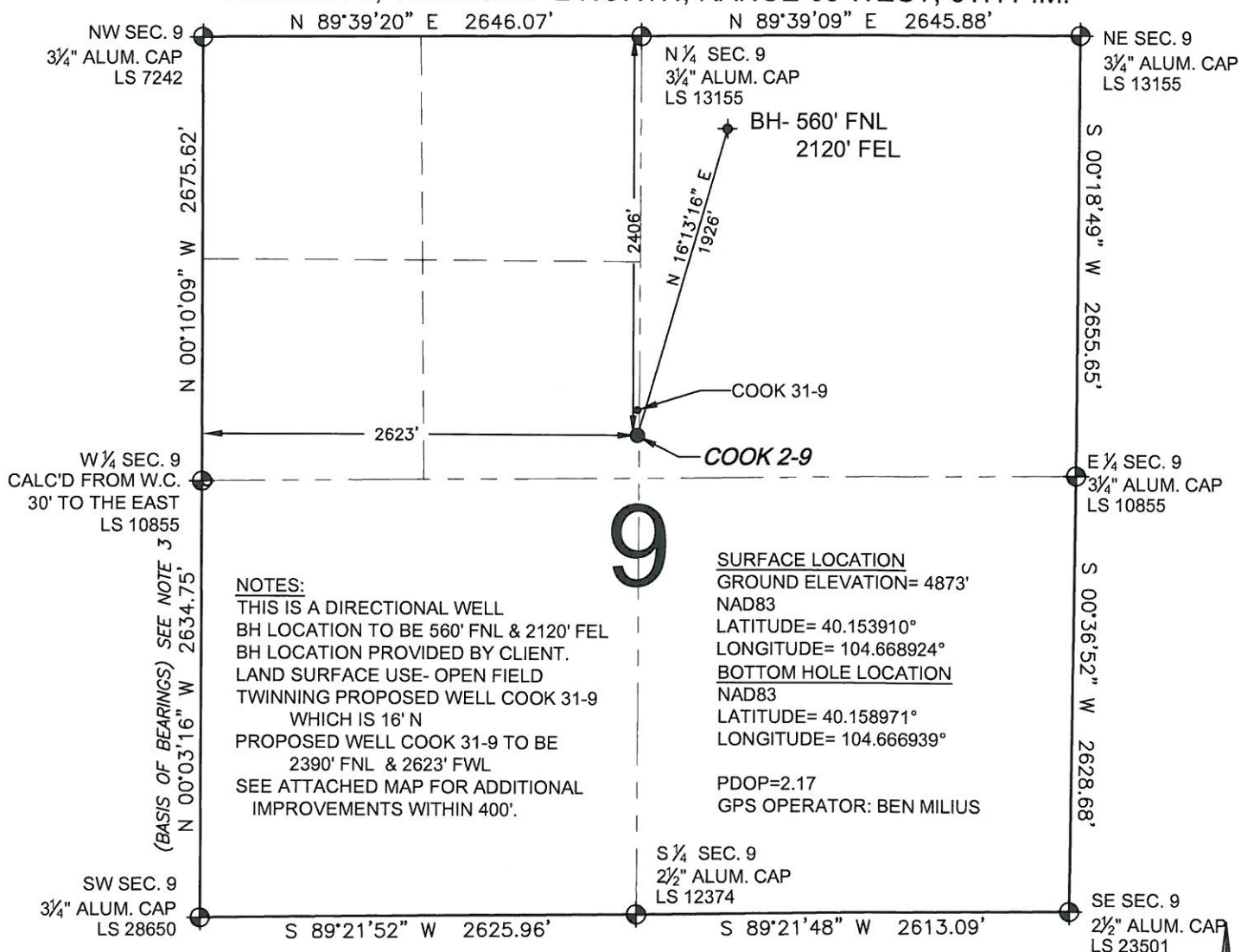


# WELL LOCATION CERTIFICATE: COOK 2-9

SECTION 9, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.



## NOTES:

THIS IS A DIRECTIONAL WELL  
BH LOCATION TO BE 560' FNL & 2120' FEL  
BH LOCATION PROVIDED BY CLIENT.  
LAND SURFACE USE- OPEN FIELD  
TWINNING PROPOSED WELL COOK 31-9  
WHICH IS 16' N  
PROPOSED WELL COOK 31-9 TO BE  
2390' FNL & 2623' FWL  
SEE ATTACHED MAP FOR ADDITIONAL  
IMPROVEMENTS WITHIN 400'.

## SURFACE LOCATION

GROUND ELEVATION= 4873'

NAD83

LATITUDE= 40.153910°

LONGITUDE= 104.668924°

## BOTTOM HOLE LOCATION

NAD83

LATITUDE= 40.158971°

LONGITUDE= 104.666939°

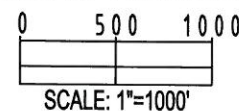
PDOP=2.17

GPS OPERATOR: BEN MILIUS

WELL **COOK 2-9** TO BE LOCATED 2406' FNL AND 2623' FWL, SECTION 9, T2N, R65W OF THE 6th P.M.

## LEGEND

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

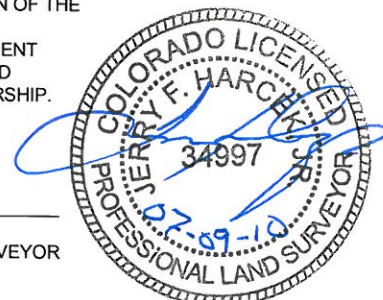


## NOTES:

- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.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.

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 **COOK 2-9**. 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



PREPARED BY:	FIELD DATE:	WELL NAME:
PFS	06-21-10	COOK 2-9
Petroleum Field Services, LLC	DRAWING DATE:	SURFACE LOCATION:
1801 W. 13th Ave.	07-08-10	WELD COUNTY, COLORADO
Denver, CO 80204	BY:	SE 1/4 NW 1/4, SEC. 9, T2N, R65W
	TBS	

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.

SECTION 9, TOWNSHIP 2 NORTH, RANGE 65 WEST, 6TH P.M.

