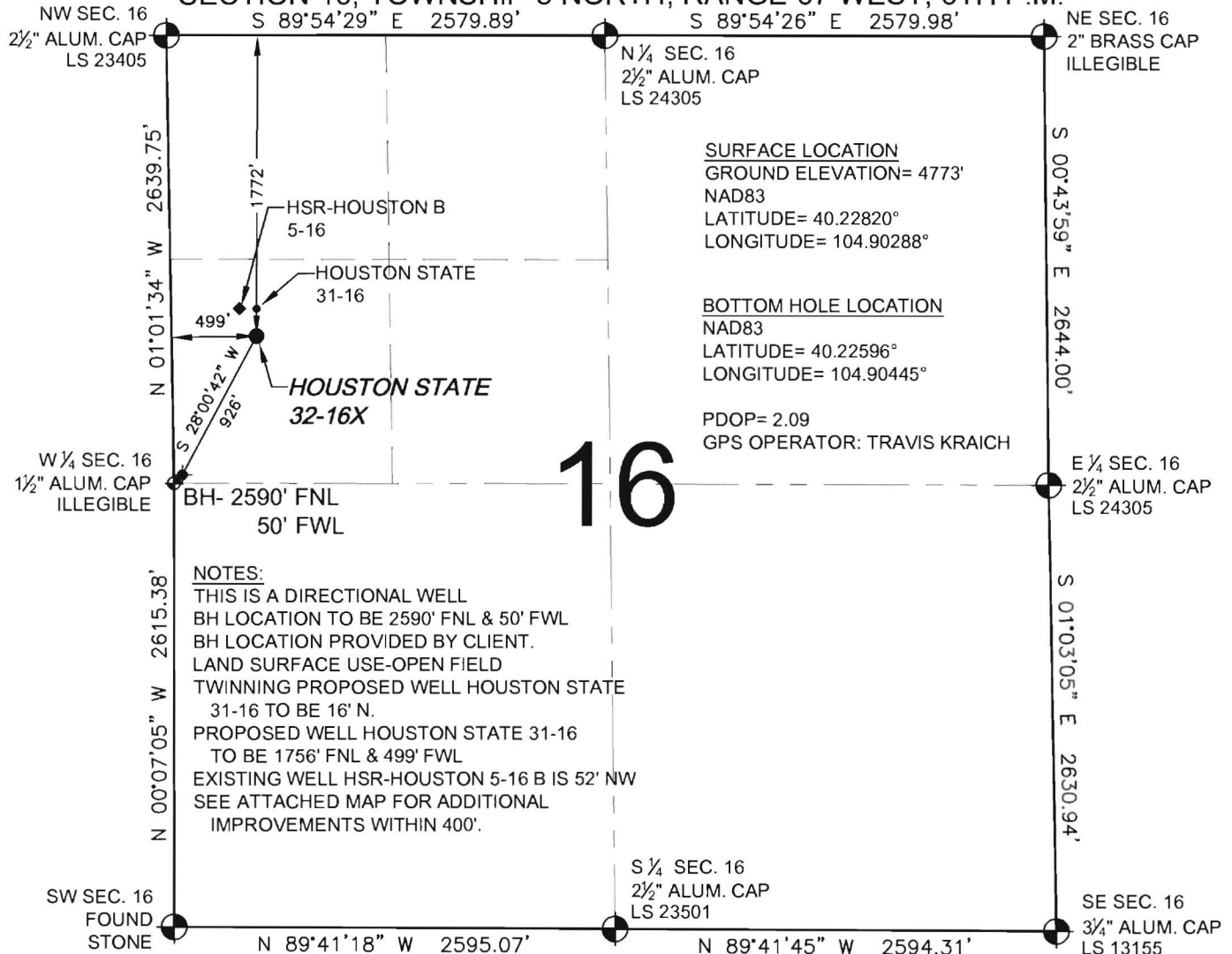


WELL LOCATION CERTIFICATE: HOUSTON STATE 32-16X

SECTION 16, TOWNSHIP 3 NORTH, RANGE 67 WEST, 6TH P.M.



NOTES:

THIS IS A DIRECTIONAL WELL
BH LOCATION TO BE 2590' FNL & 50' FWL
BH LOCATION PROVIDED BY CLIENT.
LAND SURFACE USE-OPEN FIELD
TWINNING PROPOSED WELL HOUSTON STATE
31-16 TO BE 16' N.
PROPOSED WELL HOUSTON STATE 31-16
TO BE 1756' FNL & 499' FWL
EXISTING WELL HSR-HOUSTON 5-16 B IS 52' NW
SEE ATTACHED MAP FOR ADDITIONAL
IMPROVEMENTS WITHIN 400'.

SURFACE LOCATION

GROUND ELEVATION= 4773'
NAD83
LATITUDE= 40.22820°
LONGITUDE= 104.90288°

BOTTOM HOLE LOCATION

NAD83
LATITUDE= 40.22596°
LONGITUDE= 104.90445°

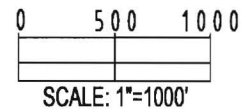
PDOP= 2.09

GPS OPERATOR: TRAVIS KRAICH

WELL HOUSTON STATE 32-16X TO BE LOCATED 1772' FNL AND 499' FWL, SECTION 16, T3N, R67W OF THE 6th P.M.

LEGEND

● = EXISTING MONUMENT ♦ = BOTTOM HOLE BH = BOTTOM HOLE
● = PROPOSED WELL ♦ = EXISTING WELL



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 **HOUSTON STATE 32-16X**. 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



NOTES:

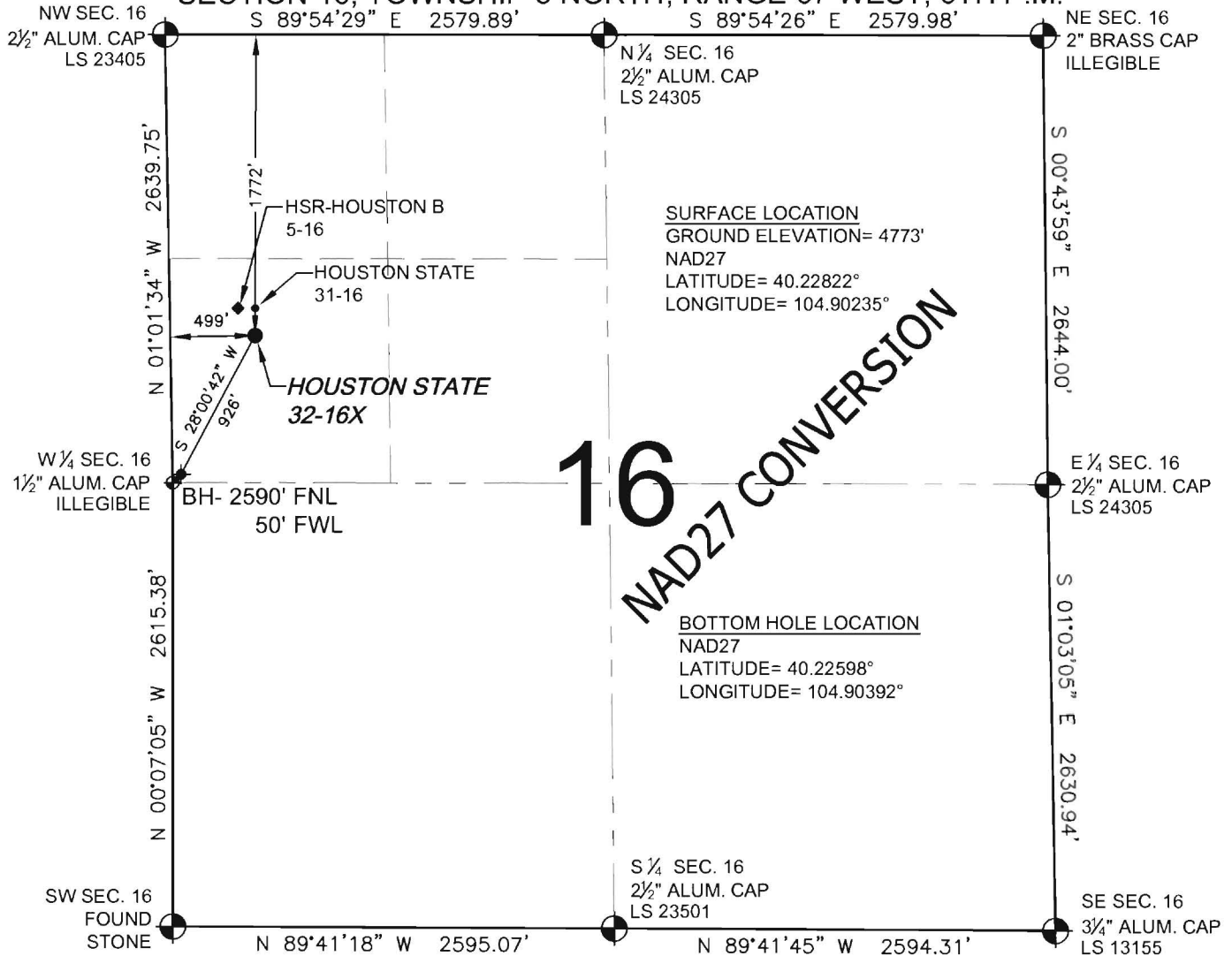
- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
- ELEVATIONS SHOWN AT THE WELL HEAD, AS WELL AS HORIZONTAL CONTROL, ARE BASED ON GPS-RTK VALUES DERIVED FROM DOING 2-HOUR STATIC GPS SESSIONS AND REDUCTIONS USING O.P.U.S. SOLUTIONS.
VERTICAL = 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.

PREPARED BY:	FIELD DATE:	WELL NAME:
PFS	08-13-09	HOUSTON STATE 32-16X
Patroleum Field Services, LLC	DRAWING DATE:	SURFACE LOCATION:
1801 W. 13th Ave.	08-18-09	WELD COUNTY, COLORADO
Denver, CO 80204	BY:	SW 1/4 NW 1/4, SEC. 16, T3N, R67W
	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.

EXHIBIT: NAD27 CONVERSION

SECTION 16, TOWNSHIP 3 NORTH, RANGE 67 WEST, 6TH P.M.



WELL HOUSTON STATE 32-16X TO BE LOCATED 1772' FNL AND 499' FWL, SECTION 16, T3N, R67W OF THE 6th P.M.

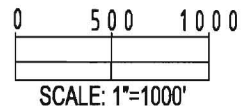
NOTES:

- THIS SURVEY WAS DONE BY GPS METHODS AND CONFORMS TO THE MINIMUM STANDARDS SET BY THE C.O.G.C.C., RULE NO. 215
- 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 ♦ = BOTTOM HOLE BH = BOTTOM HOLE
● = PROPOSED WELL ♦ = EXISTING WELL

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



PREPARED BY



FIELD DATE:

08-13-09

WELL NAME:

HOUSTON STATE 32-16X

DRAWING DATE:

08-18-09

SURFACE LOCATION:

WELD COUNTY, COLORADO

BY:

SMF

SW 1/4 NW 1/4, SEC. 16, T3N, R67W

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.