



**VANS**  
**ENERGY**  
**DEVELOPMENT**  
**INC.**

11 Lewis Drive

Paola, KS 66071

**Oil & Gas Well Drilling**  
**Water Wells**  
**Geo-Loop Installation**

Phone: 913-557-9083

Fax: 913-557-9084

**WELL LOG**

Tailwater, Inc.

Pedrow #9-T

API#15-003-25,621

October 17 - October 18, 2012

| <u>Thickness of Strata</u> | <u>Formation</u> | <u>Total</u>                   |
|----------------------------|------------------|--------------------------------|
| 1                          | soil & clay      | 1                              |
| 79                         | shale            | 80                             |
| 27                         | lime             | 107                            |
| 70                         | shale            | 177                            |
| 10                         | lime             | 187                            |
| 7                          | shale            | 194                            |
| 36                         | lime             | 230                            |
| 6                          | shale            | 236                            |
| 21                         | lime             | 257                            |
| 3                          | shale            | 260                            |
| 23                         | lime             | 283 base of the Kansas City    |
| 170                        | shale            | 453                            |
| 3                          | lime             | 456                            |
| 4                          | shale            | 460                            |
| 2                          | lime             | 462                            |
| 6                          | shale            | 468                            |
| 7                          | lime             | 475 oil show                   |
| 13                         | shale            | 488                            |
| 5                          | oil sand         | 493 green, ok bleeding         |
| 1                          | coal             | 494                            |
| 7                          | shale            | 501                            |
| 26                         | oil sand         | 527 green, good bleeding       |
| 1                          | coal             | 528                            |
| 7                          | shale            | 535                            |
| 6                          | lime             | 541                            |
| 15                         | shale            | 556                            |
| 8                          | lime             | 564                            |
| 33                         | shale            | 597                            |
| 7                          | lime             | 604                            |
| 28                         | shale            | 632                            |
| 7                          | broken sand      | 639 brown & green, ok bleeding |
| 32                         | shale            | 671                            |
| 1                          | lime & shells    | 672                            |
| 6                          | oil sand         | 678 brown, good bleeding       |
| 4                          | shale            | 682                            |
| 3                          | coal             | 685 black, no oil              |
| 52                         | shale            | 737                            |

|    |             |                                  |
|----|-------------|----------------------------------|
| 7  | oil sand    | 744 grey, ok bleeding            |
| 16 | shale       | 760                              |
| 1  | broken sand | 761 brown & grey, light bleeding |
| 16 | shale       | 777                              |
| 2  | broken sand | 779 brown & grey, ok bleeding    |
| 4  | silty shale | 783                              |
| 1  | broken sand | 784 grey, ok bleeding            |
| 3  | silty shale | 787                              |
| 2  | sand        | 789 grey, no oil                 |
| 2  | oil sand    | 791 grey, good bleeding          |
| 23 | silty shale | 814                              |
| 11 | oil sand    | 825 brown, good bleeding         |
| 63 | shale       | 888 TD                           |

Drilled a 9 7/8" hole to 21'  
 Drilled a 5 5/8" hole to 888'

Set 21' of 7" surface casing cemented with 6 sacks of cement.

Set 878.2' of 2 7/8" threaded and coupled 8 round upset tubing with 3 centralizers, 1 float shoe and 1 clamp.

