<br>Float<br>I Wipe<br>2 Frac<br>SK Portla<br>SK Portla<br>SK Premi<br>SK Cal C<br>KCL-<br>2000 City W  | C<br>man Pickup<br>ent Pump Truck<br>Truck<br>sport Truck<br>sport Truck<br>sport Trailer<br>ac<br>19<br>ralizers<br>Shoe<br>r Plug<br>Baffles 4117<br>ntte<br>eal<br>ium Gel<br>hloride<br>51/2 | ement for<br>Description of se             | s Susfa | ce       |              |            |                    | TOTAL                |

| Rig Number:         1         S. 2         T. 35         R.17 E           API No.         15-         099-24635<br>Elev.         807         County:         LB           Location:         NW SW         Second         NW SW           Operator:         POSTROCK         Advessed         Second         NW SW           Oberator:         210 Park Ave Ste 2750<br>Oklahoma City, OK 73102-5641         Well         Second         SoUTH Line           Footage Location:         1980         ft. from the         SOUTH Line         660         ft. from the         WEST Line           Drilling Contractor:         McPherson Drilling LLC         Spud date:         1/6/2011         Geologist:         Ken Recoy           Date Completed:         1/7/2011         Total Depth:         1032         1032           Size Hole:         11"         7 7/8"         odor 230         hit water at 440           Setting Depth:         22         MCP         DRILLER:         Andy Coats  |
|---|
| Elev.807Location:NW SWOperator:POSTROCKAddress:210 Park Ave Ste 2750<br>Oklahoma City, OK 73102-5641Well No:2-1Lease Name:Footage Location:1980ft. from theSolig Contractor:McPherson Drilling LLC<br>Spud date:1/6/2011Geologist:Ken Recoy<br>Date Completed:Date Completed:1/7/2011Total Depth:1032Size Hole:11"<br>8 5/8"Size Hole:5/8"Ower and the second data<br>Setting Depth:22<br>23#MCP<br>  |
| Operator:       POSTROCK         Address:       210 Park Ave Ste 2750         Oklahoma City, OK 73102-5641         Well No:       2-1       Lease Name:       HAHN         Footage Location:       1980       ft. from the       SOUTH Line         660       ft. from the       WEST Line         Drilling Contractor:       McPherson Drilling LLC       Spud date:       1/6/2011         Spud date:       1/6/2011       Geologist:       Ken Recoy         Date Completed:       1/7/2011       Total Depth:       1032         Casing Record         Size Hole:       11"       7 7/8"       odor 230         Size Casing:       8 5/8"       odor 230       hit water at 440         Setting Depth:       22       MCP       DRILLER:       Andy Coats         Type Cement:       Portland       MCP       DRILLER:       Andy Coats         Soil       0       3       black shale       474       476         shale       3       14       sand shale       476       511         Soil       0       3       black shale       518       519          Soil       0   |
| Address:210 Park Ave Ste 2750<br>Oklahoma City, OK 73102-5641Well No:2-1Lease Name:HAHNFootage Location:1980ft. from theSOUTH Line<br>660Drilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken Recoy<br>1032Date Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"7 7/8"<br>9 StarSize Hole:11"7 7/8"odor 230<br>hit water at 440Setting Depth:23#<br>4MCPDRILLER:Andy Coats4MCPDRILLER:Veil LogFormationTopBtm.Btm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624   |
| Address:210 Park Ave Ste 2750<br>Oklahoma City, OK 73102-5641Well No:2-1Lease Name:HAHNFootage Location:1980ft. from theSOUTH Line<br>660Drilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken Recoy<br>1032Date Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"7 7/8"<br>9 StarSize Hole:11"7 7/8"odor 230<br>hit water at 440Setting Depth:23#<br>4MCPDRILLER:Andy Coats4MCPDRILLER:Veil LogFormationTopBtm.Btm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624   |
| Oklahoma City, OK 73102-5641Well No: $2-1$ Lease Name:HAHNFootage Location:1980ft. from theSOUTH LineFootage Location:1980ft. from theSOUTH LineDrilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken RecoyDate Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:SurfaceProductionSize Casing:8 5/8"odor 230Weight:23#hit water at 440Setting Depth:22MCPType Cement:PortlandMCPDRILLER:Andy CoatsSoil0Soil003black shale414the Stand shale419shale511518Soil0314sand shale419shale511518Shale1931black shale518519591coal495062Shale592624   |
| Well No: $2 \cdot 1$ Lease Name:HAHNFootage Location:1980ft. from theSOUTH LineFootage Location:1980ft. from theSOUTH LineDrilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken RecoyDate Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"7 7/8"Size Casing:8 5/8"odor 230Weight:23#MCPDRILLER:Andy CoatsMcPVeiting Depth:22MCPPortlandMCPDRILLER:Andy Coatssoil0314sand shale474soil03soil03shale1931black shale511518shale1931black shale519591591coal495062shale592624   |
| Well No: $2 \cdot 1$ Lease Name:HAHNFootage Location:1980ft. from theSOUTH LineFootage Location:1980ft. from theSOUTH LineDrilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken RecoyDate Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"7 7/8"Size Casing:8 5/8"odor 230Weight:23#odor 230Setting Depth:22MCPType Cement:PortlandMCPDrilLLER:Andy CoatsSoil03Soil03Soil03Soil03Soil03Soil03Soil03Soil03Soil03Soil03Soil03Soil0Soil0Soil0Soil0Soil14Soil1518Shale1518Shale519Soil62Soil62Soil63Soil64Soil591Soil63Soil63Soil63Soil63Soil63Soil63Soil63 <t< td=""></t<>   |
| 660         ft. from the         WEST         Line           Drilling Contractor:         McPherson Drilling LLC         Spud date:         1/6/2011         Geologist:         Ken Recoy           Date Completed:         1/7/2011         Total Depth:         1032         1032           Casing Record         Rig Time:           Size Hole:         11"         7 7/8"         odor 230           Weight:         23#         hit water at 440         setting Depth:         22           Setting Depth:         22         MCP         DRILLER:         Andy Coats           Setting Depth:         22         MCP         DRILLER:         Andy Coats           Soil         0         3         black shale         474         476           shale         3         14         sand shale         476         511           lime         14         19         shale         513         518         519           lime         31         49         shale         518         519         591           coal         49         50         coal         591         592         592  |
| 660ft. from theWESTLineDrilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken RecoyDate Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"Size Casing:8 5/8"23#odor 230Weight:23#23#MCPPortlandMCPPortlandMCPPortlandMCPSoil03black shale41419shale314shale511Sine193145062Shale59159262   |
| McPherson Drilling LLCSpud date: $1/6/2011$ Geologist:Ken RecoyDate Completed: $1/7/2011$ Total Depth: $1032$ Casing RecordSize Hole:SurfaceProductionSize Casing: $85/8$ "odor 230Weight: $23#$ hit water at 440Setting Depth: $22$ MCPType Cement:PortlandMCPVell LogFormationTopBtm.Soil03black shale474Soil03black shale476Shale314sand shale476Shale1931black shale511Shale1931black shale518Soil062shale591Soil62shale592624  |
| Spud date: $1/6/2011$ Geologist:Ken RecoyDate Completed: $1/7/2011$ Total Depth: $1032$ Casing RecordSize Hole:SurfaceProduction $11"$ 7 7/8"odor 230Weight:23#odor 230 $23#$ bit water at 440Setting Depth:22MCPDRILLER:PortlandMCPWell LogFormationTopBtm.HRS.FormationTopBtm.HRS.FormationTopSoil03black shale474Soil03black shale476Shale314sand shale511Ime1419shale511Shale1931black shale518Shale1931black shale519Sinale193149shale519Sinale5062shale592Ime5062shale592   |
| Date Completed: $1/7/2011$ Total Depth: $1032$ Casing RecordRig Time:Size Hole: $11"$ $77/8"$ $0 dor 230$ Size Casing: $85/8"$ $0 dor 230$ $hit water at 440$ $Jacobic Casing Cas$ |
| Surface         Production           Size Hole:         11"         7 7/8"           Size Casing:         8 5/8"         odor 230           Weight:         23#         odor 230           Setting Depth:         22         MCP           Type Cement:         Portland         MCP           Book         MCP         DRILLER:           Weil Log           Setting Depth:           22         MCP           Portland         MCP         DRILLER:         Andy Coats           Weil Log           Formation         Top         Btm.           Soil         0         3         black shale         474         476           shale         3         14         sand shale         476         511           Ime         14         19         shale         511         518           shale         19         31         black shale         519         591           coal         49         50         coal         591         592           lime         50         62         shale         592         624  |
| SurfaceProductionSize Hole:11"7 7/8"Size Casing:8 5/8"odor 230Weight:23#odor 230Setting Depth:22MCPType Cement:PortlandAndy CoatsMCPVerent:PortlandSacks:4MCPDRILLER:Andy CoatsVerent:PortlandSoil03black shale419shale311419shale5111518shale193149Soil6262592624  |
| Size Hole:11"7 7/8"odor 230Size Casing:8 5/8"odor 230Weight:23#hit water at 440Setting Depth:22MCPType Cement:PortlandAdv Coats:MCPVeight:4MCPDRILLER:Andy CoatsVell LogFormationTopBtm.HRS.FormationTopBtm.HRS.Soil03black shale4744119shale5111ime1419Shale511518shale193149Shale5195062Shale591592624  |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $  |
| Weight:23#<br>22MCP<br>MCPhit water at 440<br>DRILLER:Andy CoatsType Cement:Portland<br>4MCPDRILLER:Andy CoatsWell LogFormationTopBtm.HRS.FormationTopBtm.Soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624  |
| Setting Depth:<br>Type Cement:<br>Sacks:22<br>Portland<br>4MCPDRILLER:<br>DRILLER:Andy CoatsFormationTopBtm.HRS.FormationTopBtm.Soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624  |
| Type Cement:<br>Sacks:Portland<br>4MCPDRILLER:Andy CoatsMCPDRILLER:Andy CoatsWell LogFormationTopBtm.HRS.FormationTopBtm.Soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624   |
| Sacks:4MCPFormationTopBtm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624  |
| FormationTopBtm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624  |
| FormationTopBtm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624  |
| FormationTopBtm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624  |
| shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624   |
| lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624   |
| shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624  |
| lime3149shale519591coal4950coal591592lime5062shale592624  |
| coal4950coal591592lime5062shale592624   |
| lime 50 62 shale 592 624  |
|   |
|   |
| shale 62 180 sand 624 645   |
| black shale 180 181 coal 645 648  |
| lime 181 211 sand shale 648 668   |
| coal 211 213 black shale 668 670  |
| shale 213 220 shale 670 682   |
| oil sand 220 230 sand 682 687   |
| sand shale 230 321 sand shale 687 720   |
| oswego lime 321 352 black shale 720 722   |
| summit 352 357 shale 722 731  |
| lime 357 387 sand shale 731 735   |
| mulkey 387 393 shale 735 748  |
| lime 393 399 black shale 748 750  |
|   |
| shale 399 409 shale 750 757   |
| shale         399         409         shale         750         757           coal         409         411         black shale         757         760  |
|   |
| coal 409 411 black shale 757 760  |
| coal409411black shale757760shale411447shale760825   |

| Gas Tests:        |      |
|-------------------|------|
|                   | MCF  |
| 195               | 0    |
| 229               | 0    |
| 379               | 1.83 |
| 404               | 7.06 |
| 429               | 7.06 |
| 455               | 7.06 |
| 520               | 7.06 |
| 605               | 34.0 |
| 685               | 34.0 |
| 780               | 8.95 |
| 830               | 34.0 |
| 885               | 37.6 |
| 915               | 37.6 |
| 1032              | 37.6 |
|                   |      |
|                   |      |
| Comments:         |      |
| Start injecting @ |      |

| Well Log    |     |      |                |     |      |           |     |      |
|-------------|-----|------|----------------|-----|------|-----------|-----|------|
| Formation   | Тор | Btm. | HRS. Formation | Тор | Btm. | Formation | Тор | Btm. |
| soil        | 0   | 3    | black shale    | 474 | 476  | coal      | 873 | 875  |
| shale       | 3   | 14   | sand shale     | 476 | 511  | shale     | 875 | 886  |
| lime        | 14  | 19   | shale          | 511 | 518  | Miss lime | 886 | 1032 |
| shale       | 19  | 31   | black shale    | 518 | 519  |           |     |      |
| lime        | 31  | 49   | shale          | 519 | 591  |           |     |      |
| coal        | 49  | 50   | coal           | 591 | 592  |           |     |      |
| lime        | 50  | 62   | shale          | 592 | 624  |           |     |      |
| shale       | 62  | 180  | sand           | 624 | 645  |           |     |      |
| black shale | 180 | 181  | coal           | 645 | 648  |           |     |      |
| lime        | 181 | 211  | sand shale     | 648 | 668  |           |     |      |
| coal        | 211 | 213  | black shale    | 668 | 670  |           |     |      |
| shale       | 213 | 220  | shale          | 670 | 682  |           |     |      |
| oil sand    | 220 | 230  | sand           | 682 | 687  |           |     |      |
| sand shale  | 230 | 321  | sand shale     | 687 | 720  |           |     |      |
| oswego lime | 321 | 352  | black shale    | 720 | 722  |           |     |      |
| summit      | 352 | 357  | shale          | 722 | 731  |           |     |      |
| lime        | 357 | 387  | sand shale     | 731 | 735  |           |     |      |
| mulkey      | 387 | 393  | shale          | 735 | 748  |           |     |      |
| lime        | 393 | 399  | black shale    | 748 | 750  |           |     |      |
| shale       | 399 | 409  | shale          | 750 | 757  |           |     |      |
| coal        | 409 | 411  | black shale    | 757 | 760  |           |     |      |
| shale       | 411 | 447  | shale          | 760 | 825  |           |     |      |
| black shale | 447 | 448  | coal           | 825 | 828  |           |     |      |
| sand shale  | 448 | 474  | shale          | 828 | 873  |           |     |      |