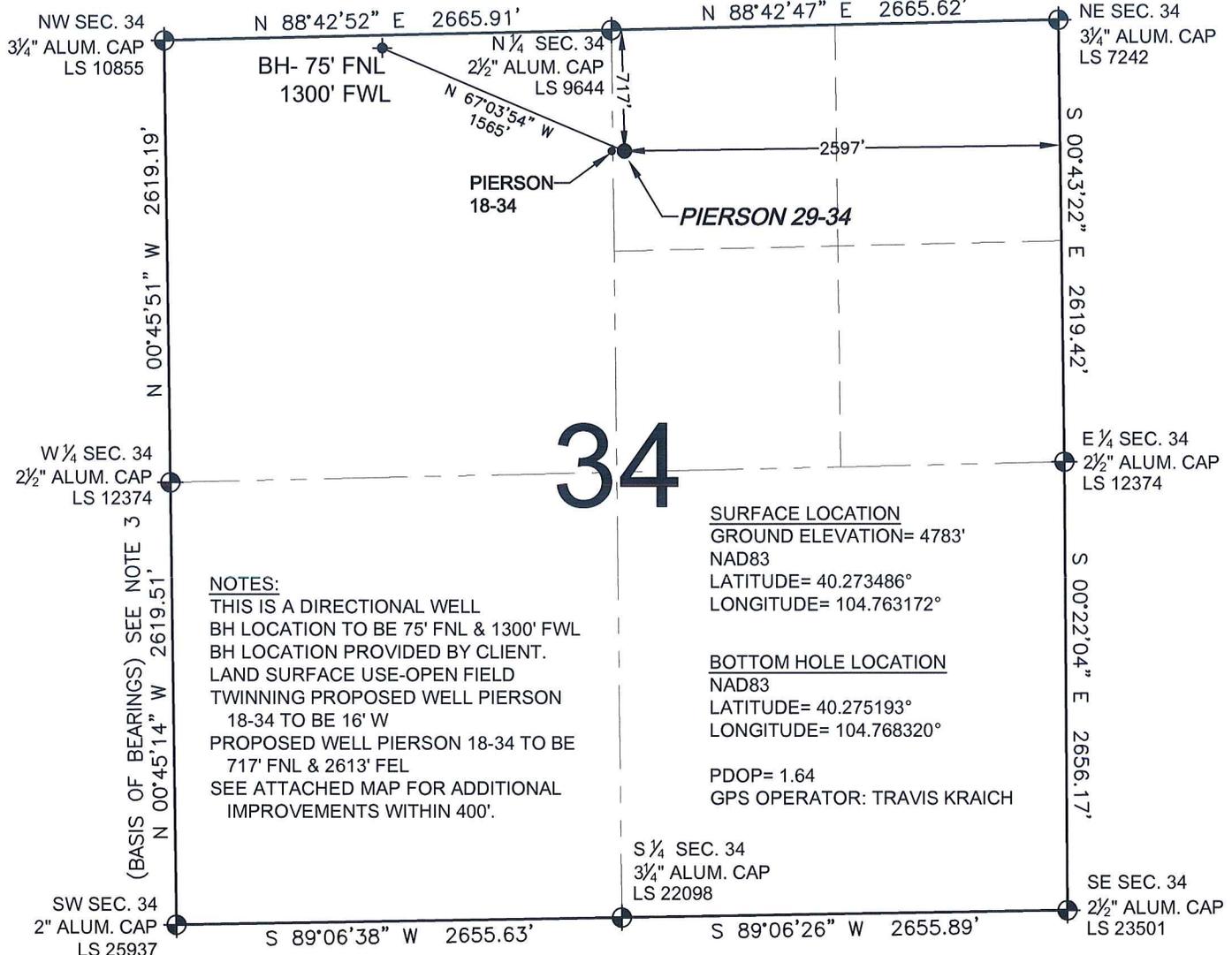


WELL LOCATION CERTIFICATE: PIERSON 29-34

SECTION 34, TOWNSHIP 4 NORTH, RANGE 66 WEST, 6TH P.M.



NOTES:
 THIS IS A DIRECTIONAL WELL
 BH LOCATION TO BE 75' FNL & 1300' FWL
 BH LOCATION PROVIDED BY CLIENT.
 LAND SURFACE USE-OPEN FIELD
 TWINNING PROPOSED WELL PIERSON
 18-34 TO BE 16' W
 PROPOSED WELL PIERSON 18-34 TO BE
 717' FNL & 2613' FEL
 SEE ATTACHED MAP FOR ADDITIONAL
 IMPROVEMENTS WITHIN 400'.

SURFACE LOCATION
 GROUND ELEVATION= 4783'
 NAD83
 LATITUDE= 40.273486°
 LONGITUDE= 104.763172°

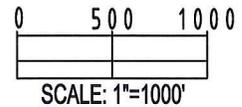
BOTTOM HOLE LOCATION
 NAD83
 LATITUDE= 40.275193°
 LONGITUDE= 104.768320°

PDOP= 1.64
 GPS OPERATOR: TRAVIS KRAICH

WELL **PIERSON 29-34** TO BE LOCATED 717' FNL AND 2597' FEL, SECTION 34, T4N, R66W 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.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 **PIERSON 29-34**. 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

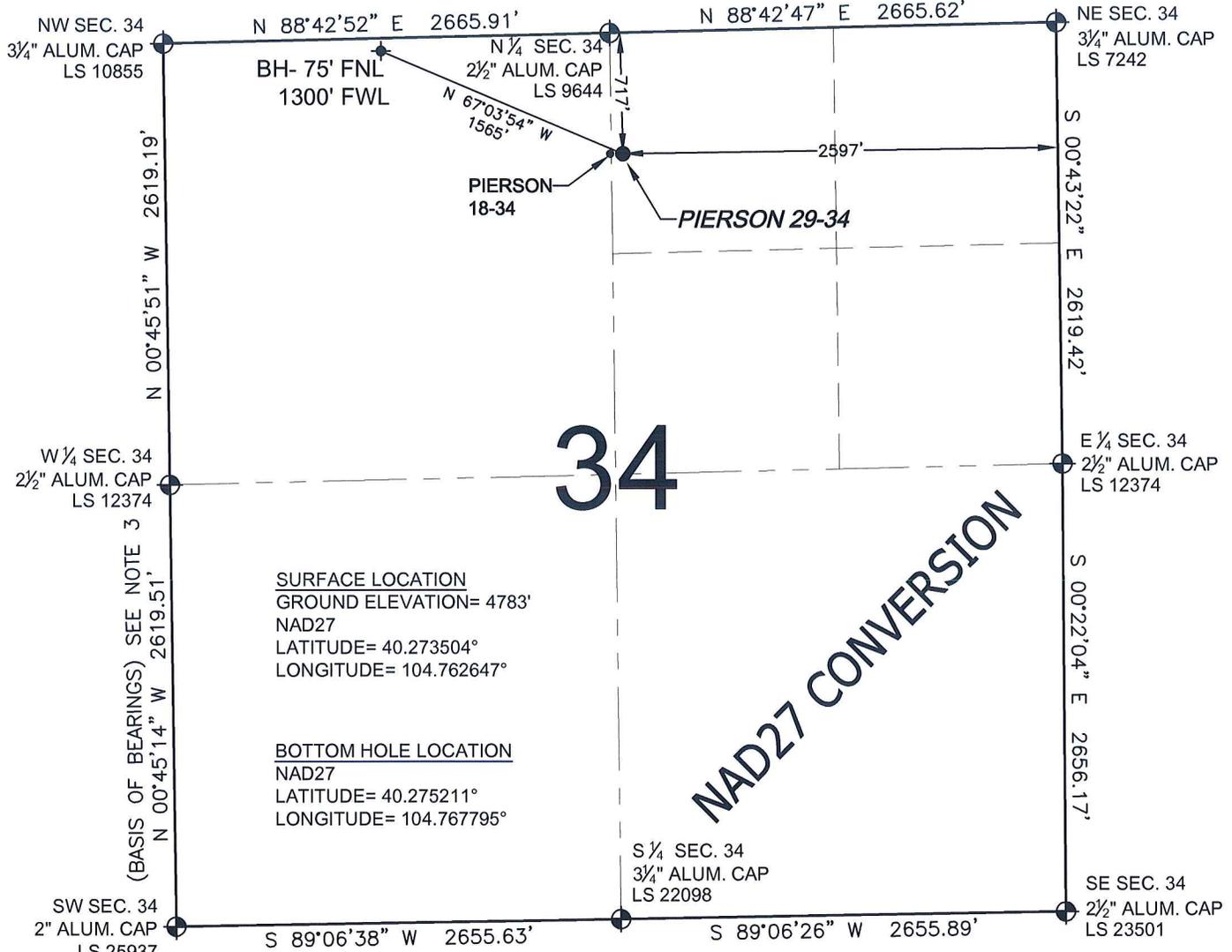


PREPARED BY:  Petroleum Field Services, LLC 1601 W. 13th Ave. Denver, CO 80204	FIELD DATE: 04-07-10	WELL NAME: PIERSON 29-34
	DRAWING DATE: 04-08-10	SURFACE LOCATION: WELD COUNTY, COLORADO
BY: SMF	NW 1/4 NE 1/4, SEC. 34, T4N, R66W	

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 34, TOWNSHIP 4 NORTH, RANGE 66 WEST, 6TH P.M.



WELL **PIERSON 29-34** TO BE LOCATED 717' FNL AND 2597' FEL, SECTION 34, T4N, R66W OF THE 6th P.M.

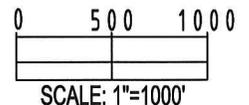
NOTES:

- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
- 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 1601 W. 13th Ave. Denver, CO 80204	FIELD DATE: 04-07-10	WELL NAME: PIERSON 29-34
	DRAWING DATE: 04-08-10	SURFACE LOCATION: WELD COUNTY, COLORADO NW 1/4 NE 1/4, SEC. 34, T4N, R66W
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.