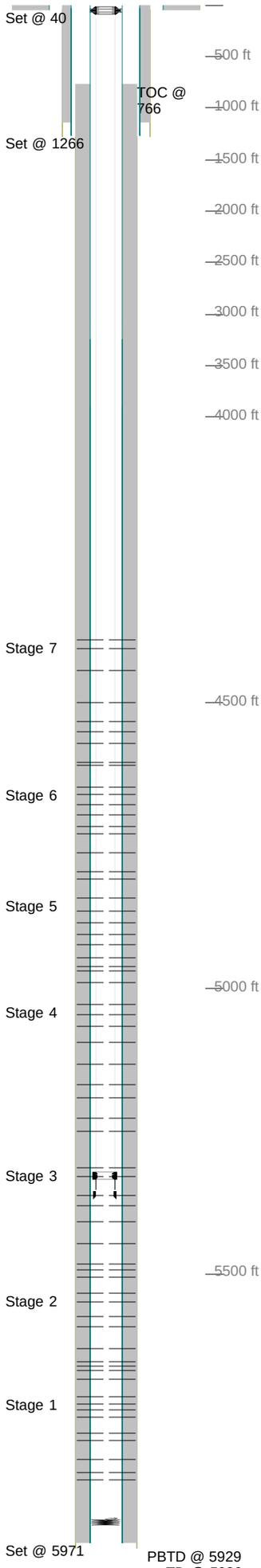
# Downhole Schematic for Twin Creek 12-1A1 (O1EB)

Project : South Piceance | API # : 05045195090000 | Surface Location : SWSE Sec 1 T7S - R92W 6th PM

Area : Mamm Creek | County : GARFIELD | BHL : NENE-12-7S-92 W 6th PM

As Of : 05/24/2011 | GL : 6062.0 ft | KB to GL : 22.0 ft | KB : 6084.0 ft




## Casing Details

| Section | Hole | Casing | Mass | Set At | Length | Thread | Grade | Description |
|---|---|---|---|---|---|---|---|---|
| Conductor | 26.000 | 16 | 42 | 40 | 40 | | | CONDUCTOR |
| Surface | 12.250 | 9.625 | 36 | 1,266 | 1 | LT&C | J55 | Float Shoe |
| | | 9.625 | 36 | 1,265 | 41 | LT&C | J55 | Casing |
| | | | 0 | 1,224 | 0 | | | Insert |
| | | 9.625 | 36 | 1,224 | 1,195 | LT&C | J55 | Casing |
| | | 9.625 | 36 | 28 | 3 | LT&C | J55 | Pup |
| | | 11 | 0 | 25 | 2 | | | Well Head |
| | | | 0 | 23 | 27 | | | Landing Joint |
| Production | 8.750 | 4.5 | 11.6 | 5,971 | 1 | LT&C | N80 | Float Shoe |
| | | 4.5 | 11.6 | 5,970 | 41 | LT&C | E80 | Casing |
| | | 4.5 | 11.6 | 5,929 | 1 | LT&C | N80 | Float Collar |
| | | 4.5 | 11.6 | 5,927 | 987 | LT&C | E80 | Casing |
| | | 4.5 | 11.6 | 4,940 | 23 | LT&C | S90 | Marker |
| | | 4.5 | 11.6 | 4,917 | 987 | LT&C | E80 | Casing |
| | | 4.5 | 11.6 | 3,930 | 23 | LT&C | S90 | Marker |
| | | 4.5 | 11.6 | 3,908 | 660 | LT&C | E80 | Casing |
| | | 4.5 | 11.6 | 3,248 | 2 | LT&C | P110 | HDVC |
| | | 4.5 | 11.6 | 3,245 | 3,248 | LT&C | E80 | Casing |

## Cement Details

| Section | Sequence | Top | Density | Blend / Additives |
|---|---|---|---|---|
| Surface | Tail | 0 | 15.8 | D907 / 1.25%S001+0.2%D046+0.25pps D29 |
| Production | Lead | 766 | 13.5 | TXI / 0.6% D207 + 0.2% D065 + 0.5% D046 + 0.25lb/sk D029 |
| | Tail | 3,065 | 15.8 | G Neat / 0.2% D065 + 0.3% D013 + 0.2% D046 + 0.25lb/sk D029 |
| | Tail | 3,247 | 13.5 | TXI / 0.6% D207 + 0.2% D013 + 0.5% D046 + 0.25lb/sk D029 + 0.2% D065 |
| Conductor | Fill | 0 | 0.0 | 4 yards redi mix / |

## Tubing and Downhole Equipment

| O.D. | Length | Depth | Description |
|---|---|---|---|
| 0.000 | 20.00 | 20.00 | Adjusted KB |
| 4.063 | 0.82 | 20.82 | 4 1/16" x 2 3/8" 5K EUE Hanger |
| 2.375 | 0.67 | 21.49 | 2 3/8" N80 Saver Sub |
| 2.375 | 5,200.23 | 5,321.72 | 2 3/8" 4.7# L80 EUE tubing |
| 3.063 | 0.97 | 5,322.69 | F-nipple |
| 2.375 | 31.68 | 5,354.37 | 2 3/8" 4.7# L80 EUE tubing |
| 3.063 | 0.91 | 5,355.28 | Top of the pump off bit sub |
| 3.750 | 1.22 | 5,929.00 | Bottom of bit sub and bit |

## Perforations

| Stage | Date | From | To | Shots |
|---|---|---|---|---|
| 1 | 02/28/2011 | 5,862 | 5,863 | 3 |
| | | 5,848 | 5,849 | 3 |
| | | 5,824 | 5,825 | 3 |
| | | 5,792 | 5,793 | 3 |
| | | 5,778 | 5,779 | 3 |
| | | 5,750 | 5,751 | 3 |
| | | 5,738 | 5,739 | 3 |
| | | 5,728 | 5,729 | 3 |
| | | 5,714 | 5,715 | 3 |
| 2 | 04/22/2011 | 5,684 | 5,685 | 3 |
| | | 5,670 | 5,671 | 3 |
| | | 5,662 | 5,663 | 3 |
| | | 5,654 | 5,655 | 3 |
| | | 5,632 | 5,633 | 3 |
| | | 5,592 | 5,593 | 3 |
| | | 5,574 | 5,575 | 3 |
| | | 5,550 | 5,551 | 3 |
| | | 5,534 | 5,535 | 3 |
| 3 | 04/23/2011 | 5,506 | 5,507 | 3 |
| | | 5,494 | 5,495 | 3 |
| | | 5,482 | 5,483 | 3 |
| | | 5,448 | 5,449 | 3 |
| | | 5,408 | 5,409 | 3 |
| | | 5,380 | 5,381 | 3 |
| | | 5,362 | 5,363 | 3 |
| | | 5,330 | 5,331 | 3 |
| | | 5,314 | 5,315 | 3 |
| 4 | 04/25/2011 | 5,250 | 5,251 | 3 |
| | | 5,228 | 5,229 | 3 |
| | | 5,192 | 5,193 | 3 |
| | | 5,170 | 5,171 | 3 |
| | | 5,134 | 5,135 | 3 |
| | | 5,096 | 5,097 | 3 |
| | | 5,068 | 5,069 | 3 |
| | | 5,046 | 5,047 | 3 |
| | | 5,028 | 5,029 | 3 |
| 5 | 04/25/2011 | 4,990 | 4,991 | 3 |
| | | 4,970 | 4,971 | 3 |
| | | 4,962 | 4,963 | 3 |
| | | 4,948 | 4,949 | 3 |
| | | 4,924 | 4,925 | 3 |
| | | 4,906 | 4,907 | 3 |
| | | 4,886 | 4,887 | 3 |
| | | 4,866 | 4,867 | 3 |
| | | 4,842 | 4,843 | 3 |
| 6 | 04/26/2011 | 4,810 | 4,811 | 3 |
| | | 4,796 | 4,797 | 3 |
| | | 4,762 | 4,763 | 3 |
| | | 4,730 | 4,731 | 3 |
| | | 4,718 | 4,719 | 3 |
| | | 4,698 | 4,699 | 3 |
| | | 4,678 | 4,679 | 3 |
| | | 4,660 | 4,661 | 3 |
| | | 4,648 | 4,649 | 3 |
| 7 | 04/27/2011 | 4,610 | 4,611 | 3 |
| | | 4,604 | 4,605 | 3 |
| | | 4,572 | 4,573 | 3 |
| | | 4,552 | 4,553 | 3 |
| | | 4,534 | 4,535 | 3 |
| | | 4,500 | 4,501 | 3 |
| | | 4,444 | 4,445 | 3 |
| | | 4,406 | 4,407 | 3 |
| | | 4,390 | 4,391 | 3 |

## Frac Summary

Stage 1 : 5,714 - 5,863, 27 - 0.340" shots, 18051 bbls of Slickwater, 127400 lbs of 20-40 Sand Report Date: 04/22/2011

Stage 2 : 5,534 - 5,685, 27 - 0.340" shots, 12308 bbls of Slickwater, 85800 lbs of 20-40 Sand Report Date: 04/23/2011

Stage 3 : 5,314 - 5,507, 27 - 0.340" shots, 12411 bbls of Slickwater, 87100 lbs of 20-40 Sand Report Date: 04/25/2011

Stage 4 : 5,028 - 5,251, 27 - 0.340" shots, 6437 bbls of Slickwater, 44200 lbs of 20-40 Sand Report Date: 04/25/2011

Stage 5 : 4,842 - 4,991, 27 - 0.340" shots, 17339 bbls of Slickwater, 120900 lbs of 20-40 Sand Report Date: 04/26/2011

Stage 6 : 4,648 - 4,811, 27 - 0.340" shots, 16319 bbls of Slickwater, 113100 lbs of 20-40 Sand Report Date: 04/27/2011

Stage 7 : 4,390 - 4,611, 27 - 0.340" shots, 10225 bbls of Slickwater, 70200 lbs of 20-40 Sand Report Date: 04/28/2011

## Bridge Plug Details

| Depth | Date Set | Plug Type | Sacks Cement |
|---|---|---|---|
| 4,290.0 | 04/30/2011 | CBP | 0 |

CBP at 4,290.0 drilled out 05/24/2011

## Comments

Braden head pressure vented thru flare stack

Braden head pressure 100 psi 5/24/11