

Downhole Schematic for Twin Creek 12-6A1 (F12E)



Project : South Piceance

API # : 05045203940000

Surface Location : SENW Sec 12 T7S - R92W 6th PM

Area : Mamm Creek

County :

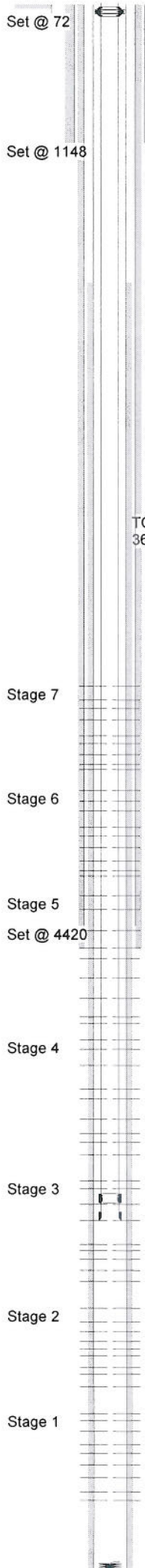
BHL : SENW-12-7S-92 W 6th PM

As Of : 07/09/2012

GL : 6145.0 ft

KB to GL : 22.0 ft

KB : 6167.0 ft



| Casing Details | | | | | | | | | |
|----------------|-----------|-------------|-----------|---------|-----------|-----------|--------|------------|-------------------|
| Section | Conductor | Hole 26.000 | Casing 16 | Mass 42 | Set At 72 | Length 72 | Thread | Grade A52A | Description Joint |
| Surface | | 12.250 | 9.625 | 36 | 1,148 | 1 | LT&C | J55 | Shoe |
| | | | 9.265 | 36 | 1,147 | 45 | LT&C | J55 | CSG jt |
| | | | 9.625 | 36 | 1,102 | 1 | LT&C | J55 | Float |
| | | | 9.625 | 36 | 1,101 | 1,073 | LT&C | J55 | CSG Jt |
| | | | 9.625 | 36 | 27 | 5 | LT&C | J55 | Wellhead |
| | | | 9.625 | 36 | 22 | 27 | LT&C | J55 | Landing Jt |
| Intermediate | | 8.750 | 7.00 | 23 | 4,420 | 2 | LT&C | J-55 | Float Shoe |
| | | | 7.00 | 23 | 4,418 | 40 | LT&C | J-55 | Int. Csg |
| | | | 7.00 | 23 | 4,378 | 1 | LT&C | J-55 | Float Collar |
| | | | 7.00 | 23 | 4,376 | 4,377 | LT&C | J-55 | Int Csg |
| Production | | 6.125 | 0 | 0 | 5,649 | 1 | Butt | | F/shoe |
| | | | 4.5 | 11.6 | 5,648 | 43 | Butt | S80 | Casing |
| | | | 0 | 0 | 5,604 | 1 | Butt | | f/collar |
| | | | 4.5 | 11.6 | 5,603 | 947 | Butt | S80 | CASING |
| | | | 4.5 | 11.6 | 4,656 | 22 | Butt | S80 | MARKER JT |
| | | | 4.5 | 11.6 | 4,634 | 992 | Butt | S80 | CASING |
| | | | 4.5 | 11.6 | 3,642 | 22 | Butt | S80 | MARKER JT |
| 4.5 | 11.6 | 3,620 | 3,624 | Butt | S80 | CASING | | | |

| Cement Details | | | | | | | | | |
|--------------------|-----------|-------|---------|--|--|--|--|--|--|
| Section | Sequence | Top | Density | Blend / Additives | | | | | |
| Surface | Tail | 0 | 15.8 | G CMT / D029=.25%, D046=.2%, S001=.5% | | | | | |
| Intermediate | Scavenger | 0 | 13.3 | MudPush II / 6432.7 lb/mgal D031 + 6.0 lb/bbl D182 + 10 lb/bbl CemNet Plus | | | | | |
| Production | Scavenger | 2,308 | 13.2 | EasyBLOK TXI / 75.0 lb/sx D049 + 6.0% D154 + 0.6% D400 + 0.1% D153 + 0.2% D202 + 0.55% D013 + 0.5% D046 + 0.25 lb/sx D029 + 1.5 lb/bbl CemNet D095 | | | | | |
| | Tail | 3,324 | 14.0 | Mud Push II / D031, D182, D097 | | | | | |
| Conductor | Fill | 0 | 0.0 | EasyBLOK TXI / D049, D154, D400, D153, D202, D013, D046, D029, D095 | | | | | |
| 4 yards redi mix / | | | | | | | | | |

| Tubing and Downhole Equipment | | | | |
|-------------------------------|----------|----------|----------------------------|--|
| O.D. | Length | Depth | Description | |
| 0.000 | 20.00 | 20.00 | KB | |
| 4.063 | 0.85 | 20.85 | 4 1/16 W.G. 10K hanger | |
| 2.594 | 0.67 | 21.52 | 2 3/8 Saver sub | |
| 2.375 | 4,894.60 | 4,916.12 | 150 jts 2 3/8 J55 4.7# eue | |
| 3.063 | 0.97 | 4,917.09 | F nipple | |
| 2.375 | 32.82 | 4,949.91 | 2 3/8 J55 4.7# eue | |
| 3.125 | 0.92 | 4,950.83 | top half of POBS | |
| 3.125 | 1.21 | 5,601.00 | POBS & Hurricane bit | |

| Perforations | | | | | | | | | |
|--------------|------------|-------|-------|-------|--|--|--|--|--|
| Stage | Date | From | To | Shots | | | | | |
| Stage 7 | 06/14/2012 | 4,740 | 4,741 | 3 | | | | | |
| | | 4,722 | 4,723 | 3 | | | | | |
| | | 4,678 | 4,679 | 3 | | | | | |
| | | 4,648 | 4,649 | 3 | | | | | |
| | | 4,630 | 4,631 | 3 | | | | | |
| | | 4,420 | 4,421 | 3 | | | | | |
| | | 4,398 | 4,399 | 3 | | | | | |
| Stage 6 | 06/21/2012 | 4,600 | 4,601 | 3 | | | | | |
| | | 4,588 | 4,589 | 3 | | | | | |
| | | 4,554 | 4,555 | 3 | | | | | |
| | | 4,516 | 4,517 | 3 | | | | | |
| | | 4,480 | 4,481 | 3 | | | | | |
| | | 4,460 | 4,461 | 3 | | | | | |
| | | 4,428 | 4,429 | 3 | | | | | |
| Stage 5 | 06/14/2012 | 4,390 | 4,391 | 3 | | | | | |
| | | 4,364 | 4,365 | 3 | | | | | |
| | | 4,328 | 4,329 | 3 | | | | | |
| | | 4,318 | 4,319 | 3 | | | | | |
| | | 4,300 | 4,301 | 3 | | | | | |
| | | 4,276 | 4,277 | 3 | | | | | |
| | | 4,254 | 4,255 | 3 | | | | | |
| Stage 4 | 06/16/2012 | 4,238 | 4,239 | 3 | | | | | |
| | | 4,208 | 4,209 | 3 | | | | | |
| | | 4,190 | 4,191 | 3 | | | | | |
| | | 4,170 | 4,171 | 3 | | | | | |
| | | 4,132 | 4,133 | 3 | | | | | |
| | | 4,122 | 4,123 | 3 | | | | | |
| | | 4,104 | 4,105 | 3 | | | | | |
| Stage 3 | 06/18/2012 | 4,084 | 4,085 | 3 | | | | | |
| | | 4,070 | 4,071 | 3 | | | | | |
| | | 4,040 | 4,041 | 3 | | | | | |
| | | 4,020 | 4,021 | 3 | | | | | |
| | | 4,004 | 4,005 | 3 | | | | | |
| | | 3,978 | 3,979 | 3 | | | | | |
| | | 4,966 | 4,967 | 3 | | | | | |
| 4,936 | 4,937 | 3 | | | | | | | |
| 4,906 | 4,907 | 3 | | | | | | | |
| 4,892 | 4,893 | 3 | | | | | | | |

| Frac Summary | | | | | | | | | |
|--------------|--|--|--|--|--|--|--|--|--|
| Stage 1 | 5,324 - 5,487, 27 - 0.380" shots, 9143 bbls of Slickwater Report Date: 06/14/2012 | | | | | | | | |
| Stage 2 | 5,128 - 5,275, 27 - 0.380" shots, 3857 bbls of Slickwater Report Date: 06/16/2012 | | | | | | | | |
| Stage 3 | 4,892 - 5,079, 27 - 0.380" shots, 6095 bbls of Slickwater Report Date: 06/18/2012 | | | | | | | | |
| Stage 4 | 4,630 - 4,845, 27 - 0.380" shots, 11975 bbls of Slickwater Report Date: 06/21/2012 | | | | | | | | |
| Stage 5 | 4,364 - 4,601, 27 - 0.380" shots, 9095 bbls of Slickwater Report Date: 06/23/2012 | | | | | | | | |
| Stage 6 | 4,170 - 4,329, 27 - 0.380" shots, 10881 bbls of Slickwater Report Date: 06/25/2012 | | | | | | | | |
| Stage 7 | 3,978 - 4,133, 27 - 0.380" shots, 17860 bbls of Slickwater Report Date: 12/30/1899 | | | | | | | | |

Comments
 SIIIC 400 psi, SIBH 65 psi, 7/9/12
 Total Fluid Recovered 41,124

Set @ 5649
 PBD @ 5601
 TD @ 5670