

WELL INFORMATION - ROCK WELLS

Layne Christensen Company

PROFESSIONAL SERVICES FOR WATER SYSTEMS

721 West Illinois Avenue • Aurora, Illinois 60506-2892 • Phone 630/897-6941 229 West Indiana Avenue • Beecher, Illinois 60401 • Phone 708/946-2244

| Name Of JobF | Prestage Fo | ods of Iowa | | | D | ate <u>07</u> | //11/17 | | |
|--------------------------------------|----------------|--|------------------------|--------------|---------------|----------------|--------------|-----------|-----------|
| City Eagle Gr | ove | | | | S | ate lo | wa | | |
| Well No1 | | Drillers Harold | Waydell/Bob Isaa | cson | | | | | |
| Well Location | | ft. (|) and | ft. (| |) of the | | | corner of |
| the 1 | /4 of Section | 21 , _{Twp} . 90 | (North |), Range | 26 | (West |) Wrigh | it | County |
| Otherwise located | as NE 1/4 | NW 1/4 SW 1/4 | | | | | | | |
| 3183 Highway | 17, Eagle G | rove, Iowa | | | | | | | |
| | arch 8, 201 | 7 | Wo | ork Complete | ed: Jun | e 28, 2017 | | | |
| Casing Record: Amount | Dia. | Wt. or Thickness | Material | | | | | | |
| 40' | 38" | 0.375" | Black Steel | with | no | Joints from | +2' | _ | 36' |
| 180' | 32" | .0375" | Black Steel | with | welded | joints from | +2' | to | 178' |
| 550' | 26" | 0.500" | Black Steel | with | welded | joints from | +2' | to | 550' |
| 5' | 26"x 20" | 0.500" | Black Steel | with | welded | joints from | 550' | to | 555' |
| 951' | 20" | 0.500" | Black Steel | with | welded | joints from | 555' | to | 1,506 |
| Hole Record: | | | | | | | | | |
| 42" | e . | inch from | 0' | to | 36' | | | | |
| 37" | | inch from | 36' | to | 178' | | | | |
| 31" | | inch from | 178' | to | 555' | | | | |
| 25" | | inch from | 555' | to | 1,508' | | | | |
| 16" | | inch from | 1,508' | | 1,988' | bottom of hole | | | |
| Cementing Record: | 38" cemer | nted using Type I Portland fro | om 36' (130 sacks) ; 3 | 2" cemented | d using Type | I Portland cen | nent from 15 | 0' (426 : | sacks); |
| 6" x 20" long string | casing with 26 | "x20" concentric reducer cem | ented using neat cem | ent (1185 sa | acks) of Port | land Type I Ce | ment | | |
| Well Test Data: Static Level ft ; pu | | ft ; pumpir | ng level | after | | hours pumping | g at | | g.p.m. |
| ength of test | | hrs. See Well Test Data | Sheet Dated | | | | | | |
| Remarks | | A DOLLAR TO THE STATE OF THE ST | | | | | | - | |
| ayne Job No. 44 | 560 | | Well Permit No.: | | | | | | |

WELL LOG

| Feet | | Feet | Description | |
|------|----|------|---------------------------------------|--|
| 0 | to | 3 | Top soil | |
| 3 | to | 17 | Clay | |
| 17 | to | 82 | Gray clay w/ sand seams | |
| 82 | to | 131 | Black shale | |
| 131 | to | 173 | Blue soft shale | |
| 173 | to | 303 | Tan soft shale | |
| 303 | to | 311 | Black hard shale | |
| 311 | to | 450 | Tan hard limestone w/ sandstone seams | |
| 450 | to | 480 | Gray limestone | |
| 480 | to | 525 | Gray limestone w/ some shale | |
| 525 | to | 590 | Gray limestone | |
| 590 | to | 595 | Gray and brown limestone | |
| 595 | to | 605 | Gray limestone | |
| 605 | to | 620 | Gray limestone/shale mix | |
| 620 | to | 630 | Gray limestone | |
| 630 | to | 635 | Gray and brown limestone | |
| 635 | to | 775 | Gray limestone and shale | |
| 775 | to | 835 | Gray limestone | |
| 835 | to | 920 | Gray limestone and shale mix | |
| 920 | to | 930 | Gray limestone | |
| 930 | to | 990 | Shale | |
| 990 | to | 1055 | Gray limestone with some shale | |
| 1055 | to | 1130 | Limestone | |
| 1130 | to | 1165 | Sandy shale | |
| 1165 | to | 1300 | Sandy Dolomite | |
| 1300 | to | 1395 | Shale | |
| 1395 | to | 1425 | Green Shale | |
| 1425 | to | 1436 | Sandstone | |
| 1436 | to | 1463 | Sandstone with some shale | |
| | | | | |

WELL LOG

| Feet | Feet | | Description |
|------|--------|-------------|---|
| 1463 | to 148 | 39 Dolom | ite with some hard black and soft tan shale |
| 1489 | to 150 | 30 Dolomi | te |
| 1530 | to 153 | 34 Tan sa | ndstone |
| 1534 | to 153 | 38 Gray lii | mestone |
| 1538 | to 154 | 12 Brown | limestone |
| 1542 | to 154 | 15 Gray lir | mestone |
| 1545 | to 155 | 54 Brown | limestone |
| 1554 | to 155 | 56 Light g | rey limestone |
| 1556 | to 155 | 59 Sandst | one |
| 1559 | to 156 | S1 Limesto | one mix |
| 1561 | to 156 | 88 Sandst | one |
| 1568 | to 157 | ′1 Sandst | one/limestone mix |
| 1571 | to 157 | '6 Tan an | d brown limestone |
| 1576 | to 159 | 7 Tan an | d brown limestone with sandstone |
| 1597 | to 161 | 1 Tan lim | estone with brown sandstone |
| 1611 | to 161 | 7 Light ta | n sandstone |
| 1617 | to 165 | 4 Gray lin | nestone |
| 1654 | to 165 | 9 Limesto | one with some sandstone |
| 1659 | to 166 | 8 Hard gr | ay limestone |
| 1668 | to 169 | 3 Sandy I | imestone |
| 1693 | to 180 | 2 Gray lin | nestone with some darker gray streaks |
| 1802 | to 180 | 9 Gray sa | andy limestone with gray fine grain sandstone |
| 1809 | to 181 | 2 Gray sa | indstone |
| 1812 | to 182 | 9 Tan sar | ndstone |
| 1829 | to 183 | 2 Hard gr | ay sandstone |
| 1832 | to 183 | 7 Tan sar | ndstone |
| 1837 | to 183 | 8 Hard gr | ay sandstone |
| 1838 | to 186 | 2 Tan sar | ndstone |
| 1862 | to 186 | 8 Gray an | d tan sandstone mix with some limestone |
| 1868 | to 187 | 4 Sandy g | gray limestone |
| | | | |

WELL LOG

| Feet | | Feet | Description |
|------|----|------|--|
| 1874 | to | 1943 | Hard gray limestone |
| 1943 | to | 1988 | Hard gray limestone with brown streaks |

