

# SPERRY-SUN DRILLING SERVICES

## CERTIFIED SURVEY WORK SHEET

**OPERATOR:** Amador ko  
**WELL:** REI 31-5HZ  
**FIELD:** Weld County, CO.  
**RIG:** Extreme8  
**LEGALS:**  
**COUNTY:** Weld County  
**STATE:** CO.  
**CAL. METHOD:** M.C.  
**MAG. DECL. APPLIED:** 8.83  
**VERTICAL SEC. DIR. :** 310.520

**SSDS Job Number :** CA-MJ-0007781539  
**Start Date of Job :** 12/14/2010  
**End Date of Job :** 12/31/2010  
**Lead Directional Driller:** Justen Koenen  
**Other SSDS DD's :** Paul Jevne  
**SSDS MWD Engineers :** Ien Cowie  
Marlo Schonsberg

*Amador ko*  
*Hx13983*

|                         | Main Hole |      | 1st Side Track |      | 2nd Side Track |      | 3rd Side Track |      | 4th Side Track |      |
|-------------------------|-----------|------|----------------|------|----------------|------|----------------|------|----------------|------|
|                         | Tie On    | Gyro | Tie On         | Gyro | Tie On         | Gyro | Tie On         | Gyro | Tie On         | Gyro |
| ESS Survey              | 0.00      |      |                |      |                |      |                |      |                |      |
| First Survey Depth      | 192.00    |      |                |      |                |      |                |      |                |      |
| Last Survey Depth       |           |      |                |      |                |      |                |      |                |      |
| KOP Depth/Sidetrack MD  | 6300.00   |      | KOP            |      | KOP-ST1        |      | KOP-ST2        |      | KOP-ST3        |      |
| First Survey Depth      |           |      | MWD            |      | MWD            |      | MWD            |      | MWD            |      |
| Last Survey Depth       | 12294.00  |      | MWD            |      | MWD            |      | MWD            |      | MWD            |      |
| Bit Extrapolation to TD | 12330.00  |      | T.D.           |      | T.D.           |      | T.D.           |      | T.D.           |      |

The following Sperry Sun Drilling Services personnel listed below, do certify the above survey information to be accurate :

**Print Name :** Justen Koenen **Print Name :** Paul Jevne **Print Name :** Marlo Schonsberg  
**Sign Name :** *Justen Koenen* **Sign Name :** *Paul Jevne* **Sign Name :** *Marlo Schonsberg*

**Tie On**  
**Examples of Survey Types:**  
 MWD  
 ESS  
 Gyro  
 SS

**Tie On to Surface Casing (Assumed Vertical), Tie On to existing MWD Survey (prior drilled hole)**  
 Sperry Sun Drilling Services (SSDS) Measurement While Drilling (MWD) Survey's  
 Sperry Sun Drilling Services (SSDS) Electronic Survey System (ESS) Survey's  
 Gyro Survey's ; Provided by third party vendor, or by Sperry Sun Drilling Services (SSDS)  
 Single Shot (SS) Survey's ; Provided by Sperry Sun Drilling Services (SSDS) or third party vendor.