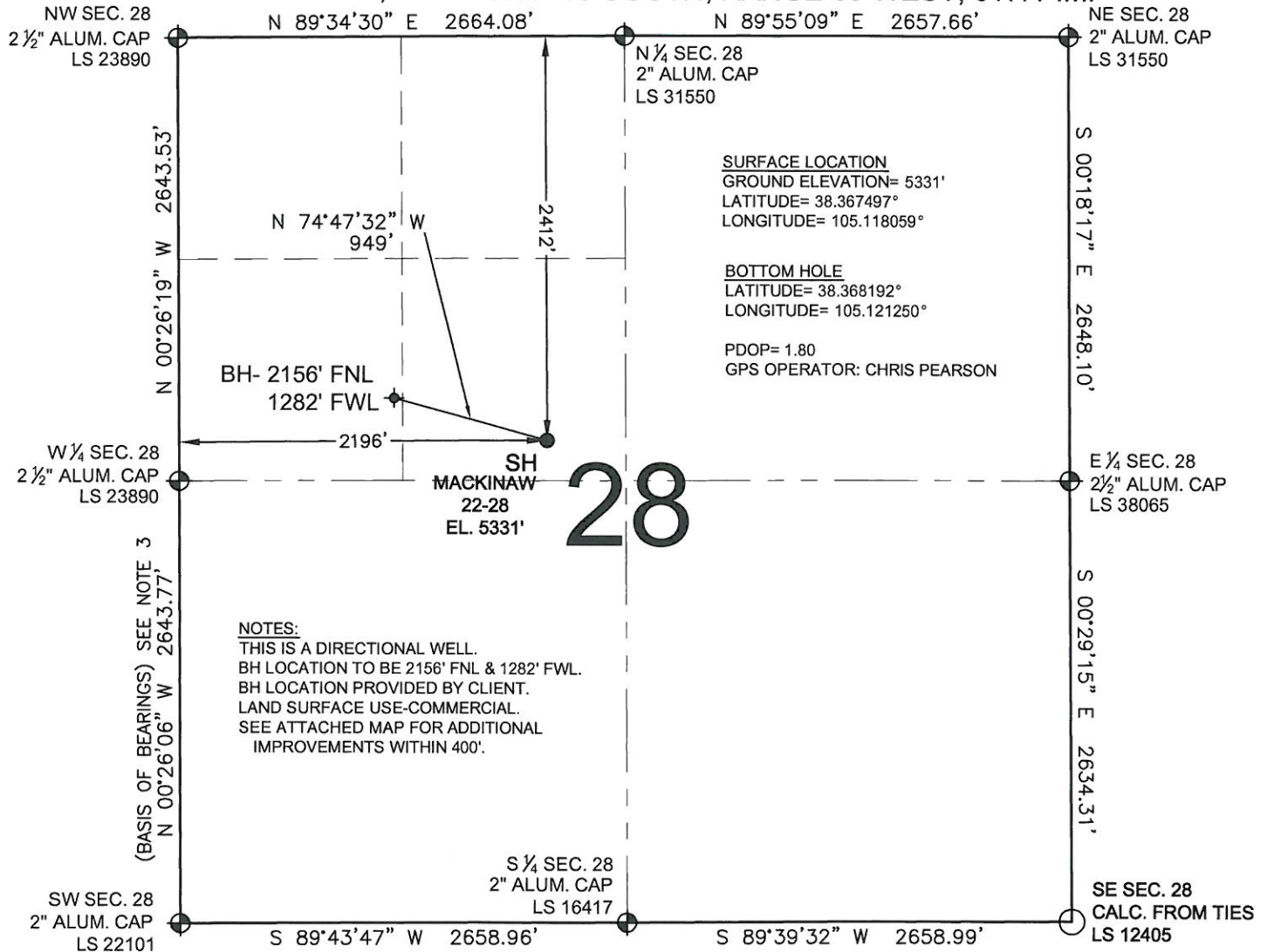


# WELL LOCATION CERTIFICATE: MACKINAW 22-28

SECTION 28, TOWNSHIP 19 SOUTH, RANGE 69 WEST, 6TH P.M.



WELL **MACKINAW 22-28** TO BE LOCATED 2412' FNL AND 2196' FWL, SECTION 28, T19S, R69W OF THE 6th P.M.

## LEGEND

-  = EXISTING MONUMENT    
  = BOTTOM HOLE  
 = PROPOSED WELL    
 = EXISTING WELL

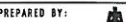
NOTES:

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
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 PINE RIDGE OIL & GAS, THAT THE SURVEY AND WELL LOCATION CERTIFICATE SHOWN HEREON WERE DONE BY ME OR UNDER MY DIRECT SUPERVISION, THAT THE DRAWING SHOWN HEREON ACCURATELY DEPICTS THE PROPOSED LOCATION OF THE WELL MACKINAW 22-28. 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:
 <b>PFS</b> Petroleum Field Services, LLC	DRAWING DATE:	SURFACE LOCATION:
	1801 W. 13th Ave. Denver, CO 80204	SE 1/4 NW 1/4, SEC. 28, T19S, R69W

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.