WELL LOCATION CERTIFICATE: MORTON 1-12 SECTION 12, TOWNSHIP 1 NORTH, RANGE 67 WEST, 6TH P.M. NW SEC. 12 N 89'47'19" E 2620.73' N 89°22'50" E 2643.80' NE SEC. 12 21/2" ALUM. CAP N 1/4 SEC. 12 31/4" ALUM, CAP LS 11372 LS 13155 21/2" ALUM. CAP BH- 660' FNL LS 11372 610' FEL S 90 SURFACE LOCATION 00.54,46, GROUND ELEVATION= 4905' NAD83 LATITUDE= 40.068973° MORTON 1-12-LONGITUDE= 104.836154° П .22 **BOTTOM HOLE LOCATION** NAD83 2638 01.05 LATITUDE= 40 070939° LONGITUDE= 104.832056° MORTON 3-12-.42 PDOP= 1.87 Z GPS OPERATOR: TRAVIS KRAICH W 1/4 SEC. 12 E 1/4 SEC. 12 21/2" ALUM. CAP 31/4" ALUM. CAP LS 11372 LS 13155 NOTE 60, S 00.51 SEE THIS IS A DIRECTIONAL WELL BH LOCATION TO BE 660' FNL & 610' FEL 1'43" BH LOCATION PROVIDED BY CLIENT. BEARINGS) LAND SURFACE USE-OPEN FIELD ≥ TWINNING PROPOSED WELL MORTON 3-12 TO BE 10' S 48,42" PROPOSED WELL MORTON 3-12 TO BE 1382' FNL & 1762' FEL 2608. SEE ATTACHED MAP FOR ADDITIONAL 9F 90 IMPROVEMENTS WITHIN 400'. (BASIS Z S1/4 SEC. 12 21/2" ALUM. CAP SE SEC. 12 **SW SEC. 12** ILLEGIBLE 21/2" ALUM, CAP 21/2" ALUM. CAP € S 89'29'52" W 2635.42 S 89°17'10" W 2622.74 LS 28286 WELL MORTON 1-12 TO BE LOCATED 1372' FNL AND 1763' FEL, SECTION 12, T1N, R67W OF THE 6th P.M. LEGEND 500 1000 → = EXISTING MONUMENT → = BOTTOM HOLE BH = BOTTOM HOLE = PROPOSED WELL = EXISTING WELL SCALE: 1"=1000" 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, 1. THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS THAT THE SURVEY AND WELL LOCATION CERTIFICATE TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE SHOWN HEREON WERE DONE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THE DRAWING SHOWN HEREON

NOTES:

- 2. 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
- 3. 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.

ACCURATELY DEPICTS THE PROPOSED LOCATION OF THE WELL MORTON 1-12. 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.

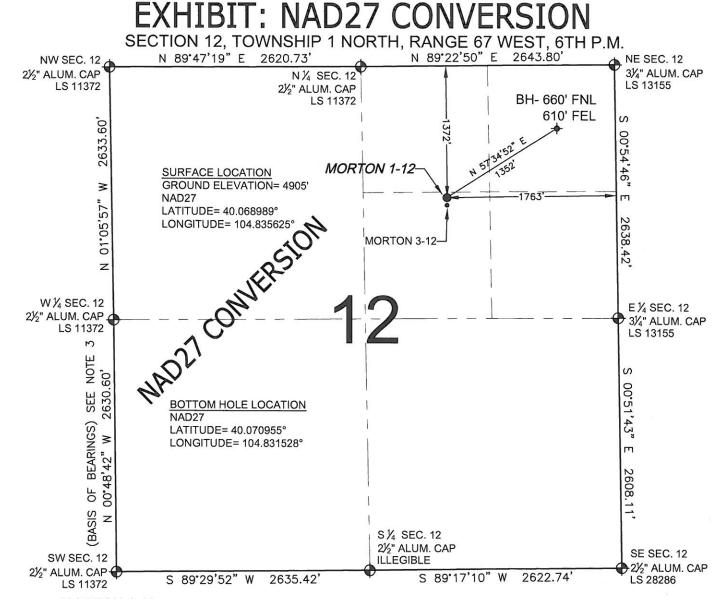
JERRY F. HARCEK JR., PLS 34997 COLORADO LICENSED PROFESSIONAL LAND SURVEYOR FOR AND ON BEHALF OF P.F.S., LLC

FIELD DATE: 05-20-10	WELL NAME: MORTON 1-12
DRAWING DATE: 06-01-10	SURFACE LOCATION: WELD COUNTY, COLORADO SW 1/4 NE 1/4, SEC. 12, T1N, R67W
BY: SMF	

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

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DININAL LANG



WELL MORTON 1-12 TO BE LOCATED 1372' FNL AND 1763' FEL, SECTION 12, T1N, R67W OF THE 6th P.M.

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
- 2. 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
 3. 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.

LEGEND

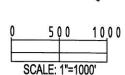
= EXISTING MONUMENT
= PROPOSED WELL

→ = BOTTOM HOLE

→ = EXISTING WELL

BH = BOTTOM HOLE

NOTE: LATITUDE AND LONGITUDE SHOWN WERE CONVERTED FROM NAD83 USING CORPSCON 6.0 (PROGRAM). PFS DOES NOT WARRANT OR GUARANTEE THEIR ACCURACY.





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.