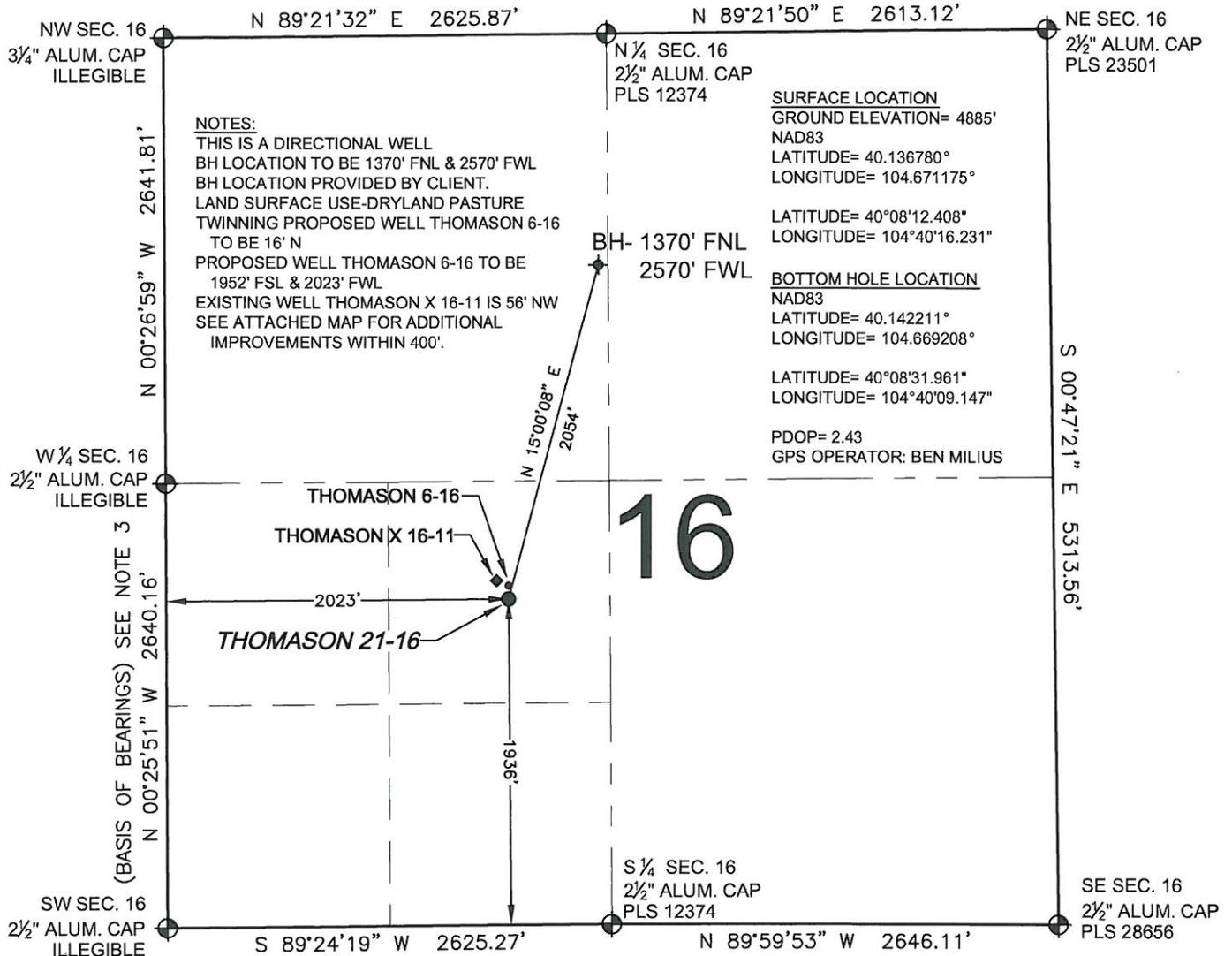


# WELL LOCATION CERTIFICATE: THOMASON 21-16

SECTION 16, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.



**NOTES:**

THIS IS A DIRECTIONAL WELL  
 BH LOCATION TO BE 1370' FNL & 2570' FWL  
 BH LOCATION PROVIDED BY CLIENT.  
 LAND SURFACE USE-DRYLAND PASTURE  
 TWINNING PROPOSED WELL THOMASON 6-16  
 TO BE 16' N  
 PROPOSED WELL THOMASON 6-16 TO BE  
 1952' FSL & 2023' FWL  
 EXISTING WELL THOMASON X 16-11 IS 56' NW  
 SEE ATTACHED MAP FOR ADDITIONAL  
 IMPROVEMENTS WITHIN 400'.

**SURFACE LOCATION**  
 GROUND ELEVATION= 4885'  
 NAD83  
 LATITUDE= 40.136780°  
 LONGITUDE= 104.671175°

LATITUDE= 40°08'12.408"  
 LONGITUDE= 104°40'16.231"

**BOTTOM HOLE LOCATION**  
 NAD83  
 LATITUDE= 40.142211°  
 LONGITUDE= 104.669208°

LATITUDE= 40°08'31.961"  
 LONGITUDE= 104°40'09.147"

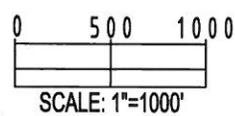
PDOP= 2.43  
 GPS OPERATOR: BEN MILIUS

# 16

WELL THOMASON 21-16 TO BE LOCATED 1936' FSL AND 2023' FWL, SECTION 16, T2N, R65W OF THE 6th P.M.

**LEGEND**

- ⊕ = EXISTING MONUMENT    ⊕ = BOTTOM HOLE    BH = BOTTOM HOLE
- = PROPOSED WELL        ◆ = EXISTING WELL



I, JERRY F. HARCEK JR., A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO DO HEREBY CERTIFY TO **KERR-MCGEE OIL & GAS ONSHORE LP**, THAT THE SURVEY AND WELL LOCATION CERTIFICATE SHOWN HEREON WERE DONE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THE DRAWING SHOWN HEREON ACCURATELY DEPICTS THE PROPOSED LOCATION OF THE WELL **THOMASON 21-16**. THIS CERTIFICATE DOES NOT REPRESENT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT AS DEFINED BY C.R.S. 38-51-102 AND CANNOT BE RELIED UPON TO DETERMINE OWNERSHIP.

JERRY F. HARCEK JR., PLS 34997  
 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR  
 FOR AND ON BEHALF OF P.F.S., LLC



- NOTES:**
- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
  - ELEVATIONS SHOWN AT THE WELL HEAD, AS WELL AS HORIZONTAL CONTROL, ARE BASED ON GPS-RTK VALUES DERIVED FROM DOING 2-HOUR STATIC GPS SESSIONS AND REDUCTIONS USING O.P.U.S. SOLUTIONS.  
 VERTICAL = NAVD88;      HORIZONTAL = NAD83/92
  - THE BEARINGS SHOWN HEREON ARE BASED ON GPS OBSERVATIONS BETWEEN THE MONUMENTS SHOWN HEREON AS FOUND ON THE FIELD DATE BELOW.
  - DISTANCES SHOWN ARE AT GROUND LEVEL, AS MEASURED IN THE FIELD, WITH TIES TO WELLS MEASURED AT A PERPENDICULAR TO SECTION LINES.

|   |   |  |
|---|---|--|
| PREPARED BY:<br><br>1801 W. 13th Ave.<br>Denver, CO 80204 | FIELD DATE:<br>10-27-10   | WELL NAME:<br>THOMASON 21-16               |
|   | DRAWING DATE:<br>12-03-10   | SURFACE LOCATION:<br>WELD COUNTY, COLORADO |
|   | BY:<br>SMF  | NE 1/4 SW 1/4, SEC. 16, T2N, R65W          |
|   | NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THIS SAID DATE OF THIS CERTIFICATION SHOWN HEREON. |  |