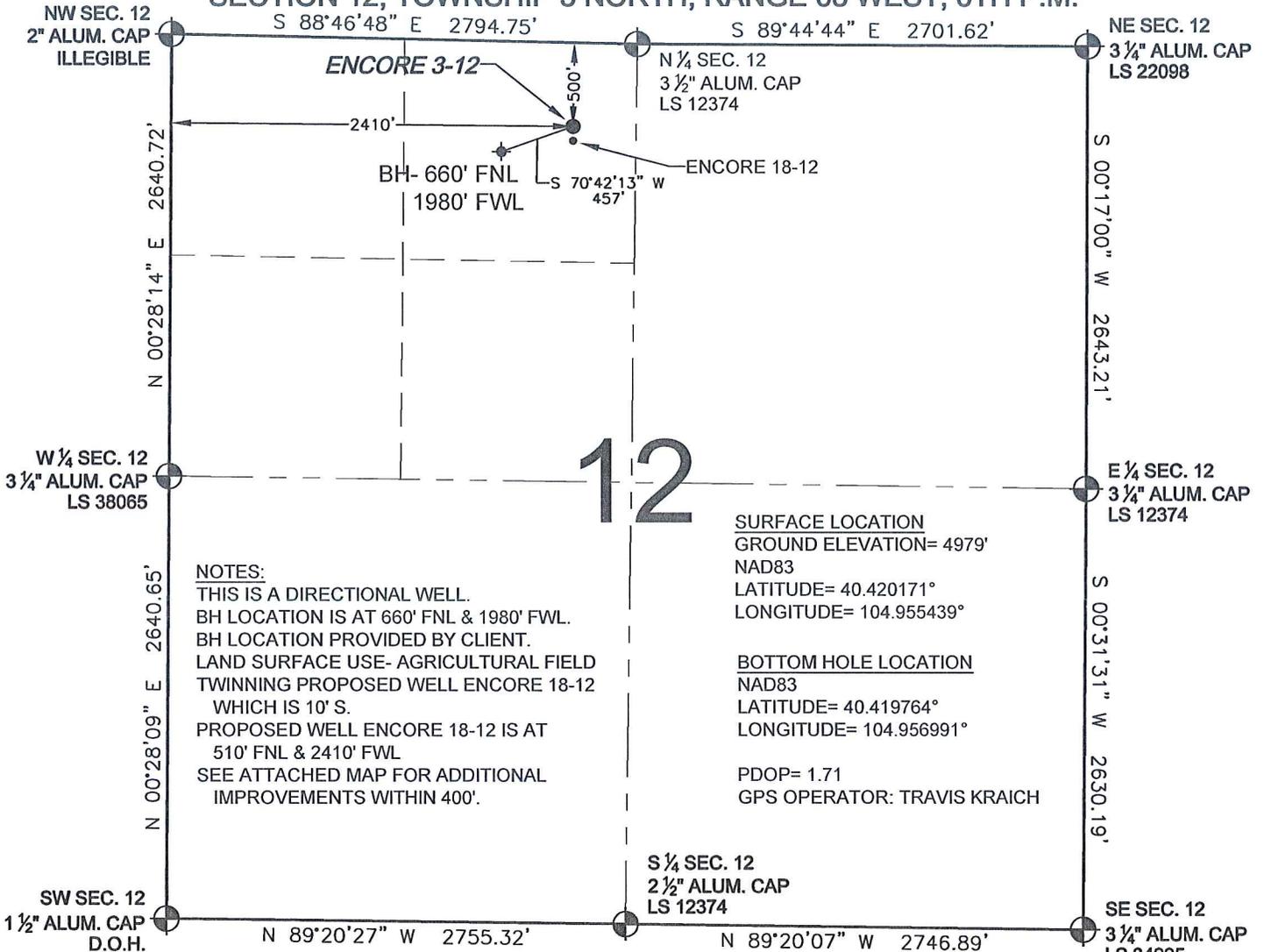


# WELL LOCATION CERTIFICATE: ENCORE 3-12

SECTION 12, TOWNSHIP 5 NORTH, RANGE 68 WEST, 6TH P.M.



**NOTES:**  
 THIS IS A DIRECTIONAL WELL.  
 BH LOCATION IS AT 660' FNL & 1980' FWL.  
 BH LOCATION PROVIDED BY CLIENT.  
 LAND SURFACE USE- AGRICULTURAL FIELD  
 TWINNING PROPOSED WELL ENCORE 18-12  
 WHICH IS 10' S.  
 PROPOSED WELL ENCORE 18-12 IS AT  
 510' FNL & 2410' FWL  
 SEE ATTACHED MAP FOR ADDITIONAL  
 IMPROVEMENTS WITHIN 400'.

**SURFACE LOCATION**  
 GROUND ELEVATION= 4979'  
 NAD83  
 LATITUDE= 40.420171°  
 LONGITUDE= 104.955439°

**BOTTOM HOLE LOCATION**  
 NAD83  
 LATITUDE= 40.419764°  
 LONGITUDE= 104.956991°

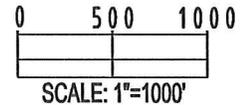
PDOP= 1.71  
 GPS OPERATOR: TRAVIS KRAICH

S ¼ SEC. 12  
 2 ½" ALUM. CAP  
 LS 12374

**WELL ENCORE 3-12 TO BE LOCATED 500' FNL AND 2410' FWL, SECTION 12, T5N, R68W OF THE 6th P.M.**

**LEGEND**

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



**NOTES:**

1. THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215 (PDOP VALUE IS LESS THAN 6.0, LATITUDE AND LONGITUDE ARE ACCURATE TO 5 DECIMAL PLACES, AND GPS OBSERVATIONS ARE DIFFERENTIAL AND DONE BY QUALIFIED PERSONNEL.)
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.
4. 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 **ENCORE 3-12**. 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

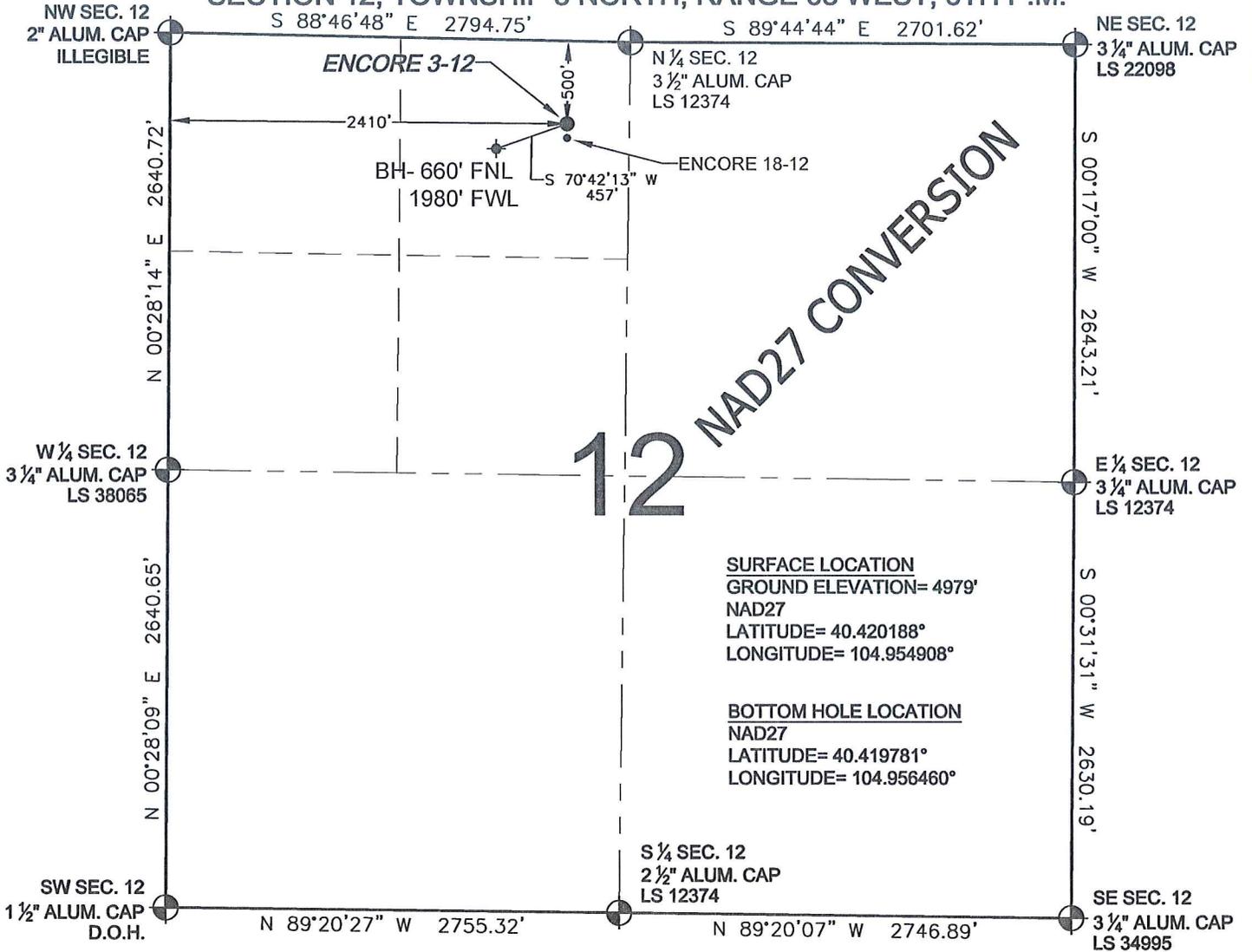


PREPARED BY:  PFS Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	FIELD DATE: 12-11-08	WELL NAME: ENCORE 3-12
	DRAWING DATE: 12-12-08	SURFACE LOCATION: LARIMER COUNTY, COLORADO
	BY: CAM	NE 1/4 NW 1/4, SEC. 12, T5N, R68W

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.

# EXHIBIT: NAD27 CONVERSION

## SECTION 12, TOWNSHIP 5 NORTH, RANGE 68 WEST, 6TH P.M.



WELL ENCORE 3-12 TO BE LOCATED 500' FNL AND 2410' FWL, SECTION 12, T5N, R68W OF THE 6th P.M.

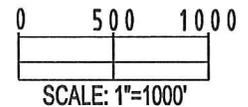
**NOTES:**

- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215 (PDOP VALUE IS LESS THAN 6.0, LATITUDE AND LONGITUDE ARE ACCURATE TO 5 DECIMAL PLACES, AND GPS OBSERVATIONS ARE DIFFERENTIAL AND DONE BY QUALIFIED PERSONNEL.)
- 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.

**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.



PREPARED BY:  Petroleum Field Services, LLC 1801 W. 13th Ave. Denver, CO 80204	FIELD DATE: 12-11-08	WELL NAME: ENCORE 3-12
	DRAWING DATE: 12-12-08	SURFACE LOCATION: LARIMER COUNTY, COLORADO
	BY: CAM	NE 1/4 NW 1/4, SEC. 12, T5N, R68W

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